



## NOAA Atlas 14



# Precipitation-Frequency Atlas of the United States

Volume 10 Version 3.0: Northeastern States

Connecticut, Maine, Massachusetts, New Hampshire,  
New York, Rhode Island, Vermont

Sanja Perica, Sandra Pavlovic, Michael St. Laurent,  
Carl Trypaluk, Dale Unruh, Deborah Martin, Orlan Wilhite

U.S. Department  
of Commerce

National Oceanic  
and Atmospheric  
Administration

National Weather  
Service

Silver Spring  
Maryland

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## DEDICATION

*Volume 10 of NOAA Atlas 14 is dedicated to Mr. Richard G. Hendrickson.*

*For over 84 years, Mr. Hendrickson recorded weather observations in Bridgehampton, on the South Fork of Long Island for the National Weather Service Cooperative Observer Program (COOP). The COOP program is the Nation's weather and climate observing network of over 8,700 volunteer observers across the country and the data collected through this program are pivotal for the development of NOAA Atlas 14.*

*More about Mr. Hendrickson's life can be read [here](#).*



*Mr. Hendrickson observes a storm in the 1930s (photo curtesy of D.L. Hendrickson).*

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## **1. Abstract**

NOAA Atlas 14 contains precipitation frequency estimates for the United States and U.S. affiliated territories with associated lower and upper bounds of the 90% confidence interval and supplementary information on temporal distribution of heavy precipitation, analysis of seasonality and trends in annual maximum series data, etc. It includes pertinent information on development methodologies and intermediate results. The results are published through the [Precipitation Frequency Data Server \(PFDS\)](#).

The Atlas is divided into volumes based on geographic sections of the country. It is intended as the U.S. Government source of precipitation frequency estimates and associated information for the United States and U.S. affiliated territories.

## 2. Preface to Volume 10

NOAA Atlas 14 Volume 10 contains precipitation frequency estimates for selected durations and frequencies with associated lower and upper bounds of the 90% confidence interval and supplementary information on the temporal distribution of heavy precipitation, analysis of seasonality and trends in annual maximum series data, etc., for the following seven northeastern states: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. The results are published through the [PFDS](#).

NOAA Atlas 14 Volume 10 was developed by the Hydrometeorological Design Studies Center within the Office of Water Prediction of the National Oceanic and Atmospheric Administration's National Weather Service. Any use of trade names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government.

**Citation and version history.** This documentation and associated artifacts such as maps, grids, and point-and-click results from the PFDS are part of a whole with a single version number and can be referenced as:

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Deborah Martin, Orlan Wilhite (2015, revised 2019). NOAA Atlas 14 Volume 10 Version 3, *Precipitation-Frequency Atlas of the United States, Northeastern States*. NOAA, National Weather Service, Silver Spring, MD.

The version number has the format P.S, where P is a primary version number representing a number of successive releases of primary information. Primary information is essentially the data. S is a secondary version number representing successive releases of secondary information. Secondary information includes documentation and metadata. S reverts to zero (or nothing; i.e., Version 2 and Version 2.0 are equivalent) when P is incremented. When documentation is completed and added without changing any prior information, the version number is not incremented.

The primary version number is stamped on the artifact or is included as part of the filename where the format does not allow for a version stamp (for example, files with gridded precipitation frequency estimates). All location-specific output from the PFDS is stamped with the version number and date of download.

Table 2.1 lists the version history associated with the NOAA Atlas 14 Volume 10 precipitation frequency project and indicates the nature of changes made.

*Table 2.1. Version history of NOAA Atlas 14 Volume 10.*

<b>Version</b>	<b>Release date</b>	<b>Notes</b>
Version 1.0	October 2014	Draft data used in peer review
Version 2.0	September 2015	Data released
Version 3.0	April 2019	Data updated (see Addendum 1)

### 3. Introduction

#### 3.1. Objective

NOAA Atlas 14 Volume 10 provides precipitation frequency estimates for durations of 5-minute through 60-day at average recurrence intervals of 1-year through 1,000-year for the following seven northeastern states: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. The estimates and associated upper and lower bounds of the 90% confidence interval are provided at 30-arc second resolution. The Atlas also includes information on temporal distributions for heavy precipitation amounts for selected durations and seasonal information for annual maxima data used in the frequency analysis. In addition, the potential effects of climate change as trends in historic annual maximum series are examined.

The precipitation frequency estimates in NOAA Atlas 14 Volume 10 supersede the estimates for Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont contained in the following publications:

- a. [NOAA Technical Memorandum NWS HYDRO-35](#), *Five- to 60-Minute Precipitation Frequency for the Eastern and Central United States* (Frederick et al., 1977) for 5-minute to 60-minute durations;
- b. [Weather Bureau Technical Paper No. 40](#), *Rainfall Frequency Atlas of the United States for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years* (Hershfield, 1961) for 2-hour to 24-hour durations;
- c. [Weather Bureau Technical Paper No. 49](#), *Two- to Ten-Day Precipitation for Return Periods of 2 to 100 Years in the Contiguous United States* (Miller, 1964) for 2-day to 10-day durations.

#### 3.2. Approach and deliverables

Precipitation frequency estimates have been computed for a range of frequencies and durations using a regional frequency analysis approach based on L-moment statistics calculated from annual maximum series. This section provides an overview of the approach; greater detail is provided in Section 4.

The annual maximum series (AMS) were extracted for a range of durations between 15-minute and 60-day from precipitation measurements recorded at variable or constant time increments from 1-minute to 1-day obtained from various sources. The tables in Appendix A.1 give detailed information on all stations whose data were used in the frequency analysis. The annual maximum series data were screened for data quality. The 1-day and 1-hour annual maximum series data were also analyzed for potential trends (Appendix A.2).

A region of influence approach was used for the regional L-moments computation at each station across all selected durations. A variety of probability distribution functions were examined for each region and duration and the most suitable distribution was selected. Distribution parameters, and consequently precipitation frequency estimates, were determined based on the mean of the annual maximum series at the station and the regionally determined higher order L-moments. Precipitation frequency estimates were smoothed across durations to ensure consistency. Partial duration series-based precipitation frequency estimates were calculated indirectly from AMS-based precipitation frequency estimates using Langbein's formula.

For areas covered in NOAA Atlas 14 Volumes where snowfall contributes to the precipitation AMS, empirical equations may be developed to produce frequency estimates for rainfall (i.e., liquid precipitation only) from corresponding precipitation frequency estimates. In the NOAA Atlas 14 Volume 10 project area, contribution of snowfall to precipitation AMS could not be determined due to



lack of relevant information, so no separate rainfall frequency analysis was done. More information on the analysis is available in Section 4.7.

A Monte-Carlo simulation approach was used to produce upper and lower bounds of the 90% confidence interval for the precipitation frequency estimates. 5-minute and 10-minute estimates were computed by applying scaling factors to matching 15-minute estimates.

Grids of precipitation frequency estimates were determined based on grids of mean annual maxima and at-station precipitation frequency estimates. The mean annual maxima grid for each duration was derived from at-station mean annual maxima using PRISM interpolation methodology (Appendix A.3). The grids of precipitation frequency estimates for all frequencies were then derived in an iterative process using the inherently strong linear relationship that exists between mean annual maxima and precipitation frequency estimates at the 2-year average recurrence interval and between precipitation frequency estimates at consecutive frequencies for a given duration (Section 4.8.2). The resulting grids were examined and adjusted in cases where inconsistencies occurred between durations and frequencies. Both spatially interpolated and point estimates for selected durations and frequencies were subject to external peer review (Appendix A.4). A similar approach was used to derive grids of lower and upper bounds of 90% confidence interval.

Climate regions were delineated based on characteristics of annual maximum data. The regions were used in the extraction and seasonality analysis of annual maxima and calculations of temporal distributions of heavy precipitation. Temporal distributions, expressed in probability terms as cumulative percentages of precipitation totals, were computed for precipitation magnitudes exceeding precipitation frequency estimates for the 2-year average recurrence interval for selected durations (Appendix A.5). The seasonality analysis was done by tabulating the number of annual maxima exceeding precipitation frequency estimates for several selected threshold frequencies (Appendix A.6).

NOAA Atlas 14 Volume 10 precipitation frequency estimates for any location in the project area are available in a variety of formats through the [PFDS](#) via a point-and-click interface; more details are provided in Section 5. Additional results and information available there include:

- ASCII grids of partial duration series-based and annual maximum series-based precipitation frequency estimates and related confidence limits for a range of durations and frequencies with associated metadata;
- cartographic maps of partial duration series-based precipitation frequency estimates for selected frequencies and durations;
- final, quality controlled annual maximum series for all observing locations used in the analysis;
- temporal distributions;
- seasonality analysis of annual maxima.

Cartographic maps were created to serve as visual aids and are not recommended for estimating precipitation frequency estimates. Users are advised to take advantage of the PFDS interface or the downloadable underlying ASCII grids for obtaining precipitation frequency estimates.

Please notice that precipitation frequency estimates from this Atlas are estimates for a point location and are not directly applicable for an area. Also, precipitation frequency estimates for each volume of NOAA Atlas 14 were computed independently using all available data at the time. Some discrepancies between volumes at project boundaries are inevitable and they will generally be more pronounced for rarer frequencies.

## 4. Frequency analysis

### 4.1. Project area

The project area, shown in Figure 4.1.1, encompasses Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont, and covers about 126,543 square miles. Much of the project area falls within the northern Appalachian Highlands with the exception of the island areas in Massachusetts and New York, and extreme Western New York area extending along the Eastern Great Lakes. The island areas in Massachusetts and New York are part of the Atlantic Coastal Plain, while the Western New York areas along the Eastern Great Lakes are part of the Central Lowland.

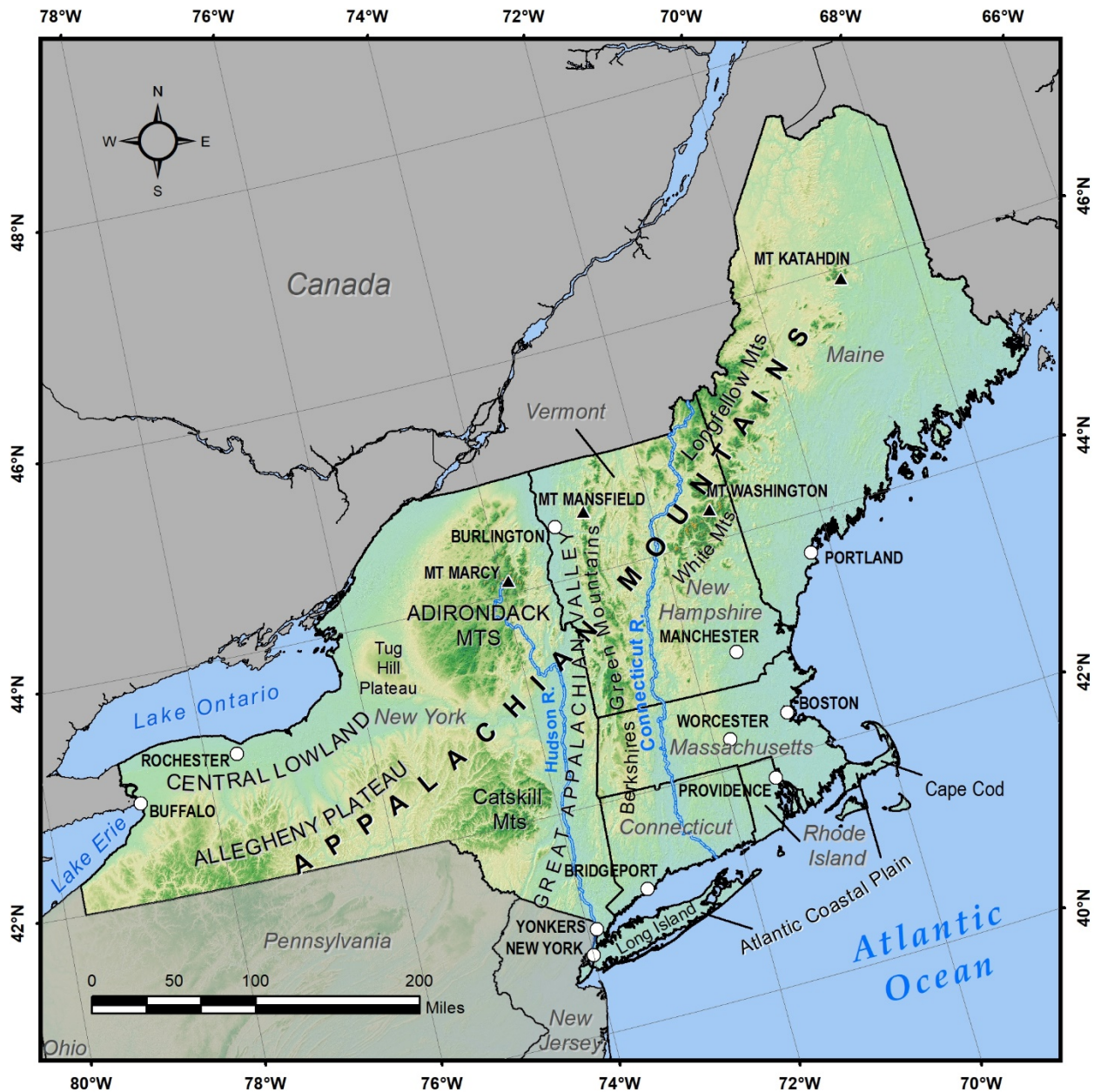


Figure 4.1.1. Project area for NOAA Atlas 14 Volume 10 (shaded relief from [USGS EROS Data Center](#)).

The Atlantic Coastal Plain is the area of flat, low-lying terrain stretching from the Northeast through Florida where already low elevations decrease slowly to sea level. The islands along the coasts of Massachusetts and New York, including Cape Cod and Long Island, are part of the Plain. The Central Lowland lies west of the Appalachian Highlands and extends over a vast area from Texas as far north as North Dakota and eastward to parts of New York State. The area typically consists of flat, low-lying terrain; rough terrain over 2,000 feet is rare. The terrain gradually rises towards the Appalachian Plateau in the east.

The majority of the project area lies within the northern Appalachian Mountains, which dominate the Northeastern states and separate the Coastal Plain from the Central Lowland. These folded mountains form a barrier to east-west atmospheric flow. The highest peak in the project area is Mount Washington in New Hampshire at 6,288 feet, but many summits rise above 5,000 feet, including Mount Katahdin, Maine (5,269 feet) and Mount Marcy, New York (5,344 feet). The highest peak in Vermont is Mount Mansfield at 4,393 feet. Familiar mountain ranges within the Appalachians include the Catskill Mountains in southeast New York, the Green Mountains in Vermont, the White Mountains in New Hampshire, the Longfellow Mountains in Maine, and the Berkshires in Massachusetts and Connecticut. The Adirondack Mountains in northern New York are not part of the Appalachians, but are an extension of the Laurentian Mountains in Canada. The elevations of the Appalachians are not high enough to allow snowcaps year-round. Several large valleys stretch through the project area, including the Connecticut River Valley through New Hampshire, Vermont, Massachusetts, and Connecticut, and the Great Appalachian Valley through eastern New York. The largest, most-populated urban areas in the project area include New York City (NY), Boston (MA), Buffalo (NY), Rochester (NY), Yonkers (NY), Worcester (MA), and Providence (RI). The largest cities (by population) in other states, which are much smaller in comparison, include Bridgeport (CT), Manchester (NH), Portland (ME), and Burlington (VT).

**Climatology of extreme precipitation.** The continental humid climate of the Northeast is generally characterized by large-scale seasonal temperature variations between warm to hot summers and cold (sometimes severely cold) winters. The one exception is over the White Mountains in northern New Hampshire where the climate is subarctic with very cold and long winters and short mild summers. At the center of this subarctic region is Mount Washington, whose peak is characterized by a tundra climate due to the lack of a warm summer. The weather on Mount Washington is dangerously unpredictable and is known to be one of the windiest places on Earth. The mountain still receives a large amount of precipitation throughout the year which is uncharacteristic of tundra climates.

In comparison with the rest of the continental United States, mean annual precipitation varies moderately in the Northeast, with a minimum along the northern and western interior lowlands and a maximum along the coast and higher elevation areas. Extreme precipitation events at daily durations in the project area can occur throughout the year, but are more common between spring and fall when strong cold fronts and other dynamic forces are more prevalent. Areas along the coast have a slightly longer rainy season with extreme events occurring into late fall and early winter. Northern and western New York can also experience heavy periods of lake effect snowfall in the late fall and winter months.

For hourly durations, heavy precipitation is mostly likely to occur during the spring through fall throughout the project area with a maximum in the summer. Major systems and other dynamic forces tend to occur more often in the spring through fall, although they can occur any time of year. During the summer months when there is weaker dynamic forcing, solar insolation and increased humidity tend to be the dominant factors for convective development of brief heavy storms. Heavy rainfall can also result from training thunderstorms, where consecutive storms follow the path of the preceding storm within a given system, which can lead to rainfall over one area for several hours.

Significant rain or snow is produced from Nor'easters which develop off the New England coast, usually between the months of October through April. These extratropical cyclones can experience explosive development when cold polar air from Canada interacts with the warm Gulf Stream waters of the

Atlantic. During the summer and fall, another mechanism to deliver heavy precipitation to the Northeast is the tropical cyclone, which includes tropical depressions, tropical storms, and hurricanes. These tropical systems account for many of the most extreme rainfall events along the coast, though they tend to be weaker in strength than those experienced in the Southeast U.S. The amount of rain produced by these systems depends on their speed, size, and location; for example, mountainous areas are more prone to extreme rainfall. Some notable examples include: The “Long Island Express” Hurricane in 1938, the Great Atlantic Hurricane in 1944, Hurricanes Carol and Edna in 1954, Hurricane Diane in 1955, Hurricane Donna in 1960, Hurricane Agnes in 1972, Hurricane Floyd in 1999, and Hurricane Irene in 2011.

**NOAA Atlas 14 Volume 10 climate regions.** Based on the climate and predominant precipitation mechanisms throughout the project area, two climate regions (shown in Figure 4.1.2) were delineated and used to assign a rainy season during the AMS extraction (Section 4.3) and in portraying the temporal distributions and seasonality of annual maxima data used in the precipitation frequency analysis. The climate regions together with the temporal distribution analysis are described in more detail in Appendix A.5. More details on seasonality analysis are available from Appendix A.6.

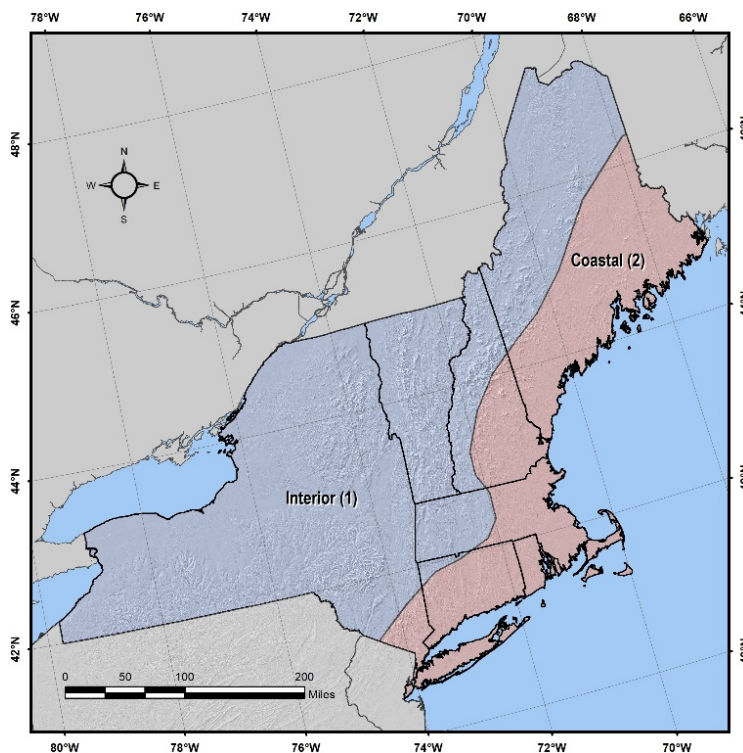


Figure 4.1.2. Climate regions delineated for NOAA Atlas 14 Volume 10.

#### 4.2. Precipitation data collection and formatting

Precipitation measurements were obtained for 7,629 stations from a number of federal, state, and local agencies. The majority of the stations were from the NWS Cooperative Observer Program (COOP) database maintained by the National Centers for Environmental Information (NCEI). Some agencies provided data directly, while others provided hyperlinks for data download. Stations from the datasets provided directly typically have data to the end of 2012. Datasets available online were updated in early 2015, but not all were up-to-date. For example, data for many NCEI sub-daily stations were only available up to December 2013.

In order to have a uniform system of numbering, each station was assigned a unique six-digit identification number (SID). Except for NCEI stations, assigned identification numbers do not match identification numbers assigned by agencies that collected or provided the data. Table 4.2.1 lists all agencies that provided the data (not necessarily agencies that collected the data) along with the datasets' names, their abbreviations used in Appendix A.1, and the first two digits of the stations' identification numbers that are common for all stations from the same dataset.

*Table 4.2.1. List of agencies, datasets with their abbreviated names used in Appendix A.1, data reporting intervals, and common SID's digits.*

<b>Agency/network</b>	<b>Dataset</b>	<b>Abbr.</b>	<b>Reporting interval</b>	<b>Common SID's digits</b>
NOAA, National Centers for Environmental Information	Cooperative Observer Network (COOP)	NCEI	15-min 1-hour 1-day	06, 17, 19, 27, 28, 30, 33, 36, 37, 43 <sup>(1)</sup>
	Global Historical Climatology Network	NCEI	1-day	06, 17, 19, 27, 28, 30, 33, 36, 37, 43 <sup>(1)</sup>
	Quality Controlled Local Climatological Data	NCEI	1-hour	55
	U.S. Climate Reference Network	NCEI	1-hour 1-day	68
	Automated Surface Observing Systems	NCEI	15-min 1-hour	78
	Daily stations without COOP SID	NCEI	1-day	79
Boston Water and Sewer Commission <sup>(2)</sup>		BWSC	15-min 1-hour	
Colorado Climate Center	Community Collaborative Rain, Hail and Snow Network	COCORAHS	1-day	69
Earth Network <sup>(2)</sup>		EN	varying	
Eastern New York Observing Network		ENYON	1-day	77
Environment Canada		ENVCAN	1-hour 1-day	71
Illinois State Water Survey	National Atmospheric Deposition Program	NADP	1-day	54
Lyndon State College		LSC	15-min	97
Massachusetts Department of Conservation and Recreation		MADCR	1-day	96
Mid-Atlantic River Forecast Center	Integrated Flood Observing and Warning System	IFLOWS	15-min	91
Midwestern Region Climate Center	19th Century Forts and Voluntary Observers Database	FORTS	1-day	52
Mount Washington Observatory		MWOBS	1-hour 1-day	27
Narragansett Bay Commission		NBC	1-hour	56
New Hampshire Department of Environmental Science <sup>(2)</sup>		NHDES	15-min	
New York City Department of Environmental Protection		NYCDEP	1-hour 1-day	99
New York Department of Water Supply, Gas and Electricity		DWSGE	1-day	60

Agency/network	Dataset	Abbr.	Reporting interval	Common SID's digits
Office of the New Jersey State Climatologist, Rutgers Univ.	NJ Mesonet	NJM	1-hour	86
	NJ SafetyNet	NJS	1-hour	87
University of Utah	Mesowest Archived Data	MESOWEST	15-min 1-hour	57
U.S. Department of Agriculture (USDA)	Agriculture Research Service	ARS	15-min	94
USDA, National Resources Conservation Service <sup>(2)</sup>	Soil Climate Analysis Network	SCAN	1-hour	
U.S. Forest Service	Remote Automated Weather Stations Network	RAWS	1-hour	76
U.S. Geological Survey	New Jersey Water Science Center	USGS	1-hour	70
	Massachusetts-Rhode Island Water Science Center	USGS	15-min 1-day	72
	Maine Water Science Center	USGS	1-day	73
	New Hampshire-Vermont Water Science Center <sup>(2)</sup>	USGS	1-day	
	New York Water Science Center <sup>(2)</sup>	USGS	1-day	

<sup>(1)</sup> SIDs by state: 06 - Connecticut, 17 - Maine, 19 - Massachusetts, 27 - New Hampshire, 28 - New Jersey, 30 - New York, 33 - Ohio, 36 - Pennsylvania, 37 - Rhode Island, 43 - Vermont.

<sup>(2)</sup> Dataset not used in frequency analysis; not included in Appendix A.1.

In areas of high importance or scarce data, additional precipitation data were digitized to improve analysis by extending record lengths and/or including extreme events missing in digitized datasets. The additional digitized data were collected from the New York City Environmental Protection Bureau of Water Supply, Massachusetts Department of Conservation and Recreation, and the NCEI Climate Database Modernization Program (CDMP). Figure 4.2.1 shows locations of hourly and daily stations for which up to 75 additional years were digitized. The Catskill Mountains area particularly benefited from this effort as up to 31 additional years of data (1918-1948 period) were added to many stations. In several cases, the highest extracted annual maxima came from the digitized periods. For example, the hourly annual maximum time series for the Ithaca, New York was extended for an additional 49 years (1900-1948 period) and eight of the top 10 annual maximum values in the series come from the newly digitized data (see Figure 4.2.2). The added data significantly altered the precipitation frequency estimates calculated based on the original station's time series data.

All data were formatted to a common format at one of three base durations that corresponded to the original reporting period: 15-minute, 1-hour, or 1-day. Data recorded at variable time steps were formatted at 15-minute increments. Table 4.2.2 lists the total number of stations that were obtained for each formatting interval.

In addition, monthly maxima for various n-minute durations (5-minute through 60-minute) were obtained for 43 NCEI stations to which any available data from the NWS and Federal Aviation Administration Automated Surface Observing System (ASOS) network (archived by NCEI) were added; they were used to develop scaling factors for generation of precipitation frequency estimate grids at 5-minute and 10-minute durations (Section 4.8.2).

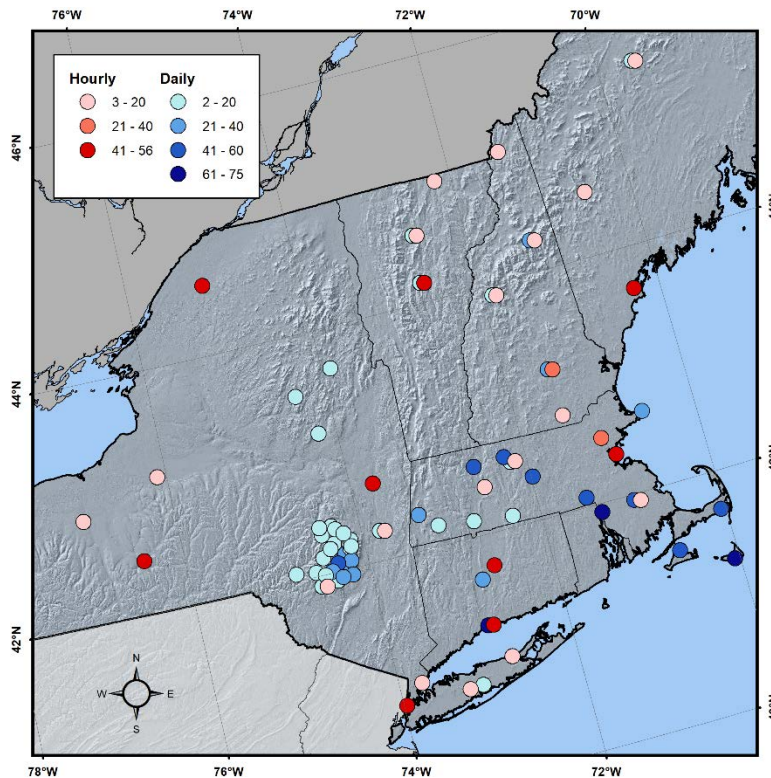


Figure 4.2.1. The locations of stations where hourly and daily records were extended through digitization. Legend indicates number of data years that were digitized.

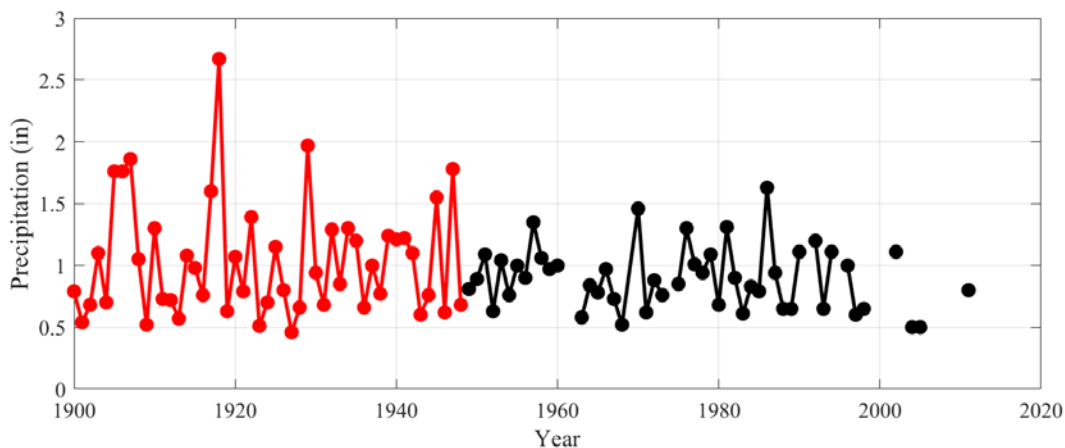


Figure 4.2.2. 60-min AMS time series for the Ithaca, NY station (added data is shown in red).

Table 4.2.2. The number of stations that were obtained per formatting interval.

Formatting interval	Abbr.	Number of stations
1-day	DLY	6,012
1-hour	HLY	1,111
15-minute	15M	506
<b>TOTAL</b>		<b>7,629</b>

### 4.3. Annual maximum series extraction

The precipitation frequency analysis approach used in this project is based on analysis of annual maximum series (AMS) across a range of durations. AMS for each station were obtained by extracting the highest precipitation amount for a particular duration in each successive year. Based on the distribution of heavy precipitation events for this project area, calendar year was used rather than a standard water year (October - September) so that a year begins and ends during a relatively dry season. Annual maximum data at stations were extracted for all durations equal to or longer than the base duration (or reporting interval) up to 60 days. AMS for the 1-day through 60-day durations were compiled from daily, hourly, and 15-minute records. To accomplish this, 15-minute and 1-hour data were first aggregated to constrained 1-day (hours 0 to 24) values before extracting 1-day and longer duration annual maxima. Hourly and 15-minute data were used to compile AMS for 1-hour through 12-hour durations, where 15-minute data were aggregated first to constrained 1-hour (0 to 60 minutes) values before extracting annual maximum value. 15-minute data were also used to compile AMS for 15-minute and 30-minute durations.

The procedure for developing an AMS from a precipitation dataset used similar criteria as in previous volumes that were designed to extract only reasonable maxima if a year was incomplete or had accumulated data. Accumulated data occur in some records where observations were not taken regularly, so recorded numbers represent accumulated amounts over extended periods of time. Since the precipitation distribution over the period is unknown, the total amount was distributed uniformly across the whole period. All annual maxima that resulted from accumulated data were flagged and screened to ensure that the incomplete data did not result in erroneously low maxima (Section 4.5.1).

The criteria for AMS extraction also exclude maxima if there were too many missing or accumulated data during the year and more specifically during critical months when precipitation maxima were most likely to occur (“wet season”). Wet seasons were resolved by assessing the periods in which two-thirds of AM occurred at each station and by inspecting histograms of annual maxima for the 1-day and 1-hour durations in a region. The final wet season months assisted in the determination of the climate regions depicted in Figure 4.1.2. The assigned wet season months for each region are shown in Table 4.3.1.

*Table 4.3.1. Wet season months for each region for daily and sub-daily durations.*

Region	Wet season months	
	Daily durations	Sub-daily durations
Interior (1)	May - November	May - September
Coastal (2)	May - December	May - October

The flowchart in Figure 4.3.1 depicts the AMS extraction criteria for all durations. Various thresholds for acceptable amounts of missing or accumulated data were applied to the year and wet season. The extracted maximum value of a given duration for a given year had to pass through all of the criteria in the flowchart to be accepted. Various codes were assigned to both accepted and rejected maxima based on the amount of missing and accumulated data in each year (see Figure 4.3.1) to assist in further quality control of AMS as described in Section 4.5.1.

For example, in a year with less than 20% of the measurements missing in the whole year and during the assigned wet season, if more than 66% of the measurements were accumulated, then the maxima for that year was (conditionally) rejected and assigned code 130. If the year had between 33% and 66% accumulated data, then it was further screened by assessing the lengths of the accumulation periods. If the lengths of the accumulation periods for more than 33% of the accumulated data were equal to or longer than threshold accumulation period lengths ( $D_{\text{thresh}}$ ), then the maximum for that year was (conditionally) rejected (code 140). Threshold accumulation period lengths were defined as matching the selected



duration for durations less than 2 days, as equal to half of duration period for durations between 2 days and 20 days, and as equal to 15 days for durations equal to or longer than 30 days. If the year had less than 33% accumulated data, the extracted maximum was passed to another set of criteria for accumulations during its wet season, etc.

If a rejected annual maximum was higher than 85% of the accepted maxima at that station, then it was kept in the series (code 30). Also, if a rejected 1-day annual maximum was higher than any accumulated amount in a year, then it was kept in the series and assigned code 40. Years in which a maximum was rejected were marked as missing in the series.

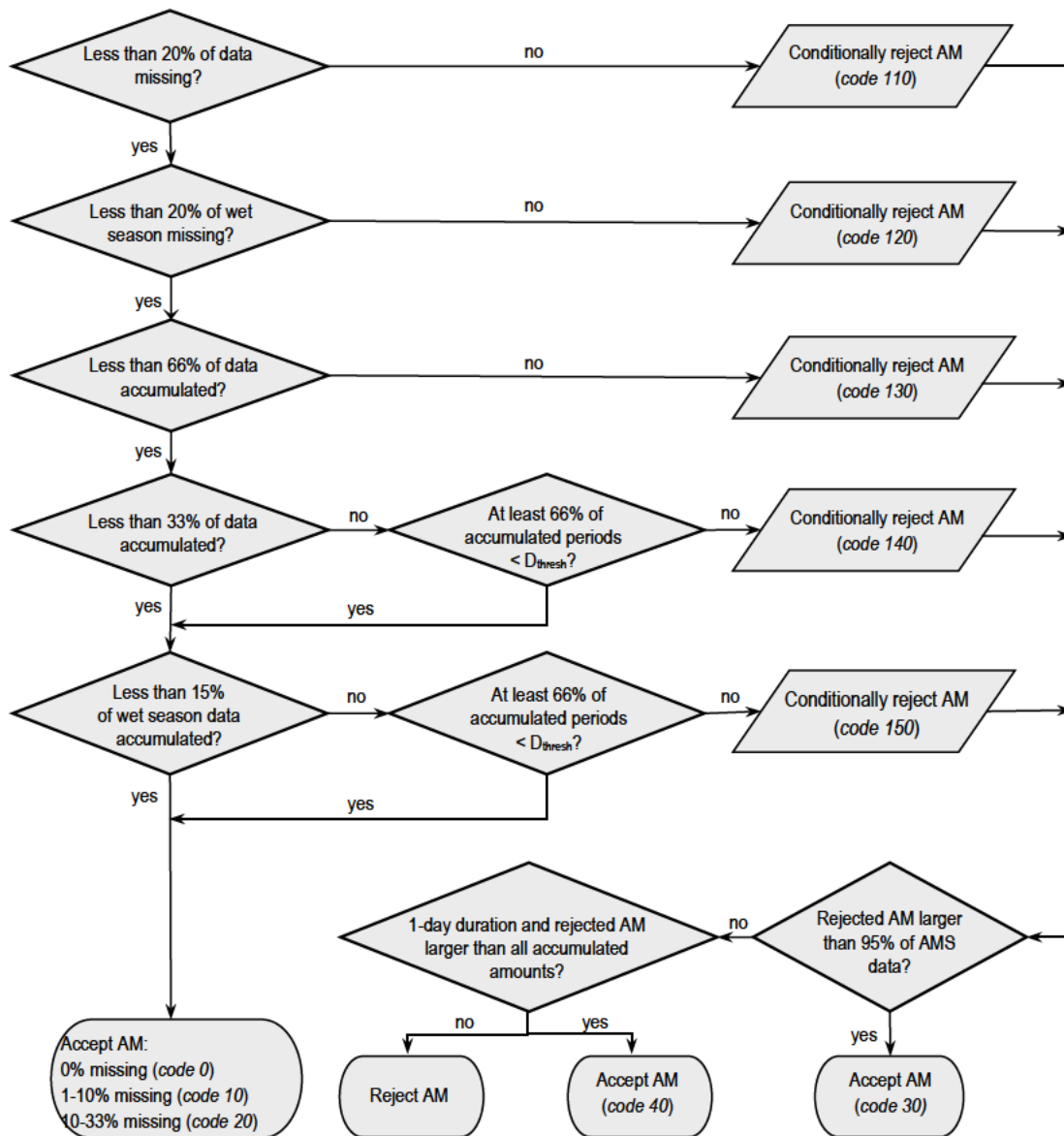


Figure 4.3.1. Criteria used to extract annual maxima. Data quality codes were assigned based on acceptance and rejection;  $D_{thresh}$  depends on duration.

#### 4.4. Station screening

Station screening was done in the following order: a) examination of geospatial data, b) screening for duplicate records at co-located daily, hourly, and/or 15-minute stations and extending records using data from co-located stations, c) screening nearby stations for potentially merging records or removing shorter, less reliable records in station dense areas, and d) screening for sufficient number of years with usable data.

**Geospatial data.** Latitude, longitude, and elevation data for all stations were screened for errors. Several stations had to be re-located because they plotted in a different state or were clearly misplaced based on inspection of satellite images and maps. Misplacement was typically the result of no seconds recorded in latitude and longitude data. There were also several stations with no elevation data; for those stations, elevation was estimated from high-resolution digital elevation model (DEM) grids. Several corrections to metadata were also made based on input received during the peer review (see Appendix A.4).

**Co-located stations.** Co-located stations were defined as stations that have the same geospatial data but report precipitation amounts at different time intervals. The screening of co-located stations was done as follows:

- If co-located 15-minute and hourly stations provided data for the same period and there were no differences in AMS for constrained 1-hour maxima (15-minute data aggregated on the clock hour), only the 15-minute station was retained and used to extract AMS for all longer durations.
- If a 15-minute or hourly station provided data for the same period as a co-located daily station and there were no differences in AMS for constrained 1-day maxima (15-minute or 1-hour data aggregated from 0 to 24 hours), only the 15-minute or hourly station was retained and used to extract AMS for all longer durations.
- If periods of record at co-located stations were consistent but did not completely overlap, aggregated data from the station with the shorter reporting interval were used to extend the record of the station with the longer reporting interval.
- If the station with the longer reporting interval had a longer period of record, then it was retained in the dataset in addition to the co-located station with the shorter reporting interval.

AMS data consistency across durations was ensured in later quality control procedures (Section 4.5.4).

**Nearby stations.** Nearby stations were defined as stations located within three miles with consideration to elevation differences. However, in areas of flat terrain, stations up to five miles apart or farther may have been considered. The records of nearby stations were considered for merging to increase record lengths. In station-dense areas some stations were removed from the analysis if a nearby station had a longer overlapping record, better quality data, or was highly correlated.

**Record length.** Record length was characterized by the number of years for which annual maxima could be extracted (i.e., data years) rather than the entire period of record. Daily stations were considered for frequency analysis if they had at least 30 data years, but allowances were made for isolated stations. A minimum of 20 data years was required for stations recording at sub-daily durations, with a few exceptions (for example, a station that caught an extreme event).

Figure 4.4.1 shows histograms for the number of data years of stations retained for frequency analysis across daily, hourly, and sub-hourly durations after all the screenings were done. The average and median record lengths as well as corresponding ranges of record lengths are given in Table 4.4.1.

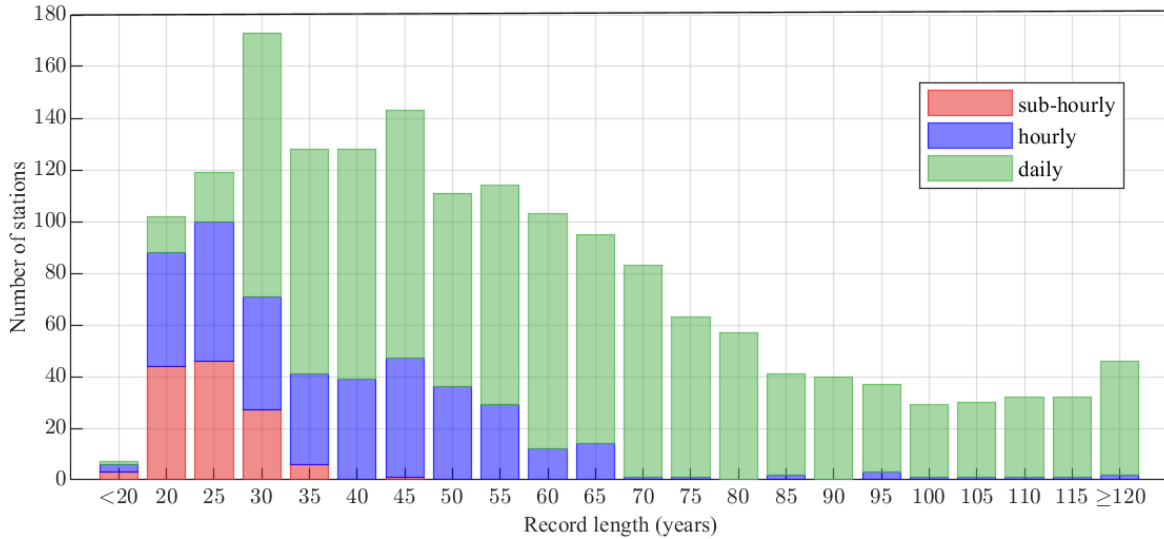


Figure 4.4.1. Number of stations available for precipitation frequency analysis across sub-hourly, hourly and daily durations.

Table 4.4.1. Record length statistics for stations used in frequency analysis for different durations.

Duration (D)	Number of stations	Record length (data years)		
		average	median	range
Daily (1-day ≤ D ≤ 60-day)	1,218	66	62	9 - 173
Hourly (1-hr ≤ D < 24-hr)	370	42	40	9 - 122
Sub-hourly (15-min ≤ D < 60-min)	127	27	26	14 - 46

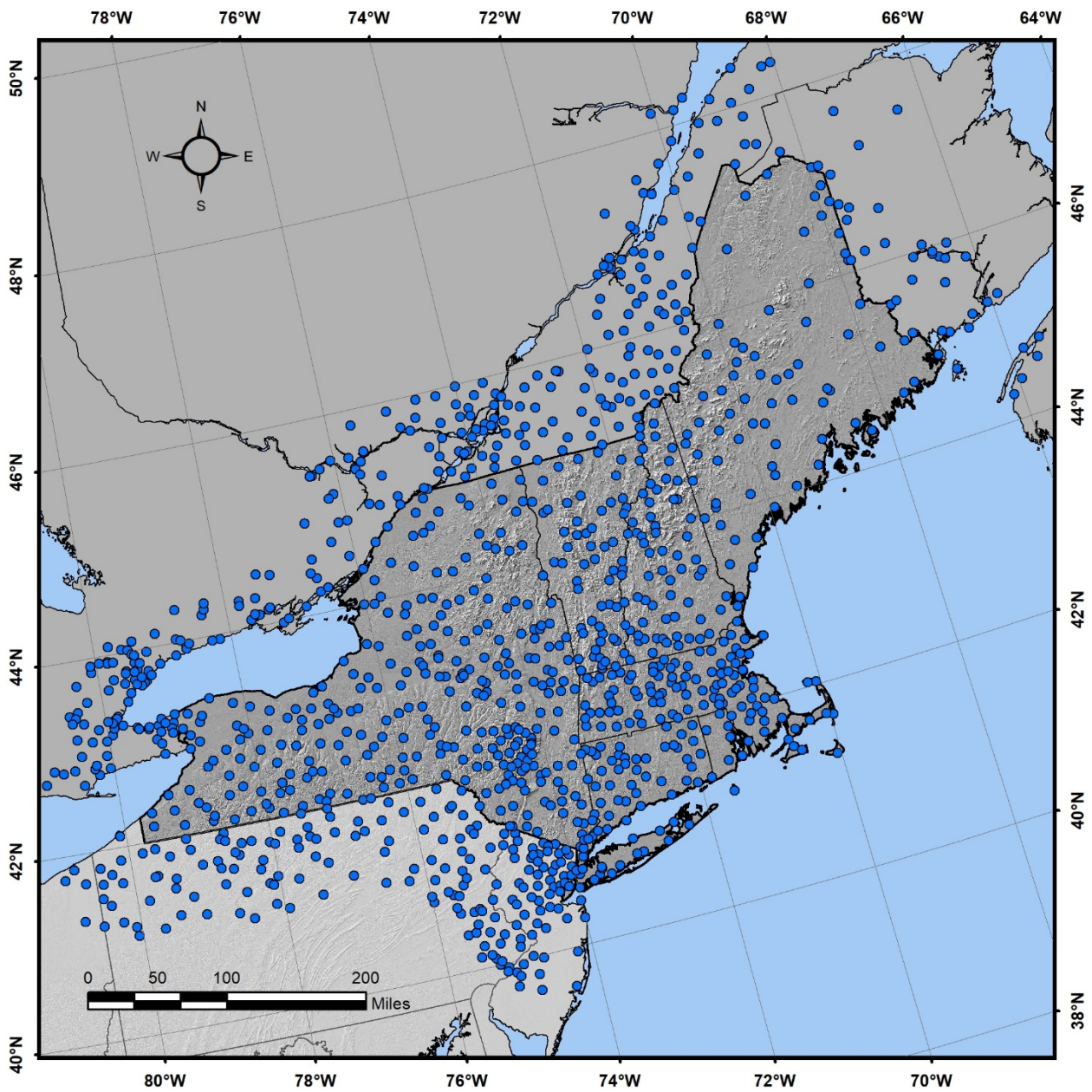
Locations of stations recording precipitation data at 1-day intervals that were used in the frequency analysis are shown in Figure 4.4.2 and locations of stations recording at 1-hour and sub-hourly intervals, as well as n-minute stations, are shown in Figure 4.4.3. More detailed information on each station whose data were used to calculate precipitation frequency estimates is given in the following six tables in Appendix A.1:

Table A.1.1 shows locations in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont, for which precipitation frequency estimates were derived. The table shows each location's state, name, SID, latitude, longitude, elevation and AMS record lengths (data years) across sub-hourly, hourly and daily durations. It also lists SIDs for stations that contributed data to this location for sub-hourly, hourly and daily durations. Details on stations' metadata are provided in Tables A.1.3 and A.1.4.

Table A.1.2 shows similar information for stations in Canada, New Jersey, Ohio, and Pennsylvania.

Details on contributing stations' metadata are provided in Table A.1.3 for stations within the seven Northeastern states and in Table A.1.4 for other stations. The tables show each station's state, name, SID, shortest formatting interval (see Table 4.2.2), latitude, longitude, elevation, dataset identifier (see Table 4.2.1), and the period of record. Similar information is shown in Table A.1.5 for stations used in derivation of n-minute scaling factors (see Section 4.6.3).

Finally, Table A.1.6 lists stations for which additional data were digitized (Section 4.2), showing each station's state, name, SID, formatting interval (Table 4.2.2), dataset identifier (Table 4.2.1), and the period(s) of record for which data were digitized.



*Figure 4.4.2. Map of stations recording at 1-day interval used in frequency analysis.*

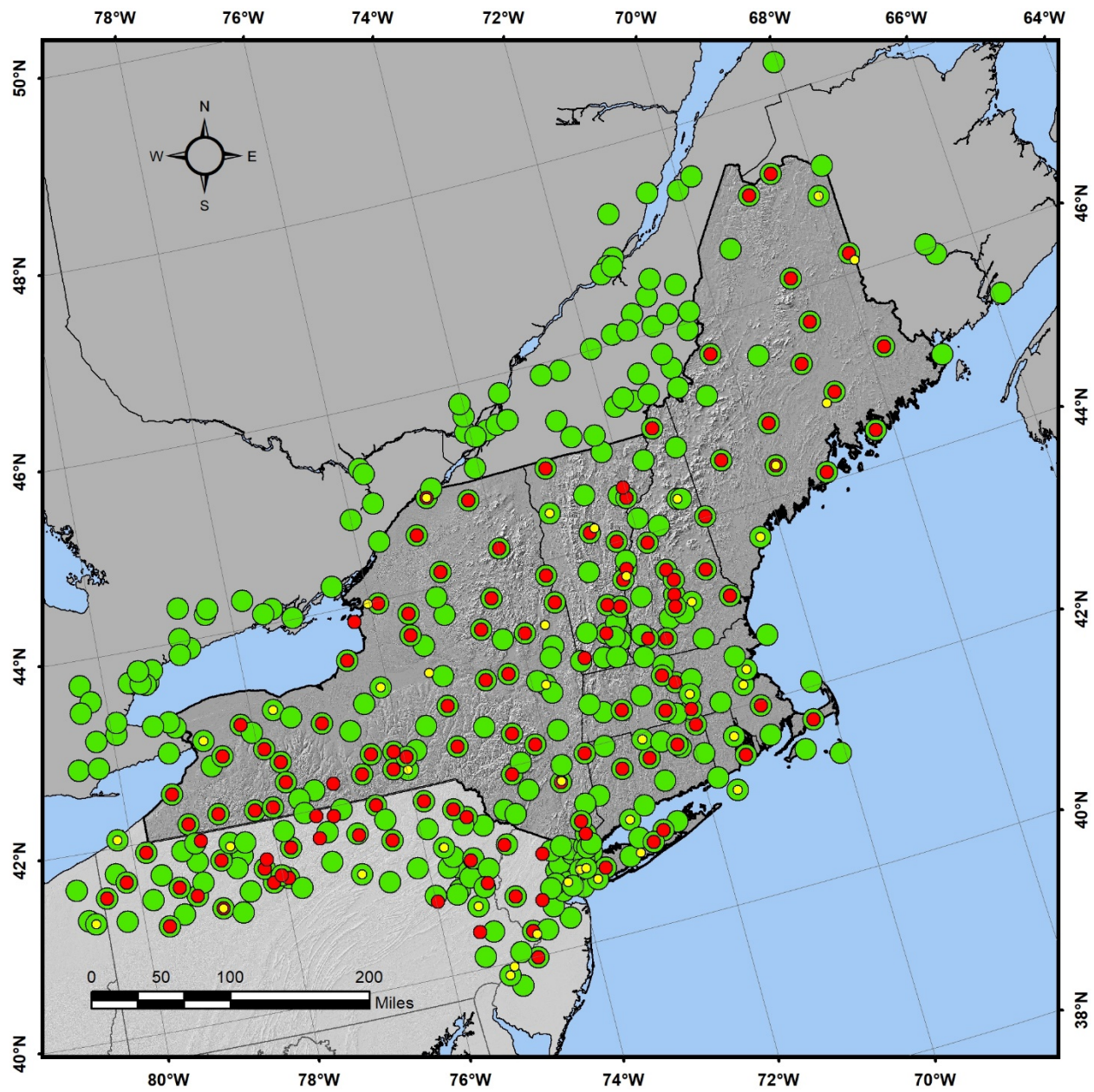


Figure 4.4.3. Map of stations recording at 1-hour (green circles) and 15-minute or variable intervals (red circles) used in the analysis; n-minute stations are shown as yellow circles.

## 4.5. AMS screening and quality control

### 4.5.1. Outliers

For this project, outliers are defined as annual maxima which depart significantly from the trend of the corresponding remaining maxima. Since data at both high and low extremities can considerably affect precipitation frequency estimates, they have to be carefully investigated and either corrected or removed from the AMS if erroneous or due to measurement errors. The high and low outliers' thresholds from the Grubbs-Beck statistical test (Interagency Advisory Committee on Water Data, 1982) and the median +/- two standard deviations thresholds were used to identify low and high outliers for all durations. Low outliers, which frequently came from years with missing and/or accumulated data, were typically removed from the annual maximum series. All values identified as high outliers were mapped with concurrent measurements at nearby stations. Questionable values that could not be confirmed were investigated further using climatological observation forms, radar data, monthly storm data reports, and other historical weather event publications. Depending on the outcome of each investigation, values were either kept as is, corrected, or removed from the datasets.

An example of outlier examination is shown in Figure 4.5.1: statistical tests indicated that a 24-hour amount of 9 inches recorded on 24 March 2005 at Rhinebeck 4SE, NY (30-7035) was an outlier. Further investigation of the original observation form for that date showed that the recorded value was a snowfall amount where the corresponding water equivalent value was 0.9 inches. This value was edited in the dataset and a new 24-hour annual maximum was extracted for that year.

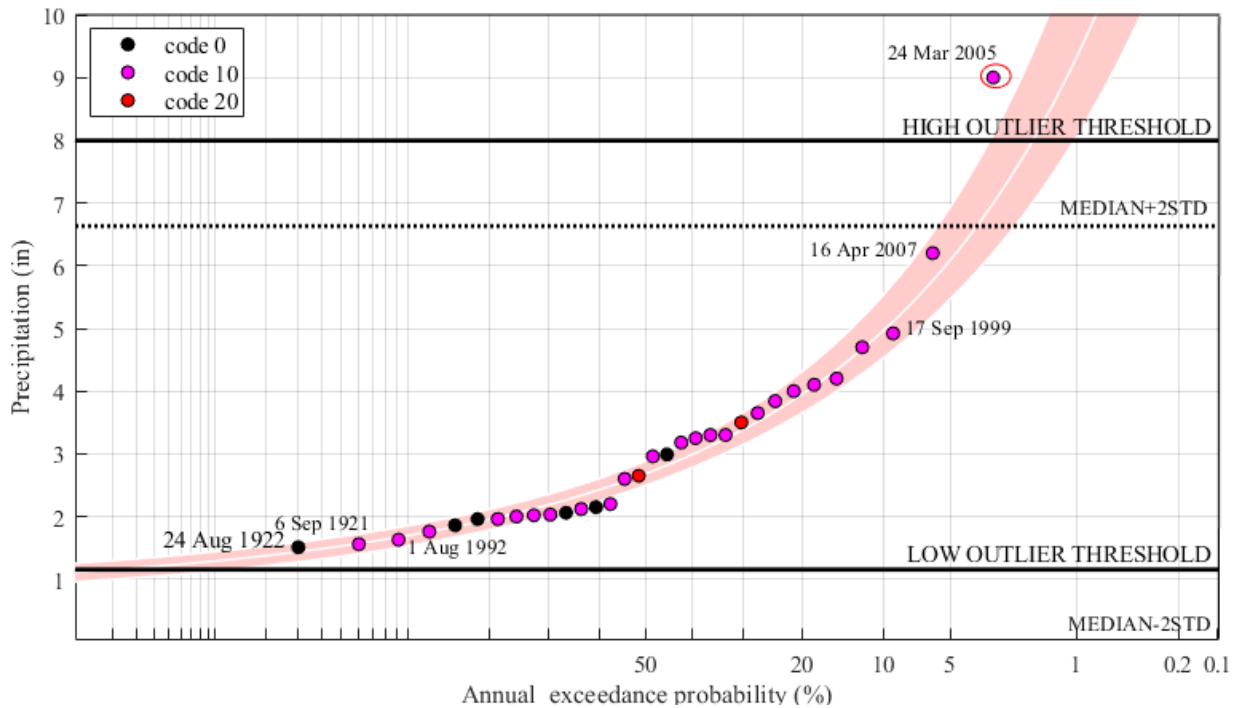


Figure 4.5.1. Outlier tests for 24-hour AMS at station 30-7035. Data quality codes were assigned to annual maxima during the extraction process (Section 4.3).

#### 4.5.2. Missing significant events in records

Precipitation frequency estimates can be significantly affected by an incomplete data record, particularly if one of the highest observed amounts is missing, either because it occurred outside a station’s period of record, because the rain gauge was destroyed during an event, or due to data that was never archived, digitized or was otherwise lost over time. Less commonly, the rainfall amounts were misread from the observation forms, or the station was discontinued.

Several significant events that were either missing, underestimated, or recorded erroneously in various stations’ records were added, if they were well documented and/or recorded at nearby stations. Table 4.5.1 shows the most notable cases with the reference to where these events were documented. For example, the gauge at Windham, NY was washed away during Hurricane Donna in September 1960. The rainfall began shortly before 8 am on the 11<sup>th</sup> with the most intense rainfall in the afternoon on the 12<sup>th</sup>. Readings at this station were taken once per day, usually around 8 am local time. On the observation form, 0.10 inches was recorded for the 11<sup>th</sup>, 2.25 inches for the 12<sup>th</sup>, and the value for the 13<sup>th</sup> is missing. 3-day rainfall of 10.1 inches at Windham, reported by a local newspaper, was used to estimate the rainfall amount for the 13<sup>th</sup> as 7.75 inches.

*Table 4.5.1. List of the most significant events that were corrected or added to the stations’ records.*

Station name, state (SID)	Date	Original amount	Updated amount
Barre Falls Dam, MA (19-0408)	12-22 Sep 1938		11.83 in/1-day <sup>(1)</sup> 18.71 in/10-day
Brattleboro, VT (43-0841)	6-7 Aug 1856		7.87 in/1-day <sup>(2)</sup> 11.80 in/2-day
Greenfield No 3, MA (19-3229)	8-9 Oct 2005		9.01 in/1-day <sup>(3)</sup> 10.0 in/2-day
Peekamoose, NY (30-6479)	21-24 Aug 1933		10.08 in/1-day <sup>(4)</sup> 12.03 in/2-day 14.53 in/3-day 15.98 in/4-day
Sanford 2 NNW, ME (17-7479)	21 Oct 1996	0.19 in/1-day	8.19 in/1-day <sup>(5)</sup>
Saratoga Springs 4 SW, NY (30-7484)	25 Jun 1966		4.04 in/60-min <sup>(6)</sup>
Tannersville, NY (30-8403)	21 Mar 1980		8.61 in/24-hour <sup>(7)</sup> 9.00 in/2-day
Westerly, RI (37-8911)	16-17 Sep 1932		12.3 in/24-hour <sup>(8)</sup>
Windham, NY (30-9516)	12-13 Sep 1960	2.25 in/1-day	7.75 in/1-day <sup>(9)</sup> 10.0 in/2-day

<sup>(1)</sup> Event occurred outside station’s period of record; it was measured by MA Department of Public Health’s gauge in nearby Barre (Paulsen et al., 1940).

<sup>(2)</sup> Ludlum (1985). Newspaper article “Local Intelligence” in [9 August 1856 Vermont Phoenix](#) also references storm total of 11.80 inches in 36 hours. 1-day rainfall was estimated at two thirds of that value.

<sup>(3)</sup> [NCEI cooperative observation form 2005-10 for Greenfield No 3, MA](#). Most of the rainfall total at ~10 inches fell in 24 hours (<https://water.weather.gov/precip/>),

<sup>(4)</sup> Table 74, Langbein et al. (1947).

<sup>(5)</sup> [NCEI cooperative observation form 1996-10 for Sanford 2 NNW, RI](#). Observation form was misread and 0.19 was digitized instead of 8.19. NCEI was informed and has since fixed this error.

<sup>(6)</sup> [NCEI 1966-06 storm data publication for New York](#). Observer measured 4.04 inches in 55-minutes.

<sup>(7)</sup> 1-day amount from Table 18, Thaler (1996); 2-day amount from Livezey (1980).

<sup>(8)</sup> 24-hour Rhode Island state rainfall record (<https://www.ncdc.noaa.gov/extremes/sccc/records>).

<sup>(9)</sup> [NCEI cooperative observation form 1960-09 for Windham, NY](#); Weber (1960); Rostvedt (1965).

### 4.5.3. Correction for constrained observations

**Daily durations.** The majority of AMS data used in this project came from daily stations at which readings were taken once per day (usually around 8 am local time, but this can vary over the course of a station’s record and from station to station). Due to the fixed beginning and ending of observation times at daily stations, the true 24-hour (unconstrained) annual maximum could be up to 100 percent larger than the corresponding 1-day (constrained) value extracted from the daily records.

For extreme events, unconstrained 24-hour AM values were determined by inspection of information from nearby gauges, and by reviewing storm reports, storm data, and radar data. For some events, weather observers computed their own 24-hour rainfall totals or made special observations that made it possible to determine more accurate unconstrained values. An example of this type of adjustment is for the East Jewett, NY station, during the passage of tropical storm Irene in August 2011 with 12.85 inches of rain over 2 days. From the evolution of this event, it was assessed that most of the rain fell in less than 24 hours, but because the observer measured the rainfall at 7 am local time (which was roughly in the middle of the event) 6.15 inches were measured on the 28th and 6.70 inches on the 29th. In this case, 12.85 inches was assumed to be a 24-hour amount. This was confirmed by the Tannersville hourly gauge, less than 5 miles away, which measured 11.6 inches in 24 hours and by an unofficial report of 18 inches in one day in Maplecrest, NY, less than 5 miles away.

*Table 4.5.2. Examples of significant adjustments to 1-day AM values to account for fixed-clock observations. Bold font indicates 1-day AM values before correction.*

Station name, state (SID)	Date	Recorded 1-day amount (inches)		24-hour AM value (inches)
		day1	day2	
East Jewett, NY (30-2366)	28-29 Aug 2011	6.15	<b>6.70</b>	12.85
Rhinebeck 4 SE, NY (30-7035)	28-29 Aug 2011	<b>4.20</b>	4.07	8.27
MT Mansfield, VT (43-5416)	28-29 Aug 2011	<b>3.62</b>	3.22	6.84
Poughkeepsie, NY (30-6821)	11-12 Jun 1903	<b>5.10</b>	3.06	8.16
NYC Central Park, NY (30-5801)	08-09 Oct 1903	4.30	<b>7.33</b>	11.17

At all daily stations, correction factors were applied to AM to account for the likely failure of capturing the true unconstrained values. The correction factor for each daily duration was estimated as the coefficient of a zero-intercept regression model using concurrent (occurring within +/- 1 day) constrained and unconstrained annual maxima from hourly stations as independent and dependent model variables, respectively. Correction factors for all daily durations are given in Table 4.5.3.

*Table 4.5.3. Correction factors applied to constrained AMS data across daily durations.*

Duration (days)	1	2	3	4	7	>7
Correction factor	1.11	1.04	1.03	1.02	1.01	1.00

**Hourly durations.** While significant underestimations due to constrained observations are commonly seen for daily stations, ‘clock-hour’ observations also affect hourly measurements at stations recording at 1-hour intervals. Data from stations recording at sub-hourly durations or from first-order hourly stations, which often report unconstrained amounts, were used to make corrections. For example, the maximum 1-hour value of 1.50 inches recorded at 4:00 pm local time on 17 June 1960 at Binghamton, NY hourly station was increased by 1.51 inches based on the corresponding 60-min value of 3.01 inches reported at the first-order hourly station (also in Jennings, 1963).



For other AM data extracted at hourly stations, the correction factors were developed from concurrent (occurring within +/- 1 hour) annual maxima at co-located hourly (constrained) and 15-minute (unconstrained) stations using a similar approach as for daily stations. Correction factors applied to constrained AMS data across hourly durations are shown in Table 4.5.4.

*Table 4.5.4. Correction factors applied to constrained AMS data across hourly durations.*

<b>Duration (hours)</b>	1	2	3	6	>6
<b>Correction factor</b>	1.08	1.04	1.02	1.01	1.00

#### **4.5.4. Inconsistencies across durations**

At co-located stations, it was not unusual that corresponding annual maxima differed for some years during their overlapping periods of record. Related 1-day maxima at co-located daily and hourly stations were compared, and each pair of significantly different estimates was investigated. Effort was made to identify the source of the error and to correct erroneous observations across all durations that were affected.

Annual maxima at each station were also compared across all durations in each year to ensure that every extracted amount for a longer duration was at least equal to the corresponding amount for the successive shorter duration. Inconsistencies of this type occurred at stations with a significant number of missing and/or accumulated data and resulted from different AMS extraction rules applied for different durations (Section 4.3), or from the correction for constrained observations (Section 4.5.3). In those cases, shorter duration annual maxima were used to replace annual maxima extracted for longer durations. Typically, adjustments of this type were small.

#### **4.5.5. Trend analysis**

The precipitation frequency analysis methods used in NOAA Atlas 14 are based on the assumption that the annual maximum series used in the analysis are stationary. Statistical tests for trends in AMS and the main findings for this project area are described in more detail in Appendix A.2. Briefly, the stationarity assumption was tested by applying a parametric *t*-test and non-parametric Mann-Kendal test for trends in means and Levene's test for trends in variance in the 1-day and 1-hour AMS data at the 5% significance level. For the 1-day duration, testing was done on stations with at least 70 years of data; for the 1-hour duration, the minimum number of data years was lowered to 40 to increase sample size. Overall, the Mann-Kendall test detected slightly more positive trends in the means than the *t*-test, but neither test detected trends in at least 80% of the stations at both durations. Levene's test did not detect trends in variance in about 94% of stations at both durations. Spatial maps did not reveal any spatial coherence in trend results.

The relative magnitude of any trend in the AMS means was also assessed for three climate regions delineated for this project (see Figure 4.1.2). AMS from all stations in each region were rescaled by corresponding mean values and then regressed against time. The regression results were tested as a set against a null hypothesis of zero serial correlation. The null hypothesis of no trends in AMS data could not be rejected at 5% significance level at any region.

### **4.6. Precipitation frequency estimates with confidence limits at stations**

#### **4.6.1. Overview of methodology and related terminology**

Precipitation magnitude-frequency relationships at individual stations have been computed using a regional frequency analysis approach based on L-moment statistics. Frequency analyses were carried out

on annual maximum series (AMS) for the following seventeen durations: 15-minute, 30-minute, 1-hour, 2-hour, 3-hour, 6-hour, 12-hour, 1-day, 2-day, 3-day, 4-day, 7-day, 10-day, 20-day, 30-day, 45-day, and 60-day. Frequency estimates based on partial duration series (PDS), which include all amounts for a specified duration at a given station above a pre-defined threshold regardless of year, were developed from AMS data using a formula that allows for conversion between AMS and PDS frequencies. Precipitation frequency estimates at 5-minute and 10-minute durations were derived from corresponding 15-minute estimates. To assess the uncertainty in estimates, 90% confidence intervals were constructed on both AMS and PDS frequency curves.

Frequency analysis involves fitting an assumed distribution function to the data. The following distribution functions were analyzed with the aim to identify a distribution that provides the best precipitation frequency estimates for the project area across all frequencies and durations: 3-parameter Generalized Extreme Value (GEV), Generalized Normal, Generalized Pareto, Generalized Logistic, and Pearson Type III distributions; 4-parameter Kappa distribution; and 5-parameter Wakeby distribution.

When fitting a distribution to a precipitation annual maximum series extracted at a given location (and selected duration), the result is a frequency distribution relating precipitation magnitude to its annual exceedance probability (AEP). The inverse of the AEP is frequently referred to as the average recurrence interval (ARI), also known as return period. When used with the AMS-based frequency analysis, ARI does not represent the “true” average period between exceedances of a given precipitation magnitude, but the average period between years in which a given precipitation magnitude is exceeded at least once. Those two average periods can be considerably different for more frequent events. The “true” average recurrence interval (ARI) between exceedances of a particular magnitude can be obtained through frequency analysis of PDS.

Differences in magnitudes of corresponding frequency estimates (i.e., quantiles) from the two series are negligible for ARIs greater than about 15 years, but notable at smaller ARIs (especially for  $ARI \leq 5$  years). Because the PDS can include more than one event in any particular year, the results from a PDS analysis are more reliable for designs based on frequent events (e.g., Laurenson, 1987). To avoid confusion, herein the term AEP is used with AMS frequency analysis and ARI with PDS frequency analysis. The term “frequency” is interchangeably used to specify the ARI and AEP.

L-moments (Hosking and Wallis, 1997) provide an alternative way of describing frequency distributions to traditional product moments (conventional moments) or the maximum likelihood approach. Since sample estimators of L-moments are linear combinations of ranked observations, they are less susceptible to the presence of outliers in the data than conventional moments and are well suited for the analysis of data that exhibit significant skewness. L-moments typically used to calculate parameters of various frequency distributions include 1<sup>st</sup> and 2<sup>nd</sup> order L-moments: L-location ( $\lambda_1$ ) and L-scale ( $\lambda_2$ ), and the following L-moment ratios: L-CV ( $\tau$ ), L-skewness ( $\tau_3$ ), and L-kurtosis ( $\tau_4$ ). L-CV, which stands for “coefficient of L-variation”, is calculated as the ratio of L-scale to L-location ( $\lambda_2 / \lambda_1$ ). L-skewness and L-kurtosis represent ratios of the 3<sup>rd</sup> order ( $\lambda_3$ ) and 4<sup>th</sup> order ( $\lambda_4$ ) L-moments to the 2<sup>nd</sup> order ( $\lambda_2$ ) L-moment, respectively, and thus are independent of scale.

One of the primary problems in precipitation frequency analysis is the need to provide estimates for average recurrence intervals that are significantly longer than available records. Regional approaches, which use data from stations that are expected to have similar frequency distributions, have been shown to yield more accurate estimates of extreme quantiles than approaches that use only data from a single station. The number of stations used to define a region should be large enough to smooth variability in at-station estimates, but also small enough that regional estimates still adequately represent local conditions. The region-of-influence approach (Burn, 1990) used in this volume defines regions such that each station has its own region with a potentially unique combination of nearby stations. Stations are selected based on the maximum allowable distance from the target station that is defined in a geographic space and in a space of selected statistical attribute variables. Like with other regionalization approaches, there is a level

of subjectivity involved in the process, for example, in choosing attribute variables, selecting the maximum allowable distance as well as attributes' weights and transformations for similarity distance algorithms. One of the advantages of the region-of-influence approach is that it results in a smooth transition in estimates across regional boundaries, which is relevant for the mapping of precipitation frequency estimates.

A frequency curve that is calculated from sample data represents some average estimate of the population frequency curve, but there is a high probability that the true value lies above or below the sample estimate. Confidence limits provide a measure of the uncertainty. They represent values between which one would expect the true value to lie with a certain confidence; they are not necessarily equidistant from the estimates. The width of a confidence interval between the upper and lower confidence limits is affected by several factors, such as the degree of confidence, sample size, exceedance probability, and so on. In this volume, simulation-based procedures were used to estimate confidence limits of a 90% confidence interval.

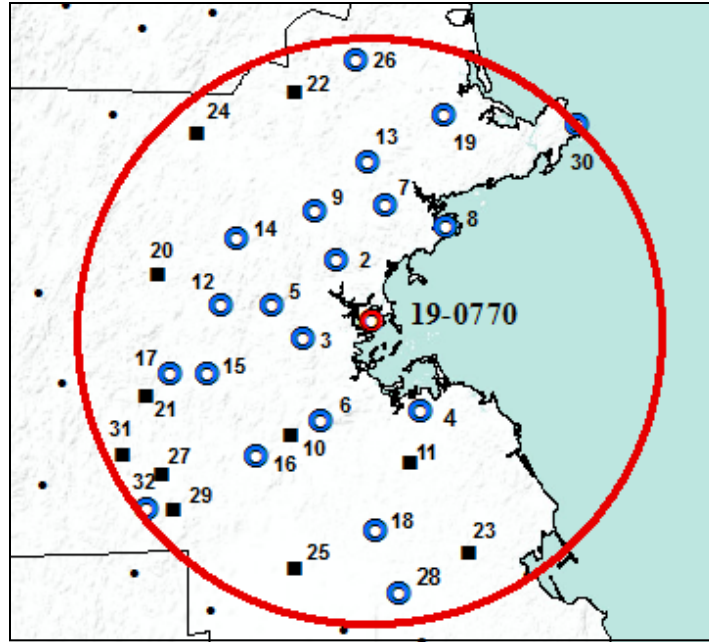
It should be noted that precipitation frequency estimates from NOAA Atlas 14 are point estimates and are not directly applicable to larger areas. The conversion of a point to an areal estimate is usually done by applying an appropriate areal reduction factor to the average of the point estimates within the subject area. Areal reduction factors are generally a function of the size of an area and the duration of the precipitation. The depth-area-duration curves from the Technical Paper No. 29 (U.S. Weather Bureau, 1957), developed for the contiguous United States, can be used for this purpose.

Also, precipitation frequency estimates for each NOAA Atlas 14 volume were computed independently using all available data at the time. Some discrepancies between volumes at project boundaries are inevitable and they will generally be more pronounced for more rare frequencies.

#### **4.6.2. Regionalization**

For each station, an initial region was created by grouping the closest 15 stations. Any station within a 60-mile radius that captured the highest observed 1-hour or 1-day amount was also automatically included in the initial region. Stations were then added to or removed from the region based on examination of their distance from a target station, inspection of their locations with respect to mountain ridges, elevation difference, difference in mean annual maxima, maximum recorded values and record lengths for selected durations, etc. (see an example in Figure 4.6.1) and assessment of similarities/dissimilarities in the progression of relevant L-moment statistics across durations compared with other stations in the region (see Figure 4.6.2). Most regions comprised between 15 and 25 stations with a cumulative number of data years between 1,000 and 1,550 for daily durations and 200 and 400 for hourly durations. The maximum cumulative number of data years was 800 for hourly and 2,186 for daily durations. A few regions in areas with sparse stations comprised less than 10 stations, with a cumulative number of data years as low as 180 for daily durations and 47 for hourly durations.

**Regional L-moments calculation.** For a given duration, regional estimates of L-moment ratios (L-CV, L-skewness and L-kurtosis) were obtained by averaging corresponding station-specific estimates weighted by record lengths. Regional L-moment ratios were then used to estimate higher order L-moments at each station.



Index	SID	Dist (mi)	Elev (ft)	ΔElev (ft)	N 24h	N 1hr	MAM 24h (in)	ΔMAM 24h (in)	MAX 1h (in)	MAX 6h (in)	MAX 24h (in)	MAX 10d (in)
<b>SELECTED STATIONS</b>												
1	19-0770		12	0	156	122	3.15	0.00	2.19	5.51	8.35	14.03
2	19-8030	7.20	171	159	71	0	3.30	0.15	-	-	11.01	16.06
3	19-1447	7.38	121	109	128	0	3.24	0.09	-	-	7.94	14.95
4	19-3624	10.51	35	23	74	0	3.67	0.52	-	-	8.01	15.18
5	54-0129	10.57	58	46	75	0	3.08	-0.07	-	-	9.62	10.90
6	19-0736	11.52	624	613	122	64	3.44	0.29	3.26	5.32	9.93	15.78
7	19-4503	12.00	170	158	42	0	3.57	0.42	-	-	5.74	14.31
...												
<b>BACKUP STATIONS</b>												
17	19-6012	14.39	50	38	43	0	3.23	0.08	-	-	6.82	10.40
18	79-0028	15.07	161	149	42	0	3.04	-0.11	-	-	6.92	14.81
19	19-4580	22.60	205	193	98	0	2.92	-0.23	-	-	6.67	11.72
20	19-0218	24.58	230	218	76	0	3.45	0.30	-	-	8.40	15.27
...												
<b>Enter SID for station(s) you want to remove from "Selected stations" list:</b>												
<b>Enter SID for station(s) you want to add from "Backup stations" list:</b>												

Figure 4.6.1. An example of a spatial plot with accompanying table used in an interactive process for adding or removing stations assigned to the Boston, MA (19-0770) station's region.

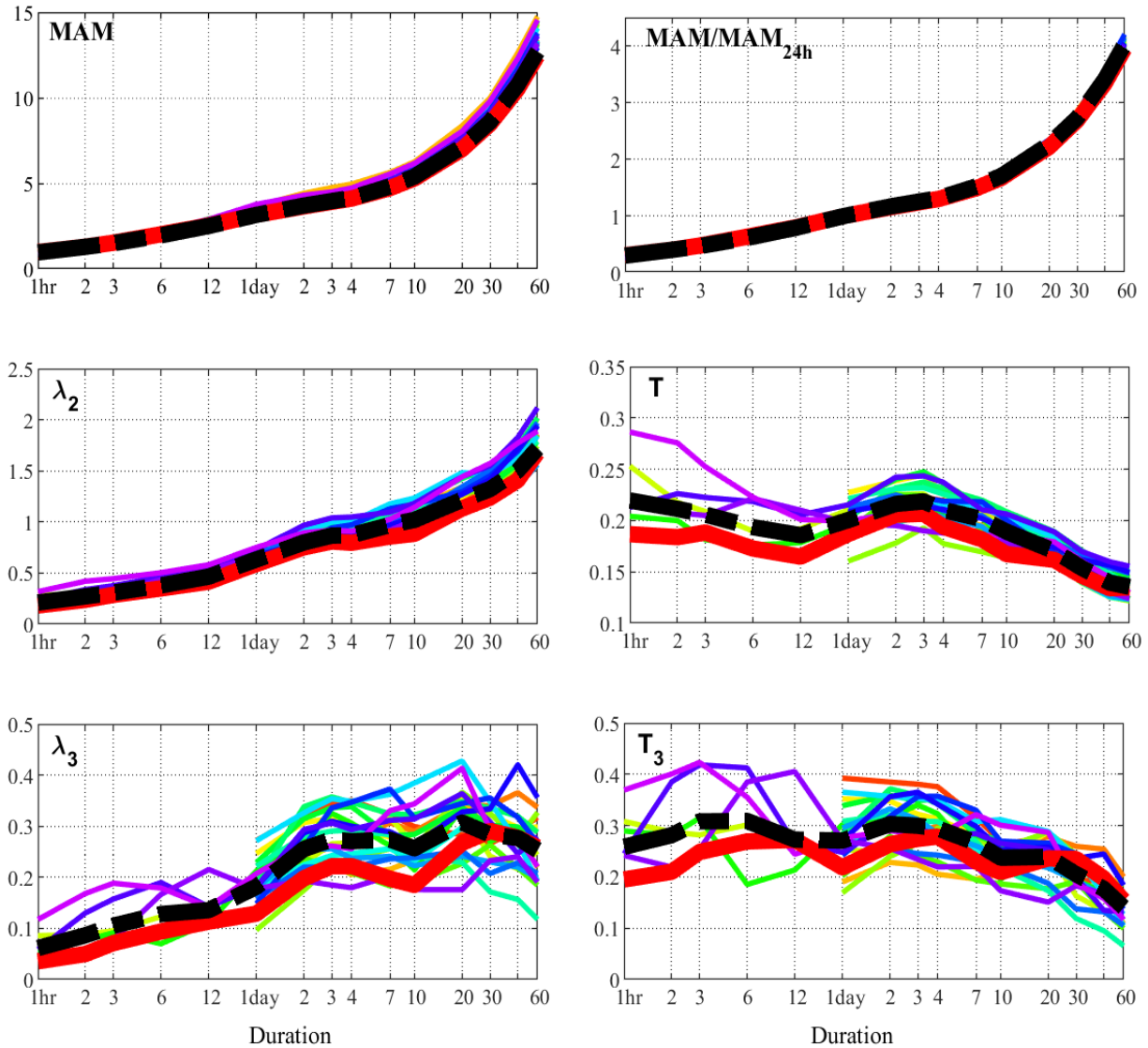


Figure 4.6.2. An example of plots of L-moments (left panels),  $MAM/MAM_{24-hr}$  and L-moment ratios (right panels) across hourly and daily durations for stations assigned to the Boston, MA (19-0770) station's region. Thick red lines show statistics for the target station, thin colored lines show statistics for other stations in the region, and thick dashed black lines show corresponding regional estimates.

**Station dependence.** Since stations were selected based on geographic proximity to a target station, it was likely that some of the extracted annual maxima at nearby stations came from the same storm events. Dependence in AMS data for stations within a region was analyzed using a  $t$ -test for the significance of a correlation coefficient at the 5% level. Analysis indicated that cross-correlation among stations was often statistically significant in areas with a dense network of rain gauges and that the number of dependent station pairs increased with duration length. The impact of station dependence was accounted for during the construction of confidence intervals on estimates where it could have substantial influence (see Section 4.6.5).

### 4.6.3. AMS-based estimates

**Choice of distribution.** A goodness-of-fit test based on L-moment statistics for 3-parameter distributions, as suggested by Hosking and Wallis (1997), was used to assess which of the five 3-parameter distributions listed in Section 4.6.1 provide acceptable fit to the AMS data. Results of  $\chi^2$ - and Kolmogorov-Smirnov tests and visual inspection of probability plots for all seven distributions for 1-hour, 1-day, and 10-day durations, like the one shown in Figure 4.6.3, were considered during distribution selection.

Although it is not required to use the same type of distribution across all durations and/or regions, changes in distribution type for different durations or regions often lead to considerable discontinuities in frequency estimates across durations or between nearby locations, particularly at more rare frequencies. Based on the test results, the GEV distribution, which is generally recommended for analysis of extreme event, provided an acceptable fit to data more frequently than any other distribution. Accordingly, the GEV distribution was adopted across all stations and for all durations.

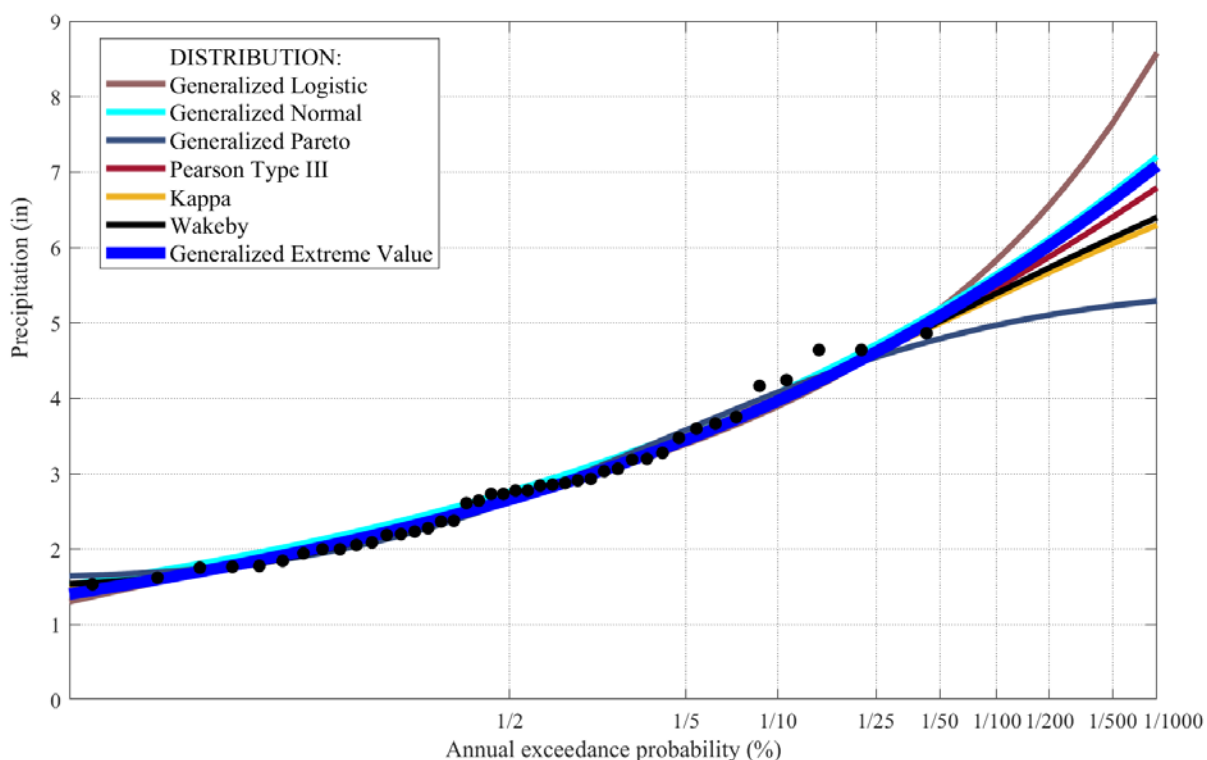


Figure 4.6.3. Probability plots for selected distributions for 1-day AMS at the Adams, MA (19-0049) station.

**Frequency estimates for hourly and daily durations.** For each station and for each hourly and daily duration, L-moment statistics were used to calculate the parameters of the GEV distribution and to produce precipitation frequency estimates for the following annual exceedance probabilities (AEPs): 1/2 (50%), 1/5, 1/10, 1/25, 1/50, 1/100, 1/200, 1/500, and 1/1000. This calculation was repeated for all durations and for all stations. Since L-moments, and consequently, precipitation frequency estimates, were calculated independently for each duration, the resulting depth-duration-frequency (DDF) curves did not always look smooth. Smoothing of quantiles using PCHIP (Piecewise Cubic Hermite Interpolating Polynomial) function (Fritsch and Carlson, 1980) improved the shape of DDF curves. Figure 4.6.4

illustrates precipitation depth-duration-frequency curves before and after smoothing for Amherst, MA (19-0120).

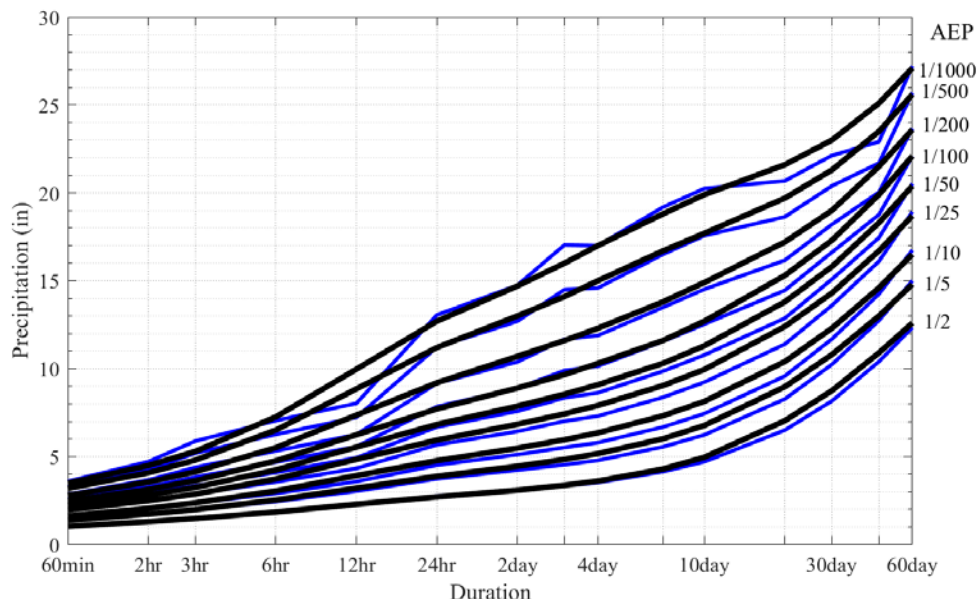


Figure 4.6.4. DDF curve for the Amherst, MA (19-0120) station. Blue lines represent original estimates and black lines represent smoothed estimates.

**Frequency estimates for sub-hourly durations.** The shortest duration at which AMS data were extracted was 15 minutes. Regional L-moment statistics were calculated for the 15-minute and 30-minute durations at stations that had 15-minute AMS data available for at least one station assigned to their region. L-moments were then used to produce precipitation frequency estimates in the same manner as for hourly and daily durations. However, in many cases, resulting precipitation frequency estimates were implausible, especially for AEPs of 1/100 (1%) or less. The primary cause of this was the sample size, as very few stations with measurements at sub-hourly durations were available, and when they were available, they typically had short periods of record. This resulted in unreliable moments (especially higher-order moments), and consequently, unreliable precipitation frequency estimates.  $\lambda_1$  moments (i.e., mean annual maxima) were less sensitive to sample size and were generally in line with corresponding estimates at nearby stations.  $\lambda_1$  moments were also, for the most part, consistent with the expected progression across hourly and daily durations (see top left panel of Figure 4.6.2). For that reason, mean annual maxima at 15-minute and 30-minute durations were retained for derivation of MAM grids (see Section 4.8.1). At-station quantiles, which were assessed as unreliable, were not interpolated to create precipitation frequency grids; an alternative approach described in Section 4.8.2 was used for that purpose.

Similarly, for the 5-minute and 10-minute durations, very few n-minute stations were available to compute precipitation frequency estimates using regional L-moments or to develop MAM grids. Therefore, an alternative approach described in Section 4.8.2 was used to develop these estimates, as well.

#### 4.6.4. PDS-based estimates

PDS-based precipitation frequency estimates were calculated indirectly from Langbein's formula (Langbein, 1949) which transforms a PDS-based average recurrence interval (ARI) to an annual exceedance probability (AEP):

$$AEP = 1 - \exp\left(-\frac{1}{ARI}\right)$$

PDS-based frequency estimates were calculated for the same durations as AMS-based estimates for 1-, 2-, 5-, 10-, 25-, 50-, 100-, 200-, 500-, and 1,000-year ARIs. Selected ARIs were first converted to AEPs using the above formula and then precipitation frequency estimates were calculated for those AEPs following the same approach that was used in the AMS analysis.

#### 4.6.5. Confidence limits

A Monte Carlo simulation procedure that accounts for inter-station dependence described in Hosking and Wallis (1997), was used to construct 90% confidence intervals (i.e., 5% and 95% confidence limits) on both AMS-based and PDS-based precipitation frequency curves (see Section 4.6.2 for spatial dependence analysis). At each station, 1,000 simulated data sets per duration were used to generate precipitation quantiles. Estimates were sorted from smallest to largest and the 50th value was selected as the lower confidence limit, while the 950th value was selected as the upper confidence limit. It should be noted that confidence intervals constructed through this approach account for uncertainties in distribution parameters, but not for other sources of uncertainties (for example, distribution selection) that could also significantly impact the total error, particularly at more rare frequencies.

For some stations, due to differences in record lengths across hourly and daily durations, confidence intervals for hourly durations were wider than corresponding intervals at daily durations; therefore, they were restricted by the corresponding values at 24-hour duration. Confidence limits for sub-hourly durations were calculated using similar approaches that were used to calculate frequency estimates at those durations. Since confidence limits were derived for each duration independently, like precipitation frequency estimates, they could fluctuate from duration to duration and were smoothed across durations using cubic spline functions.

#### 4.7. Rainfall (liquid precipitation) frequency estimates

Precipitation frequency estimates from Section 4.6 represent precipitation magnitudes regardless of the type of precipitation. For some applications, it may be important to know frequency estimates for liquid precipitation (i.e., rainfall) only. For example, rainfall is treated differently from snowfall in watershed modeling because of different runoff producing mechanisms. While the rainfall generates runoff almost immediately, snowfall generally goes into storage until it melts and produces runoff at a later time.

For some areas in NOAA Atlas 14 Volume 10, the contribution of snowfall to the total yearly precipitation amount is significant. However, that does not always translate to significant participation in precipitation AMS. Similar analyses done for previous NOAA Atlas 14 volumes indicated that snowfall contribution to the precipitation AMS is possibly relevant at elevations above 3,000 feet. For this volume, analysis was extended to include areas downwind of Lake Erie and Lake Ontario, including the plateau region east of Lake Ontario affected by lake-effect snow.

To explore differences in precipitation and rainfall (i.e., liquid-only precipitation) frequency estimates, concurrent measurements of rainfall and snow water equivalent (SWE) are needed. Such information is rarely directly available, but at the minimum, information useful for distinguishing the type of precipitation must exist.

Unfortunately, for this project, relevant data needed to perform a meaningful analysis was available for only two high elevation stations: Mount Washington, NH (6,271 feet elevation) and Mount Mansfield, VT (3,950 feet) and also for Wales, NY (1,135 feet) next to Erie Lake.

Hourly snowfall information was not available for these three stations, so analysis was done for 1-day duration only. For each station, concurrent daily precipitation and snowfall measurements were available



from the NCEI GHCN dataset. Since snow water equivalent information was not available, recorded snowfall amounts were first converted to snow water equivalent using the 10-to-1 ratio, which assumes that the density of water is 10 times the density of snowfall. While this ratio is often used in practical applications, it is typically too low for use in high terrain where temperatures are lower. The 10-to-1 ratio will likely give an upper estimate of the contribution of snowfall (10-to-1 ratio snowfall contains more liquid equivalent than a 12-to-1 ratio snowfall).

Rainfall was calculated as the difference between precipitation and snow water equivalent. AMS were extracted from both the rainfall and precipitation datasets. Frequency analysis was performed on both rainfall and precipitation AMS using the Generalized Extreme Value distribution with parameters estimated from L-moment statistics. The ratios between the rainfall and precipitation frequency estimates for selected average recurrence intervals for the 24-hour duration are shown in Table 4.7.2. Results show that differences in corresponding precipitation and rainfall frequency estimates are non-trivial only for the Mount Washington station, which is above 6,000 feet.

*Table 4.7.2. The ratios between 24-hour rainfall and precipitation quantiles for selected AEPs.*

Station name, state (SID)	Elevation (feet)	Annual exceedance probability					
		1/2	1/5	1/10	1/25	1/100	1/500
Mt Washington, NH (27-5639)	6,271	0.88	0.89	0.90	0.91	0.94	0.98
Mt Mansfield, VT (43-5416)	3,950	0.96	0.98	0.99	1	1	1
Wales, NY (30-8910)	1,135	0.96	0.97	0.98	0.99	1	1

## 4.8 Derivation of grids

### 4.8.1. Mean annual maximum precipitation

Grids of mean annual maxima (MAM) served as the basis for deriving gridded precipitation frequency estimates at different frequencies and durations. The station mean annual maximum values for the 17 durations from 15-minute and 60-day were spatially interpolated to produce corresponding mean annual maximum grids at 30 arc-seconds resolution using a hybrid statistical-geographic approach for mapping climate data named Parameter-elevation Regressions on Independent Slopes Model (PRISM), developed by Oregon State University's PRISM Climate Group (e.g., Daly et al., 2002).

Several iterations with the PRISM Climate Group were made to ensure satisfactory MAM patterns. Gauged locations where interpolated MAMs for selected base durations (15-minute, 1-hour, 1-day, 10-day) were more than 10% different (determined by jackknife analysis) than the expected at-station MAMs were carefully re-examined. As a result of those reviews, some MAM estimates were adjusted. MAMs were also estimated for a couple of ungauged locations to better anchor the spatial interpolation in coastal and varied terrain areas and/or where the lack of stations with sufficiently long records unduly influenced expected spatial patterns, particularly at hourly durations.

Appendix A.3 provides detailed information on the PRISM-based methodology for creating the mean annual maximum grids. In summary, a unique regression function was developed for each target grid cell to derive mean annual maximum values for each duration that accounted for the difference between an observing station's and the target cell's mean annual precipitation, topographic facet, coastal proximity, the distance of an observing station to the target cell, etc. Jackknife cross-validation indicated that the overall percent bias was less than 0.5% and the mean absolute error was less than 4% across all durations.

#### 4.8.2. Precipitation frequency estimates with confidence limits

**Estimates for 60-minute through 60-day durations.** The spatial interpolation technique used in this volume developed grids of AMS-based and PDS-based precipitation frequency estimates along the frequency dimension for a given duration. Hence, the evolution of frequency-dependent spatial patterns for a given duration was independent of other durations. The technique utilizes the inherently strong linear relationship that was found to exist between precipitation frequency estimates for consecutive frequencies, as well as mean annual maxima and 2-year precipitation frequency estimates. For example, Figure 4.8.1 a) shows the relationship between the 50-year and 100-year estimates for the 24-hour duration for this project area together with regression lines for a linear model and zero-intercept model. The  $R^2$  values are very close to 1.0, which was common for all relationships. Another common occurrence was a negligible intercept coefficient in the linear model regression equations, so a zero-intercept model was adopted for all frequencies and durations. The slope coefficient of the zero-intercept model represents an average domain-wide ratio between consecutive quantiles; in this case, 1.162 is an average ratio between 100-year and 50-year quantiles for the 24-hour duration for the whole project area. Although the correlation coefficients were very high, when plotted on a map, at-station ratios showed some regional features (as shown in Figure 4.8.1 b) for the same example); this finding was used in the grid generation process.

For each duration, the calculation began with the PRISM-derived MAM grid as the initial predictor grid and the grid of 2-year precipitation frequency estimates as the resulting subsequent grid. At-station ratios between the 2-year estimates and corresponding MAM estimates were spatially interpolated to a grid using a natural neighbor interpolation method, which provides a smooth approximation to the underlying "true" function while remaining true to the at-station estimates. Gridded MAM estimates were then multiplied by corresponding gridded ratios to create a grid of 2-year precipitation frequency estimates. In the subsequent run, ratios between the 5-year and 2-year estimates were interpolated and used to calculate the 5-year precipitation grid from the 2-year grid, and so forth. The grid of 2-year precipitation frequency estimates was also used to create a grid of 1-year estimates. The same process was repeated for all hourly and daily durations.

During the review process, station-driven contour lines were showing up in cartographic maps in flat terrain areas (see Appendix A.4). The majority of these were driven by small differences in MAM estimates at nearby stations and selected mapping contour intervals, but to reduce a number of station-driven contours in the final cartographic maps, a dynamic filter was applied to the precipitation frequency grids. Parameters of the filter, which controlled the amount of smoothing, were a function of elevation gradients and proximity to the coastline. Parameters were selected such that minimal smoothing was applied at the coastline or in the mountains, maximum smoothing was applied in flat terrain, and the transition from one to another was gradual. The resulting smoothed grid then served in the subsequent run as the basis for the derivation of the next grid.

To ensure consistency in grid cell values across all durations and frequencies (e.g., 24-hour estimate has to be at least equal to 12-hour estimate), duration-based internal consistency checks were conducted. For inconsistent cases, the longer duration grid cell value was adjusted by multiplying the shorter duration grid cell value by 1.01 to provide a 1% difference between the values. After grid cell consistency was ensured across durations, it was performed across frequencies to ensure that there were no frequency-based inconsistencies caused by the adjustment across durations.

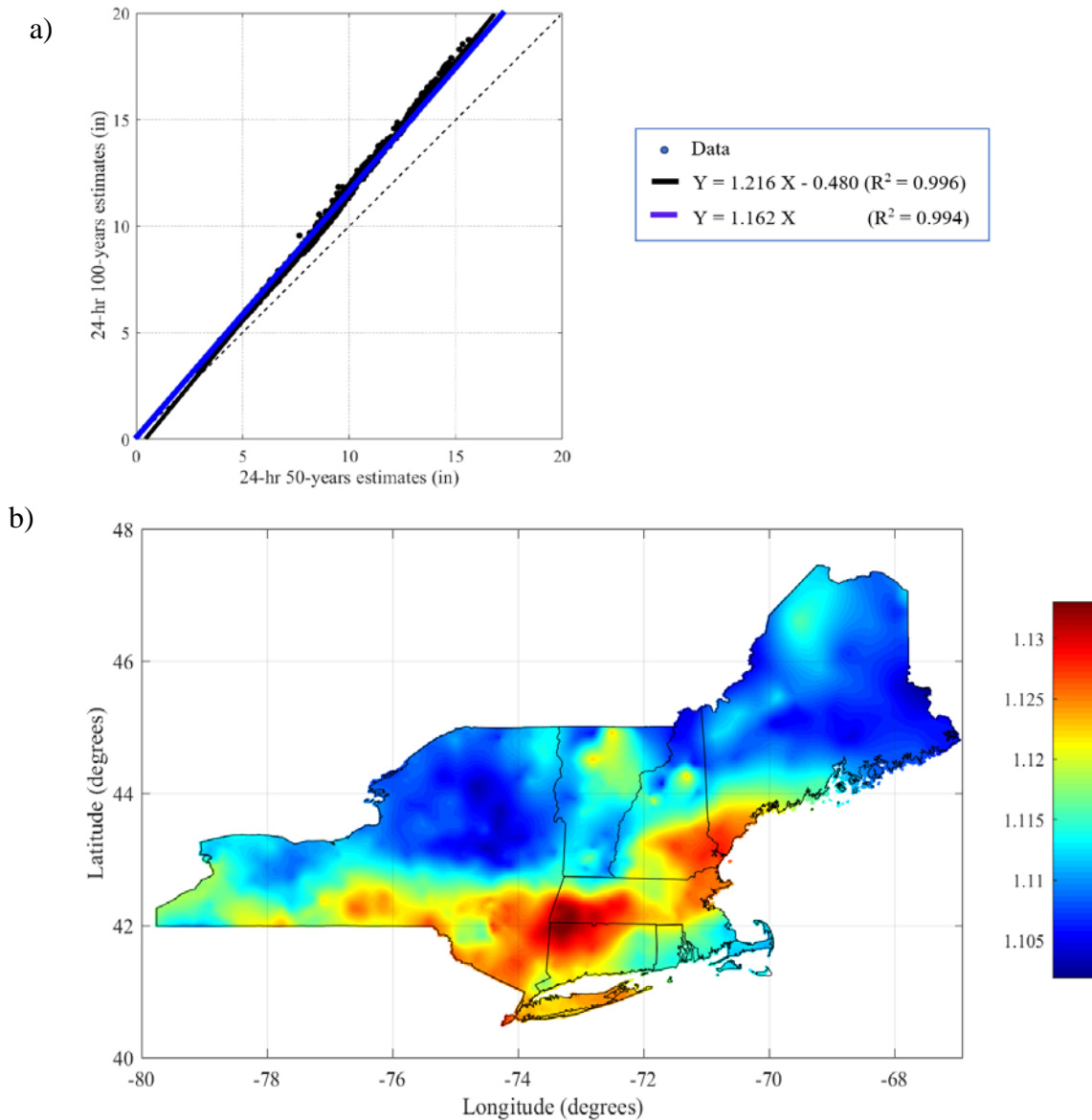


Figure 4.8.1. a) Scatter plot of 100-year versus 50-year 24-hour precipitation frequency estimates. Linear model and zero-intercept linear model regression lines are also shown. b) Spatially interpolated ratios used to calculate 24-hour 100-year precipitation frequency grid from the 24-hour 50-year grid.

A jackknife cross-validation was used to evaluate the spatial interpolation technique’s performance for interpolating precipitation frequency estimates. It was cost prohibitive to re-create the PRISM mean annual maximum grids for each cross-validation iteration. For this reason, the cross-validation results reflect the accuracy of the interpolation procedure based on the same mean annual maximum grids. Figure 4.8.2 shows validation results for 100-year estimates for the 1-hour and 24-hour durations as histograms showing the distribution of differences in estimates with and without each station (errors). Overall, the spatial interpolation technique adequately reproduced values. Errors in 100-year estimates were less than  $\pm 5\%$  for 95% of stations for the 1-hour duration and for 99% of stations for the 24-hour duration.

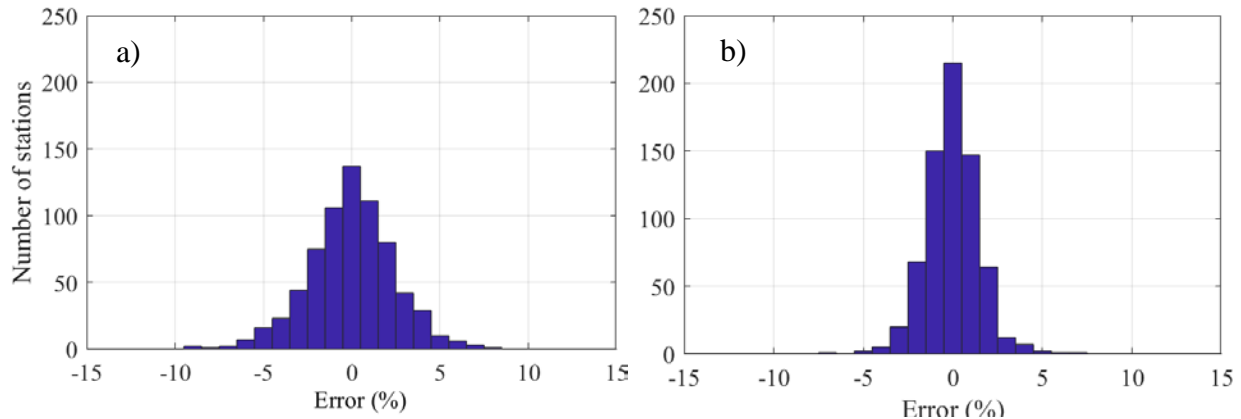


Figure 4.8.2. NOAA Atlas 14 Volume 10 jackknife cross-validation results for: a) 100-year 1-hour estimates, and b) 100-year 24-hour estimates.

**Estimates for 5-minute through 30-minute durations.** A similar approach to the one used to derive grids of precipitation frequency estimates for hourly and daily durations was used to derive gridded estimates for the 15-minute and 30-minute durations. For 15-minute, a grid of 2-year precipitation frequency estimates was calculated by multiplying the 15-minute MAM grid with a grid of ratios between the 2-year estimates and corresponding MAM estimates. In the subsequent run, a grid of ratios between the 5-year and 2-year estimates was used to calculate the 5-year grid from the 2-year grid, and so forth. The main difference is that, due to concerns about the soundness of at-station precipitation frequency estimates computed directly from AMS for sub-hourly durations, instead of using interpolating gridded ratios from sub-hourly estimates, corresponding 60-minute ratio grids were assumed to characterize 15-minute ratio grids. The same process was used for 30-minute duration, as well.

Precipitation frequency grids for 5-minute and 10-minute durations were derived by multiplying the 15-minute precipitation frequency grids by scaling factors. Scaling factors were obtained from n-minute stations; they were calculated as average ratios of 5-minute and 10-minute annual maxima to corresponding 15-minute annual maxima. Given that relatively few n-minute stations were available, and that at-station scaling factors varied little across the project area, they were assumed to be uniform for the whole area: 0.60 for 5-minute duration and 0.85 for 10-minute duration. The scaling factors were applied to the 15-minute precipitation frequency grids for all frequencies to create matching 5-minute and 10-minute grids.

**Confidence limits.** Grids of upper and lower limits of the 90% confidence interval for the precipitation frequency estimates between 5-minute and 60-day durations were derived using same procedures that were used to create grids of precipitation frequency estimates.

## **5. Precipitation Frequency Data Server**

NOAA Atlas 14 precipitation frequency estimates are delivered entirely in digital form in order to make the estimates more widely available and to provide them in various formats. [Precipitation Frequency Data Server \(PFDS\)](#) provides a point-and-click web portal for precipitation frequency estimates and associated information.

In early 2011 the PFDS underwent a major redesign to make PFDS pages interactive. Since then, PFDS pages were enhanced on several occasions to improve the usability and readability of the PFDS website's content, to increase data download speeds, and to provide additional information. In order to keep this section of the documentation up-to-date for all volumes, the PFDS section is offered as a separate document. This document is updated as needed and is available for download from [here](#).

## 6. Peer review

A peer review of preliminary results for the NOAA Atlas 14 Volume 10 precipitation frequency project was carried out during a five-week period starting on 1 October 2014. The request for review was sent via email to the members of the HDSC list-server from all over the United States and other interested parties. Potential reviewers were asked to evaluate the reasonableness of point precipitation frequency estimates as well as their spatial patterns. The review included the following items:

- a. Metadata for stations whose data were used to prepare mean annual maximum precipitation maps and/or in precipitation frequency analysis. The table included information on station name, state, source of data, assigned station ID, latitude, longitude, elevation, and period of record. It also showed if the station was merged with another station, if the station was co-located with another station with a different ID, and if metadata at the station were changed. (Station IDs were assigned by HDSC and do not match station IDs assigned by the agency that provided the data, except for National Climatic Data Center.)
- b. Metadata for stations whose data were collected, but not used in the analysis. The table contained metadata for stations that were examined, but not used, with brief comments on why the data were not used. Generally, stations were not used because there was another station with a longer period of record nearby, station data were assessed as not reliable for this specific purpose, or the station's period of record was not long enough and it was not a candidate for merging with any nearby station.
- c. At-station depth-duration-frequency (DDF) curves for 60-minute to 10-day durations and for 2-year to 100-year ARIs.
- d. Maps of spatially-interpolated precipitation frequency estimates for 60-minute, 24-hour and 10-day durations and for 2-year and 100-year average recurrence intervals.

Comments were received from twelve individuals or offices and agencies including the U.S. Army Corps of Engineers and Weather Forecast Offices. The reviews provided critical feedback that improved the estimates. The reviews provided critical feedback that improved the estimates. Reviewers' comments regarding station metadata, at-station precipitation frequency estimates and their spatial patterns, and supplemental information along with HDSC responses can be found in Appendix A.4.

## 7. Comparison with previous NOAA publications

The precipitation frequency estimates in NOAA Atlas 14 Volume 10 supersede the estimates published in the following publications:

- a. [NOAA Technical Memorandum NWS HYDRO-35](#), *Five- to 60-Minute Precipitation Frequency for the Eastern and Central United States* (Frederick et al., 1977) for 5-minute to 60-minute durations;
- b. [Weather Bureau Technical Paper No. 40](#), *Rainfall Frequency Atlas of the United States for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years* (Hershfield, 1961) for 2-hour to 24-hour durations;
- c. [Weather Bureau Technical Paper No. 49](#), *Two- to Ten-Day Precipitation for Return Periods of 2 to 100 Years in the Contiguous United States* (Miller, 1964) for 2-day to 10-day durations.

Precipitation frequency estimates at the 100-year average recurrence interval from NOAA Atlas 14 were examined in relation to corresponding estimates from NOAA Technical Memorandum NWS HYDRO-35 (HYDRO35) for the 60-minute duration and the Weather Bureau's Technical Paper No. 40 (TP40) for the 24-hour duration. Corresponding grids from HYDRO35 and TP40, which were used in the comparison, were obtained by interpolating digitized isopluvials from paper cartographic maps using the standard spatial interpolation tools available in ArcGIS.

**100-year 60-minute.** The maps in Figures 7.1 and 7.2 illustrate the differences between NA14 and HYDRO35 100-year 60-minute estimates in inches and in percentages, respectively. The contour lines superimposed on the map in Figure 7.1 represent isopluvials from HYDRO35. 100-year 60-minute precipitation frequency estimates at specific locations across the project area changed between -0.62 and 0.41 inches, or from -26% to 20%. The maximum increase occurred in northern New York, while the largest decrease of 0.62 inches occurred on the border between Vermont and Massachusetts. Other locations with decreases greater than .50 inches are northwest portions of Maine and Northern New Hampshire extending into Northeastern Vermont. Increases in magnitudes between 0.31 and 0.40 inches were observed in Southeast Massachusetts, extending from parts of Cape Cod into Eastern Rhode Island. Additional increases in the range of 0.21 to 0.30 were observed on Long Island in New York as well as in Northern Maine.

The differences in estimates between the two publications are attributed to several factors. Firstly, differences in data quality control procedures and frequency analysis approaches (distribution selection, parameter estimation method, regional versus at-station methods) affect estimates, especially at higher ARIs. Section 4.6.1 of this document describes methods used in NA14 and their advantages. Secondly, differences in spatial interpolation techniques impact estimates at ungauged locations. Isopluvials in HYDRO35 were based solely on station data without incorporating topographic features; NA14 estimates were based on PRISM products that integrate topography (see Section 4.8 for more details). Finally, the increase in the amount of available data from HYDRO35 to NA14, both in the number of stations and their record lengths, has a considerable effect on estimates. HYDRO35 was published in 1977 using data from 1948 to 1972. Stations retained for analysis in HYDRO35 had between 15 and 25 years of data. At those stations, 41 additional years of data were potentially available for the NA14 analyses. Also, many stations that were rejected at the time due to short records (less than 15 years) were included in NA14. A detailed comparison of the numbers of stations and record lengths available to each of the two projects could not be provided since the HYDRO35 project covered a significantly larger area and the necessary information was not available in the HYDRO35 document.

**100-year 24-hour.** The maps in Figure 7.3 and 7.4 illustrate the differences between NA14 and TP40 100-year 24-hour estimates in inches and in percentages, respectively. The contour lines superimposed on the map in Figure 7.3 represent isopluvials from TP40. 100-year 24-hour precipitation frequency estimates at specific locations across the project area changed between -1.73 to 4.46 inches, or from -26% to 58%. Some of the largest increases occurred in parts of the Catskills Mountains in New York, with an increase of up to 4.26 inches in the vicinity of Elka Park, NY. NA14 analysis benefited from a dense network of gauges specifically in the Catskills. Additional digitized data in this area helped extend the record length of many stations, which included stations that otherwise wouldn't have met data length criteria (See Section 4.2). Also, NA14 analysis by design accounts for topographic effects. In contrast, the TP40 analysis, which did not account for orographic impacts, was unable to resolve the full effect of mountainous terrain on estimates. This can be seen in other mountainous areas throughout the project.

Estimates increased up to 3.5 inches (48%) in and around Mount Washington in New Hampshire, and also in the range of 2.50 – 3.0 inches (57%) in the parts of the Green Mountains in Vermont, such as at Mount Mansfield. Other locations with significant increases of up to 2.5 inches (up to 40%) occurred in portions of western Connecticut and western Massachusetts. Coastal areas of Maine and New Hampshire saw increases up to 2 inches (30%). A large swath from Long island through Connecticut and Rhode Island up to eastern Massachusetts into central New Hampshire increased as much as 1.5 inches (on average around 15%). Estimates decreased as much as 1.82 inches (-26%) in northern New Hampshire, while parts of Northwest Maine and Northeast Vermont decreased in the range of 1.0 to 1.49 inches.

Differences in estimates can be attributed to similar factors as for the 60-minute duration: different data quality control techniques, frequency analysis approaches, and spatial interpolation techniques. Many stations that were rejected at the time due to short records (less than 15 years) were included in NA14. Since TP40 was published in 1961 with data collected through 1957, stations in NA14 that were available in TP40 could have an additional 55 years of data. A more detailed comparison of the numbers of stations and their record lengths between two projects could not be provided since the necessary information was not available in the TP40 document.



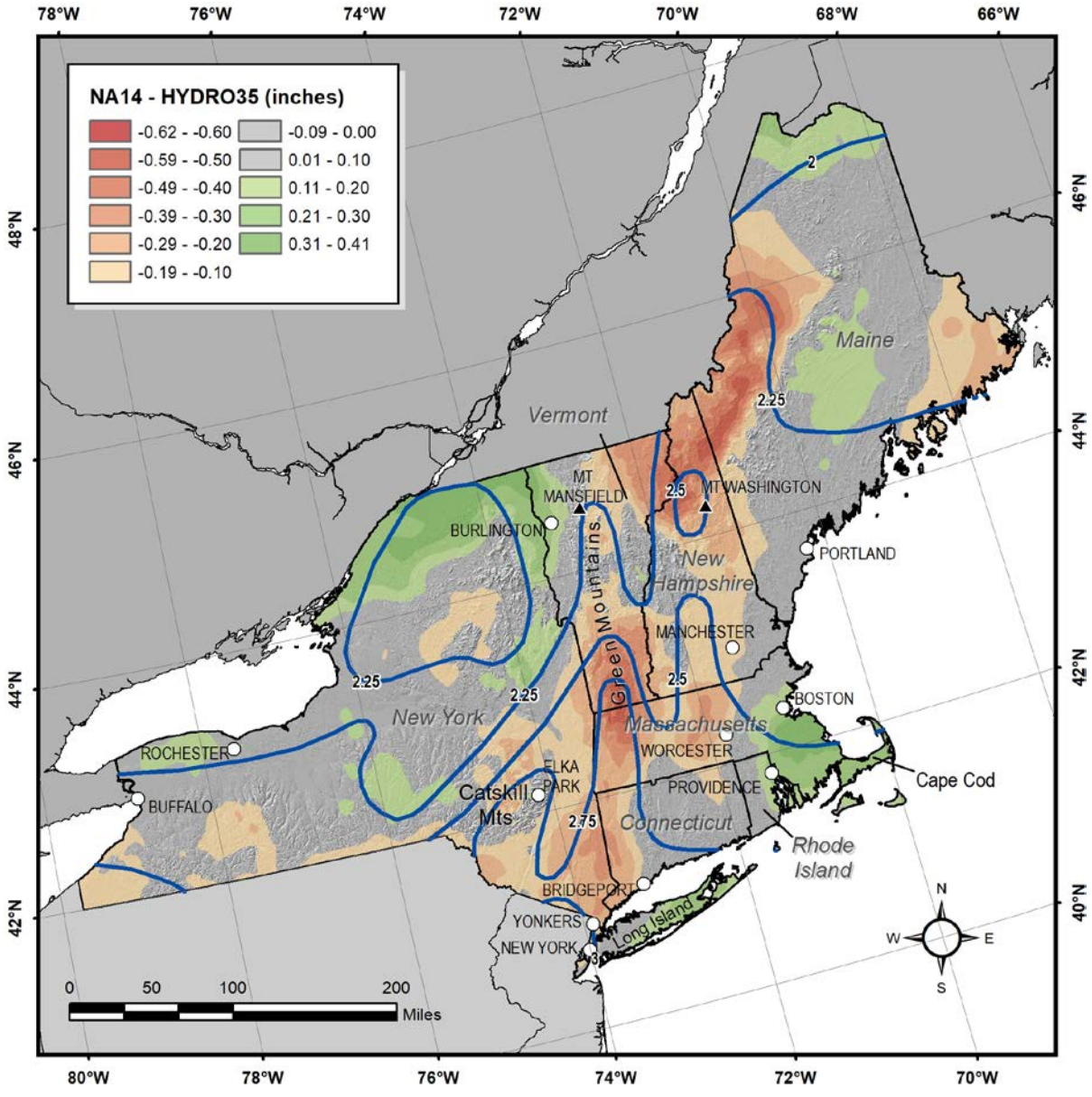


Figure 7.1. Map showing differences in 100-year 60-minute estimates (in inches) between NOAA Atlas 14 Volume 10 and HYDRO35. Superimposed on the map are isopluvials (blue lines) from HYDRO35.

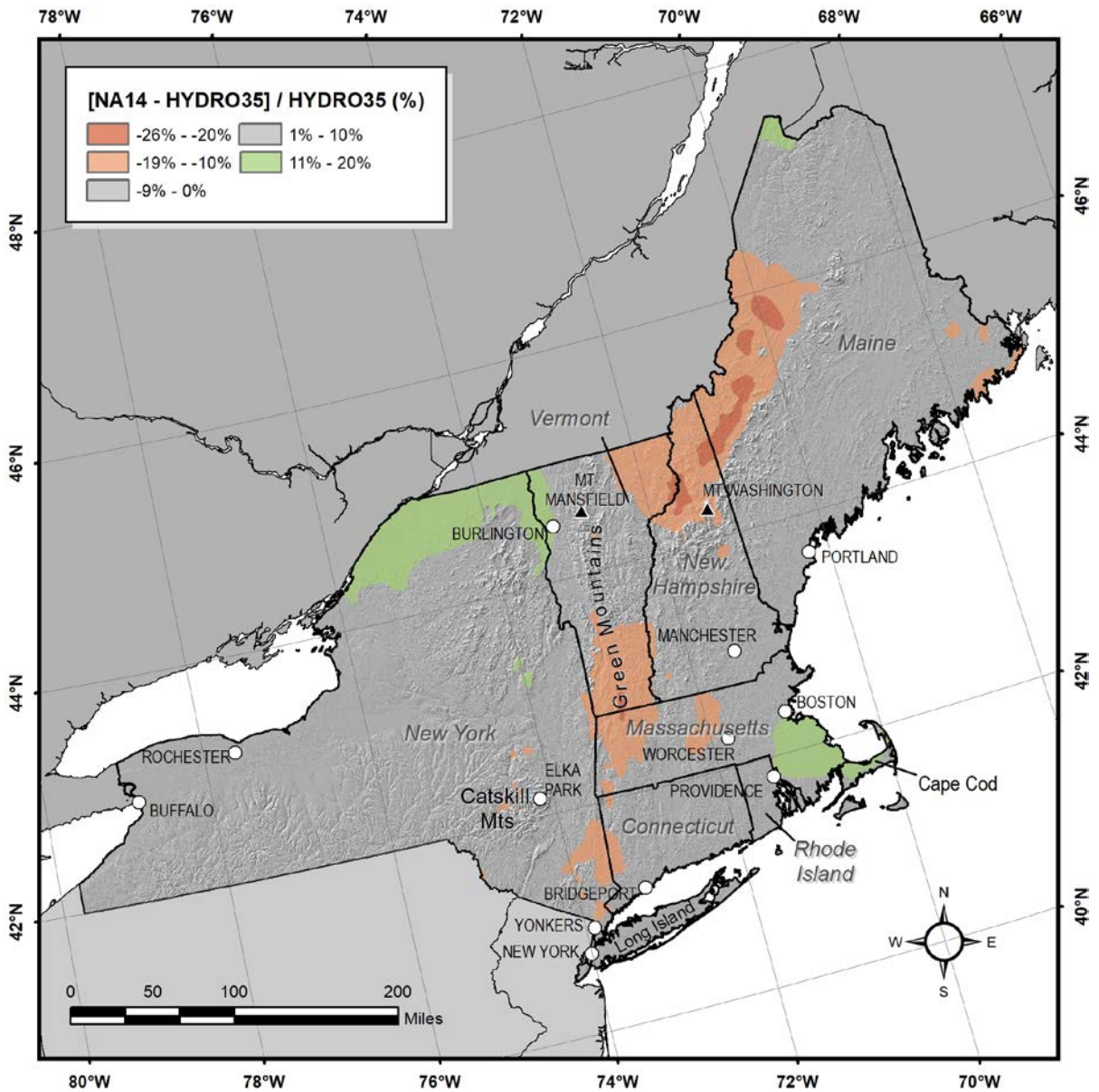


Figure 7.2. Map showing percent differences in 100-year 60-minute estimates between NOAA Atlas 14 Volume 10 and HYDRO35. Superimposed on the map are isopluvials (blue lines) from HYDRO35.

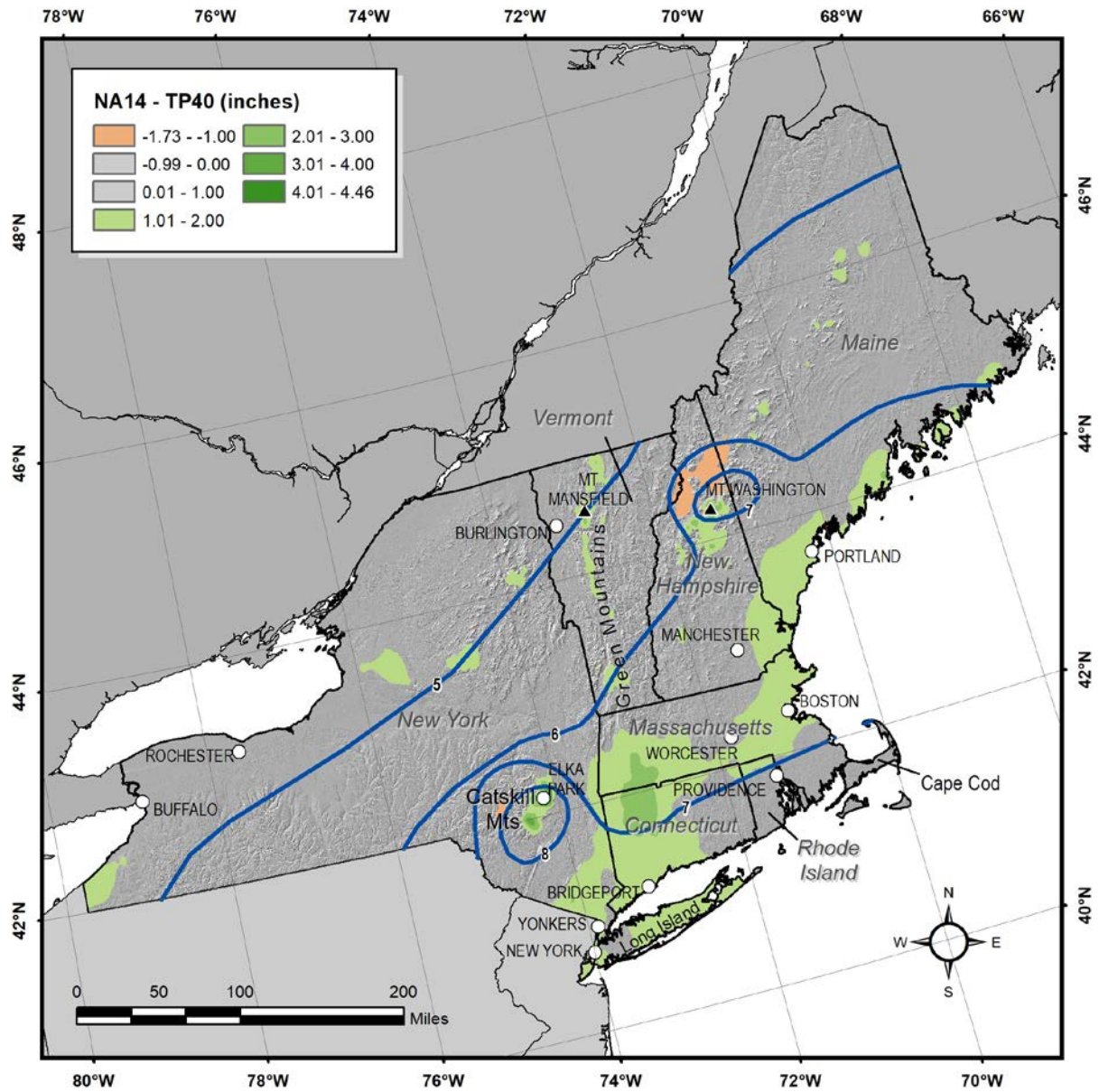


Figure 7.3. Map showing differences in 100-year 24-hour estimates (in inches) between NOAA Atlas 14 Volume 10 and TP40. Superimposed on the map are isopluvials (blue lines) from TP40.

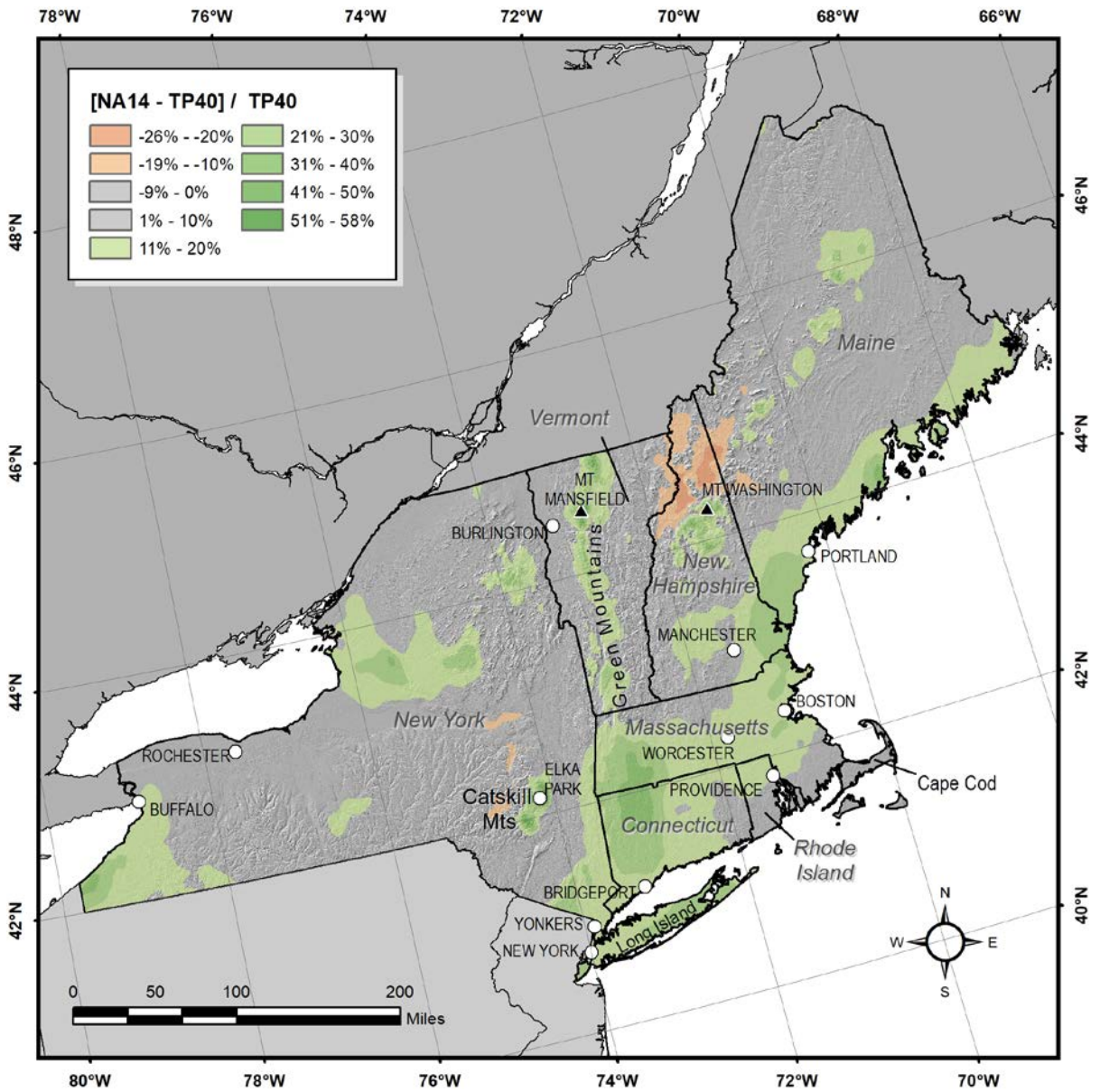


Figure 7.4. Map showing percent differences in 100-year 24-hour estimates between NOAA Atlas 14 Volume 10 and TP40.

**Appendix A.1. Metadata for stations used in NOAA Atlas 14 Volume 10.**

*Table A.1.1 List of stations in the states of Connecticut (CT), Maine (MA), Massachusetts (ME), New Hampshire (NH), New York (NY), Rhode Island (RI), and Vermont (VT) for which precipitation frequency estimates were derived. The table shows location’s state, name, SID, latitude, longitude, elevation and AMS record lengths (data years) across sub-hourly, hourly and daily durations. It also lists SIDs for stations that contributed data to this location for sub-hourly, hourly and daily durations. Details on stations’ metadata are provided in Tables A.1.3 and A.1.4.*

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CT	ANSONIA 1 NE	06-0128	41.3489	-73.0694	140	0	0	67			06-0128 DLY 06-0120 DLY 06-7361 DLY
CT	BAKERSVILLE	06-0227	41.8417	-73.0086	686	0	0	65			06-0227 DLY 06-5262 DLY
CT	BALTIC	06-0251	41.6167	-72.1000	141	0	0	34			06-0251 DLY
CT	BARKHAMSTED	06-0299	41.9211	-72.9644	705	0	0	80			06-0299 DLY
CT	BRIDGEPORT SIKORSKY MEM A	06-0806	41.1583	-73.1289	5	0	66	119	06-0806 HLY 55-0156 HLY		06-0806 DLY 06-0808 DLY 06-2288 DLY 06-0801 DLY 06-0806 HLY 55-0156 HLY
CT	BROOKLYN	06-0918	41.7833	-71.9500	240	0	0	30			06-0918 DLY
CT	BULLS BRG DAM	06-0961	41.6756	-73.5083	260	0	0	56			06-0961 DLY
CT	BURLINGTON	06-0973	41.7944	-72.9319	505	0	0	80			06-0973 DLY
CT	CANDLEWOOD LAKE	06-1093	41.4840	-73.4625	502	0	26	25	06-1093 HLY		06-1093 HLY
CT	COCKAPONSET RS	06-1488	41.4614	-72.5197	160	0	36	99	06-1488 HLY 06-5018 HLY		06-1488 DLY 06-1499 DLY
CT	COVENTRY	06-1689	41.8000	-72.3500	480	0	0	38			06-1689 DLY 06-5131 DLY
CT	CREAM HILL	06-1715	41.9000	-73.3167	1302	0	0	67			06-1715 DLY
CT	DANBURY	06-1762	41.4000	-73.4167	405	0	0	63			06-1762 DLY 69-0012 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CT	FALLS VILLAGE	06-2658	41.9500	-73.3667	550	0	0	120			06-2658 DLY 06-2655 DLY 06-3495 DLY
CT	GROTON	06-3207	41.3511	-72.0389	40	0	0	131			06-3207 DLY 52-5309 DLY 06-5309 DLY 79-0016 DLY
CT	HARTFORD BRADLEY AP	06-3456	41.9381	-72.6825	190	0	59	59		06-3456 HLY	06-3456 HLY
CT	HARTFORD BRAINARD FLD	06-3451	41.7333	-72.6500	20	20	99	108	06-3451 15M 78-0031 15M	06-3451 HLY 06-3446 HLY 78-0031 15M 55-0062 HLY	06-3451 DLY 78-0031 15M 79-0020 DLY 06-3451 HLY 06-3446 HLY 55-0062 HLY
CT	JEWETT CITY	06-3857	41.6297	-71.9014	400	0	41	55		06-3857 HLY	06-3857 DLY 06-3857 HLY
CT	LAKE KONOMOC	06-3989	41.4000	-72.1833	180	0	0	68			06-3989 DLY
CT	MANSFIELD HOLLOW LAKE	06-4488	41.7572	-72.1858	250	0	63	66		06-4488 HLY 55-0104 HLY	06-4488 DLY 06-9592 DLY 06-4488 HLY 55-0104 HLY
CT	MIDDLETOWN 4 W	06-4767	41.5500	-72.7167	369	0	0	113			06-4767 DLY 52-4767 DLY 06-4757 DLY 06-4757 HLY
CT	MT CARMEL	06-5077	41.4075	-72.9033	180	0	0	58			06-5077 DLY
CT	NATCHAUG RS	06-5125	41.8833	-72.0833	541	0	0	31			06-5125 DLY 06-2073 DLY 54-0126 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations																
						<1hr	hourly	daily	<1hr	hourly	daily														
CT	NEW HAVEN TWEED AP	06-5273	41.2639	-72.8872	3	0	88	125	06-5273 HLY	06-5273 DLY	06-5273 15M	06-5266 DLY	06-2169 15M	06-2169 DLY	06-2169 HLY	06-5510 DLY	06-5266 HLY	06-5273 HLY	06-5273 15M	06-2169 15M	06-2169 HLY	06-5266 HLY			
CT	NORFOLK 2 SW	06-5445	41.9725	-73.2208	1340	0	52	73	06-5445 HLY	06-5445 DLY															
CT	NORWALK GAS PLT	06-5893	41.1167	-73.4167	37	0	0	87		06-5893 DLY															
CT	NORWICH PUB UTILITY PLANT	06-5910	41.5269	-72.0642	20	0	0	65		06-5910 DLY															
CT	PROSPECT	06-6597	41.5043	-72.9362	420	0	0	78		06-6597 DLY															
CT	PUTNAM LAKE	06-6655	41.0825	-73.6386	300	0	0	46		06-6655 DLY															
CT	ROCKVILLE	06-6942	41.8667	-72.4333	510	0	39	34	06-6942 HLY	06-6942 HLY															
CT	ROCKY RIVER DAM	06-6966	41.5831	-73.4331	220	0	0	57		06-6966 DLY															
CT	ROUND POND	06-7002	41.3008	-73.5369	800	0	0	49		06-7002 DLY															
CT	SALISBURY	06-7109	41.9799	-73.4430	1079	0	0	30		06-7109 DLY															
CT	SAUGATUCK RSVR	06-7157	41.2500	-73.3500	300	0	0	52		06-7157 DLY															
CT	SHEPAUG DAM	06-7373	41.7233	-73.2927	840	0	0	59		06-7373 DLY															
CT	SHUTTLE MEADOW RESVR	06-7432	41.6444	-72.8167	410	0	0	88		06-7432 DLY															
CT	STAFFORDVILLE	06-7958	41.9983	-72.2606	736	0	0	44		06-7958 DLY															
CT	STAMFORD 5 N	06-7970	41.1247	-73.5475	190	0	0	55		06-7970 DLY															
CT	STEVENSON DAM	06-8065	41.3819	-73.1717	115	0	0	55		06-4096 DLY															

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CT	STORRS	06-8138	41.7950	-72.2286	665	31	51	116	06-8138 15M 06-4488 15M 78-0037 15M	06-8138 HLY 06-8138 15M 06-4488 15M 78-0037 15M	06-8138 DLY
CT	THOMASTON DAM	06-8330	41.6931	-73.0600	538	31	35	46	06-8330 15M 06-9568 15M	06-8330 HLY	06-8330 DLY 06-8330 HLY 06-0830 DLY
CT	TORRINGTON	06-8436	41.8000	-73.1167	580	0	0	59			06-8436 DLY 06-8441 DLY 06-8438 DLY
CT	WEST HARTFORD	06-9162	41.7500	-72.7833	275	0	0	64			06-9162 DLY 06-3446 DLY
CT	WEST THOMPSON LAKE	06-9388	41.9442	-71.9031	370	15	42	74	06-9388 15M	06-9388 HLY 06-6660 HLY 06-6645 HLY 06-6650 HLY	06-9388 DLY 06-6645 DLY
CT	WESTBROOK	06-9067	41.3000	-72.4333	39	0	0	37			06-9067 DLY
CT	WHIGVILLE RSVR	06-9508	41.7333	-72.9500	581	0	0	45			06-9508 DLY 06-1536 DLY
CT	WOODBURY	06-9775	41.5536	-73.2297	650	0	0	59			06-9775 DLY 06-9783 DLY
MA	ADAMS	19-0049	42.6500	-73.1000	751	0	0	42			19-0049 DLY
MA	AMHERST	19-0120	42.3861	-72.5375	142	0	34	160		19-0120 HLY	19-0120 DLY 52-0120 DLY
MA	ASHBURNHAM	19-0190	42.6178	-71.9158	1108	0	0	91			19-0190 DLY 19-2810 DLY
MA	ASHFIELD	19-0213	42.5133	-72.8508	1340	0	0	79			19-0213 DLY 19-6435 DLY 19-6425 DLY
MA	ASHLAND	19-0218	42.2500	-71.4667	230	0	0	76			19-0218 DLY
MA	ATH404	96-0001	42.5861	-72.2431	514	0	0	73			96-0001 DLY 19-0257 DLY
MA	ATT801	96-0002	41.9282	-71.3369	122	0	0	119			96-0002 DLY 37-5882 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	BARRE FALLS DAM	19-0408	42.4283	-72.0275	830	25	37	74	19-0408 15M	19-0408 HLY	19-0408 DLY 19-1589 DLY
MA	BECKET 2 SW	19-0510	42.3167	-73.1167	1592	0	38	56		19-0510 HLY 19-8843 HLY 19-8842 HLY	19-0510 DLY 19-8843 DLY 19-6311 DLY
MA	BEDFORD	19-0535	42.4833	-71.2833	160	0	0	94			19-0535 DLY 19-4162 DLY 19-0538 DLY 79-0014 DLY
MA	BEL736	96-0003	42.0792	-71.4648	304	0	43	61		19-0575 HLY 19-4667 HLY	96-0003 DLY 19-0575 HLY 19-4667 HLY
MA	BELCHERTOWN	19-0562	42.2794	-72.3483	547	0	0	73			19-0562 DLY
MA	BIRCH HILL DAM	19-0666	42.6325	-72.1233	863	0	53	65		19-0666 HLY	19-0666 DLY
MA	BLUE HILL	19-0736	42.2122	-71.1136	625	0	64	122		19-0736 HLY	19-0736 DLY
MA	BORDEN BROOK RSVR	19-0759	42.1333	-72.9333	1110	0	0	60			19-0759 DLY 19-9219 DLY 19-9221 DLY 06-9174 DLY
MA	BOSTON LOGAN INTL AP	19-0770	42.3606	-71.0106	12	0	122	156		19-0770 HLY	19-0770 DLY 19-0775 DLY 52-2895 DLY
MA	BRIDGEWATER	19-0840	41.9539	-70.9572	40	20	51	75	19-0840 15M	19-0840 HLY 19-8101 HLY	19-0840 DLY 19-0840 HLY 19-8101 DLY 19-8101 HLY 96-0004 DLY
MA	BROCKTON	19-0860	42.0478	-71.0050	80	0	0	100			19-0860 DLY
MA	BUFFUMVILLE LAKE	19-0998	42.1164	-71.9075	525	26	38	94	19-0998 15M	19-0998 HLY	19-0998 DLY 19-1344 DLY 19-8918 DLY
MA	CHATHAM	19-1386	41.6569	-69.9589	40	0	0	56			19-1386 DLY 19-1376 DLY
MA	CHESTER 2	19-1430	42.3000	-72.9833	640	0	0	53			19-1430 DLY 19-1425 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	CHESTNUT HILL	19-1447	42.3333	-71.1500	121	0	0	128			19-1447 DLY 72-0038 15M 72-0004 15M 19-3890 DLY 19-1097 DLY 19-1097 HLY 69-0126 DLY 19-1110 DLY
MA	CLINTON	19-1561	42.4000	-71.6833	400	0	0	78			19-1561 DLY
MA	COLRAIN	19-1611	42.6728	-72.6970	625	0	0	61			19-1611 DLY 19-7370 DLY
MA	CUMMINGTON HILL	19-1774	42.4667	-72.9333	1610	0	0	45			19-1774 DLY 19-9136 DLY
MA	EAST	54-0129	42.3845	-71.2146	58	0	0	75			54-0129 DLY 19-0166 DLY 19-8218 DLY 19-6915 DLY
MA	EAST BRIMFIELD LAKE	19-2107	42.1103	-72.1269	700	0	38	65		19-2107 HLY	19-2107 DLY 19-2770 DLY
MA	EAST WAREHAM	19-2451	41.7653	-70.6697	30	0	0	89			19-2451 DLY
MA	EDGARTOWN	19-2501	41.3853	-70.5181	30	0	22	69		19-2501 HLY 78-0048 HLY	19-2501 DLY
MA	FITCHBURG 4 SE	19-2806	42.5500	-71.7500	331	0	0	109			19-2806 DLY 79-0007 DLY 19-4135 DLY
MA	FRAMINGHAM	19-2975	42.2833	-71.4167	171	0	0	94			19-2975 DLY
MA	FRANKLIN	19-2997	42.0792	-71.4094	250	0	0	104			19-2997 DLY 19-0360 DLY
MA	GARDNER	19-3052	42.5833	-71.9833	1110	0	0	80			19-3052 DLY 19-2420 DLY
MA	GREAT BARRINGTON 2N	19-3213	42.2167	-73.3500	688	0	0	45			19-3213 DLY 19-3208 DLY 69-0085 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	GREENFIELD NO 3	19-3229	42.5719	-72.5975	130	0	0	82			19-3229 DLY 19-3224 DLY 19-4903 DLY 96-0014 DLY
MA	GROVELAND	19-3276	42.7467	-71.0425	33	0	0	112			19-3276 DLY 19-3505 DLY 19-3946 DLY 19-3276 HLY 19-3276 15M 78-0040 15M
MA	HAR910	96-0006	41.6826	-70.0526	61	0	0	47			96-0006 DLY
MA	HARDWICK	19-3401	42.3500	-72.2000	970	0	0	75			19-3401 DLY
MA	HARDWICK 3 WSW	19-3405	42.3333	-72.2500	743	0	0	60			19-3405 DLY 19-6699 DLY 19-3110 DLY
MA	HATCHVILLE	19-3471	41.6167	-70.5333	70	0	0	81			19-3471 DLY 19-1650 DLY
MA	HEATH	19-3549	42.6667	-72.8167	1590	0	0	73			19-3549 DLY
MA	HINGHAM	19-3624	42.2269	-70.9125	35	0	0	74			19-3624 DLY 19-3625 DLY 19-0551 DLY
MA	HOLYOKE	19-3702	42.2000	-72.6000	98	0	0	106			19-3702 DLY 19-4340 DLY
MA	HOOSAC TUNNEL	19-3713	42.6747	-72.9960	801	0	0	42			19-3713 DLY
MA	HUBBARDSTON	19-3772	42.4833	-72.0000	981	0	0	55			19-3772 DLY
MA	HYANNIS	19-3821	41.6650	-70.3039	50	22	60	112	19-3821 15M 78-0035 15M	19-3821 HLY 78-0035 15M 55-0160 HLY	19-3821 DLY 19-3821 HLY 78-0035 15M 55-0160 HLY
MA	IPSWICH	19-3876	42.6647	-70.8658	85	0	0	83			19-3876 DLY
MA	JEFFERSON	19-3931	42.3667	-71.9000	810	0	0	62			19-3931 DLY
MA	KNIGHTVILLE DAM	19-3985	42.2910	-72.8595	630	21	45	49	19-3985 15M 19-4246 15M	19-3985 HLY 19-4246 HLY	19-3985 DLY
MA	LAWRENCE	19-4105	42.6992	-71.1658	50	0	0	119			19-4105 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	LENOX DALE	19-4131	42.3356	-73.2506	1004	0	0	21			19-4131 DLY 19-4112 DLY
MA	LOWELL	19-4313	42.6408	-71.3636	110	0	0	117			19-4313 DLY 19-1992 DLY
MA	MARBLEHEAD	19-4502	42.5008	-70.8644	84	0	0	84			19-4502 DLY 19-7122 DLY 19-7124 DLY 19-8301 DLY 19-4360 DLY
MA	MAYNARD 2	19-4580	42.4292	-71.4425	205	0	0	99			19-4580 DLY 19-1622 DLY 79-0004 DLY
MA	MIDDLEBORO	19-4711	41.8819	-70.9086	52	0	0	100			19-4711 DLY
MA	MIDDLETON	19-4744	42.5947	-71.0208	90	0	0	89			19-4744 DLY
MA	MILFORD	19-4760	42.1619	-71.5117	270	0	0	80			19-4760 DLY
MA	MONSON	19-4875	42.0940	-72.3136	420	20	46	85	19-9093 15M	19-9093 HLY	19-4875 DLY 19-9093 HLY 96-0012 DLY
MA	NANTUCKET MEM AP	19-5159	41.2531	-70.0608	45	0	39	120		19-5159 HLY 55-0065 HLY	19-5159 DLY 19-5159 15M 96-0007 DLY 52-5159 DLY 19-5159 HLY 55-0065 HLY
MA	NATICK	19-5175	42.2825	-71.3439	180	0	0	108			19-5175 DLY 19-4012 DLY
MA	NEW BEDFORD MUNI AP	19-5251	41.6764	-70.9583	80	0	65	115		19-5246 HLY 78-0020 15M 55-0165 HLY	19-5251 DLY 19-5246 DLY 19-5246 HLY 78-0020 15M 55-0165 HLY
MA	NEW SALEM	19-5306	42.4500	-72.3333	845	0	0	54			19-5306 DLY
MA	NEWBURYPORT 4 NNW	19-5285	42.8633	-70.8997	85	0	0	109			19-5285 DLY 27-5880 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	NORTH ADAMS HARRIMAN AP	19-5430	42.7000	-73.1667	655	0	0	106			19-5430 DLY 19-9731 DLY 52-9730 DLY
MA	NORTH TRURO	19-5891	42.0333	-70.0667	138	0	0	36			19-5891 DLY 54-0127 DLY
MA	NORTHBRIDGE 2	19-5524	42.1150	-71.6758	315	0	0	87			19-5524 DLY 19-5514 DLY
MA	NORTON WEST	19-5984	41.9928	-71.1667	95	0	0	107			19-5984 DLY 19-4449 DLY 19-8770 DLY
MA	NORWOOD MEM AP	19-6012	42.1908	-71.1736	50	0	0	43			19-6012 DLY 19-6004 DLY 19-6013 15M 19-6012 15M
MA	PEABODY	19-6245	42.5333	-70.9833	170	0	0	42			19-6245 DLY 79-0033 DLY
MA	PEMBROKE	19-6262	42.0167	-70.8167	69	0	0	60			19-6262 DLY
MA	PEPPERELL	19-6286	42.6667	-71.5333	210	0	0	86			19-6286 DLY 19-2369 DLY 19-2026 DLY 19-9226 DLY 19-3270 DLY
MA	PETERSHAM 3 N	19-6322	42.5333	-72.1833	1090	21	47	73	19-6322 15M	19-6322 HLY 19-3429 HLY	19-6322 DLY
MA	PITTSFIELD MUNI AP	19-6414	42.4272	-73.2892	1194	0	38	59		19-6414 HLY 78-0053 15M 55-0069 HLY	19-6414 DLY 19-6409 DLY 19-6414 HLY 78-0053 15M 55-0069 HLY
MA	PLYMOUTH-KINGSTON	19-6486	41.9819	-70.6961	45	0	0	116			19-6486 DLY
MA	PROVINCETOWN	19-6681	42.0500	-70.1833	20	0	40	95		19-6681 HLY	19-6681 DLY 19-6681 15M 19-6676 DLY 52-6676 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	QUABBIN RESERVOIR	54-0128	42.3925	-72.3444	1004	0	0	60			54-0128 DLY 19-6251 DLY
MA	READING	19-6783	42.5242	-71.1264	83	0	34	61		19-6783 HLY 57-0008 HLY	19-6783 DLY 19-8740 DLY
MA	ROCHESTER	19-6938	41.7850	-70.9175	65	0	0	62			19-6938 DLY
MA	ROCKPORT 1 ESE	19-6977	42.6500	-70.6000	79	0	32	106		19-6977 HLY	19-6977 DLY 96-0005 DLY 19-2150 DLY
MA	SEGREGANSET	19-7293	41.8333	-71.1167	39	0	0	60			19-7293 DLY 19-7475 DLY 69-0098 DLY
MA	SOUTH WEYMOUTH NAS	79-0028	42.1500	-70.9333	161	0	0	42			79-0028 DLY
MA	SOUTHBRIDGE 3 SW	19-7627	42.0583	-72.0722	685	0	0	82			19-7627 DLY
MA	SPOT POND	19-8030	42.4500	-71.0833	171	0	0	71			19-8030 DLY
MA	SPRINGFIELD	19-8046	42.1000	-72.5833	190	0	0	71			19-8046 DLY
MA	STERLING	19-8154	42.4500	-71.8167	480	0	29	95		19-8164 HLY 19-9463 HLY 19-8159 HLY	19-8154 DLY 19-8164 HLY 19-9463 HLY 19-8159 HLY 19-6644 DLY 52-6644 DLY
MA	STOCKBRIDGE	19-8181	42.3000	-73.3333	860	0	0	82			19-8181 DLY 96-0008 DLY
MA	SUNDERLAND	19-8278	42.4444	-72.5528	225	0	0	36			19-8278 DLY
MA	TAUNTON	19-8367	41.9003	-71.0658	20	0	0	124			19-8367 DLY 19-8374 DLY 79-0042 DLY
MA	TIS906	96-0009	41.4466	-70.6202	81	0	0	42			96-0009 DLY 69-0100 DLY
MA	TULLY LAKE	19-8573	42.6400	-72.2244	685	0	0	64			19-8573 DLY
MA	TURNERS FALLS	19-8580	42.6167	-72.5500	190	0	0	80			19-8580 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
MA	WALPOLE 2	19-8757	42.1608	-71.2461	165	0	0	65			19-8757 DLY 19-8760 DLY 19-8755 DLY
MA	WARE	19-8793	42.2622	-72.2483	400	0	0	78			19-8793 DLY 19-8798 DLY
MA	WEST MEDWAY	19-9316	42.1333	-71.4333	210	0	0	48			19-9316 DLY
MA	WEST OTIS	19-9371	42.1752	-73.1462	1295	0	0	84			19-9371 DLY 96-0015 DLY 96-0016 DLY
MA	WEST RUTLAND	19-9442	42.3667	-71.9833	860	0	0	91			19-9442 DLY 19-7104 DLY 96-0017 DLY
MA	WESTBORO	19-9080	42.2667	-71.6333	298	0	0	31			19-9080 DLY
MA	WESTFIELD	19-9191	42.1333	-72.7500	120	0	0	86			19-9191 DLY 96-0010 DLY 19-9193 DLY 96-0013 DLY
MA	WESTON	19-9360	42.3833	-71.3167	220	0	0	79			19-9360 DLY 19-3640 DLY
MA	WINCHENDON 2	19-9780	42.6833	-72.0500	1020	0	0	91			19-9780 DLY 19-9770 DLY
MA	WOODS HOLE GOLF CLUB	19-9891	41.5317	-70.6617	85	0	0	23			19-9891 DLY 69-0076 DLY 19-9175 DLY 19-9893 DLY
MA	WORCESTER RGNL AP	19-9923	42.2706	-71.8731	1000	0	56	118		19-9923 HLY 55-0173 HLY	19-9923 DLY 19-9928 DLY 19-9923 HLY 55-0173 HLY
MA	WORTHINGTON	19-9972	42.3869	-72.9211	1285	0	0	88			19-9972 DLY 19-1436 DLY
ME	ACADIA NP	17-0100	44.3739	-68.2592	470	25	55	123	17-0100 15M	17-0100 HLY 17-8301 HLY 76-0003 HLY	17-0100 DLY 17-0371 DLY 52-0371 DLY 17-0100 HLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
ME	ALLAGASH	17-0200	47.0886	-69.0250	596	25	25	33	17-0200 15M	17-0200 HLY	17-0200 DLY 17-0200 HLY
ME	ANDOVER 2	17-0217	44.6528	-70.7928	830	0	0	38			17-0217 DLY 17-7940 DLY 17-5805 DLY
ME	AUGUSTA STATE AP	17-0275	44.3156	-69.7972	351	39	59	85	17-0275 15M 17-0273 15M	17-0275 HLY 17-0273 HLY 55-0029 HLY	17-0275 DLY 17-0275 15M 17-0273 15M 17-2539 DLY 17-0272 DLY 17-0275 HLY 17-0273 HLY 55-0029 HLY
ME	BANGOR INTL AP	17-0355	44.7978	-68.8186	148	0	0	84			17-0355 DLY 17-0350 DLY
ME	BELFAST	17-0480	44.4394	-68.9892	30	0	0	81			17-0480 DLY
ME	BINGHAM WYMAN DAM	17-0600	45.0706	-69.9044	400	0	0	52			17-0600 DLY
ME	BLANCHARD	17-0655	45.2669	-69.5839	600	0	0	50			17-0655 DLY 73-0015 DLY 17-5070 DLY 73-0020 DLY
ME	BRASSUA DAM	17-0814	45.6603	-69.8120	1060	0	0	92			17-0814 DLY 17-4290 DLY
ME	BRIDGEWATER	17-0833	46.4283	-67.8442	420	0	0	52			17-0833 DLY
ME	BRIDGTON	54-0131	44.1075	-70.7289	728	0	0	30			54-0131 DLY
ME	BRIDGTON 3 NW	17-0844	44.0697	-70.7467	560	0	0	112			17-0844 DLY 17-5875 DLY
ME	BRUNSWICK NAS	17-0934	43.9000	-69.9333	70	0	0	62			17-0934 DLY
ME	CARIBOU MUNI AP	17-1175	46.8706	-68.0172	624	0	65	75		17-1175 HLY	17-1175 DLY
ME	CLAYTON LAKE	17-1472	46.6108	-69.5231	1000	0	48	62		17-1472 HLY 55-0149 HLY	17-1472 DLY 17-1472 HLY 55-0149 HLY
ME	CORINNA	17-1628	44.9197	-69.2417	297	0	0	65			17-1628 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
ME	DANFORTH	17-1833	45.6611	-67.8614	475	0	0	47			17-1833 DLY 17-1835 DLY
ME	DOVER-FOXCROFT WWTP	17-1975	45.1872	-69.1839	370	0	0	42			17-1975 DLY 17-2207 DLY
ME	EAST HIRAM	17-2238	43.8786	-70.7539	528	0	0	137			17-2238 DLY 17-3794 DLY 17-3800 DLY 17-1670 DLY 52-1670 DLY
ME	EASTPORT	17-2426	44.9067	-66.9919	85	0	40	127		17-2426 HLY	17-2426 DLY 52-2426 DLY
ME	ELIOT	17-2602	43.1025	-70.7731	20	0	0	57			17-2602 DLY 27-6980 DLY 27-5768 DLY 52-5768 DLY
ME	ELLSWORTH 3SSW	17-2623	44.4933	-68.4583	105	0	0	77			17-2623 DLY 17-2620 DLY 17-2443 DLY
ME	EUSTIS	17-2700	45.2172	-70.4825	1260	0	25	93		17-2700 HLY 17-2705 HLY	17-2700 DLY 17-2700 HLY 17-2695 DLY 17-2705 HLY
ME	FARMINGTON	17-2765	44.6889	-70.1567	420	0	0	112			17-2765 DLY
ME	FRYEBURG E SLOPES AP	79-0040	43.9906	-70.9475	445	29	64	62	17-3026 15M 17-8641 15M 78-0039 15M	17-3026 HLY 17-8641 HLY 17-3026 15M 17-8641 15M 78-0039 15M 55-0109 HLY	79-0040 DLY 17-3026 HLY 17-8641 HLY 17-3026 15M 17-8641 15M 17-8641 15M 78-0039 15M
ME	FT FAIRFIELD 5 NE	17-2868	46.7732	-67.8371	302	0	0	55			17-2868 DLY
ME	FT KENT	17-2878	47.2386	-68.6136	610	33	46	78	17-2878 15M	17-2878 HLY	17-2878 DLY
ME	GARDINER	17-3046	44.2203	-69.7889	140	0	0	123			17-3046 DLY
ME	GILEAD	17-3110	44.4000	-70.9667	702	0	0	28			17-3110 DLY 54-0133 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
ME	GRAND LAKE MATAGAMON	17-3250	46.1411	-68.7906	660	28	29	26	17-3250 15M	17-3250 HLY	17-3250 HLY
ME	GRAND LAKE STREAM	17-3261	45.1775	-67.7742	290	24	51	63	17-3261 15M	17-3261 HLY	17-3261 DLY 17-3261 HLY
ME	GREENVILLE	17-3353	45.4667	-69.5833	1029	0	50	104		17-3353 HLY 78-0029 15M 55-0152 HLY	17-3353 DLY 54-0134 DLY 17-3353 HLY 78-0029 15M 55-0152 HLY
ME	GUILFORD	17-3417	45.1703	-69.3817	400	0	0	51			17-3417 DLY 17-2442 DLY
ME	HARMONY	17-3567	44.9442	-69.5458	320	0	0	36			17-3567 DLY
ME	HARRIS STN	17-3588	45.4590	-69.8648	830	0	0	46			17-3588 DLY
ME	HOULTON	17-3897	46.1333	-67.8333	410	0	0	90			17-3897 DLY 52-3892 DLY
ME	HOULTON 5N	17-3944	46.2061	-67.8417	390	26	65	66	17-3944 15M	17-3944 HLY 17-3897 HLY 17-3892 HLY	17-3944 DLY 17-3944 HLY 17-3897 HLY 17-3892 HLY
ME	HOULTON INTL AP	17-3892	46.1236	-67.7928	476	0	0	62			17-3892 DLY
ME	JACKMAN	17-4086	45.6233	-70.2550	1190	22	21	91	17-4086 15M	17-4086 HLY	17-4086 DLY
ME	JONESBORO	17-4183	44.6439	-67.6475	185	0	0	58			17-4183 DLY
ME	KENNEBUNKPORT	17-4193	43.3606	-70.4697	20	0	0	40			17-4193 DLY 17-7349 DLY
ME	KINGFIELD	17-4324	44.9656	-70.1711	630	0	0	33			17-4324 DLY
ME	LEWISTON	17-4566	44.1000	-70.2167	180	0	0	116			17-4566 DLY
ME	LIMESTONE 4 NNW	17-4630	46.9600	-67.8833	737	0	0	31			17-4630 DLY 79-0011 DLY
ME	LONG FALLS DAM	17-4781	45.2219	-70.1983	1160	0	0	66			17-4781 DLY 17-2805 DLY
ME	MACHIAS	17-4878	44.7200	-67.4539	20	0	0	87			17-4878 DLY
ME	MADISON	17-4927	44.7983	-69.8878	260	0	0	111			17-4927 DLY
ME	MIDDLE DAM	17-5261	44.7931	-70.9167	1460	0	0	83			17-5261 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
ME	MILLINOCKET	17-5304	45.6503	-68.7050	360	35	65	112	17-5304 15M 78-0043 15M	17-5304 HLY 17-5309 HLY 78-0043 15M 55-0033 HLY	17-5304 DLY 78-0043 15M 17-5304 HLY 17-5309 HLY 55-0033 HLY
ME	MILO	17-5347	45.2564	-69.0100	420	33	33	59	17-5347 15M	17-5347 HLY	17-5347 DLY 17-5347 HLY
ME	MOOSEHEAD	17-5460	45.5869	-69.7161	1028	0	0	84			17-5460 DLY
ME	NEWCASTLE	17-5675	44.0461	-69.5367	190	0	0	49			17-5675 DLY
ME	OLD TOWN 2 W	17-6426	44.9281	-68.7006	127	0	0	62			17-6426 DLY 17-6425 DLY 17-6420 DLY
ME	ORONO	17-6430	44.8992	-68.6744	115	34	53	111	17-6435 15M	17-6435 HLY	17-6430 DLY 17-6435 HLY
ME	PATTEN 2	17-6594	46.0267	-68.5000	760	0	0	52			17-6594 DLY 69-0333 DLY 17-6599 DLY 17-6595 DLY 17-6593 DLY 17-6585 DLY 17-6597 DLY
ME	PHILLIPS 2	17-6707	44.8297	-70.3936	1020	0	0	33			17-6707 DLY 17-6705 DLY
ME	PITTSTON FARM	17-6721	45.8944	-69.9647	1100	0	0	23			17-6721 DLY 17-1516 DLY
ME	PORTLAND INTL JETPORT	17-6905	43.6497	-70.3003	45	0	122	146		17-6905 HLY 55-0070 HLY	17-6905 DLY 17-6900 DLY 52-6900 DLY 17-6902 DLY 17-6905 HLY 55-0070 HLY
ME	PRESQUE ISLE	17-6937	46.6539	-68.0089	599	0	0	98			17-6937 DLY
ME	RANGELEY	17-7037	44.9678	-70.6433	1530	0	0	45			17-7037 DLY
ME	RIPOGENUS DAM	17-7174	45.8833	-69.1833	965	0	0	71			17-7174 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
ME	RUMFORD 1 SSE	17-7325	44.5308	-70.5372	630	25	57	113	17-7325 15M 57-0001 15M	17-7325 HLY 17-7330 HLY 57-0001 15M	17-7325 DLY 17-7330 DLY 17-7330 HLY 57-0001 15M
ME	SANFORD 2 NNW	17-7479	43.4569	-70.7803	280	0	0	61			17-7479 DLY
ME	SKOWHEGAN	17-7827	44.7639	-69.7194	165	24	56	59	17-7827 15M	17-7827 HLY 17-7827 15M	17-7827 DLY 17-7827 HLY 17-7827 15M
ME	SPRINGFIELD	17-8353	45.4000	-68.1667	440	0	0	31			17-8353 DLY
ME	SQUA PAN DAM	17-8398	46.5500	-68.3333	610	0	0	65			17-8398 DLY
ME	THE FORKS	17-8721	45.3363	-69.9667	600	0	0	67			17-8721 DLY 73-0026 DLY
ME	UPPER DAM	17-8942	44.8828	-70.8619	1480	0	0	36			17-8942 DLY
ME	VAN BUREN 2	17-8965	47.1664	-67.9397	456	0	0	70			17-8965 DLY 17-8963 DLY
ME	VANCEBORO NO 2	17-8974	45.5608	-67.4303	420	0	0	55			17-8974 DLY 17-8969 DLY 73-0027 DLY
ME	WATERVILLE TRTMT PLT	17-9151	44.5272	-69.6544	73	0	0	129			17-9151 DLY 17-9826 DLY 17-2740 DLY
ME	WEST BUXTON 2 NNW	17-9314	43.6878	-70.6128	220	0	0	55			17-9314 DLY
ME	WEST ROCKPORT 1 NNW	17-9593	44.1925	-69.1461	380	27	55	85	17-7255 15M	17-7255 HLY 55-0148 HLY	17-9593 DLY 17-7250 DLY 17-9591 DLY 17-7255 HLY 55-0148 HLY
ME	WOODLAND	17-9891	45.1569	-67.4044	140	0	0	89			17-9891 DLY
NH	ALTON	27-0100	43.4333	-71.2500	720	0	0	46			27-0100 DLY 27-3367 DLY 27-0620 DLY 27-3359 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NH	BATH 3	27-0493	44.1511	-71.9681	650	0	29	64	27-4570 HLY 27-4568 HLY	27-0493 DLY 27-0496 DLY 43-2578 DLY 27-9950 DLY 27-4570 HLY 27-4568 HLY	
NH	BENTON 5 SW	27-0681	44.0342	-71.9486	1200	0	0	65		27-0681 DLY 27-0675 DLY	
NH	BERLIN	27-0690	44.4486	-71.1842	930	0	0	99		27-0690 DLY	
NH	BETHLEHEM 2	27-0706	44.3064	-71.6575	1180	0	0	117		27-0706 DLY 27-0703 DLY	
NH	BLACKWATER DAM	27-0741	43.3167	-71.7167	600	26	49	56	27-0741 15M 27-9045 15M 27-7833 15M	27-0741 HLY 27-7833 HLY 27-9045 HLY 27-0741 DLY 27-7833 DLY 27-0741 HLY 27-7833 HLY 27-9045 HLY	
NH	BRADFORD 2	27-0913	43.2581	-72.0028	827	0	0	73		27-0913 DLY 27-0910 DLY	
NH	BRISTOL	27-0998	43.5889	-71.7361	470	24	47	66	27-0998 15M	27-0998 HLY 27-0998 DLY 27-0998 HLY 27-0045 DLY 27-0038 DLY	
NH	CANNON MTN	27-1187	44.1581	-71.6986	4003	0	0	20		27-1187 DLY	
NH	CLAREMONT JUNCTION	27-1552	43.3667	-72.3833	430	0	0	31		27-1552 DLY 69-0572 DLY	
NH	COLEBROOK 3SW	27-1647	44.8611	-71.5400	1120	0	0	62		27-1647 DLY 43-4603 DLY	
NH	CONCORD MUNI AP	27-1683	43.1953	-71.5011	346	0	107	150		27-1683 HLY 27-1683 DLY 27-1682 DLY 27-1678 DLY	
NH	DEERING	27-1950	43.0908	-71.8678	1067	0	48	54	27-1950 HLY 27-4062 HLY	27-1950 DLY 27-2284 DLY 27-4059 DLY	
NH	DIAMOND POND	27-1968	44.9542	-71.3206	2200	0	0	78		27-1968 DLY 27-2023 DLY	

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NH	DUBLIN	27-2136	42.9167	-72.0667	1490	0	0	39			27-2136 DLY 27-5730 DLY
NH	DURHAM	27-2174	43.1500	-70.9500	80	25	57	120	27-2174 15M	27-2174 HLY 68-2178 HLY 55-0127 HLY	27-2174 DLY 27-2174 HLY 68-2178 HLY 55-0127 HLY
NH	EAST MILFORD	27-2302	42.8272	-71.6264	230	0	0	66			27-2302 DLY 27-5412 DLY
NH	EDWARD MACDOWELL LAKE	27-5013	42.8942	-71.9842	970	26	45	61	27-5013 15M	27-5013 HLY	27-5013 DLY 27-5013 HLY 27-6302 DLY
NH	EPPING	27-2800	43.0303	-71.0839	160	0	0	49			27-2800 DLY
NH	ERROL	27-2842	44.7889	-71.1231	1280	0	51	85		27-2842 HLY	27-2842 DLY
NH	FIRST CONNECTICUT LAKE	27-2999	45.0875	-71.2872	1660	0	0	91			27-2999 DLY
NH	FITZWILLIAM 2 W	27-3024	42.7797	-72.1789	1190	0	0	73			27-3024 DLY
NH	FRANKLIN FALLS DAM	27-3182	43.4669	-71.6664	430	29	52	116	27-3182 15M	27-3182 HLY	27-3182 DLY 27-3182 HLY 27-7850 DLY 27-3177 DLY
NH	GLENCLIFF 2	27-3415	43.9847	-71.8947	1080	0	0	73			27-3415 DLY 27-3409 DLY
NH	GRAFTON	27-3530	43.5667	-71.9500	830	0	0	89			27-3530 DLY 27-7967 DLY 69-0538 DLY
NH	GREENLAND	27-3626	43.0167	-70.8333	85	0	0	54			27-3626 DLY 79-0003 DLY
NH	GREENVILLE 1 NNE	27-3658	42.7828	-71.7986	900	0	0	77			27-3658 DLY 27-5196 DLY 27-3660 DLY 27-3656 DLY 27-3661 DLY 27-1020 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NH	HANOVER	27-3850	43.7033	-72.2847	603	38	59	139	27-3850 15M 27-4656 15M	27-3850 HLY 27-3850 15M 27-4656 15M	27-3850 DLY 52-3850 DLY
NH	HOPKINTON LAKE	27-4218	43.1917	-71.7478	440	20	40	39	27-4218 15M	27-4218 HLY	27-4218 HLY
NH	JEFFERSON	27-4329	44.4169	-71.5008	1235	0	0	61			27-4329 DLY 27-4321 DLY 27-4314 DLY
NH	KEENE	27-4399	42.9389	-72.3247	511	0	0	120			27-4399 DLY
NH	LAKEPORT 2	27-4480	43.5492	-71.4642	500	0	0	86			27-4480 DLY
NH	LANCASTER	27-4556	44.4911	-71.5725	860	0	0	67			27-4556 DLY
NH	LINCOLN	27-4732	44.0500	-71.6667	875	0	47	73		27-4732 HLY	27-4732 DLY 27-4732 HLY
NH	MARLOW	27-5150	43.1175	-72.2003	1180	0	0	68			27-5150 DLY 69-0426 DLY 27-8350 DLY
NH	MASSABESIC LAKE	27-5211	42.9892	-71.3933	253	0	0	91			27-5211 DLY 27-5072 DLY
NH	MEREDITH 3 NNE	27-5350	43.6972	-71.4699	830	0	0	64			27-5350 DLY 27-5532 DLY 27-1339 DLY 27-1338 DLY
NH	MILAN 7 NNW	27-5400	44.6667	-71.2167	1181	0	0	55			27-5400 DLY
NH	MONROE 5 NNE	27-5500	44.3167	-72.0000	660	0	0	36			27-5500 DLY
NH	MT SUNAPEE	27-5629	43.3336	-72.0825	1270	0	0	69			27-5629 DLY 27-8502 DLY 27-8502 HLY
NH	MT WASHINGTON	27-5639	44.2698	-71.3037	6267	0	75	96		27-5639 HLY	27-5639 DLY 27-5639 HLY
NH	NASHUA 2 NNW	27-5712	42.7914	-71.4736	135	0	48	116		27-5712 HLY 27-5705 HLY 27-4234 HLY	27-5712 DLY 27-4234 DLY 27-4234 HLY
NH	NEW DURHAM 3 NNW	27-5780	43.4833	-71.1833	640	31	57	68	27-5780 15M	27-5780 HLY	27-5780 DLY 27-5780 HLY
NH	NEWPORT	27-5868	43.3836	-72.1753	790	0	29	86		27-5868 HLY	27-5868 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NH	NORTH CONWAY	27-5995	44.0303	-71.1383	544	0	0	68			27-5995 DLY 27-1732 DLY 27-5997 DLY
NH	NORTH STRATFORD	27-6234	44.7500	-71.6303	910	0	51	97		27-6234 HLY 27-6234 15M 76-0039 HLY 43-0690 HLY	27-6234 DLY 43-0690 DLY
NH	OTTER BROOK LAKE	27-6550	42.9453	-72.2369	680	25	35	50	27-6550 15M	27-6550 HLY	27-6550 DLY 27-6550 HLY
NH	PETERBORO 2 S	27-6697	42.8500	-71.9500	1020	0	0	46			27-6697 DLY
NH	PINKHAM NOTCH	27-6818	44.2574	-71.2538	2010	0	45	84		27-6818 HLY	27-6818 DLY
NH	PITTSBURG RSVR	27-6856	45.0467	-71.3836	1350	25	60	62	27-6856 15M	27-6856 HLY	27-6856 HLY
NH	PLYMOUTH	27-6945	43.7849	-71.6572	660	0	0	116			27-6945 DLY 27-6944 DLY
NH	SOUTH LYNDEBORO	27-8081	42.8833	-71.7833	650	0	0	51			27-8081 DLY
NH	SURRY MTN LAKE	27-8539	42.9967	-72.3128	560	0	50	60		27-8539 HLY	27-8539 DLY 27-8539 HLY
NH	TAMWORTH 4	27-8614	43.8583	-71.2597	520	0	0	54			27-8614 DLY 27-8612 DLY 27-9903 DLY 27-8610 DLY 27-8606 DLY
NH	WALPOLE 3	27-8858	43.0739	-72.4053	930	0	0	98			27-8858 DLY 27-8854 DLY 27-8855 DLY 27-0090 DLY
NH	WARREN	27-8885	43.9097	-71.8878	710	21	51	62	27-8885 15M	27-8885 HLY	27-8885 DLY 27-8885 HLY 27-9091 DLY
NH	WEARE	27-8972	43.0847	-71.7383	720	0	22	60		27-2870 HLY	27-8972 DLY 27-8194 DLY
NH	WEST RUMNEY	27-9474	43.8000	-71.8500	560	0	0	50			27-9474 DLY 27-6055 DLY
NH	WINCHESTER	27-9726	42.7667	-72.3667	489	0	34	34		27-9726 HLY	27-9726 HLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NH	WINDHAM 3 NW	27-9740	42.8167	-71.3333	220	0	0	32			27-9740 DLY 27-1960 DLY
NH	WOLFEBORO	27-9866	43.6000	-71.2333	728	0	0	44			27-9866 DLY 27-9865 DLY
NH	WOODSTOCK	27-9940	43.9833	-71.6833	722	0	0	67			27-9940 DLY 54-0140 DLY
NH	YORK POND	27-9966	44.5000	-71.3328	1530	0	0	71			27-9966 DLY
NY	ADDISON	30-0023	42.1014	-77.2344	999	0	0	96			30-0023 DLY
NY	ALBANY	30-0047	42.6461	-73.7472	0	0	87	128		30-0047 HLY 30-0049 15M	30-0047 DLY 69-1009 DLY 30-0047 HLY 30-0049 15M 30-0048 DLY
NY	ALBANY AP	30-0042	42.7431	-73.8092	312	0	69	76		30-0042 HLY	30-0042 DLY
NY	ALBION 2 NE	30-0055	43.2722	-78.1664	440	0	0	63			30-0055 DLY
NY	ALCOVE DAM	30-0063	42.4697	-73.9267	607	0	0	64			30-0063 DLY
NY	ALFRED	30-0085	42.2497	-77.7583	1706	0	0	101			30-0085 DLY 54-0145 DLY
NY	ALLEGANY SP	30-0093	42.1003	-78.7497	1500	0	0	88			30-0093 DLY
NY	AMSTERDAM LOCK 10	30-0159	42.9167	-74.1333	279	0	0	32			30-0159 DLY
NY	ANGELICA	30-0183	42.3033	-78.0189	1483	0	0	117			30-0183 DLY
NY	ARCADE	30-0220	42.5333	-78.4167	1580	0	0	58			30-0220 DLY
NY	ARKVILLE 2 W	30-0254	42.1392	-74.6533	1310	0	0	60			30-0254 DLY
NY	ARNOT FOREST	30-0270	42.2633	-76.6278	1200	28	46	47	30-0270 15M	30-0270 HLY	30-0270 HLY
NY	ATTICA 7 SW	30-0317	42.8031	-78.3875	1365	0	0	30			30-0317 DLY 30-0613 DLY
NY	AUBURN	30-0321	42.9328	-76.5447	770	0	0	93			30-0321 DLY
NY	AURORA RSCH FARM	30-0331	42.7339	-76.6592	830	0	38	58		30-0331 HLY	30-0331 DLY 54-0147 DLY
NY	AVERILL PARK	77-0001	42.6390	-73.5697	640	0	0	48			77-0001 DLY 30-9303 DLY 69-1452 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	AVON	30-0343	42.9203	-77.7558	545	0	0	108			30-0343 DLY
NY	BABYLON	30-0351	40.7167	-73.3667	49	0	0	45			30-0351 DLY 30-2760 DLY 79-0046 DLY
NY	BAINBRIDGE 2 E	30-0360	42.2928	-75.4385	994	0	0	75			30-0360 DLY
NY	BAKERS MILLS	30-0368	43.6167	-74.0333	1581	0	0	34			30-0368 DLY
NY	BALDWINSVILLE	30-0379	43.1500	-76.3333	379	0	0	98			30-0379 DLY
NY	BALSAM LAKE	30-0393	42.0333	-74.6000	2602	0	0	28			30-0393 DLY
NY	BARKER 4 NE	30-0412	43.3667	-78.4833	279	0	0	63			30-0412 DLY 30-0208 DLY
NY	BATAVIA	30-0443	43.0303	-78.1692	913	21	22	114	30-0443 15M	30-0443 HLY	30-0443 DLY 30-2547 DLY
NY	BATH	30-0448	42.3489	-77.3478	1120	0	0	59			30-0448 DLY
NY	BATTENVILLE	30-0452	43.1014	-73.4319	380	0	0	54			30-0452 DLY 30-3468 DLY
NY	BEAVER FALLS	30-0500	43.8833	-75.4333	740	0	0	62			30-0500 DLY 69-1265 DLY
NY	BEDFORD HILLS	30-0511	41.2333	-73.7167	430	0	0	76			30-0511 DLY
NY	BENNETTS BRG	30-0608	43.5317	-75.9525	660	0	0	68			30-0608 DLY
NY	BERLIN 5 S	30-0641	42.6228	-73.3712	1140	0	0	51			30-0641 DLY 30-1433 DLY
NY	BERNE 5 SW	30-0658	42.5833	-74.1833	1850	0	0	66			30-0658 DLY 30-0654 DLY 30-0655 DLY 30-9100 DLY
NY	BIG MOOSE 3 SE	30-0668	43.8000	-74.8667	1760	0	0	80			30-0668 DLY 54-0153 DLY
NY	BINGHAMTON GREATER AP	30-0687	42.2067	-75.9800	1595	0	63	63		30-0687 HLY 55-0014 HLY	30-0687 DLY 30-0687 HLY 55-0014 HLY
NY	BINGHAMTON SUSQ RVR	30-0681	42.1000	-75.9000	854	0	0	82			30-0681 DLY 69-1025 DLY 30-0691 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	BISCUIT BROOK	54-0158	41.9936	-74.5031	2080	0	0	66			54-0158 DLY 30-3076 DLY
NY	BLUE MTN LAKE 2 N	30-0746	43.8748	-74.4334	2201	0	0	25			30-0746 DLY
NY	BOLIVAR	30-0766	42.1225	-78.2064	1790	25	42	91	30-0766 15M	30-0766 HLY	30-0766 DLY 30-3065 DLY 30-3069 DLY 30-3070 DLY
NY	BOONVILLE 4 SSW	30-0785	43.4361	-75.3697	1550	0	46	89		30-0785 HLY	30-0785 DLY 30-0780 DLY
NY	BRADFORD 1 NW	30-0817	42.3833	-77.1167	1362	0	0	36			30-0817 DLY 30-0816 DLY
NY	BREWERTON LOCK 23	30-0870	43.2386	-76.1964	377	0	0	83			30-0870 DLY
NY	BRIDGEHAMPTON	30-0889	40.9461	-72.3069	60	0	0	100			30-0889 DLY 30-7895 DLY
NY	BROADALBIN	30-0929	43.0508	-74.1981	840	0	0	58			30-0929 DLY
NY	BROCKPORT	30-0937	43.2000	-77.9333	535	0	0	83			30-0937 DLY 69-1282 DLY
NY	BUFFALO	30-1010	42.8833	-78.8833	594	0	0	121			30-1010 DLY 52-1010 DLY 71-0845 DLY
NY	BUFFALO NIAGARA INTL AP	30-1012	42.9408	-78.7358	716	0	66	75		30-1012 HLY	30-1012 DLY
NY	CAIRO 3 NW	30-1095	42.3167	-74.0331	490	0	0	84			30-1095 DLY 30-1093 DLY 30-3038 DLY
NY	CAMDEN	30-1110	43.3306	-75.8417	580	0	0	68			30-1110 DLY 30-9480 DLY
NY	CANADA LAKE	30-1138	43.1667	-74.5167	1680	0	0	21			30-1138 DLY 30-8240 DLY
NY	CANAJOHARIE	30-1144	42.9096	-74.5779	302	0	0	50			30-1144 DLY
NY	CANANDAIGUA 3 S	30-1152	42.8453	-77.2808	720	0	0	71			30-1152 DLY
NY	CANASTOTA	30-1160	43.0833	-75.7667	410	0	0	55			30-1160 DLY 69-1275 DLY
NY	CANDOR 2SE	30-1168	42.1944	-76.3128	920	0	0	66			30-1168 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	CANISTEO 1 SW	30-1173	42.2608	-77.6161	1155	0	0	64			30-1173 DLY 30-7918 DLY
NY	CANTON 4 SE	30-1185	44.5772	-75.1097	448	22	96	115	30-1185 15M	30-1185 HLY	30-1185 DLY 30-1185 HLY
NY	CARMEL	30-1207	41.4333	-73.6833	530	0	45	103		30-1207 HLY 30-8512 HLY 99-0025 HLY	30-1207 DLY 30-1207 HLY 30-1211 DLY 99-0025 HLY
NY	CAYUGA LOCK #1	30-1265	42.9481	-76.7342	380	0	0	83			30-1265 DLY
NY	CHASM FALLS	30-1387	44.7500	-74.2167	1060	0	0	64			30-1387 DLY
NY	CHAZY	30-1401	44.8786	-73.3953	157	0	0	92			30-1401 DLY
NY	CHEMUNG	30-1413	42.0025	-76.6383	822	0	0	74			30-1413 DLY
NY	CHEPACHET	30-1424	42.9097	-75.1108	1320	0	0	43			30-1424 DLY
NY	CHERRY VALLEY 2 NNE	30-1436	42.8239	-74.7386	1360	0	0	56			30-1436 DLY
NY	CINCINNATUS	30-1492	42.5433	-75.8947	1050	0	0	69			30-1492 DLY 69-1084 DLY
NY	CLARYVILLE	30-1521	41.9133	-74.5722	1653	20	33	69	30-1521 15M 30-1523 15M	30-1521 HLY	30-1521 DLY 30-1523 DLY 30-1521 HLY
NY	CLYDE LOCK 26	30-1580	43.0589	-76.8386	392	0	0	82			30-1580 DLY
NY	COBLESKILL 2 ESE	30-1595	42.6667	-74.4333	1169	0	0	65			30-1595 DLY 30-1589 DLY 30-1593 DLY
NY	COLD BROOK	30-1615	42.0167	-74.2667	650	0	0	41			30-1615 DLY 60-1615 DLY
NY	COLDEN 1 N	30-1623	42.6631	-78.6831	1025	0	40	51		30-1623 HLY	30-1623 DLY 30-1625 DLY
NY	COLTON 2 N	30-1664	44.5842	-74.9572	580	0	0	76			30-1664 DLY
NY	CONKLINGVILLE DAM	30-1708	43.3203	-73.9256	808	31	50	61	30-1708 15M	30-1708 HLY	30-1708 DLY
NY	COOPERSTOWN	30-1752	42.7167	-74.9267	1257	0	0	154			30-1752 DLY 52-1752 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	COPAKE	30-1761	42.1131	-73.5522	550	0	0	75			30-1761 DLY 19-7692 DLY
NY	CORNING	30-1787	42.1342	-77.0692	1147	0	0	75			30-1787 DLY 30-1794 DLY 30-1792 DLY
NY	CORTLAND	30-1799	42.6000	-76.1833	1129	0	0	104			30-1799 DLY
NY	CROPSEYVILLE 2.9 ESE	77-0002	42.7328	-73.5057	1480	0	0	63			77-0002 DLY 30-3360 DLY
NY	CROSS RIVER METEOROLOGICA	99-0021	41.2455	-73.5903	573	0	0	44			99-0021 DLY 30-1896 DLY
NY	CUTCHOGUE	30-1949	41.0167	-72.5000	39	0	26	100		30-1949 HLY	30-1949 DLY 54-0160 DLY 30-3464 DLY
NY	DANNEMORA	30-1966	44.7192	-73.7206	1340	0	0	106			30-1966 DLY
NY	DANSVILLE	30-1974	42.5656	-77.7175	660	22	26	92	30-1980 15M 30-1979 15M	30-1979 HLY 30-1980 15M 30-1979 15M 55-0157 HLY	30-1974 DLY 30-1979 HLY 30-1980 15M 30-1979 15M 55-0157 HLY
NY	DE RUYTER 4 N	30-2079	42.8042	-75.8856	1302	0	0	74			30-2079 DLY
NY	DELANSON 2NE	30-2031	42.7672	-74.1711	984	0	0	40			30-2031 DLY 30-7568 DLY
NY	DELHI 2 SE	30-2036	42.2558	-74.9128	1420	0	0	84			30-2036 DLY 30-4525 DLY
NY	DELTA DAM	30-2047	43.2736	-75.4272	550	0	0	57			30-2047 DLY 30-2045 DLY
NY	DEPOSIT	30-2060	42.0628	-75.4264	1000	0	0	65			30-2060 DLY 30-1471 DLY 30-1466 DLY 30-1466 HLY 99-0004 DLY
NY	DOBBS FERRY ARDSLEY	30-2129	41.0072	-73.8344	200	0	42	93		30-2129 HLY 30-9576 HLY	30-2129 DLY 30-5540 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	DOLGEVILLE	30-2137	43.0833	-74.7667	685	0	0	72			30-2137 DLY 69-1228 DLY
NY	EAGLE BRG 2 SE	30-2236	42.9331	-73.3667	380	0	0	50			30-2236 DLY 30-3965 DLY 30-1068 DLY
NY	EAGLE FALLS	30-2239	43.9167	-75.2000	1302	0	0	46			30-2239 DLY 30-6098 DLY
NY	EAST JEWETT	30-2366	42.2356	-74.1433	1991	0	0	60			30-2366 DLY 30-2362 DLY 60-2362 DLY
NY	EAST SIDNEY	30-2454	42.3328	-75.2297	1155	33	52	63	30-2454 15M	30-2454 HLY	30-2454 DLY 30-2454 HLY 30-3020 DLY
NY	EDGEWOOD	30-2517	42.1333	-74.2333	1660	0	0	45			30-2517 DLY 60-2517 DLY
NY	EDMESTON 5 N	30-2530	42.7669	-75.2344	1548	23	57	54	30-2530 15M 30-2526 15M	30-2530 HLY 30-2526 HLY	30-2530 HLY 30-2526 HLY
NY	ELIZABETHTOWN	30-2554	44.2139	-73.5986	611	0	0	63			30-2554 DLY
NY	ELKA PARK	30-2562	42.1667	-74.1667	2251	0	0	31			30-2562 DLY 60-2562 DLY
NY	ELLENBURG DEPOT	30-2574	44.9131	-73.8222	950	0	0	67			30-2574 DLY
NY	ELLENVILLE	30-2582	41.7167	-74.4000	350	0	22	77		30-2582 HLY	30-2582 DLY 30-3953 DLY
NY	ELMIRA	30-2610	42.0997	-76.8358	947	0	0	119			30-2610 DLY
NY	EMMONS	30-5113	42.4694	-75.0106	1225	0	0	115			30-5113 DLY 30-6232 DLY 30-6229 DLY 30-6229 HLY 30-6224 DLY
NY	ENDICOTT	30-2627	42.0858	-76.0878	827	0	0	56			30-2627 DLY 69-1564 DLY 30-8833 DLY 30-8831 DLY 30-8835 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	FISHS EDDY	30-2829	41.9667	-75.1833	1020	0	0	50			30-2829 DLY 30-3714 DLY
NY	FORESTPORT	30-2917	43.4333	-75.2167	1132	0	0	33			30-2917 DLY
NY	FRANKFORT LOCK 19	30-3010	43.0667	-75.1167	410	0	0	66			30-3010 DLY
NY	FRANKLINVILLE	30-3025	42.3297	-78.4633	1590	0	0	89			30-3025 DLY
NY	FREDONIA	30-3033	42.4497	-79.3120	760	22	55	101	30-3033 15M 78-0015 15M	30-3033 HLY 30-2198 HLY 78-0015 15M 55-0058 HLY	30-3033 DLY 30-3033 HLY 30-2198 HLY 78-0015 15M 55-0058 HLY
NY	FREEVILLE 1 NE	30-3050	42.5192	-76.3311	1050	0	0	60			30-3050 DLY
NY	FT DRUM	30-2934	44.0333	-75.7667	630	0	0	42			30-2934 DLY 30-0706 DLY
NY	FT PLAIN	30-2953	42.9383	-74.6228	305	28	51	56	30-2953 15M	30-2953 HLY	30-2953 DLY 30-2953 HLY 69-1278 DLY
NY	FULTON	30-3087	43.3050	-76.3939	360	0	0	115			30-3087 DLY 79-0041 DLY 30-6375 DLY 52-6375 DLY
NY	GABRIELS	30-3102	44.4333	-74.1667	1762	0	0	84			30-3102 DLY 30-6459 DLY 69-1211 DLY 79-0060 DLY
NY	GANNETT HILL	30-3124	42.7000	-77.4000	1975	0	0	59			30-3124 DLY 30-0921 DLY
NY	GARDNERVILLE	30-3144	41.3458	-74.4872	460	0	0	52			30-3144 DLY
NY	GENEVA RSCH FARM	30-3184	42.8767	-77.0308	718	22	63	102	30-3184 15M	30-3184 HLY 30-3177 HLY 30-3182 HLY	30-3184 DLY 30-3177 DLY
NY	GLENHAM	30-3259	41.5167	-73.9333	275	0	0	63			30-3259 DLY
NY	GLENS FALLS AP	30-3294	43.3500	-73.6167	321	0	0	67			30-3294 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	GLENS FALLS FARM	30-3284	43.3331	-73.7280	504	0	0	95			30-3284 DLY 30-3281 DLY 30-4529 DLY 30-4530 DLY
NY	GLENS FALLS FIRE STN	30-3289	43.3167	-73.6500	351	0	0	50			30-3289 DLY
NY	GLOVERSVILLE	30-3319	43.0492	-74.3592	810	0	0	109			30-3319 DLY
NY	GOUVERNEUR 3 NW	30-3346	44.3539	-75.5122	420	0	0	77			30-3346 DLY
NY	GRAHAMSVILLE	30-3365	41.8500	-74.5333	960	0	0	49			30-3365 DLY
NY	GREENE	30-3444	42.3239	-75.7711	920	0	46	64		30-7830 HLY	30-3444 DLY
NY	GRIFFISS AFB	30-3507	43.2333	-75.4000	519	0	0	62			30-3507 DLY
NY	HAMILTON	30-3602	42.8167	-75.5333	1211	0	0	45			30-3602 DLY 30-0795 DLY 69-1277 DLY
NY	HAMMONDSPORT 1 W	30-3617	42.4000	-77.2500	781	0	0	31			30-3617 DLY 30-3616 DLY 30-3619 DLY
NY	HASKINVILLE	30-3722	42.4206	-77.5675	1650	0	0	91			30-3722 DLY
NY	HEMLOCK	30-3773	42.7442	-77.6083	902	0	0	113			30-3773 DLY
NY	HEMPSTEAD MALVERNE	30-3786	40.6833	-73.6667	39	0	0	41			30-3786 DLY 30-6138 DLY 69-1330 DLY
NY	HIGH FALLS	30-3839	41.8333	-74.1333	141	0	0	41			30-3839 DLY
NY	HIGHMARKET	30-3851	43.5753	-75.5208	1763	24	56	90	30-3851 15M	30-3851 HLY 30-3856 HLY	30-3851 DLY
NY	HIGHMOUNT	30-3864	42.1394	-74.4880	1841	0	0	61			30-3864 DLY 30-3503 DLY 76-0014 HLY 60-3864 DLY
NY	HINCKLEY 2 SW	30-3889	43.3000	-75.1500	1141	0	0	63			30-3889 DLY
NY	HOFFMEISTER 3 W	30-3916	43.3833	-74.7333	1880	0	0	50			30-3916 DLY 30-5489 DLY
NY	HOOKER 12 NNW	30-3961	43.8525	-75.7158	1481	0	0	70			30-3961 DLY
NY	HOPE	30-3970	43.3117	-74.2478	880	0	46	65		30-3970 HLY	30-3970 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	HORNBY	30-3979	42.2333	-77.0500	1795	26	25	23	30-3979 15M	30-3979 15M	30-3979 15M
NY	HORNELL ALMOND DAM	30-3983	42.3489	-77.7044	1325	31	53	62	30-3983 15M	30-3983 HLY	30-3983 DLY
NY	HUDSON COR.FACILITY	30-4025	42.2500	-73.8000	60	0	36	89		30-4025 HLY 30-4024 HLY 30-1670 HLY	30-4025 DLY 30-4024 DLY 30-0300 DLY 30-1670 HLY
NY	HUNTS CORNERS	30-4070	42.4272	-76.1253	1394	25	49	47	30-4070 15M	30-4070 HLY 68-4180 HLY	30-4070 HLY 68-4180 HLY
NY	INDIAN LAKE 2SW	30-4102	43.7550	-74.2692	1660	28	44	114	30-4102 15M	30-4102 HLY	30-4102 DLY
NY	ISLIP LI MACARTHUR AP	30-4130	40.7939	-73.1017	84	0	43	65		30-0862 HLY 30-4130 15M	30-4130 DLY 30-3919 DLY 30-4563 DLY 30-0862 DLY 30-0862 HLY 30-2091 DLY 30-4130 15M
NY	ITHACA CORNELL UNIV	30-4174	42.4492	-76.4492	960	14	97	121	30-4174 15M	30-4174 HLY	30-4174 DLY 30-4174 HLY
NY	JACKSONBURG	30-4182	43.0167	-74.9167	390	0	0	31			30-4182 DLY
NY	JAMESTOWN 4 ENE	30-4207	42.1100	-79.1592	1250	20	39	101	30-4207 15M	30-4207 HLY 30-4206 HLY 30-4208 HLY	30-4207 DLY 30-4206 DLY 30-4208 DLY
NY	JEFFERSONVILLE	30-4234	41.7833	-74.9333	1080	0	0	44			30-4234 DLY
NY	KEENE VALLEY 1 W	30-4332	44.1859	-73.8001	1280	0	0	26			30-4332 DLY 30-4332 HLY
NY	KORTRIGHT 2	30-4473	42.4167	-74.8000	1730	0	34	57		30-1987 HLY	30-4473 DLY 30-9205 DLY 30-4472 DLY 30-1987 HLY
NY	LAKE HILL	30-4533	42.0667	-74.1833	1122	0	0	41			30-4533 DLY 60-4533 DLY
NY	LAKE PLACID 2 S	30-4555	44.2444	-73.9855	1940	33	58	97	30-4555 15M	30-4555 HLY 30-4555 15M 76-0021 HLY	30-4555 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	LARCHMONT	30-4613	40.9333	-73.7500	39	0	34	34	30-4613 HLY	30-4613 HLY	
NY	LAWRENCEVILLE 3 SW	30-4647	44.7583	-74.6692	466	0	0	77			30-4647 DLY 69-1486 DLY
NY	LEWISTON 1 N	30-4715	43.1833	-79.0500	331	0	0	37			30-4715 DLY
NY	LEXINGTON 1 SE	30-4723	42.2333	-74.3333	1480	0	0	31			30-4723 DLY 60-4723 DLY
NY	LIBERTY 1 NE	30-4731	41.8017	-74.7400	1580	0	0	79			30-4731 DLY
NY	LINDEN	30-4767	42.8833	-78.1667	1122	0	0	33			30-4767 DLY
NY	LINDLEY 2N	30-4772	42.0642	-77.1441	1040	0	0	57			30-4772 DLY
NY	LITTLE FALLS CITY RES	30-4791	43.0603	-74.8686	893	0	0	106			30-4791 DLY
NY	LITTLE FALLS MILL ST	30-4796	43.0350	-74.8652	360	0	0	68			30-4796 DLY
NY	LITTLE VALLEY	30-4808	42.2472	-78.8125	1625	0	0	72			30-4808 DLY
NY	LOCKE 2 W	30-4836	42.6703	-76.4722	1200	0	0	80			30-4836 DLY
NY	LOCKPORT 3 S	30-4844	43.1392	-78.6814	605	0	0	102			30-4844 DLY
NY	LOCKPORT 4 NE	30-4849	43.2000	-78.6333	440	0	0	33			30-4849 DLY
NY	LOWVILLE	30-4912	43.7975	-75.4817	860	21	22	122	30-4912 15M	30-4912 HLY	30-4912 DLY
NY	LYONS FALLS	30-4944	43.6167	-75.3667	800	0	0	70			30-4944 DLY
NY	MACEDON	30-4952	43.0731	-77.3019	466	0	0	70			30-4952 DLY
NY	MALONE	30-4996	44.8419	-74.3081	880	0	0	48			30-4996 DLY 30-4995 DLY 30-1723 DLY
NY	MANORKILL	30-5032	42.3833	-74.3167	1620	0	0	66			30-5032 DLY 60-5032 DLY
NY	MARY SMITH	30-5120	42.0595	-74.8221	1522	0	0	36			30-5120 DLY
NY	MASSENA INTL AP	30-5134	44.9358	-74.8458	214	22	48	75	30-5134 15M 30-5129 15M	30-5134 HLY 30-5134 15M 30-5129 15M 30-5129 HLY 55-0164 HLY	30-5134 DLY 30-5129 DLY 30-5129 HLY 30-5134 HLY 30-5134 15M 30-5129 15M 55-0164 HLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	MAYS POINT LOCK 25	30-5171	43.0000	-76.7667	400	0	0	64			30-5171 DLY
NY	MCKEEVER	30-5199	43.6167	-75.1167	1480	0	0	24			30-5199 DLY
NY	MECHANICVILLE 2 S	30-5231	42.8833	-73.6833	39	0	0	65			30-5231 DLY
NY	MECKLENBURG 4SW	30-5233	42.4422	-76.7586	1510	0	0	47			30-5233 DLY 30-1032 DLY
NY	MELROSE 1 NE	30-5248	42.8500	-73.6167	350	0	0	54			30-5248 DLY 30-7505 DLY
NY	MIDDLETOWN 2 NW	30-5310	41.4603	-74.4489	700	0	0	73			30-5310 DLY 30-0732 DLY
NY	MILLBROOK	30-5334	41.8553	-73.6700	820	0	0	52			30-5334 DLY
NY	MILLERTON	30-5346	41.9500	-73.5167	732	22	53	60	30-5346 15M 30-1559 15M	30-5346 HLY 30-1559 HLY 68-5338 HLY	30-5346 DLY 30-5346 HLY 30-1559 HLY 68-5338 HLY
NY	MILTON CTR	30-5255	43.0500	-73.9000	410	0	0	85			30-5255 DLY 30-9250 DLY 30-3452 DLY
NY	MINEOLA	30-5377	40.7328	-73.6183	96	26	48	92	30-5377 15M	30-5377 HLY	30-5377 DLY 30-7282 DLY
NY	MINEOLA 1 NE	30-5380	40.7494	-73.6233	100	0	0	36			30-5380 DLY 30-3781 DLY 30-9117 DLY
NY	MOHONK LAKE	30-5426	41.7681	-74.1550	1245	0	0	119			30-5426 DLY
NY	MONGAUP VALLEY 4 SSW	30-5435	41.5703	-74.7931	1246	0	20	45		30-5435 HLY	30-5435 DLY 30-5435 HLY
NY	MORRISVILLE 6 SW	30-5512	42.8417	-75.7264	1681	0	0	92			30-5512 DLY
NY	MOUNT VERNON	30-5618	40.9000	-73.8333	155	0	23	45		30-5799 HLY 30-5806 HLY	30-5618 DLY 30-5799 HLY 30-5806 HLY
NY	MT MORRIS 2 W	30-5597	42.7314	-77.9053	880	35	53	70	30-5597 15M	30-5597 HLY	30-5597 DLY
NY	NEVERSINK DAM NEAR NEVERS	99-0013	41.8275	-74.6391	1448	0	0	42			99-0013 DLY 30-5671 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	NEW ALBION 2	30-5676	42.3114	-78.9083	1990	0	0	31			30-5676 DLY 30-5673 DLY 30-5675 DLY
NY	NEW KINGSTON	30-5743	42.2281	-74.7018	1923	0	0	42			30-5743 DLY 30-0799 DLY 99-0008 HLY
NY	NEW LONDON LOCK NO 22	30-5751	43.2097	-75.6453	400	0	0	78			30-5751 DLY
NY	NEW YORK JFK INTL AP	30-5803	40.6386	-73.7622	11	0	47	57		30-5803 HLY 55-0176 HLY	30-5803 DLY 30-5803 HLY 55-0176 HLY
NY	NEW YORK LAGUARDIA AP	30-5811	40.7794	-73.8803	11	0	65	93		30-5811 HLY	30-5811 DLY 30-2868 DLY 30-5811 HLY
NY	NEW YORK LAUREL HILL	30-5804	40.7333	-73.9333	10	0	0	32			30-5804 DLY
NY	NEWARK	30-5679	43.0467	-77.0842	430	0	0	83			30-5679 DLY
NY	NEWARK VALLEY 1N	30-5682	42.2464	-76.1767	990	33	53	70	30-5682 15M	30-5682 HLY	30-5682 DLY 30-5682 HLY 69-1557 DLY
NY	NEWCOMB	30-5714	43.9708	-74.2219	1647	0	0	73			30-5714 DLY 54-0150 DLY 30-5711 DLY
NY	NEWPORT 7 NE	30-5769	43.2000	-74.9167	1694	0	0	89			30-5769 DLY 30-2720 DLY 30-7413 DLY 69-1233 DLY
NY	NIAGARA FALLS INTL AP	30-5841	43.1083	-78.9381	585	0	0	35			30-5841 DLY 30-5840 DLY
NY	NORFOLK	30-5869	44.8053	-74.9997	230	0	0	64			30-5869 DLY
NY	NORTH CREEK 5 SE	30-5925	43.6611	-73.8969	890	0	0	70			30-5925 DLY
NY	NORTH LAKE	30-5987	43.5237	-74.9438	1831	0	0	41			30-5987 DLY
NY	NORTH TONAWANDA	30-6047	43.0219	-78.8467	600	0	0	32			30-6047 DLY
NY	NORTHVILLE	30-6062	43.1592	-74.2042	790	0	0	76			30-6062 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	NORWICH	30-6085	42.5117	-75.5197	989	0	0	106			30-6085 DLY
NY	NORWICH 5.7 NE	69-1066	42.5800	-75.4300	1766	0	0	65			69-1066 DLY 30-5687 DLY
NY	NY AVE V BROOKLYN	30-5796	40.5939	-73.9808	20	0	29	111		30-5796 HLY	30-5796 DLY 30-5796 HLY 52-5812 DLY
NY	NY CITY CNTRL PARK	30-5801	40.7789	-73.9692	130	0	117	173		30-5801 HLY 30-5816 HLY	30-5801 DLY 30-5816 DLY 52-5802 DLY
NY	NY WESTERLEIGH STAT IS	30-5821	40.6333	-74.1167	80	0	37	38		30-5821 HLY	30-5821 DLY
NY	OAKLAND VALLEY	30-6119	41.5035	-74.6529	920	0	32	32		30-6119 HLY	30-6119 HLY
NY	OGDENSBURG 4 NE	30-6164	44.7281	-75.4442	280	0	0	110			30-6164 DLY
NY	OLD FORGE	30-6184	43.7025	-74.9839	1748	0	49	70		30-6184 HLY	30-6184 DLY
NY	OLEAN	30-6196	42.0736	-78.4517	1420	0	0	99			30-6196 DLY
NY	ON MERRIMAN DAM (RONDOUT)	99-0014	41.8044	-74.4245	850	0	0	65			99-0014 DLY 30-5276 DLY 30-4486 DLY
NY	OSWEGO EAST	30-6314	43.4622	-76.4933	350	21	54	128	30-6314 15M	30-6314 HLY	30-6314 DLY 52-2948 DLY
NY	OVID 4 S	30-6346	42.6167	-76.8167	1122	0	0	37			30-6346 DLY
NY	OWEGO 3 WSW	30-6356	42.0811	-76.3178	810	0	0	36			30-6356 DLY
NY	PARISHVILLE 1 WNW	30-6411	44.6333	-74.8333	751	0	0	38			30-6411 DLY
NY	PATCHOGUE 2 N	30-6441	40.7967	-73.0014	55	0	0	77			30-6441 DLY 30-5235 DLY
NY	PAVILION	30-6464	42.9294	-78.0319	956	0	29	45		30-6464 HLY	30-6464 DLY
NY	PEEKAMOOSE	30-6479	41.9277	-74.3801	1460	0	0	36			30-6479 DLY 99-0003 HLY 60-6479 DLY
NY	PENN YAN	30-6510	42.6711	-77.0628	830	0	0	71			30-6510 DLY
NY	PEPACTON DAM NEAR DOWNSVI	99-0016	42.0758	-74.9724	1200	0	0	64			99-0016 DLY 30-2169 DLY 30-2164 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	PERRYSBURG	30-6525	42.4647	-79.0031	1210	0	0	57			30-6525 DLY 30-3354 DLY 30-3352 DLY
NY	PERU 2 WSW	30-6538	44.5658	-73.5700	510	0	0	102			30-6538 DLY 30-3662 DLY
NY	PHONECIA 2SW	30-6570	42.0675	-74.3356	1060	0	0	95			30-6570 DLY 30-6567 DLY 60-6567 DLY
NY	PISECO	30-6623	43.4614	-74.5231	1730	21	43	67	30-6623 15M	30-6623 HLY	30-6623 DLY 30-6623 HLY
NY	PLATTSBURGH 3 S	30-6660	44.6522	-73.4400	178	0	0	74			30-6660 DLY 30-6659 DLY 78-0050 15M 79-0058 DLY 79-0002 DLY
NY	PLEASANTVILLE	30-6674	41.1314	-73.7758	320	24	23	60	30-6674 15M 30-9400 15M 30-9140 15M	30-6674 HLY 30-6674 15M 30-9400 15M 30-9140 15M	30-6674 DLY 30-6674 HLY 30-6674 15M 30-9400 15M 30-9140 15M
NY	PLYMOUTH	30-6685	42.6167	-75.6000	1280	0	36	35		30-6685 HLY	30-6685 HLY
NY	PORT JERVIS	30-6774	41.3800	-74.6847	470	0	0	115			30-6774 DLY
NY	PORTAGEVILLE	30-6745	42.5697	-78.0400	1168	0	0	113			30-6745 DLY 30-4698 DLY 30-9533 DLY
NY	POUGHKEEPSIE 7NNW	30-6820	41.7267	-73.9200	185	23	27	82	30-6825 15M 30-6820 15M	30-6825 HLY 30-6820 HLY 30-6820 15M 30-6817 HLY	30-6820 DLY 30-6817 DLY 30-6825 HLY 30-6820 HLY 30-6820 15M 30-6817 HLY
NY	POUGHKEEPSIE DUTCHESS CO	30-6821	41.6267	-73.8842	166	0	0	111			30-6821 DLY 30-8949 DLY
NY	PRATTSBURG	30-6833	42.5167	-77.2667	1440	0	0	48			30-6833 DLY 30-6831 DLY

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						<1hr	hourly	daily	<1hr	hourly	daily
NY	PRATTSVILLE	30-6839	42.3281	-74.4422	1207	23	42	70	30-6839 15M	30-6839 HLY	30-6839 DLY 30-6839 HLY 60-6839 DLY
NY	PULASKI 1 N	30-6867	43.5833	-76.1167	400	0	0	34			30-6867 DLY 30-7077 DLY
NY	RAQUETTE LAKE	30-6941	43.8167	-74.6667	1781	0	0	50			30-6941 DLY
NY	RAY BROOK	30-6957	44.2961	-74.1028	1620	0	0	63			30-6957 DLY 30-7472 DLY
NY	RHINEBECK 4SE	30-7035	41.8847	-73.8686	301	0	43	62		30-7035 HLY 30-4426 HLY 30-4424 HLY	30-7035 DLY 30-7033 DLY 30-4426 HLY 30-4424 HLY
NY	RIVERBANK	30-7129	43.6000	-73.7331	750	0	0	38			30-7129 DLY 30-8959 DLY
NY	RIVERHEAD RSCH FM	30-7134	40.9619	-72.7158	100	28	47	75	30-7134 15M	30-7134 HLY	30-7134 DLY
NY	ROCHESTER GTR INTL AP	30-7167	43.1167	-77.6767	539	0	66	156		30-7167 HLY	30-7167 DLY 79-0061 DLY 52-7160 DLY
NY	ROCK HILL 3 SW	30-7210	41.5917	-74.6142	1270	0	0	56			30-7210 DLY 30-7205 DLY
NY	ROCKDALE	30-7195	42.3833	-75.4000	1030	0	0	59			30-7195 DLY
NY	ROSENDALE 2 E	30-7274	41.8500	-74.0500	40	0	0	87			30-7274 DLY 30-7115 DLY
NY	ROXBURY	30-7317	42.2833	-74.5667	1490	0	0	55			30-7317 DLY
NY	RUSHFORD	30-7329	42.3942	-78.2517	1540	0	0	69			30-7329 DLY 30-1170 DLY
NY	SABATTIS 3 NE	30-7348	44.1167	-74.6667	1762	0	0	44			30-7348 DLY
NY	SALAMANCA 2	30-7400	42.1506	-78.7203	1415	31	49	48	30-7398 15M	30-7398 HLY	30-7400 DLY 30-7398 HLY
NY	SALEM	30-7405	43.1667	-73.3167	490	0	0	48			30-7405 DLY
NY	SARATOGA SPRINGS 4 SW	30-7484	43.0333	-73.8167	310	0	11	72		76-0022 HLY	30-7484 DLY 30-7480 DLY
NY	SCARSDALE	30-7497	40.9833	-73.8000	199	0	32	79		30-7497 HLY	30-7497 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	SCHENECTADY	30-7514	42.8000	-73.9167	360	0	39	53		30-7514 HLY	30-7514 DLY 30-7513 DLY 69-1461 DLY 30-7514 HLY
NY	SCHOHARIE DAM NEAR GILBOA	99-0018	42.3910	-74.4524	1122	0	0	82			99-0018 DLY 30-3373 DLY 60-3373 DLY
NY	SCHUYLERVILLE LOCK 5	30-7544	43.1167	-73.5833	112	0	52	64		30-7549 HLY	30-7544 DLY 30-7549 HLY
NY	SETAUKET STRONG	30-7633	40.9586	-73.1047	40	0	21	113		30-6768 HLY	30-7633 DLY
NY	SHARON SPRINGS 1N	30-7659	42.8118	-74.5991	820	0	0	36			30-7659 DLY
NY	SHARON SPRINGS 2 SW	30-7664	42.7818	-74.6534	1362	0	0	32			30-7664 DLY
NY	SHERBURNE	30-7705	42.6772	-75.5067	1095	0	0	104			30-7705 DLY
NY	SHERMAN	30-7713	42.1572	-79.5936	1560	0	0	52			30-7713 DLY
NY	SHOKAN BROWN STATION	30-7721	41.9500	-74.2000	510	0	0	96			30-7721 DLY 30-0985 DLY 99-0001 DLY 60-0985 DLY
NY	SHORTSVILLE	30-7728	42.9500	-77.2500	660	0	0	37			30-7728 DLY
NY	SINCLAIRVILLE	30-7772	42.2786	-79.2656	1620	0	0	43			30-7772 DLY
NY	SKANEATELES	30-7780	42.9461	-76.4314	875	0	20	105		30-5072 HLY	30-7780 DLY
NY	SLIDE MTN	30-7799	42.0124	-74.4159	2650	0	28	95		30-7799 HLY 99-0020 HLY 99-0003 HLY	30-7799 DLY 60-7799 DLY
NY	SMITHS BASIN	30-7818	43.3519	-73.4961	142	0	0	55			30-7818 DLY
NY	SODUS CTR	30-7842	43.2078	-77.0128	420	0	0	83			30-7842 DLY
NY	SOUTH EDWARDS 1 E	30-7944	44.2667	-75.2000	801	0	0	49			30-7944 DLY
NY	SOUTH WALES EMERY PARK	30-8058	42.7167	-78.6000	1089	36	55	74	30-8910 15M	30-8910 HLY	30-8058 DLY 30-8910 HLY
NY	SPECULATOR	30-8080	43.5000	-74.3617	1740	0	0	33			30-8080 DLY
NY	SPENCER 1 NE	30-8086	42.2167	-76.4667	1170	0	0	56			30-8086 DLY 30-8088 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	SPIER FALLS	30-8104	43.2349	-73.7537	390	0	0	72			30-8104 DLY 69-1506 DLY
NY	STAFFORD	30-8152	42.9833	-78.0833	912	0	0	34			30-8152 DLY
NY	STAMFORD	30-8160	42.4000	-74.6333	1779	0	0	53			30-8160 DLY
NY	STEWART FLD	30-8232	41.5000	-74.1000	581	0	0	31			30-8232 DLY 30-7420 DLY
NY	STILLWATER RSVR	30-8248	43.9000	-75.0367	1690	0	54	79		30-8248 HLY	30-8248 DLY
NY	STONY POINT 2E	30-8290	43.8389	-76.2675	250	25	25	25	30-8290 15M	30-8290 15M	30-8290 15M
NY	STORMVILLE	30-8304	41.5333	-73.7333	915	0	0	32			30-8304 DLY 30-9413 DLY 69-1444 DLY
NY	SYRACUSE HANCOCK AP	30-8383	43.1111	-76.1039	413	0	71	111		30-8383 HLY	30-8383 DLY 30-8380 DLY
NY	TANNERSVILLE SWG PLT	30-8403	42.1833	-74.1500	1801	29	27	75	30-8406 15M	30-8406 HLY	30-8403 DLY 30-6649 DLY 30-8406 HLY 30-8405 DLY 60-8403 DLY
NY	THERESA	30-8455	44.2167	-75.8000	341	0	0	40			30-8455 DLY 69-1251 DLY
NY	THURSTON	30-8498	42.2072	-77.3306	1620	0	43	42		30-8498 HLY	30-8498 HLY
NY	TICONDEROGA	30-8503	43.8500	-73.4167	161	31	47	72	30-8507 15M	30-8507 HLY 30-8503 HLY	30-8503 DLY 30-8507 HLY 30-8503 HLY 30-8506 DLY
NY	TRENTON FALLS	30-8578	43.2761	-75.1567	800	0	0	88			30-8578 DLY
NY	TRIBES HILL	30-8586	42.9464	-74.2886	300	30	51	101	30-8586 15M	30-8586 HLY	30-8586 DLY
NY	TROUPSBURG 4 NE	30-8594	42.0667	-77.4833	1710	0	0	57			30-8594 DLY
NY	TROY L&D	30-8600	42.7500	-73.6833	24	0	0	103			30-8600 DLY 30-8597 DLY 52-5259 DLY
NY	TULLY HEIBERG FOREST	30-8627	42.7603	-76.0803	1899	0	0	57			30-8627 DLY 30-2356 DLY

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						<1hr	hourly	daily	<1hr	hourly	daily
NY	TUPPER LAKE SUNMOUNT	30-8631	44.2308	-74.4383	1680	0	0	95			30-8631 DLY
NY	UNADILLA 2 N	30-8670	42.3542	-75.3242	1480	0	0	62			30-8670 DLY 30-8665 DLY
NY	UPTON	30-8720	40.8706	-72.8914	75	32	58	56	30-8720 15M 78-0034 15M	30-8720 HLY 30-8720 15M 78-0034 15M 55-0122 HLY	30-8720 HLY 30-8720 15M 78-0034 15M 55-0122 HLY
NY	UTICA	30-8739	43.0833	-75.2000	580	0	34	64		30-8739 HLY	30-8739 DLY 30-8733 DLY
NY	UTICA ONEIDA CO AP	30-8737	43.1450	-75.3839	711	0	0	56			30-8737 DLY
NY	VALATIE 1 N	30-8746	42.4333	-73.6833	300	0	0	82			30-8746 DLY 30-1391 DLY 30-8096 DLY
NY	VALHALLA 2 E	30-8749	41.0667	-73.7667	371	0	52	75		30-9400 HLY 55-0172 HLY	30-8749 DLY 99-0023 HLY 30-9400 DLY 52-9400 DLY 30-9400 HLY 55-0172 HLY
NY	VICTOR 2NW	30-8839	43.0044	-77.4472	588	0	41	47		30-8839 HLY	30-8839 DLY 30-2277 DLY
NY	WALDEN 1 ESE	30-8906	41.5514	-74.1628	380	0	0	91			30-8906 DLY 30-8902 DLY 30-3138 DLY
NY	WALTON 2	30-8932	42.1847	-75.1456	1480	0	0	82			30-8932 DLY 30-0540 DLY 30-8936 DLY 30-8935 DLY
NY	WANAKENA RNGR SCHOOL	30-8944	44.1481	-74.9003	1510	23	59	96	30-8944 15M	30-8944 HLY 76-0028 HLY	30-8944 DLY
NY	WANTAGH CEDAR CREEK	30-8946	40.6550	-73.5053	10	0	0	45			30-8946 DLY 30-3042 DLY 30-1285 DLY
NY	WARSAW 6 SW	30-8962	42.6856	-78.2203	1820	0	0	59			30-8962 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	WARWICK	30-8967	41.2667	-74.3667	541	0	0	70			30-8967 DLY
NY	WATERLOO	30-8987	42.9014	-76.8642	452	0	0	75			30-8987 DLY
NY	WATERTOWN	30-9000	43.9761	-75.8753	497	32	55	118	30-9000 15M	30-9000 HLY	30-9000 DLY
NY	WATERTOWN INTL AP	30-9005	43.9922	-76.0217	318	0	0	124			30-9005 DLY 30-0015 DLY 30-4957 DLY 52-4957 DLY
NY	WAVERLY	30-9047	42.0019	-76.5250	845	0	0	45			30-9047 DLY
NY	WELLESLEY ISLAND	30-9055	44.3564	-75.9286	285	0	0	69			30-9055 DLY 30-0077 DLY
NY	WELLSVILLE	30-9072	42.1172	-77.9475	1510	26	48	55	30-9072 15M	30-9072 HLY	30-9072 DLY
NY	WELLSVILLE 4 NNW	30-9076	42.1667	-77.9833	1460	0	0	45			30-9076 DLY 30-7557 DLY
NY	WEST JASPER	30-9229	42.1453	-77.5661	2170	0	39	37		30-9229 HLY	30-9229 HLY
NY	WEST KILL	30-9237	42.2000	-74.3833	1503	0	0	31			30-9237 DLY 60-9237 DLY
NY	WEST POINT	30-9292	41.3906	-73.9608	320	0	0	141			30-9292 DLY 52-0228 DLY
NY	WEST SHOKAN 3 SW	30-9311	41.9500	-74.3167	981	0	0	41			30-9311 DLY 60-9311 DLY
NY	WESTCHESTER CO AP	30-9140	41.0669	-73.7075	379	0	0	70			30-9140 DLY 30-7338 DLY
NY	WESTFIELD 2 SSE	30-9189	42.2956	-79.5856	944	0	0	81			30-9189 DLY
NY	WESTHAMPTN GABRESKI AP	79-0019	40.8436	-72.6322	67	0	0	34			79-0019 DLY
NY	WHIPPLEVILLE	30-9374	44.8047	-74.2597	830	27	59	56	30-9374 15M	30-9374 HLY	30-9374 HLY
NY	WHITEFACE MOUNTAIN	54-0161	44.3933	-73.8594	2001	0	0	37			54-0161 DLY
NY	WHITEHALL	30-9389	43.5575	-73.4011	119	34	56	81	30-9389 15M	30-9389 HLY	30-9389 DLY
NY	WHITESVILLE	30-9425	42.0397	-77.7650	1740	0	0	61			30-9425 DLY
NY	WHITNEY POINT DAM	30-9442	42.3417	-75.9653	1040	34	55	72	30-9442 15M	30-9442 HLY	30-9442 DLY 30-9442 HLY 30-9437 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NY	WILSON 4 S	30-9507	43.2500	-78.8333	350	0	0	53			30-9507 DLY
NY	WINDHAM 3 E	30-9516	42.3031	-74.2011	1680	0	0	92			30-9516 DLY 30-9514 DLY 60-9516 DLY
NY	WINDHAM NORTH SETTLEME	30-9512	42.3500	-74.2833	1900	0	0	31			30-9512 DLY 60-9512 DLY 30-6042 DLY
NY	WOLCOTT 3 NW	30-9544	43.2500	-76.8667	400	0	0	41			30-9544 DLY
NY	YORKTOWN HEIGHTS 1W	30-9670	41.2664	-73.7975	670	32	48	72	30-9670 15M 30-7742PP01	30-9670 HLY 99-0024 HLY	30-9670 DLY 30-1912 DLY 30-9660 DLY 30-9670 HLY
NY	YOUNGSTOWN 2 NE	30-9690	43.2683	-79.0103	280	0	0	59			30-9690 DLY 71-0873 DLY 30-9691 DLY 30-2946 DLY 52-2946 DLY
RI	BLOCK ISLAND STATE AP	37-0896	41.1681	-71.5778	105	0	44	62		37-0896 HLY 55-0178 HLY	37-0896 DLY 52-0896 DLY 69-2532 DLY 37-0896 HLY 79-0031 DLY 55-0178 HLY
RI	KINGSTON	37-4266	41.4906	-71.5414	114	0	0	117			37-4266 DLY
RI	NEWPORT ROSE	37-5215	41.4970	-71.3413	15	30	55	71	37-5215 15M 78-0062 15M	37-5215 HLY 37-5215 15M 37-5225 HLY 78-0062 15M 55-0079 HLY	37-5215 DLY 79-0025 DLY 37-5225 HLY 37-5002 DLY 37-6453 DLY 37-5215 HLY 37-5215 15M 78-0062 15M 55-0079 HLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
RI	NORTH FOSTER 1 E	37-5270	41.8564	-71.7333	630	0	0	72			37-5270 DLY 37-5354 DLY 37-3306 DLY
RI	PROVIDENCE (1)	37-6710	41.8333	-71.4167	75	0	0	66			37-6710 DLY 37-6712 DLY 52-6703 DLY 56-0004 HLY 56-0003 HLY 56-0002 HLY
RI	PROVIDENCE T F GREEN AP	37-6698	41.7219	-71.4325	60	0	66	82		37-6698 HLY	37-6698 DLY
RI	TIVERTON	37-7581	41.6267	-71.2092	82	0	0	101			37-7581 DLY 37-0218 DLY 19-2642 DLY
RI	WESTERLY 1 W	37-8911	41.3667	-71.8333	39	0	17	28		55-0082 HLY	37-8911 DLY 37-9327 DLY
RI	WOONSOCKET	37-9423	41.9844	-71.4908	110	0	0	63			37-9423 DLY 37-9423 HLY
VT	BALL MTN LAKE	43-0277	43.1098	-72.7974	1130	27	37	50	43-0277 15M	43-0277 HLY	43-0277 DLY 43-0277 HLY
VT	BARRE MONTPELIER AP	43-5278	44.2036	-72.5622	1126	0	0	62			43-5278 DLY
VT	BELLOWS FALLS	43-0499	43.1333	-72.4500	270	0	0	71			43-0499 DLY
VT	BENNINGTON 2 NNW	43-0563	42.9167	-73.2167	669	28	33	87	43-0568 15M 78-0014 15M	78-0014 HLY 43-0568 15M 78-0014 15M 55-0115 HLY	43-0563 DLY 54-0186 DLY 43-0568 15M 78-0014 HLY 78-0014 15M 55-0115 HLY
VT	BETHEL 4 N	43-0661	43.8833	-72.6344	660	0	0	71			43-0661 DLY 43-0660 DLY
VT	BRATTLEBORO	43-0841	42.8500	-72.5667	437	0	0	32			43-0841 DLY
VT	BROOKFIELD 2 SW	43-0940	44.0242	-72.6411	1300	0	0	20			43-0940 DLY 43-0942 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
VT	BURLINGTON	43-1072	44.4833	-73.1833	217	0	66	164		43-1081 HLY	43-1072 DLY 52-1081 DLY 43-1081 HLY 43-1081 DLY
VT	CANAAN	43-1213	44.9964	-71.5356	1070	0	0	81			43-1213 DLY 27-9525 DLY
VT	CAVENDISH	43-1243	43.3847	-72.5989	842	0	0	110			43-1243 DLY
VT	CHELSEA	43-1360	43.9832	-72.4480	800	0	0	113			43-1360 DLY 43-1363 DLY
VT	CHITTENDEN	43-1433	43.7064	-72.9617	1163	0	0	66			43-1433 DLY
VT	CORINTH	43-1565	44.0069	-72.3194	1180	28	31	34	43-1565 15M	43-1565 HLY	43-1565 DLY 43-1565 HLY
VT	CORNWALL	43-1580	43.9572	-73.2106	345	0	0	107			43-1580 DLY
VT	DORSET 2 SE	43-1786	43.2242	-73.0750	930	0	0	50			43-1786 DLY
VT	ENOSBURG FALLS	43-2769	44.9094	-72.8083	420	0	0	114			43-2769 DLY
VT	ESSEX JUNCTION 1 N	43-2843	44.5078	-73.1153	340	0	0	52			43-2843 DLY 43-2828 DLY
VT	GILMAN	43-3341	44.4111	-71.7186	840	0	0	108			43-3341 DLY 52-3341 DLY
VT	GRAFTON 1NW	43-3400	43.1906	-72.6253	1175	0	44	42		43-3400 HLY	43-3400 HLY
VT	HANKSVILLE	43-3769	44.2378	-72.9656	1083	0	0	50			43-3769 DLY 69-2559 DLY 43-4052 DLY
VT	HIGHGATE FALLS	43-3914	44.9339	-73.0494	175	26	55	53	43-3914 15M	43-3914 HLY	43-3914 HLY
VT	ISLAND POND	43-4120	44.8128	-71.8903	1200	0	0	24			43-4120 DLY
VT	JAY PEAK	43-4189	44.9381	-72.5022	1840	0	0	26			43-4189 DLY
VT	LSC MAIN STATION	97-0001	44.5357	-72.0286	1039	29	30	30	97-0001 15M 94-0020 15M 94-0009 15M	97-0001 15M 94-0020 15M 94-0009 15M	97-0001 15M 94-0020 15M 94-0009 15M
VT	LUDLOW	43-4747	43.3939	-72.7103	1265	31	57	62	43-4749 15M	43-4749 HLY 43-8512 HLY	43-4747 DLY 69-2615 DLY 43-4749 HLY 43-8512 HLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
VT	MANCHESTER	43-4882	43.1667	-73.0667	930	0	32	43		43-4882 HLY 43-4887 HLY	43-4882 DLY
VT	MARLBORO COLLEGE	76-0038	42.8378	-72.7350	1686	0	9	9		76-0038 HLY	76-0038 HLY
VT	MARSHFIELD	43-4999	44.3514	-72.3569	796	0	0	43			43-4999 DLY 43-6391 DLY 43-4985 DLY
VT	MAYS MILL	43-5029	42.7433	-72.7335	830	0	0	44			43-5029 DLY
VT	MC INDOE FALLS	43-5044	44.2612	-72.0621	479	0	0	40			43-5044 DLY
VT	MORRISVILLE	43-5366	44.5617	-72.6028	620	0	62	71		43-5366 HLY 55-0108 HLY	43-5366 DLY 43-5366 HLY 43-5376 DLY 55-0108 HLY
VT	MT MANSFIELD	43-5416	44.5247	-72.8153	3950	0	0	59			43-5416 DLY
VT	N SPRINGFIELD LAKE	43-5982	43.3392	-72.5056	560	22	44	55	43-5982 15M 78-0064 15M	43-5982 HLY 78-0064 15M 55-0094 HLY	43-5982 DLY 43-5982 HLY 43-7954 DLY 79-0034 DLY 79-0035 DLY 78-0064 15M 55-0094 HLY
VT	NEWFANE	43-5492	43.0000	-72.6333	420	0	27	43		43-5492 HLY 43-8438 HLY	43-5492 DLY 43-5492 HLY 43-8438 HLY
VT	NEWPORT	43-5542	44.9489	-72.1911	790	0	57	82		43-5542 HLY	43-5542 DLY
VT	NORTH DANVILLE	43-5632	44.4667	-72.1167	1142	0	21	21		43-5632 HLY	43-5632 HLY
VT	NORTHFIELD	43-5733	44.1647	-72.6567	670	35	104	121	43-5733 15M 43-5740 15M	43-5733 HLY 43-5740 HLY	43-5733 DLY 43-5733 HLY 43-5740 HLY
VT	PERU	43-6335	43.2667	-72.9000	1700	0	0	72			43-6335 DLY
VT	PITTSFIELD	43-6386	43.7733	-72.8150	850	0	45	43		43-6386 HLY 43-3268 HLY 43-8057 HLY 43-6386 15M 43-8057 15M	43-6386 HLY 43-3268 HLY 43-8057 HLY 43-6386 15M 43-8057 15M

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
VT	POWNAL 1 NE	43-6500	42.7917	-73.2228	1110	0	0	26			43-6500 DLY
VT	READSBORO 1 SE	43-6761	42.7583	-72.9300	1120	0	0	66			43-6761 DLY
VT	ROCHESTER	43-6893	43.8578	-72.8045	830	0	0	83			43-6893 DLY
VT	RUTLAND	43-6995	43.6253	-72.9781	620	0	0	94			43-6995 DLY
VT	SAINT JOHNSBURY	43-7054	44.4200	-72.0194	700	46	60	121	43-7054 15M 78-0002 15M 94-0010 15M	43-7054 HLY 78-0002 15M 94-0010 15M 55-0095 HLY	43-7054 DLY
VT	SALISBURY 2 N	43-7098	43.9256	-73.0992	420	0	0	66			43-7098 DLY
VT	SEARSBURG PWR PLT	43-7142	42.9000	-73.0000	2100	0	0	35			43-7142 DLY 43-9953 DLY
VT	SEARSBURG STN	43-7152	42.8680	-72.9160	1560	0	42	68		43-7152 HLY	43-7152 DLY
VT	SOMERSET	43-7401	42.9667	-72.9500	2080	0	0	56			43-7401 DLY
VT	SOUTH HERO	43-7607	44.6264	-73.3031	110	0	0	45			43-7607 DLY
VT	SOUTH LINCOLN	43-7612	44.0725	-72.9736	1341	0	0	30			43-7612 DLY
VT	SOUTH LONDONDERRY	43-7617	43.1890	-72.8123	1050	0	0	38			43-7617 DLY
VT	SOUTH NEWBURY	43-7646	44.0503	-72.0753	470	0	0	56			43-7646 DLY
VT	ST ALBANS RADIO	43-7032	44.8111	-73.0791	460	0	0	70			43-7032 DLY 43-7026 DLY 69-2580 DLY 43-7025 DLY
VT	SUTTON 2NE	43-8172	44.6650	-72.0233	1000	0	0	84			43-8172 DLY 43-9099 DLY
VT	TOWNSHEND	43-8438	43.0333	-72.6667	420	0	39	47		43-8428 HLY	43-8438 DLY 43-8428 HLY
VT	UNION VILLAGE DAM	43-8556	43.7917	-72.2578	460	0	48	64		43-8556 HLY	43-8556 DLY 43-8556 HLY
VT	VERNON	43-8600	42.7717	-72.5150	226	0	0	97			43-8600 DLY
VT	WAITSFIELD 2 SE	43-8640	44.1756	-72.7961	1142	0	0	59			43-8640 DLY 43-8637 DLY 43-8633 DLY 43-8644 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
VT	WATERBURY 2 SSE	43-8815	44.3111	-72.7490	760	0	0	53			43-8815 DLY 69-2627 DLY 43-8805 DLY
VT	WEST DANVILLE 2	43-9184	44.4095	-72.1952	1575	0	0	52			43-9184 DLY 69-2621 DLY 43-1715 DLY 43-9182 DLY
VT	WEST HARTFORD	43-9329	43.7167	-72.4167	410	0	0	52			43-9329 DLY 43-6020 DLY
VT	WEST WARDSBORO	43-9591	43.0331	-72.8500	1410	0	0	67			43-9591 DLY 43-8755 DLY 43-8750 DLY 43-8747 DLY
VT	WHITE RIVER JUNCTION	43-9691	43.6500	-72.3167	361	34	48	98	43-5768 15M	43-5768 HLY 27-4656 HLY 55-0175 HLY	43-9691 DLY 43-5768 HLY 27-4656 HLY 55-0175 HLY
VT	WHITINGHAM 1 W	43-9735	42.7920	-72.9156	1402	0	0	67			43-9735 DLY
VT	WILMINGTON	43-9858	42.8227	-72.8623	1640	0	0	34			43-9858 DLY 43-4150 DLY
VT	WOODSTOCK	43-9984	43.6303	-72.5072	600	0	0	103			43-9984 DLY

Table A.1.2. Same as Table A.1.1, but for locations in Canada (CAN), New Jersey (NJ), Ohio (OH), and Pennsylvania (PA).

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	ACADIA FOREST EXP ST	71-2436	45.9903	-66.3633	177	0	0	47			71-2436 DLY
CAN	ALBION	71-1085	43.9333	-79.8333	900	0	0	41			71-1085 DLY
CAN	ALBION FIELD CENTRE	71-1086	43.9167	-79.8333	925	0	0	35			71-1086 DLY 71-1249 DLY
CAN	ALDERSHOT	71-1087	43.3167	-79.8667	475	0	0	30			71-1087 DLY
CAN	ALTON	71-1089	43.8500	-80.0833	1317	0	0	54			71-1089 DLY
CAN	ANGERS	71-1848	45.5500	-75.5500	298	0	0	97			71-1848 DLY 71-1896 DLY
CAN	ANNAPOLIS ROYAL	71-2656	44.7500	-65.5167	25	0	0	77			71-2656 DLY
CAN	APPLETON	71-0361	45.1858	-76.1128	436	0	0	40			71-0361 DLY 71-0380 DLY
CAN	ARMAGH	71-2051	46.7500	-70.5333	1174	0	0	75			71-2051 DLY 71-2052 DLY
CAN	ARNPRIOR GRANDON	71-0364	45.4167	-76.3667	350	0	0	37			71-0364 DLY
CAN	AROOSTOOK	71-2439	46.7122	-67.7156	262	0	0	66			71-2439 DLY
CAN	ARTHABASKA	71-1590	46.0167	-71.9500	459	0	28	57		71-1590 HLY 71-1826 HLY	71-1590 DLY 71-1826 DLY
CAN	ARUNDEL	71-1849	45.9500	-74.6167	628	0	0	96			71-1849 DLY 71-1868 DLY
CAN	ASBESTOS	71-1591	45.7667	-71.9500	750	0	0	36			71-1591 DLY
CAN	AYLMER	71-0814	42.7667	-80.9833	761	0	0	38			71-0814 DLY 71-0813 DLY 71-0816 DLY
CAN	BAIE ST PAUL	71-1924	47.4167	-70.5000	105	0	24	37		71-1924 HLY 71-1935 HLY	71-1924 DLY
CAN	BARRAGE LAC MORIN	71-2053	47.6500	-69.5167	650	0	0	41			71-2053 DLY
CAN	BEAR RIVER	71-2671	44.5667	-65.6333	25	0	0	51			71-2671 DLY
CAN	BEAUCEVILLE	71-1594	46.2000	-70.7667	525	0	0	88			71-1594 DLY 71-1827 DLY
CAN	BEAUSEJOUR	71-1595	46.6667	-71.1667	350	0	0	36			71-1595 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	BEECHWOOD	71-2448	46.5333	-67.6667	300	0	0	33			71-2448 DLY 71-2448 HLY
CAN	BEETON GRAHAM	71-0578	44.0833	-79.7833	750	0	0	63			71-0578 DLY 71-0576 DLY
CAN	BELL FALLS	71-1854	45.7667	-74.6833	400	0	0	68			71-1854 DLY
CAN	BELLEVILLE	71-1095	44.1506	-77.3947	250	0	42	102		71-1095 HLY 71-1096 HLY	71-1095 DLY
CAN	BELLEVILLE OWRC	71-1096	44.1667	-77.3667	255	0	0	39			71-1096 DLY 71-1097 DLY
CAN	BIC	71-2058	48.4000	-68.6667	75	0	0	71			71-2058 DLY 71-2057 DLY
CAN	BISHOPTON	71-1599	45.5833	-71.5667	700	0	0	36			71-1599 DLY
CAN	BLOOMFIELD	71-1099	43.9833	-77.2167	300	0	0	72			71-1099 DLY
CAN	BOLTON NORTH	71-1416	43.9167	-79.7500	856	0	0	31			71-1416 DLY 71-1151 DLY
CAN	BON ACCORD	71-2456	46.6508	-67.5845	1477	0	0	37			71-2456 DLY
CAN	BONSECOURS	71-1602	45.4000	-72.2667	975	0	0	44			71-1602 DLY
CAN	BOWMANVILLE MOSTERT	71-1103	43.9167	-78.6667	325	0	32	43		71-1103 HLY	71-1103 DLY 71-1102 DLY
CAN	BRADFORD MUCK RESEARCH	71-1107	44.0333	-79.6000	725	0	0	32			71-1107 DLY 71-1110 DLY
CAN	BRANTFORD MOE	71-0961	43.1333	-80.2333	643	0	35	110		71-0961 HLY	71-0961 DLY 71-0958 DLY
CAN	BROCKVILLE PCC	71-0377	44.6000	-75.6667	315	0	36	98		71-0377 HLY	71-0377 DLY 71-0375 DLY
CAN	BROME	71-1605	45.1833	-72.5667	675	0	25	112		71-1605 HLY	71-1605 DLY
CAN	BROMPTONVILLE	71-1607	45.4833	-71.9500	426	0	0	54			71-1607 DLY
CAN	BURKETON MCLAUGHLIN	71-1119	44.0333	-78.8000	1025	0	31	33		71-1119 HLY	71-1119 DLY
CAN	BURLINGTON FIRE HQ'S	71-1123	43.3500	-79.8167	375	0	0	30			71-1123 DLY 71-1120 DLY
CAN	BURLINGTON TS	71-1125	43.3333	-79.8333	325	0	0	43			71-1125 DLY
CAN	CAMBRIDGE GALT MOE	71-0966	43.3333	-80.3167	880	0	0	55			71-0966 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	CAMPBELLFORD	71-1133	44.3000	-77.8000	480	0	22	77		71-1133 HLY	71-1133 DLY
CAN	CANNING	71-0968	43.1833	-80.4500	850	0	0	62			71-0968 DLY 71-1044 DLY
CAN	CAP-TOURMENTE	71-1945	47.0786	-70.7808	20	0	0	47			71-1945 DLY 71-1937 DLY 71-2010 DLY
CAN	CARLETON PLACE	71-0381	45.1500	-76.2000	476	0	0	40			71-0381 DLY 71-0359 DLY
CAN	CATARAQUI TS	71-0383	44.3667	-76.6167	475	0	0	46			71-0383 DLY 71-0546 DLY
CAN	CHARLESBOURG PARC ORLEAN	71-1486	46.8667	-71.2667	375	0	26	34		71-1486 HLY	71-1486 DLY 71-1485 DLY
CAN	CHARTIERVILLE	71-1615	45.2833	-71.2000	1700	0	0	35			71-1615 DLY
CAN	CHATS FALLS	71-0385	45.4667	-76.2333	308	0	0	54			71-0385 DLY 71-0416 DLY
CAN	CHELSEA	71-1859	45.5167	-75.7833	369	0	0	83			71-1859 DLY
CAN	CHENEVILLE	71-1860	45.9000	-75.0833	730	0	0	43			71-1860 DLY
CAN	CHESTERVILLE 2	71-0388	45.0167	-75.2000	279	0	0	30			71-0388 DLY 71-0387 DLY
CAN	CHUTE HEMMINGS	71-1617	45.8667	-72.4500	285	0	0	51			71-1617 DLY
CAN	CLAYBANK	71-0390	45.4167	-76.4000	350	0	0	61			71-0390 DLY 71-0516 DLY
CAN	COATICOOK	71-1620	45.1500	-71.8000	850	0	0	62			71-1620 DLY
CAN	COBOURG (AUT)	71-1145	43.9500	-78.1667	255	0	0	44			71-1145 DLY 71-1147 DLY 71-1148 DLY
CAN	COPETOWN	71-1153	43.2500	-80.1167	750	0	0	41			71-1153 DLY 71-1055 DLY
CAN	CORNWALL	71-0396	45.0156	-74.7489	210	0	40	67		71-0396 HLY 71-0400 HLY	71-0396 DLY 71-0394 DLY
CAN	CORNWALL ONT HYDRO	71-0400	45.0333	-74.8000	250	0	0	35			71-0400 DLY
CAN	COTEAU DU LAC	71-1490	45.3167	-74.1667	162	0	0	45			71-1490 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	CRESSY	71-1156	44.1000	-76.8500	275	0	0	33			71-1156 DLY
CAN	CULLODEN EASEY	71-0974	42.8895	-80.8467	918	0	0	32			71-0974 DLY
CAN	DALHOUSIE L HIGH FALLS	71-0405	44.9481	-76.6245	620	0	0	56			71-0405 DLY
CAN	DALHOUSIE MILLS	71-0406	45.3167	-74.4667	225	0	0	36			71-0406 DLY
CAN	DALKEITH PYM	71-0408	45.4333	-74.5833	250	0	0	31			71-0408 DLY 71-0407 DLY 71-0547 DLY
CAN	DANVILLE	71-1626	45.8167	-71.9833	623	0	0	53			71-1626 DLY 71-1662 DLY
CAN	DELHI CS	71-0833	42.8667	-80.5500	760	0	42	76		71-0833 HLY 71-0832 HLY	71-0833 DLY 71-0832 DLY
CAN	DIGBY PRIM POINT	71-2720	44.6903	-65.7850	70	0	0	74			71-2720 DLY 71-2717 DLY
CAN	DISRAELI	71-1627	45.9167	-71.3167	1148	0	0	73			71-1627 DLY
CAN	DRUMMONDVILLE	71-1629	45.8833	-72.4833	270	0	23	94		71-1629 HLY	71-1629 DLY
CAN	EAST HEREFORD	71-1637	45.0833	-71.5000	1174	0	0	42			71-1637 DLY
CAN	EDMUNDSTON	71-2493	47.4167	-68.3245	506	0	0	73			71-2493 DLY 71-2650 DLY 71-2492 DLY 71-2491 DLY
CAN	FARNHAM	71-1639	45.3000	-72.9000	223	0	0	81			71-1639 DLY
CAN	FERGUS SHAND DAM	71-0988	43.7347	-80.3303	1370	0	42	64		71-0988 HLY	71-0988 DLY
CAN	FLEURY	71-1642	45.8000	-73.0000	100	0	0	45			71-1642 DLY
CAN	FORET MONTMORENCY	71-1949	47.3167	-71.1500	2099	0	30	24		71-1949 HLY	71-1949 HLY
CAN	FORET MONTMORENCY RCS	71-1950	47.3228	-71.1483	2207	0	0	40			71-1950 DLY 71-1949 DLY
CAN	FREDERICTON A	71-2495	45.8721	-66.5279	68	0	0	57			71-2495 DLY
CAN	FREDERICTON CDA CS	71-2499	45.9203	-66.6089	115	0	48	96		71-2499 HLY 71-2498 HLY 71-2495 HLY	71-2499 DLY 71-2498 DLY
CAN	FREDERICTON UNB	71-2500	45.9500	-66.6000	164	0	0	75			71-2500 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	FRENCHMANS BAY	71-1162	43.8167	-79.0833	250	0	0	45			71-1162 DLY
CAN	GAGETOWN 2	71-2504	45.7833	-66.1500	110	0	0	79			71-2504 DLY
CAN	GAGETOWN AWOS A	71-2503	45.8389	-66.4497	166	0	0	46			71-2503 DLY 71-2567 DLY
CAN	GARTHBY	71-1648	45.8333	-71.3833	823	0	0	30			71-1648 DLY
CAN	GEORGETOWN WWTP	71-1166	43.6400	-79.8792	725	0	0	122			71-1166 DLY 71-1165 DLY
CAN	GEORGEVILLE	71-1650	45.1333	-72.2333	875	0	26	55		71-1650 HLY	71-1650 DLY
CAN	GLEN GORDON	71-0421	45.1667	-74.5333	175	0	0	32			71-0421 DLY 71-0448 DLY
CAN	GLEN HAFFY MONO MILLS	71-1167	43.9333	-79.9500	1425	0	0	45			71-1167 DLY
CAN	GODFREY	71-0426	44.5667	-76.6333	525	0	0	31			71-0426 DLY 71-0433 DLY
CAN	GRANBY	71-1651	45.3833	-72.7167	574	0	26	63		71-1651 HLY	71-1651 DLY
CAN	GRAND FALLS DRUMMOND	71-2508	47.0333	-67.7000	750	0	0	73			71-2508 DLY 71-2507 DLY
CAN	GRAND MANAN SAR CS	71-2510	44.7121	-66.8019	256	0	0	42			71-2510 DLY 71-2509 DLY
CAN	GRANDES BERGERONNES	71-1955	48.2500	-69.5167	200	0	0	58			71-1955 DLY
CAN	GRIMSBY	71-0847	43.2000	-79.5667	298	0	0	56			71-0847 DLY
CAN	GRIMSBY ROYAL OAK	71-0852	43.1833	-79.5500	625	0	0	59			71-0852 DLY 71-0851 DLY
CAN	GUELPH ARBORETUM	71-1000	43.5500	-80.2167	1075	0	33	106		71-1000 HLY 71-2991 HLY 71-1001 HLY 71-1004 HLY	71-1000 DLY 71-1001 DLY
CAN	HAGERSVILLE	71-0853	42.9667	-80.0667	725	0	0	54			71-0853 DLY
CAN	HAMILTON A	71-1176	43.1717	-79.9342	780	0	31	50		71-1176 HLY	71-1176 DLY
CAN	HAMILTON MUNICIPAL LAB	71-1179	43.2500	-79.7667	250	0	0	71			71-1179 DLY 71-1177 DLY 71-1290 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	HAMILTON PSYCH HOSPITAL	71-1180	43.2333	-79.9000	650	0	0	32			71-1180 DLY
CAN	HAMILTON RBG CS	71-1182	43.2917	-79.9083	335	0	41	106	71-1182 HLY 71-1181 HLY		71-1182 DLY 71-1181 DLY 71-1174 DLY
CAN	HARTINGTON IHD	71-0431	44.4281	-76.6903	525	0	0	39			71-0431 DLY
CAN	HARVEY STATION	71-2520	45.7333	-67.0167	636	0	0	80			71-2520 DLY 71-2519 DLY 71-2518 DLY
CAN	HEART LAKE	71-1186	43.7333	-79.7833	850	0	0	53			71-1186 DLY 71-1112 DLY
CAN	HEMMINGFORD FOUR WINDS	71-1655	45.0667	-73.7167	200	0	0	48			71-1655 DLY
CAN	HIGH FALLS	71-1867	45.8394	-75.6481	638	0	0	48			71-1867 DLY 71-1866 DLY
CAN	HONFLEUR	71-2093	46.6833	-70.8500	574	0	0	39			71-2093 DLY
CAN	HOYT BLISSVILLE	71-2527	45.6000	-66.5667	50	0	0	30			71-2527 DLY 71-2454 DLY
CAN	HUNTINGDON	71-1656	45.0500	-74.1667	161	0	0	78			71-1656 DLY
CAN	IBERVILLE	71-1658	45.3333	-73.2500	100	0	0	48			71-1658 DLY
CAN	ILE AUX COUDRES	71-2027	47.3833	-70.3833	50	0	0	31			71-2027 DLY
CAN	JUNIPER	71-2528	46.5500	-67.1667	850	0	0	33			71-2528 DLY
CAN	KEDGWICK	71-2529	47.6500	-67.3500	900	0	0	39			71-2529 DLY
CAN	KEMPTVILLE CS	71-0435	45.0000	-75.6333	326	0	30	78	71-0435 HLY 71-0434 HLY		71-0435 DLY 71-0434 DLY
CAN	KING SMOKE TREE	71-1199	44.0167	-79.5167	1155	0	0	32			71-1199 DLY 71-1093 DLY
CAN	KINGSTON CLIMATE	71-0437	44.2233	-76.5994	305	0	0	32			71-0437 DLY 71-0439 DLY
CAN	KINGSTON PUMPING STATION	71-0444	44.2439	-76.4806	251	0	44	128	71-0444 HLY		71-0444 DLY 71-0443 DLY 71-0445 DLY
CAN	KITCHENER	71-1012	43.4333	-80.5000	1125	0	0	62			71-1012 DLY

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						<1hr	hourly	daily	<1hr	hourly	daily			
CAN	KITCHENER/WATERLOO	71-1013	43.4608	-80.3786	1055	0	34	43	71-1071 HLY	71-1013 DLY	71-1072 DLY	71-1071 DLY	71-1071 HLY	71-1014 HLY
CAN	LA MALBAIE	71-1968	47.6667	-70.1500	75	0	0	74						71-1968 DLY
CAN	LA POCATIERE	71-2100	47.3558	-70.0319	102	0	29	100	71-2099 HLY	71-2100 DLY	71-2099 DLY			
CAN	LAC MEGANTIC 2	71-1667	45.6000	-70.8667	1397	0	26	95	71-1667 HLY	71-1667 DLY	71-1691 DLY	71-1668 DLY		
CAN	LAC ST DENIS	71-1873	45.9333	-74.3167	1333	0	0	37				71-1873 DLY	71-1891 DLY	
CAN	LACHUTE	71-1869	45.6500	-74.3333	300	0	0	49						71-1869 DLY
CAN	LAKEVIEW MOE	71-1201	43.5667	-79.5667	250	0	0	50				71-1201 DLY	71-1160 DLY	71-1261 DLY
CAN	LAMARTINE	71-2097	47.0916	-70.3312	207	0	0	32						71-2097 DLY
CAN	LAMBTON	71-1669	45.8333	-71.0833	1200	0	0	72						71-1669 DLY
CAN	LAPRAIRIE	71-1671	45.3833	-73.4333	98	0	0	46						71-1671 DLY
CAN	L'ASSOMPTION	71-1512	45.8094	-73.4347	69	0	29	81	71-1512 HLY	71-1512 DLY				
CAN	LAURIERVILLE	71-1674	46.3333	-71.6667	499	0	0	44						71-1674 DLY
CAN	LAUZON	71-1675	46.8167	-71.1000	226	0	0	32						71-1675 DLY
CAN	LAVAL DES RAPIDES	71-1676	45.5333	-73.7000	120	0	0	43						71-1676 DLY
														71-1772 DLY
CAN	LENNOXVILLE	71-1679	45.3689	-71.8236	594	0	31	97	71-1679 HLY	71-1679 DLY				
CAN	LES CEDRES	71-1514	45.3000	-74.0500	155	0	0	92						71-1514 DLY
CAN	LINDSAY FROST	71-1445	44.3384	-78.7403	860	0	23	125	71-1444 HLY	71-1445 DLY	71-1444 DLY	71-1443 DLY		
CAN	LINGWICK	71-1680	45.6333	-71.3667	875	0	28	56	71-1680 HLY	71-1680 DLY				



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	LUSKVILLE	71-1879	45.5333	-76.0500	226	0	0	68			71-1879 DLY 71-1878 DLY 71-0553 DLY
CAN	LYNDHURST SHAWMERE	71-0453	44.5167	-76.0833	285	0	0	45			71-0453 DLY 71-0449 DLY
CAN	MACTAQUAC PROV PARK	71-2542	45.9544	-66.8986	361	0	0	39			71-2542 DLY 71-2531 DLY
CAN	MADOC	71-1205	44.5333	-77.4775	728	0	0	50			71-1205 DLY 71-1206 DLY 71-1464 DLY
CAN	MAGOG	71-1683	45.2667	-72.1167	899	0	0	59			71-1683 DLY
CAN	MAPLETON	71-2545	46.1833	-67.2333	550	0	0	31			71-2545 DLY
CAN	MARIEVILLE	71-1688	45.4000	-73.1333	125	0	0	46			71-1688 DLY 71-1727 DLY
CAN	MCADAM	71-2546	45.5833	-67.3333	459	0	0	49			71-2546 DLY
CAN	MCTAVISH	71-1690	45.5050	-73.5792	240	0	32	136		71-1704 HLY 71-1702 HLY	71-1690 DLY 71-1704 DLY
CAN	METEGHAN RIVER	71-2797	44.2667	-66.1333	50	0	0	61			71-2797 DLY 71-2866 DLY
CAN	MEYERSBURG	71-1217	44.2500	-77.8000	410	0	0	33			71-1217 DLY
CAN	MIDDLEPORT TS	71-1218	43.1167	-80.0333	676	0	0	54			71-1218 DLY 71-0820 DLY
CAN	MILAN	71-1694	45.5955	-71.1142	1580	0	0	61			71-1694 DLY
CAN	MILLGROVE	71-1221	43.3167	-79.9667	837	0	0	49			71-1221 DLY
CAN	MONTEBELLO (SEDBERGH)	71-1886	45.7000	-74.9333	645	0	0	79			71-1886 DLY 71-1887 DLY
CAN	MONTMAGNY	71-2112	46.9667	-70.5833	50	0	0	38			71-2112 DLY
CAN	MONTREAL JAR BOT	71-1700	45.5667	-73.5500	150	0	0	39			71-1700 DLY
CAN	MONTREAL JEAN BREBEUF	71-1701	45.5000	-73.6167	435	0	0	34			71-1701 DLY 71-1702 DLY
CAN	MONTREAL/MIRABEL INT'L A	71-1890	45.6667	-74.0333	271	0	21	33		71-1890 HLY	71-1890 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	MONTREAL/PIERRE ELLIOTT T	71-1699	45.4667	-73.7500	118	0	50	70		71-1699 HLY	71-1699 DLY
CAN	MONTREAL/ST-HUBERT A	71-1761	45.5167	-73.4167	90	0	28	85		71-1761 HLY	71-1761 DLY 71-1739 DLY 71-1762 DLY 71-1763 DLY
CAN	MORRISBURG	71-0467	44.9236	-75.1883	268	0	0	93			71-0467 DLY
CAN	MUSQUASH	71-2560	45.2000	-66.3333	50	0	0	59			71-2560 DLY
CAN	NANTICOKE ESSO	71-0867	42.8333	-80.0500	650	0	0	38			71-0867 DLY 71-0857 DLY 71-0854 DLY
CAN	NIAGARA FALLS	71-0869	43.1333	-79.0833	600	0	24	61		71-0869 HLY	71-0869 DLY
CAN	NIAGARA FALLS ONT HYDRO	71-0872	43.0833	-79.0833	650	0	0	71			71-0872 DLY 71-0871 DLY
CAN	NICTAU	71-2565	47.2333	-67.1500	557	0	0	31			71-2565 DLY 71-2586 DLY
CAN	NOTRE DAME DES BOIS	71-1713	45.4000	-71.0833	1650	0	0	37			71-1713 DLY
CAN	NOTRE DAME DU LAC	71-2117	47.6000	-68.8000	1050	0	0	37			71-2117 DLY
CAN	OAK RIDGES	71-1232	43.9667	-79.4667	1055	0	0	52			71-1232 DLY
CAN	OAKVILLE SOUTHEAST WPCP	71-1412	43.4833	-79.6333	285	0	0	46			71-1412 DLY 71-1143 DLY
CAN	OKA	71-1523	45.5000	-74.0667	300	0	24	65		71-1523 HLY	71-1523 DLY
CAN	ORANGEVILLE MOE	71-1236	43.9184	-80.0864	1350	0	0	86			71-1236 DLY 71-1235 DLY 71-1272 DLY
CAN	ORMSTOWN	71-1714	45.1167	-74.0500	150	0	31	49		71-1714 HLY	71-1714 DLY
CAN	ORONO	71-1238	43.9667	-78.6167	485	0	0	70			71-1238 DLY
CAN	OSHAWA WPCP	71-1244	43.8667	-78.8333	275	0	27	57		71-1244 HLY	71-1244 DLY 71-1242 DLY
CAN	OTTAWA	71-0478	45.4000	-75.7167	236	0	44	49		71-0485 HLY 71-0484 HLY	71-0478 DLY
CAN	OTTAWA CDA	71-0484	45.3833	-75.7167	260	0	0	117			71-0484 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	OTTAWA MACDONALD-CARTIER	71-0489	45.3225	-75.6692	374	0	35	73		71-0489 HLY	71-0489 DLY
CAN	OTTAWA NRC	71-0495	45.4500	-75.6167	320	0	0	42			71-0495 DLY 71-0497 DLY
CAN	OUIMET	71-2120	48.3167	-68.2000	1000	0	0	30			71-2120 DLY
CAN	PENNFIELD	71-2570	45.1000	-66.7333	75	0	0	50			71-2570 DLY 71-2571 DLY
CAN	PETERBOROUGH AWOS	71-1456	44.2333	-78.3667	628	0	30	41		71-1455 HLY	71-1456 DLY 71-1455 DLY
CAN	PETERBOROUGH STP	71-1460	44.2833	-78.3167	630	0	27	117		71-1460 HLY	71-1460 DLY 71-1454 DLY
CAN	PETERBOROUGH TRENT U	71-1463	44.3500	-78.3000	708	0	0	72			71-1463 DLY 71-1462 DLY 71-1459 DLY 71-1452 DLY
CAN	PETIT SAGUENAY	71-1994	48.1833	-70.0500	400	0	0	33			71-1994 DLY
CAN	PHILIPSBURG	71-1716	45.0333	-73.0833	175	0	0	59			71-1716 DLY
CAN	PICTON	71-1256	44.0167	-77.1333	250	0	27	37		71-1256 HLY	71-1256 DLY
CAN	PINE GROVE	71-1258	43.8000	-79.5833	600	0	0	30			71-1258 DLY
CAN	POINT LEPREAU CS	71-2581	45.0731	-66.4492	20	0	0	94			71-2581 DLY 71-2580 DLY
CAN	POINTE AU CHENE	71-1897	45.6500	-74.8000	167	0	0	44			71-1897 DLY
CAN	PORT COLBORNE	71-0881	42.8833	-79.2500	575	0	33	41		71-0881 HLY	71-0881 DLY
CAN	PORT DALHOUSIE	71-0884	43.1833	-79.2667	300	0	0	81			71-0884 DLY 71-0900 DLY
CAN	PORT DOVER	71-0886	42.7833	-80.2167	610	0	0	100			71-0886 DLY
CAN	PORT ELMSLEY	71-0510	44.8833	-76.1333	425	0	0	52			71-0510 DLY 71-0454 DLY
CAN	PORT HOPE	71-1264	43.9500	-78.2833	265	0	0	50			71-1264 DLY
CAN	PORT WELLER (AUT)	71-0888	43.2500	-79.2167	259	0	0	78			71-0888 DLY 71-0897 DLY
CAN	PRESTON	71-1047	43.4000	-80.4167	955	0	0	46			71-1047 DLY 71-0976 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	QUEBEC/JEAN LESAGE INTL	71-1587	46.8036	-71.3817	197	0	32	69	71-1527 HLY	71-1587 DLY	71-1527 DLY
CAN	RICHMOND	71-1725	45.6333	-72.1333	404	0	0	58		71-1725 DLY	
CAN	RICHMOND HILL	71-1267	43.8772	-79.4478	787	0	0	47		71-1267 DLY	
CAN	RIDEAU CANAL NARROWS	71-0524	44.7000	-76.3000	410	0	0	32		71-0524 DLY	71-0548 DLY
CAN	RIDGEVILLE	71-0895	43.0417	-79.3250	775	0	0	46		71-0895 DLY	71-0844 DLY
CAN	RIGAUD	71-1528	45.5000	-74.3667	151	0	0	47		71-1528 DLY	
CAN	RIVIERE BLEUE	71-2136	47.4333	-69.0333	699	0	0	44		71-2136 DLY	
CAN	RIVIERE DES PRAIRIES	71-1726	45.7000	-73.5000	30	0	0	39		71-1726 DLY	
CAN	ROSEVILLE	71-1053	43.3536	-80.4736	1076	0	0	43		71-1053 DLY	71-1016 DLY
CAN	ROYAL ROAD	71-2591	46.0500	-66.7167	380	0	24	27	71-2591 HLY	71-2591 DLY	
CAN	RUSSELL	71-0532	45.2628	-75.3595	250	0	0	45		71-0532 DLY	71-0463 DLY
CAN	SABREVOIS	71-1729	45.2167	-73.2000	125	0	0	34		71-1729 DLY	
CAN	SAINT JOHN A	71-2603	45.3181	-65.8856	357	0	38	60	71-2603 HLY	71-2603 DLY	
CAN	SAINT JOHN BRIDGE	71-2606	45.2667	-66.0667	25	0	0	102		71-2606 DLY	71-2601 DLY
CAN	SAINT MICHEL	71-2160	46.8667	-70.8833	226	0	0	39		71-2160 DLY	71-2009 DLY
CAN	SAWYERVILLE NORD	71-1800	45.3762	-71.5383	801	0	31	58	71-1800 HLY	71-1800 DLY	71-1799 DLY
CAN	SCOTLAND	71-1058	43.0008	-80.4278	810	0	0	35		71-1058 DLY	
CAN	SCOTT	71-1801	46.5000	-71.0833	475	0	0	56		71-1801 DLY	
CAN	SHARON	71-1277	44.1000	-79.4333	861	0	0	46		71-1277 DLY	71-1105 DLY
CAN	SHERBROOKE	71-1802	45.4000	-71.9000	595	0	0	77		71-1802 DLY	71-1803 DLY
CAN	SHERBROOKE A	71-1805	45.4333	-71.6833	792	0	30	86	71-1805 HLY	71-1805 DLY	71-1633 DLY 71-1806 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations					
						<1hr	hourly	daily	<1hr	hourly	daily			
CAN	SIMCOE (AUT)	71-0908	42.8500	-80.2667	789	0	22	82	71-0907 HLY	71-0908 DLY	71-0907 DLY	71-0909 DLY		
CAN	SMITHFIELD CDA AUTOMATIC	71-1279	44.0833	-77.6667	390	0	0	46		71-1279 DLY	71-1278 DLY			
CAN	SMITHS FALLS TS	71-0541	44.8833	-76.0000	375	0	21	43	71-0541 HLY	71-0541 DLY	71-0540 HLY	71-0540 DLY	71-0464 DLY	
CAN	SOUTH MOUNTAIN	71-0542	44.9667	-75.4833	278	0	0	35		71-0542 DLY				
CAN	SQUATECK	71-2172	47.8833	-68.7000	649	0	0	31		71-2172 DLY				
CAN	ST AMABLE	71-1732	45.6667	-73.3000	135	0	0	31		71-1732 DLY				
CAN	ST ANICET	71-1733	45.1333	-74.3500	175	0	0	50		71-1733 DLY				
CAN	ST ARSENE	71-2143	47.9500	-69.3833	250	0	0	36		71-2143 DLY				
CAN	ST AUGUSTIN	71-1536	46.7333	-71.5000	190	0	22	24	71-1536 HLY	71-1536 DLY				
CAN	ST BERNARD DE LACOLLE	71-1737	45.0833	-73.3833	162	0	0	33		71-1737 DLY				
CAN	ST BRUNO KAMOURASKA	71-2144	47.4500	-69.7833	650	0	27	32	71-2144 HLY	71-2144 DLY				
CAN	ST CAMILLE	71-2145	46.4833	-70.2167	1299	0	0	48		71-2145 DLY				
CAN	ST CAMILLE WOLFE	71-1839	45.6667	-71.7333	880	0	0	53		71-1839 DLY	71-1830 DLY			
CAN	ST CATHARINES A	71-0898	43.2000	-79.1667	321	0	36	39	71-0898 HLY	71-0898 DLY	71-0900 HLY	71-0927 DLY	71-0898 HLY	71-0900 HLY
CAN	ST CATHARINES POWER GLEN	71-0901	43.1167	-79.2500	400	0	0	40		71-0901 DLY				
CAN	ST CHARLES GARNIER	71-2146	48.3333	-68.0500	1060	0	20	30	71-2146 HLY	71-2146 DLY				
CAN	ST CLEMENT	71-2147	47.9167	-69.1000	850	0	0	35		71-2147 DLY				
CAN	ST COME DE LINIERE	71-1743	46.0500	-70.5167	800	0	0	46		71-1743 DLY				
CAN	ST EPHREM	71-1748	46.0667	-70.9667	1025	0	28	66	71-1748 HLY	71-1748 DLY				
CAN	ST FERDINAND	71-1749	46.1000	-71.5833	974	0	23	38	71-1749 HLY	71-1749 DLY				

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	ST FEREOLE	71-2006	47.1224	-70.8261	750	0	0	65			71-2006 DLY
CAN	ST FLAVIEN	71-1750	46.4833	-71.5667	450	0	0	48			71-1750 DLY
CAN	ST GEORGE	71-2598	45.1333	-66.8333	110	0	0	56			71-2598 DLY
CAN	ST GEORGES	71-1756	46.1500	-70.7000	550	0	29	43	71-1756 HLY		71-1756 DLY
CAN	ST GUILLAUME	71-1757	45.8833	-72.7667	144	0	23	44	71-1757 HLY		71-1757 DLY
CAN	ST GUY	71-2154	48.0500	-68.8167	1050	0	0	36			71-2154 DLY
CAN	ST HIPPOLYTE	71-1904	45.9833	-74.0000	1200	0	0	48			71-1904 DLY
CAN	ST HYACINTHE 2	71-1765	45.5667	-72.9167	108	0	0	78			71-1765 DLY 71-1764 DLY
CAN	ST JACQUES	71-1550	45.9500	-73.5833	226	0	0	39			71-1550 DLY
CAN	ST JANVIER	71-1551	45.7333	-73.8833	200	0	0	32			71-1551 DLY
CAN	ST JEROME	71-1905	45.8000	-74.0500	556	0	22	77	71-1905 HLY		71-1905 DLY
CAN	ST LEONARD A	71-2610	47.1578	-67.8319	793	0	24	26	71-2610 HLY		71-2610 DLY
CAN	ST LIN DES LAURENTIDES	71-1555	45.8500	-73.7500	210	0	0	61			71-1555 DLY
CAN	ST LUDGER	71-1774	45.7500	-70.6833	1099	0	0	47			71-1774 DLY
CAN	ST MALACHIE	71-2158	46.5500	-70.8167	725	0	24	28	71-2158 HLY		71-2158 DLY
CAN	ST MALO D AUCKLAND	71-1776	45.1936	-71.4976	1850	0	0	56			71-1776 DLY
CAN	ST NAZAIRE	71-1780	45.7333	-72.6167	225	0	0	38			71-1780 DLY
CAN	ST ODILON	71-1781	46.3500	-70.6500	1175	0	0	44			71-1781 DLY 71-1625 DLY
CAN	ST PAMPHILE	71-2163	46.9667	-69.7833	1273	0	0	43			71-2163 DLY
CAN	ST PIERRE DE BROUGHTON	71-1783	46.2500	-71.2167	1200	0	27	38	71-1783 HLY		71-1783 DLY
CAN	ST PROSPER	71-1784	46.2167	-70.5000	925	0	0	43			71-1784 DLY
CAN	ST RAPHAEL	71-2168	46.8167	-70.7500	350	0	0	31			71-2168 DLY
CAN	ST REMI	71-1785	45.2833	-73.6000	175	0	0	42			71-1785 DLY 71-1779 DLY
CAN	ST SEBASTIEN	71-1788	45.7667	-70.9500	1450	0	26	46	71-1788 HLY		71-1788 DLY
CAN	ST SEVERIN	71-1790	46.3333	-71.0500	1450	0	0	44			71-1790 DLY
CAN	ST SIMEON	71-2013	47.8500	-69.8667	50	0	0	31			71-2013 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	ST THEOPHILE	71-1793	45.9333	-70.4833	1296	0	29	55	71-1793 HLY	71-1793 DLY	
CAN	ST URBAIN	71-2015	47.5667	-70.5500	300	0	0	42		71-2015 DLY	
CAN	ST WILLIAMS AUTOMATIC CLI	71-0906	42.7000	-80.4500	700	0	0	42		71-0906 DLY	71-0905 DLY
CAN	ST ZACHARIE	71-1797	46.1167	-70.3833	1575	0	21	28	71-1797 HLY	71-1797 DLY	
CAN	ST. STEPHEN	71-2612	45.2102	-67.2529	86	0	0	64		71-2612 DLY	71-2614 DLY
										71-2552 DLY	71-2613 DLY
										17-1100 DLY	
CAN	STANSTEAD	71-1812	45.0167	-72.1000	1050	0	0	42		71-1812 DLY	
CAN	STE ANNE DE BELLEVUE	71-1734	45.4333	-73.9333	128	0	27	79	71-1734 HLY	71-1734 DLY	
									71-1682 HLY	71-1682 DLY	
CAN	STE FOY (PIE XII)	71-1567	46.7833	-71.3167	260	0	22	135	71-1567 HLY	71-1567 DLY	71-1585 DLY
										71-1526 DLY	71-1525 DLY
CAN	STE FOY MATAPEDIA	71-1566	46.7500	-71.2833	150	0	0	42		71-1566 DLY	71-1483 DLY
CAN	STE GENEVIEVE	71-1755	45.5000	-73.8500	75	0	0	53		71-1755 DLY	
CAN	STE GERMAINE	71-2153	46.4224	-70.4681	1674	0	29	47	71-2153 HLY	71-2153 DLY	
CAN	STE LUCIE	71-2157	46.7333	-70.0167	1223	0	0	50		71-2157 DLY	17-4420 DLY
CAN	STE MADELEINE	71-1775	45.6167	-73.1333	98	0	0	31		71-1775 DLY	71-1775 HLY
CAN	STE MARTINE	71-1777	45.2167	-73.8500	125	0	0	47		71-1777 DLY	
CAN	STE PERPETUE	71-2166	47.0500	-69.9333	1348	0	0	34		71-2166 DLY	
CAN	STE ROSE DU DEGELIS	71-2170	47.5667	-68.6333	495	0	0	67		71-2170 DLY	
CAN	STE THERESE OUEST	71-1561	45.6500	-73.8833	200	0	0	48		71-1561 DLY	
CAN	STE-CLOTHILDE	71-1741	45.1672	-73.6789	174	0	0	70		71-1741 DLY	71-1742 DLY
CAN	STIRLING	71-1289	44.2931	-77.5547	426	0	0	36		71-1289 DLY	71-1288 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	STOUFFVILLE WPCP	71-1293	43.9667	-79.2500	875	0	0	31			71-1293 DLY 71-1291 DLY
CAN	SUTTON	71-1814	45.0667	-72.6833	800	0	0	61			71-1814 DLY 71-1588 DLY
CAN	TADOUSSAC	71-2020	48.1500	-69.7000	230	0	0	75			71-2020 DLY
CAN	THETFORD MINES	71-1818	46.1000	-71.3500	1250	0	29	84		71-1818 HLY	71-1818 DLY 71-1817 DLY
CAN	THORNHILL GRANDVIEW	71-1295	43.8000	-79.4167	654	0	0	41			71-1295 DLY
CAN	TILLSONBURG MOE	71-0919	42.8553	-80.7217	700	0	0	43			71-0919 DLY
CAN	TORONTO AMESBURY	71-1306	43.7000	-79.4833	505	0	0	32			71-1306 DLY 71-1354 DLY 71-1327 DLY
CAN	TORONTO ASHBRIDGES BAY	71-1300	43.6667	-79.3167	243	0	0	42			71-1300 DLY 71-1328 DLY 71-1322 DLY
CAN	TORONTO BOOTH	71-1308	43.6500	-79.3500	253	0	24	16		71-1308 HLY 71-1370 HLY	71-1308 DLY 71-1308 HLY 71-1370 HLY
CAN	TORONTO BUTTONVILLE A	71-1408	43.8622	-79.3700	650	0	0	49			71-1408 DLY 71-1214 DLY 71-1171 DLY
CAN	TORONTO CITY	71-1297	43.6667	-79.4000	369	0	62	166		71-1297 HLY 71-1296 HLY	71-1297 DLY 71-1296 DLY
CAN	TORONTO CITY CENTRE	71-1337	43.6286	-79.3950	252	0	23	45		71-1336 HLY	71-1337 DLY 71-1336 DLY
CAN	TORONTO ELLESMERE	71-1323	43.7667	-79.2667	538	0	23	95		71-1323 HLY	71-1323 DLY 71-1299 DLY
CAN	TORONTO LESTER B. PEARSON	71-1344	43.6772	-79.6306	569	0	46	72		71-1344 HLY	71-1344 DLY
CAN	TORONTO NORTH YORK	71-1415	43.7800	-79.4678	613	0	29	48		71-1415 HLY 71-1340 HLY 71-1319 HLY	71-1415 DLY 71-1340 DLY 71-1319 DLY 71-1320 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	TORONTO OLD WESTON RD	71-1356	43.6500	-79.4667	400	0	20	32		71-1356 HLY	71-1356 DLY 71-1332 DLY
CAN	TORONTO SCARBOROUGH	71-1360	43.7167	-79.2333	514	0	0	39			71-1360 DLY 71-1357 DLY 71-1274 DLY
CAN	TORONTO SUNNYBROOK	71-1363	43.7167	-79.3833	515	0	0	69			71-1363 DLY 71-1342 DLY 71-1313 DLY
CAN	TRENTON A	71-1376	44.1167	-77.5333	283	0	33	73		71-1376 HLY	71-1376 DLY
CAN	TRENTON ONT HYDRO	71-1378	44.1333	-77.6000	290	0	0	76			71-1378 DLY
CAN	TRINITE DES MONTS	71-2173	48.1333	-68.4833	859	0	0	49			71-2173 DLY
CAN	TROIS PISTOLES	71-2174	48.1500	-69.1167	190	0	0	48			71-2174 DLY
CAN	TWEED	71-1382	44.5000	-77.2833	475	0	0	41			71-1382 DLY
CAN	TYRONE	71-1384	44.0167	-78.7333	675	0	0	32			71-1384 DLY
CAN	UPSALQUITCH LAKE	71-2636	47.4556	-66.4153	2049	0	0	34			71-2636 DLY
CAN	UXBRIDGE 3	71-1390	44.1333	-79.0833	885	0	0	51			71-1390 DLY 71-1389 DLY 71-1387 DLY
CAN	VALLEE JONCTION	71-1822	46.3833	-70.9333	500	0	28	47		71-1822 HLY	71-1822 DLY
CAN	VALLEYFIELD	71-1823	45.2833	-74.1000	150	0	0	57			71-1823 DLY
CAN	VERCHERES	71-1825	45.7667	-73.3667	69	0	0	48			71-1825 DLY
CAN	VINELAND RITTENHOUSE	71-0923	43.1667	-79.4167	310	0	0	37			71-0923 DLY
CAN	VINELAND STATION RCS	71-0926	43.1833	-79.4000	260	0	25	81		71-0926 HLY 71-0924 HLY	71-0926 DLY 71-0921 DLY 71-0924 DLY
CAN	WATERFORD	71-0933	42.8833	-80.2333	730	0	0	36			71-0933 DLY
CAN	WELLAND	71-0934	42.9925	-79.2611	575	0	0	118			71-0934 DLY
CAN	WEST DITTON	71-1831	45.4000	-71.3000	1679	0	22	42		71-1831 HLY	71-1831 DLY 71-1670 DLY
CAN	WEYMOUTH FALLS	71-2918	44.4000	-65.9500	35	0	0	33			71-2918 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
CAN	WILCOX LAKE	71-1397	43.9500	-79.4333	950	0	0	50			71-1397 DLY 71-1090 DLY
CAN	WOBURN	71-1833	45.3849	-70.8595	1355	0	23	23		71-1833 HLY	71-1833 DLY
CAN	WOODBIDGE	71-1398	43.7833	-79.6000	538	0	0	54			71-1398 DLY
CAN	WOODSTOCK	71-2643	46.1703	-67.5536	502	0	0	83			71-2643 DLY
NJ	AUDUBON	28-0346	39.8833	-75.0833	39	0	0	113			28-0346 DLY 36-6894 DLY 28-1280 DLY 52-6894 DLY 52-6915 DLY
NJ	BELVIDERE BRG	28-0734	40.8292	-75.0836	263	0	0	120			28-0734 DLY 28-0729 DLY
NJ	BERNARDSVILLE 2 E	28-0797	40.7167	-74.5333	240	0	0	35			28-0797 DLY 91-0005 DLY
NJ	BLACKWELLS MILLS	28-0847	40.4603	-74.5825	40	0	0	37			28-0847 DLY 69-0920 DLY
NJ	BOONTON 1 SE	28-0907	40.8922	-74.4033	280	0	0	104			28-0907 DLY 69-0848 DLY
NJ	BOUND BROOK 2W	28-0927	40.5603	-74.5750	50	19	18	74	28-0927 15M	28-0927 15M	28-0927 DLY 28-5197 DLY
NJ	BRANCHVILLE	28-0978	41.1500	-74.7500	581	0	0	78			28-0978 DLY 28-2130 DLY
NJ	CANISTEAR RSVR	28-1327	41.1086	-74.4817	1100	0	0	64			28-1327 DLY
NJ	CANOE BROOK	28-1335	40.7436	-74.3539	180	0	0	109			28-1335 DLY 69-0851 DLY 28-1590 DLY
NJ	CHARLOTTEBURG RESERVE	28-1582	41.0347	-74.4233	760	25	26	121	28-1582 15M	28-1582 15M	28-1582 DLY
NJ	CLINTON	28-1749	40.6333	-74.9167	200	21	22	46	28-1754 15M	28-1754 HLY	28-1749 DLY 69-0739 DLY
NJ	CRANFORD	28-2023	40.6669	-74.3231	75	0	45	71		28-8423 HLY	28-2023 DLY 28-9455 DLY 28-8423 HLY
NJ	ELIZABETH	28-2644	40.6667	-74.2333	39	0	0	74			28-2644 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NJ	ESSEX FELLOWS SERVICE BLDG	28-2768	40.8314	-74.2858	350	0	42	55		28-2768 HLY	28-2768 DLY
NJ	FLEMINGTON 5 NNW	28-3029	40.5772	-74.8826	260	0	0	111			28-3029 DLY
NJ	FREEHOLD-MARLBORO	28-3181	40.3142	-74.2511	194	0	34	75		28-3181 HLY	28-3181 DLY
NJ	GLASSBORO 2 NE	28-3291	39.7358	-75.0953	100	0	46	49		28-3291 HLY	28-3291 DLY 28-3291 HLY
NJ	GREENWOOD LAKE	28-3516	41.1386	-74.3244	470	0	0	70			28-3516 DLY 69-0902 DLY
NJ	HAMMONTON 1 NE	28-3662	39.6442	-74.8072	90	0	0	77			28-3662 DLY
NJ	HARRISON	28-3704	40.7514	-74.1567	24	0	0	39			28-3704 DLY 28-6560 DLY
NJ	HIGH POINT PARK	28-3935	41.3061	-74.6714	1520	0	0	40			28-3935 DLY 28-8648 DLY
NJ	HIGHTSTOWN 2 W	28-3951	40.2650	-74.5642	100	0	24	116		28-9761 HLY 28-3951 HLY 28-3956 HLY 28-9761 15M 28-3951 15M	28-3951 DLY
NJ	INDIAN MILLS 2 W	28-4229	39.8144	-74.7883	100	0	0	110			28-4229 DLY
NJ	JERSEY CITY	28-4339	40.7419	-74.0572	135	0	0	89			28-4339 DLY 86-0005 HLY
NJ	LAMBERTVILLE	28-4635	40.3667	-74.9472	68	0	0	113			28-4635 DLY 28-4653 DLY
NJ	LITTLE FALLS	28-4887	40.8858	-74.2261	150	0	50	110		28-4887 HLY 78-0011 15M 55-0096 HLY	28-4887 DLY 69-0898 DLY 28-4887 HLY 78-0011 15M 55-0096 HLY
NJ	LONG BRANCH OAKHURST	28-4987	40.2797	-74.0047	30	0	0	94			28-4987 DLY 69-0790 DLY
NJ	LONG VALLEY	28-5003	40.7875	-74.7789	550	0	0	73			28-5003 DLY 69-0720 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NJ	MAHWAH	28-5104	41.1000	-74.1667	249	0	26	55		87-0004 HLY	28-5104 DLY
										28-0100 HLY	76-0011 HLY
											87-0004 HLY
											30-8322 DLY
											30-8321 DLY
NJ	MIDLAND PARK	28-5503	40.9939	-74.1453	210	0	0	60			28-5503 DLY
NJ	MILTON	28-5597	41.0167	-74.5333	951	0	0	30			28-5597 DLY
NJ	MOORESTOWN	28-5728	39.9511	-74.9697	45	0	0	144			28-5728 DLY
											52-5728 DLY
NJ	MORRIS PLAINS 1 W	28-5769	40.8333	-74.5000	400	0	0	51			28-5769 DLY
											69-0843 DLY
NJ	NEW BRUNSWICK 3 SE	28-6055	40.4719	-74.4364	86	0	42	119		28-6055 HLY	28-6055 DLY
										28-7831 HLY	28-6062 DLY
										76-0010 HLY	
NJ	NEW MILFORD	28-6146	40.9611	-74.0158	12	0	30	91		28-6146 HLY	28-6146 DLY
NJ	NEWARK INTL AP	28-6026	40.6825	-74.1694	7	0	66	85		28-6026 HLY	28-6026 DLY
											52-6026 DLY
											28-6026 HLY
NJ	NEWTON	28-6177	41.0553	-74.7592	605	0	0	104			28-6177 DLY
											69-0948 DLY
NJ	OAK RIDGE RSVR	28-6460	41.0425	-74.4959	880	0	0	72			28-6460 DLY
NJ	PATERSON	28-6775	40.9000	-74.1500	102	0	0	78			28-6775 DLY
NJ	PEMBERTON	28-6843	39.9708	-74.6828	60	0	0	70			28-6843 DLY
NJ	PHILADELPHIA MT HOLLY	28-6964	40.0136	-74.8178	50	23	45	89	28-5866 15M	28-5866 HLY	28-6964 DLY
										28-5055 HLY	28-1211 DLY
											28-5866 HLY
											28-5055 HLY
NJ	PHILLIPSBURG	28-6974	40.6833	-75.1833	180	0	0	81			28-6974 DLY
											36-2425 DLY
NJ	PLAINFIELD	28-7079	40.6036	-74.4025	90	0	0	114			28-7079 DLY
NJ	POTTERSVILLE 2 NNW	28-7301	40.7369	-74.7322	484	0	0	58			28-7301 DLY
											28-6544 DLY
NJ	PRINCETON WTR WKS	28-7328	40.3333	-74.6667	59	0	0	47			28-7328 DLY
											69-0761 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
NJ	RAHWAY	28-7393	40.6006	-74.2569	20	0	42	58		28-7393 HLY	28-7393 DLY
NJ	RIDGEFIELD	28-7545	40.8333	-74.0167	79	0	0	45			28-7545 DLY 69-0607 DLY
NJ	RINGWOOD	28-7587	41.0917	-74.2683	305	0	0	68			28-7587 DLY 69-0909 DLY
NJ	RUNYON	28-7825	40.4333	-74.3333	20	0	0	38			28-7825 DLY 69-0776 DLY
NJ	SANDY HOOK	28-7865	40.4633	-74.0056	10	0	0	60			28-7865 DLY 28-6154 DLY 28-7869 DLY
NJ	SOMERDALE 4 SW	28-8173	39.8372	-75.0442	55	0	0	32			28-8173 DLY 28-0787 DLY
NJ	SOMERVILLE 4 NW	28-8194	40.6153	-74.6531	134	0	0	109			28-8194 DLY 69-0944 DLY
NJ	SPLIT ROCK POND	28-8402	40.9631	-74.4599	800	0	0	57			28-8402 DLY 28-5071 DLY
NJ	SUSSEX 2 NW	28-8644	41.2214	-74.6600	649	0	0	107			28-8644 DLY
NJ	TOMS RIVER	28-8816	39.9500	-74.2167	100	0	0	81			28-8816 DLY
NJ	TRENTON 2	28-8878	40.2333	-74.7667	112	30	58	107	28-8880 15M 28-8883PP01 78-0061 15M	28-8880 HLY 78-0061 15M	28-8878 DLY 69-0746 DLY 28-8880 HLY
NJ	TUCKERTON 2 NE	28-8899	39.6025	-74.3386	10	0	0	89			28-8899 DLY
NJ	WANAQUE RAYMOND DAM	28-9187	41.0444	-74.2933	245	0	40	59		28-9187 HLY	28-9187 DLY
NJ	WATCHUNG	28-9271	40.6622	-74.4164	260	0	46	44		28-9271 HLY	28-9271 HLY
NJ	WERTSVILLE 4 NE	28-9363	40.4528	-74.8081	240	0	0	50			28-9363 DLY
NJ	WEST WHARTON	28-9608	40.9000	-74.6000	679	0	0	96			28-9608 DLY 28-2340 DLY 91-0082 DLY
NJ	WOODCLIFF LAKE	28-9832	41.0139	-74.0425	103	0	36	92		28-9832 HLY 70-0001 HLY	28-9832 DLY 70-0001 HLY
OH	ASHTABULA	33-0264	41.8500	-80.8000	690	0	0	49			33-0264 DLY
OH	DORSET	33-2251	41.6833	-80.6667	980	0	0	58			33-2251 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
OH	GENEVA 3 S	33-3095	41.7500	-80.9500	751	0	0	66			33-3095 DLY 33-3094 DLY 33-4815 DLY 33-3750 DLY
OH	MOSQUITO CREEK LAKE	33-5505	41.2986	-80.7647	910	0	25	70		33-5505 HLY	33-5505 DLY
OH	ROCK CREEK 2 S	33-7175	41.6333	-80.8667	843	0	27	25		33-7175 HLY	33-7175 HLY
OH	YOUNGSTOWN WSO AP	33-9406	41.2544	-80.6739	1180	0	65	65		33-9406 HLY	33-9406 HLY
PA	ALLEGHENY	76-0029	41.4864	-79.1025	1770	0	52	50		76-0029 HLY 36-5400 HLY	76-0029 HLY 36-5400 HLY
PA	ALLENTOWN GAS COMPANY	36-0111	40.6000	-75.4667	249	0	66	97		36-0106 HLY	36-0111 DLY 36-0106 HLY
PA	ALVIN R BUSH DAM	36-0147	41.3583	-77.9267	930	28	39	42	36-0147 15M	36-0147 HLY 36-4545 HLY	36-0147 HLY 36-4545 HLY
PA	ANSONIA 2 W	36-0176	41.7439	-77.4670	1210	0	0	37			36-0176 DLY
PA	ARDMORE	36-0222	40.0000	-75.2833	340	0	0	32			36-0222 DLY 36-9074 DLY 69-2342 DLY
PA	AUSTINBURG 2 W	36-0313	41.9958	-77.5331	1591	0	25	32		36-0313 HLY	36-0313 DLY 36-0313 HLY
PA	BARNES	36-0409	41.6678	-79.0186	1360	0	0	48			36-0409 DLY
PA	BECHTELSVILLE 1ENE	36-0488	40.3783	-75.6150	460	0	0	53			36-0488 DLY 69-2309 DLY
PA	BERWICK	36-0611	41.0667	-76.2500	571	0	0	30			36-0611 DLY
PA	BETHLEHEM	36-0629	40.6167	-75.3833	240	0	0	37			36-0629 DLY 69-2378 DLY
PA	BETHLEHEM LEHIGH UNIV	36-0634	40.5903	-75.3624	361	0	0	68			36-0634 DLY 36-0634 HLY
PA	BLAKESLEE CORNERS	36-0743	41.1000	-75.6000	1650	0	33	30		36-0743 HLY	36-0743 HLY
PA	BRADFORD 4SW RES 5	36-0868	41.8975	-78.7144	1660	0	0	78			36-0868 DLY
PA	BRADFORD CNTRL FS	36-0867	41.9500	-78.6500	1500	0	0	74			36-0867 DLY 69-2294 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	BROOKVILLE SEWAGE PLT	36-1004	41.1500	-79.0833	1210	0	0	79			36-1004 DLY 36-1001 DLY
PA	BUCKSVILLE	36-1080	40.5003	-75.2044	460	0	0	40			36-1080 DLY 36-6651 DLY
PA	CANTON	36-1212	41.6517	-76.8464	1140	0	32	72		36-1215 HLY 36-1212 15M	36-1212 DLY 36-1215 DLY
PA	CEDAR RUN (RIVER)	36-1301	41.5217	-77.4478	780	0	0	47			36-1301 DLY
PA	CHERRY SPRINGS	36-1400	41.6667	-77.8167	2300	25	49	45	36-1400 15M	36-1400 HLY 36-1262 HLY	36-1400 HLY 36-1262 HLY
PA	CLARENCE	36-1480	41.0489	-77.9411	1390	0	0	63			36-1480 DLY
PA	CLARION 3 SW	36-1485	41.1922	-79.4361	1040	0	21	109		36-1485 HLY	36-1485 DLY
PA	CLAUSSVILLE	36-1505	40.6167	-75.6500	670	0	0	66			36-1505 DLY 69-2261 DLY
PA	CLEARFIELD	36-1519	41.0164	-78.4450	1140	0	0	85			36-1519 DLY 36-1524 DLY
PA	CLERMONT 1 NW	36-1526	41.6961	-78.4878	2080	0	21	36		36-1529 HLY	36-1526 DLY 36-1529 DLY 36-1529 HLY
PA	CLERMONT 8 SW	36-1534	41.7333	-78.5333	1620	0	0	33			36-1534 DLY
PA	CONNEAUTVILLE 4 ESE	36-1719	41.7333	-80.2833	1270	0	32	34		36-1719 HLY 36-1720 HLY 36-8359 HLY	36-1719 DLY 36-1719 HLY 36-1720 HLY 36-8359 HLY
PA	CONSHOHOCKEN	36-1737	40.0744	-75.3178	70	0	0	83			36-1737 DLY
PA	COOKSBURG 2 NW	36-1751	41.3575	-79.2172	1450	22	24	47	36-1751 15M 36-1750 15M 36-1749 15M	36-1751 HLY 36-1751 15M 36-1750 15M 36-1749 15M	36-1751 DLY 36-1749 DLY 36-1750 DLY
PA	CORRY	36-1790	41.9167	-79.6333	1440	0	0	74			36-1790 DLY
PA	COUDERSPORT 1 SW	36-1802	41.7664	-78.0362	1650	0	0	81			36-1802 DLY 36-1815 DLY 36-1806 DLY 36-1805 DLY 36-1804 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	COUDERSPORT 7SE	36-1810	41.7392	-77.9711	2150	0	0	30			36-1810 DLY 36-1809 DLY
PA	COVINGTON 2 WSW	36-1833	41.7333	-77.1167	1745	0	0	75			36-1833 DLY 36-1832 DLY
PA	COWANESQUE DAM	36-1838	41.9903	-77.1567	1150	0	0	98			36-1838 DLY 36-4873 DLY
PA	DINGMANS FERRY	36-2160	41.2167	-74.8667	430	28	53	105	36-2163 15M 36-2160 15M	36-2160 HLY 76-0032 HLY	36-2160 DLY 36-2160 HLY 76-0032 HLY 28-4735 DLY 28-4736 DLY
PA	DOYLESTOWN	36-2221	40.3000	-75.1333	361	0	0	86			36-2221 DLY
PA	DRIFTWOOD	36-2245	41.3419	-78.1403	820	21	49	65	36-2245 15M	36-2245 HLY	36-2245 DLY 36-2245 HLY
PA	DU BOIS 7 E	36-2265	41.1000	-78.6333	1670	0	26	38		36-2265 HLY	36-2265 DLY
PA	DUBOIS FAA AP	36-2260	41.1783	-78.8989	1814	25	53	51	36-2261 15M 36-2260 15M	36-2260 HLY 36-0099 HLY 36-2261 15M 36-2260 15M 55-0021 HLY	36-2260 HLY 36-0099 HLY 36-2261 15M 36-2260 15M 55-0021 HLY
PA	DUSHORE	36-2323	41.5217	-76.4042	1530	27	35	67	36-2323 15M 36-2325 15M	36-2323 HLY	36-2323 DLY 36-2325 DLY 36-2325 HLY 36-2324 DLY
PA	EDINBORO	36-2514	41.8667	-80.1333	1220	0	0	35			36-2514 DLY 36-2520 15M
PA	EMPORIUM	36-2629	41.5067	-78.2275	1040	23	53	117	36-2629 15M	36-2629 HLY 36-2633 HLY 36-2635 HLY 36-2634 HLY	36-2629 DLY 36-2635 DLY 36-2634 DLY 36-2633 DLY
PA	ENGLISH CTR	36-2644	41.4333	-77.2889	879	0	31	36		36-2644 HLY	36-2644 DLY
PA	EQUINUNK 2 NW	36-2671	41.8719	-75.2656	890	0	0	69			36-2671 DLY 36-2669 DLY



State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	ERIE WB CITY	36-2677	42.1167	-80.0833	689	0	64	135		36-2682 HLY 36-2677 HLY	36-2677 DLY 52-2677 DLY 36-2682 HLY
PA	FARRELL SHARON	36-2814	41.2167	-80.5167	850	0	0	68			36-2814 DLY
PA	FOREST CITY 5 N	36-2951	41.7167	-75.4833	1650	28	50	68	36-8491 15M	36-8491 HLY 36-7029 HLY	36-2951 DLY 69-2462 DLY 36-8491 HLY 36-7029 HLY
PA	FRANCIS E WALTER DAM	36-3018	41.1183	-75.7278	1509	0	41	55		36-3018 HLY 36-0455 HLY	36-3018 DLY 36-3018 HLY 36-0455 HLY
PA	FRANKLIN	36-3028	41.4003	-79.8306	1015	0	40	112		36-3028 HLY	36-3028 DLY
PA	FREELAND	36-3056	41.0167	-75.9000	1903	0	0	80			36-3056 DLY 69-2287 DLY
PA	GALETON	36-3130	41.7356	-77.6517	1345	0	0	84			36-3130 DLY
PA	GARLAND 1 SW	36-3158	41.8167	-79.4500	1300	0	0	42			36-3158 DLY 36-8901 DLY
PA	GEORGE SCHOOL	36-3200	40.2167	-74.9333	141	0	0	68			36-3200 DLY
PA	GERMANIA	36-3211	41.6478	-77.6607	1935	0	0	40			36-3211 DLY 36-1262 DLY
PA	GLEN HAZEL 2 NE DAM	36-3311	41.5631	-78.6014	1720	0	31	67		36-3311 HLY	36-3311 DLY
PA	GOULDSBORO	36-3394	41.2500	-75.4500	1890	0	0	73			36-3394 DLY 69-2459 DLY
PA	GRATERFORD 1 E	36-3437	40.2306	-75.4353	240	0	0	91			36-3437 DLY 36-3435 DLY
PA	GREENVILLE 2 NE	36-3526	41.4167	-80.3667	1130	0	0	90			36-3526 DLY
PA	GROVE CITY	36-3542	41.1536	-80.0733	1350	0	0	36			36-3542 DLY
PA	HAWLEY 1 E	36-3758	41.4764	-75.1653	890	0	42	94		36-3762 HLY 36-3761 HLY	36-3758 DLY 36-3761 DLY 36-3761 HLY
PA	HOLLISTERVILLE	36-4008	41.3883	-75.4363	1370	0	0	76			36-4008 DLY 69-2449 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	HONESDALE 4 NW	36-4043	41.6167	-75.3167	1410	27	52	64	36-7186 15M 36-4044 15M	36-7186 HLY 36-4044 HLY	36-4043 DLY 69-2443 DLY 36-7186 HLY
PA	HOP BOTTOM 2 SE	36-4066	41.6702	-75.7267	902	0	0	26			36-4066 DLY
PA	JAMESTOWN 2 NW	36-4325	41.5000	-80.4667	1040	27	45	92	36-4325 15M	36-4325 HLY	36-4325 DLY 36-9496 DLY
PA	JIM THORPE	36-5479	40.8667	-75.7500	830	0	60	109		36-0560 HLY 36-6689 HLY	36-5479 DLY 69-2134 DLY
PA	KANE INNE	36-4432	41.6767	-78.8036	1750	21	45	73	36-4432 15M	36-4432 HLY	36-4432 DLY
PA	KANE EXPERIMENTAL FOREST	54-0175	41.5978	-78.7675	2028	0	0	35			54-0175 DLY 36-4437 DLY
PA	KARTHAUS RIVER	36-4450	41.1175	-78.1092	950	0	0	34			36-4450 DLY 36-4477 DLY
PA	KINZUA	76-0031	41.9006	-79.1186	1408	22	52	50	36-7855 15M	76-0031 HLY 36-7855 HLY	76-0031 HLY 36-7855 HLY
PA	KRESGEVILLE 2 W	36-4672	40.9000	-75.5333	830	0	0	51			36-4672 DLY 69-2141 DLY
PA	LAKE MINISINK	36-4727	41.2167	-75.0500	1362	0	0	40			36-4727 DLY 36-6786 DLY
PA	LAKEVILLE 2 NNE	36-4733	41.4500	-75.2667	1440	0	0	41			36-4733 DLY
PA	LAPORTE	36-4815	41.4233	-76.4933	1966	0	0	84			36-4815 DLY 36-2343 DLY 36-6098 DLY
PA	LE ROY	36-4972	41.6764	-76.7083	1040	0	0	72			36-4972 DLY
PA	LEHIGHTON 1SSW	36-4934	40.8222	-75.6961	580	0	31	80		36-4934 HLY	36-4934 DLY
PA	LEWIS RUN	36-4983	41.8667	-78.6500	1560	0	35	60		36-4984 HLY 36-0865 15M 36-4984 15M	36-4983 DLY 36-4984 DLY 36-4984 HLY
PA	LINESVILLE 1 S	36-5050	41.6500	-80.4333	1030	0	0	75			36-5050 DLY 36-5046 DLY
PA	LOCK HAVEN SWG PLT	36-5109	41.1167	-77.4500	566	0	0	116			36-5109 DLY 36-5109 HLY 36-5104 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	LONG POND POCONO LAKE	36-5160	41.0500	-75.5000	1800	0	0	51			36-5160 DLY
PA	MATAMORAS	36-5470	41.3914	-74.7172	459	0	0	100			36-5470 DLY
PA	MEADOW RUN PONDS	36-5601	41.2167	-75.6333	1910	0	40	37		36-5601 HLY	36-5601 HLY
PA	MEADVILLE 1 S	36-5606	41.6305	-80.1578	1065	28	58	115	36-5606 15M 78-0028 15M	36-5606 HLY 78-0028 15M 55-0026 HLY	36-5606 DLY 36-7734 DLY 78-0028 15M 36-5606 HLY 55-0026 HLY
PA	MERCER	36-5651	41.2247	-80.2350	1220	0	26	54		36-5651 HLY 36-5654 HLY	36-5651 DLY
PA	MERWINSBURG	36-5676	40.9667	-75.4667	985	0	36	54		36-5676 HLY	36-5676 DLY 36-5676 HLY
PA	MILAN 1 N	36-5731	41.9203	-76.5306	850	23	43	40	36-5731 15M	36-5731 HLY 36-5732 HLY	36-5731 HLY 36-5732 HLY
PA	MILANVILLE	36-5738	41.6725	-75.0642	760	0	0	62			36-5738 DLY 69-2469 DLY 30-5639 DLY
PA	MILFORD	54-0182	41.3273	-74.8199	696	0	0	44			54-0182 DLY 36-5752 DLY
PA	MILLVILLE 2 SW	36-5817	41.1000	-76.5667	860	0	37	71		36-5817 HLY	36-5817 DLY 36-0753 DLY
PA	MONTROSE	36-5915	41.8511	-75.8583	1420	26	47	103	36-5915 15M	36-5915 HLY	36-5915 DLY 69-2415 DLY
PA	MT POCONO 2 N	36-6055	41.1500	-75.3667	1915	29	53	89	36-8893 15M 78-0045 15M	36-6055 HLY 36-8893 HLY 55-0121 HLY	36-6055 DLY 36-6055 HLY 36-8893 HLY 55-0121 HLY
PA	NESHAMINY FALLS	36-6194	40.1358	-74.9550	60	0	29	97		36-6419 HLY 78-0052 15M	36-6194 DLY
PA	NEW TRIPOLI 4 E	36-6326	40.6833	-75.6833	689	0	0	42			36-6326 DLY
PA	NORRISTOWN	36-6370	40.1197	-75.3583	70	0	0	48			36-6370 DLY
PA	ORWELL 2 NW	36-6622	41.9167	-76.3000	1600	0	0	47			36-6622 DLY 36-6621 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	OSCEOLA 3 SW	36-6627	41.9389	-77.3772	1795	23	24	20	36-6627 15M	36-6627 15M	36-6627 15M
PA	PALM 3 SE	36-6681	40.3856	-75.5022	300	31	31	67	36-6681 15M	36-6681 15M	36-6681 DLY
PA	PALMERTON	36-6689	40.8000	-75.6167	410	0	0	77			36-6689 DLY
PA	PARKER	36-6721	41.0833	-79.6833	1060	0	0	94			36-6721 DLY 36-6719 DLY
PA	PARKER 1 E	36-6724	41.0964	-79.6719	1100	24	49	46	36-6724 15M	36-6724 HLY	36-6724 HLY
PA	PAUPACK 1 WSW	36-6762	41.4000	-75.2333	1360	0	0	104			36-6762 DLY 69-2453 DLY 36-0751 DLY 52-0751 DLY
PA	PHILADELPHIA INTL AP	36-6889	39.8683	-75.2311	10	0	114	114		36-6889 HLY	36-6889 HLY
PA	PHILADELPHIA POINT BRE	36-6899	39.9167	-75.2000	30	0	0	35			36-6899 DLY
PA	PHILADELPHIA SHAWMONT	36-6904	40.0369	-75.2457	69	0	0	60			36-6904 DLY 69-2385 DLY
PA	PHILLY FRANKLIN INST	36-6886	39.9575	-75.1728	60	0	0	92			36-6886 DLY
PA	PHOENIXVILLE 1 E	36-6927	40.1200	-75.5011	105	0	40	93		36-6927 HLY	36-6927 DLY
PA	PLEASANT MT 1 W	36-7029	41.7394	-75.4464	1800	0	0	89			36-7029 DLY
PA	PORT ALLEGANY	36-7103	41.8158	-78.2872	1475	0	0	68			36-7103 DLY 36-9002 DLY 36-7108 DLY
PA	RAYMOND	36-7310	41.8500	-77.8667	2300	0	39	44		36-7310 HLY	36-7310 DLY 36-7310 HLY
PA	RENOVO	36-7409	41.3297	-77.7381	660	0	0	105			36-7409 DLY
PA	RENOVO 6 S	36-7410	41.2333	-77.7667	2039	0	35	35		36-7410 HLY	36-7410 HLY
PA	RIDGWAY	36-7477	41.4197	-78.7492	1360	0	0	106			36-7477 DLY
PA	RUSHVILLE	36-7727	41.7833	-76.1167	870	0	0	58			36-7727 DLY 36-7694 DLY
PA	RUSSELL 3 NW	36-7728	41.9667	-79.1833	1493	0	0	38			36-7728 DLY 69-1081 DLY 36-7729 DLY
PA	SABINSVILLE 3 SE	36-7730	41.8422	-77.4758	2000	0	0	43			36-7730 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	SCRANTON	36-7902	41.4167	-75.6667	804	0	59	86		36-9705 HLY 36-7905 HLY	36-7902 DLY 36-9705 HLY 36-7905 HLY
PA	SELLERSVILLE	36-7938	40.3578	-75.3155	340	0	40	105		36-7938 HLY	36-7938 DLY 36-7938 HLY 36-7239 DLY
PA	SHEFFIELD 5 W	36-8026	41.7058	-79.1298	1920	0	55	49		36-8026 HLY	36-8026 HLY
PA	SHICKSHINNY 3 N	36-8057	41.1831	-76.1489	685	0	21	67		36-8057 HLY	36-8057 DLY 36-6090 DLY 36-7417 DLY
PA	SINNEMAHOING	36-8145	41.3203	-78.0958	820	0	0	60			36-8145 DLY
PA	SIZERVILLE	36-8155	41.5967	-78.1802	1290	25	25	25	36-8155 15M	36-8155 15M	36-8155 DLY 36-8155 15M
PA	SLIPPERY ROCK 1 SSW	36-8184	41.0558	-80.0600	1250	0	0	65			36-8184 DLY
PA	SMETHPORT	36-8190	41.8144	-78.4291	1469	0	34	53		36-8190 HLY	36-8190 DLY 36-8190 HLY
PA	SOUTH CANAAN 1 NE	36-8275	41.5167	-75.4000	1400	0	37	37		36-8275 HLY	36-8275 HLY
PA	SPRING HOUSE 2 NE	36-8388	40.2167	-75.2167	240	0	0	62			36-8388 DLY 69-2315 DLY 36-5368 DLY 36-4798 DLY
PA	SPRINGBORO 3 WNW	36-8361	41.8167	-80.4333	1005	0	0	35			36-8361 DLY 36-1720 DLY 36-8359 DLY
PA	STEVENSON DAM	36-8469	41.4039	-78.0183	932	21	30	45	36-8469 15M	36-8469 HLY	36-8469 DLY
PA	STROUDSBURG	36-8596	41.0125	-75.1906	460	0	34	91		36-8596 HLY 36-8601 HLY	36-8596 DLY
PA	SUSQUEHANNA	36-8692	41.9478	-75.6047	910	0	0	78			36-8692 DLY
PA	TAMAQUA	36-8758	40.7947	-75.9753	925	34	39	98	36-8758 15M	36-8758 15M	36-8758 DLY 36-1572 DLY 36-4804 DLY 69-2129 DLY
PA	TAMAQUA 4 N DAM	36-8763	40.8561	-75.9911	1110	0	43	68		36-8763 HLY	36-8763 DLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations		
						<1hr	hourly	daily	<1hr	hourly	daily
PA	TIOGA HAMMOND DAM	36-8868	41.8975	-77.1419	1230	32	52	64	36-8868 15M 36-4304 15M	36-4304 HLY 36-5779 15M 36-8868 15M 36-4304 15M	36-8868 DLY 36-8868 15M 36-4304 HLY 36-5779 15M 36-4304 15M
PA	TIONESTA 2 SE LAKE	36-8873	41.4792	-79.4433	1200	22	45	70	36-8873 15M	36-8873 HLY	36-8873 DLY
PA	TITUSVILLE	36-8885	41.6361	-79.6618	1552	0	28	38		36-8885 HLY	36-8885 DLY 36-8885 HLY 36-8880 DLY
PA	TITUSVILLE WTR WKS	36-8888	41.6333	-79.7000	1220	0	0	60			36-8888 DLY
PA	TOWANDA 1 S	36-8905	41.7511	-76.4431	760	0	53	119		36-8905 HLY	36-8905 DLY
PA	TROY 1 NE	36-8959	41.7903	-76.7725	1045	0	0	52			36-8959 DLY
PA	TUNKHANNOCK	36-8982	41.5584	-75.8942	620	0	25	25		36-8982 HLY 36-2171 HLY	36-8982 DLY 36-2171 DLY
PA	UNION CITY FLTR PLT	36-9042	41.9000	-79.8167	1400	22	47	56	36-9042 15M	36-9042 HLY	36-9042 DLY
PA	WARREN	36-9298	41.8467	-79.1494	1210	0	0	122			36-9298 DLY
PA	WEEDVILLE 1 N	36-9385	41.3000	-78.4833	1760	0	32	37		36-9385 HLY 36-5627 HLY 36-9385 15M	36-9385 DLY 36-5627 DLY 36-9385 HLY 36-5627 HLY 36-9385 15M
PA	WELLSBORO 4 SW	36-9408	41.7003	-77.3894	1818	26	38	122	36-9408 15M	36-9412 HLY 36-9408 15M	36-9408 DLY 36-9408 15M 36-9407 DLY 36-9412 HLY
PA	WEST HICKORY 2	36-9510	41.5764	-79.4106	1345	0	0	54			36-9510 DLY 36-9507 DLY
PA	WILKES BARRE	36-9702	41.2333	-75.8833	660	0	0	105			36-9702 DLY
PA	WILLIAMSPORT 2	36-9735	41.2486	-76.9833	525	0	46	98		36-9728 HLY	36-9735 DLY 36-9733 DLY 36-9728 HLY
PA	WIND GAP 1 S	36-9781	40.8333	-75.3000	722	31	47	42	36-6792 15M	36-9781 HLY 36-6792 15M	36-9781 HLY 36-6792 15M
PA	YOUNGSVILLE	36-9966	41.8500	-79.3167	1217	0	29	25		36-9966 HLY	36-9966 HLY

State	Name	SID	Latitude	Longitude	Elev. (ft)	Data years			Contributing stations			
						<1hr	hourly	daily	<1hr	hourly	daily	
PA	ZIONSVILLE 3 ESE	36-9995	40.4667	-75.4500	585	0	0	68				36-9995 DLY 69-2094 DLY 36-9994 DLY

Table A.1.3. The metadata information for all Connecticut (CT), Maine (MA), Massachusetts (ME), New Hampshire (NH), New York (NY), Rhode Island (RI), and Vermont (VT) stations whose data were used in this Volume showing each station's state, name, SID, reporting interval abbreviation (see Table 4.2.2), latitude, longitude, elevation, dataset abbreviation (see Table 4.2.1), and the period of record.

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CT	ABINGTON	54-0126	DLY	41.8400	-72.0101	686	NADP	1999-2013
CT	ANSONIA	06-0120	DLY	41.3333	-73.0833	20	NCEI	1948-1966
CT	ANSONIA 1 NE	06-0128	DLY	41.3489	-73.0694	140	NCEI	1966-2014
CT	BAKERSVILLE	06-0227	DLY	41.8417	-73.0086	686	NCEI	1948-2014
CT	BALTIC	06-0251	DLY	41.6167	-72.1000	141	NCEI	1931-1967
CT	BARKHAMSTED	06-0299	DLY	41.9211	-72.9644	705	NCEI	1932-2014
CT	BRIDGEPORT	55-0156	HLY	41.1583	-73.1289	17	NCEI	1996-2014
CT	BRIDGEPORT	06-0801	DLY	41.2000	-73.2000	141	NCEI	1893-1951
CT	BRIDGEPORT SIKORSKY AP	06-0806	HLY	41.1583	-73.1289	5	NCEI	1948-2013
CT	BRIDGEPORT SIKORSKY MEM A	06-0806	DLY	41.1583	-73.1289	5	NCEI	1948-2014
CT	BRIDGEPORT-SUCCESS HILL	06-0808	DLY	41.2008	-73.1586	75	NCEI	2008-2014
CT	BRISTOL 3 W	06-0830	DLY	41.6833	-72.9833	640	NCEI	1948-1957
CT	BROOKFIELD 3.3 SSE	69-0012	DLY	41.4400	-73.3900	404	COCORAHS	2009-2012
CT	BROOKLYN	06-0918	DLY	41.7833	-71.9500	240	NCEI	1950-1983
CT	BULLS BRG DAM	06-0961	DLY	41.6756	-73.5083	260	NCEI	1948-2014
CT	BURLINGTON	06-0973	DLY	41.7944	-72.9319	505	NCEI	1932-2014
CT	CANDLEWOOD LAKE	06-1093	HLY	41.4840	-73.4625	502	NCEI	1948-1975
CT	COCKAPONSET RS	06-1488	HLY	41.4614	-72.5197	160	NCEI	1978-2013
CT	COCKAPONSET RS	06-1488	DLY	41.4614	-72.5197	160	NCEI	1948-2000
CT	COLCHESTER 2 W	06-1499	DLY	41.5500	-72.3667	479	NCEI	1893-1973
CT	COLLINSVILLE 1 S	06-1536	DLY	41.8033	-72.9257	279	NCEI	1885-1966
CT	COVENTRY	06-1689	DLY	41.8000	-72.3500	480	NCEI	1957-1993
CT	CREAM HILL	06-1715	DLY	41.9000	-73.3167	1302	NCEI	1896-1972
CT	DANBURY	06-1762	DLY	41.4000	-73.4167	405	NCEI	1937-2014
CT	DANBURY MUNI AP	79-0034	DLY	41.3714	-73.4828	457	NCEI	1998-2014
CT	EAST HAVEN SALTONSTALL	06-2169	15M	41.2847	-72.8564	30	NCEI	1978-1998
CT	EAST HAVEN SALTONSTALL	06-2169	HLY	41.2847	-72.8564	30	NCEI	1978-1998



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CT	EAST HAVEN SALTONSTALL	06-2169	DLY	41.2847	-72.8564	30	NCEI	1948-1997
CT	EASTFORD	06-2073	DLY	41.9000	-72.0833	541	NCEI	1964-1968
CT	EASTON RSVR	06-2288	DLY	41.2333	-73.2500	171	NCEI	1948-1975
CT	FALLS VILLAGE	06-2658	DLY	41.9500	-73.3667	550	NCEI	1916-2014
CT	FALLS VILLAGE 1	06-2655	DLY	41.9333	-73.3167	940	NCEI	1893-1921
CT	GROTON	06-3207	DLY	41.3511	-72.0389	40	NCEI	1948-2014
CT	GROTON NEW LONDON AP	79-0016	DLY	41.3275	-72.0494	10	NCEI	1999-2014
CT	HARTFORD	06-3446	HLY	41.7667	-72.7000	141	NCEI	1948-1971
CT	HARTFORD	06-3456	HLY	41.9381	-72.6825	190	NCEI	1954-2013
CT	HARTFORD	55-0062	HLY	41.7361	-72.6506	19	NCEI	1997-2014
CT	HARTFORD	06-3446	DLY	41.7667	-72.7000	141	NCEI	1897-1951
CT	HARTFORD BRAINARD FLD	06-3451	15M	41.7333	-72.6500	20	NCEI	1984-2008
CT	HARTFORD BRAINARD FLD	06-3451	HLY	41.7333	-72.6500	20	NCEI	1972-1999
CT	HARTFORD BRAINARD FLD	06-3451	DLY	41.7333	-72.6500	20	NCEI	1904-2014
CT	HARTFORD BRAINARD FLD	79-0020	DLY	41.7361	-72.6506	19	NCEI	1920-2014
CT	HAUTBOY HILL FARM	06-3495	DLY	41.9000	-73.2833	981	NCEI	1974-1977
CT	HEMLOCKS RSVR	06-3583	DLY	41.2319	-73.3155	240	NCEI	1948-1960
CT	JEWETT CITY	06-3857	HLY	41.6297	-71.9014	400	NCEI	1948-2011
CT	JEWETT CITY	06-3857	DLY	41.6297	-71.9014	400	NCEI	1948-2009
CT	KHFD	78-0031	15M	41.7361	-72.6506	19	NCEI	2005-2014
CT	KIJD	78-0037	15M	41.7419	-72.1836	239	NCEI	2005-2014
CT	LAKE KONOMOC	06-3989	DLY	41.4000	-72.1833	180	NCEI	1893-1978
CT	LAUREL RSVR	06-4096	DLY	41.1667	-73.5500	351	NCEI	1948-1960
CT	MANSFIELD HOLLOW LAKE	06-4488	15M	41.7572	-72.1858	250	NCEI	1972-2007
CT	MANSFIELD HOLLOW LAKE	06-4488	HLY	41.7572	-72.1858	250	NCEI	1952-2007
CT	MANSFIELD HOLLOW LAKE	06-4488	DLY	41.7572	-72.1858	250	NCEI	1952-2007
CT	MIDDLETOWN 4 W	06-4767	DLY	41.5500	-72.7167	369	NCEI	1868-1997
CT	MIDDLETOWN 4 W	52-4767	DLY	41.5500	-72.7167	369	FORTS	1868-1890
CT	MIDDLETOWN WB	06-4757	HLY	41.5500	-72.5500	135	NCEI	1956-1961
CT	MIDDLETOWN WB	06-4757	DLY	41.5500	-72.5500	135	NCEI	1849-1958
CT	MOODUS RSVR	06-5018	HLY	41.5000	-72.4333	459	NCEI	1948-1976

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CT	MT CARMEL	06-5077	DLY	41.4075	-72.9033	180	NCEI	1936-1998
CT	NATCHAUG RS	06-5125	DLY	41.8833	-72.0833	541	NCEI	1948-1962
CT	NATHAN HALE SF	06-5131	DLY	41.7667	-72.3500	571	NCEI	1949-1960
CT	NEW HARTFORD	06-5262	DLY	41.8795	-72.9610	381	NCEI	1893-1960
CT	NEW HAVEN	06-5266	HLY	41.3000	-72.9333	20	NCEI	1899-1943
CT	NEW HAVEN	06-5266	DLY	41.3000	-72.9333	20	NCEI	1873-1992
CT	NEW HAVEN TWEED AP	06-5273	DLY	41.2639	-72.8872	3	NCEI	1948-2014
CT	NEW HAVEN WB AP	06-5273	15M	41.2667	-72.8833	6	NCEI	2005-2013
CT	NEW HAVEN WB AP	06-5273	HLY	41.2667	-72.8833	6	NCEI	1943-1969
CT	NEW LONDON	06-5309	DLY	41.3500	-72.1000	60	NCEI	1895-1955
CT	NEW LONDON	52-5309	DLY	41.3500	-72.1000	60	FORTS	1849-1892
CT	NORFOLK 2 SW	06-5445	HLY	41.9725	-73.2208	1340	NCEI	1948-2013
CT	NORFOLK 2 SW	06-5445	DLY	41.9725	-73.2208	1340	NCEI	1884-2014
CT	NORTH BRANFORD	06-5510	DLY	41.3333	-72.7667	210	NCEI	1930-1975
CT	NORWALK	06-5892	DLY	41.1333	-73.4500	121	NCEI	1893-1956
CT	NORWALK GAS PLT	06-5893	DLY	41.1167	-73.4167	37	NCEI	1956-1987
CT	NORWICH	06-5904	DLY	41.5500	-72.0833	200	NCEI	1948-1952
CT	NORWICH 5 SW	06-5905	DLY	41.5000	-72.1500	302	NCEI	1952-1956
CT	NORWICH PUB UTILITY PLANT	06-5910	DLY	41.5269	-72.0642	20	NCEI	1956-2014
CT	PROSPECT	06-6597	DLY	41.5043	-72.9362	420	NCEI	1948-1975
CT	PUTNAM	06-6645	HLY	41.9167	-71.9167	300	NCEI	1952-1962
CT	PUTNAM	06-6645	DLY	41.9167	-71.9167	300	NCEI	1934-1962
CT	PUTNAM HEIGHTS	06-6650	HLY	41.9000	-71.8667	561	NCEI	1948-1952
CT	PUTNAM LAKE	06-6655	DLY	41.0825	-73.6386	300	NCEI	1948-2014
CT	PUTNAM WTR WKS	06-6660	HLY	41.9333	-71.9333	279	NCEI	1962-1965
CT	ROCKVILLE	06-6942	HLY	41.8667	-72.4333	510	NCEI	1948-2005
CT	ROCKY RIVER DAM	06-6966	DLY	41.5831	-73.4331	220	NCEI	1948-2014
CT	ROUND POND	06-7002	DLY	41.3008	-73.5369	800	NCEI	1948-2009
CT	SALISBURY	06-7109	DLY	41.9799	-73.4430	1079	NCEI	1933-1966
CT	SAUGATUCK RSVR	06-7157	DLY	41.2500	-73.3500	300	NCEI	1948-2004
CT	SHELTON	06-7361	DLY	41.3167	-73.0833	59	NCEI	1884-1949

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CT	SHEPAUG DAM	06-7373	DLY	41.7233	-73.2927	840	NCEI	1948-2014
CT	SHUTTLE MEADOW RESVR	06-7432	DLY	41.6444	-72.8167	410	NCEI	1948-2014
CT	SOUTHINGTON	52-7620	DLY	41.5833	-72.8500	140	FORTS	1870-1892
CT	STAFFORD SPRINGS	06-7946	DLY	41.9500	-72.3000	541	NCEI	1948-1964
CT	STAFFORD SPRINGS 2	06-7959	DLY	41.9500	-72.3000	455	NCEI	1966-2006
CT	STAFFORDVILLE	06-7958	DLY	41.9983	-72.2606	736	NCEI	2002-2014
CT	STAMFORD 5 N	06-7970	DLY	41.1247	-73.5475	190	NCEI	1955-2010
CT	STEVENSON DAM	06-8065	DLY	41.3819	-73.1717	115	NCEI	1893-2014
CT	STORRS	06-8138	15M	41.7950	-72.2286	665	NCEI	1971-2009
CT	STORRS	06-8138	HLY	41.7950	-72.2286	665	NCEI	1948-2009
CT	STORRS	06-8138	DLY	41.7950	-72.2286	665	NCEI	1888-2014
CT	THOMASTON DAM	06-8330	15M	41.6931	-73.0600	538	NCEI	1971-2011
CT	THOMASTON DAM	06-8330	HLY	41.6931	-73.0600	538	NCEI	1961-2013
CT	THOMASTON DAM	06-8330	DLY	41.6931	-73.0600	538	NCEI	2011-2014
CT	TORRINGTON	06-8436	DLY	41.8000	-73.1167	580	NCEI	1948-2014
CT	TORRINGTON (1)	06-8438	DLY	41.8000	-73.1167	625	NCEI	1915-1924
CT	TORRINGTON 2	06-8441	DLY	41.8000	-73.1333	600	NCEI	1948-1960
CT	WATERBURY	06-8906	DLY	41.5500	-73.0333	341	NCEI	1893-1954
CT	WEST HARTFORD	06-9162	DLY	41.7500	-72.7833	275	NCEI	1948-2002
CT	WEST HARTLAND	06-9174	DLY	42.0000	-72.9667	1161	NCEI	1932-1964
CT	WEST THOMPSON LAKE	06-9388	15M	41.9442	-71.9031	370	NCEI	1971-2007
CT	WEST THOMPSON LAKE	06-9388	HLY	41.9442	-71.9031	370	NCEI	1965-2007
CT	WEST THOMPSON LAKE	06-9388	DLY	41.9442	-71.9031	370	NCEI	1965-2014
CT	WESTBROOK	06-9067	DLY	41.3000	-72.4333	39	NCEI	1940-1978
CT	WHIGVILLE RSVR	06-9508	DLY	41.7333	-72.9500	581	NCEI	1948-1975
CT	WIGWAM RSVR	06-9568	15M	41.6667	-73.1333	570	NCEI	1972-1980
CT	WILLIMANTIC	55-0104	HLY	41.7419	-72.1836	247	NCEI	1996-2014
CT	WILLIMANTIC	06-9592	DLY	41.7167	-72.2333	249	NCEI	1948-1959
CT	WOODBURY	06-9775	DLY	41.5536	-73.2297	650	NCEI	1966-2009
CT	WOODBURY 3 W	06-9783	DLY	41.5667	-73.2667	935	NCEI	1948-1965
MA	ADAMS	19-0049	DLY	42.6500	-73.1000	751	NCEI	1893-1978

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	AMHERST	19-0120	HLY	42.3861	-72.5375	142	NCEI	1948-2008
MA	AMHERST	19-0120	DLY	42.3861	-72.5375	142	NCEI	1893-2014
MA	AMHERST	52-0120	DLY	42.3861	-72.5375	142	FORTS	1849-1892
MA	ARLINGTON	19-0166	DLY	42.4167	-71.1833	180	NCEI	1943-1950
MA	ASHBURNHAM	19-0190	DLY	42.6178	-71.9158	1108	NCEI	1906-2014
MA	ASHFIELD	19-0213	DLY	42.5133	-72.8508	1340	NCEI	1978-2011
MA	ASHLAND	19-0218	DLY	42.2500	-71.4667	230	NCEI	1893-1969
MA	ATH404	96-0001	DLY	42.5861	-72.2431	514	MADCR	1966-2012
MA	ATHOL	19-0257	DLY	42.5833	-72.2167	850	NCEI	1930-1960
MA	ATT801	96-0002	DLY	41.9282	-71.3369	122	MADCR	1937-2013
MA	BAKER'S BRIDGE	19-0360	DLY	42.1000	-71.3333	187	NCEI	1905-1925
MA	BARRE FALLS DAM	19-0408	15M	42.4283	-72.0275	830	NCEI	1971-2008
MA	BARRE FALLS DAM	19-0408	HLY	42.4283	-72.0275	830	NCEI	1958-2008
MA	BARRE FALLS DAM	19-0408	DLY	42.4283	-72.0275	830	NCEI	1959-2014
MA	BECKET 2 SW	19-0510	HLY	42.3167	-73.1167	1592	NCEI	1973-1988
MA	BECKET 2 SW	19-0510	DLY	42.3167	-73.1167	1592	NCEI	1973-1987
MA	BEDFORD	19-0535	DLY	42.4833	-71.2833	160	NCEI	1957-2009
MA	BEDFORD	19-0538	DLY	42.4667	-71.2500	160	NCEI	1893-1923
MA	BEDFORD HANSCOM FLD	79-0014	DLY	42.4700	-71.2894	133	NCEI	1949-2014
MA	BEECHWOOD	19-0551	DLY	42.2333	-70.8167	62	NCEI	1936-1996
MA	BEL736	96-0003	DLY	42.0792	-71.4648	304	MADCR	1966-2013
MA	BELCHERTOWN	19-0562	DLY	42.2794	-72.3483	547	NCEI	1942-2014
MA	BELLINGHAM	19-0575	HLY	42.1000	-71.4833	270	NCEI	1978-2001
MA	BEVERLY MUNI AP	79-0033	DLY	42.5842	-70.9175	108	NCEI	1998-2014
MA	BIRCH HILL DAM	19-0666	HLY	42.6325	-72.1233	863	NCEI	1948-2010
MA	BIRCH HILL DAM	19-0666	DLY	42.6325	-72.1233	863	NCEI	1948-2014
MA	BLUE HILL	19-0736	HLY	42.2122	-71.1136	625	NCEI	1948-2013
MA	BLUE HILL	19-0736	DLY	42.2122	-71.1136	625	NCEI	1919-2014
MA	BORDEN BROOK RSVR	19-0759	DLY	42.1333	-72.9333	1110	NCEI	1969-1995
MA	BOSTON	19-0770	HLY	42.3606	-71.0106	12	NCEI	1892-2011
MA	BOSTON CITY WSO	19-0775	DLY	42.3500	-71.0667	20	NCEI	1939-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	BOSTON LOGAN INTL AP	19-0770	DLY	42.3606	-71.0106	12	NCEI	1939-2014
MA	BRI805	96-0004	DLY	41.9538	-70.9578	40	MADCR	1966-2013
MA	BRIDGEWATER	19-0840	15M	41.9539	-70.9572	40	NCEI	1971-2007
MA	BRIDGEWATER	19-0840	HLY	41.9539	-70.9572	40	NCEI	1956-2007
MA	BRIDGEWATER	19-0840	DLY	41.9539	-70.9572	40	NCEI	2007-2014
MA	BROCKTON	19-0860	DLY	42.0478	-71.0050	80	NCEI	1894-2014
MA	BUFFUMVILLE LAKE	19-0998	15M	42.1164	-71.9075	525	NCEI	1971-2008
MA	BUFFUMVILLE LAKE	19-0998	HLY	42.1164	-71.9075	525	NCEI	1958-2008
MA	BUFFUMVILLE LAKE	19-0998	DLY	42.1164	-71.9075	525	NCEI	1959-2014
MA	C9683	57-0008	HLY	42.5429	-71.0901	82	MESOWEST	2010-2014
MA	CAMBRIDGE	19-1097	HLY	42.3833	-71.1167	59	NCEI	1948-1958
MA	CAMBRIDGE	19-1097	DLY	42.3833	-71.1167	59	NCEI	1884-1951
MA	CAMBRIDGE 0.9 NNW	69-0126	DLY	42.3900	-71.1300	30	COCORAHS	2010-2012
MA	CAMBRIDGE MIT	19-1110	DLY	42.3667	-71.1000	19	NCEI	1931-1933
MA	CHARLTON 2	19-1344	DLY	42.1332	-71.9454	679	NCEI	1953-1956
MA	CHATHAM	19-1386	DLY	41.6569	-69.9589	40	NCEI	1972-2014
MA	CHATHAM LT STN	19-1376	DLY	41.6667	-69.9500	38	NCEI	1943-1971
MA	CHESTER	19-1425	DLY	42.2833	-72.9833	600	NCEI	1925-1957
MA	CHESTER 2	19-1430	DLY	42.3000	-72.9833	640	NCEI	1962-1988
MA	CHESTERFIELD	19-1436	DLY	42.3833	-72.8500	1345	NCEI	1925-2003
MA	CHESTNUT HILL	19-1447	DLY	42.3333	-71.1500	121	NCEI	1893-1986
MA	CLINTON	19-1561	DLY	42.4000	-71.6833	400	NCEI	1899-1985
MA	COLDBROOK	19-1589	DLY	42.3934	-72.0474	679	NCEI	1942-1959
MA	COLRAIN	19-1611	DLY	42.6728	-72.6970	625	NCEI	1975-1997
MA	CONCORD	19-1622	DLY	42.4500	-71.3667	141	NCEI	1893-1950
MA	COTUIT	19-1650	DLY	41.6167	-70.4333	60	NCEI	1885-1892
MA	CUMMINGTON HILL	19-1774	DLY	42.4667	-72.9333	1610	NCEI	1963-1994
MA	DIGHTON 1.1 WSW	69-0098	DLY	41.8100	-71.1400	62	COCORAHS	2009-2012
MA	DRACUT	19-1992	DLY	42.7000	-71.2833	269	NCEI	1971-1978
MA	DUNSTABLE	19-2026	DLY	42.6667	-71.5167	210	NCEI	1970-1990
MA	EAST	54-0129	DLY	42.3845	-71.2146	58	NADP	1982-2010

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	EAST BRIMFIELD LAKE	19-2107	HLY	42.1103	-72.1269	700	NCEI	1961-2008
MA	EAST BRIMFIELD LAKE	19-2107	DLY	42.1103	-72.1269	700	NCEI	1962-2014
MA	EAST GLOUCESTER	19-2150	DLY	42.6167	-70.6500	15	NCEI	1930-1946
MA	EAST PEPPERELL	19-2369	DLY	42.6667	-71.5667	210	NCEI	1955-1970
MA	EAST TEMPLETON	19-2420	DLY	42.5666	-72.0383	1200	NCEI	1893-1906
MA	EAST WAREHAM	19-2451	DLY	41.7653	-70.6697	30	NCEI	1912-2014
MA	EDGARTOWN	19-2501	HLY	41.3853	-70.5181	30	NCEI	1991-2013
MA	EDGARTOWN	19-2501	DLY	41.3853	-70.5181	30	NCEI	1946-2014
MA	FALL RIVER	19-2642	DLY	41.7167	-71.1333	190	NCEI	1893-1976
MA	FALMOUTH 3.0 E	69-0076	DLY	41.5500	-70.5500	10	COCORAHS	2009-2012
MA	FISKDALE	19-2770	DLY	42.1166	-72.1140	650	NCEI	1887-1900
MA	FITCHBURG "A"	19-2810	DLY	42.5945	-71.8240	700	NCEI	1893-1915
MA	FITCHBURG 4 SE	19-2806	DLY	42.5500	-71.7500	331	NCEI	1893-1978
MA	FITCHBURG MUNI AP	79-0007	DLY	42.5519	-71.7558	348	NCEI	1998-2014
MA	FORT INDEPENDENCE	52-2895	DLY	42.3361	-71.0119	12	FORTS	1820-1879
MA	FRAMINGHAM	19-2975	DLY	42.2833	-71.4167	171	NCEI	1893-1989
MA	FRANKLIN	19-2997	DLY	42.0792	-71.4094	250	NCEI	1926-2014
MA	GARDNER	19-3052	DLY	42.5833	-71.9833	1110	NCEI	1930-2002
MA	GILBERTVILLE	19-3110	DLY	42.2833	-72.2167	500	NCEI	1885-1895
MA	GLO615	96-0005	DLY	42.6110	-70.6801	6	MADCR	1966-2013
MA	GRE203	96-0014	DLY	42.5718	-72.5994	129	MADCR	1948-2005
MA	GREAT BARRINGTON	19-3208	DLY	42.2167	-73.3500	688	NCEI	1893-2011
MA	GREAT BARRINGTON 2N	19-3213	DLY	42.2167	-73.3500	688	NCEI	1973-2014
MA	GREENFIELD	19-3224	DLY	42.5833	-72.6000	185	NCEI	1929-1945
MA	GREENFIELD NO 3	19-3229	DLY	42.5719	-72.5975	130	NCEI	2005-2014
MA	GROTON	19-3270	DLY	42.6000	-71.5833	341	NCEI	1893-1974
MA	GROVELAND	19-3276	15M	42.7467	-71.0425	33	NCEI	1992-1997
MA	GROVELAND	19-3276	HLY	42.7467	-71.0425	33	NCEI	1992-2013
MA	GROVELAND	19-3276	DLY	42.7467	-71.0425	33	NCEI	1992-2014
MA	HAR910	96-0006	DLY	41.6826	-70.0526	61	MADCR	1966-2013
MA	HARDWICK	19-3401	DLY	42.3500	-72.2000	970	NCEI	1925-2007

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	HARDWICK 3 WSW	19-3405	DLY	42.3333	-72.2500	743	NCEI	1991-2002
MA	HARVARD FOREST	19-3429	HLY	42.5333	-72.1833	1240	NCEI	1948-1953
MA	HATCHVILLE	19-3471	DLY	41.6167	-70.5333	70	NCEI	1926-2000
MA	HAVERHILL	19-3505	DLY	42.7594	-71.0603	20	NCEI	1899-2014
MA	HEATH	19-3549	DLY	42.6667	-72.8167	1590	NCEI	1926-2002
MA	HINGHAM	19-3624	DLY	42.2269	-70.9125	35	NCEI	1960-2014
MA	HINGHAM (1)	19-3625	DLY	42.2167	-70.8833	60	NCEI	1885-1935
MA	HOBBS BROOK	19-3640	DLY	42.3667	-71.3333	220	NCEI	1894-1934
MA	HOLYOKE	19-3702	DLY	42.2000	-72.6000	98	NCEI	1902-2006
MA	HOOSAC TUNNEL	19-3713	DLY	42.6747	-72.9960	801	NCEI	1930-1973
MA	HUBBARDSTON	19-3772	DLY	42.4833	-72.0000	981	NCEI	1925-1980
MA	HYANNIS	19-3821	15M	41.6650	-70.3039	50	NCEI	1984-1999
MA	HYANNIS	19-3821	HLY	41.6650	-70.3039	50	NCEI	1948-2007
MA	HYANNIS	55-0160	HLY	41.6686	-70.2800	52	NCEI	1998-2014
MA	HYANNIS	19-3821	DLY	41.6650	-70.3039	50	NCEI	1893-2014
MA	IPSWICH	19-3876	DLY	42.6647	-70.8658	85	NCEI	1926-2009
MA	JAMAICA PLAIN	19-3890	DLY	42.3031	-71.1239	95	NCEI	1962-2014
MA	JEFFERSON	19-3931	DLY	42.3667	-71.9000	810	NCEI	1897-1959
MA	KENOZA LAKE	19-3946	DLY	42.8000	-71.0500	119	NCEI	1931-1945
MA	KEWB	78-0020	15M	41.6764	-70.9583	73	NCEI	2005-2014
MA	KHYA	78-0035	15M	41.6686	-70.2800	46	NCEI	2005-2014
MA	KLWM	78-0040	15M	42.7172	-71.1239	135	NCEI	2005-2014
MA	KMVY	78-0048	HLY	41.3931	-70.6150	56	NCEI	2002-2014
MA	KNIGHTVILLE DAM	19-3985	15M	42.2910	-72.8595	630	NCEI	1984-2000
MA	KNIGHTVILLE DAM	19-3985	HLY	42.2910	-72.8595	630	NCEI	1948-1996
MA	KNIGHTVILLE DAM	19-3985	DLY	42.2910	-72.8595	630	NCEI	1948-1997
MA	KPSF	78-0053	15M	42.4272	-73.2892	1147	NCEI	2005-2014
MA	LAKE COCHITUATE	19-4012	DLY	42.3167	-71.3833	151	NCEI	1885-1960
MA	LAWRENCE	19-4105	DLY	42.6992	-71.1658	50	NCEI	1893-2014
MA	LEE	19-4112	DLY	42.3000	-73.2333	942	NCEI	1921-1924
MA	LENOX DALE	19-4131	DLY	42.3356	-73.2506	1004	NCEI	1996-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	LEOMINSTER	19-4135	DLY	42.5333	-71.7667	540	NCEI	1884-1935
MA	LEXINGTON	19-4162	DLY	42.4500	-71.2000	200	NCEI	1951-1956
MA	LITTLEVILLE LAKE	19-4246	15M	42.2667	-72.8833	600	NCEI	1971-2004
MA	LITTLEVILLE LAKE	19-4246	HLY	42.2667	-72.8833	600	NCEI	1965-1996
MA	LOWELL	19-4313	DLY	42.6408	-71.3636	110	NCEI	1885-2014
MA	LUDLOW CENTER	19-4340	DLY	42.2000	-72.4833	380	NCEI	1885-1906
MA	LYNN	19-4360	DLY	42.4667	-70.9333	40	NCEI	1885-1900
MA	MANSFIELD	19-4449	DLY	42.0500	-71.2000	141	NCEI	1893-1986
MA	MARBLEHEAD	19-4502	DLY	42.5008	-70.8644	84	NCEI	1984-2014
MA	MAYNARD	79-0004	DLY	42.4167	-71.4833	207	NCEI	1961-1971
MA	MAYNARD 2	19-4580	DLY	42.4292	-71.4425	205	NCEI	1963-2014
MA	MENDON	19-4667	HLY	42.1000	-71.5667	449	NCEI	1948-1978
MA	MIDDLEBORO	19-4711	DLY	41.8819	-70.9086	52	NCEI	1893-2014
MA	MIDDLETON	19-4744	DLY	42.5947	-71.0208	90	NCEI	1925-2014
MA	MILFORD	19-4760	DLY	42.1619	-71.5117	270	NCEI	1885-2014
MA	MON323	96-0012	DLY	42.1321	-72.3113	324	MADCR	1966-2013
MA	MONSON	19-4875	DLY	42.3890	-72.3153	420	NCEI	1885-1911
MA	MONTAGUE CITY	19-4903	DLY	42.5833	-72.5833	100	NCEI	1936-1960
MA	MUDDY RIVER AT BROOKLINE	72-0004	15M	42.3373	-71.1112	10	USGS	1998-2011
MA	MUDDY RIVER AT BROOKLINE	72-0038	15M	42.3373	-71.1112	10	USGS	2007-2012
MA	NAN920	96-0007	DLY	41.2705	-70.0838	25	MADCR	1991-2000
MA	NANTUCKET	55-0065	HLY	41.2531	-70.0608	47	NCEI	1998-2014
MA	NANTUCKET FAA AP	19-5159	15M	41.2500	-70.0667	43	NCEI	2005-2013
MA	NANTUCKET FAA AP	19-5159	HLY	41.2500	-70.0667	43	NCEI	1948-1969
MA	NANTUCKET FAA AP	52-5159	DLY	41.2500	-70.0667	43	FORTS	1852-1892
MA	NANTUCKET MEM AP	19-5159	DLY	41.2531	-70.0608	45	NCEI	1948-2014
MA	NATICK	19-5175	DLY	42.2825	-71.3439	180	NCEI	1978-2014
MA	NEW BEDFORD	19-5246	HLY	41.6333	-70.9333	70	NCEI	1948-2006
MA	NEW BEDFORD	55-0165	HLY	41.6764	-70.9583	80	NCEI	1996-2014
MA	NEW BEDFORD	19-5246	DLY	41.6333	-70.9333	70	NCEI	1893-2002
MA	NEW BEDFORD MUNI AP	19-5251	DLY	41.6764	-70.9583	80	NCEI	1998-2014



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	NEW SALEM	19-5306	DLY	42.4500	-72.3333	845	NCEI	1897-1998
MA	NEWBURYPORT 4 NNW	19-5285	DLY	42.8633	-70.8997	85	NCEI	1893-2014
MA	NORTH ADAMS HARRIMAN AP	19-5430	DLY	42.7000	-73.1667	655	NCEI	1992-2014
MA	NORTH ATLANTIC COASTAL LA	54-0127	DLY	41.9759	-70.0241	187	NADP	1981-2013
MA	NORTH TRURO	19-5891	DLY	42.0333	-70.0667	138	NCEI	1886-1954
MA	NORTHBRIDGE	19-5514	DLY	42.1167	-71.6833	335	NCEI	1926-1964
MA	NORTHBRIDGE 2	19-5524	DLY	42.1150	-71.6758	315	NCEI	1964-2014
MA	NORTON WEST	19-5984	DLY	41.9928	-71.1667	95	NCEI	1913-2014
MA	NORWOOD MEM AP	19-6012	DLY	42.1908	-71.1736	50	NCEI	1998-2014
MA	NORWOOD MUNI AP	19-6012	15M	42.1833	-71.1833	50	NCEI	1972-1987
MA	NORWOOD MUNI AP	19-6013	15M	42.1833	-71.1833	50	NCEI	2005-2013
MA	NORWOOD RIVER GAGE	19-6004	DLY	42.1833	-71.2000	140	NCEI	1931-1972
MA	OTI111	96-0015	DLY	42.1752	-73.1462	1349	MADCR	1932-2003
MA	OTI115	96-0016	DLY	42.1608	-73.0578	1437	MADCR	2000-2004
MA	PEABODY	19-6245	DLY	42.5333	-70.9833	170	NCEI	1967-1995
MA	PELHAM	19-6251	DLY	42.4000	-72.4000	1102	NCEI	1948-1988
MA	PEMBROKE	19-6262	DLY	42.0167	-70.8167	69	NCEI	1927-1988
MA	PEPPERELL	19-6286	DLY	42.6667	-71.5333	210	NCEI	1990-1996
MA	PERU	19-6311	DLY	42.4144	-73.0638	1831	NCEI	1930-1967
MA	PETERSHAM 3 N	19-6322	15M	42.5333	-72.1833	1090	NCEI	1971-1997
MA	PETERSHAM 3 N	19-6322	HLY	42.5333	-72.1833	1090	NCEI	1954-1997
MA	PETERSHAM 3 N	19-6322	DLY	42.5333	-72.1833	1090	NCEI	1913-1996
MA	PITTSFIELD	55-0069	HLY	42.4272	-73.2892	1194	NCEI	1999-2014
MA	PITTSFIELD	19-6409	DLY	42.4500	-73.2500	1040	NCEI	1894-1948
MA	PITTSFIELD MUNI AP	19-6414	DLY	42.4272	-73.2892	1194	NCEI	1925-2014
MA	PITTSFIELD WB AP	19-6414	HLY	42.4333	-73.2833	1083	NCEI	1948-1970
MA	PLAINFIELD	19-6425	DLY	42.5167	-72.9167	1620	NCEI	1930-1990
MA	PLAINFIELD 2	19-6435	DLY	42.5237	-72.9155	1780	NCEI	1990-2004
MA	PLYMOUTH-KINGSTON	19-6486	DLY	41.9819	-70.6961	45	NCEI	1893-2014
MA	PRINCETON	19-6644	DLY	42.4500	-71.8667	1040	NCEI	1896-1959
MA	PRINCETON	52-6644	DLY	42.4500	-71.8667	1040	FORTS	1833-1886

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	PROVINCETOWN	19-6681	15M	42.0500	-70.1833	20	NCEI	1984-2005
MA	PROVINCETOWN	19-6681	HLY	42.0500	-70.1833	20	NCEI	1954-2004
MA	PROVINCETOWN	19-6681	DLY	42.0500	-70.1833	20	NCEI	1958-1992
MA	PROVINCETOWN 3 NW	19-6676	DLY	42.0833	-70.2167	39	NCEI	1893-1958
MA	PROVINCETOWN 3 NW	52-6676	DLY	42.0833	-70.2167	39	FORTS	1882-1892
MA	QUABBIN INTAKE	19-6699	DLY	42.3667	-72.2833	550	NCEI	1948-1990
MA	QUABBIN RESERVOIR	54-0128	DLY	42.3925	-72.3444	1004	NADP	1982-2013
MA	READING	19-6783	HLY	42.5242	-71.1264	83	NCEI	2009-2013
MA	READING	19-6783	DLY	42.5242	-71.1264	83	NCEI	1960-2014
MA	ROBERTS DAM	19-6915	DLY	42.3667	-71.2667	75	NCEI	1889-1930
MA	ROCHESTER	19-6938	DLY	41.7850	-70.9175	65	NCEI	1900-2014
MA	ROCKPORT 1 ESE	19-6977	HLY	42.6500	-70.6000	79	NCEI	1948-1983
MA	ROCKPORT 1 ESE	19-6977	DLY	42.6500	-70.6000	79	NCEI	1902-1983
MA	RUT417	96-0017	DLY	42.3597	-71.9888	844	MADCR	1932-2003
MA	RUTLAND	19-7104	DLY	42.3948	-71.9575	1160	NCEI	1902-1929
MA	SALEM "B"	19-7122	DLY	42.5167	-70.9000	40	NCEI	1885-1909
MA	SALEM CG AIR STN	19-7124	DLY	42.5333	-70.8667	30	NCEI	1948-1966
MA	SEGREGANSET	19-7293	DLY	41.8333	-71.1167	39	NCEI	1941-1980
MA	SHELBURNE FALLS	19-7370	DLY	42.6167	-72.7333	449	NCEI	1930-1977
MA	SOMERSET (1)	19-7475	DLY	41.7667	-71.1333	40	NCEI	1893-1922
MA	SOUTH EGREMONT	19-7692	DLY	42.1500	-73.4500	840	NCEI	1902-1973
MA	SOUTH WEYMOUTH NAS	79-0028	DLY	42.1500	-70.9333	161	NCEI	1945-1996
MA	SOUTHBRIDGE 3 SW	19-7627	DLY	42.0583	-72.0722	685	NCEI	1926-2014
MA	SPOT POND	19-8030	DLY	42.4500	-71.0833	171	NCEI	1904-1977
MA	SPRINGFIELD	19-8046	DLY	42.1000	-72.5833	190	NCEI	1893-1984
MA	STATE FARM	19-8101	HLY	41.9500	-70.9500	79	NCEI	1948-1956
MA	STATE FARM	19-8101	DLY	41.9500	-70.9500	79	NCEI	1948-2007
MA	STERLING	19-8154	DLY	42.4500	-71.8167	480	NCEI	1896-1985
MA	STERLING 2 NNW	19-8159	HLY	42.4576	-71.7761	722	NCEI	1948-1972
MA	STERLING JCT 2 WNW	19-8164	HLY	42.4167	-71.8000	489	NCEI	1979-1982
MA	STO109	96-0008	DLY	42.2935	-73.3250	825	MADCR	1966-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	STOCKBRIDGE	19-8181	DLY	42.3000	-73.3333	860	NCEI	1929-1985
MA	STOCKBRIDGE .2 NNE	69-0085	DLY	42.2900	-73.3200	817	COCORAHS	2010-2012
MA	STONY BROOK	19-8218	DLY	42.3667	-71.2667	58	NCEI	1929-1934
MA	SUNDERLAND	19-8278	DLY	42.4444	-72.5528	225	NCEI	1978-2014
MA	SWAMPSCOTT	19-8301	DLY	42.4667	-70.9000	20	NCEI	1929-1957
MA	TAUNTON	19-8367	DLY	41.9003	-71.0658	20	NCEI	1893-2007
MA	TAUNTON MUNI AP	79-0042	DLY	41.8756	-71.0211	43	NCEI	1998-2014
MA	TAUNTON NO. 163	19-8374	DLY	41.9000	-71.0833	41	NCEI	1885-1892
MA	TIS906	96-0009	DLY	41.4466	-70.6202	81	MADCR	1966-2013
MA	TULLY LAKE	19-8573	DLY	42.6400	-72.2244	685	NCEI	1949-2014
MA	TURNERS FALLS	19-8580	DLY	42.6167	-72.5500	190	NCEI	1892-1977
MA	VINEYARD HAVEN 0.6 ESE	69-0100	DLY	41.4500	-70.6100	92	COCORAHS	2009-2012
MA	WAKEFIELD	19-8740	DLY	42.5000	-71.0667	110	NCEI	1890-1897
MA	WALPOLE	19-8755	DLY	42.1667	-71.2333	171	NCEI	1948-1972
MA	WALPOLE 1 SSE	19-8760	DLY	42.1333	-71.2500	200	NCEI	1951-1959
MA	WALPOLE 2	19-8757	DLY	42.1608	-71.2461	165	NCEI	1972-2014
MA	WALTHAM	19-8770	DLY	42.0333	-71.2833	40	NCEI	1885-1913
MA	WARE	19-8793	DLY	42.2622	-72.2483	400	NCEI	1937-2014
MA	WARE 2	19-8798	DLY	42.2667	-72.2667	502	NCEI	1930-1960
MA	WASHINGTON	19-8842	HLY	42.3667	-73.1333	1801	NCEI	1948-1951
MA	WASHINGTON 2	19-8843	HLY	42.3667	-73.1500	1962	NCEI	1951-1973
MA	WASHINGTON 2	19-8843	DLY	42.3667	-73.1500	1962	NCEI	1951-1973
MA	WEBSTER	19-8918	DLY	42.0500	-71.8833	469	NCEI	1893-1959
MA	WES219	96-0013	DLY	42.0931	-72.8035	426	MADCR	1994-2014
MA	WES221	96-0010	DLY	42.1248	-72.6831	142	MADCR	1966-2013
MA	WEST BRIMFIELD	19-9093	15M	42.1667	-72.2667	375	NCEI	1979-2007
MA	WEST BRIMFIELD	19-9093	HLY	42.1667	-72.2667	375	NCEI	1948-2005
MA	WEST CUMMINGTON	19-9136	DLY	42.4906	-72.9670	1191	NCEI	1941-1963
MA	WEST FALMOUTH	19-9175	DLY	41.6000	-70.6333	10	NCEI	1976-1982
MA	WEST GRANVILLE	19-9219	DLY	42.0833	-72.9333	1332	NCEI	1964-1968
MA	WEST GRANVILLE	19-9221	DLY	42.0648	-72.9379	1070	NCEI	1990-1996

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
MA	WEST GROTON	19-9226	DLY	42.6167	-71.6333	341	NCEI	1974-1986
MA	WEST MEDWAY	19-9316	DLY	42.1333	-71.4333	210	NCEI	1957-2005
MA	WEST OTIS	19-9371	DLY	42.1752	-73.1462	1295	NCEI	1926-2014
MA	WEST RUTLAND	19-9442	DLY	42.3667	-71.9833	860	NCEI	1927-1959
MA	WEST STERLING	19-9463	HLY	42.4500	-71.8167	512	NCEI	1972-1978
MA	WESTBORO	19-9080	DLY	42.2667	-71.6333	298	NCEI	1893-1925
MA	WESTFIELD	19-9191	DLY	42.1333	-72.7500	120	NCEI	1926-1995
MA	WESTFIELD 3 SW	19-9193	DLY	42.0931	-72.8036	430	NCEI	2007-2014
MA	WESTON	19-9360	DLY	42.3833	-71.3167	220	NCEI	1896-1968
MA	WILLIAMSTOWN	19-9731	DLY	42.7167	-73.2000	711	NCEI	1885-1947
MA	WILLIAMSTOWN	52-9730	DLY	42.7119	-73.2056	725	FORTS	1816-1892
MA	WINCHENDON	19-9770	DLY	42.7000	-72.0833	860	NCEI	1893-1963
MA	WINCHENDON 2	19-9780	DLY	42.6833	-72.0500	1020	NCEI	1963-1986
MA	WOODS HOLE 2 NE	19-9893	DLY	41.5500	-70.6500	40	NCEI	1964-1975
MA	WOODS HOLE GOLF CLUB	19-9891	DLY	41.5317	-70.6617	85	NCEI	2011-2014
MA	WORCESTER	19-9923	HLY	42.2706	-71.8731	1000	NCEI	1948-2013
MA	WORCESTER	55-0173	HLY	42.2706	-71.8731	1017	NCEI	1996-2014
MA	WORCESTER	19-9928	DLY	42.3000	-71.8167	620	NCEI	1892-1962
MA	WORCESTER RGNL AP	19-9923	DLY	42.2706	-71.8731	1000	NCEI	2014-2014
MA	WORTHINGTON	19-9972	DLY	42.3869	-72.9211	1285	NCEI	1994-2014
ME	ACADIA NP	17-0100	15M	44.3739	-68.2592	470	NCEI	1982-2011
ME	ACADIA NP	17-0100	HLY	44.3739	-68.2592	470	NCEI	1982-2013
ME	ACADIA NP	17-0100	DLY	44.3739	-68.2592	470	NCEI	1982-2014
ME	ALLAGASH	17-0200	15M	47.0886	-69.0250	596	NCEI	1975-2011
ME	ALLAGASH	17-0200	HLY	47.0886	-69.0250	596	NCEI	1975-2013
ME	ALLAGASH	17-0200	DLY	47.0886	-69.0250	596	NCEI	1986-2014
ME	ANDOVER 2	17-0217	DLY	44.6528	-70.7928	830	NCEI	2002-2014
ME	AUGUSTA	17-0273	15M	44.3008	-69.7778	35	NCEI	1971-2011
ME	AUGUSTA	17-0273	HLY	44.3008	-69.7778	35	NCEI	1952-2013
ME	AUGUSTA	55-0029	HLY	44.3155	-69.7972	360	NCEI	2001-2014
ME	AUGUSTA (1)	17-0272	DLY	44.3000	-69.7833	134	NCEI	1913-1915

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	AUGUSTA FAA AP	17-0275	15M	44.3206	-69.7972	350	NCEI	2005-2013
ME	AUGUSTA FAA AP	17-0275	HLY	44.3206	-69.7972	350	NCEI	1948-1952
ME	AUGUSTA STATE AP	17-0275	DLY	44.3156	-69.7972	351	NCEI	1998-2014
ME	BANGOR	17-0350	DLY	44.8000	-68.8000	59	NCEI	1925-1953
ME	BANGOR INTL AP	17-0355	DLY	44.7978	-68.8186	148	NCEI	1998-2014
ME	BAR HARBOR 3 NW	17-0371	DLY	44.4167	-68.2500	112	NCEI	1893-1982
ME	BAR HARBOR 3 NW	52-0371	DLY	44.4167	-68.2500	112	FORTS	1849-1870
ME	BELFAST	17-0480	DLY	44.4394	-68.9892	30	NCEI	1893-2014
ME	BINGHAM WYMAN DAM	17-0600	DLY	45.0706	-69.9044	400	NCEI	1957-2014
ME	BLANCHARD	17-0655	DLY	45.2669	-69.5839	600	NCEI	1978-2008
ME	BLANCHARD	73-0015	DLY	45.2675	-69.5836	591	USGS	1997-2012
ME	BRASSUA DAM	17-0814	DLY	45.6603	-69.8120	1060	NCEI	1929-2014
ME	BRIDGEWATER	17-0833	DLY	46.4283	-67.8442	420	NCEI	1957-2014
ME	BRIDGTON	54-0131	DLY	44.1075	-70.7289	728	NADP	1980-2013
ME	BRIDGTON 3 NW	17-0844	DLY	44.0697	-70.7467	560	NCEI	1955-2014
ME	BRUNSWICK NAS	17-0934	DLY	43.9000	-69.9333	70	NCEI	1940-2010
ME	CALAIS	17-1100	DLY	45.1831	-67.2642	120	NCEI	1888-1902
ME	CARIBOU MUNI AP	17-1175	DLY	46.8706	-68.0172	624	NCEI	2011-2014
ME	CARIBOU WFO	17-1175	HLY	46.8706	-68.0172	624	NCEI	1948-2013
ME	CLAYTON LAKE	17-1472	HLY	46.6108	-69.5231	1000	NCEI	1948-2013
ME	CLAYTON LAKE	55-0149	HLY	46.6167	-69.5333	1031	NCEI	2005-2014
ME	CLAYTON LAKE	17-1472	DLY	46.6108	-69.5231	1000	NCEI	1948-2011
ME	COMSTOCK	17-1516	DLY	45.9333	-70.0000	1120	NCEI	1989-1996
ME	CORINNA	17-1628	DLY	44.9197	-69.2417	297	NCEI	1947-2014
ME	CORNISH	17-1670	DLY	43.7793	-70.7980	784	NCEI	1892-1924
ME	CORNISH	52-1670	DLY	43.8000	-70.8000	784	FORTS	1857-1892
ME	DANFORTH	17-1833	DLY	45.6611	-67.8614	475	NCEI	1978-2008
ME	DANFORTH (1)	17-1835	DLY	45.6588	-67.8687	386	NCEI	1902-1936
ME	DOVER-FOXCROFT WWTP	17-1975	DLY	45.1872	-69.1839	370	NCEI	1973-2014
ME	EAST DOVER	17-2207	DLY	45.1833	-69.1667	420	NCEI	1969-1973
ME	EAST HIRAM	17-2238	DLY	43.8786	-70.7539	528	NCEI	1970-2009

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	EAST SANGERVILLE 5 SE	17-2442	DLY	45.1333	-69.2833	541	NCEI	1947-1969
ME	EAST SURRY	17-2443	DLY	44.4933	-68.4583	105	NCEI	2011-2014
ME	EAST WINTHROP	17-2539	DLY	44.3167	-69.9000	171	NCEI	1931-1959
ME	EASTPORT	17-2426	HLY	44.9067	-66.9919	85	NCEI	1953-2008
ME	EASTPORT	17-2426	DLY	44.9067	-66.9919	85	NCEI	1889-2011
ME	EASTPORT	52-2426	DLY	44.9000	-66.9833	30	FORTS	1873-1892
ME	ELIOT	17-2602	DLY	43.1025	-70.7731	20	NCEI	1992-2014
ME	ELLSWORTH	17-2620	DLY	44.5333	-68.4333	20	NCEI	1910-1995
ME	ELLSWORTH 3SSW	17-2623	DLY	44.4933	-68.4583	105	NCEI	2002-2011
ME	EUSTIS	17-2700	HLY	45.2172	-70.4825	1260	NCEI	1948-1984
ME	EUSTIS	17-2700	DLY	45.2172	-70.4825	1260	NCEI	1948-2014
ME	EUSTIS 2 SSE	17-2695	DLY	45.1946	-70.4555	1161	NCEI	1910-1948
ME	EUSTIS 7 NW	17-2705	HLY	45.2833	-70.5833	1240	NCEI	1955-1961
ME	FAIRFIELD	17-2740	DLY	44.5833	-69.5833	90	NCEI	1886-1914
ME	FARMINGTON	17-2765	DLY	44.6889	-70.1567	420	NCEI	1893-2014
ME	FLAGSTAFF	17-2805	DLY	45.2167	-70.2000	1253	NCEI	1895-1901
ME	FRYEBURG	17-3026	15M	44.0167	-70.9825	425	NCEI	1992-1998
ME	FRYEBURG	17-3026	HLY	44.0167	-70.9825	425	NCEI	1992-1998
ME	FRYEBURG	55-0109	HLY	43.9906	-70.9475	452	NCEI	1996-2014
ME	FRYEBURG E SLOPES AP	79-0040	DLY	43.9906	-70.9475	445	NCEI	1998-2014
ME	FT FAIRFIELD 5 NE	17-2868	DLY	46.7732	-67.8371	302	NCEI	1896-1980
ME	FT KENT	17-2878	15M	47.2386	-68.6136	610	NCEI	1975-2011
ME	FT KENT	17-2878	HLY	47.2386	-68.6136	610	NCEI	1953-2013
ME	FT KENT	17-2878	DLY	47.2386	-68.6136	610	NCEI	1893-2014
ME	GARDINER	17-3046	DLY	44.2203	-69.7889	140	NCEI	1886-2014
ME	GILEAD	17-3110	DLY	44.4000	-70.9667	702	NCEI	1943-1965
ME	GILEAD	54-0133	DLY	44.4003	-71.0098	696	NADP	1999-2013
ME	GRAND LAKE MATAGAMON	17-3250	15M	46.1411	-68.7906	660	NCEI	1975-2011
ME	GRAND LAKE MATAGAMON	17-3250	HLY	46.1411	-68.7906	660	NCEI	1975-2013
ME	GRAND LAKE STREAM	17-3261	15M	45.1775	-67.7742	290	NCEI	1984-2011
ME	GRAND LAKE STREAM	17-3261	HLY	45.1775	-67.7742	290	NCEI	1948-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	GRAND LAKE STREAM	17-3261	DLY	45.1775	-67.7742	290	NCEI	1948-2014
ME	GREENVILLE	17-3353	HLY	45.4667	-69.5833	1029	NCEI	1948-1975
ME	GREENVILLE	55-0152	HLY	45.4622	-69.5953	1387	NCEI	1998-2014
ME	GREENVILLE	17-3353	DLY	45.4667	-69.5833	1029	NCEI	1920-2014
ME	GREENVILLE STATION	54-0134	DLY	45.4891	-69.6647	1056	NADP	1979-2013
ME	GUILFORD	17-3417	DLY	45.1703	-69.3817	400	NCEI	1978-2014
ME	HARMONY	17-3567	DLY	44.9442	-69.5458	320	NCEI	1978-2014
ME	HARRIS STN	17-3588	DLY	45.4590	-69.8648	830	NCEI	1969-2014
ME	HIRAM	17-3794	DLY	43.8833	-70.8000	361	NCEI	1965-1970
ME	HIRAM 2 S	17-3800	DLY	43.8529	-70.7952	289	NCEI	1925-1965
ME	HOULTON	17-3897	HLY	46.1333	-67.8333	410	NCEI	1948-1985
ME	HOULTON	17-3897	DLY	46.1333	-67.8333	410	NCEI	1893-1985
ME	HOULTON 5N	17-3944	15M	46.2061	-67.8417	390	NCEI	1985-2011
ME	HOULTON 5N	17-3944	HLY	46.2061	-67.8417	390	NCEI	1985-2013
ME	HOULTON 5N	17-3944	DLY	46.2061	-67.8417	390	NCEI	1985-2014
ME	HOULTON AP	17-3892	HLY	46.1236	-67.7928	476	NCEI	1948-2013
ME	HOULTON AP	52-3892	DLY	46.1236	-67.7928	476	FORTS	1828-1871
ME	HOULTON INTL AP	17-3892	DLY	46.1236	-67.7928	476	NCEI	1886-2014
ME	JACKMAN	17-4086	15M	45.6233	-70.2550	1190	NCEI	1975-2011
ME	JACKMAN	17-4086	HLY	45.6233	-70.2550	1190	NCEI	1975-2013
ME	JACKMAN	17-4086	DLY	45.6233	-70.2550	1190	NCEI	1894-2014
ME	JONESBORO	17-4183	DLY	44.6439	-67.6475	185	NCEI	1948-2008
ME	KENNEBUNKPORT	17-4193	DLY	43.3606	-70.4697	20	NCEI	1989-2014
ME	KGNR	78-0029	15M	45.4622	-69.5953	1033	NCEI	2005-2014
ME	KINEO	17-4290	DLY	45.6950	-69.7308	1060	NCEI	1895-1903
ME	KINGFIELD	17-4324	DLY	44.9656	-70.1711	630	NCEI	1978-2014
ME	KINGSBURY	73-0020	DLY	45.1181	-69.6467	914	USGS	1997-2012
ME	KIZG	78-0039	15M	43.9906	-70.9475	445	NCEI	2005-2014
ME	KMLT	78-0043	15M	45.6477	-68.6925	406	NCEI	2005-2014
ME	LAC FRONTIERE	17-4420	DLY	46.6962	-69.9942	1201	NCEI	1942-1952
ME	LEWISTON	17-4566	DLY	44.1000	-70.2167	180	NCEI	1893-2010

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	LIMESTONE 4 NNW	17-4630	DLY	46.9600	-67.8833	737	NCEI	2002-2014
ME	LIMESTONE LORING AFB	79-0011	DLY	46.9500	-67.8833	751	NCEI	1950-1970
ME	LONG FALLS DAM	17-4781	DLY	45.2219	-70.1983	1160	NCEI	1953-2014
ME	MACHIAS	17-4878	DLY	44.7200	-67.4539	20	NCEI	1893-2014
ME	MADISON	17-4927	DLY	44.7983	-69.8878	260	NCEI	1894-2014
ME	MAYFIELD	17-5070	DLY	45.1333	-69.6833	1374	NCEI	1885-1908
ME	MCFARLAND HILL	76-0003	HLY	44.3769	-68.2608	424	RAWS	2002-2013
ME	MIDDLE DAM	17-5261	DLY	44.7931	-70.9167	1460	NCEI	1926-2014
ME	MILLINOCKET	17-5304	15M	45.6503	-68.7050	360	NCEI	1975-2009
ME	MILLINOCKET	17-5304	HLY	45.6503	-68.7050	360	NCEI	1953-2009
ME	MILLINOCKET	55-0033	HLY	45.6477	-68.6925	402	NCEI	1996-2014
ME	MILLINOCKET	17-5304	DLY	45.6503	-68.7050	360	NCEI	1902-2010
ME	MILLINOCKET FAA AP	17-5309	HLY	45.6500	-68.6833	407	NCEI	1948-1955
ME	MILO	17-5347	15M	45.2564	-69.0100	420	NCEI	1975-2011
ME	MILO	17-5347	HLY	45.2564	-69.0100	420	NCEI	1975-2013
ME	MILO	17-5347	DLY	45.2564	-69.0100	420	NCEI	1921-2014
ME	MOOSEHEAD	17-5460	DLY	45.5869	-69.7161	1028	NCEI	1930-2014
ME	NEWCASTLE	17-5675	DLY	44.0461	-69.5367	190	NCEI	1965-2014
ME	NORTH ANDOVER	17-5805	DLY	44.6500	-70.7833	741	NCEI	1948-1951
ME	NORTH BRIDGTON	17-5875	DLY	44.1333	-70.7167	449	NCEI	1893-1953
ME	OLD TOWN	17-6420	DLY	44.9333	-68.6500	112	NCEI	1921-1956
ME	OLD TOWN 2 W	17-6426	DLY	44.9281	-68.7006	127	NCEI	2002-2014
ME	OLD TOWN FAA AP	17-6425	DLY	44.9500	-68.6667	135	NCEI	1948-1972
ME	ORONO	17-6430	DLY	44.8992	-68.6744	115	NCEI	1893-2005
ME	ORONO 2	17-6435	15M	44.8783	-68.6689	58	NCEI	1973-2011
ME	ORONO 2	17-6435	HLY	44.8783	-68.6689	58	NCEI	1954-2013
ME	PATTEN	17-6585	DLY	46.0167	-68.4500	702	NCEI	1962-1963
ME	PATTEN	17-6597	DLY	46.0334	-68.4577	1000	NCEI	1902-1930
ME	PATTEN	17-6599	DLY	46.0000	-68.4500	600	NCEI	1985-1991
ME	PATTEN 1 S	17-6593	DLY	45.9833	-68.4500	801	NCEI	1965-1974
ME	PATTEN 2	17-6594	DLY	46.0267	-68.5000	760	NCEI	1992-2014



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	PATTEN 2.9 WNW	69-0333	DLY	46.0000	-68.5100	666	COCORAHS	2010-2012
ME	PATTEN 4 WSW	17-6595	DLY	45.9667	-68.5333	771	NCEI	1974-1980
ME	PHILLIPS	17-6705	DLY	44.8167	-70.3500	600	NCEI	1978-2000
ME	PHILLIPS 2	17-6707	DLY	44.8297	-70.3936	1020	NCEI	2002-2014
ME	PITTSTON FARM	17-6721	DLY	45.8944	-69.9647	1100	NCEI	1996-2014
ME	PORTLAND	55-0070	HLY	43.6497	-70.3002	63	NCEI	1996-2014
ME	PORTLAND	17-6900	DLY	43.6667	-70.2500	66	NCEI	1946-1972
ME	PORTLAND	17-6902	DLY	43.6500	-70.2500	26	NCEI	1871-1940
ME	PORTLAND	52-6900	DLY	43.6667	-70.2500	66	FORTS	1851-1892
ME	PORTLAND INTL JETPORT	17-6905	DLY	43.6497	-70.3003	45	NCEI	2002-2014
ME	PORTLAND JETPORT	17-6905	HLY	43.6497	-70.3003	45	NCEI	1948-2013
ME	PRESQUE ISLE	17-6937	DLY	46.6539	-68.0089	599	NCEI	1909-2014
ME	RANGELEY	17-7037	DLY	44.9678	-70.6433	1530	NCEI	1969-2014
ME	RIPOGENUS DAM	17-7174	DLY	45.8833	-69.1833	965	NCEI	1925-2006
ME	RMFM1	57-0001	15M	44.5519	-70.5442	419	MESOWEST	2007-2014
ME	ROCKLAND	17-7255	15M	44.1022	-69.1169	35	NCEI	1972-2011
ME	ROCKLAND	17-7255	HLY	44.1022	-69.1169	35	NCEI	1948-2013
ME	ROCKLAND	55-0148	HLY	44.0667	-69.1000	55	NCEI	2002-2014
ME	ROCKLAND	17-7250	DLY	44.1000	-69.1167	39	NCEI	1937-1976
ME	RUMFORD	17-7330	HLY	44.5500	-70.5500	505	NCEI	1948-1965
ME	RUMFORD	17-7330	DLY	44.5500	-70.5500	505	NCEI	1899-1959
ME	RUMFORD 1 SSE	17-7325	15M	44.5308	-70.5372	630	NCEI	1975-2009
ME	RUMFORD 1 SSE	17-7325	HLY	44.5308	-70.5372	630	NCEI	1948-2009
ME	RUMFORD 1 SSE	17-7325	DLY	44.5308	-70.5372	630	NCEI	1948-2009
ME	SACO	17-7349	DLY	43.5000	-70.4500	79	NCEI	1965-1981
ME	SANFORD 2 NNW	17-7479	DLY	43.4569	-70.7803	280	NCEI	1953-2014
ME	SKOWHEGAN	17-7827	15M	44.7639	-69.7194	165	NCEI	1971-2011
ME	SKOWHEGAN	17-7827	HLY	44.7639	-69.7194	165	NCEI	1948-2013
ME	SKOWHEGAN	17-7827	DLY	44.7639	-69.7194	165	NCEI	1887-2014
ME	SOUTH ANDOVER	17-7940	DLY	44.5833	-70.7333	659	NCEI	1943-1976
ME	SOUTHWEST HARBOR 3 SSE	17-8301	HLY	44.2333	-68.3000	20	NCEI	1948-1980

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
ME	SPRINGFIELD	17-8353	DLY	45.4000	-68.1667	440	NCEI	1964-1998
ME	SQUA PAN DAM	17-8398	DLY	46.5500	-68.3333	610	NCEI	1927-1999
ME	SWANS FALLS	17-8641	15M	44.0333	-70.9833	400	NCEI	1975-1992
ME	SWANS FALLS	17-8641	HLY	44.0333	-70.9833	400	NCEI	1948-1991
ME	THE FORKS	17-8721	DLY	45.3363	-69.9667	600	NCEI	1902-1968
ME	THE FORKS	73-0026	DLY	45.3368	-69.9670	591	USGS	1996-2011
ME	UPPER DAM	17-8942	DLY	44.8828	-70.8619	1480	NCEI	1948-2014
ME	VAN BUREN	17-8963	DLY	47.1500	-67.9333	510	NCEI	1902-1935
ME	VAN BUREN 2	17-8965	DLY	47.1664	-67.9397	456	NCEI	1963-2014
ME	VANCEBORO	17-8969	DLY	45.5667	-67.4333	459	NCEI	1902-1950
ME	VANCEBORO	73-0027	DLY	45.5681	-67.4292	401	USGS	2004-2012
ME	VANCEBORO NO 2	17-8974	DLY	45.5608	-67.4303	420	NCEI	1965-2009
ME	WATERVILLE TRTMT PLT	17-9151	DLY	44.5272	-69.6544	73	NCEI	1958-2014
ME	WATERVILLE WWTP	17-9826	DLY	44.5500	-69.6333	89	NCEI	1895-1958
ME	WEST BUXTON 2 NNW	17-9314	DLY	43.6878	-70.6128	220	NCEI	1953-2011
ME	WEST ROCKPORT	17-9591	DLY	44.1833	-69.1500	331	NCEI	1926-1935
ME	WEST ROCKPORT 1 NNW	17-9593	DLY	44.1925	-69.1461	380	NCEI	1976-2014
ME	WOODLAND	17-9891	DLY	45.1569	-67.4044	140	NCEI	1917-2014
NH	ALEXANDRIA	27-0038	DLY	43.6500	-71.8667	1371	NCEI	1938-1954
NH	ALEXANDRIA 4	27-0045	DLY	43.6427	-71.8101	1160	NCEI	1996-2014
NH	ALSTEAD CENTER	27-0090	DLY	43.1173	-72.3294	1120	NCEI	1893-1922
NH	ALTON	27-0100	DLY	43.4333	-71.2500	720	NCEI	1977-1986
NH	BATH 2 SW	27-0496	DLY	44.1532	-71.9867	489	NCEI	1938-1957
NH	BATH 3	27-0493	DLY	44.1511	-71.9681	650	NCEI	2009-2014
NH	BELMONT	27-0620	DLY	43.4470	-71.4775	600	NCEI	1890-1896
NH	BENTON	27-0675	DLY	44.1000	-71.8833	1312	NCEI	1940-1964
NH	BENTON 5 SW	27-0681	DLY	44.0342	-71.9486	1200	NCEI	1965-2014
NH	BERLIN	27-0690	DLY	44.4486	-71.1842	930	NCEI	1886-2014
NH	BETHLEHEM	27-0703	DLY	44.2833	-71.6833	1380	NCEI	1893-1991
NH	BETHLEHEM 2	27-0706	DLY	44.3064	-71.6575	1180	NCEI	1992-2014
NH	BLACKWATER DAM	27-0741	15M	43.3167	-71.7167	600	NCEI	1971-1992

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NH	BLACKWATER DAM	27-0741	HLY	43.3167	-71.7167	600	NCEI	1948-1992
NH	BLACKWATER DAM	27-0741	DLY	43.3167	-71.7167	600	NCEI	1948-1991
NH	BRADFORD	27-0910	DLY	43.2586	-71.9800	940	NCEI	1938-1998
NH	BRADFORD 2	27-0913	DLY	43.2581	-72.0028	827	NCEI	1998-2014
NH	BRISTOL	27-0998	15M	43.5889	-71.7361	470	NCEI	1973-2011
NH	BRISTOL	27-0998	HLY	43.5889	-71.7361	470	NCEI	1948-2013
NH	BRISTOL	27-0998	DLY	43.5889	-71.7361	470	NCEI	1938-1951
NH	BROOKLINE	27-1020	DLY	42.7333	-71.6833	300	NCEI	1892-1918
NH	CANNON MTN	27-1187	DLY	44.1581	-71.6986	4003	NCEI	1952-1974
NH	CENTER HARBOR	27-1338	DLY	43.7151	-71.4810	902	NCEI	1948-1952
NH	CENTER HARBOR	27-1339	DLY	43.7167	-71.4667	659	NCEI	1952-1973
NH	CLAREMONT JUNCTION	27-1552	DLY	43.3667	-72.3833	430	NCEI	1897-1973
NH	COLEBROOK 3SW	27-1647	DLY	44.8611	-71.5400	1120	NCEI	1960-2014
NH	CONCORD	27-1682	DLY	43.2000	-71.5333	289	NCEI	1868-1941
NH	CONCORD ASOS	27-1683	HLY	43.1953	-71.5011	346	NCEI	1948-2013
NH	CONCORD MUNI AP	27-1683	DLY	43.1953	-71.5011	346	NCEI	1948-2014
NH	CONCORD RIVER	27-1678	DLY	43.2167	-71.5167	217	NCEI	1884-1939
NH	CONWAY 1 N	27-1732	DLY	44.0000	-71.1167	479	NCEI	1959-1973
NH	DANBURY 2.2 ESE	69-0538	DLY	43.5200	-71.8200	774	COCORAHS	2009-2012
NH	DEERING	27-1950	HLY	43.0908	-71.8678	1067	NCEI	1979-2001
NH	DEERING	27-1950	DLY	43.0908	-71.8678	1067	NCEI	1976-1997
NH	DERRY	27-1960	DLY	42.8661	-71.3247	300	NCEI	2004-2007
NH	DIAMOND POND	27-1968	DLY	44.9542	-71.3206	2200	NCEI	1997-2011
NH	DIXVILLE NOTCH	27-2023	DLY	44.8689	-71.3247	1690	NCEI	1931-2005
NH	DUBLIN	27-2136	DLY	42.9167	-72.0667	1490	NCEI	1892-1976
NH	DURHAM	27-2174	15M	43.1500	-70.9500	80	NCEI	1971-2011
NH	DURHAM	27-2174	HLY	43.1500	-70.9500	80	NCEI	1948-2013
NH	DURHAM	55-0127	HLY	43.1092	-70.9484	63	NCEI	2007-2014
NH	DURHAM	27-2174	DLY	43.1500	-70.9500	80	NCEI	1893-2014
NH	DURHAM 2SSW	68-2178	HLY	43.1000	-70.9400	63	NCEI	2001-2013
NH	EAST DEERING	27-2284	DLY	43.0667	-71.8167	791	NCEI	1948-1976

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NH	EAST MILFORD	27-2302	DLY	42.8272	-71.6264	230	NCEI	2008-2014
NH	EDWARD MACDOWELL LAKE	27-5013	15M	42.8942	-71.9842	970	NCEI	1971-2006
NH	EDWARD MACDOWELL LAKE	27-5013	HLY	42.8942	-71.9842	970	NCEI	1950-2006
NH	EDWARD MACDOWELL LAKE	27-5013	DLY	42.8942	-71.9842	970	NCEI	1950-2014
NH	EPPING	27-2800	DLY	43.0303	-71.0839	160	NCEI	1963-2014
NH	ERROL	27-2842	HLY	44.7889	-71.1231	1280	NCEI	1948-2013
NH	ERROL	27-2842	DLY	44.7889	-71.1231	1280	NCEI	1927-2014
NH	EVERETT LAKE	27-2870	HLY	43.1000	-71.6500	435	NCEI	1963-1986
NH	FIRST CONNECTICUT LAKE	27-2999	DLY	45.0875	-71.2872	1660	NCEI	1918-2014
NH	FITZWILLIAM 2 W	27-3024	DLY	42.7797	-72.1789	1190	NCEI	1930-2014
NH	FRANKLIN	27-3177	DLY	43.4500	-71.6667	390	NCEI	1900-1971
NH	FRANKLIN FALLS DAM	27-3182	15M	43.4669	-71.6664	430	NCEI	1971-2011
NH	FRANKLIN FALLS DAM	27-3182	HLY	43.4669	-71.6664	430	NCEI	1948-2013
NH	FRANKLIN FALLS DAM	27-3182	DLY	43.4669	-71.6664	430	NCEI	1948-2014
NH	GILMANTON	27-3359	DLY	43.4500	-71.4167	1030	NCEI	1944-1964
NH	GILMANTON 2 E	27-3367	DLY	43.4333	-71.3667	801	NCEI	1965-1976
NH	GILSUM 2.6 ENE	69-0426	DLY	43.0700	-72.2200	1152	COCORAHS	2011-2012
NH	GLENCLIFF	27-3409	DLY	44.0016	-71.8803	1650	NCEI	1909-1954
NH	GLENCLIFF 2	27-3415	DLY	43.9847	-71.8947	1080	NCEI	1978-2014
NH	GRAFTON	27-3530	DLY	43.5667	-71.9500	830	NCEI	1884-2004
NH	GREENLAND	27-3626	DLY	43.0167	-70.8333	85	NCEI	1973-2014
NH	GREENVILLE	27-3656	DLY	42.7833	-71.8167	879	NCEI	1955-1971
NH	GREENVILLE 1 NNE	27-3658	DLY	42.7828	-71.7986	900	NCEI	1992-2014
NH	GREENVILLE 1 NW	27-3661	DLY	42.7833	-71.8000	712	NCEI	1938-1948
NH	GREENVILLE 2 NNE	27-3660	DLY	42.7667	-71.7833	1050	NCEI	1971-1988
NH	HANOVER	27-3850	15M	43.7033	-72.2847	603	NCEI	1971-2011
NH	HANOVER	27-3850	HLY	43.7033	-72.2847	603	NCEI	1948-2013
NH	HANOVER	27-3850	DLY	43.7033	-72.2847	603	NCEI	1884-2014
NH	HANOVER	52-3850	DLY	43.7033	-72.2847	603	FORTS	1834-1892
NH	HILLSBORO	27-4059	DLY	43.1500	-71.9167	812	NCEI	1936-1943
NH	HILLSBORO 2 W	27-4062	HLY	43.1167	-71.9333	600	NCEI	1948-1979

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NH	HOPKINTON LAKE	27-4218	15M	43.1917	-71.7478	440	NCEI	1984-2011
NH	HOPKINTON LAKE	27-4218	HLY	43.1917	-71.7478	440	NCEI	1963-2013
NH	HUBBARD BROOK	54-0140	DLY	43.9433	-71.7029	820	NADP	1978-2013
NH	HUDSON 1 SSE	27-4234	HLY	42.7831	-71.4147	185	NCEI	1950-1972
NH	HUDSON 1 SSE	27-4234	DLY	42.7831	-71.4147	185	NCEI	1948-2014
NH	JEFFERSON	27-4314	DLY	44.4064	-71.4511	1450	NCEI	1940-1961
NH	JEFFERSON	27-4329	DLY	44.4169	-71.5008	1235	NCEI	1963-2014
NH	JEFFERSON 5 SSW	27-4321	DLY	44.3500	-71.5167	1401	NCEI	1967-1976
NH	KEENE	27-4399	DLY	42.9389	-72.3247	511	NCEI	1893-2014
NH	LAKEPORT 2	27-4480	DLY	43.5492	-71.4642	500	NCEI	1926-2014
NH	LANCASTER	27-4556	DLY	44.4911	-71.5725	860	NCEI	1892-2014
NH	LANDAFF	27-4568	HLY	44.1667	-71.8833	1050	NCEI	1948-1969
NH	LANDAFF 2	27-4570	HLY	44.1833	-71.9333	709	NCEI	1969-1984
NH	LEBANON	55-0175	HLY	43.6264	-72.3047	570	NCEI	1998-2014
NH	LEBANON FAA AP	27-4656	15M	43.6294	-72.3098	562	NCEI	2000-2013
NH	LEBANON FAA AP	27-4656	HLY	43.6294	-72.3098	562	NCEI	1948-1951
NH	LINCOLN	27-4732	HLY	44.0500	-71.6667	875	NCEI	1948-2004
NH	LINCOLN	27-4732	DLY	44.0500	-71.6667	875	NCEI	1921-1965
NH	MANCHESTER	27-5072	DLY	43.0333	-71.4833	210	NCEI	1885-1999
NH	MARLOW	27-5150	DLY	43.1175	-72.2003	1180	NCEI	1941-2011
NH	MASON	27-5196	DLY	42.7833	-71.7833	1000	NCEI	1988-1991
NH	MASSABESIC LAKE	27-5211	DLY	42.9892	-71.3933	253	NCEI	1942-2014
NH	MEREDITH 3 NNE	27-5350	DLY	43.6972	-71.4699	830	NCEI	1994-2014
NH	MILAN 7 NNW	27-5400	DLY	44.6667	-71.2167	1181	NCEI	1926-1981
NH	MILFORD	27-5412	DLY	42.8394	-71.6486	320	NCEI	1944-2008
NH	MONROE 5 NNE	27-5500	DLY	44.3167	-72.0000	660	NCEI	1948-1998
NH	MOULTONBORO 5 WSW	27-5532	DLY	43.7333	-71.4833	600	NCEI	1973-1993
NH	MT SUNAPEE	27-5629	DLY	43.3336	-72.0825	1270	NCEI	1957-2014
NH	MT WASHINGTON	27-5639	HLY	44.2698	-71.3037	6267	NCEI	1948-2009
NH	MT WASHINGTON	27-5639	DLY	44.2698	-71.3037	6267	NCEI	1963-2014
NH	NASHUA 2	27-5705	HLY	42.7833	-71.5000	188	NCEI	1972-1984

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NH	NASHUA 2 NNW	27-5712	HLY	42.7914	-71.4736	135	NCEI	1950-2008
NH	NASHUA 2 NNW	27-5712	DLY	42.7914	-71.4736	135	NCEI	1885-2014
NH	NELSON	27-5730	DLY	42.9833	-72.1333	1522	NCEI	1940-1951
NH	NEW CASTLE	27-5768	DLY	43.0719	-70.7163	10	NCEI	1943-1954
NH	NEW CASTLE	52-5768	DLY	43.0719	-70.7163	10	FORTS	1820-1853
NH	NEW DURHAM 3 NNW	27-5780	15M	43.4833	-71.1833	640	NCEI	1971-2011
NH	NEW DURHAM 3 NNW	27-5780	HLY	43.4833	-71.1833	640	NCEI	1948-2013
NH	NEW DURHAM 3 NNW	27-5780	DLY	43.4833	-71.1833	640	NCEI	1926-2008
NH	NEWPORT	27-5868	HLY	43.3836	-72.1753	790	NCEI	1969-2013
NH	NEWPORT	27-5868	DLY	43.3836	-72.1753	790	NCEI	1928-2014
NH	NEWTON	27-5880	DLY	42.8695	-71.0345	198	NCEI	1889-1918
NH	NORTH CONWAY	27-5995	DLY	44.0303	-71.1383	544	NCEI	1974-2014
NH	NORTH CONWAY (1)	27-5997	DLY	44.0333	-71.1500	575	NCEI	1887-1901
NH	NORTH GROTON	27-6055	DLY	43.7611	-71.8714	1290	NCEI	1989-1999
NH	NORTH STRATFORD	27-6234	15M	44.7500	-71.6303	910	NCEI	1984-2011
NH	NORTH STRATFORD	27-6234	HLY	44.7500	-71.6303	910	NCEI	1968-1997
NH	NORTH STRATFORD	27-6234	DLY	44.7500	-71.6303	910	NCEI	1902-2014
NH	NORTH VILLAGE	27-6302	DLY	42.9333	-71.9167	702	NCEI	1942-1953
NH	OTTER BROOK LAKE	27-6550	15M	42.9453	-72.2369	680	NCEI	1971-2007
NH	OTTER BROOK LAKE	27-6550	HLY	42.9453	-72.2369	680	NCEI	1958-2007
NH	OTTER BROOK LAKE	27-6550	DLY	42.9453	-72.2369	680	NCEI	1958-2014
NH	PETERBORO 2 S	27-6697	DLY	42.8500	-71.9500	1020	NCEI	1892-1994
NH	PINKHAM NOTCH	27-6818	HLY	44.2574	-71.2538	2010	NCEI	1948-2013
NH	PINKHAM NOTCH	27-6818	DLY	44.2574	-71.2538	2010	NCEI	1930-2014
NH	PITTSBURG RSVR	27-6856	15M	45.0467	-71.3836	1350	NCEI	1975-2011
NH	PITTSBURG RSVR	27-6856	HLY	45.0467	-71.3836	1350	NCEI	1948-2013
NH	PLYMOUTH	27-6944	DLY	43.7500	-71.6833	502	NCEI	1887-1951
NH	PLYMOUTH	27-6945	DLY	43.7849	-71.6572	660	NCEI	1951-2007
NH	PORTSMOUTH	27-6980	DLY	43.0667	-70.7167	59	NCEI	1954-1973
NH	PORTSMOUTH PEASE AFB	79-0003	DLY	43.0833	-70.8167	100	NCEI	1956-1970
NH	SALISBURY	27-7833	15M	43.3837	-71.6855	550	NCEI	1997-2009

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NH	SALISBURY	27-7833	HLY	43.3837	-71.6855	550	NCEI	1997-2013
NH	SALISBURY	27-7833	DLY	43.3837	-71.6855	550	NCEI	1996-2007
NH	SANBORNTON	27-7850	DLY	43.5000	-71.6833	415	NCEI	1892-1903
NH	SOUTH DANBURY	27-7967	DLY	43.5000	-71.9000	932	NCEI	1942-1981
NH	SOUTH LYNDEBORO	27-8081	DLY	42.8833	-71.7833	650	NCEI	1944-1999
NH	SOUTH WEARE 1 SE	27-8194	DLY	43.0500	-71.7167	702	NCEI	1944-1969
NH	STODDARD	27-8350	DLY	43.0792	-72.1115	1401	NCEI	1944-1951
NH	SUNAPEE	27-8502	HLY	43.3833	-72.0833	1030	NCEI	1954-1969
NH	SUNAPEE	27-8502	DLY	43.3833	-72.0833	1030	NCEI	1941-1954
NH	SURRY MTN LAKE	27-8539	HLY	42.9967	-72.3128	560	NCEI	1948-2007
NH	SURRY MTN LAKE	27-8539	DLY	42.9967	-72.3128	560	NCEI	1948-2014
NH	TAMWORTH	27-8606	DLY	43.8667	-71.2667	660	NCEI	1954-1956
NH	TAMWORTH 2	27-8610	DLY	43.8500	-71.2667	502	NCEI	1962-1969
NH	TAMWORTH 3	27-8612	DLY	43.9000	-71.3000	790	NCEI	1974-2000
NH	TAMWORTH 4	27-8614	DLY	43.8583	-71.2597	520	NCEI	2000-2014
NH	WALPOLE	27-8854	DLY	43.0833	-72.4333	322	NCEI	1885-1952
NH	WALPOLE 2	27-8855	DLY	43.0500	-72.4500	302	NCEI	1952-1979
NH	WALPOLE 3	27-8858	DLY	43.0739	-72.4053	930	NCEI	1979-2014
NH	WARREN	27-8885	15M	43.9097	-71.8878	710	NCEI	1973-2011
NH	WARREN	27-8885	HLY	43.9097	-71.8878	710	NCEI	1948-2013
NH	WARREN	27-8885	DLY	43.9097	-71.8878	710	NCEI	1942-1991
NH	WEARE	27-8972	DLY	43.0847	-71.7383	720	NCEI	1969-2006
NH	WEBSTER	27-9045	15M	43.3000	-71.7000	450	NCEI	1992-1997
NH	WEBSTER	27-9045	HLY	43.3000	-71.7000	450	NCEI	1992-1997
NH	WENTWORTH	27-9091	DLY	43.8662	-71.9158	620	NCEI	1944-2014
NH	WEST RUMNEY	27-9474	DLY	43.8000	-71.8500	560	NCEI	1944-1986
NH	WEST STEWARTSTOWN	27-9525	DLY	44.9955	-71.5319	1079	NCEI	1902-1971
NH	WEST UNITY 0.7 WSW	69-0572	DLY	43.2900	-72.3300	991	COCORAHS	2009-2012
NH	WINCHESTER	27-9726	HLY	42.7667	-72.3667	489	NCEI	1948-1985
NH	WINDHAM 3 NW	27-9740	DLY	42.8167	-71.3333	220	NCEI	1948-1976
NH	WOLFEBORO	27-9866	DLY	43.6000	-71.2333	728	NCEI	1961-1975

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NH	WOLFEBORO FALLS	27-9865	DLY	43.5833	-71.2000	531	NCEI	1931-1961
NH	WONALANCET	27-9903	DLY	43.9088	-71.3504	1102	NCEI	1970-1974
NH	WOODSTOCK	27-9940	DLY	43.9833	-71.6833	722	NCEI	1942-1980
NH	WOODSVILLE	27-9950	DLY	44.1522	-72.0372	456	NCEI	1915-1933
NH	YORK POND	27-9966	DLY	44.5000	-71.3328	1530	NCEI	1931-2014
NY	ADAMS CTR	30-0015	DLY	43.9000	-76.0667	400	NCEI	1900-1950
NY	ADDISON	30-0023	DLY	42.1014	-77.2344	999	NCEI	1893-2014
NY	ALBANY	30-0047	HLY	42.6461	-73.7472	0	NCEI	1897-1971
NY	ALBANY	30-0047	DLY	42.6461	-73.7472	0	NCEI	1903-1970
NY	ALBANY 0.7 SW	69-1009	DLY	42.6600	-73.8100	197	COCORAHS	2010-2012
NY	ALBANY 4 S	30-0049	15M	42.5833	-73.7333	12	NCEI	1971-1992
NY	ALBANY AP	30-0042	DLY	42.7431	-73.8092	312	NCEI	2000-2014
NY	ALBANY INTL AP	30-0042	HLY	42.7431	-73.8092	275	NCEI	1948-2013
NY	ALBANY NWFO UNIV	30-0048	DLY	42.6925	-73.8308	293	NCEI	1998-2010
NY	ALBION 2 NE	30-0055	DLY	43.2722	-78.1664	440	NCEI	1938-2014
NY	ALCOVE DAM	30-0063	DLY	42.4697	-73.9267	607	NCEI	1942-2014
NY	ALEXANDRIA BAY 1 SW	30-0077	DLY	44.3333	-75.9167	259	NCEI	1932-1972
NY	ALFRED	30-0085	DLY	42.2497	-77.7583	1706	NCEI	1893-2014
NY	ALFRED	54-0145	DLY	42.2276	-77.8016	2287	NADP	2004-2013
NY	ALLEGANY SP	30-0093	DLY	42.1003	-78.7497	1500	NCEI	1924-2014
NY	AMSTERDAM LOCK 10	30-0159	DLY	42.9167	-74.1333	279	NCEI	1902-1959
NY	ANGELICA	30-0183	DLY	42.3033	-78.0189	1483	NCEI	1893-2014
NY	APALACHIN 3.0 ESE	69-1564	DLY	42.0500	-76.1200	1040	COCORAHS	2004-2012
NY	APPLETON	30-0208	DLY	43.3500	-78.6500	300	NCEI	1893-1923
NY	ARCADE	30-0220	DLY	42.5333	-78.4167	1580	NCEI	1893-1995
NY	ARDENIA	52-0228	DLY	41.4000	-73.9333	157	FORTS	1851-1890
NY	ARKVILLE 2 W	30-0254	DLY	42.1392	-74.6533	1310	NCEI	1948-2014
NY	ARNOT FOREST	30-0270	15M	42.2633	-76.6278	1200	NCEI	1975-2011
NY	ARNOT FOREST	30-0270	HLY	42.2633	-76.6278	1200	NCEI	1955-2011
NY	ASHOKAN DAM NEAR BOICEVIL	99-0001	DLY	41.9498	-74.1996	609	NYCDEP	1982-2014
NY	ATNENS	30-0300	DLY	42.2667	-73.8333	170	NCEI	1901-1919



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	ATTICA 7 SW	30-0317	DLY	42.8031	-78.3875	1365	NCEI	2011-2014
NY	AUBURN	30-0321	DLY	42.9328	-76.5447	770	NCEI	1897-2014
NY	AURORA RESEARCH FARM	54-0147	DLY	42.7339	-76.6597	817	NADP	1979-2013
NY	AURORA RSCH FARM	30-0331	HLY	42.7339	-76.6592	830	NCEI	1958-2009
NY	AURORA RSCH FARM	30-0331	DLY	42.7339	-76.6592	830	NCEI	1956-2014
NY	AVERILL PARK	77-0001	DLY	42.6390	-73.5697	640	ENYON	1988-2014
NY	AVERILL PARK 0.9 WNW	69-1452	DLY	42.6400	-73.5700	610	COCORAHS	2007-2012
NY	AVON	30-0343	DLY	42.9203	-77.7558	545	NCEI	1895-2014
NY	BABYLON	30-0351	DLY	40.7167	-73.3667	49	NCEI	1939-1959
NY	BAINBRIDGE 2 E	30-0360	DLY	42.2928	-75.4385	994	NCEI	1907-1992
NY	BAKERS MILLS	30-0368	DLY	43.6167	-74.0333	1581	NCEI	1940-1977
NY	BALDWINSVILLE	30-0379	DLY	43.1500	-76.3333	379	NCEI	1893-2014
NY	BALSAM LAKE	30-0393	DLY	42.0270	-74.5998	2602	NCEI	1948-1970
NY	BARKER 4 NE	30-0412	DLY	43.3667	-78.4833	279	NCEI	1941-1976
NY	BATAVIA	30-0443	15M	43.0303	-78.1692	913	NCEI	1984-2011
NY	BATAVIA	30-0443	HLY	43.0303	-78.1692	913	NCEI	1984-2013
NY	BATAVIA	30-0443	DLY	43.0303	-78.1692	913	NCEI	1911-2014
NY	BATH	30-0448	DLY	42.3489	-77.3478	1120	NCEI	1953-2014
NY	BATTENVILLE	30-0452	DLY	43.1014	-73.4319	380	NCEI	1952-1999
NY	BEAVER FALLS	30-0500	DLY	43.8833	-75.4333	740	NCEI	1934-1996
NY	BEAVER FALLS 0.1 SW	69-1265	DLY	43.8900	-75.4300	774	COCORAHS	2009-2012
NY	BEDFORD HILLS	30-0511	DLY	41.2333	-73.7167	430	NCEI	1899-1977
NY	BEERSTON	30-0540	DLY	42.1221	-75.1210	1552	NCEI	1911-1951
NY	BELLEAYRE MT	76-0014	HLY	42.1439	-74.4944	1950	RAWS	2004-2013
NY	BENNETTS BRG	30-0608	DLY	43.5317	-75.9525	660	NCEI	1941-2014
NY	BENNINGTON	30-0613	DLY	42.8561	-78.3958	1245	NCEI	1977-2009
NY	BERKSHIRE 1.9 ENE	69-1557	DLY	42.3200	-76.2200	1608	COCORAHS	2008-2012
NY	BERLIN 5 S	30-0641	DLY	42.6228	-73.3712	1140	NCEI	1903-2000
NY	BERNE 2 NW	30-0655	DLY	42.6500	-74.1667	1240	NCEI	1963-1966
NY	BERNE 2 S	30-0654	DLY	42.6000	-74.1500	1060	NCEI	1966-1983
NY	BERNE 5 SW	30-0658	DLY	42.5833	-74.1833	1850	NCEI	1983-1998

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	BIG MOOSE 3 SE	30-0668	DLY	43.8000	-74.8667	1760	NCEI	1931-2014
NY	BINGHAMTON	55-0014	HLY	42.2068	-75.9800	1638	NCEI	1996-2014
NY	BINGHAMTON 1.8 SW	69-1025	DLY	42.0800	-75.9300	942	COCORAHS	2004-2012
NY	BINGHAMTON GREATER AP	30-0687	HLY	42.2067	-75.9800	1595	NCEI	1951-2013
NY	BINGHAMTON GREATER AP	30-0687	DLY	42.2067	-75.9800	1595	NCEI	1896-2014
NY	BINGHAMTON SUSQ RVR	30-0681	DLY	42.1000	-75.9000	854	NCEI	1902-1974
NY	BINGHAMTON WB CITY	30-0691	DLY	42.1000	-75.9167	909	NCEI	1893-1968
NY	BISCUIT BROOK	54-0158	DLY	41.9936	-74.5031	2080	NADP	1983-2013
NY	BLACK RIVER 1 SW	30-0706	DLY	44.0000	-75.8167	531	NCEI	1940-1975
NY	BLOOMINGBURG 2 SW	30-0732	DLY	41.5417	-74.4765	1300	NCEI	2008-2014
NY	BLUE MTN LAKE 2 N	30-0746	DLY	43.8748	-74.4334	2201	NCEI	1900-1951
NY	BOLIVAR	30-0766	15M	42.1225	-78.2064	1790	NCEI	1971-2001
NY	BOLIVAR	30-0766	HLY	42.1225	-78.2064	1790	NCEI	1948-2001
NY	BOLIVAR	30-0766	DLY	42.1225	-78.2064	1790	NCEI	1896-1999
NY	BOONVILLE 2 N	30-0780	DLY	43.5167	-75.3667	1181	NCEI	1912-1966
NY	BOONVILLE 4 SSW	30-0785	HLY	43.4361	-75.3697	1550	NCEI	1949-2007
NY	BOONVILLE 4 SSW	30-0785	DLY	43.4361	-75.3697	1550	NCEI	1949-2014
NY	BOUCKVILLE	30-0795	DLY	42.8333	-75.5833	1350	NCEI	1897-1916
NY	BOVINA	30-0799	DLY	42.2673	-74.7251	1880	NCEI	1948-1959
NY	BRADFORD	30-0816	DLY	42.3667	-77.1000	1102	NCEI	1943-1961
NY	BRADFORD 1 NW	30-0817	DLY	42.3833	-77.1167	1362	NCEI	1961-1982
NY	BREATH HILL NEAR PEEKAMOO	99-0003	HLY	41.9308	-74.3666	2164	NYCDEP	1997-2013
NY	BRENTWOOD	30-0862	HLY	40.7833	-73.2500	102	NCEI	1948-1976
NY	BRENTWOOD	30-0862	DLY	40.7833	-73.2500	102	NCEI	1893-1951
NY	BREWERTON LOCK 23	30-0870	DLY	43.2386	-76.1964	377	NCEI	1932-2014
NY	BRIDGEHAMPTON	30-0889	DLY	40.9461	-72.3069	60	NCEI	1930-2014
NY	BRISTOL SPRINGS	30-0921	DLY	42.7056	-77.3795	1201	NCEI	1932-1967
NY	BROADALBIN	30-0929	DLY	43.0508	-74.1981	840	NCEI	1939-2001
NY	BROCKPORT	30-0937	DLY	43.2000	-77.9333	535	NCEI	1893-1993
NY	BROCKPORT 0.6 WNW	69-1282	DLY	43.2200	-77.9500	456	COCORAHS	2001-2012
NY	BROWN STN	30-0985	DLY	41.9500	-74.2167	541	NCEI	1948-1952

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	BROWN STN	60-0985	DLY	41.9500	-74.2167	541	DWSGE	1918-1948
NY	BUFFALO	30-1010	DLY	42.8833	-78.8833	594	NCEI	1871-1944
NY	BUFFALO	52-1010	DLY	42.8833	-78.8833	594	FORTS	1840-1892
NY	BUFFALO NIAGARA INTL	30-1012	HLY	42.9408	-78.7358	705	NCEI	1948-2013
NY	BUFFALO NIAGARA INTL AP	30-1012	DLY	42.9408	-78.7358	716	NCEI	1946-2014
NY	BURDETT 1 NE	30-1032	DLY	42.4167	-76.8333	1030	NCEI	1932-1967
NY	BUSKIRK	30-1068	DLY	42.9361	-73.4325	507	NCEI	2011-2014
NY	CAIRO	30-1093	DLY	42.3167	-74.0167	302	NCEI	1924-1963
NY	CAIRO 3 NW	30-1095	DLY	42.3167	-74.0331	490	NCEI	1978-2014
NY	CAMDEN	30-1110	DLY	43.3306	-75.8417	580	NCEI	1946-2014
NY	CANADA LAKE	30-1138	DLY	43.1667	-74.5167	1680	NCEI	1961-1976
NY	CANAJOHARIE	30-1144	DLY	42.9096	-74.5779	302	NCEI	1897-1976
NY	CANANDAIGUA 3 S	30-1152	DLY	42.8453	-77.2808	720	NCEI	1942-2014
NY	CANASTOTA	30-1160	DLY	43.0833	-75.7667	410	NCEI	1932-1983
NY	CANASTOTA 0.9 S	69-1275	DLY	43.0700	-75.7600	443	COCORAHS	2007-2012
NY	CANDOR 2SE	30-1168	DLY	42.1944	-76.3128	920	NCEI	1944-2014
NY	CANEADEA DAM	30-1170	DLY	42.3833	-78.1833	1480	NCEI	1929-1940
NY	CANISTEO 1 SW	30-1173	DLY	42.2608	-77.6161	1155	NCEI	1949-2008
NY	CANNONSVILLE DAM NEAR STI	99-0004	DLY	42.0673	-75.3779	1169	NYCDEP	1982-2014
NY	CANTON 4 SE	30-1185	15M	44.5772	-75.1097	448	NCEI	1984-2011
NY	CANTON 4 SE	30-1185	HLY	44.5772	-75.1097	448	NCEI	1948-2013
NY	CANTON 4 SE	30-1185	DLY	44.5772	-75.1097	448	NCEI	1893-2014
NY	CARMEL	30-1207	HLY	41.4333	-73.6833	530	NCEI	1953-1996
NY	CARMEL	30-1207	DLY	41.4333	-73.6833	530	NCEI	1888-1995
NY	CARMEL 4N	30-1211	DLY	41.4725	-73.6550	680	NCEI	2003-2014
NY	CAYUGA LOCK #1	30-1265	DLY	42.9481	-76.7342	380	NCEI	1932-2014
NY	CEDAR BEACH, SOUTHOLD	54-0160	DLY	41.0347	-72.3891	3	NADP	2003-2013
NY	CHASM FALLS	30-1387	DLY	44.7500	-74.2167	1060	NCEI	1926-2008
NY	CHATHAM	30-1391	DLY	42.3667	-73.6000	420	NCEI	1904-1970
NY	CHAZY	30-1401	DLY	44.8786	-73.3953	157	NCEI	1902-2011
NY	CHEMUNG	30-1413	DLY	42.0025	-76.6383	822	NCEI	1888-2014

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NY	CHEPACHET	30-1424	DLY	42.9097	-75.1108	1320	NCEI	1957-2001
NY	CHERRY PLAIN	30-1433	DLY	42.6196	-73.4115	1401	NCEI	1943-1949
NY	CHERRY VALLEY 2 NNE	30-1436	DLY	42.8239	-74.7386	1360	NCEI	1944-2011
NY	CHINA	30-1466	HLY	42.1567	-75.3921	1460	NCEI	1948-1969
NY	CHINA	30-1466	DLY	42.1567	-75.3921	1460	NCEI	1945-1951
NY	CHINA 2	30-1471	DLY	42.1000	-75.3833	1152	NCEI	1950-1970
NY	CINCINNATUS	30-1492	DLY	42.5433	-75.8947	1050	NCEI	1928-2010
NY	CLARYVILLE	30-1521	15M	41.9133	-74.5722	1653	NCEI	1981-2010
NY	CLARYVILLE	30-1521	HLY	41.9133	-74.5722	1653	NCEI	1948-2010
NY	CLARYVILLE	30-1521	DLY	41.9133	-74.5722	1653	NCEI	1945-2014
NY	CLARYVILLE 2 SW	30-1523	15M	41.9087	-74.6019	2080	NCEI	1971-1981
NY	CLARYVILLE 2 SW	30-1523	DLY	41.9087	-74.6019	2080	NCEI	1967-1978
NY	CLINTON CORNERS	30-1559	15M	41.8167	-73.7667	280	NCEI	1978-2011
NY	CLINTON CORNERS	30-1559	HLY	41.8167	-73.7667	280	NCEI	1978-2013
NY	CLYDE LOCK 26	30-1580	DLY	43.0589	-76.8386	392	NCEI	1932-2014
NY	COBLESKILL	30-1589	DLY	42.6667	-74.5000	961	NCEI	1946-1956
NY	COBLESKILL	30-1593	DLY	42.6833	-74.4833	900	NCEI	1955-1986
NY	COBLESKILL 2 ESE	30-1595	DLY	42.6667	-74.4333	1169	NCEI	1987-2014
NY	COLD BROOK	30-1615	DLY	42.0167	-74.2667	650	NCEI	1948-1959
NY	COLD BROOK	60-1615	DLY	42.0167	-74.2667	650	DWSGE	1918-1948
NY	COLD SPRINGS 8.1 NE	69-1444	DLY	41.5000	-73.8400	715	COCORAHS	2008-2012
NY	COLDEN 1 N	30-1623	HLY	42.6631	-78.6831	1025	NCEI	1957-2002
NY	COLDEN 1 N	30-1623	DLY	42.6631	-78.6831	1025	NCEI	1957-2002
NY	COLDEN 1W	30-1625	DLY	42.6472	-78.7111	1535	NCEI	2005-2014
NY	COLTON 2 N	30-1664	DLY	44.5842	-74.9572	580	NCEI	1934-2014
NY	COLUMBIAVILLE	30-1670	HLY	42.3330	-73.7500	170	NCEI	1941-1946
NY	CONKLINGVILLE DAM	30-1708	15M	43.3203	-73.9256	808	NCEI	1971-2011
NY	CONKLINGVILLE DAM	30-1708	HLY	43.3203	-73.9256	808	NCEI	1950-2013
NY	CONKLINGVILLE DAM	30-1708	DLY	43.3203	-73.9256	808	NCEI	1948-2014
NY	CONSTABLE 1 S	30-1723	DLY	44.9167	-74.3000	420	NCEI	1965-1982
NY	COOPERSTOWN	30-1752	DLY	42.7167	-74.9267	1257	NCEI	1893-2014

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NY	COOPERSTOWN	52-1752	DLY	42.7167	-74.9267	1257	FORTS	1854-1892
NY	COPAKE	30-1761	DLY	42.1131	-73.5522	550	NCEI	1988-2014
NY	CORNING	30-1787	DLY	42.1342	-77.0692	1147	NCEI	1909-2014
NY	CORNING 5 SSW	30-1792	DLY	42.0667	-77.0500	1640	NCEI	1977-1986
NY	CORNING 5 W	30-1794	DLY	42.1745	-77.1160	1040	NCEI	1986-1988
NY	CORTLAND	30-1799	DLY	42.6000	-76.1833	1129	NCEI	1895-2000
NY	CROPSEYVILLE 2.9 ESE	77-0002	DLY	42.7328	-73.5057	1480	ENYON	1996-2014
NY	CROSS RIVER	30-1896	DLY	41.2667	-73.6833	240	NCEI	1948-1961
NY	CROSS RIVER METEOROLOGICA	99-0021	DLY	41.2455	-73.5903	573	NYCDEP	1982-2014
NY	CROTON LAKE	30-1912	DLY	41.2333	-73.8000	249	NCEI	1948-1961
NY	CUTCHOGUE	30-1949	HLY	41.0167	-72.5000	39	NCEI	1948-1976
NY	CUTCHOGUE	30-1949	DLY	41.0167	-72.5000	39	NCEI	1899-1975
NY	DANNEMORA	30-1966	DLY	44.7192	-73.7206	1340	NCEI	1906-2014
NY	DANSVILLE	55-0157	HLY	42.5708	-77.7133	662	NCEI	2000-2014
NY	DANSVILLE	30-1974	DLY	42.5656	-77.7175	660	NCEI	1917-2014
NY	DANSVILLE AP	30-1979	15M	42.5675	-77.7142	649	NCEI	1986-2010
NY	DANSVILLE AP	30-1980	15M	42.5675	-77.7142	649	NCEI	2005-2013
NY	DANSVILLE AP	30-1979	HLY	42.5675	-77.7142	649	NCEI	1948-2010
NY	DAVENPORT 2 E	30-1987	HLY	42.4667	-74.8000	1350	NCEI	1948-1994
NY	DE RUYTER 4 N	30-2079	DLY	42.8042	-75.8856	1302	NCEI	1903-1984
NY	DELANSON 2NE	30-2031	DLY	42.7672	-74.1711	984	NCEI	2005-2014
NY	DELHI 2 SE	30-2036	DLY	42.2558	-74.9128	1420	NCEI	1924-2011
NY	DELTA	30-2045	DLY	43.2667	-75.4333	561	NCEI	1932-1976
NY	DELTA DAM	30-2047	DLY	43.2736	-75.4272	550	NCEI	2000-2014
NY	DEP PROPERTY ID 634 NEAR	99-0008	HLY	42.2424	-74.6806	2229	NYCDEP	2006-2013
NY	DEPOSIT	30-2060	DLY	42.0628	-75.4264	1000	NCEI	1962-2014
NY	DIX HILLS	30-2091	DLY	40.8000	-73.3000	120	NCEI	1987-1991
NY	DOBBS FERRY ARDSLEY	30-2129	HLY	41.0072	-73.8344	200	NCEI	1992-2013
NY	DOBBS FERRY ARDSLEY	30-2129	DLY	41.0072	-73.8344	200	NCEI	1945-2010
NY	DOLGEVILLE	30-2137	DLY	43.0833	-74.7667	685	NCEI	1920-1994
NY	DOLGEVILLE 0.7 SW	69-1228	DLY	43.0900	-74.7800	919	COCORAHS	2010-2010

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	DOWNSVILLE	30-2164	DLY	42.0803	-74.9957	1112	NCEI	1948-1967
NY	DOWNSVILLE DAM	30-2169	DLY	42.0770	-74.9676	1200	NCEI	1959-2014
NY	DUNKIRK	55-0058	HLY	42.4933	-79.2722	693	NCEI	1997-2014
NY	DUNKIRK PWR PLT	30-2198	HLY	42.4833	-79.3500	591	NCEI	1948-1977
NY	EAGLE BRG 2 SE	30-2236	DLY	42.9331	-73.3667	380	NCEI	1951-1985
NY	EAGLE FALLS	30-2239	DLY	43.9167	-75.2000	1302	NCEI	1926-1963
NY	EARLVILLE 0.4 W	69-1277	DLY	42.7400	-75.5500	1109	COCORAHS	2006-2012
NY	EAST BLOOMFIELD	30-2277	DLY	42.9000	-77.4333	870	NCEI	1956-1984
NY	EAST HOMER 2	30-2356	DLY	42.7167	-76.1167	1562	NCEI	1948-1969
NY	EAST JEWETT	30-2362	DLY	42.2500	-74.1833	1860	NCEI	1948-1959
NY	EAST JEWETT	30-2366	DLY	42.2356	-74.1433	1991	NCEI	1985-2014
NY	EAST JEWETT	60-2362	DLY	42.2500	-74.1833	1860	DWSGE	1928-1948
NY	EAST SIDNEY	30-2454	15M	42.3328	-75.2297	1155	NCEI	1971-2011
NY	EAST SIDNEY	30-2454	HLY	42.3328	-75.2297	1155	NCEI	1950-2013
NY	EAST SIDNEY	30-2454	DLY	42.3328	-75.2297	1155	NCEI	1950-2014
NY	EDGEWOOD	30-2517	DLY	42.1333	-74.2333	1660	NCEI	1948-1963
NY	EDGEWOOD	60-2517	DLY	42.1333	-74.2333	1660	DWSGE	1918-1948
NY	EDMESTON	30-2526	15M	42.6833	-75.2500	1180	NCEI	1984-1990
NY	EDMESTON	30-2526	HLY	42.6833	-75.2500	1180	NCEI	1948-1990
NY	EDMESTON 5 N	30-2530	15M	42.7669	-75.2344	1548	NCEI	1975-2008
NY	EDMESTON 5 N	30-2530	HLY	42.7669	-75.2344	1548	NCEI	1975-2008
NY	ELBA	30-2547	DLY	43.0667	-78.1667	700	NCEI	1900-1919
NY	ELIZABETHTOWN	30-2554	DLY	44.2139	-73.5986	611	NCEI	1897-2014
NY	ELKA PARK	30-2562	DLY	42.1667	-74.1667	2251	NCEI	1948-1959
NY	ELKA PARK	60-2562	DLY	42.1667	-74.1667	2251	DWSGE	1928-1948
NY	ELLENBURG DEPOT	30-2574	DLY	44.9131	-73.8222	950	NCEI	1898-2014
NY	ELLENVILLE	30-2582	HLY	41.7167	-74.4000	350	NCEI	1949-1986
NY	ELLENVILLE	30-2582	DLY	41.7167	-74.4000	350	NCEI	1945-2014
NY	ELMIRA	30-2610	DLY	42.0997	-76.8358	947	NCEI	1893-2014
NY	EMMONS	30-5113	DLY	42.4694	-75.0106	1225	NCEI	1983-2014
NY	ENDICOTT	30-2627	DLY	42.0858	-76.0878	827	NCEI	1985-2004

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	FAIRFIELD	30-2720	DLY	43.1500	-74.9000	1460	NCEI	1979-1981
NY	FARMINGDALE 2 NE	30-2760	DLY	40.7500	-73.4333	79	NCEI	1916-1956
NY	FARMINGDALE AP	79-0046	DLY	40.7342	-73.4169	81	NCEI	1999-2014
NY	FISHS EDDY	30-2829	DLY	41.9667	-75.1833	1020	NCEI	1953-2007
NY	FLORAL PARK 0.4 W	69-1330	DLY	40.7200	-73.7100	62	COCORAHS	2008-2012
NY	FLUSHING	30-2868	DLY	40.7667	-73.8667	60	NCEI	1916-1939
NY	FORESTPORT	30-2917	DLY	43.4333	-75.2167	1132	NCEI	1942-1978
NY	FORT NIAGARA	30-2946	DLY	43.2632	-79.0619	262	NCEI	1890-1899
NY	FORT NIAGARA	52-2946	DLY	43.2632	-79.0619	262	FORTS	1820-1893
NY	FORT PLAIN 0.2 SE	69-1278	DLY	42.9300	-74.6300	476	COCORAHS	2008-2012
NY	FRANKFORT LOCK 19	30-3010	DLY	43.0667	-75.1167	410	NCEI	1932-1997
NY	FRANKLIN	30-3020	DLY	42.3333	-75.1667	1340	NCEI	1936-1943
NY	FRANKLINVILLE	30-3025	DLY	42.3297	-78.4633	1590	NCEI	1896-2014
NY	FREDONIA	30-3033	15M	42.4497	-79.3120	760	NCEI	1984-2011
NY	FREDONIA	30-3033	HLY	42.4497	-79.3120	760	NCEI	1977-2011
NY	FREDONIA	30-3033	DLY	42.4497	-79.3120	760	NCEI	1914-2014
NY	FREEHOLD 2 NW	30-3038	DLY	42.3667	-74.0667	449	NCEI	1963-1978
NY	FREEPORT	30-3042	DLY	40.6667	-73.6000	20	NCEI	1948-1961
NY	FREEVILLE 1 NE	30-3050	DLY	42.5192	-76.3311	1050	NCEI	1948-2014
NY	FREWSBURG 4.3 SSE	69-1081	DLY	42.0000	-79.1300	1299	COCORAHS	2009-2012
NY	FRIENDSHIP	30-3069	DLY	42.1908	-78.1458	1552	NCEI	1893-2011
NY	FRIENDSHIP 5 SW	30-3070	DLY	42.1613	-78.2102	1982	NCEI	1956-1968
NY	FRIENDSHIP 7 SW	30-3065	DLY	42.1378	-78.2372	1640	NCEI	1969-2010
NY	FROST VALLEY	30-3076	DLY	41.9569	-74.5510	1841	NCEI	1948-1981
NY	FT DRUM	30-2934	DLY	44.0333	-75.7667	630	NCEI	1975-1985
NY	FT ONTARIO	52-2948	DLY	43.4658	-76.5075	246	FORTS	1842-1892
NY	FT PLAIN	30-2953	15M	42.9383	-74.6228	305	NCEI	1971-2011
NY	FT PLAIN	30-2953	HLY	42.9383	-74.6228	305	NCEI	1949-2013
NY	FT PLAIN	30-2953	DLY	42.9383	-74.6228	305	NCEI	1901-2014
NY	FULTON	30-3087	DLY	43.3050	-76.3939	360	NCEI	1900-2014
NY	FULTON OSWEGO CO AP	79-0041	DLY	43.3497	-76.3847	475	NCEI	1998-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	GABRIELS	30-3102	DLY	44.4333	-74.1667	1762	NCEI	1900-1978
NY	GANNETT HILL	30-3124	DLY	42.7000	-77.4000	1975	NCEI	1971-1998
NY	GANSEVOORT 1.3 WNW	69-1506	DLY	43.2000	-73.6800	282	COCORAHS	2008-2012
NY	GARDINER 1 W	30-3138	DLY	41.6833	-74.1500	320	NCEI	1956-1987
NY	GARDNERVILLE	30-3144	DLY	41.3458	-74.4872	460	NCEI	1956-2008
NY	GENEVA EXP STN	30-3177	HLY	42.8833	-77.0000	591	NCEI	1955-1968
NY	GENEVA EXP STN	30-3177	DLY	42.8833	-77.0000	591	NCEI	1892-1968
NY	GENEVA RSCH FARM	30-3184	15M	42.8767	-77.0308	718	NCEI	1984-2011
NY	GENEVA RSCH FARM	30-3184	HLY	42.8767	-77.0308	718	NCEI	1968-2013
NY	GENEVA RSCH FARM	30-3184	DLY	42.8767	-77.0308	718	NCEI	1969-2014
NY	GENEVA SCS	30-3182	HLY	42.8833	-77.0167	620	NCEI	1948-1955
NY	GLENHAM	30-3259	DLY	41.5167	-73.9333	275	NCEI	1932-1996
NY	GLENS FALLS 2	30-3281	DLY	43.3000	-73.6667	390	NCEI	1906-1941
NY	GLENS FALLS AP	30-3294	DLY	43.3500	-73.6167	321	NCEI	2018-2014
NY	GLENS FALLS FARM	30-3284	DLY	43.3331	-73.7280	504	NCEI	1943-2014
NY	GLENS FALLS FIRE STN	30-3289	DLY	43.3167	-73.6500	351	NCEI	1893-1956
NY	GLOVERSVILLE	30-3319	DLY	43.0492	-74.3592	810	NCEI	1893-2006
NY	GOUVERNEUR 3 NW	30-3346	DLY	44.3539	-75.5122	420	NCEI	1936-2014
NY	GOWANDA	30-3352	DLY	42.4667	-78.9500	759	NCEI	1977-1985
NY	GOWANDA CORRECTIONAL	30-3354	DLY	42.4833	-78.9333	870	NCEI	1945-1997
NY	GRAFTON	30-3360	DLY	42.7833	-73.4667	1560	NCEI	1950-2004
NY	GRAHAMSVILLE	30-3365	DLY	41.8500	-74.5333	960	NCEI	1948-2003
NY	GRAND GORGE	30-3373	DLY	42.3608	-74.4731	1362	NCEI	1948-1977
NY	GRAND GORGE	60-3373	DLY	42.3667	-74.4833	1362	DWSGE	1928-1948
NY	GREENE	30-3444	DLY	42.3239	-75.7711	920	NCEI	1909-2014
NY	GREENFIELD CTR	30-3452	DLY	43.1167	-73.8333	610	NCEI	1903-1955
NY	GREENPORT PWR HOUSE	30-3464	DLY	41.1019	-72.3731	16	NCEI	1958-2000
NY	GREENWICH	30-3468	DLY	43.1167	-73.5000	425	NCEI	1897-1913
NY	GRIFFIN CORNERS	30-3503	DLY	42.1421	-74.5226	2260	NCEI	1900-1913
NY	GRIFFISS AFB	30-3507	DLY	43.2333	-75.4000	519	NCEI	1893-2014
NY	HAMILTON	30-3602	DLY	42.8167	-75.5333	1211	NCEI	1894-1963



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	HAMMONDSPORT	30-3616	DLY	42.4000	-77.2333	722	NCEI	1942-1954
NY	HAMMONDSPORT	30-3619	DLY	42.4333	-77.1500	1300	NCEI	1932-1941
NY	HAMMONDSPORT 1 W	30-3617	DLY	42.4000	-77.2500	781	NCEI	1954-1963
NY	HARKNESS	30-3662	DLY	44.5195	-73.5537	622	NCEI	1902-1932
NY	HARVARD	30-3714	DLY	42.0167	-75.1167	1079	NCEI	1888-1959
NY	HASKINVILLE	30-3722	DLY	42.4206	-77.5675	1650	NCEI	1900-2000
NY	HEMLOCK	30-3773	DLY	42.7442	-77.6083	902	NCEI	1898-2014
NY	HEMPSTEAD GARDEN CITY	30-3781	DLY	40.7167	-73.6333	79	NCEI	1948-1972
NY	HEMPSTEAD MALVERNE	30-3786	DLY	40.6833	-73.6667	39	NCEI	1941-1966
NY	HIGH FALLS	30-3839	DLY	41.8333	-74.1333	141	NCEI	1927-1967
NY	HIGHMARKET	30-3851	15M	43.5753	-75.5208	1763	NCEI	1984-2011
NY	HIGHMARKET	30-3851	HLY	43.5753	-75.5208	1763	NCEI	1968-2013
NY	HIGHMARKET	30-3851	DLY	43.5753	-75.5208	1763	NCEI	1924-2014
NY	HIGHMARKET 1 SE	30-3856	HLY	43.5833	-75.5167	1781	NCEI	1948-1968
NY	HIGHMOUNT	30-3864	DLY	42.1394	-74.4880	1841	NCEI	1948-1976
NY	HIGHMOUNT	60-3864	DLY	42.1333	-74.4833	1841	DWSGE	1918-1948
NY	HINCKLEY 2 SW	30-3889	DLY	43.3000	-75.1500	1141	NCEI	1926-2008
NY	HOFFMEISTER 3 W	30-3916	DLY	43.3833	-74.7333	1880	NCEI	1920-1965
NY	HOLBROOK	30-3919	DLY	40.8333	-73.0833	79	NCEI	1972-1979
NY	HONK FALLS	30-3953	DLY	41.7500	-74.3833	430	NCEI	1927-1952
NY	HOOKER 12 NNW	30-3961	DLY	43.8525	-75.7158	1481	NCEI	1911-2014
NY	HOOSICK FALLS	30-3965	DLY	42.9000	-73.3500	430	NCEI	1900-1923
NY	HOPE	30-3970	HLY	43.3117	-74.2478	880	NCEI	1948-1999
NY	HOPE	30-3970	DLY	43.3117	-74.2478	880	NCEI	1931-1998
NY	HORNBY	30-3979	15M	42.2333	-77.0500	1795	NCEI	1975-2006
NY	HORNELL ALMOND DAM	30-3983	15M	42.3489	-77.7044	1325	NCEI	1971-2011
NY	HORNELL ALMOND DAM	30-3983	HLY	42.3489	-77.7044	1325	NCEI	1950-2013
NY	HORNELL ALMOND DAM	30-3983	DLY	42.3489	-77.7044	1325	NCEI	1950-2014
NY	HUDSON	30-4024	HLY	42.2423	-73.7783	322	NCEI	1948-1957
NY	HUDSON	30-4024	DLY	42.2423	-73.7783	322	NCEI	1920-1956
NY	HUDSON COR.FACILITY	30-4025	HLY	42.2500	-73.8000	60	NCEI	1957-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	HUDSON COR.FACILITY	30-4025	DLY	42.2500	-73.8000	60	NCEI	1957-2014
NY	HUNTINGTON WILDLIFE	54-0150	DLY	43.9731	-74.2231	1640	NADP	1978-2013
NY	HUNTS CORNERS	30-4070	15M	42.4272	-76.1253	1394	NCEI	1971-2011
NY	HUNTS CORNERS	30-4070	HLY	42.4272	-76.1253	1394	NCEI	1948-2011
NY	INDIAN LAKE 2SW	30-4102	15M	43.7550	-74.2692	1660	NCEI	1976-2011
NY	INDIAN LAKE 2SW	30-4102	HLY	43.7550	-74.2692	1660	NCEI	1948-2013
NY	INDIAN LAKE 2SW	30-4102	DLY	43.7550	-74.2692	1660	NCEI	1899-2014
NY	ISLIP LI MACARTHUR AP	30-4130	15M	40.7939	-73.1017	84	NCEI	2000-2013
NY	ISLIP LI MACARTHUR AP	30-4130	DLY	40.7939	-73.1017	84	NCEI	1906-2014
NY	ITHACA 13E	68-4180	HLY	42.4400	-76.2400	1228	NCEI	2004-2013
NY	ITHACA CORNELL UNIV	30-4174	15M	42.4492	-76.4492	960	NCEI	1984-2011
NY	ITHACA CORNELL UNIV	30-4174	HLY	42.4492	-76.4492	960	NCEI	1948-2013
NY	ITHACA CORNELL UNIV	30-4174	DLY	42.4492	-76.4492	960	NCEI	1893-2014
NY	JACKSONBURG	30-4182	DLY	43.0167	-74.9167	390	NCEI	1932-1963
NY	JAMESTOWN	30-4206	HLY	42.1000	-79.2500	1391	NCEI	1948-1960
NY	JAMESTOWN	30-4206	DLY	42.1000	-79.2500	1391	NCEI	1895-1960
NY	JAMESTOWN 4 ENE	30-4207	15M	42.1100	-79.1592	1250	NCEI	1984-2011
NY	JAMESTOWN 4 ENE	30-4207	HLY	42.1100	-79.1592	1250	NCEI	1960-2013
NY	JAMESTOWN 4 ENE	30-4207	DLY	42.1100	-79.1592	1250	NCEI	1960-2014
NY	JAMESTOWN WTR WKS	30-4208	HLY	42.1167	-79.2333	1390	NCEI	1962-1973
NY	JAMESTOWN WTR WKS	30-4208	DLY	42.1167	-79.2333	1390	NCEI	1962-1974
NY	JEFFERSONVILLE	30-4234	DLY	41.7833	-74.9333	1080	NCEI	1903-1947
NY	KDKK	78-0015	15M	42.4933	-79.2722	667	NCEI	2005-2014
NY	KEENE VALLEY 1 W	30-4332	HLY	44.1859	-73.8001	1280	NCEI	1955-1969
NY	KEENE VALLEY 1 W	30-4332	DLY	44.1859	-73.8001	1280	NCEI	1897-1918
NY	KENSICO RESERVOIR NEAR VA	99-0023	HLY	41.0835	-73.7738	355	NYCDEP	1996-2013
NY	KHWV	78-0034	15M	40.8217	-72.8689	68	NCEI	2005-2014
NY	KINGSTON CITY HALL	30-4424	HLY	41.9333	-74.0000	279	NCEI	1948-1972
NY	KINGSTON CITY HALL	30-4426	HLY	41.9167	-73.9833	49	NCEI	1973-1984
NY	KORTRIGHT	30-4472	DLY	42.4066	-74.7978	1903	NCEI	1948-1960
NY	KORTRIGHT 2	30-4473	DLY	42.4167	-74.8000	1730	NCEI	1960-1994

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	KPBG	78-0050	15M	44.6500	-73.4667	188	NCEI	2007-2014
NY	LACKAWACK	30-4486	DLY	41.7867	-74.4123	722	NCEI	1948-1961
NY	LAKE DELAWARE	30-4525	DLY	42.2500	-74.9000	1470	NCEI	1948-1981
NY	LAKE GEORGE	30-4529	DLY	43.4277	-73.7147	350	NCEI	1903-1919
NY	LAKE GEORGE #1	30-4530	DLY	43.4277	-73.7147	350	NCEI	1896-1908
NY	LAKE HILL	30-4533	DLY	42.0667	-74.1833	1122	NCEI	1899-1959
NY	LAKE HILL	60-4533	DLY	42.0667	-74.1833	1122	DWSGE	1918-1948
NY	LAKE PLACID 2 S	30-4555	15M	44.2444	-73.9855	1940	NCEI	1971-2011
NY	LAKE PLACID 2 S	30-4555	HLY	44.2444	-73.9855	1940	NCEI	1948-2013
NY	LAKE PLACID 2 S	30-4555	DLY	44.2444	-73.9855	1940	NCEI	1897-2014
NY	LAKE RONKONKOMA	30-4563	DLY	40.8333	-73.1333	79	NCEI	1948-1967
NY	LARCHMONT	30-4613	HLY	40.9333	-73.7500	39	NCEI	1948-1976
NY	LAWRENCEVILLE 3 SW	30-4647	DLY	44.7583	-74.6692	466	NCEI	1931-2008
NY	LETCHWORTH PARK	30-4698	DLY	42.5833	-78.0333	1260	NCEI	1912-1952
NY	LEWISTON 1 N	30-4715	DLY	43.1833	-79.0500	331	NCEI	1935-1972
NY	LEXINGTON 1 SE	30-4723	DLY	42.2320	-74.3562	1480	NCEI	1948-1959
NY	LEXINGTON 1 SE	60-4723	DLY	42.2333	-74.3333	1480	DWSGE	1928-1948
NY	LIBERTY 1 NE	30-4731	DLY	41.8017	-74.7400	1580	NCEI	1898-2014
NY	LINDEN	30-4767	DLY	42.8833	-78.1667	1122	NCEI	1912-1965
NY	LINDLEY 2N	30-4772	DLY	42.0642	-77.1441	1040	NCEI	1953-2014
NY	LITTLE FALLS 7.5 NW	69-1233	DLY	43.1100	-74.9700	712	COCORAHS	2007-2012
NY	LITTLE FALLS CITY RES	30-4791	DLY	43.0603	-74.8686	893	NCEI	1897-2014
NY	LITTLE FALLS MILL ST	30-4796	DLY	43.0350	-74.8652	360	NCEI	1920-1994
NY	LITTLE VALLEY	30-4808	DLY	42.2472	-78.8125	1625	NCEI	1941-2014
NY	LOCKE 2 W	30-4836	DLY	42.6703	-76.4722	1200	NCEI	1932-2014
NY	LOCKPORT 3 S	30-4844	DLY	43.1392	-78.6814	605	NCEI	1893-1999
NY	LOCKPORT 4 NE	30-4849	DLY	43.2000	-78.6333	440	NCEI	1961-1994
NY	LOWVILLE	30-4912	15M	43.7975	-75.4817	860	NCEI	1987-2011
NY	LOWVILLE	30-4912	HLY	43.7975	-75.4817	860	NCEI	1987-2013
NY	LOWVILLE	30-4912	DLY	43.7975	-75.4817	860	NCEI	1891-2014
NY	LYONS FALLS	30-4944	DLY	43.6167	-75.3667	800	NCEI	1926-2000

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	MACEDON	30-4952	DLY	43.0731	-77.3019	466	NCEI	1932-2014
NY	MADISON BARRACKS	30-4957	DLY	43.9500	-76.1167	262	NCEI	1890-1899
NY	MADISON BARRACKS	52-4957	DLY	43.9500	-76.1167	262	FORTS	1820-1893
NY	MALONE	30-4996	DLY	44.8419	-74.3081	880	NCEI	1983-2014
NY	MALONE (1)	30-4995	DLY	44.8500	-74.3833	810	NCEI	1893-1896
NY	MANORKILL	30-5032	DLY	42.3833	-74.3167	1620	NCEI	1948-1995
NY	MANORKILL	60-5032	DLY	42.3833	-74.3167	1620	DWSGE	1928-1948
NY	MARCELLUS SCS	30-5072	HLY	42.9833	-76.3833	1030	NCEI	1948-1968
NY	MARY SMITH	30-5120	DLY	42.0595	-74.8221	1522	NCEI	1948-1976
NY	MASSENA	55-0164	HLY	44.9358	-74.8458	214	NCEI	2000-2014
NY	MASSENA AP	30-5134	15M	44.9358	-74.8456	214	NCEI	2005-2013
NY	MASSENA AP	30-5134	HLY	44.9358	-74.8456	214	NCEI	1948-1952
NY	MASSENA INTL AP	30-5134	DLY	44.9358	-74.8458	214	NCEI	1948-2014
NY	MASSENA SNELL LOCK	30-5129	15M	44.9833	-74.7833	220	NCEI	1971-1992
NY	MASSENA SNELL LOCK	30-5129	HLY	44.9833	-74.7833	220	NCEI	1952-1992
NY	MASSENA SNELL LOCK	30-5129	DLY	44.9833	-74.7833	220	NCEI	1894-1962
NY	MAYS POINT LOCK 25	30-5171	DLY	43.0000	-76.7667	400	NCEI	1932-1996
NY	MCKEEVER	30-5199	DLY	43.6167	-75.1167	1480	NCEI	1926-1953
NY	MECHANICVILLE 2 S	30-5231	DLY	42.8833	-73.6833	39	NCEI	1903-1976
NY	MECKLENBURG 4SW	30-5233	DLY	42.4422	-76.7586	1510	NCEI	2003-2014
NY	MEDFORD	30-5235	DLY	40.8167	-72.9833	80	NCEI	1906-1927
NY	MELROSE 1 NE	30-5248	DLY	42.8500	-73.6167	350	NCEI	1965-2014
NY	MENANDS	52-5259	DLY	42.7000	-73.7333	125	FORTS	1825-1892
NY	MERRIMAN DAM	30-5276	DLY	41.8000	-74.4331	865	NCEI	1961-2005
NY	MIDDLETOWN 2 NW	30-5310	DLY	41.4603	-74.4489	700	NCEI	1893-2011
NY	MILLBROOK	30-5334	DLY	41.8553	-73.6700	820	NCEI	1941-2004
NY	MILLBROOK 3W	68-5338	HLY	41.7800	-73.7400	413	NCEI	2004-2013
NY	MILLERTON	30-5346	15M	41.9500	-73.5167	732	NCEI	1984-1985
NY	MILLERTON	30-5346	HLY	41.9500	-73.5167	732	NCEI	1948-1985
NY	MILLERTON	30-5346	DLY	41.9500	-73.5167	732	NCEI	1941-1953
NY	MILTON CTR	30-5255	DLY	43.0500	-73.9000	410	NCEI	1987-1990

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	MINEOLA	30-5377	15M	40.7328	-73.6183	96	NCEI	1972-2011
NY	MINEOLA	30-5377	HLY	40.7328	-73.6183	96	NCEI	1948-2013
NY	MINEOLA	30-5377	DLY	40.7328	-73.6183	96	NCEI	1938-2011
NY	MINEOLA 1 NE	30-5380	DLY	40.7494	-73.6233	100	NCEI	1994-2000
NY	MOHONK LAKE	30-5426	DLY	41.7681	-74.1550	1245	NCEI	1896-2014
NY	MONGAUP VALLEY 4 SSW	30-5435	HLY	41.5703	-74.7931	1246	NCEI	1974-2013
NY	MONGAUP VALLEY 4 SSW	30-5435	DLY	41.5703	-74.7931	1246	NCEI	1945-1974
NY	MOREHOUSEVILLE	30-5489	DLY	43.3979	-74.7180	1697	NCEI	1908-1915
NY	MORRISVILLE 6 SW	30-5512	DLY	42.8417	-75.7264	1681	NCEI	1911-2014
NY	MOSS LAKE	54-0153	DLY	43.7868	-74.8429	1857	NADP	2003-2013
NY	MOUNT HOPE	30-5540	DLY	40.9833	-73.8667	200	NCEI	1896-1929
NY	MOUNT VERNON	30-5618	DLY	40.9000	-73.8333	155	NCEI	1914-1941
NY	MT MORRIS 2 W	30-5597	15M	42.7314	-77.9053	880	NCEI	1971-2011
NY	MT MORRIS 2 W	30-5597	HLY	42.7314	-77.9053	880	NCEI	1950-2013
NY	MT MORRIS 2 W	30-5597	DLY	42.7314	-77.9053	880	NCEI	1893-2014
NY	MT VANHOEVENBERG	76-0021	HLY	44.2000	-73.9000	2000	RAWS	2004-2013
NY	NARROWSBURG 4 SE	30-5639	DLY	41.5690	-75.0119	740	NCEI	1956-1998
NY	NEVERSINK	30-5671	DLY	41.8333	-74.6500	1302	NCEI	1948-1959
NY	NEVERSINK DAM NEAR NEVERS	99-0013	DLY	41.8275	-74.6391	1448	NYCDEP	1982-2014
NY	NEW ALBION	30-5673	DLY	42.3019	-78.8981	1860	NCEI	1948-1987
NY	NEW ALBION 1 W	30-5675	DLY	42.2833	-78.9167	1972	NCEI	1951-1954
NY	NEW ALBION 2	30-5676	DLY	42.3114	-78.9083	1990	NCEI	2011-2014
NY	NEW BERLIN	30-5687	DLY	42.6167	-75.3333	1080	NCEI	1907-1997
NY	NEW CROTON RESERVOIR SOUT	99-0024	HLY	41.2447	-73.8211	196	NYCDEP	1996-2013
NY	NEW KINGSTON	30-5743	DLY	42.2281	-74.7018	1923	NCEI	1948-1985
NY	NEW LONDON LOCK NO 22	30-5751	DLY	43.2097	-75.6453	400	NCEI	1932-2014
NY	NEW YORK	55-0176	HLY	40.6386	-73.7622	22	NCEI	1996-2014
NY	NEW YORK BOTANICAL GRD	30-5799	HLY	40.8667	-73.8833	89	NCEI	1973-1976
NY	NEW YORK CITY	52-5802	DLY	40.7022	-74.0149	10	FORTS	1821-1892
NY	NEW YORK JFK INTL AP	30-5803	HLY	40.6386	-73.7622	11	NCEI	1949-2013
NY	NEW YORK JFK INTL AP	30-5803	DLY	40.6386	-73.7622	11	NCEI	1963-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	NEW YORK LA GUARDIA AP	30-5811	HLY	40.7794	-73.8803	11	NCEI	1948-2013
NY	NEW YORK LAGUARDIA AP	30-5811	DLY	40.7794	-73.8803	11	NCEI	1963-2014
NY	NEW YORK LAUREL HILL	30-5804	DLY	40.7333	-73.9333	10	NCEI	1922-1983
NY	NEW YORK UNIV ST	30-5806	HLY	40.8500	-73.9167	180	NCEI	1948-1973
NY	NEW YORK WB CITY	30-5816	HLY	40.7000	-74.0167	10	NCEI	1889-1948
NY	NEW YORK WB CITY	30-5816	DLY	40.7022	-74.0149	10	NCEI	1948-1960
NY	NEWARK	30-5679	DLY	43.0467	-77.0842	430	NCEI	1932-2014
NY	NEWARK VALLEY 1N	30-5682	15M	42.2464	-76.1767	990	NCEI	1974-2011
NY	NEWARK VALLEY 1N	30-5682	HLY	42.2464	-76.1767	990	NCEI	1954-2011
NY	NEWARK VALLEY 1N	30-5682	DLY	42.2464	-76.1767	990	NCEI	1900-1920
NY	NEWCOMB	30-5714	DLY	43.9708	-74.2219	1647	NCEI	1959-2014
NY	NEWCOMB 3 W	30-5711	DLY	43.9698	-74.2162	1621	NCEI	1940-1977
NY	NEWPORT 7 NE	30-5769	DLY	43.2000	-74.9167	1694	NCEI	1985-1995
NY	NIAGARA FALLS INTL AP	30-5840	DLY	43.1014	-78.9500	519	NCEI	1989-2014
NY	NIAGARA FALLS INTL AP	30-5841	DLY	43.1083	-78.9381	585	NCEI	1951-2014
NY	NORFOLK	30-5869	DLY	44.8053	-74.9997	230	NCEI	1941-2004
NY	NORTH CREEK 5 SE	30-5925	DLY	43.6611	-73.8969	890	NCEI	1907-2014
NY	NORTH LAKE	30-5987	DLY	43.5237	-74.9438	1831	NCEI	1896-1948
NY	NORTH TONAWANDA	30-6047	DLY	43.0219	-78.8467	600	NCEI	1982-2014
NY	NORTHVILLE	30-6062	DLY	43.1592	-74.2042	790	NCEI	1903-2014
NY	NORWICH	30-6085	DLY	42.5117	-75.5197	989	NCEI	1906-2014
NY	NORWICH 5.7 NE	69-1066	DLY	42.5800	-75.4300	1745	COCORAHS	2004-2012
NY	NUMBER FOUR	30-6098	DLY	43.8667	-75.1833	1571	NCEI	1893-1905
NY	NY AVE V BROOKLYN	30-5796	HLY	40.5939	-73.9808	20	NCEI	1948-1977
NY	NY AVE V BROOKLYN	30-5796	DLY	40.5939	-73.9808	20	NCEI	1948-2007
NY	NY CITY CNTRL PARK	30-5801	HLY	40.7789	-73.9692	130	NCEI	1948-2013
NY	NY CITY CNTRL PARK	30-5801	DLY	40.7789	-73.9692	130	NCEI	1876-2014
NY	NY WESTERLEIGH STAT IS	30-5821	HLY	40.6333	-74.1167	80	NCEI	1948-1992
NY	NY WESTERLEIGH STAT IS	30-5821	DLY	40.6333	-74.1167	80	NCEI	1948-1992
NY	NYC FT HAMILTON	52-5812	DLY	40.6065	-74.0299	25	FORTS	1832-1892
NY	OAKLAND VALLEY	30-6119	HLY	41.5035	-74.6529	920	NCEI	1948-2004

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	OCEANSIDE	30-6138	DLY	40.6328	-73.6269	12	NCEI	1994-2010
NY	OGDENSBURG 4 NE	30-6164	DLY	44.7281	-75.4442	280	NCEI	1893-2014
NY	OLD FORGE	30-6184	HLY	43.7025	-74.9839	1748	NCEI	1948-2013
NY	OLD FORGE	30-6184	DLY	43.7025	-74.9839	1748	NCEI	1907-2014
NY	OLEAN	30-6196	DLY	42.0736	-78.4517	1420	NCEI	1909-2014
NY	ON MERRIMAN DAM (RONDOUT)	99-0014	DLY	41.8044	-74.4245	850	NYCDEP	1982-2014
NY	ONCHIOTA 0.3 ENE	69-1211	DLY	44.5000	-74.1200	1732	COCORAHS	2008-2012
NY	ONEONTA 1 S	30-6224	DLY	42.4500	-75.0667	1079	NCEI	1894-1956
NY	ONEONTA 3 SE	30-6229	HLY	42.4500	-75.0000	1161	NCEI	1948-1950
NY	ONEONTA 3 SE	30-6229	DLY	42.4500	-75.0000	1161	NCEI	1948-1969
NY	ONEONTA STATE UNIV	30-6232	DLY	42.4667	-75.0667	1401	NCEI	1971-1983
NY	OSWEGO EAST	30-6314	15M	43.4622	-76.4933	350	NCEI	1984-2011
NY	OSWEGO EAST	30-6314	HLY	43.4622	-76.4933	350	NCEI	1948-2013
NY	OSWEGO EAST	30-6314	DLY	43.4622	-76.4933	350	NCEI	1926-2014
NY	OVID 4 S	30-6346	DLY	42.6167	-76.8167	1122	NCEI	1932-1972
NY	OWEGO 3 WSW	30-6356	DLY	42.0811	-76.3178	810	NCEI	1979-2014
NY	PALERMO	30-6375	DLY	43.4000	-76.3000	467	NCEI	1893-1925
NY	PALERMO	52-6375	DLY	43.4000	-76.3000	467	FORTS	1860-1892
NY	PARISHVILLE 1 WNW	30-6411	DLY	44.6333	-74.8333	751	NCEI	1941-1981
NY	PATCHOGUE 2 N	30-6441	DLY	40.7967	-73.0014	55	NCEI	1937-1997
NY	PAUL SMITHS	30-6459	DLY	44.4333	-74.2667	1670	NCEI	1903-1966
NY	PAVILION	30-6464	HLY	42.9294	-78.0319	956	NCEI	1956-1992
NY	PAVILION	30-6464	DLY	42.9294	-78.0319	956	NCEI	1956-2014
NY	PEEKAMOOSE	30-6479	DLY	41.9277	-74.3801	1460	NCEI	1948-1964
NY	PEEKAMOOSE	60-6479	DLY	41.9333	-74.3833	1460	DWSGE	1933-1948
NY	PENN YAN	30-6510	DLY	42.6711	-77.0628	830	NCEI	1897-2001
NY	PEPACTON DAM NEAR DOWNSVI	99-0016	DLY	42.0758	-74.9724	1200	NYCDEP	1982-2014
NY	PERRYSBURG	30-6525	DLY	42.4647	-79.0031	1210	NCEI	2003-2014
NY	PERU 2 WSW	30-6538	DLY	44.5658	-73.5700	510	NCEI	1938-2014
NY	PHOENICIA	30-6567	DLY	42.0864	-74.3142	870	NCEI	1948-2000
NY	PHOENICIA	60-6567	DLY	42.0864	-74.3142	870	DWSGE	1918-1948

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	PHONECIA 2SW	30-6570	DLY	42.0675	-74.3356	1060	NCEI	2011-2014
NY	PISECO	30-6623	15M	43.4614	-74.5231	1730	NCEI	1975-2011
NY	PISECO	30-6623	HLY	43.4614	-74.5231	1730	NCEI	1948-2011
NY	PISECO	30-6623	DLY	43.4614	-74.5231	1730	NCEI	1942-2011
NY	PLATTE CLOVE	30-6649	DLY	42.1389	-74.0914	2032	NCEI	1998-2014
NY	PLATTSBURGH 3 S	30-6660	DLY	44.6522	-73.4400	178	NCEI	2011-2014
NY	PLATTSBURGH AFB	30-6659	DLY	44.6500	-73.4667	165	NCEI	1898-1995
NY	PLATTSBURGH CLINTON AP	79-0058	DLY	44.6872	-73.5231	372	NCEI	1998-2007
NY	PLATTSBURGH INTL AP	79-0002	DLY	44.6500	-73.4667	234	NCEI	1956-2014
NY	PLEASANTVILLE	30-6674	15M	41.1314	-73.7758	320	NCEI	1976-2000
NY	PLEASANTVILLE	30-6674	HLY	41.1314	-73.7758	320	NCEI	1976-2000
NY	PLEASANTVILLE	30-6674	DLY	41.1314	-73.7758	320	NCEI	1944-1999
NY	PLYMOUTH	30-6685	HLY	42.6167	-75.6000	1280	NCEI	1948-1997
NY	PORT JEFFERSON	30-6768	HLY	40.9500	-73.0667	10	NCEI	1953-1976
NY	PORT JERVIS	30-6774	DLY	41.3800	-74.6847	470	NCEI	1893-2014
NY	PORTAGEVILLE	30-6745	DLY	42.5697	-78.0400	1168	NCEI	1898-2014
NY	POUGHKEEPSIE	30-6817	HLY	41.6833	-73.9333	102	NCEI	1950-1951
NY	POUGHKEEPSIE	30-6817	DLY	41.6833	-73.9333	102	NCEI	1893-1971
NY	POUGHKEEPSIE 1 N	30-6825	15M	41.7167	-73.9333	50	NCEI	1971-2011
NY	POUGHKEEPSIE 1 N	30-6825	HLY	41.7167	-73.9333	50	NCEI	1953-2013
NY	POUGHKEEPSIE 7NNW	30-6820	15M	41.7267	-73.9200	185	NCEI	2005-2013
NY	POUGHKEEPSIE 7NNW	30-6820	HLY	41.7267	-73.9200	185	NCEI	1948-1953
NY	POUGHKEEPSIE 7NNW	30-6820	DLY	41.7267	-73.9200	185	NCEI	1896-2014
NY	POUGHKEEPSIE DUTCHESS CO	30-6821	DLY	41.6267	-73.8842	166	NCEI	1896-2014
NY	PRATTSBURG	30-6833	DLY	42.5167	-77.2667	1440	NCEI	1988-2002
NY	PRATTSBURG 2 NW	30-6831	DLY	42.5333	-77.3000	1942	NCEI	1944-1986
NY	PRATTSVILLE	30-6839	15M	42.3281	-74.4422	1207	NCEI	1971-2006
NY	PRATTSVILLE	30-6839	HLY	42.3281	-74.4422	1207	NCEI	1948-2006
NY	PRATTSVILLE	30-6839	DLY	42.3281	-74.4422	1207	NCEI	1948-2001
NY	PRATTSVILLE	60-6839	DLY	42.3281	-74.4422	1207	DWSGE	1928-1948
NY	PULASKI 1 N	30-6867	DLY	43.5833	-76.1167	400	NCEI	1948-1990



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NY	RAQUETTE LAKE	30-6941	DLY	43.8167	-74.6667	1781	NCEI	1895-1952
NY	RAY BROOK	30-6957	DLY	44.2961	-74.1028	1620	NCEI	1969-2004
NY	RHINEBECK	30-7033	DLY	41.9333	-73.9167	215	NCEI	1916-1926
NY	RHINEBECK 4SE	30-7035	HLY	41.8847	-73.8686	301	NCEI	1990-2008
NY	RHINEBECK 4SE	30-7035	DLY	41.8847	-73.8686	301	NCEI	1990-2014
NY	RICHLAND	30-7077	DLY	43.5667	-76.0500	522	NCEI	1904-1952
NY	RIFTON 1 N	30-7115	DLY	41.8500	-74.0500	39	NCEI	1921-1967
NY	RIVERBANK	30-7129	DLY	43.6000	-73.7331	750	NCEI	1955-1986
NY	RIVERHEAD RSCH FM	30-7134	15M	40.9619	-72.7158	100	NCEI	1971-2011
NY	RIVERHEAD RSCH FM	30-7134	HLY	40.9619	-72.7158	100	NCEI	1948-2013
NY	RIVERHEAD RSCH FM	30-7134	DLY	40.9619	-72.7158	100	NCEI	1938-2014
NY	ROCHESTER	52-7160	DLY	43.1558	-77.6131	501	FORTS	1856-1892
NY	ROCHESTER	79-0061	DLY	43.1500	-77.6167	551	NCEI	1871-1940
NY	ROCHESTER GTR INTL AP	30-7167	DLY	43.1167	-77.6767	539	NCEI	1948-2014
NY	ROCHESTER INTL AP	30-7167	HLY	43.1167	-77.6767	533	NCEI	1948-2013
NY	ROCK HILL	30-7205	DLY	41.6000	-74.6000	1552	NCEI	1956-1963
NY	ROCK HILL 3 SW	30-7210	DLY	41.5917	-74.6142	1270	NCEI	1963-2014
NY	ROCKDALE	30-7195	DLY	42.3833	-75.4000	1030	NCEI	1943-2007
NY	ROSENDALE 2 E	30-7274	DLY	41.8500	-74.0500	40	NCEI	1956-2014
NY	ROSLYN	30-7282	DLY	40.8000	-73.6333	220	NCEI	1912-1931
NY	ROXBURY	30-7317	DLY	42.2833	-74.5667	1490	NCEI	1915-1972
NY	RUSHFORD	30-7329	DLY	42.3942	-78.2517	1540	NCEI	1954-2014
NY	RYE LAKE AIRPORT	30-7338	DLY	41.0667	-73.7167	425	NCEI	1944-1946
NY	SABATTIS 3 NE	30-7348	DLY	44.1167	-74.6667	1762	NCEI	1933-1979
NY	SALAMANCA	30-7398	15M	42.1589	-78.7219	1372	NCEI	1971-2008
NY	SALAMANCA	30-7398	HLY	42.1589	-78.7219	1372	NCEI	1951-2008
NY	SALAMANCA 2	30-7400	DLY	42.1506	-78.7203	1415	NCEI	1991-2008
NY	SALEM	30-7405	DLY	43.1667	-73.3167	490	NCEI	1942-1997
NY	SALISBURY	30-7413	DLY	43.1589	-74.8533	1381	NCEI	1897-1975
NY	SALISBURY MILLS	30-7420	DLY	41.4333	-74.1167	314	NCEI	1899-1910
NY	SARANAC LAKE	30-7472	DLY	44.3333	-74.1333	1581	NCEI	1893-1966

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NY	SARANAC RGNL AP	79-0060	DLY	44.3853	-74.2067	1663	NCEI	1998-2014
NY	SARATOGA BATTLEFIELD	76-0022	HLY	43.0078	-73.6511	375	RAWS	2003-2013
NY	SARATOGA SPRINGS 4 NW	30-7480	DLY	43.1000	-73.8333	551	NCEI	1898-1951
NY	SARATOGA SPRINGS 4 SW	30-7484	DLY	43.0333	-73.8167	310	NCEI	1955-2014
NY	SCARSDALE	30-7497	HLY	40.9833	-73.8000	199	NCEI	1948-1990
NY	SCARSDALE	30-7497	DLY	40.9833	-73.8000	199	NCEI	1904-1991
NY	SCHAGHTICOKE 1 W	30-7505	DLY	42.9000	-73.6000	131	NCEI	1948-1965
NY	SCHENECTADY	30-7514	HLY	42.8000	-73.9167	360	NCEI	1988-1997
NY	SCHENECTADY	30-7514	DLY	42.8000	-73.9167	360	NCEI	1988-1996
NY	SCHENECTADY	30-7513	DLY	42.8333	-73.9167	220	NCEI	1898-1985
NY	SCHOHARIE DAM NEAR GILBOA	99-0018	DLY	42.3910	-74.4524	1122	NYCDEP	1982-2014
NY	SCHUYLERVILLE	30-7549	HLY	43.1131	-73.5775	120	NCEI	1948-2013
NY	SCHUYLERVILLE LOCK 5	30-7544	DLY	43.1167	-73.5833	112	NCEI	1932-1963
NY	SCIO	30-7557	DLY	42.1667	-77.9833	1440	NCEI	1948-1975
NY	SCOTIA	30-7568	DLY	42.8167	-73.9833	230	NCEI	1932-1963
NY	SCOTIA 1.1 NW	69-1461	DLY	42.8400	-73.9700	276	COCORAHS	2008-2012
NY	SETAUKET STRONG	30-7633	DLY	40.9586	-73.1047	40	NCEI	1885-2011
NY	SHARON SPRINGS 1N	30-7659	DLY	42.8118	-74.5991	820	NCEI	1911-1953
NY	SHARON SPRINGS 2 SW	30-7664	DLY	42.7818	-74.6534	1362	NCEI	1914-1951
NY	SHERBURNE	30-7705	DLY	42.6772	-75.5067	1095	NCEI	1907-2014
NY	SHERMAN	30-7713	DLY	42.1572	-79.5936	1560	NCEI	1951-2005
NY	SHIRLEY	55-0122	HLY	40.8217	-72.8689	82	NCEI	1999-2014
NY	SHOKAN BROWN STATION	30-7721	DLY	41.9500	-74.2000	510	NCEI	1953-2008
NY	SHORTSVILLE	30-7728	DLY	42.9500	-77.2500	660	NCEI	1899-1937
NY	SHRUB OAK	30-7742	HLY	41.3333	-73.8333	420	NCEI	1953-1970
NY	SINCLAIRVILLE	30-7772	DLY	42.2786	-79.2656	1620	NCEI	1959-2003
NY	SKANEATELES	30-7780	DLY	42.9461	-76.4314	875	NCEI	1900-2014
NY	SLIDE MTN	30-7799	HLY	42.0124	-74.4159	2650	NCEI	1953-1970
NY	SLIDE MTN	30-7799	DLY	42.0124	-74.4159	2650	NCEI	1948-2014
NY	SLIDE MTN	60-7799	DLY	42.0167	-74.4167	2650	DWSGE	1918-1948
NY	SMITHS BASIN	30-7818	DLY	43.3519	-73.4961	142	NCEI	1932-2010

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	SMITHVILLE FLATS	30-7830	HLY	42.3878	-75.8095	1080	NCEI	1948-2006
NY	SODUS CTR	30-7842	DLY	43.2078	-77.0128	420	NCEI	1922-2014
NY	SOUTH CANISTEO	30-7918	DLY	42.1848	-77.5528	1562	NCEI	1893-1949
NY	SOUTH EDWARDS 1 E	30-7944	DLY	44.2667	-75.2000	801	NCEI	1927-1978
NY	SOUTH WALES EMERY PARK	30-8058	DLY	42.7167	-78.6000	1089	NCEI	1931-1985
NY	SOUTHHAMPTON	30-7895	DLY	40.9000	-72.4500	36	NCEI	1900-1918
NY	SPECULATOR	30-8080	DLY	43.5000	-74.3617	1740	NCEI	1901-2000
NY	SPENCER 1 NE	30-8086	DLY	42.2167	-76.4667	1170	NCEI	1997-2007
NY	SPENCER 2 N	30-8088	DLY	42.2500	-76.5000	1050	NCEI	1943-1994
NY	SPENCERTOWN	30-8096	DLY	42.3333	-73.5500	630	NCEI	1929-1959
NY	SPIER FALLS	30-8104	DLY	43.2349	-73.7537	390	NCEI	1901-1975
NY	STAFFORD	30-8152	DLY	42.9833	-78.0833	912	NCEI	1931-1967
NY	STAMFORD	30-8160	DLY	42.4000	-74.6333	1779	NCEI	1948-2004
NY	STEWART FLD	30-8232	DLY	41.5000	-74.1000	581	NCEI	1899-1970
NY	STEWARTS LANDING	30-8240	DLY	43.1333	-74.6000	1542	NCEI	1948-1958
NY	STILLWATER RSVR	30-8248	HLY	43.9000	-75.0367	1690	NCEI	1948-2013
NY	STILLWATER RSVR	30-8248	DLY	43.9000	-75.0367	1690	NCEI	1925-2014
NY	STONY POINT 2E	30-8290	15M	43.8389	-76.2675	250	NCEI	1978-2010
NY	STORMVILLE	30-8304	DLY	41.5333	-73.7333	915	NCEI	1990-2007
NY	SUFFERN	30-8322	DLY	41.1128	-74.1572	270	NCEI	1956-2009
NY	SUFFERN 2 E	30-8321	DLY	41.1167	-74.1167	502	NCEI	1940-1955
NY	SYRACUSE	30-8380	DLY	43.0500	-76.1500	390	NCEI	1922-1940
NY	SYRACUSE HANCOCK AP	30-8383	HLY	43.1111	-76.1039	413	NCEI	1948-2013
NY	SYRACUSE HANCOCK AP	30-8383	DLY	43.1111	-76.1039	413	NCEI	1938-2014
NY	TANNERSVILLE 2 E	30-8405	DLY	42.2000	-74.1000	1923	NCEI	1959-1974
NY	TANNERSVILLE 2 SE	30-8406	15M	42.1625	-74.1572	1950	NCEI	1976-2011
NY	TANNERSVILLE 2 SE	30-8406	HLY	42.1625	-74.1572	1950	NCEI	1976-2013
NY	TANNERSVILLE SWG PLT	30-8403	DLY	42.1833	-74.1500	1801	NCEI	1948-1959
NY	TANNERSVILLE SWG PLT	60-8403	DLY	42.1833	-74.1500	1801	DWSGE	1928-1948
NY	THERESA	30-8455	DLY	44.2167	-75.8000	341	NCEI	1941-1979
NY	THERESA 2.8 S	69-1251	DLY	44.1800	-75.7900	423	COCORAHS	2008-2012

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NY	THURSTON	30-8498	HLY	42.2072	-77.3306	1620	NCEI	1948-2013
NY	TICONDEROGA	30-8503	HLY	43.8500	-73.4167	161	NCEI	1953-1961
NY	TICONDEROGA	30-8503	DLY	43.8500	-73.4167	161	NCEI	1897-1972
NY	TICONDEROGA 3 NE	30-8506	DLY	43.8833	-73.4000	210	NCEI	1941-1980
NY	TICONDEROGA B MILL	30-8507	15M	43.8467	-73.4281	315	NCEI	1974-2011
NY	TICONDEROGA B MILL	30-8507	HLY	43.8467	-73.4281	315	NCEI	1961-2013
NY	TILLY FOSTER	30-8512	HLY	41.4000	-73.6500	400	NCEI	1948-1953
NY	TRENTON FALLS	30-8578	DLY	43.2761	-75.1567	800	NCEI	1909-2014
NY	TRIBES HILL	30-8586	15M	42.9464	-74.2886	300	NCEI	1971-2011
NY	TRIBES HILL	30-8586	HLY	42.9464	-74.2886	300	NCEI	1948-2013
NY	TRIBES HILL	30-8586	DLY	42.9464	-74.2886	300	NCEI	1904-2014
NY	TROUPSBURG 4 NE	30-8594	DLY	42.0667	-77.4833	1710	NCEI	1944-2003
NY	TROY	30-8597	DLY	42.7333	-73.7000	35	NCEI	1911-1935
NY	TROY L&D	30-8600	DLY	42.7500	-73.6833	24	NCEI	1932-2014
NY	TULLY HEIBERG FOREST	30-8627	DLY	42.7603	-76.0803	1899	NCEI	1967-2007
NY	TUPPER LAKE SUNMOUNT	30-8631	DLY	44.2308	-74.4383	1680	NCEI	1899-2014
NY	UNADILLA	30-8665	DLY	42.3167	-75.3167	1020	NCEI	1943-1978
NY	UNADILLA 2 N	30-8670	DLY	42.3542	-75.3242	1480	NCEI	1975-2014
NY	UPTON	30-8720	15M	40.8706	-72.8914	75	NCEI	1971-2011
NY	UPTON	30-8720	HLY	40.8706	-72.8914	75	NCEI	1948-2013
NY	UTICA	30-8739	HLY	43.0833	-75.2000	580	NCEI	1952-1991
NY	UTICA	30-8739	DLY	43.0833	-75.2000	580	NCEI	1948-1991
NY	UTICA HARBOR POINT	30-8733	DLY	43.1167	-75.2333	410	NCEI	1893-1948
NY	UTICA ONEIDA CO AP	30-8737	DLY	43.1450	-75.3839	711	NCEI	1950-2007
NY	VALATIE 1 N	30-8746	DLY	42.4333	-73.6833	300	NCEI	1971-2009
NY	VALHALLA 2 E	30-8749	DLY	41.0667	-73.7667	371	NCEI	1948-1961
NY	VESTAL	30-8833	DLY	42.0500	-76.0500	1490	NCEI	1977-1985
NY	VESTAL 2	30-8831	DLY	42.1000	-76.0500	830	NCEI	1940-1977
NY	VESTAL 2	30-8835	DLY	42.1000	-76.0500	799	NCEI	1940-1977
NY	VICTOR 2NW	30-8839	HLY	43.0044	-77.4472	588	NCEI	1948-2006
NY	VICTOR 2NW	30-8839	DLY	43.0044	-77.4472	588	NCEI	1893-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	WALDEN 1 ESE	30-8906	DLY	41.5514	-74.1628	380	NCEI	1972-2014
NY	WALDEN 2 NE	30-8902	DLY	41.5667	-74.1667	400	NCEI	1922-1959
NY	WALES	30-8910	15M	42.7417	-78.5108	1090	NCEI	1971-2011
NY	WALES	30-8910	HLY	42.7417	-78.5108	1090	NCEI	1948-2013
NY	WALTON	30-8936	DLY	42.1667	-75.1333	1240	NCEI	1956-1997
NY	WALTON 2	30-8932	DLY	42.1847	-75.1456	1480	NCEI	1997-2014
NY	WALTON 5 NE	30-8935	DLY	42.2333	-75.0833	1801	NCEI	1900-1956
NY	WANAKENA	76-0028	HLY	44.1637	-74.9114	1500	RAWS	2004-2013
NY	WANAKENA RNGR SCHOOL	30-8944	15M	44.1481	-74.9003	1510	NCEI	1984-2011
NY	WANAKENA RNGR SCHOOL	30-8944	HLY	44.1481	-74.9003	1510	NCEI	1948-2013
NY	WANAKENA RNGR SCHOOL	30-8944	DLY	44.1481	-74.9003	1510	NCEI	1910-2010
NY	WANTAGH CEDAR CREEK	30-8946	DLY	40.6550	-73.5053	10	NCEI	1976-2011
NY	WANTAGH CEDAR CREEK	30-1285	DLY	40.6550	-73.5053	10	NCEI	1976-2011
NY	WAPPINGERS FALLS	30-8949	DLY	41.6500	-73.8667	114	NCEI	1893-1950
NY	WARRENSBURG 4 NW	30-8959	DLY	43.5500	-73.8000	780	NCEI	1948-1982
NY	WARSAW 6 SW	30-8962	DLY	42.6856	-78.2203	1820	NCEI	1952-2014
NY	WARWICK	30-8967	DLY	41.2667	-74.3667	541	NCEI	1900-1974
NY	WATERLOO	30-8987	DLY	42.9014	-76.8642	452	NCEI	1932-2014
NY	WATERTOWN	30-9000	15M	43.9761	-75.8753	497	NCEI	1971-2011
NY	WATERTOWN	30-9000	HLY	43.9761	-75.8753	497	NCEI	1948-2013
NY	WATERTOWN	30-9000	DLY	43.9761	-75.8753	497	NCEI	1893-2014
NY	WATERTOWN INTL AP	30-9005	DLY	43.9922	-76.0217	318	NCEI	2011-2014
NY	WAVERLY	30-9047	DLY	42.0019	-76.5250	845	NCEI	1893-2014
NY	WELLESLEY ISLAND	30-9055	DLY	44.3564	-75.9286	285	NCEI	1974-2005
NY	WELLSVILLE	30-9072	15M	42.1172	-77.9475	1510	NCEI	1978-2011
NY	WELLSVILLE	30-9072	HLY	42.1172	-77.9475	1510	NCEI	1955-2013
NY	WELLSVILLE	30-9072	DLY	42.1172	-77.9475	1510	NCEI	1956-2014
NY	WELLSVILLE 4 NNW	30-9076	DLY	42.1667	-77.9833	1460	NCEI	1975-1998
NY	WEST BERNE	30-9100	DLY	42.6167	-74.1667	936	NCEI	1898-1932
NY	WEST BRANCH RESERVOIR DAM	99-0025	HLY	41.4116	-73.6958	503	NYCDEP	1996-2013
NY	WEST HARPERSFIELD	30-9205	DLY	42.4283	-74.7186	1880	NCEI	1893-1945

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	WEST JASPER	30-9229	HLY	42.1453	-77.5661	2170	NCEI	1948-2011
NY	WEST KILL	30-9237	DLY	42.2049	-74.3820	1503	NCEI	1948-1959
NY	WEST KILL	60-9237	DLY	42.2000	-74.3833	1503	DWSGE	1928-1948
NY	WEST MILTON	30-9250	DLY	43.0333	-73.9333	440	NCEI	1955-1986
NY	WEST POINT	30-9292	DLY	41.3906	-73.9608	320	NCEI	1890-2014
NY	WEST SAND LAKE 2 S	30-9303	DLY	42.6167	-73.6000	640	NCEI	1965-2010
NY	WEST SHOKAN 3 SW	30-9311	DLY	41.9500	-74.3167	981	NCEI	1948-1959
NY	WEST SHOKAN 3 SW	60-9311	DLY	41.9500	-74.3167	981	DWSGE	1918-1948
NY	WESTBURY	30-9117	DLY	40.7333	-73.6000	90	NCEI	1980-1990
NY	WESTCHESTER CO AP	30-9140	15M	41.0669	-73.7075	379	NCEI	2005-2013
NY	WESTCHESTER CO AP	30-9140	DLY	41.0669	-73.7075	379	NCEI	2011-2014
NY	WESTFIELD 2 SSE	30-9189	DLY	42.2956	-79.5856	944	NCEI	1895-2003
NY	WESTHAMPTN GABRESKI AP	79-0019	DLY	40.8436	-72.6322	67	NCEI	1951-2014
NY	WHIPPLEVILLE	30-9374	15M	44.8047	-74.2597	830	NCEI	1984-2011
NY	WHIPPLEVILLE	30-9374	HLY	44.8047	-74.2597	830	NCEI	1948-2013
NY	WHITE PLAINS	55-0172	HLY	41.0669	-73.7075	397	NCEI	2001-2014
NY	WHITE PLAINS MPL MOOR	30-9400	15M	41.0167	-73.7333	150	NCEI	1982-1992
NY	WHITE PLAINS MPL MOOR	30-9400	HLY	41.0167	-73.7333	150	NCEI	1948-1992
NY	WHITE PLAINS MPL MOOR	30-9400	DLY	41.0167	-73.7333	150	NCEI	1948-1951
NY	WHITE PLAINS MPL MOOR	52-9400	DLY	41.0167	-73.7333	150	FORTS	1862-1892
NY	WHITE POND	30-9413	DLY	41.5000	-73.7500	791	NCEI	1948-1961
NY	WHITEFACE MOUNTAIN	54-0161	DLY	44.3933	-73.8594	2001	NADP	1984-2013
NY	WHITEHALL	30-9389	15M	43.5575	-73.4011	119	NCEI	1971-2011
NY	WHITEHALL	30-9389	HLY	43.5575	-73.4011	119	NCEI	1948-2013
NY	WHITEHALL	30-9389	DLY	43.5575	-73.4011	119	NCEI	1932-2014
NY	WHITESVILLE	30-9425	DLY	42.0397	-77.7650	1740	NCEI	1954-2014
NY	WHITNEY POINT DAM	30-9442	15M	42.3417	-75.9653	1040	NCEI	1971-2010
NY	WHITNEY POINT DAM	30-9442	HLY	42.3417	-75.9653	1040	NCEI	1948-2011
NY	WHITNEY POINT DAM	30-9442	DLY	42.3417	-75.9653	1040	NCEI	1948-2014
NY	WHITNEY POINT LAKE	30-9437	DLY	42.3333	-75.9667	1040	NCEI	1933-2001
NY	WILLET 1.8 E	69-1084	DLY	42.4700	-75.8700	1470	COCORAHS	2004-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NY	WILLIAMSTOWN	30-9480	DLY	43.3769	-75.9206	705	NCEI	1932-2005
NY	WILSON 4 S	30-9507	DLY	43.2500	-78.8333	350	NCEI	1941-1997
NY	WINDHAM	30-9514	DLY	42.3056	-74.2538	1503	NCEI	1961-1969
NY	WINDHAM 3 E	30-9516	DLY	42.3031	-74.2011	1680	NCEI	1900-2008
NY	WINDHAM 3 E	60-9516	DLY	42.3031	-74.2011	1680	DWSGE	1928-1948
NY	WINDHAM NORTH SETTLEME	30-6042	DLY	42.3500	-74.2833	1900	NCEI	1948-1952
NY	WINDHAM NORTH SETTLEME	30-9512	DLY	42.3500	-74.2833	1900	NCEI	1953-1959
NY	WINDHAM NORTH SETTLEME	60-9512	DLY	42.3500	-74.2833	1900	DWSGE	1928-1948
NY	WINNISOOK CLUB AT WINNISO	99-0020	HLY	42.0133	-74.3961	3627	NYCDEP	1998-2013
NY	WINTHROP 2.0 SW	69-1486	DLY	44.7700	-74.8200	338	COCORAHS	2008-2012
NY	WISCOY 1 E	30-9533	DLY	42.5167	-78.0500	1151	NCEI	1940-1995
NY	WOLCOTT 3 NW	30-9544	DLY	43.2500	-76.8667	400	NCEI	1948-1996
NY	WOODLANDS ARDSLEY	30-9576	HLY	41.0167	-73.8500	140	NCEI	1948-1989
NY	YORKTOWN HEIGHTS	30-9660	DLY	41.2667	-73.7667	420	NCEI	1942-1950
NY	YORKTOWN HEIGHTS 1W	30-9670	15M	41.2664	-73.7975	670	NCEI	1970-2011
NY	YORKTOWN HEIGHTS 1W	30-9670	HLY	41.2664	-73.7975	670	NCEI	1970-2013
NY	YORKTOWN HEIGHTS 1W	30-9670	DLY	41.2664	-73.7975	670	NCEI	1965-2014
NY	YOUNGSTOWN	30-9691	DLY	43.2500	-79.0500	300	NCEI	1902-1912
NY	YOUNGSTOWN 2 NE	30-9690	DLY	43.2683	-79.0103	280	NCEI	2004-2014
RI	ADAMSVILLE 2 NW	37-0218	DLY	41.5667	-71.1500	100	NCEI	1991-1994
RI	BLOCK IS.	55-0178	HLY	41.1681	-71.5778	108	NCEI	2002-2014
RI	BLOCK ISLAND	79-0031	DLY	41.1667	-71.5667	43	NCEI	1948-1950
RI	BLOCK ISLAND 1.5 ESE	69-2532	DLY	41.1600	-71.5600	59	COCORAHS	2011-2012
RI	BLOCK ISLAND STATE AP	37-0896	HLY	41.1667	-71.5833	110	NCEI	1950-1997
RI	BLOCK ISLAND STATE AP	37-0896	DLY	41.1681	-71.5778	105	NCEI	1927-2014
RI	BLOCK ISLAND WSO AP	52-0896	DLY	41.1667	-71.5833	108	FORTS	1880-1892
RI	GREENVILLE	37-3306	DLY	41.8833	-71.5667	420	NCEI	1942-1974
RI	KINGSTON	37-4266	DLY	41.4906	-71.5414	114	NCEI	1893-2014
RI	KUUU	78-0062	15M	41.5333	-71.2833	167	NCEI	2005-2014
RI	MIDDLETOWN 2 NE NEWPOR	37-5002	DLY	41.5000	-71.2667	102	NCEI	1946-1948
RI	MVI-1	56-0002	HLY	41.8808	-71.4067	53	NBC	2008-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
RI	NEWPORT	55-0079	HLY	41.5333	-71.2833	172	NCEI	1996-2014
RI	NEWPORT ROSE	37-5215	15M	41.4970	-71.3413	15	NCEI	1971-2005
RI	NEWPORT ROSE	37-5215	HLY	41.5000	-71.3500	15	NCEI	1965-2002
RI	NEWPORT ROSE	37-5215	DLY	41.4970	-71.3413	15	NCEI	1957-2003
RI	NEWPORT STATE AP	79-0025	DLY	41.5333	-71.2833	172	NCEI	1998-2014
RI	NEWPORT WTR WKS	37-5225	HLY	41.5000	-71.3000	10	NCEI	1950-1965
RI	NORTH FOSTER 1 E	37-5270	DLY	41.8564	-71.7333	630	NCEI	1974-2014
RI	NORTH SCITUATE 4 W	37-5354	DLY	41.8333	-71.6833	679	NCEI	1969-1974
RI	PAWTUCKET	37-5882	DLY	41.8667	-71.3667	97	NCEI	1893-1938
RI	PORTSMOUTH	37-6453	DLY	41.5333	-71.2667	225	NCEI	1900-1946
RI	PROVIDENCE	37-6698	HLY	41.7219	-71.4325	60	NCEI	1948-2013
RI	PROVIDENCE (1)	37-6710	DLY	41.8333	-71.4167	75	NCEI	1896-1917
RI	PROVIDENCE (2)	37-6712	DLY	41.8333	-71.4000	204	NCEI	1893-1913
RI	PROVIDENCE T F GREEN AP	37-6698	DLY	41.7219	-71.4325	60	NCEI	1936-2014
RI	PROVIDENCE WB CITY	52-6703	DLY	41.8333	-71.4167	69	FORTS	1831-1885
RI	RAIN DOT	56-0003	HLY	41.8327	-71.4148	127	NBC	2005-2012
RI	RAIN DOT	56-0004	HLY	41.8327	-71.4148	127	NBC	2012-2014
RI	TIVERTON	37-7581	DLY	41.6267	-71.2092	82	NCEI	1998-2014
RI	WESTERLY	55-0082	HLY	41.3497	-71.7989	81	NCEI	1999-2014
RI	WESTERLY 1 W	37-8911	DLY	41.3667	-71.8333	39	NCEI	1944-1950
RI	WOOD RIVER JUNCTION	37-9327	DLY	41.4333	-71.7000	49	NCEI	1938-1948
RI	WOONSOCKET	37-9423	HLY	41.9844	-71.4908	110	NCEI	1948-1965
RI	WOONSOCKET	37-9423	DLY	41.9844	-71.4908	110	NCEI	1948-2014
VT	BALL MTN LAKE	43-0277	15M	43.1098	-72.7974	1130	NCEI	1971-2011
VT	BALL MTN LAKE	43-0277	HLY	43.1098	-72.7974	1130	NCEI	1962-2013
VT	BALL MTN LAKE	43-0277	DLY	43.1098	-72.7974	1130	NCEI	1969-2014
VT	BARRE MONTPELIER AP	43-5278	DLY	44.2036	-72.5622	1126	NCEI	1930-2014
VT	BELLOWS FALLS	43-0499	DLY	43.1333	-72.4500	270	NCEI	1902-1997
VT	BENNINGTON	55-0115	HLY	42.8914	-73.2469	828	NCEI	1998-2014
VT	BENNINGTON	54-0186	DLY	42.8761	-73.1633	1001	NADP	1981-2013
VT	BENNINGTON 2 NNW	43-0563	DLY	42.9167	-73.2167	669	NCEI	1896-1969



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
VT	BENNINGTON 3 N	43-0568	15M	42.9167	-73.1833	960	NCEI	1976-2001
VT	BETHEL	43-0660	DLY	43.8333	-72.6333	541	NCEI	1928-1957
VT	BETHEL 4 N	43-0661	DLY	43.8833	-72.6344	660	NCEI	1958-2014
VT	BLOOMFIELD	43-0690	HLY	44.7590	-71.6279	1040	NCEI	1949-1968
VT	BLOOMFIELD	43-0690	DLY	44.7590	-71.6279	1040	NCEI	1906-1968
VT	BRATTLEBORO	43-0841	DLY	42.8500	-72.5667	437	NCEI	1893-1942
VT	BROOKFIELD 2 SW	43-0940	DLY	44.0242	-72.6411	1300	NCEI	1989-2007
VT	BROOKFIELD 2 WSW	43-0942	DLY	44.0358	-72.6389	1800	NCEI	2007-2011
VT	BURLINGTON	43-1072	DLY	44.4833	-73.1833	217	NCEI	1884-1943
VT	BURLINGTON INTL AP	43-1081	DLY	44.4683	-73.1500	330	NCEI	1898-2014
VT	BURLINGTON WSO AP	43-1081	HLY	44.4683	-73.1500	330	NCEI	1948-2013
VT	BURLINGTON WSO AP	52-1081	DLY	44.4667	-73.1500	335	FORTS	1832-1892
VT	CABOT 3.9 ENE	69-2621	DLY	44.4200	-72.2300	1608	COCORAHS	2009-2012
VT	CANAAN	43-1213	DLY	44.9964	-71.5356	1070	NCEI	1938-2011
VT	CAVENDISH	43-1243	DLY	43.3847	-72.5989	842	NCEI	1903-2014
VT	CHELSEA	43-1360	DLY	43.9832	-72.4480	800	NCEI	1893-2000
VT	CHELSEA 2 NW	43-1363	DLY	44.0108	-72.4833	1440	NCEI	2000-2014
VT	CHITTENDEN	43-1433	DLY	43.7064	-72.9617	1163	NCEI	1904-2014
VT	CORINTH	43-1565	15M	44.0069	-72.3194	1180	NCEI	1978-2011
VT	CORINTH	43-1565	HLY	44.0069	-72.3194	1180	NCEI	1978-2013
VT	CORINTH	43-1565	DLY	44.0069	-72.3194	1180	NCEI	1948-2014
VT	CORNWALL	43-1580	DLY	43.9572	-73.2106	345	NCEI	1893-2014
VT	DANVILLE	43-1715	DLY	44.4167	-72.1333	1391	NCEI	1956-1984
VT	DORSET 2 SE	43-1786	DLY	43.2242	-73.0750	930	NCEI	1940-1999
VT	EAST RYEGATE	43-2578	DLY	44.1987	-72.0635	440	NCEI	1930-1949
VT	ENOSBURG FALLS	43-2769	DLY	44.9094	-72.8083	420	NCEI	1891-2014
VT	ESSEX JUNCTION	43-2828	DLY	44.4833	-73.1167	240	NCEI	1937-1960
VT	ESSEX JUNCTION 1 N	43-2843	DLY	44.5078	-73.1153	340	NCEI	1973-2014
VT	FAIRFAX 7.7 NNW	69-2580	DLY	44.7700	-73.0800	600	COCORAHS	2011-2012
VT	GAYSVILLE	43-3268	HLY	43.7773	-72.7962	820	NCEI	1965-1972
VT	GILMAN	43-3341	DLY	44.4111	-71.7186	840	NCEI	1930-2014

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
VT	GILMAN	52-3341	DLY	44.4111	-71.7186	840	FORTS	1859-1892
VT	GRAFTON 1NW	43-3400	HLY	43.1906	-72.6253	1175	NCEI	1948-2011
VT	HANKSVILLE	43-3769	DLY	44.2378	-72.9656	1083	NCEI	1997-2011
VT	HIGHGATE FALLS	43-3914	15M	44.9339	-73.0494	175	NCEI	1977-2011
VT	HIGHGATE FALLS	43-3914	HLY	44.9339	-73.0494	175	NCEI	1948-2013
VT	HUNTINGTON 1.1 E	69-2559	DLY	44.3200	-72.9700	1010	COCORAHS	2009-2012
VT	HUNTINGTON CTR	43-4052	DLY	44.2961	-72.9671	730	NCEI	1955-1995
VT	ISLAND POND	43-4120	DLY	44.8128	-71.8903	1200	NCEI	1990-2014
VT	JACKSONVILLE	43-4150	DLY	42.8005	-72.8107	1890	NCEI	1889-1911
VT	JAY PEAK	43-4189	DLY	44.9381	-72.5022	1840	NCEI	1988-2014
VT	K1V4	78-0002	15M	44.4200	-72.0194	697	NCEI	2005-2014
VT	KDDH	78-0014	15M	42.8914	-73.2469	800	NCEI	2005-2014
VT	KDDH	78-0014	HLY	42.8914	-73.2469	800	NCEI	2002-2014
VT	KVSF	78-0064	15M	43.3436	-72.5178	578	NCEI	2005-2014
VT	LEMINGTON	43-4603	DLY	44.8968	-71.5113	1030	NCEI	1943-1958
VT	LSC MAIN STATION	97-0001	15M	44.5357	-72.0286	1039	LSC	2000-2014
VT	LUDLOW	43-4747	DLY	43.3939	-72.7103	1265	NCEI	1970-2005
VT	LUDLOW # 2	43-4749	15M	43.3922	-72.6792	970	NCEI	1975-2011
VT	LUDLOW # 2	43-4749	HLY	43.3922	-72.6792	970	NCEI	1973-2011
VT	LUDLOW 0.5 WSW	69-2615	DLY	43.3900	-72.7100	1302	COCORAHS	2009-2012
VT	MANCHESTER	43-4882	HLY	43.1667	-73.0667	930	NCEI	1948-1989
VT	MANCHESTER	43-4882	DLY	43.1667	-73.0667	930	NCEI	1899-1988
VT	MANCHESTER DEPOT	43-4887	HLY	43.1667	-73.0500	702	NCEI	1961-1979
VT	MARLBORO COLLEGE	76-0038	HLY	42.8378	-72.7350	1686	RAWS	2003-2012
VT	MARSHFIELD	43-4985	DLY	44.3667	-72.3333	860	NCEI	1936-1959
VT	MARSHFIELD	43-4999	DLY	44.3514	-72.3569	796	NCEI	1991-2014
VT	MAYS MILL	43-5029	DLY	42.7433	-72.7335	830	NCEI	1930-1975
VT	MC INDOE FALLS	43-5044	DLY	44.2612	-72.0621	479	NCEI	1932-1972
VT	MORRISVILLE	43-5366	HLY	44.5617	-72.6028	620	NCEI	1948-2013
VT	MORRISVILLE	55-0108	HLY	44.5344	-72.6144	732	NCEI	1996-2014
VT	MORRISVILLE	43-5366	DLY	44.5617	-72.6028	620	NCEI	1902-1951

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
VT	MORRISVILLE 4 SSW	43-5376	DLY	44.5139	-72.6236	760	NCEI	1962-2009
VT	MT MANSFIELD	43-5416	DLY	44.5247	-72.8153	3950	NCEI	1954-2014
VT	N SPRINGFIELD LAKE	43-5982	15M	43.3392	-72.5056	560	NCEI	1984-1997
VT	N SPRINGFIELD LAKE	43-5982	HLY	43.3392	-72.5056	560	NCEI	1971-2010
VT	N SPRINGFIELD LAKE	43-5982	DLY	43.3392	-72.5056	560	NCEI	2006-2014
VT	NEWFANE	43-5492	HLY	43.0000	-72.6333	420	NCEI	1957-1981
VT	NEWFANE	43-5492	DLY	43.0000	-72.6333	420	NCEI	1930-1981
VT	NEWPORT	43-5542	HLY	44.9489	-72.1911	790	NCEI	1948-2002
VT	NEWPORT	43-5542	DLY	44.9489	-72.1911	790	NCEI	1930-2014
VT	NORTH DANVILLE	43-5632	HLY	44.4667	-72.1167	1142	NCEI	1958-1979
VT	NORTH HARTLAND LAKE	43-5768	15M	43.6028	-72.3622	570	NCEI	1971-2011
VT	NORTH HARTLAND LAKE	43-5768	HLY	43.6028	-72.3622	570	NCEI	1961-2013
VT	NORTHFIELD	43-5733	15M	44.1647	-72.6567	670	NCEI	1971-2011
VT	NORTHFIELD	43-5733	HLY	44.1647	-72.6567	670	NCEI	1948-2013
VT	NORTHFIELD	43-5733	DLY	44.1647	-72.6567	670	NCEI	1901-2014
VT	NORTHFIELD 3 SSE	43-5740	15M	44.1047	-72.6225	1410	NCEI	1974-1994
VT	NORTHFIELD 3 SSE	43-5740	HLY	44.1047	-72.6225	1410	NCEI	1974-1994
VT	NORWICH	43-6020	DLY	43.7257	-72.2974	793	NCEI	1892-1925
VT	NULHEGAN	76-0039	HLY	44.7700	-71.7017	1245	RAWS	2003-2013
VT	PERU	43-6335	DLY	43.2667	-72.9000	1700	NCEI	1940-2014
VT	PITTSFIELD	43-6386	15M	43.7733	-72.8150	850	NCEI	1992-2003
VT	PITTSFIELD	43-6386	HLY	43.7733	-72.8150	850	NCEI	1992-2002
VT	PLAINFIELD	43-6391	DLY	44.2764	-72.4153	800	NCEI	1999-2014
VT	POWNA 1 NE	43-6500	DLY	42.7917	-73.2228	1110	NCEI	1975-2014
VT	READSBORO 1 SE	43-6761	DLY	42.7583	-72.9300	1120	NCEI	1930-1998
VT	RG000010	94-0009	15M	44.4868	-72.0833	990	ARS	1958-1975
VT	RG000011	94-0010	15M	44.4372	-72.0380	772	ARS	1958-1979
VT	RG000024	94-0020	15M	44.5123	-72.0408	1223	ARS	1959-1969
VT	ROCHESTER	43-6893	DLY	43.8578	-72.8045	830	NCEI	1928-2014
VT	RUTLAND	43-6995	DLY	43.6253	-72.9781	620	NCEI	1916-2014
VT	SAINT JOHNSBURY	43-7054	15M	44.4200	-72.0194	700	NCEI	1984-2011

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
VT	SAINT JOHNSBURY	43-7054	HLY	44.4200	-72.0194	700	NCEI	1948-2013
VT	SAINT JOHNSBURY	55-0095	HLY	44.4200	-72.0194	697	NCEI	1998-2014
VT	SAINT JOHNSBURY	43-7054	DLY	44.4200	-72.0194	700	NCEI	1943-2014
VT	SALISBURY 2 N	43-7098	DLY	43.9256	-73.0992	420	NCEI	1947-2014
VT	SEARSBURG PWR PLT	43-7142	DLY	42.9000	-73.0000	2100	NCEI	1930-1965
VT	SEARSBURG STN	43-7152	HLY	42.8680	-72.9160	1560	NCEI	1948-1998
VT	SEARSBURG STN	43-7152	DLY	42.8680	-72.9160	1560	NCEI	1930-1998
VT	SOMERSET	43-7401	DLY	42.9667	-72.9500	2080	NCEI	1911-1968
VT	SOUTH HERO	43-7607	DLY	44.6264	-73.3031	110	NCEI	1969-2014
VT	SOUTH LINCOLN	43-7612	DLY	44.0725	-72.9736	1341	NCEI	1981-2014
VT	SOUTH LONDONDERRY	43-7617	DLY	43.1890	-72.8123	1050	NCEI	1930-1984
VT	SOUTH NEWBURY	43-7646	DLY	44.0503	-72.0753	470	NCEI	1936-2014
VT	SPRINGFIELD	55-0094	HLY	43.3436	-72.5178	577	NCEI	1996-2014
VT	SPRINGFIELD 2 SE	43-7954	DLY	43.2667	-72.4500	302	NCEI	1940-1956
VT	SPRINGFIELD HARTNESS AP	79-0035	DLY	43.3436	-72.5178	578	NCEI	1998-2014
VT	ST ALBANS	43-7025	DLY	44.8167	-73.0833	541	NCEI	1929-1956
VT	ST ALBANS BAY	43-7026	DLY	44.8000	-73.1667	112	NCEI	1956-1977
VT	ST ALBANS RADIO	43-7032	DLY	44.8111	-73.0791	460	NCEI	1978-2010
VT	STOCKBRIDGE 3 WSW	43-8057	15M	43.7722	-72.8271	850	NCEI	1982-1992
VT	STOCKBRIDGE 3 WSW	43-8057	HLY	43.7722	-72.8271	850	NCEI	1948-1992
VT	SUTTON 2NE	43-8172	DLY	44.6650	-72.0233	1000	NCEI	1999-2014
VT	TOWNSHEND	43-8438	HLY	43.0333	-72.6667	420	NCEI	1948-1957
VT	TOWNSHEND	43-8438	DLY	43.0333	-72.6667	420	NCEI	1947-1957
VT	TOWNSHEND LAKE	43-8428	HLY	43.0516	-72.6979	510	NCEI	1961-2007
VT	TYSON	43-8512	HLY	43.4666	-72.6998	1102	NCEI	1948-1973
VT	UNION VILLAGE DAM	43-8556	HLY	43.7917	-72.2578	460	NCEI	1950-1999
VT	UNION VILLAGE DAM	43-8556	DLY	43.7917	-72.2578	460	NCEI	1950-2014
VT	VERNON	43-8600	DLY	42.7717	-72.5150	226	NCEI	1893-1998
VT	WAITSFIELD 1 W	43-8633	DLY	44.1892	-72.8513	1200	NCEI	1983-1985
VT	WAITSFIELD 2 SE	43-8640	DLY	44.1756	-72.7961	1142	NCEI	2009-2014
VT	WAITSFIELD 2 W	43-8637	DLY	44.1872	-72.8781	1028	NCEI	1985-2011

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
VT	WAITSFIELD 2 WSW	43-8644	DLY	44.1833	-72.8500	820	NCEI	1955-1983
VT	WARDSBORO	43-8747	DLY	43.0500	-72.7833	981	NCEI	1940-1973
VT	WARDSBORO 1 SW	43-8755	DLY	43.0286	-72.8022	1391	NCEI	1978-1984
VT	WARDSBORO 3 SE	43-8750	DLY	43.0113	-72.7623	1640	NCEI	1974-1978
VT	WATERBURY 2 SSE	43-8815	DLY	44.3111	-72.7490	760	NCEI	1958-1992
VT	WATERBURY 3 NNW	43-8805	DLY	44.3803	-72.7704	469	NCEI	1941-1958
VT	WATERBURY 3.0 NW	69-2627	DLY	44.3600	-72.8100	968	COCORAHS	2010-2012
VT	WEST BURKE	43-9099	DLY	44.6464	-71.9833	900	NCEI	1930-1998
VT	WEST DANVILLE	43-9182	DLY	44.4000	-72.1833	1381	NCEI	1941-1955
VT	WEST DANVILLE 2	43-9184	DLY	44.4095	-72.1952	1575	NCEI	1989-2002
VT	WEST HARTFORD	43-9329	DLY	43.7167	-72.4167	410	NCEI	1930-1957
VT	WEST WARDSBORO	43-9591	DLY	43.0331	-72.8500	1410	NCEI	1985-2014
VT	WHITE RIVER JUNCTION	43-9691	DLY	43.6500	-72.3167	361	NCEI	1902-1959
VT	WHITINGHAM 1 W	43-9735	DLY	42.7920	-72.9156	1402	NCEI	1930-1998
VT	WILMINGTON	43-9858	DLY	42.8227	-72.8623	1640	NCEI	1930-1945
VT	WOODFORD	43-9953	DLY	42.8833	-73.0333	2241	NCEI	1966-1966
VT	WOODSTOCK	43-9984	DLY	43.6303	-72.5072	600	NCEI	1893-2014

Table A.1.4. Same as Table A.1.3, but for stations in Canada (CAN), New Jersey (NJ), Ohio (OH), and Pennsylvania (PA).

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	ABERCORN	71-1588	DLY	45.0333	-72.6667	490	ENVCAN	1950-1985
CAN	ACADIA FOREST EXP ST	71-2436	DLY	45.9903	-66.3633	177	ENVCAN	1955-2006
CAN	ALBION	71-1085	DLY	43.9333	-79.8333	900	ENVCAN	1956-2000
CAN	ALBION FIELD CENTRE	71-1086	DLY	43.9167	-79.8333	925	ENVCAN	1969-2001
CAN	ALDERSHOT	71-1087	DLY	43.3167	-79.8667	475	ENVCAN	1947-1977
CAN	ALMONTE	71-0359	DLY	45.1833	-76.2333	410	ENVCAN	1912-1980
CAN	ALTON	71-1089	DLY	43.8500	-80.0833	1317	ENVCAN	1887-1963
CAN	ANGERS	71-1848	DLY	45.5500	-75.5500	298	ENVCAN	1962-2012
CAN	ANNAPOLIS ROYAL	71-2656	DLY	44.7500	-65.5167	25	ENVCAN	1914-2006
CAN	APPLETON	71-0361	DLY	45.1858	-76.1128	436	ENVCAN	1992-2006
CAN	ARMAGH	71-2051	DLY	46.7500	-70.5333	1174	ENVCAN	1916-1994
CAN	ARMAGH STATION	71-2052	DLY	46.7167	-70.6167	1025	ENVCAN	1966-1986
CAN	ARNPRIOR GRANDON	71-0364	DLY	45.4167	-76.3667	350	ENVCAN	1959-1999
CAN	AROOSTOOK	71-2439	DLY	46.7122	-67.7156	262	ENVCAN	1929-2005
CAN	ARTHABASKA	71-1590	HLY	46.0167	-71.9500	459	ENVCAN	1969-2000
CAN	ARTHABASKA	71-1590	DLY	46.0167	-71.9500	459	ENVCAN	1969-2012
CAN	ARUNDEL	71-1849	DLY	45.9500	-74.6167	628	ENVCAN	1963-2012
CAN	ASBESTOS	71-1591	DLY	45.7667	-71.9500	750	ENVCAN	1948-1987
CAN	AURORA	71-1090	DLY	43.9500	-79.4000	886	ENVCAN	1883-1919
CAN	AURORA NE	71-1093	DLY	44.0167	-79.4500	853	ENVCAN	2003-2006
CAN	AYLMER	71-0813	DLY	42.7667	-80.9833	750	ENVCAN	1948-1981
CAN	AYLMER	71-0814	DLY	42.7667	-80.9833	761	ENVCAN	1996-2004
CAN	AYLMER ONT HYDRO	71-0816	DLY	42.7833	-80.9833	774	ENVCAN	1983-2000
CAN	BAIE ST PAUL	71-1924	HLY	47.4167	-70.5000	105	ENVCAN	1979-2000
CAN	BAIE ST PAUL	71-1924	DLY	47.4167	-70.5000	105	ENVCAN	1963-2004
CAN	BARRAGE LAC MORIN	71-2053	DLY	47.6500	-69.5167	650	ENVCAN	1942-1984
CAN	BEAR RIVER	71-2671	DLY	44.5667	-65.6333	25	ENVCAN	1952-2006
CAN	BEAUCEVILLE	71-1594	DLY	46.2000	-70.7667	525	ENVCAN	1913-1985
CAN	BEAUCEVILLE	71-1827	DLY	46.2050	-70.7850	752	ENVCAN	1994-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	BEAUSEJOUR	71-1595	DLY	46.6667	-71.1667	350	ENVCAN	1975-2012
CAN	BEECHWOOD	71-2448	HLY	46.5333	-67.6667	300	ENVCAN	1960-1969
CAN	BEECHWOOD	71-2448	DLY	46.5333	-67.6667	300	ENVCAN	1966-1997
CAN	BEETON	71-0576	DLY	44.1000	-79.7833	764	ENVCAN	1916-1970
CAN	BEETON GRAHAM	71-0578	DLY	44.0833	-79.7833	750	ENVCAN	1971-1984
CAN	BELL FALLS	71-1854	DLY	45.7667	-74.6833	400	ENVCAN	1919-1994
CAN	BELLEVILLE	71-1095	HLY	44.1506	-77.3947	250	ENVCAN	1975-2007
CAN	BELLEVILLE	71-1095	DLY	44.1506	-77.3947	250	ENVCAN	1866-2006
CAN	BELLEVILLE OWRC	71-1096	HLY	44.1667	-77.3667	255	ENVCAN	1960-1975
CAN	BELLEVILLE OWRC	71-1096	DLY	44.1667	-77.3667	255	ENVCAN	1959-1975
CAN	BELLEVILLE PAR LAB	71-1097	DLY	44.1667	-77.3500	290	ENVCAN	1929-1959
CAN	BIC	71-2057	DLY	48.3742	-68.7052	60	ENVCAN	1882-1968
CAN	BIC	71-2058	DLY	48.4000	-68.6667	75	ENVCAN	1966-1985
CAN	BISHOPTON	71-1599	DLY	45.5833	-71.5667	700	ENVCAN	1948-1996
CAN	BLISSVILLE	71-2454	DLY	45.6167	-66.5500	73	ENVCAN	1940-1951
CAN	BLOOMFIELD	71-1099	DLY	43.9833	-77.2167	300	ENVCAN	1896-2006
CAN	BOLTON NORTH	71-1416	DLY	43.9167	-79.7500	856	ENVCAN	1995-2001
CAN	BON ACCORD	71-2456	DLY	46.6508	-67.5845	1477	ENVCAN	1966-2005
CAN	BONSECOURS	71-1602	DLY	45.4000	-72.2667	975	ENVCAN	1967-2012
CAN	BOWMANVILLE	71-1102	DLY	43.9167	-78.6500	400	ENVCAN	1947-1957
CAN	BOWMANVILLE MOSTERT	71-1103	HLY	43.9167	-78.6667	325	ENVCAN	1966-2001
CAN	BOWMANVILLE MOSTERT	71-1103	DLY	43.9167	-78.6667	325	ENVCAN	1966-2002
CAN	BRADFORD 2	71-1105	DLY	44.1167	-79.5333	725	ENVCAN	1954-1958
CAN	BRADFORD MUCK RESEARCH	71-1107	DLY	44.0333	-79.6000	725	ENVCAN	1974-1998
CAN	BRADFORD SPRINGDALE	71-1110	DLY	44.0333	-79.6167	725	ENVCAN	1966-1982
CAN	BRAMPTON	71-1112	DLY	43.7000	-79.7667	725	ENVCAN	1870-1964
CAN	BRANTFORD	71-0958	DLY	43.1333	-80.2667	675	ENVCAN	1876-1963
CAN	BRANTFORD MOE	71-0961	HLY	43.1333	-80.2333	643	ENVCAN	1961-2001
CAN	BRANTFORD MOE	71-0961	DLY	43.1333	-80.2333	643	ENVCAN	1960-2006
CAN	BROCKVILLE	71-0375	DLY	44.6000	-75.7000	300	ENVCAN	1871-1980
CAN	BROCKVILLE PCC	71-0377	HLY	44.6000	-75.6667	315	ENVCAN	1965-2007

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	BROCKVILLE PCC	71-0377	DLY	44.6000	-75.6667	315	ENVCAN	1965-2006
CAN	BROME	71-1605	HLY	45.1833	-72.5667	675	ENVCAN	1970-2000
CAN	BROME	71-1605	DLY	45.1833	-72.5667	675	ENVCAN	1875-2012
CAN	BROMPTONVILLE	71-1607	DLY	45.4833	-71.9500	426	ENVCAN	1957-2012
CAN	BURKETON MCLAUGHLIN	71-1119	HLY	44.0333	-78.8000	1025	ENVCAN	1969-2001
CAN	BURKETON MCLAUGHLIN	71-1119	DLY	44.0333	-78.8000	1025	ENVCAN	1969-2002
CAN	BURLINGTON	71-1120	DLY	43.3500	-79.8000	345	ENVCAN	1947-1974
CAN	BURLINGTON FIRE HQ'S	71-1123	DLY	43.3500	-79.8167	375	ENVCAN	1970-1983
CAN	BURLINGTON TS	71-1125	DLY	43.3333	-79.8333	325	ENVCAN	1951-1999
CAN	CALEDONIA	71-0820	DLY	43.0833	-79.9500	675	ENVCAN	1931-1966
CAN	CAMBRIDGE GALT MOE	71-0966	DLY	43.3333	-80.3167	880	ENVCAN	1879-1994
CAN	CAMPBELLFORD	71-1133	HLY	44.3000	-77.8000	480	ENVCAN	1973-1999
CAN	CAMPBELLFORD	71-1133	DLY	44.3000	-77.8000	480	ENVCAN	1915-1997
CAN	CANNING	71-0968	DLY	43.1833	-80.4500	850	ENVCAN	1968-1971
CAN	CAP AUX CORBEAUX	71-1935	HLY	47.4500	-70.4500	1150	ENVCAN	1966-1972
CAN	CAP ROUGE	71-1483	DLY	46.7499	-71.2872	40	ENVCAN	1911-1940
CAN	CAP TOURMENTE	71-1937	DLY	47.0667	-70.7833	20	ENVCAN	1971-1984
CAN	CAP-TOURMENTE	71-1945	DLY	47.0786	-70.7808	20	ENVCAN	1993-2012
CAN	CARLETON PLACE	71-0380	DLY	45.1500	-76.1667	449	ENVCAN	1948-1976
CAN	CARLETON PLACE	71-0381	DLY	45.1500	-76.2000	476	ENVCAN	1984-1999
CAN	CATARAQUI TS	71-0383	DLY	44.3667	-76.6167	475	ENVCAN	1960-1995
CAN	CHARLESBOURG JAR ZOO	71-1485	DLY	46.9000	-71.3000	500	ENVCAN	1963-1977
CAN	CHARLESBOURG PARC ORLEAN	71-1486	HLY	46.8667	-71.2667	375	ENVCAN	1971-1998
CAN	CHARLESBOURG PARC ORLEAN	71-1486	DLY	46.8667	-71.2667	375	ENVCAN	1971-1997
CAN	CHARTIERVILLE	71-1615	DLY	45.2833	-71.2000	1700	ENVCAN	1951-1990
CAN	CHATS FALLS	71-0385	DLY	45.4667	-76.2333	308	ENVCAN	1950-1992
CAN	CHELSEA	71-1859	DLY	45.5167	-75.7833	369	ENVCAN	1927-2012
CAN	CHENEVILLE	71-1860	DLY	45.9000	-75.0833	730	ENVCAN	1964-2012
CAN	CHESTERVILLE	71-0387	DLY	45.1000	-75.2333	230	ENVCAN	1965-1983
CAN	CHESTERVILLE 2	71-0388	DLY	45.0167	-75.2000	279	ENVCAN	1983-1997
CAN	CHUTE HEMMINGS	71-1617	DLY	45.8667	-72.4500	285	ENVCAN	1931-1986



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	CLARKSON	71-1143	DLY	43.5167	-79.6167	305	ENVCAN	1949-1967
CAN	CLAYBANK	71-0390	DLY	45.4167	-76.4000	350	ENVCAN	1961-1994
CAN	COATICOOK	71-1620	DLY	45.1500	-71.8000	850	ENVCAN	1949-2012
CAN	COBOURG (AUT)	71-1145	DLY	43.9500	-78.1667	255	ENVCAN	1993-2012
CAN	COBOURG 2	71-1148	DLY	43.9500	-78.1500	275	ENVCAN	1958-1962
CAN	COBOURG STP	71-1147	DLY	43.9667	-78.1833	260	ENVCAN	1970-2006
CAN	COLD CREEK	71-1151	DLY	43.9167	-79.7000	823	ENVCAN	1961-1991
CAN	COPETOWN	71-1153	DLY	43.2500	-80.1167	750	ENVCAN	1970-1993
CAN	CORNWALL	71-0396	HLY	45.0156	-74.7489	210	ENVCAN	1991-2006
CAN	CORNWALL	71-0394	DLY	45.0167	-74.7333	175	ENVCAN	1867-1887
CAN	CORNWALL	71-0396	DLY	45.0156	-74.7489	210	ENVCAN	1950-2006
CAN	CORNWALL ONT HYDRO	71-0400	HLY	45.0333	-74.8000	250	ENVCAN	1960-1993
CAN	CORNWALL ONT HYDRO	71-0400	DLY	45.0333	-74.8000	250	ENVCAN	1955-1995
CAN	COTEAU DU LAC	71-1490	DLY	45.3167	-74.1667	162	ENVCAN	1966-2012
CAN	CRANBOURNE	71-1625	DLY	46.3833	-70.7000	1266	ENVCAN	1875-1890
CAN	CRESSY	71-1156	DLY	44.1000	-76.8500	275	ENVCAN	1966-2002
CAN	CULLODEN EASEY	71-0974	DLY	42.8895	-80.8467	918	ENVCAN	1974-2006
CAN	DALHOUSIE L HIGH FALLS	71-0405	DLY	44.9481	-76.6245	620	ENVCAN	1923-1983
CAN	DALHOUSIE MILLS	71-0406	DLY	45.3167	-74.4667	225	ENVCAN	1968-2004
CAN	DALKEITH	71-0407	DLY	45.4333	-74.6167	220	ENVCAN	1961-1978
CAN	DALKEITH PYM	71-0408	DLY	45.4333	-74.5833	250	ENVCAN	1978-1987
CAN	DANVILLE	71-1626	DLY	45.8167	-71.9833	623	ENVCAN	1871-2012
CAN	DELHI CDA	71-0832	HLY	42.8667	-80.5500	760	ENVCAN	1962-1995
CAN	DELHI CDA	71-0832	DLY	42.8667	-80.5500	760	ENVCAN	1934-1997
CAN	DELHI CS	71-0833	HLY	42.8667	-80.5500	760	ENVCAN	1997-2007
CAN	DELHI CS	71-0833	DLY	42.8667	-80.5500	760	ENVCAN	1997-2012
CAN	DIGBY	71-2717	DLY	44.6167	-65.7500	40	ENVCAN	1872-1965
CAN	DIGBY PRIM POINT	71-2720	DLY	44.6903	-65.7850	70	ENVCAN	1965-1985
CAN	DISRAELI	71-1627	DLY	45.9167	-71.3167	1148	ENVCAN	1908-1991
CAN	DOON	71-0976	DLY	43.4000	-80.4500	1025	ENVCAN	1948-1953
CAN	DRUMMONDVILLE	71-1629	HLY	45.8833	-72.4833	270	ENVCAN	1967-2000

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	DRUMMONDVILLE	71-1629	DLY	45.8833	-72.4833	270	ENVCAN	1913-2012
CAN	EAST ANGUS	71-1633	DLY	45.4833	-71.6667	620	ENVCAN	1919-1985
CAN	EAST HEREFORD	71-1637	DLY	45.0833	-71.5000	1174	ENVCAN	1949-1994
CAN	EDMUNDSTON	71-2491	DLY	47.3667	-68.3333	570	ENVCAN	1913-1957
CAN	EDMUNDSTON	71-2493	DLY	47.4167	-68.3245	506	ENVCAN	2004-2012
CAN	EDMUNDSTON	71-2650	DLY	47.3667	-68.2833	650	ENVCAN	1979-1983
CAN	EDMUNDSTON FRASER CO	71-2492	DLY	47.3667	-68.3333	500	ENVCAN	1949-1979
CAN	ERINDALE	71-1160	DLY	43.5667	-79.6500	460	ENVCAN	1959-1978
CAN	FARNHAM	71-1639	DLY	45.3000	-72.9000	223	ENVCAN	1917-2012
CAN	FERGUS SHAND DAM	71-0988	HLY	43.7347	-80.3303	1370	ENVCAN	1960-2007
CAN	FERGUS SHAND DAM	71-0988	DLY	43.7347	-80.3303	1370	ENVCAN	1939-2006
CAN	FITZROY HARBOUR	71-0416	DLY	45.4667	-76.2167	243	ENVCAN	1870-1906
CAN	FLEURY	71-1642	DLY	45.8000	-73.0000	100	ENVCAN	1967-2012
CAN	FONTHILL	71-0844	DLY	43.0333	-79.3000	775	ENVCAN	1945-1969
CAN	FORET MONTMORENCY	71-1949	HLY	47.3167	-71.1500	2099	ENVCAN	1967-2000
CAN	FORET MONTMORENCY	71-1949	DLY	47.3167	-71.1500	2099	ENVCAN	1965-2001
CAN	FORET MONTMORENCY RCS	71-1950	DLY	47.3228	-71.1483	2207	ENVCAN	2003-2012
CAN	FORT ERIE	71-0845	DLY	42.8833	-78.9667	590	ENVCAN	1966-2006
CAN	FREDERICTON A	71-2495	HLY	45.8721	-66.5279	68	ENVCAN	1984-1995
CAN	FREDERICTON A	71-2495	DLY	45.8721	-66.5279	68	ENVCAN	1951-2012
CAN	FREDERICTON CDA	71-2498	HLY	45.9167	-66.6167	130	ENVCAN	1960-2000
CAN	FREDERICTON CDA	71-2498	DLY	45.9167	-66.6167	130	ENVCAN	1913-2000
CAN	FREDERICTON CDA CS	71-2499	HLY	45.9203	-66.6089	115	ENVCAN	2000-2011
CAN	FREDERICTON CDA CS	71-2499	DLY	45.9203	-66.6089	115	ENVCAN	2000-2012
CAN	FREDERICTON UNB	71-2500	DLY	45.9500	-66.6000	164	ENVCAN	1871-1952
CAN	FRENCHMANS BAY	71-1162	DLY	43.8167	-79.0833	250	ENVCAN	1959-2004
CAN	GAGETOWN 2	71-2504	DLY	45.7833	-66.1500	110	ENVCAN	1897-2006
CAN	GAGETOWN AWOS A	71-2503	DLY	45.8389	-66.4497	166	ENVCAN	2000-2011
CAN	GARTHBY	71-1648	DLY	45.8333	-71.3833	823	ENVCAN	1963-1994
CAN	GEORGETOWN	71-1165	DLY	43.6500	-79.9500	900	ENVCAN	1882-1966
CAN	GEORGETOWN WWTP	71-1166	DLY	43.6400	-79.8792	725	ENVCAN	1962-2006

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	GEORGEVILLE	71-1650	HLY	45.1333	-72.2333	875	ENVCAN	1966-2000
CAN	GEORGEVILLE	71-1650	DLY	45.1333	-72.2333	875	ENVCAN	1951-2012
CAN	GLEN GORDON	71-0421	DLY	45.1667	-74.5333	175	ENVCAN	1967-1999
CAN	GLEN HAFFY MONO MILLS	71-1167	DLY	43.9333	-79.9500	1425	ENVCAN	1959-2003
CAN	GODFREY	71-0426	DLY	44.5667	-76.6333	525	ENVCAN	1981-2003
CAN	GORMLEY ARDENLEE	71-1171	DLY	43.8667	-79.3833	650	ENVCAN	1974-1994
CAN	GRANBY	71-1651	HLY	45.3833	-72.7167	574	ENVCAN	1968-2000
CAN	GRANBY	71-1651	DLY	45.3833	-72.7167	574	ENVCAN	1948-2012
CAN	GRAND FALLS	71-2507	DLY	47.0500	-67.7333	500	ENVCAN	1913-1966
CAN	GRAND FALLS DRUMMOND	71-2508	DLY	47.0333	-67.7000	750	ENVCAN	1966-1992
CAN	GRAND MANAN	71-2509	DLY	44.7333	-66.7667	25	ENVCAN	1874-1965
CAN	GRAND MANAN SAR CS	71-2510	DLY	44.7121	-66.8019	256	ENVCAN	2000-2012
CAN	GRANDES BERGERONNES	71-1955	DLY	48.2500	-69.5167	200	ENVCAN	1951-2012
CAN	GRIMSBY	71-0847	DLY	43.2000	-79.5667	298	ENVCAN	1910-1985
CAN	GRIMSBY ROCK CHAPEL	71-0851	DLY	43.1833	-79.5833	650	ENVCAN	1914-1966
CAN	GRIMSBY ROYAL OAK	71-0852	DLY	43.1833	-79.5500	625	ENVCAN	1965-1974
CAN	GUELPH ARBORETUM	71-1000	HLY	43.5500	-80.2167	1075	ENVCAN	1975-1991
CAN	GUELPH ARBORETUM	71-1000	DLY	43.5500	-80.2167	1075	ENVCAN	1975-1997
CAN	GUELPH HARRISON FARM	71-2991	HLY	43.5500	-80.2167	1080	ENVCAN	1960-1966
CAN	GUELPH OAC	71-1001	HLY	43.5167	-80.2333	1095	ENVCAN	1962-1973
CAN	GUELPH OAC	71-1001	DLY	43.5167	-80.2333	1095	ENVCAN	1881-1973
CAN	GUELPH TURFGRASS CS	71-1004	HLY	43.5500	-80.2167	1066	ENVCAN	1997-2005
CAN	HAGERSVILLE	71-0853	DLY	42.9667	-80.0667	725	ENVCAN	1948-2004
CAN	HAGERSVILLE 2	71-0854	DLY	42.9333	-80.0833	700	ENVCAN	1956-1984
CAN	HAMILTON	71-1174	DLY	43.2667	-79.9000	303	ENVCAN	1866-1958
CAN	HAMILTON A	71-1176	HLY	43.1717	-79.9342	780	ENVCAN	1970-2006
CAN	HAMILTON A	71-1176	DLY	43.1717	-79.9342	780	ENVCAN	1959-2011
CAN	HAMILTON GAGE PARK	71-1177	DLY	43.2404	-79.8283	325	ENVCAN	1953-1956
CAN	HAMILTON MUNICIPAL LAB	71-1179	DLY	43.2500	-79.7667	250	ENVCAN	1967-1994
CAN	HAMILTON PSYCH HOSPITAL	71-1180	DLY	43.2333	-79.9000	650	ENVCAN	1960-1993
CAN	HAMILTON RBG	71-1181	HLY	43.2833	-79.8833	335	ENVCAN	1962-1996

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	HAMILTON RBG	71-1181	DLY	43.2833	-79.8833	335	ENVCAN	1950-1997
CAN	HAMILTON RBG CS	71-1182	HLY	43.2917	-79.9083	335	ENVCAN	1997-2007
CAN	HAMILTON RBG CS	71-1182	DLY	43.2917	-79.9083	335	ENVCAN	1997-2012
CAN	HARTINGTON IHD	71-0431	DLY	44.4281	-76.6903	525	ENVCAN	1967-2006
CAN	HARVEY STATION	71-2518	DLY	45.7333	-67.0000	500	ENVCAN	1920-1976
CAN	HARVEY STATION	71-2519	DLY	45.6667	-67.0333	600	ENVCAN	1976-1996
CAN	HARVEY STATION	71-2520	DLY	45.7333	-67.0167	636	ENVCAN	1997-2004
CAN	HEART LAKE	71-1186	DLY	43.7333	-79.7833	850	ENVCAN	1957-1989
CAN	HEMMINGFORD FOUR WINDS	71-1655	DLY	45.0667	-73.7167	200	ENVCAN	1960-2012
CAN	HIGH FALLS	71-1866	DLY	45.8500	-75.6500	620	ENVCAN	1933-1972
CAN	HIGH FALLS	71-1867	DLY	45.8394	-75.6481	638	ENVCAN	1999-2012
CAN	HINCHINBROOKE	71-0433	DLY	44.5833	-76.6833	592	ENVCAN	1961-1973
CAN	HONFLEUR	71-2093	DLY	46.6833	-70.8500	574	ENVCAN	1957-2005
CAN	HOYT BLISSVILLE	71-2527	DLY	45.6000	-66.5667	50	ENVCAN	1981-2001
CAN	HUBERDEAU	71-1868	DLY	45.9667	-74.6333	700	ENVCAN	1913-1980
CAN	HUNTINGDON	71-1656	DLY	45.0500	-74.1667	161	ENVCAN	1870-2008
CAN	IBERVILLE	71-1658	DLY	45.3333	-73.2500	100	ENVCAN	1963-2012
CAN	ILE AUX COUDRES	71-2027	DLY	47.3833	-70.3833	50	ENVCAN	1968-2004
CAN	JARVIS	71-0857	DLY	42.8833	-80.0833	705	ENVCAN	1954-1956
CAN	JUNIPER	71-2528	DLY	46.5500	-67.1667	850	ENVCAN	1969-2004
CAN	KEDGWICK	71-2529	DLY	47.6500	-67.3500	900	ENVCAN	1931-1994
CAN	KEMPTVILLE	71-0434	HLY	45.0000	-75.6333	326	ENVCAN	1969-1996
CAN	KEMPTVILLE	71-0434	DLY	45.0000	-75.6333	326	ENVCAN	1928-1997
CAN	KEMPTVILLE CS	71-0435	HLY	45.0000	-75.6333	326	ENVCAN	1998-2007
CAN	KEMPTVILLE CS	71-0435	DLY	45.0000	-75.6333	326	ENVCAN	1997-2012
CAN	KESWICK RIDGE MACTAQUAC	71-2531	DLY	45.9556	-66.8649	25	ENVCAN	1965-1978
CAN	KING SMOKE TREE	71-1199	DLY	44.0167	-79.5167	1155	ENVCAN	1974-2003
CAN	KINGSEY	71-1662	DLY	45.8333	-72.0000	425	ENVCAN	1957-1974
CAN	KINGSTON A	71-0439	DLY	44.2186	-76.5967	303	ENVCAN	1930-1996
CAN	KINGSTON CLIMATE	71-0437	DLY	44.2233	-76.5994	305	ENVCAN	2008-2012
CAN	KINGSTON ONT HYDRO	71-0443	DLY	44.2667	-76.5000	300	ENVCAN	1945-1971

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	KINGSTON PUMPING STATION	71-0444	HLY	44.2439	-76.4806	251	ENVCAN	1960-2007
CAN	KINGSTON PUMPING STATION	71-0444	DLY	44.2439	-76.4806	251	ENVCAN	1960-2006
CAN	KINGSTON QUEENS U	71-0445	DLY	44.2500	-76.5000	340	ENVCAN	1872-1957
CAN	KITCHENER	71-1012	DLY	43.4333	-80.5000	1125	ENVCAN	1914-1977
CAN	KITCHENER CITY ENG 1	71-1014	HLY	43.4500	-80.4833	1050	ENVCAN	1960-1968
CAN	KITCHENER OWRC	71-1016	DLY	43.4000	-80.4333	925	ENVCAN	1962-1975
CAN	KITCHENER/WATERLOO	71-1013	DLY	43.4608	-80.3786	1055	ENVCAN	2010-2012
CAN	LA MALBAIE	71-1968	DLY	47.6667	-70.1500	75	ENVCAN	1913-2004
CAN	LA PATRIE	71-1670	DLY	45.4000	-71.2500	1250	ENVCAN	1949-1981
CAN	LA POCATIERE	71-2100	DLY	47.3558	-70.0319	102	ENVCAN	1996-2012
CAN	LA POCATIERE CDA	71-2099	HLY	47.3500	-70.0333	100	ENVCAN	1962-1996
CAN	LA POCATIERE CDA	71-2099	DLY	47.3500	-70.0333	100	ENVCAN	1899-1996
CAN	LAC MEGANTIC 2	71-1667	HLY	45.6000	-70.8667	1397	ENVCAN	1968-2000
CAN	LAC MEGANTIC 2	71-1667	DLY	45.6000	-70.8667	1397	ENVCAN	1963-2012
CAN	LAC ST DENIS	71-1873	DLY	45.9333	-74.3167	1333	ENVCAN	1957-1986
CAN	LACHUTE	71-1869	DLY	45.6500	-74.3333	300	ENVCAN	1963-2012
CAN	LAKE MEGANTIC	71-1668	DLY	45.5788	-70.8972	1314	ENVCAN	1913-1947
CAN	LAKEVIEW MOE	71-1201	DLY	43.5667	-79.5667	250	ENVCAN	1963-1994
CAN	LAMARTINE	71-2097	DLY	47.0916	-70.3312	207	ENVCAN	1960-1994
CAN	LAMBTON	71-1669	DLY	45.8333	-71.0833	1200	ENVCAN	1915-1994
CAN	LANCASTER	71-0448	DLY	45.1500	-74.4667	165	ENVCAN	1961-1973
CAN	LANSDOWNE	71-0449	DLY	44.5000	-76.0333	340	ENVCAN	1895-1909
CAN	LAPRAIRIE	71-1671	DLY	45.3833	-73.4333	98	ENVCAN	1963-2012
CAN	L'ASSOMPTION	71-1512	HLY	45.8094	-73.4347	69	ENVCAN	1963-1994
CAN	L'ASSOMPTION	71-1512	DLY	45.8094	-73.4347	69	ENVCAN	1930-2012
CAN	LAURIERVILLE	71-1674	DLY	46.3333	-71.6667	499	ENVCAN	1963-2012
CAN	LAUZON	71-1675	DLY	46.8167	-71.1000	226	ENVCAN	1978-2012
CAN	LAVAL DES RAPIDES	71-1676	DLY	45.5333	-73.7000	120	ENVCAN	1965-1976
CAN	LENNOXVILLE	71-1679	HLY	45.3689	-71.8236	594	ENVCAN	1960-1995
CAN	LENNOXVILLE	71-1679	DLY	45.3689	-71.8236	594	ENVCAN	1888-2012
CAN	LES CEDRES	71-1514	DLY	45.3000	-74.0500	155	ENVCAN	1913-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	LINDSAY	71-1443	DLY	44.3500	-78.7500	875	ENVCAN	1880-1971
CAN	LINDSAY FILTRATION PLANT	71-1444	HLY	44.3500	-78.7333	825	ENVCAN	1964-1989
CAN	LINDSAY FILTRATION PLANT	71-1444	DLY	44.3500	-78.7333	825	ENVCAN	1964-1990
CAN	LINDSAY FROST	71-1445	DLY	44.3384	-78.7403	860	ENVCAN	1974-2006
CAN	LINGWICK	71-1680	HLY	45.6333	-71.3667	875	ENVCAN	1966-1999
CAN	LINGWICK	71-1680	DLY	45.6333	-71.3667	875	ENVCAN	1952-2012
CAN	LUCERNE	71-1878	DLY	45.5243	-75.9805	330	ENVCAN	1911-1945
CAN	LUSKVILLE	71-1879	DLY	45.5333	-76.0500	226	ENVCAN	1980-2012
CAN	LYNDHURST SHAWMERE	71-0453	DLY	44.5167	-76.0833	285	ENVCAN	1976-2006
CAN	MACCUE	71-0454	DLY	44.8833	-76.1667	381	ENVCAN	1883-1918
CAN	MACDONALD COLLEGE	71-1682	HLY	45.4167	-73.9333	90	ENVCAN	1963-1968
CAN	MACDONALD COLLEGE	71-1682	DLY	45.4167	-73.9333	90	ENVCAN	1906-1976
CAN	MACTAQUAC PROV PARK	71-2542	DLY	45.9544	-66.8986	361	ENVCAN	1973-2006
CAN	MADOC	71-1205	DLY	44.5333	-77.4775	728	ENVCAN	1998-2006
CAN	MADOC	71-1206	DLY	44.5167	-77.4667	600	ENVCAN	1903-1969
CAN	MAGOG	71-1683	DLY	45.2667	-72.1167	899	ENVCAN	1948-2012
CAN	MAPLETON	71-2545	DLY	46.1833	-67.2333	550	ENVCAN	1972-2005
CAN	MARIEVILLE	71-1688	DLY	45.4000	-73.1333	125	ENVCAN	1960-2012
CAN	MARKHAM WATERWORKS	71-1214	DLY	43.8333	-79.3500	600	ENVCAN	1961-1979
CAN	MCADAM	71-2546	DLY	45.5833	-67.3333	459	ENVCAN	1872-1976
CAN	MCTAVISH	71-1690	DLY	45.5050	-73.5792	240	ENVCAN	1994-2012
CAN	MEGANTIC A	71-1691	DLY	45.5833	-70.8667	1362	ENVCAN	1939-1962
CAN	METCALFE OSGOODE	71-0463	DLY	45.2333	-75.4667	275	ENVCAN	1968-1976
CAN	METEGHAN RIVER	71-2797	DLY	44.2667	-66.1333	50	ENVCAN	1937-1986
CAN	MEYERSBURG	71-1217	DLY	44.2500	-77.8000	410	ENVCAN	1930-1971
CAN	MIDDLEPORT TS	71-1218	DLY	43.1167	-80.0333	676	ENVCAN	1980-2000
CAN	MILAN	71-1694	DLY	45.5955	-71.1142	1580	ENVCAN	1949-2012
CAN	MILLGROVE	71-1221	DLY	43.3167	-79.9667	837	ENVCAN	1951-2006
CAN	MILLTOWN	71-2552	DLY	45.1667	-67.3000	52	ENVCAN	1964-1983
CAN	MONTAGUE	71-0464	DLY	44.9333	-75.9500	585	ENVCAN	1895-1914
CAN	MONTEBELLO (SEDBERGH)	71-1886	DLY	45.7000	-74.9333	645	ENVCAN	1956-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	MONTEBELLO SEIGNIORY	71-1887	DLY	45.6500	-74.9500	172	ENVCAN	1930-1975
CAN	MONTMAGNY	71-2112	DLY	46.9667	-70.5833	50	ENVCAN	1963-2004
CAN	MONTREAL JAR BOT	71-1700	DLY	45.5667	-73.5500	150	ENVCAN	1948-1989
CAN	MONTREAL JEAN BREBEUF	71-1701	DLY	45.5000	-73.6167	435	ENVCAN	1956-1985
CAN	MONTREAL LAFONTAINE	71-1702	HLY	45.5167	-73.5667	135	ENVCAN	1971-1992
CAN	MONTREAL LAFONTAINE	71-1702	DLY	45.5167	-73.5667	135	ENVCAN	1971-1992
CAN	MONTREAL MCGILL	71-1704	HLY	45.5000	-73.5833	187	ENVCAN	1960-1993
CAN	MONTREAL MCGILL	71-1704	DLY	45.5000	-73.5833	187	ENVCAN	1871-1993
CAN	MONTREAL/MIRABEL INT'L A	71-1890	HLY	45.6667	-74.0333	271	ENVCAN	1976-2007
CAN	MONTREAL/MIRABEL INT'L A	71-1890	DLY	45.6667	-74.0333	271	ENVCAN	1975-2008
CAN	MONTREAL/PIERRE ELLIOTT T	71-1699	HLY	45.4667	-73.7500	118	ENVCAN	1943-1994
CAN	MONTREAL/PIERRE ELLIOTT T	71-1699	DLY	45.4667	-73.7500	118	ENVCAN	1941-2012
CAN	MONTREAL/ST-HUBERT	71-1763	DLY	45.5175	-73.4169	90	ENVCAN	2009-2012
CAN	MONTREAL/ST-HUBERT A	71-1761	HLY	45.5167	-73.4167	90	ENVCAN	1964-1999
CAN	MONTREAL/ST-HUBERT A	71-1761	DLY	45.5167	-73.4167	90	ENVCAN	1928-2011
CAN	MONTREAL/ST-HUBERT A	71-1762	DLY	45.5167	-73.4167	90	ENVCAN	2005-2010
CAN	MORIN HEIGHTS	71-1891	DLY	45.9167	-74.2667	950	ENVCAN	1948-1982
CAN	MORRISBURG	71-0467	DLY	44.9236	-75.1883	268	ENVCAN	1913-2006
CAN	MUSQUASH	71-2560	DLY	45.2000	-66.3333	50	ENVCAN	1922-1981
CAN	NANTICOKE ESSO	71-0867	DLY	42.8333	-80.0500	650	ENVCAN	1975-1994
CAN	NIAGARA FALLS	71-0869	HLY	43.1333	-79.0833	600	ENVCAN	1965-1990
CAN	NIAGARA FALLS	71-0869	DLY	43.1333	-79.0833	600	ENVCAN	1902-1995
CAN	NIAGARA FALLS NPCSH	71-0871	DLY	43.1365	-79.0567	575	ENVCAN	1980-2006
CAN	NIAGARA FALLS ONT HYDRO	71-0872	DLY	43.0833	-79.0833	650	ENVCAN	1921-1972
CAN	NIAGARA ON THE LAKE	71-0873	DLY	43.2500	-79.1333	266	ENVCAN	1983-1996
CAN	NICTAU	71-2565	DLY	47.2333	-67.1500	557	ENVCAN	1978-2001
CAN	NOTRE DAME DES BOIS	71-1713	DLY	45.4000	-71.0833	1650	ENVCAN	1965-2012
CAN	NOTRE DAME DU LAC	71-2117	DLY	47.6000	-68.8000	1050	ENVCAN	1963-2004
CAN	OAK RIDGES	71-1232	DLY	43.9667	-79.4667	1055	ENVCAN	1918-1979
CAN	OAKVILLE SOUTHEAST WPCP	71-1412	DLY	43.4833	-79.6333	285	ENVCAN	1970-2001
CAN	OKA	71-1523	HLY	45.5000	-74.0667	300	ENVCAN	1966-2000

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CAN	OKA	71-1523	DLY	45.5000	-74.0667	300	ENVCAN	1937-2012
CAN	ORANGEVILLE	71-1235	DLY	43.9167	-80.0500	1328	ENVCAN	1883-1967
CAN	ORANGEVILLE MOE	71-1236	DLY	43.9184	-80.0864	1350	ENVCAN	1961-2006
CAN	ORMSTOWN	71-1714	HLY	45.1167	-74.0500	150	ENVCAN	1963-2000
CAN	ORMSTOWN	71-1714	DLY	45.1167	-74.0500	150	ENVCAN	1962-2012
CAN	OROMOCTO	71-2567	DLY	45.8333	-66.4667	150	ENVCAN	1957-1994
CAN	ORONO	71-1238	DLY	43.9667	-78.6167	485	ENVCAN	1923-1996
CAN	OSHAWA	71-1242	DLY	43.9000	-78.8667	370	ENVCAN	1882-1959
CAN	OSHAWA WPCP	71-1244	HLY	43.8667	-78.8333	275	ENVCAN	1969-2007
CAN	OSHAWA WPCP	71-1244	DLY	43.8667	-78.8333	275	ENVCAN	1969-2006
CAN	OTONABEE	71-1452	DLY	44.3333	-78.3000	674	ENVCAN	1895-1911
CAN	OTTAWA	71-0478	DLY	45.4000	-75.7167	236	ENVCAN	1872-1935
CAN	OTTAWA CDA	71-0484	HLY	45.3833	-75.7167	260	ENVCAN	1960-2001
CAN	OTTAWA CDA	71-0484	DLY	45.3833	-75.7167	260	ENVCAN	1889-2006
CAN	OTTAWA CDA RCS	71-0485	HLY	45.3833	-75.7167	260	ENVCAN	2002-2007
CAN	OTTAWA MACDONALD-CARTIER	71-0489	HLY	45.3225	-75.6692	374	ENVCAN	1967-2007
CAN	OTTAWA MACDONALD-CARTIER	71-0489	DLY	45.3225	-75.6692	374	ENVCAN	1938-2011
CAN	OTTAWA NRC	71-0495	DLY	45.4500	-75.6167	320	ENVCAN	1951-1984
CAN	OTTAWA ROCKCLIFFE A	71-0497	DLY	45.4500	-75.6333	178	ENVCAN	1942-1964
CAN	OUMET	71-2120	DLY	48.3167	-68.2000	1000	ENVCAN	1963-1993
CAN	PALGRAVE	71-1249	DLY	43.9500	-79.8500	1026	ENVCAN	1956-1984
CAN	PARIS	71-1044	DLY	43.1833	-80.4500	875	ENVCAN	1870-1967
CAN	PENNFIELD	71-2570	DLY	45.1000	-66.7333	75	ENVCAN	1961-2003
CAN	PENNFIELD RIDGE A	71-2571	DLY	45.1333	-66.6833	240	ENVCAN	1941-1951
CAN	PERKINS	71-1896	DLY	45.6000	-75.6167	500	ENVCAN	1911-1991
CAN	PETERBOROUGH	71-1454	DLY	44.2833	-78.3167	635	ENVCAN	1866-1970
CAN	PETERBOROUGH A	71-1455	HLY	44.2333	-78.3667	628	ENVCAN	1971-2006
CAN	PETERBOROUGH A	71-1455	DLY	44.2333	-78.3667	628	ENVCAN	1969-2006
CAN	PETERBOROUGH AWOS	71-1456	DLY	44.2333	-78.3667	628	ENVCAN	2004-2010
CAN	PETERBOROUGH ONT HYDRO	71-1459	DLY	44.3333	-78.3167	680	ENVCAN	1949-1965
CAN	PETERBOROUGH STP	71-1460	HLY	44.2833	-78.3167	630	ENVCAN	1964-1992



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	PETERBOROUGH STP	71-1460	DLY	44.2833	-78.3167	630	ENVCAN	1964-1993
CAN	PETERBOROUGH TRENT U	71-1462	DLY	44.3667	-78.3000	650	ENVCAN	1968-2006
CAN	PETERBOROUGH TRENT U	71-1463	DLY	44.3500	-78.3000	708	ENVCAN	2005-2012
CAN	PETIT SAGUENAY	71-1994	DLY	48.1833	-70.0500	400	ENVCAN	1963-2004
CAN	PHILIPSBURG	71-1716	DLY	45.0333	-73.0833	175	ENVCAN	1950-2012
CAN	PICTON	71-1256	HLY	44.0167	-77.1333	250	ENVCAN	1965-1995
CAN	PICTON	71-1256	DLY	44.0167	-77.1333	250	ENVCAN	1915-1995
CAN	PINE GROVE	71-1258	DLY	43.8000	-79.5833	600	ENVCAN	1957-1996
CAN	POINT LEPREAU	71-2580	DLY	45.0667	-66.4667	17	ENVCAN	1872-1952
CAN	POINT LEPREAU CS	71-2581	DLY	45.0731	-66.4492	20	ENVCAN	1992-2012
CAN	POINTE AU CHENE	71-1897	DLY	45.6500	-74.8000	167	ENVCAN	1958-2009
CAN	PORT COLBORNE	71-0881	HLY	42.8833	-79.2500	575	ENVCAN	1964-2007
CAN	PORT COLBORNE	71-0881	DLY	42.8833	-79.2500	575	ENVCAN	1964-2006
CAN	PORT CREDIT	71-1261	DLY	43.5667	-79.6167	325	ENVCAN	1871-1959
CAN	PORT DALHOUSIE	71-0884	DLY	43.1833	-79.2667	300	ENVCAN	1874-1996
CAN	PORT DOVER	71-0886	DLY	42.7833	-80.2167	610	ENVCAN	1874-1983
CAN	PORT ELMSLEY	71-0510	DLY	44.8833	-76.1333	425	ENVCAN	1948-1968
CAN	PORT HOPE	71-1264	DLY	43.9500	-78.2833	265	ENVCAN	1882-1992
CAN	PORT WELLER (AUT)	71-0888	DLY	43.2500	-79.2167	259	ENVCAN	1993-2012
CAN	PRESTON	71-1047	DLY	43.4000	-80.4167	955	ENVCAN	1953-1996
CAN	QUEBEC	71-1525	DLY	46.8000	-71.2167	296	ENVCAN	1872-1959
CAN	QUEBEC 2	71-1526	DLY	46.7871	-71.2667	250	ENVCAN	1956-1968
CAN	QUEBEC/JEAN LESAGE INTL	71-1587	DLY	46.8036	-71.3817	197	ENVCAN	1992-2012
CAN	QUEBEC/JEAN LESAGE INTL A	71-1527	HLY	46.8000	-71.3833	244	ENVCAN	1961-1995
CAN	QUEBEC/JEAN LESAGE INTL A	71-1527	DLY	46.8000	-71.3833	244	ENVCAN	1943-2009
CAN	QUEENSBORO	71-1464	DLY	44.6000	-77.4167	640	ENVCAN	1914-1946
CAN	REGION OF WATERLOO INT'L	71-1072	DLY	43.4589	-80.3775	1054	ENVCAN	2002-2010
CAN	RENFREW SAND POINT	71-0516	DLY	45.4833	-76.4333	416	ENVCAN	1929-1959
CAN	RICHMOND	71-1725	DLY	45.6333	-72.1333	404	ENVCAN	1871-2012
CAN	RICHMOND HILL	71-1267	DLY	43.8772	-79.4478	787	ENVCAN	1959-2006
CAN	RIDEAU CANAL NARROWS	71-0524	DLY	44.7000	-76.3000	410	ENVCAN	1954-1969

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	RIDGEVILLE	71-0895	DLY	43.0417	-79.3250	775	ENVCAN	1950-2006
CAN	RIGAUD	71-1528	DLY	45.5000	-74.3667	151	ENVCAN	1963-2012
CAN	RILEY BROOK	71-2586	DLY	47.1833	-67.2000	560	ENVCAN	1955-1970
CAN	RIVIERE BLEUE	71-2136	DLY	47.4333	-69.0333	699	ENVCAN	1950-2004
CAN	RIVIERE DES PRAIRIES	71-1726	DLY	45.7000	-73.5000	30	ENVCAN	1973-2012
CAN	ROSEVILLE	71-1053	DLY	43.3536	-80.4736	1076	ENVCAN	1972-2006
CAN	ROUGEMONT	71-1727	DLY	45.4333	-73.1000	131	ENVCAN	1956-1985
CAN	ROYAL ROAD	71-2591	HLY	46.0500	-66.7167	380	ENVCAN	1965-1992
CAN	ROYAL ROAD	71-2591	DLY	46.0500	-66.7167	380	ENVCAN	1965-1993
CAN	RUSSELL	71-0532	DLY	45.2628	-75.3595	250	ENVCAN	1954-2006
CAN	SABREVOIS	71-1729	DLY	45.2167	-73.2000	125	ENVCAN	1975-2012
CAN	SAINT JOHN	71-2601	DLY	45.2833	-66.0833	100	ENVCAN	1871-1970
CAN	SAINT JOHN A	71-2603	HLY	45.3181	-65.8856	357	ENVCAN	1960-2002
CAN	SAINT JOHN A	71-2603	DLY	45.3181	-65.8856	357	ENVCAN	1946-2012
CAN	SAINT JOHN BRIDGE	71-2606	DLY	45.2667	-66.0667	25	ENVCAN	1968-1976
CAN	SAINT MICHEL	71-2160	DLY	46.8667	-70.8833	226	ENVCAN	1978-2012
CAN	SANDHILL	71-1272	DLY	43.9167	-80.0333	950	ENVCAN	1946-1947
CAN	SAULNIERVILLE	71-2866	DLY	44.2667	-66.1167	150	ENVCAN	1916-1937
CAN	SAWYERVILLE	71-1799	DLY	45.3333	-71.5667	907	ENVCAN	1952-1981
CAN	SAWYERVILLE NORD	71-1800	HLY	45.3762	-71.5383	801	ENVCAN	1965-1999
CAN	SAWYERVILLE NORD	71-1800	DLY	45.3762	-71.5383	801	ENVCAN	1961-2012
CAN	SCARBOROUGH JUNCTION	71-1274	DLY	43.7167	-79.2167	548	ENVCAN	1883-1912
CAN	SCOTLAND	71-1058	DLY	43.0008	-80.4278	810	ENVCAN	1971-2006
CAN	SCOTT	71-1801	DLY	46.5000	-71.0833	475	ENVCAN	1950-2012
CAN	SHARON	71-1277	DLY	44.1000	-79.4333	861	ENVCAN	1886-1999
CAN	SHERBROOKE	71-1802	DLY	45.4000	-71.9000	595	ENVCAN	1900-1972
CAN	SHERBROOKE	71-1803	DLY	45.3667	-71.9333	835	ENVCAN	1975-1985
CAN	SHERBROOKE A	71-1805	HLY	45.4333	-71.6833	792	ENVCAN	1962-1995
CAN	SHERBROOKE A	71-1805	DLY	45.4333	-71.6833	792	ENVCAN	1962-2005
CAN	SHERBROOKE A	71-1806	DLY	45.4333	-71.6833	792	ENVCAN	2005-2009
CAN	SIMCOE	71-0907	HLY	42.8500	-80.2667	789	ENVCAN	1962-1986

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	SIMCOE	71-0907	DLY	42.8500	-80.2667	789	ENVCAN	1962-1986
CAN	SIMCOE	71-0909	DLY	42.8667	-80.3333	730	ENVCAN	1866-1961
CAN	SIMCOE (AUT)	71-0908	DLY	42.8500	-80.2667	789	ENVCAN	1993-1999
CAN	SMITHFIELD CDA	71-1278	DLY	44.0833	-77.6667	390	ENVCAN	1949-1990
CAN	SMITHFIELD CDA AUTOMATIC	71-1279	DLY	44.0833	-77.6667	390	ENVCAN	1987-1996
CAN	SMITHS FALLS TS	71-0541	HLY	44.8833	-76.0000	375	ENVCAN	1983-1989
CAN	SMITHS FALLS TS	71-0541	DLY	44.8833	-76.0000	375	ENVCAN	1982-1989
CAN	SMITHS FALLS WPCP	71-0540	HLY	44.9000	-76.0000	400	ENVCAN	1964-1982
CAN	SMITHS FALLS WPCP	71-0540	DLY	44.9000	-76.0000	400	ENVCAN	1964-1983
CAN	SOUTH MOUNTAIN	71-0542	DLY	44.9667	-75.4833	278	ENVCAN	1960-1996
CAN	SQUATECK	71-2172	DLY	47.8833	-68.7000	649	ENVCAN	1963-1994
CAN	ST AMABLE	71-1732	DLY	45.6667	-73.3000	135	ENVCAN	1980-2012
CAN	ST ANICET	71-1733	DLY	45.1333	-74.3500	175	ENVCAN	1960-2012
CAN	ST ARSENE	71-2143	DLY	47.9500	-69.3833	250	ENVCAN	1963-2004
CAN	ST AUGUSTIN	71-1536	HLY	46.7333	-71.5000	190	ENVCAN	1965-1989
CAN	ST AUGUSTIN	71-1536	DLY	46.7333	-71.5000	190	ENVCAN	1964-1989
CAN	ST BERNARD DE LACOLLE	71-1737	DLY	45.0833	-73.3833	162	ENVCAN	1973-2012
CAN	ST BRUNO	71-1739	DLY	45.5500	-73.3500	200	ENVCAN	1926-1958
CAN	ST BRUNO KAMOURASKA	71-2144	HLY	47.4500	-69.7833	650	ENVCAN	1966-2000
CAN	ST BRUNO KAMOURASKA	71-2144	DLY	47.4500	-69.7833	650	ENVCAN	1964-2004
CAN	ST CAMILLE	71-2145	DLY	46.4833	-70.2167	1299	ENVCAN	1963-2012
CAN	ST CAMILLE WOLFE	71-1839	DLY	45.6667	-71.7333	880	ENVCAN	1975-2012
CAN	ST CATHARINES	71-0897	DLY	43.2000	-79.2500	300	ENVCAN	1882-1995
CAN	ST CATHARINES A	71-0898	HLY	43.2000	-79.1667	321	ENVCAN	1971-2005
CAN	ST CATHARINES A	71-0898	DLY	43.2000	-79.1667	321	ENVCAN	1971-2000
CAN	ST CATHARINES CDA	71-0900	HLY	43.1833	-79.2333	325	ENVCAN	1960-1964
CAN	ST CATHARINES CDA	71-0900	DLY	43.1833	-79.2333	325	ENVCAN	1928-1964
CAN	ST CATHARINES POWER GLEN	71-0901	DLY	43.1167	-79.2500	400	ENVCAN	1965-2006
CAN	ST CHARLES GARNIER	71-2146	HLY	48.3333	-68.0500	1060	ENVCAN	1969-1994
CAN	ST CHARLES GARNIER	71-2146	DLY	48.3333	-68.0500	1060	ENVCAN	1963-1994
CAN	ST CLEMENT	71-2147	DLY	47.9167	-69.1000	850	ENVCAN	1964-2004

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	ST COME DE LINIERE	71-1743	DLY	46.0500	-70.5167	800	ENVCAN	1965-2012
CAN	ST EPHREM	71-1748	HLY	46.0667	-70.9667	1025	ENVCAN	1965-2000
CAN	ST EPHREM	71-1748	DLY	46.0667	-70.9667	1025	ENVCAN	1929-2012
CAN	ST FERDINAND	71-1749	HLY	46.1000	-71.5833	974	ENVCAN	1976-2000
CAN	ST FERDINAND	71-1749	DLY	46.1000	-71.5833	974	ENVCAN	1965-2012
CAN	ST FEREOLE	71-2006	DLY	47.1224	-70.8261	750	ENVCAN	1915-1983
CAN	ST FLAVIEN	71-1750	DLY	46.4833	-71.5667	450	ENVCAN	1963-2012
CAN	ST GEORGE	71-2598	DLY	45.1333	-66.8333	110	ENVCAN	1919-1981
CAN	ST GEORGE	71-1055	DLY	43.2333	-80.2000	722	ENVCAN	1883-1901
CAN	ST GEORGES	71-1756	HLY	46.1500	-70.7000	550	ENVCAN	1965-2000
CAN	ST GEORGES	71-1756	DLY	46.1500	-70.7000	550	ENVCAN	1963-2012
CAN	ST GUILLAUME	71-1757	HLY	45.8833	-72.7667	144	ENVCAN	1972-2000
CAN	ST GUILLAUME	71-1757	DLY	45.8833	-72.7667	144	ENVCAN	1963-2012
CAN	ST GUY	71-2154	DLY	48.0500	-68.8167	1050	ENVCAN	1963-2004
CAN	ST HIPPOLYTE	71-1904	DLY	45.9833	-74.0000	1200	ENVCAN	1961-2012
CAN	ST HYACINTHE	71-1764	DLY	45.6333	-72.9500	102	ENVCAN	1890-1979
CAN	ST HYACINTHE 2	71-1765	DLY	45.5667	-72.9167	108	ENVCAN	1963-2012
CAN	ST JACQUES	71-1550	DLY	45.9500	-73.5833	226	ENVCAN	1957-2011
CAN	ST JANVIER	71-1551	DLY	45.7333	-73.8833	200	ENVCAN	1973-2010
CAN	ST JEAN (IO)	71-2009	DLY	46.9167	-70.9167	100	ENVCAN	1972-1994
CAN	ST JEROME	71-1905	HLY	45.8000	-74.0500	556	ENVCAN	1969-2000
CAN	ST JEROME	71-1905	DLY	45.8000	-74.0500	556	ENVCAN	1932-2012
CAN	ST JOACHIM	71-2010	DLY	47.0667	-70.8333	25	ENVCAN	1922-1940
CAN	ST LAURENT (COLLEGE)	71-1772	DLY	45.5167	-73.6667	125	ENVCAN	1931-1967
CAN	ST LEONARD A	71-2610	HLY	47.1578	-67.8319	793	ENVCAN	1985-2009
CAN	ST LEONARD A	71-2610	DLY	47.1578	-67.8319	793	ENVCAN	1985-2012
CAN	ST LIN DES LAURENTIDES	71-1555	DLY	45.8500	-73.7500	210	ENVCAN	1913-1981
CAN	ST LUDGER	71-1774	DLY	45.7500	-70.6833	1099	ENVCAN	1964-2012
CAN	ST MALACHIE	71-2158	HLY	46.5500	-70.8167	725	ENVCAN	1965-1990
CAN	ST MALACHIE	71-2158	DLY	46.5500	-70.8167	725	ENVCAN	1965-1994
CAN	ST MALO D AUCKLAND	71-1776	DLY	45.1936	-71.4976	1850	ENVCAN	1949-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	ST MATHIEU LAPRAIRIE	71-1779	DLY	45.3500	-73.5333	100	ENVCAN	1948-1982
CAN	ST NAZAIRE	71-1780	DLY	45.7333	-72.6167	225	ENVCAN	1973-2012
CAN	ST ODILON	71-1781	DLY	46.3500	-70.6500	1175	ENVCAN	1965-1994
CAN	ST PAMPHILE	71-2163	DLY	46.9667	-69.7833	1273	ENVCAN	1950-2004
CAN	ST PIERRE DE BROUGHTON	71-1783	HLY	46.2500	-71.2167	1200	ENVCAN	1972-1999
CAN	ST PIERRE DE BROUGHTON	71-1783	DLY	46.2500	-71.2167	1200	ENVCAN	1965-2012
CAN	ST PROSPER	71-1784	DLY	46.2167	-70.5000	925	ENVCAN	1963-2011
CAN	ST RAPHAEL	71-2168	DLY	46.8167	-70.7500	350	ENVCAN	1949-1982
CAN	ST REMI	71-1785	DLY	45.2833	-73.6000	175	ENVCAN	1963-1991
CAN	ST SEBASTIEN	71-1788	HLY	45.7667	-70.9500	1450	ENVCAN	1972-2000
CAN	ST SEBASTIEN	71-1788	DLY	45.7667	-70.9500	1450	ENVCAN	1963-2012
CAN	ST SEVERIN	71-1790	DLY	46.3333	-71.0500	1450	ENVCAN	1964-2012
CAN	ST SIMEON	71-2013	DLY	47.8500	-69.8667	50	ENVCAN	1968-2004
CAN	ST STEPHEN	71-2613	DLY	45.1942	-67.2756	35	ENVCAN	1898-1915
CAN	ST STEPHEN (AUT)	71-2614	DLY	45.2167	-67.2500	86	ENVCAN	1992-2006
CAN	ST THEOPHILE	71-1793	HLY	45.9333	-70.4833	1296	ENVCAN	1966-2000
CAN	ST THEOPHILE	71-1793	DLY	45.9333	-70.4833	1296	ENVCAN	1950-2012
CAN	ST URBAIN	71-2015	DLY	47.5667	-70.5500	300	ENVCAN	1957-2004
CAN	ST WILLIAMS	71-0905	DLY	42.7000	-80.4500	700	ENVCAN	1954-1988
CAN	ST WILLIAMS AUTOMATIC CLI	71-0906	DLY	42.7000	-80.4500	700	ENVCAN	1989-1998
CAN	ST ZACHARIE	71-1797	HLY	46.1167	-70.3833	1575	ENVCAN	1972-1994
CAN	ST ZACHARIE	71-1797	DLY	46.1167	-70.3833	1575	ENVCAN	1965-1994
CAN	ST. STEPHEN	71-2612	DLY	45.2102	-67.2529	86	ENVCAN	2006-2012
CAN	STANSTEAD	71-1812	DLY	45.0167	-72.1000	1050	ENVCAN	1948-1991
CAN	STE ANNE DE BELLEVUE	71-1734	HLY	45.4333	-73.9333	128	ENVCAN	1969-1992
CAN	STE ANNE DE BELLEVUE	71-1734	DLY	45.4333	-73.9333	128	ENVCAN	1969-1992
CAN	STE CLOTHILDE CDA	71-1742	DLY	45.1667	-73.6833	185	ENVCAN	1937-1990
CAN	STE FOY (PIE XII)	71-1567	HLY	46.7833	-71.3167	260	ENVCAN	1972-1997
CAN	STE FOY (PIE XII)	71-1567	DLY	46.7833	-71.3167	260	ENVCAN	1972-1996
CAN	STE FOY MATAPEDIA	71-1566	DLY	46.7500	-71.2833	150	ENVCAN	1971-1984
CAN	STE GENEVIEVE	71-1755	DLY	45.5000	-73.8500	75	ENVCAN	1952-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	STE GERMAINE	71-2153	HLY	46.4224	-70.4681	1674	ENVCAN	1965-2000
CAN	STE GERMAINE	71-2153	DLY	46.4224	-70.4681	1674	ENVCAN	1963-2012
CAN	STE LUCIE	71-2157	DLY	46.7333	-70.0167	1223	ENVCAN	1963-2012
CAN	STE MADELEINE	71-1775	HLY	45.6167	-73.1333	98	ENVCAN	1979-2000
CAN	STE MADELEINE	71-1775	DLY	45.6167	-73.1333	98	ENVCAN	1979-2012
CAN	STE MARTINE	71-1777	DLY	45.2167	-73.8500	125	ENVCAN	1963-2012
CAN	STE PERPETUE	71-2166	DLY	47.0500	-69.9333	1348	ENVCAN	1963-1997
CAN	STE ROSE DU DEGELIS	71-2170	DLY	47.5667	-68.6333	495	ENVCAN	1932-2004
CAN	STE THERESE OUEST	71-1561	DLY	45.6500	-73.8833	200	ENVCAN	1961-2010
CAN	STE-CLOTHILDE	71-1741	DLY	45.1672	-73.6789	174	ENVCAN	1993-2012
CAN	STE-FOY (U. LAVAL)	71-1585	DLY	46.7803	-71.2875	300	ENVCAN	1997-2012
CAN	STIRLING	71-1288	DLY	44.3167	-77.6333	455	ENVCAN	1940-1968
CAN	STIRLING	71-1289	DLY	44.2931	-77.5547	426	ENVCAN	1998-2006
CAN	STONEY CREEK	71-1290	DLY	43.2167	-79.7500	292	ENVCAN	1884-1927
CAN	STOUFFVILLE	71-1291	DLY	44.0000	-79.2667	1025	ENVCAN	1960-1981
CAN	STOUFFVILLE WPCP	71-1293	DLY	43.9667	-79.2500	875	ENVCAN	1971-1993
CAN	SUTTON	71-1814	DLY	45.0667	-72.6833	800	ENVCAN	1978-2012
CAN	SYDENHAM	71-0546	DLY	44.4000	-76.5833	437	ENVCAN	1903-1917
CAN	TADOUSSAC	71-2020	DLY	48.1500	-69.7000	230	ENVCAN	1913-2004
CAN	THETFORD MINES	71-1818	HLY	46.1000	-71.3500	1250	ENVCAN	1967-2000
CAN	THETFORD MINES	71-1817	DLY	46.0667	-71.3167	1020	ENVCAN	1922-1965
CAN	THETFORD MINES	71-1818	DLY	46.1000	-71.3500	1250	ENVCAN	1960-2012
CAN	THORNHILL GRANDVIEW	71-1295	DLY	43.8000	-79.4167	654	ENVCAN	1965-2006
CAN	TILLSONBURG MOE	71-0919	DLY	42.8553	-80.7217	700	ENVCAN	1962-2006
CAN	TORONTO	71-1296	HLY	43.6667	-79.4000	369	ENVCAN	1937-2002
CAN	TORONTO	71-1296	DLY	43.6667	-79.4000	369	ENVCAN	1840-2006
CAN	TORONTO AGINCOURT	71-1299	DLY	43.7833	-79.2667	590	ENVCAN	1895-1968
CAN	TORONTO AMESBURY	71-1306	DLY	43.7000	-79.4833	505	ENVCAN	1980-1987
CAN	TORONTO ASHBRIDGES BAY	71-1300	DLY	43.6667	-79.3167	243	ENVCAN	1958-1997
CAN	TORONTO BOOTH	71-1308	HLY	43.6500	-79.3500	253	ENVCAN	1980-1993
CAN	TORONTO BOOTH	71-1308	DLY	43.6500	-79.3500	253	ENVCAN	1980-1993

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	TORONTO BUTTONVILLE A	71-1408	DLY	43.8622	-79.3700	650	ENVCAN	1986-2012
CAN	TORONTO CITY	71-1297	HLY	43.6667	-79.4000	369	ENVCAN	2002-2007
CAN	TORONTO CITY	71-1297	DLY	43.6667	-79.4000	369	ENVCAN	2002-2012
CAN	TORONTO CITY CENTRE	71-1337	DLY	43.6286	-79.3950	252	ENVCAN	2006-2012
CAN	TORONTO DEER PARK	71-1313	DLY	43.6833	-79.3833	471	ENVCAN	1890-1933
CAN	TORONTO DOWNSVIEW A	71-1319	HLY	43.7500	-79.4833	650	ENVCAN	1964-1982
CAN	TORONTO DOWNSVIEW A	71-1319	DLY	43.7500	-79.4833	650	ENVCAN	1957-1982
CAN	TORONTO DOWNSVIEW S	71-1320	DLY	43.7167	-79.4833	525	ENVCAN	1951-1970
CAN	TORONTO EAST YORK	71-1322	DLY	43.7000	-79.3333	400	ENVCAN	1951-1957
CAN	TORONTO ELLESMERE	71-1323	HLY	43.7667	-79.2667	538	ENVCAN	1966-1995
CAN	TORONTO ELLESMERE	71-1323	DLY	43.7667	-79.2667	538	ENVCAN	1959-1994
CAN	TORONTO GLENVIEW	71-1327	DLY	43.7000	-79.4500	570	ENVCAN	1953-1966
CAN	TORONTO GREENWOOD	71-1328	DLY	43.6667	-79.3167	325	ENVCAN	1966-1981
CAN	TORONTO HIGH PARK	71-1332	DLY	43.6500	-79.4667	350	ENVCAN	1951-1962
CAN	TORONTO ISLAND A	71-1336	HLY	43.6286	-79.3950	251	ENVCAN	1971-1994
CAN	TORONTO ISLAND A	71-1336	DLY	43.6286	-79.3950	251	ENVCAN	1957-2006
CAN	TORONTO KEELE-FINCH	71-1340	HLY	43.7667	-79.4833	656	ENVCAN	1973-1987
CAN	TORONTO KEELE-FINCH	71-1340	DLY	43.7667	-79.4833	656	ENVCAN	1973-1987
CAN	TORONTO LEASIDE S	71-1342	DLY	43.7000	-79.3667	450	ENVCAN	1951-1956
CAN	TORONTO LESTER B. PEARSON	71-1344	HLY	43.6772	-79.6306	569	ENVCAN	1960-2007
CAN	TORONTO LESTER B. PEARSON	71-1344	DLY	43.6772	-79.6306	569	ENVCAN	1937-2012
CAN	TORONTO NORTH YORK	71-1415	HLY	43.7800	-79.4678	613	ENVCAN	1998-2007
CAN	TORONTO NORTH YORK	71-1415	DLY	43.7800	-79.4678	613	ENVCAN	1994-2006
CAN	TORONTO NORTHCLIFFE	71-1354	DLY	43.6833	-79.4500	550	ENVCAN	1957-1981
CAN	TORONTO OLD WESTON RD	71-1356	HLY	43.6500	-79.4667	400	ENVCAN	1966-1990
CAN	TORONTO OLD WESTON RD	71-1356	DLY	43.6500	-79.4667	400	ENVCAN	1966-1990
CAN	TORONTO PINE RIDGE	71-1357	DLY	43.7167	-79.2333	570	ENVCAN	1958-1965
CAN	TORONTO SCARBOROUGH	71-1360	DLY	43.7167	-79.2333	514	ENVCAN	1961-1971
CAN	TORONTO SHERBOURNE	71-1370	HLY	43.6500	-79.3667	250	ENVCAN	1966-1979
CAN	TORONTO SUNNYBROOK	71-1363	DLY	43.7167	-79.3833	515	ENVCAN	1962-1993
CAN	TRENTON A	71-1376	HLY	44.1167	-77.5333	283	ENVCAN	1964-2009

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	TRENTON A	71-1376	DLY	44.1167	-77.5333	283	ENVCAN	1935-2012
CAN	TRENTON ONT HYDRO	71-1378	DLY	44.1333	-77.6000	290	ENVCAN	1915-1992
CAN	TRINITE DES MONTS	71-2173	DLY	48.1333	-68.4833	859	ENVCAN	1950-2004
CAN	TROIS PISTOLES	71-2174	DLY	48.1500	-69.1167	190	ENVCAN	1951-2004
CAN	TWEED	71-1382	DLY	44.5000	-77.2833	475	ENVCAN	1925-1972
CAN	TYRONE	71-1384	DLY	44.0167	-78.7333	675	ENVCAN	1967-1999
CAN	UPSALQUITCH LAKE	71-2636	DLY	47.4556	-66.4153	2049	ENVCAN	1967-2006
CAN	UXBRIDGE	71-1387	DLY	44.0833	-79.1333	886	ENVCAN	1899-1923
CAN	UXBRIDGE 2	71-1389	DLY	44.1167	-79.1000	886	ENVCAN	1948-1977
CAN	UXBRIDGE 3	71-1390	DLY	44.1333	-79.0833	885	ENVCAN	1970-1981
CAN	VALLEE JONCTION	71-1822	HLY	46.3833	-70.9333	500	ENVCAN	1965-2000
CAN	VALLEE JONCTION	71-1822	DLY	46.3833	-70.9333	500	ENVCAN	1965-2012
CAN	VALLEYFIELD	71-1823	DLY	45.2833	-74.1000	150	ENVCAN	1952-2011
CAN	VANKLEEK HILL	71-0547	DLY	45.5167	-74.6500	290	ENVCAN	1896-1961
CAN	VERCHERES	71-1825	DLY	45.7667	-73.3667	69	ENVCAN	1963-2012
CAN	VICTORIAVILLE	71-1826	HLY	46.0500	-71.9667	450	ENVCAN	1963-1984
CAN	VICTORIAVILLE	71-1826	DLY	46.0500	-71.9667	450	ENVCAN	1949-1984
CAN	VINELAND	71-0921	DLY	43.1589	-79.4169	361	ENVCAN	1993-2006
CAN	VINELAND RITTENHOUSE	71-0923	DLY	43.1667	-79.4167	310	ENVCAN	1965-2001
CAN	VINELAND STATION	71-0924	HLY	43.1833	-79.4000	260	ENVCAN	1963-1989
CAN	VINELAND STATION	71-0924	DLY	43.1833	-79.4000	260	ENVCAN	1924-1988
CAN	VINELAND STATION RCS	71-0926	HLY	43.1833	-79.4000	260	ENVCAN	2002-2007
CAN	VINELAND STATION RCS	71-0926	DLY	43.1833	-79.4000	260	ENVCAN	2002-2012
CAN	VIRGIL BRIGHTS	71-0927	DLY	43.2000	-79.1500	325	ENVCAN	1965-1978
CAN	WATERFORD	71-0933	DLY	42.8833	-80.2333	730	ENVCAN	1971-2006
CAN	WATERLOO WELLINGTON A	71-1071	HLY	43.4500	-80.3833	1040	ENVCAN	1970-2007
CAN	WATERLOO WELLINGTON A	71-1071	DLY	43.4500	-80.3833	1040	ENVCAN	1970-2002
CAN	WATOPEKA	71-1830	DLY	45.6333	-71.7500	1017	ENVCAN	1942-1968
CAN	WELLAND	71-0934	DLY	42.9925	-79.2611	575	ENVCAN	1872-2006
CAN	WEST DITTON	71-1831	HLY	45.4000	-71.3000	1679	ENVCAN	1965-1992
CAN	WEST DITTON	71-1831	DLY	45.4000	-71.3000	1679	ENVCAN	1965-1993



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CAN	WESTPORT	71-0548	DLY	44.6833	-76.4167	444	ENVCAN	1895-1920
CAN	WEYMOUTH FALLS	71-2918	DLY	44.4000	-65.9500	35	ENVCAN	1965-2000
CAN	WILCOX LAKE	71-1397	DLY	43.9500	-79.4333	950	ENVCAN	1960-1979
CAN	WOBURN	71-1833	HLY	45.3849	-70.8595	1355	ENVCAN	1972-1997
CAN	WOBURN	71-1833	DLY	45.3849	-70.8595	1355	ENVCAN	1973-1997
CAN	WOODBIDGE	71-1398	DLY	43.7833	-79.6000	538	ENVCAN	1948-2005
CAN	WOODLAWN	71-0553	DLY	45.5000	-76.1000	300	ENVCAN	1975-1982
CAN	WOODSTOCK	71-2643	DLY	46.1703	-67.5536	502	ENVCAN	1886-2006
NJ	ALLENDALE	28-0100	HLY	41.0333	-74.1333	269	NCEI	1953-1974
NJ	ANDOVER TWP 1.7 W	69-0948	DLY	41.0200	-74.7600	584	COCORAHS	2008-2012
NJ	AUDUBON	28-0346	DLY	39.8833	-75.0833	39	NCEI	1950-1990
NJ	BELVIDERE	28-0729	DLY	40.8333	-75.0833	279	NCEI	1893-1981
NJ	BELVIDERE BRG	28-0734	DLY	40.8292	-75.0836	263	NCEI	1982-2014
NJ	BERLIN 1 W	28-0787	DLY	39.8000	-74.9500	151	NCEI	1941-1959
NJ	BERNARDSVILLE 2 E	28-0797	DLY	40.7167	-74.5333	240	NCEI	1959-1979
NJ	BKRN4	91-0005	DLY	40.7000	-74.5500	280	IFLOWS	1996-2012
NJ	BLACKWELLS MILLS	28-0847	DLY	40.4603	-74.5825	40	NCEI	1956-2014
NJ	BOONTON 1 SE	28-0907	DLY	40.8922	-74.4033	280	NCEI	1893-2014
NJ	BOUND BROOK 2W	28-0927	15M	40.5603	-74.5750	50	NCEI	1980-2011
NJ	BOUND BROOK 2W	28-0927	DLY	40.5603	-74.5750	50	NCEI	1956-2014
NJ	BRANCHVILLE	28-0978	DLY	41.1500	-74.7500	581	NCEI	1954-1982
NJ	BRIDGEWATER TWP 3.3 NW	69-0944	DLY	40.6300	-74.6500	118	COCORAHS	2008-2012
NJ	BURLINGTON	28-1211	DLY	40.0833	-74.8667	12	NCEI	1907-1977
NJ	CALDWELL	55-0096	HLY	40.8764	-74.2831	175	NCEI	1999-2014
NJ	CALIFON 0.6 NW	69-0720	DLY	40.7300	-74.8400	571	COCORAHS	2008-2012
NJ	CAMDEN	28-1280	DLY	39.9167	-75.1167	14	NCEI	1893-1953
NJ	CANISTEAR RSVR	28-1327	DLY	41.1086	-74.4817	1100	NCEI	1948-2010
NJ	CANOE BROOK	28-1335	DLY	40.7436	-74.3539	180	NCEI	1931-2014
NJ	CHARLOTTEBURG RESERVE	28-1582	15M	41.0347	-74.4233	760	NCEI	1973-2011
NJ	CHARLOTTEBURG RESERVE	28-1582	DLY	41.0347	-74.4233	760	NCEI	1893-2014
NJ	CHATHAM	28-1590	DLY	40.7500	-74.3667	190	NCEI	1903-1963

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NJ	CHATHAM 0.6 NW	69-0851	DLY	40.7500	-74.3900	203	COCORAHNS	2010-2012
NJ	CLINTON	28-1749	DLY	40.6333	-74.9167	200	NCEI	1943-1969
NJ	CLINTON 2 N	28-1754	15M	40.6628	-74.9147	350	NCEI	1970-2011
NJ	CLINTON 2 N	28-1754	HLY	40.6628	-74.9147	350	NCEI	1970-2011
NJ	CRANFORD	28-2023	DLY	40.6669	-74.3231	75	NCEI	1969-2014
NJ	CULVERS LAKE	28-2130	DLY	41.1667	-74.7833	761	NCEI	1902-1954
NJ	DOVER	28-2340	DLY	40.8833	-74.5667	575	NCEI	1893-1943
NJ	EATONTOWN 1.2 NE	69-0790	DLY	40.3000	-74.0400	46	COCORAHNS	2008-2012
NJ	ELIZABETH	28-2644	DLY	40.6667	-74.2333	39	NCEI	1893-1970
NJ	ESSEX FELS SERVICE BLDG	28-2768	HLY	40.8314	-74.2858	350	NCEI	1949-2013
NJ	ESSEX FELS SERVICE BLDG	28-2768	DLY	40.8314	-74.2858	350	NCEI	1949-2010
NJ	EWING TWP 1.6 SE	69-0746	DLY	40.2500	-74.7800	125	COCORAHNS	2008-2012
NJ	FLEMINGTON 5 NNW	28-3029	DLY	40.5772	-74.8826	260	NCEI	1898-2014
NJ	FRANKLIN TWP 2.8 NNE	69-0739	DLY	40.6100	-74.9200	220	COCORAHNS	2008-2012
NJ	FREEHOLD-MARLBORO	28-3181	HLY	40.3142	-74.2511	194	NCEI	1948-1989
NJ	FREEHOLD-MARLBORO	28-3181	DLY	40.3142	-74.2511	194	NCEI	1893-2014
NJ	GLASSBORO 2 NE	28-3291	HLY	39.7358	-75.0953	100	NCEI	1948-1998
NJ	GLASSBORO 2 NE	28-3291	DLY	39.7358	-75.0953	100	NCEI	1948-2004
NJ	GREENWOOD LAKE	28-3516	DLY	41.1386	-74.3244	470	NCEI	1941-2009
NJ	HAMMONTON 1 NE	28-3662	DLY	39.6442	-74.8072	90	NCEI	1893-2014
NJ	HARRISON	28-3704	DLY	40.7514	-74.1567	24	NCEI	1997-2014
NJ	HIGH POINT PARK	28-3935	DLY	41.3061	-74.6714	1520	NCEI	1956-2005
NJ	HIGHTSTOWN 2 W	28-3951	15M	40.2650	-74.5642	100	NCEI	1971-1973
NJ	HIGHTSTOWN 2 W	28-3951	HLY	40.2650	-74.5642	100	NCEI	1948-1973
NJ	HIGHTSTOWN 2 W	28-3951	DLY	40.2650	-74.5642	100	NCEI	1893-2014
NJ	HIGHTSTOWN PUMPING STN	28-3956	HLY	40.2833	-74.5333	79	NCEI	1948-1960
NJ	HILLSBOROUGH TWP 4.7 ESE	69-0920	DLY	40.4700	-74.5900	141	COCORAHNS	2008-2012
NJ	INDIAN MILLS 2 W	28-4229	DLY	39.8144	-74.7883	100	NCEI	1901-2014
NJ	JERSEY CITY	28-4339	DLY	40.7419	-74.0572	135	NCEI	1905-1997
NJ	JERSEY CITY (LSC)	86-0005	HLY	40.7087	-74.0531	2	NJMESONET	2008-2013
NJ	KCDW	78-0011	15M	40.8764	-74.2831	170	NCEI	2005-2014

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NJ	KTTN	78-0061	15M	40.2769	-74.8158	184	NCEI	2005-2014
NJ	LAMBERTVILLE	28-4635	DLY	40.3667	-74.9472	68	NCEI	1931-2014
NJ	LAMBERTVILLE RIVER	28-4653	DLY	40.3667	-74.9500	60	NCEI	1893-1949
NJ	LAWRENCE TWP 1.0 NNW	69-0761	DLY	40.3100	-74.7200	138	COCORAHS	2008-2012
NJ	LAYTON 2	28-4736	DLY	41.2285	-74.8635	400	NCEI	1962-1970
NJ	LAYTON 3 NW	28-4735	DLY	41.2500	-74.8500	469	NCEI	1900-1962
NJ	LITTLE FALLS	28-4887	HLY	40.8858	-74.2261	150	NCEI	1948-2013
NJ	LITTLE FALLS	28-4887	DLY	40.8858	-74.2261	150	NCEI	1903-2009
NJ	LITTLE FALLS TWP 0.5 WNW	69-0898	DLY	40.8800	-74.2300	174	COCORAHS	2009-2012
NJ	LONG BRANCH OAKHURST	28-4987	DLY	40.2797	-74.0047	30	NCEI	1907-2014
NJ	LONG VALLEY	28-5003	DLY	40.7875	-74.7789	550	NCEI	1929-2004
NJ	LUMBERTON	28-5055	HLY	39.9667	-74.8000	30	NCEI	1948-1970
NJ	MACOPIN LWR INTKE DAM	28-5071	DLY	41.0167	-74.4000	580	NCEI	1941-1960
NJ	MAHWAH	28-5104	DLY	41.1000	-74.1667	249	NCEI	1956-1988
NJ	MANVILLE	28-5197	DLY	40.5500	-74.5667	49	NCEI	1941-1967
NJ	MIDLAND PARK	28-5503	DLY	40.9939	-74.1453	210	NCEI	1945-2014
NJ	MILTON	28-5597	DLY	41.0167	-74.5333	951	NCEI	1941-1972
NJ	MOORESTOWN	28-5728	DLY	39.9511	-74.9697	45	NCEI	1893-2014
NJ	MOORESTOWN	52-5728	DLY	39.9511	-74.9697	45	FORTS	1849-1892
NJ	MORRIS PLAINS 1 W	28-5769	DLY	40.8333	-74.5000	400	NCEI	1941-1990
NJ	MORRIS TWP 0.8 NW	69-0843	DLY	40.8100	-74.5000	338	COCORAHS	2008-2012
NJ	MT HOLLY	28-5866	15M	39.9883	-74.8047	10	NCEI	1971-2011
NJ	MT HOLLY	28-5866	HLY	39.9883	-74.8047	10	NCEI	1970-2011
NJ	NEW BRUNSWICK 3 SE	28-6055	HLY	40.4719	-74.4364	86	NCEI	1968-2006
NJ	NEW BRUNSWICK 3 SE	28-6055	DLY	40.4719	-74.4364	86	NCEI	1968-2014
NJ	NEW BRUNSWICK EXP STN	28-6062	DLY	40.4667	-74.4333	89	NCEI	1912-1968
NJ	NEW MIDDLESEX COUNTY	76-0010	HLY	40.4072	-74.4942	116	RAWS	2005-2013
NJ	NEW MILFORD	28-6146	HLY	40.9611	-74.0158	12	NCEI	1946-1980
NJ	NEW MILFORD	28-6146	DLY	40.9611	-74.0158	12	NCEI	1919-2014
NJ	NEW MONMOUTH	28-6154	DLY	40.4167	-74.1000	30	NCEI	1961-1968
NJ	NEWARK INTL AP	28-6026	HLY	40.6825	-74.1694	7	NCEI	1948-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NJ	NEWARK INTL AP	28-6026	DLY	40.6825	-74.1694	7	NCEI	1849-2014
NJ	NEWARK INTL AP	52-6026	DLY	40.6825	-74.1694	7	FORTS	1849-1884
NJ	NEWTON	28-6177	DLY	41.0553	-74.7592	605	NCEI	1893-2005
NJ	OAK RIDGE RSVR	28-6460	DLY	41.0425	-74.4959	880	NCEI	1941-2010
NJ	OLD BRIDGE TWP 3.3 N	69-0776	DLY	40.4500	-74.3100	102	COCORAHS	2011-2012
NJ	OLDWICK	28-6544	DLY	40.6667	-74.7500	259	NCEI	1956-1968
NJ	ORANGE	28-6560	DLY	40.7833	-74.2167	161	NCEI	1940-1964
NJ	PALISADES PARK 0.2 WNW	69-0607	DLY	40.8500	-74.0000	20	COCORAHS	2008-2012
NJ	PARSIPPANY-TROY HILLS TWP	69-0848	DLY	40.8700	-74.3900	302	COCORAHS	2009-2012
NJ	PATERSON	28-6775	DLY	40.9000	-74.1500	102	NCEI	1893-1974
NJ	PEMBERTON	28-6843	DLY	39.9708	-74.6828	60	NCEI	1902-2002
NJ	PHILADELPHIA MT HOLLY	28-6964	DLY	40.0136	-74.8178	50	NCEI	2011-2014
NJ	PHILLIPSBURG	28-6974	DLY	40.6833	-75.1833	180	NCEI	1903-1976
NJ	PLAINFIELD	28-7079	DLY	40.6036	-74.4025	90	NCEI	1893-2014
NJ	POTTERSVILLE 2 NNW	28-7301	DLY	40.7369	-74.7322	484	NCEI	1968-2014
NJ	PRINCETON WTR WKS	28-7328	DLY	40.3333	-74.6667	59	NCEI	1941-1986
NJ	RAHWAY	28-7393	HLY	40.6006	-74.2569	20	NCEI	1948-2001
NJ	RAHWAY	28-7393	DLY	40.6006	-74.2569	20	NCEI	1940-2000
NJ	RAMSEY	87-0004	HLY	41.0659	-74.1475	350	NJSAFETYNET	2004-2013
NJ	RIDGEFIELD	28-7545	DLY	40.8333	-74.0167	79	NCEI	1916-1960
NJ	RINGWOOD	76-0011	HLY	41.1181	-74.2403	567	RAWS	2004-2013
NJ	RINGWOOD	28-7587	DLY	41.0917	-74.2683	305	NCEI	1902-2014
NJ	RINGWOOD 3.0 SSE	69-0909	DLY	41.0700	-74.2600	354	COCORAHS	2011-2012
NJ	RUNYON	28-7825	DLY	40.4333	-74.3333	20	NCEI	1907-1958
NJ	RUTGERS MICRO MET STN	28-7831	HLY	40.4833	-74.4333	131	NCEI	1964-1968
NJ	SANDY HOOK	28-7865	DLY	40.4633	-74.0056	10	NCEI	1873-2014
NJ	SANDY HOOK LIGHTBOAT S	28-7869	DLY	40.4714	-74.0178	22	NCEI	1903-1959
NJ	SOMERDALE 4 SW	28-8173	DLY	39.8372	-75.0442	55	NCEI	1998-2014
NJ	SOMERVILLE 4 NW	28-8194	DLY	40.6153	-74.6531	134	NCEI	1893-2006
NJ	SPLIT ROCK POND	28-8402	DLY	40.9631	-74.4599	800	NCEI	1948-1998
NJ	SPRINGFIELD	28-8423	HLY	40.6964	-74.3364	90	NCEI	1948-2001

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
NJ	SUSSEX 2 NW	28-8644	DLY	41.2214	-74.6600	649	NCEI	1893-2014
NJ	SUSSEX 8 NNW	28-8648	DLY	41.3179	-74.6435	1020	NCEI	1992-2005
NJ	TOMS RIVER	28-8816	DLY	39.9500	-74.2167	100	NCEI	1893-2011
NJ	TRENTON	28-8883	HLY	40.2269	-74.7464	190	NCEI	1948-1981
NJ	TRENTON 2	28-8878	DLY	40.2333	-74.7667	112	NCEI	1893-1959
NJ	TRENTON STATE COLLEGE	28-8880	15M	40.2714	-74.7919	100	NCEI	1977-2003
NJ	TRENTON STATE COLLEGE	28-8880	HLY	40.2714	-74.7919	100	NCEI	1977-2003
NJ	TUCKERTON 2 NE	28-8899	DLY	39.6025	-74.3386	10	NCEI	1898-2008
NJ	WANAQUE RAYMOND DAM	28-9187	HLY	41.0444	-74.2933	245	NCEI	1948-2011
NJ	WANAQUE RAYMOND DAM	28-9187	DLY	41.0444	-74.2933	245	NCEI	1945-2014
NJ	WATCHUNG	28-9271	HLY	40.6622	-74.4164	260	NCEI	1948-2013
NJ	WERTSVILLE 4 NE	28-9363	DLY	40.4528	-74.8081	240	NCEI	1956-2014
NJ	WEST MILFORD TWP 3.2 NE	69-0902	DLY	41.1400	-74.3500	610	COCORAHS	2010-2012
NJ	WEST WHARTON	28-9608	DLY	40.9000	-74.6000	679	NCEI	1959-1990
NJ	WESTFIELD	28-9455	DLY	40.6500	-74.3500	141	NCEI	1939-1960
NJ	WINDSOR 1NW	28-9761	15M	40.2478	-74.5903	90	NCEI	1971-2009
NJ	WINDSOR 1NW	28-9761	HLY	40.2478	-74.5903	90	NCEI	1971-2011
NJ	WOODCLIFF LAKE	28-9832	HLY	41.0139	-74.0425	103	NCEI	1948-1980
NJ	WOODCLIFF LAKE	28-9832	DLY	41.0139	-74.0425	103	NCEI	1919-2014
NJ	WOODCLIFF LAKE OUTLET	70-0001	HLY	41.0119	-74.0478	100	USGSNJ	2007-2014
NJ	WWNN4	91-0082	DLY	40.9000	-74.6000	680	IFLOWS	1996-2012
OH	ASHTABULA	33-0264	DLY	41.8500	-80.8000	690	NCEI	1951-2014
OH	DORSET	33-2251	DLY	41.6833	-80.6667	980	NCEI	1956-2014
OH	GENEVA 3 S	33-3095	DLY	41.7500	-80.9500	751	NCEI	1970-1983
OH	GENEVA 4 SW	33-3094	DLY	41.7667	-81.0000	850	NCEI	1915-1965
OH	HILL HOUSE	33-3750	DLY	41.7333	-81.0167	997	NCEI	1893-1920
OH	MADISON	33-4815	DLY	41.7667	-81.0833	610	NCEI	1920-1929
OH	MOSQUITO CREEK LAKE	33-5505	HLY	41.2986	-80.7647	910	NCEI	1948-1990
OH	MOSQUITO CREEK LAKE	33-5505	DLY	41.2986	-80.7647	910	NCEI	1944-2014
OH	ROCK CREEK 2 S	33-7175	HLY	41.6333	-80.8667	843	NCEI	1972-1982
OH	YOUNGSTOWN WSO AP	33-9406	HLY	41.2544	-80.6739	1180	NCEI	1948-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	ALLEGHENY	76-0029	HLY	41.4864	-79.1025	1770	RAWS	1999-2013
PA	ALLENS MILLS	36-0099	HLY	41.2000	-78.9000	1601	NCEI	1948-1967
PA	ALLENTOWN AP	36-0106	HLY	40.6508	-75.4492	390	NCEI	1948-2013
PA	ALLENTOWN GAS COMPANY	36-0111	DLY	40.6000	-75.4667	249	NCEI	1912-1965
PA	ALVIN R BUSH DAM	36-0147	15M	41.3583	-77.9267	930	NCEI	1971-2011
PA	ALVIN R BUSH DAM	36-0147	HLY	41.3583	-77.9267	930	NCEI	1963-2013
PA	ALVIN R BUSH DAM	36-4545	HLY	41.3667	-77.9333	930	NCEI	1960-1963
PA	ANSONIA 2 W	36-0176	DLY	41.7439	-77.4670	1210	NCEI	1908-1946
PA	ARDMORE	36-0222	DLY	40.0000	-75.2833	340	NCEI	1918-1942
PA	ARDMORE 0.5 NW	69-2342	DLY	40.0100	-75.3000	410	COCORAHS	2009-2012
PA	AUSTINBURG 2 W	36-0313	HLY	41.9958	-77.5331	1591	NCEI	1948-1981
PA	AUSTINBURG 2 W	36-0313	DLY	41.9958	-77.5331	1591	NCEI	1948-1981
PA	BARNES	36-0409	DLY	41.6678	-79.0186	1360	NCEI	1940-1991
PA	BECHTELSVILLE 1ENE	36-0488	DLY	40.3783	-75.6150	460	NCEI	1958-2014
PA	BELTZVILLE DAM	36-0560	HLY	40.8619	-75.6428	735	NCEI	1989-2013
PA	BERWICK	36-0611	DLY	41.0667	-76.2500	571	NCEI	1944-1976
PA	BETHANY - 10	69-2443	DLY	41.6139	-75.2859	1400	COCORAHS	2008-2010
PA	BETHLEHEM	36-0629	DLY	40.6167	-75.3833	240	NCEI	1940-1981
PA	BETHLEHEM 2.9 NE	69-2378	DLY	40.6600	-75.3300	410	COCORAHS	2011-2012
PA	BETHLEHEM LEHIGH UNIV	36-0634	HLY	40.5903	-75.3624	361	NCEI	1948-1978
PA	BETHLEHEM LEHIGH UNIV	36-0634	DLY	40.5903	-75.3624	361	NCEI	1894-1964
PA	BLAKESLEE CORNERS	36-0743	HLY	41.1000	-75.6000	1650	NCEI	1948-1983
PA	BLOOMING GROVE	36-0751	DLY	41.3667	-75.1500	1400	NCEI	1893-1897
PA	BLOOMING GROVE	52-0751	DLY	41.3667	-75.1500	1400	FORTS	1865-1892
PA	BLOOMSBURG NEAR	36-0753	DLY	41.0733	-76.4217	610	NCEI	1894-1943
PA	BRADFORD 2.8 WSW	69-2294	DLY	41.9500	-78.6900	1893	COCORAHS	2008-2012
PA	BRADFORD 4SW RES 5	36-0868	DLY	41.8975	-78.7144	1660	NCEI	1934-2014
PA	BRADFORD CNTRL FS	36-0867	DLY	41.9500	-78.6500	1500	NCEI	1910-2008
PA	BRADFORD RGNL AP	36-0865	15M	41.8031	-78.6403	2117	NCEI	2005-2013
PA	BROOKVILLE	36-1001	DLY	41.1667	-79.0833	1230	NCEI	1892-1942
PA	BROOKVILLE SEWAGE PLT	36-1004	DLY	41.1500	-79.0833	1210	NCEI	1963-1996

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	BUCKSVILLE	36-1080	DLY	40.5003	-75.2044	460	NCEI	1978-2010
PA	CANTON	36-1212	15M	41.6517	-76.8464	1140	NCEI	1976-1992
PA	CANTON	36-1212	DLY	41.6517	-76.8464	1140	NCEI	1976-2014
PA	CANTON 1 NW	36-1215	HLY	41.6667	-76.8667	1522	NCEI	1948-1975
PA	CANTON 1 NW	36-1215	DLY	41.6667	-76.8667	1522	NCEI	1925-1975
PA	CARTER CAMP 2 W	36-1262	HLY	41.6167	-77.7500	2031	NCEI	1948-1972
PA	CARTER CAMP 2 W	36-1262	DLY	41.6167	-77.7500	2031	NCEI	1944-1972
PA	CEDAR RUN (RIVER)	36-1301	DLY	41.5217	-77.4478	780	NCEI	1895-2009
PA	CHERRY SPRINGS	36-1400	15M	41.6667	-77.8167	2300	NCEI	1978-2011
PA	CHERRY SPRINGS	36-1400	HLY	41.6667	-77.8167	2300	NCEI	1978-2013
PA	CLARENCE	36-1480	DLY	41.0489	-77.9411	1390	NCEI	1950-2014
PA	CLARION 3 SW	36-1485	HLY	41.1922	-79.4361	1040	NCEI	1948-1971
PA	CLARION 3 SW	36-1485	DLY	41.1922	-79.4361	1040	NCEI	1884-2014
PA	CLAUSSVILLE	36-1505	DLY	40.6167	-75.6500	670	NCEI	1945-2014
PA	CLEARFIELD	36-1519	DLY	41.0164	-78.4450	1140	NCEI	1904-2001
PA	CLEARFIELD CLIMAT	36-1524	DLY	41.0192	-78.4256	1250	NCEI	1908-1943
PA	CLERMONT	36-1529	HLY	41.6833	-78.5000	2103	NCEI	1951-1985
PA	CLERMONT	36-1529	DLY	41.6833	-78.5000	2103	NCEI	1951-1960
PA	CLERMONT 1 NW	36-1526	DLY	41.6961	-78.4878	2080	NCEI	2000-2014
PA	CLERMONT 8 SW	36-1534	DLY	41.7333	-78.5333	1620	NCEI	1961-1999
PA	COALDALE 1.5 N	69-2129	DLY	40.8400	-75.9200	1070	COCORAHS	2006-2012
PA	COALDALE 2 NW	36-1572	DLY	40.8333	-75.9333	1030	NCEI	1942-1959
PA	CONNEAUTVILLE	36-1720	HLY	41.7500	-80.3667	971	NCEI	1959-1975
PA	CONNEAUTVILLE	36-1720	DLY	41.7500	-80.3667	971	NCEI	1959-1976
PA	CONNEAUTVILLE 4 ESE	36-1719	HLY	41.7333	-80.2833	1270	NCEI	1975-1995
PA	CONNEAUTVILLE 4 ESE	36-1719	DLY	41.7333	-80.2833	1270	NCEI	1976-1995
PA	CONSHOHOCKEN	36-1737	DLY	40.0744	-75.3178	70	NCEI	1923-2014
PA	COOKSBURG 2 NW	36-1750	15M	41.3500	-79.2167	1450	NCEI	1992-1993
PA	COOKSBURG 2 NW	36-1751	15M	41.3575	-79.2172	1450	NCEI	1994-2007
PA	COOKSBURG 2 NW	36-1751	HLY	41.3575	-79.2172	1450	NCEI	1994-2013
PA	COOKSBURG 2 NW	36-1750	DLY	41.3500	-79.2167	1450	NCEI	1992-1993

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	COOKSBURG 2 NW	36-1751	DLY	41.3575	-79.2172	1450	NCEI	1994-2014
PA	COOKSBURG RIVER	36-1749	15M	41.3306	-79.2092	1180	NCEI	1976-1991
PA	COOKSBURG RIVER	36-1749	DLY	41.3306	-79.2092	1180	NCEI	1955-1991
PA	CORRY	36-1790	DLY	41.9167	-79.6333	1440	NCEI	1893-1997
PA	COUDERSPORT 1 NNE	36-1804	DLY	41.7833	-78.0167	1690	NCEI	1903-1954
PA	COUDERSPORT 1 SW	36-1802	DLY	41.7664	-78.0362	1650	NCEI	2000-2014
PA	COUDERSPORT 2 NW	36-1805	DLY	41.8000	-78.0500	2221	NCEI	1954-1956
PA	COUDERSPORT 4 NW	36-1806	DLY	41.8342	-78.0581	2301	NCEI	1956-1986
PA	COUDERSPORT 5 NW	36-1815	DLY	41.8500	-78.0500	2180	NCEI	1987-2000
PA	COUDERSPORT 7 E	36-1809	DLY	41.7667	-77.8833	2421	NCEI	1946-1973
PA	COUDERSPORT 7SE	36-1810	DLY	41.7392	-77.9711	2150	NCEI	2005-2014
PA	COVINGTON 2 WSW	36-1833	DLY	41.7333	-77.1167	1745	NCEI	1956-2014
PA	COVINGTON 3 W	36-1832	DLY	41.7500	-77.1167	1581	NCEI	1938-1956
PA	COWANESQUE DAM	36-1838	DLY	41.9903	-77.1567	1150	NCEI	1993-2014
PA	DINGMANS FERRY	36-2160	15M	41.2167	-74.8667	430	NCEI	1971-1983
PA	DINGMANS FERRY	36-2160	HLY	41.2167	-74.8667	430	NCEI	1948-1983
PA	DINGMANS FERRY	36-2160	DLY	41.2167	-74.8667	430	NCEI	1939-1951
PA	DINGMANS FERRY 3 W	36-2163	15M	41.2175	-74.9072	908	NCEI	1983-2009
PA	DIXON	36-2171	HLY	41.5584	-75.8942	620	NCEI	1949-1969
PA	DIXON	36-2171	DLY	41.5584	-75.8942	620	NCEI	1949-1969
PA	DOYLESTOWN	36-2221	DLY	40.3000	-75.1333	361	NCEI	1899-2014
PA	DRIFTWOOD	36-2245	15M	41.3419	-78.1403	820	NCEI	1979-2011
PA	DRIFTWOOD	36-2245	HLY	41.3419	-78.1403	820	NCEI	1948-2013
PA	DRIFTWOOD	36-2245	DLY	41.3419	-78.1403	820	NCEI	1895-1951
PA	DU BOIS	55-0021	HLY	41.1783	-78.8989	1824	NCEI	2000-2014
PA	DU BOIS 7 E	36-2265	HLY	41.1000	-78.6333	1670	NCEI	1948-1975
PA	DU BOIS 7 E	36-2265	DLY	41.1000	-78.6333	1670	NCEI	1937-1974
PA	DUBOIS FAA AP	36-2260	15M	41.1783	-78.8989	1814	NCEI	1974-2011
PA	DUBOIS FAA AP	36-2261	15M	41.1783	-78.8989	1814	NCEI	2005-2013
PA	DUBOIS FAA AP	36-2260	HLY	41.1783	-78.8989	1814	NCEI	1967-2013
PA	DUSHORE	36-2323	15M	41.5217	-76.4042	1530	NCEI	1999-2011



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	DUSHORE	36-2323	HLY	41.5217	-76.4042	1530	NCEI	1948-2013
PA	DUSHORE	36-2323	DLY	41.5217	-76.4042	1530	NCEI	1948-2014
PA	DUSHORE 3 NE	36-2324	DLY	41.5500	-76.3500	1752	NCEI	1897-1960
PA	DUSHORE 3 SSW	36-2325	15M	41.4775	-76.4181	1890	NCEI	1971-1999
PA	DUSHORE 3 SSW	36-2325	HLY	41.4775	-76.4181	1890	NCEI	1959-1999
PA	DUSHORE 3 SSW	36-2325	DLY	41.4775	-76.4181	1890	NCEI	1960-1976
PA	EAGLES MERE	36-2343	DLY	41.4000	-76.5833	1991	NCEI	1941-1987
PA	EASTON (1)	36-2425	DLY	40.6833	-75.2167	340	NCEI	1894-1909
PA	EDINBORO	36-2514	DLY	41.8667	-80.1333	1220	NCEI	1913-1962
PA	EDINBORO 3 E	36-2520	15M	41.8833	-80.0833	1460	NCEI	1984-2011
PA	EMPORIUM	36-2629	15M	41.5067	-78.2275	1040	NCEI	1978-2009
PA	EMPORIUM	36-2629	HLY	41.5067	-78.2275	1040	NCEI	1969-2009
PA	EMPORIUM	36-2629	DLY	41.5067	-78.2275	1040	NCEI	1969-2008
PA	EMPORIUM 1 E	36-2633	HLY	41.5167	-78.2167	1161	NCEI	1948-1956
PA	EMPORIUM 1 E	36-2633	DLY	41.5167	-78.2167	1161	NCEI	1894-1956
PA	EMPORIUM 1 N	36-2635	HLY	41.5332	-78.2365	1562	NCEI	1960-1969
PA	EMPORIUM 1 N	36-2635	DLY	41.5332	-78.2365	1562	NCEI	1960-1969
PA	EMPORIUM 2 SSW	36-2634	HLY	41.4667	-78.2500	1742	NCEI	1956-1960
PA	EMPORIUM 2 SSW	36-2634	DLY	41.4667	-78.2500	1742	NCEI	1956-1960
PA	ENGLISH CTR	36-2644	HLY	41.4333	-77.2889	879	NCEI	1948-1985
PA	ENGLISH CTR	36-2644	DLY	41.4333	-77.2889	879	NCEI	1948-1984
PA	EQUINUNK	36-2669	DLY	41.8564	-75.2238	902	NCEI	1945-1956
PA	EQUINUNK 2 NW	36-2671	DLY	41.8719	-75.2656	890	NCEI	1957-2014
PA	ERIE WB CITY	36-2677	HLY	42.1167	-80.0833	689	NCEI	1948-1953
PA	ERIE WB CITY	36-2677	DLY	42.1167	-80.0833	689	NCEI	1948-1953
PA	ERIE WB CITY	52-2677	DLY	42.1167	-80.0833	689	FORTS	1849-1892
PA	ERIE WSO AP	36-2682	HLY	42.0800	-80.1825	730	NCEI	1948-2013
PA	FARRELL SHARON	36-2814	DLY	41.2167	-80.5167	850	NCEI	1911-1980
PA	FOREST CITY 5 N	36-2951	DLY	41.7167	-75.4833	1650	NCEI	1921-1939
PA	FRANCIS E WALTER DAM	36-0455	HLY	41.1167	-75.7333	1509	NCEI	1958-1963
PA	FRANCIS E WALTER DAM	36-3018	HLY	41.1183	-75.7278	1509	NCEI	1963-2013

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	FRANCIS E WALTER DAM	36-3018	DLY	41.1183	-75.7278	1509	NCEI	1963-2014
PA	FRANKLIN	36-3028	HLY	41.4003	-79.8306	1015	NCEI	1948-2013
PA	FRANKLIN	36-3028	DLY	41.4003	-79.8306	1015	NCEI	1897-2014
PA	FREELAND	36-3056	DLY	41.0167	-75.9000	1903	NCEI	1914-1989
PA	GALETON	36-3130	DLY	41.7356	-77.6517	1345	NCEI	1931-2014
PA	GARLAND 1 SW	36-3158	DLY	41.8167	-79.4500	1300	NCEI	1973-2002
PA	GEORGE SCHOOL	36-3200	DLY	40.2167	-74.9333	141	NCEI	1906-1978
PA	GERMANIA	36-3211	DLY	41.6478	-77.6607	1935	NCEI	1973-1985
PA	GILBERTSVILLE 0.9 S	69-2309	DLY	40.3100	-75.6100	331	COCORAHS	2005-2012
PA	GLEN HAZEL 2 NE DAM	36-3311	HLY	41.5631	-78.6014	1720	NCEI	1953-2003
PA	GLEN HAZEL 2 NE DAM	36-3311	DLY	41.5631	-78.6014	1720	NCEI	1942-2014
PA	GOULDSBORO	36-3394	DLY	41.2500	-75.4500	1890	NCEI	1914-1987
PA	GRATERFORD	36-3435	DLY	40.2333	-75.4500	151	NCEI	1920-1972
PA	GRATERFORD 1 E	36-3437	DLY	40.2306	-75.4353	240	NCEI	1960-2014
PA	GREENVILLE 2 NE	36-3526	DLY	41.4167	-80.3667	1130	NCEI	1894-1997
PA	GROVE CITY	36-3542	DLY	41.1536	-80.0733	1350	NCEI	1907-1942
PA	HAWLEY 1 E	36-3758	DLY	41.4764	-75.1653	890	NCEI	1897-2014
PA	HAWLEY 1 S WALLEN DAM	36-3761	HLY	41.4585	-75.1845	1201	NCEI	1951-1973
PA	HAWLEY 1 S WALLEN DAM	36-3761	DLY	41.4585	-75.1845	1201	NCEI	1934-1958
PA	HAWLEY 3 ESE	36-3762	HLY	41.4681	-75.1314	850	NCEI	1974-2006
PA	HOLLISTERVILLE	36-4008	DLY	41.3883	-75.4363	1370	NCEI	1928-2001
PA	HONESDALE 4 NW	36-4043	DLY	41.6167	-75.3167	1410	NCEI	1944-1996
PA	HONESDALE 5 NNW	36-4044	15M	41.6500	-75.2667	1040	NCEI	1979-1980
PA	HONESDALE 5 NNW	36-4044	HLY	41.6500	-75.2667	1040	NCEI	1948-1980
PA	HOP BOTTOM 2 SE	36-4066	DLY	41.6702	-75.7267	902	NCEI	1944-1974
PA	JACKSON SUMMIT	36-4304	15M	41.9500	-77.0167	1690	NCEI	1973-1983
PA	JACKSON SUMMIT	36-4304	HLY	41.9500	-77.0167	1690	NCEI	1948-1983
PA	JAMESTOWN 2 NW	36-4325	15M	41.5000	-80.4667	1040	NCEI	1971-2011
PA	JAMESTOWN 2 NW	36-4325	HLY	41.5000	-80.4667	1040	NCEI	1948-2013
PA	JAMESTOWN 2 NW	36-4325	DLY	41.5000	-80.4667	1040	NCEI	1931-2014
PA	JIM THORPE	36-5479	DLY	40.8667	-75.7500	830	NCEI	1893-1954

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PA	JIM THORPE 1.1 NNE	69-2134	DLY	40.8900	-75.7300	1089	COCORAHNS	2006-2012
PA	KANE 1NNE	36-4432	15M	41.6767	-78.8036	1750	NCEI	1977-2011
PA	KANE 1NNE	36-4432	HLY	41.6767	-78.8036	1750	NCEI	1949-2013
PA	KANE 1NNE	36-4432	DLY	41.6767	-78.8036	1750	NCEI	1894-2014
PA	KANE 5 SE	36-4437	DLY	41.6000	-78.7667	2011	NCEI	1932-1948
PA	KANE EXPERIMENTAL FOREST	54-0175	DLY	41.5978	-78.7675	2028	NADP	1978-2013
PA	KARTHAUS RIVER	36-4450	DLY	41.1175	-78.1092	950	NCEI	1895-1972
PA	KEEWAYDIN	36-4477	DLY	41.1000	-78.1500	1371	NCEI	1973-1975
PA	KGKJ	78-0028	15M	41.6264	-80.2150	1399	NCEI	2005-2014
PA	KINZUA	76-0031	HLY	41.9006	-79.1186	1408	RAWS	2005-2013
PA	KMPO	78-0045	15M	41.1389	-75.3794	1897	NCEI	2005-2014
PA	KPNE	78-0052	15M	40.0819	-75.0111	100	NCEI	2005-2014
PA	KRESGEVILLE 2 W	36-4672	DLY	40.9000	-75.5333	830	NCEI	1943-1990
PA	LAKE MINISINK	36-4727	DLY	41.2167	-75.0500	1362	NCEI	1959-1987
PA	LAKEVILLE 2 NNE	36-4733	DLY	41.4500	-75.2667	1440	NCEI	1928-1972
PA	LANSDALE	36-4798	DLY	40.2500	-75.2833	368	NCEI	1899-1910
PA	LANSFORD	36-4804	DLY	40.8333	-75.8833	1142	NCEI	1915-1954
PA	LAPORTE	36-4815	DLY	41.4233	-76.4933	1966	NCEI	1991-2014
PA	LAWRENCEVILLE 2 S	36-4873	DLY	41.9686	-77.1144	922	NCEI	1896-1974
PA	LE ROY	36-4972	DLY	41.6764	-76.7083	1040	NCEI	1893-1997
PA	LEHIGHTON 1SSW	36-4934	HLY	40.8222	-75.6961	580	NCEI	1948-1979
PA	LEHIGHTON 1SSW	36-4934	DLY	40.8222	-75.6961	580	NCEI	1934-2014
PA	LEWIS RUN	36-4983	DLY	41.8667	-78.6500	1560	NCEI	1969-2005
PA	LEWIS RUN 3 SE	36-4984	15M	41.8417	-78.6433	1740	NCEI	1984-2006
PA	LEWIS RUN 3 SE	36-4984	HLY	41.8417	-78.6433	1740	NCEI	1954-2006
PA	LEWIS RUN 3 SE	36-4984	DLY	41.8417	-78.6433	1740	NCEI	1948-1970
PA	LINESVILLE	36-5046	DLY	41.6500	-80.4333	1035	NCEI	1914-1940
PA	LINESVILLE 1 S	36-5050	DLY	41.6500	-80.4333	1030	NCEI	1920-2014
PA	LOCH LOMOND	76-0032	HLY	41.2039	-74.8897	900	RAWS	2004-2013
PA	LOCK HAVEN	36-5104	DLY	41.1333	-77.4167	551	NCEI	1890-1977
PA	LOCK HAVEN SWG PLT	36-5109	HLY	41.1167	-77.4500	566	NCEI	1948-1969

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PA	LOCK HAVEN SWG PLT	36-5109	DLY	41.1167	-77.4500	566	NCEI	1948-2014
PA	LONG POND POCONO LAKE	36-5160	DLY	41.0500	-75.5000	1800	NCEI	1947-2000
PA	MAPLE GLEN 2 ESE	36-5368	DLY	40.1833	-75.2000	381	NCEI	1945-1970
PA	MARIENVILLE 2 NE	36-5400	HLY	41.4833	-79.1000	1779	NCEI	1948-1998
PA	MATAMORAS	36-5470	DLY	41.3914	-74.7172	459	NCEI	1904-2014
PA	MEADOW RUN PONDS	36-5601	HLY	41.2167	-75.6333	1910	NCEI	1948-2009
PA	MEADVILLE	55-0026	HLY	41.6264	-80.2150	1400	NCEI	1997-2014
PA	MEADVILLE 1 S	36-5606	15M	41.6305	-80.1578	1065	NCEI	1971-1999
PA	MEADVILLE 1 S	36-5606	HLY	41.6305	-80.1578	1065	NCEI	1948-1999
PA	MEADVILLE 1 S	36-5606	DLY	41.6305	-80.1578	1065	NCEI	1928-1999
PA	MEDIX RUN	36-5627	HLY	41.2833	-78.4000	1102	NCEI	1948-1969
PA	MEDIX RUN	36-5627	DLY	41.2833	-78.4000	1102	NCEI	1948-1968
PA	MERCER	36-5651	HLY	41.2247	-80.2350	1220	NCEI	1986-2005
PA	MERCER	36-5651	DLY	41.2247	-80.2350	1220	NCEI	1950-2010
PA	MERCER HWY SHED	36-5654	HLY	41.2333	-80.2500	1250	NCEI	1948-1986
PA	MERWINSBURG	36-5676	HLY	40.9667	-75.4667	985	NCEI	1948-1996
PA	MERWINSBURG	36-5676	DLY	40.9667	-75.4667	985	NCEI	1925-1951
PA	MILAN 1 N	36-5731	15M	41.9203	-76.5306	850	NCEI	1979-2011
PA	MILAN 1 N	36-5731	HLY	41.9203	-76.5306	850	NCEI	1948-2013
PA	MILAN 4 WNW	36-5732	HLY	41.9333	-76.5833	1450	NCEI	1955-1960
PA	MILANVILLE	36-5738	DLY	41.6725	-75.0642	760	NCEI	1945-2014
PA	MILANVILLE 1.5 SE	69-2469	DLY	41.6300	-75.0500	1138	COCORAHS	2004-2012
PA	MILFORD	36-5752	DLY	41.3167	-74.8000	500	NCEI	1903-1921
PA	MILFORD	54-0182	DLY	41.3273	-74.8199	696	NADP	1983-2013
PA	MILLERTON	36-5779	15M	41.9833	-76.9333	1200	NCEI	1984-1989
PA	MILLVILLE 2 SW	36-5817	HLY	41.1000	-76.5667	860	NCEI	1950-1992
PA	MILLVILLE 2 SW	36-5817	DLY	41.1000	-76.5667	860	NCEI	1950-1992
PA	MONTROSE	36-5915	15M	41.8511	-75.8583	1420	NCEI	1973-2011
PA	MONTROSE	36-5915	HLY	41.8511	-75.8583	1420	NCEI	1949-2011
PA	MONTROSE	36-5915	DLY	41.8511	-75.8583	1420	NCEI	1903-2009
PA	MONTROSE 1.3 NNE	69-2415	DLY	41.8500	-75.8700	1778	COCORAHS	2011-2012

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	MOUNT POCONO	55-0121	HLY	41.1389	-75.3794	1894	NCEI	1999-2014
PA	MT POCONO 2 N	36-6055	HLY	41.1500	-75.3667	1915	NCEI	1948-1961
PA	MT POCONO 2 N	36-6055	DLY	41.1500	-75.3667	1915	NCEI	1901-1960
PA	MUHLENBURG 1 SE	36-6090	DLY	41.2167	-76.1333	1112	NCEI	1953-1960
PA	MUNCY VALLEY	36-6098	DLY	41.3477	-76.5881	940	NCEI	1909-1942
PA	N E PHILADEPHIA AP	36-6419	HLY	40.0833	-75.0167	100	NCEI	1965-1989
PA	NESHAMINY FALLS	36-6194	DLY	40.1358	-74.9550	60	NCEI	1915-2014
PA	NEW TRIPOLI 4 E	36-6326	DLY	40.6833	-75.6833	689	NCEI	1938-1982
PA	NORRISTOWN	36-6370	DLY	40.1197	-75.3583	70	NCEI	1948-2014
PA	NORTH WALES 1.3 WSW	69-2315	DLY	40.2100	-75.3000	371	COCORAHS	2006-2012
PA	ORWELL 2 NW	36-6622	DLY	41.9167	-76.3000	1600	NCEI	1961-1993
PA	ORWELL 3 N	36-6621	DLY	41.9167	-76.2667	1621	NCEI	1944-1960
PA	OSCEOLA 3 SW	36-6627	15M	41.9389	-77.3772	1795	NCEI	1980-2011
PA	OTTSVILLE	36-6651	DLY	40.4703	-75.1567	390	NCEI	1899-1910
PA	PALM 3 SE	36-6681	15M	40.3856	-75.5022	300	NCEI	1971-2011
PA	PALM 3 SE	36-6681	DLY	40.3856	-75.5022	300	NCEI	1941-2014
PA	PALMERTON	36-6689	HLY	40.8000	-75.6167	410	NCEI	1948-1998
PA	PALMERTON	36-6689	DLY	40.8000	-75.6167	410	NCEI	1917-1997
PA	PALMERTON 5.8 ENE	69-2141	DLY	40.8400	-75.5200	837	COCORAHS	2006-2012
PA	PARKER	36-6721	DLY	41.0833	-79.6833	1060	NCEI	1952-1987
PA	PARKER 1 E	36-6724	15M	41.0964	-79.6719	1100	NCEI	1975-2010
PA	PARKER 1 E	36-6724	HLY	41.0964	-79.6719	1100	NCEI	1948-2010
PA	PARKERS LANDING	36-6719	DLY	41.1000	-79.6833	879	NCEI	1892-1951
PA	PAUPACK - 21	69-2453	DLY	41.3959	-75.1964	1540	COCORAHS	2008-2010
PA	PAUPACK 1 WSW	36-6762	DLY	41.4000	-75.2333	1360	NCEI	1926-2000
PA	PECKS POND	36-6786	DLY	41.2833	-75.1000	1381	NCEI	1945-1958
PA	PEN ARGYL	36-6792	15M	40.8653	-75.2458	718	NCEI	1971-2011
PA	PENNSBURG 3.0 ENE	69-2094	DLY	40.4100	-75.4400	568	COCORAHS	2006-2012
PA	PHILADELPHIA	52-6915	DLY	39.9586	-75.1728	20	FORTS	1854-1892
PA	PHILADELPHIA INTL AP	36-6889	HLY	39.8683	-75.2311	10	NCEI	1900-2013
PA	PHILADELPHIA NAVY YARD	36-6894	DLY	39.8833	-75.1667	15	NCEI	1915-1941

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	PHILADELPHIA NAVY YARD	52-6894	DLY	39.8833	-75.1667	15	FORTS	1843-1892
PA	PHILADELPHIA POINT BRE	36-6899	DLY	39.9167	-75.2000	30	NCEI	1924-1963
PA	PHILADELPHIA SHAWMONT	36-6904	DLY	40.0369	-75.2457	69	NCEI	1896-1957
PA	PHILLY FRANKLIN INST	36-6886	DLY	39.9575	-75.1728	60	NCEI	1994-2014
PA	PHOENIXVILLE 1 E	36-6927	HLY	40.1200	-75.5011	105	NCEI	1948-2008
PA	PHOENIXVILLE 1 E	36-6927	DLY	40.1200	-75.5011	105	NCEI	1893-2014
PA	PLEASANT MOUNT 1.0 E	69-2462	DLY	41.7400	-75.4400	1995	COCORAHS	2009-2012
PA	PLEASANT MT 1 W	36-7029	HLY	41.7394	-75.4464	1800	NCEI	1948-2008
PA	PLEASANT MT 1 W	36-7029	DLY	41.7394	-75.4464	1800	NCEI	1924-2014
PA	PORT ALLEGANY	36-7103	DLY	41.8158	-78.2872	1475	NCEI	1948-2014
PA	PORT ALLEGANY 3 SW	36-7108	DLY	41.7833	-78.2833	1581	NCEI	1942-1949
PA	PROMPTON DAM	36-7186	15M	41.5889	-75.3303	1230	NCEI	1971-2011
PA	PROMPTON DAM	36-7186	HLY	41.5889	-75.3303	1230	NCEI	1966-2013
PA	QUAKERTOWN	36-7239	DLY	40.4333	-75.3333	489	NCEI	1885-1969
PA	RAYMOND	36-7310	HLY	41.8500	-77.8667	2300	NCEI	1948-1992
PA	RAYMOND	36-7310	DLY	41.8500	-77.8667	2300	NCEI	1948-1992
PA	RENOVO	36-7409	DLY	41.3297	-77.7381	660	NCEI	1895-2014
PA	RENOVO 6 S	36-7410	HLY	41.2333	-77.7667	2039	NCEI	1948-1997
PA	RETREAT 1 SW	36-7417	DLY	41.1833	-76.1000	571	NCEI	1933-1953
PA	RIDGWAY	36-7477	DLY	41.4197	-78.7492	1360	NCEI	1893-2014
PA	RUSH	36-7694	DLY	41.7833	-76.0500	1001	NCEI	1944-1959
PA	RUSHVILLE	36-7727	DLY	41.7833	-76.1167	870	NCEI	1949-2004
PA	RUSSELL 3 NW	36-7728	DLY	41.9667	-79.1833	1493	NCEI	1983-1999
PA	RUSSELL RIVER	36-7729	DLY	41.9381	-79.1333	1240	NCEI	1960-1983
PA	SABINSVILLE 3 SE	36-7730	DLY	41.8422	-77.4758	2000	NCEI	1969-2014
PA	SAEGERSTOWN	36-7734	DLY	41.7079	-80.1291	1116	NCEI	1894-1927
PA	SALEM - 16	69-2449	DLY	41.4011	-75.4094	1600	COCORAHS	2008-2010
PA	SCANDIA 1 E	36-7855	15M	41.9167	-79.0333	2120	NCEI	1972-1998
PA	SCANDIA 1 E	36-7855	HLY	41.9167	-79.0333	2120	NCEI	1948-1998
PA	SCHNECKSVILLE 2.7 SW	69-2261	DLY	40.6500	-75.6500	627	COCORAHS	2007-2012
PA	SCRANTON	36-7902	DLY	41.4167	-75.6667	804	NCEI	1926-1975

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	SCRANTON WSO AP	36-7905	HLY	41.3333	-75.7333	928	NCEI	1955-1964
PA	SELLERSVILLE	36-7938	HLY	40.3578	-75.3155	340	NCEI	1948-2013
PA	SELLERSVILLE	36-7938	DLY	40.3578	-75.3155	340	NCEI	1948-2014
PA	SHEFFIELD 5 W	36-8026	HLY	41.7058	-79.1298	1920	NCEI	1948-2013
PA	SHICKSHINNY 3 N	36-8057	HLY	41.1831	-76.1489	685	NCEI	1971-2013
PA	SHICKSHINNY 3 N	36-8057	DLY	41.1831	-76.1489	685	NCEI	1971-2014
PA	SINNEMAHONING	36-8145	DLY	41.3203	-78.0958	820	NCEI	1951-2014
PA	SIZERVILLE	36-8155	15M	41.5967	-78.1802	1290	NCEI	1983-2011
PA	SIZERVILLE	36-8155	DLY	41.5967	-78.1802	1290	NCEI	1957-1963
PA	SLIPPERY ROCK 1 SSW	36-8184	DLY	41.0558	-80.0600	1250	NCEI	1949-2014
PA	SMETHPORT	36-8190	HLY	41.8144	-78.4291	1469	NCEI	1948-1992
PA	SMETHPORT	36-8190	DLY	41.8144	-78.4291	1469	NCEI	1894-1951
PA	SOUTH CANAAN 1 NE	36-8275	HLY	41.5167	-75.4000	1400	NCEI	1948-1993
PA	SPRING HOUSE 2 NE	36-8388	DLY	40.2167	-75.2167	240	NCEI	1972-1998
PA	SPRINGBORO	36-8359	HLY	41.8000	-80.3833	902	NCEI	1955-1959
PA	SPRINGBORO	36-8359	DLY	41.8000	-80.3833	902	NCEI	1955-1959
PA	SPRINGBORO 3 WNW	36-8361	DLY	41.8167	-80.4333	1005	NCEI	1996-2014
PA	STERLING - 22	69-2459	DLY	41.2800	-75.4500	2044	COCORAHS	2007-2012
PA	STEVENSON DAM	36-8469	15M	41.4039	-78.0183	932	NCEI	1979-2011
PA	STEVENSON DAM	36-8469	HLY	41.4039	-78.0183	932	NCEI	1969-2013
PA	STEVENSON DAM	36-8469	DLY	41.4039	-78.0183	932	NCEI	1969-2014
PA	STILLWATER DAM	36-8491	15M	41.6972	-75.4828	1650	NCEI	1970-2011
PA	STILLWATER DAM	36-8491	HLY	41.6972	-75.4828	1650	NCEI	1960-2013
PA	STROUDSBURG	36-8596	HLY	41.0125	-75.1906	460	NCEI	1952-1997
PA	STROUDSBURG	36-8601	HLY	40.9833	-75.1833	390	NCEI	1948-1952
PA	STROUDSBURG	36-8596	DLY	41.0125	-75.1906	460	NCEI	1910-2014
PA	SUSQUEHANNA	36-8692	DLY	41.9478	-75.6047	910	NCEI	1935-2014
PA	TAMAQUA	36-8758	15M	40.7947	-75.9753	925	NCEI	1971-2011
PA	TAMAQUA	36-8758	DLY	40.7947	-75.9753	925	NCEI	1940-2014
PA	TAMAQUA 4 N DAM	36-8763	HLY	40.8561	-75.9911	1110	NCEI	1948-2000
PA	TAMAQUA 4 N DAM	36-8763	DLY	40.8561	-75.9911	1110	NCEI	1931-2005

State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	TIOGA HAMMOND DAM	36-8868	15M	41.8975	-77.1419	1230	NCEI	1975-2011
PA	TIOGA HAMMOND DAM	36-8868	DLY	41.8975	-77.1419	1230	NCEI	1973-2014
PA	TIONESTA 2 SE LAKE	36-8873	15M	41.4792	-79.4433	1200	NCEI	1971-2011
PA	TIONESTA 2 SE LAKE	36-8873	HLY	41.4792	-79.4433	1200	NCEI	1948-2013
PA	TIONESTA 2 SE LAKE	36-8873	DLY	41.4792	-79.4433	1200	NCEI	1921-2014
PA	TITUSVILLE	36-8885	HLY	41.6361	-79.6618	1552	NCEI	1948-1976
PA	TITUSVILLE	36-8885	DLY	41.6361	-79.6618	1552	NCEI	1927-1951
PA	TITUSVILLE 2 S	36-8880	DLY	41.6000	-79.6667	1526	NCEI	1945-1954
PA	TITUSVILLE WTR WKS	36-8888	DLY	41.6333	-79.7000	1220	NCEI	1954-2014
PA	TOBYHANNA POCONO MTN AP	36-8893	15M	41.1386	-75.4058	1916	NCEI	1971-2011
PA	TOBYHANNA POCONO MTN AP	36-8893	HLY	41.1386	-75.4058	1916	NCEI	1961-2011
PA	TORPEDO 4 W	36-8901	DLY	41.7833	-79.5333	1742	NCEI	1951-1966
PA	TOWANDA 1 S	36-8905	HLY	41.7511	-76.4431	760	NCEI	1948-2013
PA	TOWANDA 1 S	36-8905	DLY	41.7511	-76.4431	760	NCEI	1894-2014
PA	TROY 1 NE	36-8959	DLY	41.7903	-76.7725	1045	NCEI	1951-2011
PA	TUNKHANNOCK	36-8982	HLY	41.5584	-75.8942	620	NCEI	1948-1973
PA	TUNKHANNOCK	36-8982	DLY	41.5584	-75.8942	620	NCEI	1945-1973
PA	TURTLEPOINT 4 NE	36-9002	DLY	41.9000	-78.2667	1640	NCEI	1951-1968
PA	UNION CITY FLTR PLT	36-9042	15M	41.9000	-79.8167	1400	NCEI	1976-2011
PA	UNION CITY FLTR PLT	36-9042	HLY	41.9000	-79.8167	1400	NCEI	1950-2013
PA	UNION CITY FLTR PLT	36-9042	DLY	41.9000	-79.8167	1400	NCEI	1950-2005
PA	UPPER DARBY	36-9074	DLY	39.9667	-75.3000	220	NCEI	1950-1959
PA	WARREN	36-9298	DLY	41.8467	-79.1494	1210	NCEI	1893-2014
PA	WEEDVILLE 1 N	36-9385	15M	41.3000	-78.4833	1760	NCEI	1979-1990
PA	WEEDVILLE 1 N	36-9385	HLY	41.3000	-78.4833	1760	NCEI	1969-1990
PA	WEEDVILLE 1 N	36-9385	DLY	41.3000	-78.4833	1760	NCEI	1969-1987
PA	WELLSBORO	36-9407	DLY	41.7417	-77.3122	1380	NCEI	1893-1999
PA	WELLSBORO 2 E	36-9412	HLY	41.7500	-77.2667	1552	NCEI	1948-1957
PA	WELLSBORO 4 SW	36-9408	15M	41.7003	-77.3894	1818	NCEI	1973-2011
PA	WELLSBORO 4 SW	36-9408	DLY	41.7003	-77.3894	1818	NCEI	1926-2014
PA	WEST HAZLETON 3.2 NNE	69-2287	DLY	41.0200	-76.0000	958	COCORAHS	2004-2012



State	Station name	SID	Formatting interval	Latitude	Longitude	Elev (ft)	Dataset	Period of record
PA	WEST HICKORY 2	36-9510	DLY	41.5764	-79.4106	1345	NCEI	1992-2014
PA	WEST HICKORY RIVER	36-9507	DLY	41.5833	-79.4000	1180	NCEI	1952-1992
PA	WESTFORD	36-9496	DLY	41.5544	-80.4753	1100	NCEI	1920-1940
PA	WILKES BARRE	36-9702	DLY	41.2333	-75.8833	660	NCEI	1893-2000
PA	WILKES-BARRE INTL AP	36-9705	HLY	41.3336	-75.7269	930	NCEI	1964-2013
PA	WILLIAMSPORT	36-9733	DLY	41.2333	-77.0000	495	NCEI	1895-1949
PA	WILLIAMSPORT 2	36-9735	DLY	41.2486	-76.9833	525	NCEI	1997-2014
PA	WILLIAMSPORT RGNL AP	36-9728	HLY	41.2433	-76.9217	520	NCEI	1948-2013
PA	WIND GAP 1 S	36-9781	HLY	40.8333	-75.3000	722	NCEI	1948-1967
PA	WYNDMOOR 3.0 SSW	69-2385	DLY	40.0500	-75.2200	308	COCORAHS	2009-2012
PA	YOUNGSVILLE	36-9966	HLY	41.8500	-79.3167	1217	NCEI	1948-1985
PA	ZIONSVILLE 3 ESE	36-9995	DLY	40.4667	-75.4500	585	NCEI	1950-1997
PA	ZIONSVILLE 3 SE	36-9994	DLY	40.4500	-75.4667	820	NCEI	1931-1950

Table A.1.5. Metadata for n-minute stations used in derivation of 5- and 10-minute scaling factors (see Section 4.6.3) showing each station's state, name, SID, latitude, longitude, elevation, dataset identifier (see Table 4.2.1), and the period of record.

State	Station name	SID	Latitude	Longitude	Elev (ft)	Dataset	Period of record
CT	BRIDGEPORT SIKORSKY AP	06-0806	41.1583	-73.1289	5	NCEI	1973-2012
CT	HARTFORD BRADLEY AP	06-3456	41.9381	-72.6825	190	NCEI	1973-2012
MA	BLUE HILL	19-0736	42.2122	-71.1136	625	NCEI	1973-2012
MA	BOSTON	19-0770	42.3606	-71.0106	12	NCEI	1973-2012
MA	WORCESTER	19-9923	42.2706	-71.8731	1000	NCEI	1984-2012
ME	AUGUSTA FAA AP	17-0275	44.3206	-69.7972	350	NCEI	1984-2012
ME	BANGOR AP	17-0355	44.7883	-68.8211	148	NCEI	1984-2012
ME	CARIBOU WFO	17-1175	46.8706	-68.0172	624	NCEI	1973-2012
ME	HOULTON AP	17-3892	46.1236	-67.7928	476	NCEI	1984-1997
ME	PORTLAND JETPORT	17-6905	43.6497	-70.3003	45	NCEI	1973-1997
NH	CONCORD ASOS	27-1683	43.1953	-71.5011	346	NCEI	1973-2012
NH	LEBANON FAA AP	27-4656	43.6294	-72.3098	562	NCEI	1984-2012
NH	MT WASHINGTON	27-5639	44.2698	-71.3037	6267	NCEI	1984-1997
NJ	NEWARK INTL AP	28-6026	40.6825	-74.1694	7	NCEI	1973-2012
NJ	TRENTON	28-8883	40.2269	-74.7464	190	NCEI	1973-1979
NY	ALBANY INTL AP	30-0042	42.7431	-73.8092	275	NCEI	1973-2012
NY	BINGHAMTON GREATER AP	30-0687	42.2067	-75.9800	1595	NCEI	1973-2012
NY	BUFFALO NIAGARA INTL	30-1012	42.9408	-78.7358	705	NCEI	1973-1997
NY	GLENS FALLS AP	30-3294	43.3500	-73.6167	321	NCEI	1984-2012
NY	ISLIP LI MACARTHUR AP	30-4130	40.7939	-73.1017	84	NCEI	1984-2012
NY	MASSENA AP	30-5134	44.9358	-74.8456	214	NCEI	1984-2012
NY	NEW YORK JFK INTL AP	30-5803	40.6386	-73.7622	11	NCEI	1973-2012
NY	NEW YORK LA GUARDIA AP	30-5811	40.7794	-73.8803	11	NCEI	1973-2012
NY	NY CITY CNTRL PARK	30-5801	40.7789	-73.9692	130	NCEI	1973-2012
NY	POUGHKEEPSIE 7NNW	30-6820	41.7267	-73.9200	185	NCEI	1984-2012
NY	ROCHESTER INTL AP	30-7167	43.1167	-77.6767	533	NCEI	1973-2012
NY	SYRACUSE HANCOCK AP	30-8383	43.1111	-76.1039	413	NCEI	1973-2012
NY	UTICA FAA AP	30-8737	43.1450	-75.3839	711	NCEI	1984-2007
NY	WATERTOWN AP	30-9005	43.9922	-76.0217	318	NCEI	1984-2012
OH	YOUNGSTOWN WSO AP	33-9406	41.2544	-80.6739	1180	NCEI	1973-2012
PA	ALLENTOWN AP	36-0106	40.6508	-75.4492	390	NCEI	1973-1997
PA	AVOCA SCRANTON WSO AP	36-0319	41.3333	-75.7333	928	NCEI	1984-1997
PA	BRADFORD RGNL AP	36-0865	41.8031	-78.6403	2117	NCEI	1984-2012
PA	DUBOIS FAA AP	36-2260	41.1783	-78.8989	1814	NCEI	1984-2012
PA	ERIE WSO AP	36-2682	42.0800	-80.1825	730	NCEI	1973-2012
PA	PHILADELPHIA CITY	36-6909	39.9500	-75.1500	26	NCEI	1984-1996
PA	PHILADELPHIA INTL AP	36-6889	39.8683	-75.2311	10	NCEI	1973-2012
PA	WILKES-BARRE INTL AP	36-9705	41.3336	-75.7269	930	NCEI	1973-2012
PA	WILLIAMSPORT RGNL AP	36-9728	41.2433	-76.9217	520	NCEI	1984-2012
RI	BLOCK ISLAND STATE AP	37-0896	41.1667	-71.5833	110	NCEI	1973-1991
RI	PROVIDENCE	37-6698	41.7219	-71.4325	60	NCEI	1973-2012

<b>State</b>	<b>Station name</b>	<b>SID</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Elev (ft)</b>	<b>Dataset</b>	<b>Period of record</b>
VT	BURLINGTON WSO AP	43-1081	44.4683	-73.1500	330	NCEI	1973-2012
VT	MONTPELIER AP	43-5278	44.2033	-72.5794	1126	NCEI	1984-2012

Table A.1.6. List of stations for which additional data were digitized (Section 4.2) showing each station's state, name, SID, formatting interval, dataset identifier (Table 4.2.1), and the period(s) of record for which data were digitized.

State	Station name	SID	Formatting interval	Dataset	Period of record
CT	NEW HAVEN	06-5266	DLY	NCEI	1873-1899
CT	HARTFORD	06-3451	HLY	NCEI	1904-1948
CT	NEW HAVEN	06-5266	HLY	NCEI	1899-1943
CT	NEW HAVEN	06-5273	HLY	NCEI	1943-1948
CT	SOUTHINGTON	06-7620	DLY	NCEI	1893-1921
MA	AMHERST	19-0120	HLY	NCEI	1940-1946
MA	ATH404	96-0001	DLY	MADCR	1966-2013
MA	ATT801	96-0002	DLY	MADCR	1937-2013
MA	BEL736	96-0003	DLY	MADCR	1966-2013
MA	BOSTON	19-0770	HLY	NCEI	1892-1948
MA	BRI805	96-0004	DLY	MADCR	1966-2013
MA	GLO615	96-0005	DLY	MADCR	1966-2013
MA	GRE203	96-0014	DLY	MADCR	1960-2005
MA	HAR910	96-0006	DLY	MADCR	1966-2013
MA	HARVARD FOREST	19-3429	HLY	NCEI	1940-1948
MA	MON323	96-0012	DLY	MADCR	1966-2013
MA	NAN920	96-0007	DLY	MADCR	1991-2000
MA	NANTUCKET	19-5159	DLY	NCEI	1889-1948
MA	OTI111	96-0015	DLY	MADCR	1990-1998
MA	OTI115	96-0016	DLY	MADCR	2000-2004
MA	READING	19-6783	HLY	NCEI	1981-2010
MA	RUT417	96-0017	DLY	MADCR	1932-2003
MA	STATE FARM	19-8101	HLY	NCEI	1940-1948
MA	STO109	96-0008	DLY	MADCR	1966-2013
MA	TIS906	96-0009	DLY	MADCR	1966-2013
MA	WES219	96-0013	DLY	MADCR	1994-2014
ME	GREENVILLE	17-3353	DLY	NCEI	1905-1919
ME	GREENVILLE	17-3353	HLY	NCEI	1940-1948
ME	PORTLAND	17-6905	HLY	NCEI	1894-1948
ME	RUMFORD	17-7330	HLY	NCEI	1940-1948
NH	CONCORD	27-1683	DLY	NCEI	1864-1884
NH	CONCORD	27-1683	HLY	NCEI	1903-1948
NH	MOUNT WASHINGTON	27-5639	DLY	NCEI	1872-1892, 1934-1947
NH	MOUNT WASHINGTON	27-5639	HLY	NCEI	1940-1948
NH	NASHUA	27-5712	HLY	NCEI	1940-1948
NH	PITTSBURG RESEVOIR	27-6856	HLY	NCEI	1940-1948
NH	WARREN	27-8885	HLY	NCEI	1940-1948
NY	ALBANY	30-0047	HLY	NCEI	1897-1948
NY	BALSAM LAKE	60-0393	DLY	DWSGE	1941-1948

State	Station name	SID	Formatting interval	Dataset	Period of record
NY	BRENTWOOD	30-0862	HLY	NCEI	1941-1948
NY	BROWN STATION	60-0985	DLY	DWSGE	1918-1948
NY	CANTON	30-1185	HLY	NCEI	1906-1948
NY	CLARYVILLE	30-1521	HLY	NCEI	1941-1948
NY	COLD BROOK	60-1615	DLY	DWSGE	1918-1948
NY	COLUMBIAVILLE	30-1670	HLY	NCEI	1941-1948
NY	EAST JEWETT	60-2362	DLY	DWSGE	1928-1948
NY	EDGEWOOD	60-2517	DLY	DWSGE	1918-1948
NY	ELKA PARK	60-2562	DLY	DWSGE	1928-1948
NY	FROST VALLEY	60-3076	DLY	DWSGE	1941-1948
NY	GENEVA	30-3182	HLY	NCEI	1941-1948
NY	GRAND GORGE	60-3373	DLY	DWSGE	1928-1948
NY	HIGHMOUNT	60-3864	DLY	DWSGE	1918-1925, 1943-1948
NY	ITHACA	30-4174	HLY	NCEI	1900-1948
NY	LAKE HILL	60-4533	DLY	DWSGE	1918-1948
NY	LARCHMONT	30-4613	HLY	NCEI	1941-1948
NY	LEXINGTON	60-4723	DLY	DWSGE	1928-1948
NY	MANORKILL	60-5032	DLY	DWSGE	1928-1948
NY	MARY SMITH	60-5120	DLY	DWSGE	1941-1948
NY	NEW YORK CITY	30-5816	HLY	NCEI	1889-1948
NY	NORTH CREEK	30-5925	DLY	NCEI	1940-1948
NY	NORTH SETTLEMENT	60-9512	DLY	DWSGE	1928-1948
NY	NORTHVILLE	30-6062	DLY	NCEI	1942-1945
NY	PEEKAMOOSE	60-6479	DLY	DWSGE	1941-1948
NY	PHOENICIA	30-6567	DLY	NCEI	1997-2010
NY	PHOENICIA	60-6567	DLY	DWSGE	1918-1948
NY	PRATTSVILLE	60-6839	DLY	DWSGE	1928-1948
NY	RIVERHEAD	30-7134	HLY	NCEI	1941-1948
NY	SLIDE MOUNTAIN	60-7799	DLY	DWSGE	1918-1948
NY	SPECULATOR	30-8080	DLY	NCEI	1940-1946
NY	SYRACUSE	30-8383	HLY	NCEI	1941-1948
NY	TANNERSVILLE	60-8403	DLY	DWSGE	1928-1948
NY	WEST KILL	60-9237	DLY	DWSGE	1928-1948
NY	WEST SHOKAN	60-9311	DLY	DWSGE	1918-1948
NY	WINDHAM	60-9516	DLY	DWSGE	1928-1948
VT	MORRISVILLE	43-5366	HLY	NCEI	1940-1948
VT	NEWPORT	43-5542	HLY	NCEI	1940-1948
VT	NORTHFIELD	43-5733	HLY	NCEI	1896-1948

## Appendix A.2. Annual maximum series trend analysis

### 1. Selection of statistical tests for detection of trends in AMS

The precipitation frequency analysis methods used in NOAA Atlas 14 assume that annual maximum series (AMS) data used in the analysis are stationary. Several parametric and non-parametric statistical tests were used for the detection of trends in AMS mean and variance. The selection of statistical tests was made in consideration of the data tested and the limitations of each of the tests.

First, AMS were graphed to observe types of trends in the data for all stations in the project area at 1-hour and 1-day durations. Visual inspection of time series plots did not detect any abrupt changes or apparent cycles in the AMS but suggested the possibility of slight trends at some locations. Changes appeared to be gradual and approximately linear.

The null hypotheses that there are no trends in AMS mean and/or variance were tested on 1-day and 1-hour AMS data at each station in the project area. The hypotheses were tested at the level of significance  $\alpha = 5\%$ . The hypothesis that there are no trends in AMS means was also tested for each climate region (see Figure 4.1.2) as a whole.

Levene's test (Levene, 1960) was used to test for homogeneity of variance in the AMS data. The test has been proven to be less sensitive to non-normality in data than some other commonly used tests (such as the Barlett test). The test statistic,  $W$ , is defined as follows:

$$W = \frac{(N - k) \sum_{i=1}^k N_i (Z_{i.} - Z_{..})^2}{(k - 1) \sum_{i=1}^k \sum_{j=1}^{N_i} N_i (Z_{ij} - Z_{i.})^2}$$

where  $k$  is the number of sub-groups,  $N$  is the sample size,  $N_i$  is the sample size of the  $i^{\text{th}}$  subgroup,  $Y_{ij}$  is the value of the  $j^{\text{th}}$  sample from the  $i^{\text{th}}$  subgroup, and  $Z_{ij}$  is the absolute deviation of  $Y_{ij}$  from the mean of the  $i^{\text{th}}$  subgroup. Levene's test rejects the hypothesis that the variances are equal if

$W > F_{\alpha, k-1, N-k}$ , where  $F_{\alpha, k-1, N-k}$  is the upper critical value of the  $F$  distribution with  $k-1$  and  $N-k$  degrees of freedom at a significance level of  $\alpha$ .

At-station trends in AMS means were inspected using the parametric  $t$ -test and non-parametric Mann-Kendall test (e.g., Maidment, 1993). Both tests are extensively used for trend analysis in environmental sciences and are appropriate for records that have undergone a gradual change. The tests are fairly robust, readily available, and easy to use and interpret. Since each test is based on different assumptions and different test statistics, the rationale was that if both tests have similar outcomes there can be more confidence about the results; if the outcomes are different, it would provide an opportunity to investigate reasons for discrepancies.

Parametric tests in general have been shown to be more powerful than non-parametric tests when the data are approximately normally distributed and when the assumption of homoscedasticity (homogeneous variance) holds (e.g., Hirsch et al., 1991), but are less reliable when those assumptions do not hold. The parametric  $t$ -test for trend detection is based on linear regression, and therefore checks only for a linear trend in data. A linear trend assumption seemed adequate here, since time series plots indicated, if any, monotonic, linear changes in AMS. The Pearson correlation coefficient ( $r$ ) was used as a measure of linear association between annual maximum series data and time for the  $t$ -test. The hypothesis that the data are not dependent on time (and also that they are independent and normally distributed values) was tested using the  $t$ -statistic that follows Student's distribution defined as:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

where  $n$  is the record length of the AMS. The hypothesis is rejected when the absolute value of the computed  $t$ -statistic is greater than the critical value obtained from Student's distribution with  $(n - 2)$  degrees of freedom and exceedance probability of  $\alpha/2$  %, where  $\alpha$  is the significance level. The sign of the  $t$ -statistic indicates the direction of the trend, positive or negative.

Non-parametric tests have advantages over parametric tests since they make no assumption of probability distribution and are performed without specifying whether trend is linear or nonlinear. They are also more resilient to outliers in data because they do not operate on data directly. One of the disadvantages of non-parametric tests is that they do not account for the magnitude of the data. The Mann-Kendall test (M-K test) was selected among various non-parametric tests because it can accommodate missing values in a time series, which was a frequent occurrence in the AMS data. The Mann-Kendall test compares the relative magnitudes of annual maximum data. If annual maximum values are indexed based on time, and  $x_i$  is the annual maximum value that corresponds to year  $t_i$ , then the Mann-Kendall statistic is given by:

$$S = \sum_{k=1}^{n-1} \sum_{i=k+1}^n \text{sign}(x_i - x_k)$$

The test statistic  $Z$  is then computed using a normal approximation and standardization of the statistic  $S$ . The null hypothesis that there is no trend in the data is rejected at significance level  $\alpha$  if the computed  $Z$  value is greater, in absolute terms, than the critical value obtained from a standard normal distribution that has probability of exceedance of  $\alpha/2$  %. The sign of the statistic indicates the direction of the trend, positive or negative.

In addition to an at-station trend analysis, the relative magnitude of any trend in AMS for each climate region (see Figure 4.1.2) as a whole was assessed by linear regression techniques. 1-hour and 1-day station-specific AMS for stations with at least 70 years of data for the 1-day duration and with at least 40 years of data for the 1-hour duration were rescaled by corresponding mean annual maximum values and then regressed against time, where time was defined as year of occurrence minus 1900. The regression results from all stations were tested against a null hypothesis of zero serial correlation (zero regression slopes).

## 2. Trend analysis results and conclusion

The stationarity assumption was tested by applying a parametric  $t$ -test and non-parametric Mann-Kendall test for trends in means and the Levene's test for trends in variance in the 1-day and 1-hour AMS data at 5% significance level. For the 1-day duration, testing was done on stations with at least 70 years of data; for the 1-hour duration, the minimum number of data years was lowered to 40 to increase the sample size. 131 and 302 stations satisfied the record length criterion for the 1-hour duration and 1-day duration, respectively. For 1-hour, the  $t$ -test and Mann-Kendall test indicated statistically significant positive trends in the mean at about 13% and 20% of stations, respectively. In the 1-day dataset, the  $t$ -test and Mann-Kendall test, detected positive trends at about 18% and 20% of stations, respectively. Levene's test indicated non-homogeneous variance at about 6% of stations for both durations. More details are provided in Table A.2.1. The spatial distribution of the results for all three tests for 1-hour and 1-day AMS are shown in Figures A.2.1 and A.2.2, respectively. Small clusters of stations where tests indicated positive trends are often due to AMS data sampled from the same storm events at several nearby locations.

Results from the regional trend analysis also indicated that the null hypothesis, that there are no trends in AMS, could not be rejected at the 5% significance level for either climate region for the 1-hour and 1-day durations.

Because tests at both the 1-hour and 1-day durations indicated no statistically significant trends in the data, the assumption of stationary AMS was accepted for this project area and no adjustment to AMS data was recommended.

Table A.2.1. Trend analysis results for 1-hour and 1-day AMS data.

Number of stations	1-hour			1-day		
	<i>t</i> -test	M-K test	Levene's	<i>t</i> -test	M-K test	Levene's
no trend	113	103	124	240	234	285
positive trend	17	26	7	53	59	17
negative trend	1	2		9	9	

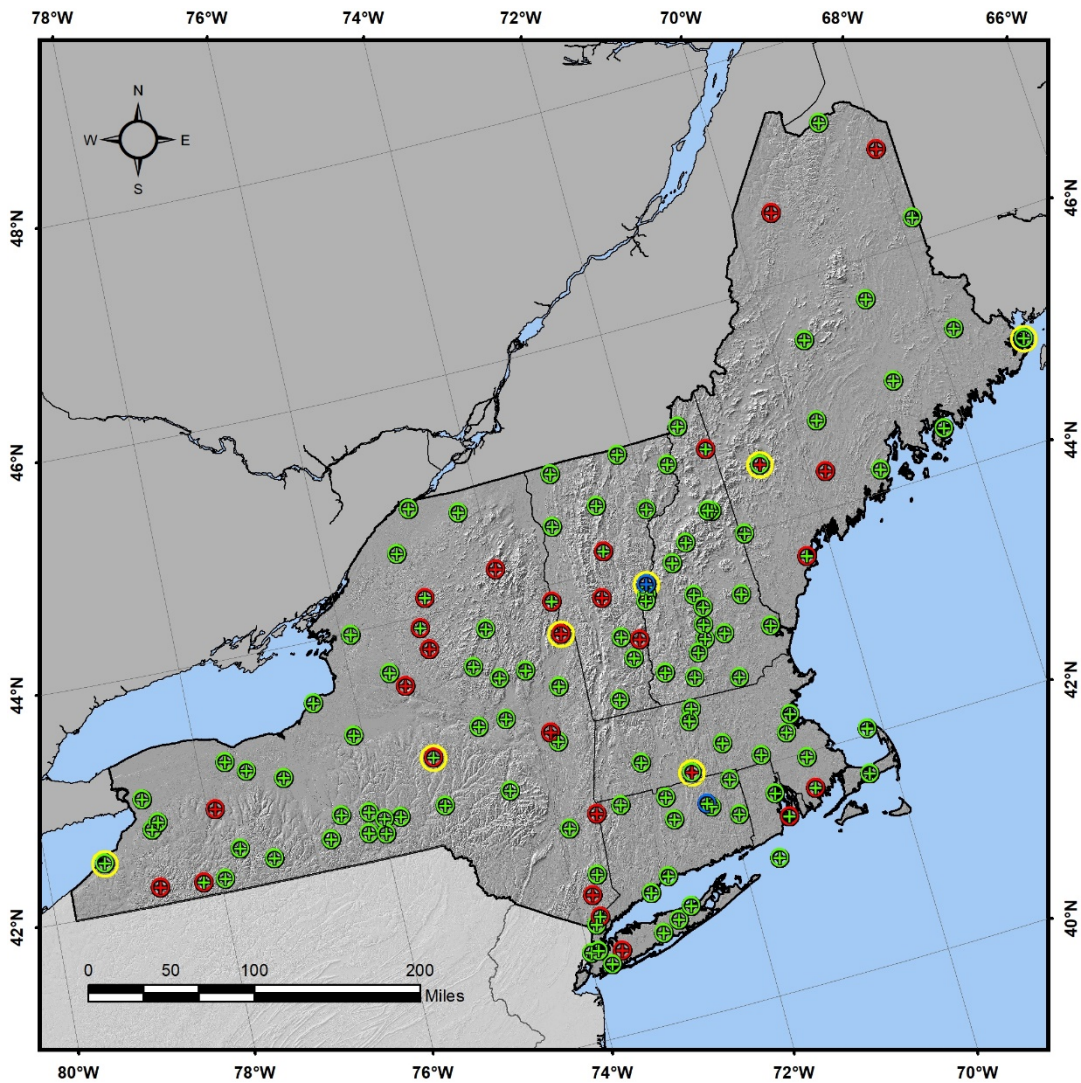


Figure A.2.1. Spatial distribution of results of *t*-, Mann-Kendall, and Levene's tests for 1-hour AMS. Circles (except yellow) were used to present Mann-Kendall test results and plus signs were used to present *t*-test results. Red color indicates positive trends, green no trend, and blue negative trends. Yellow circles show locations where Levene's test detected changes in variance.



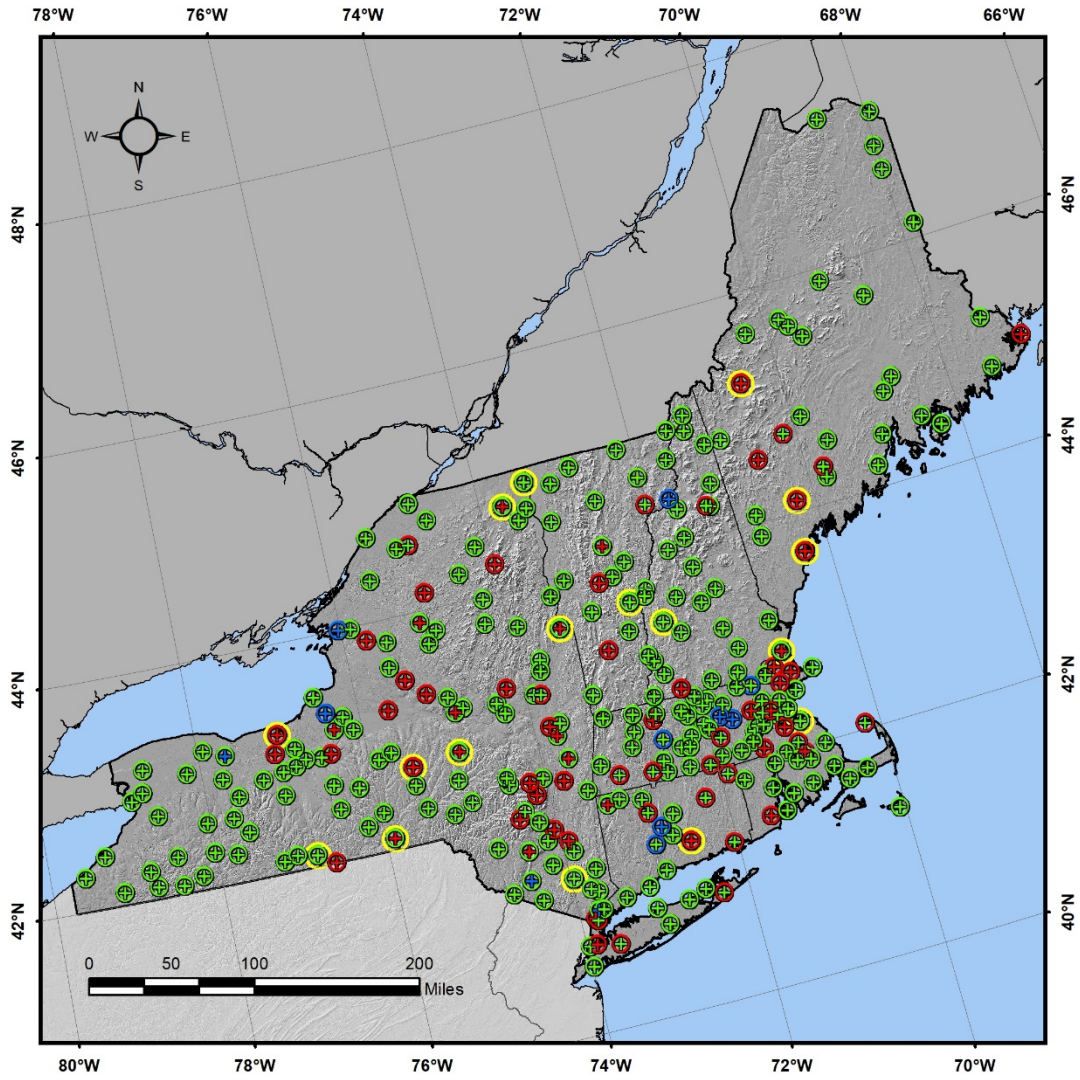


Figure A.2.2. Same as in Figure A.2.1, but for 1-day duration.

## **Appendix A.3. PRISM report**

### **Final Report Production of Rainfall Frequency Grids for the Northeast US Region Using a Specifically Optimized PRISM System**

**Prepared for**  
National Weather Service, Hydrologic Design Service Center  
Silver Spring, Maryland

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September 2015

#### **1. Project Goal**

The Hydrometeorological Design Studies Center (HDSC) within the Office of Water Prediction of NOAA's National Weather Service is updating precipitation frequency estimates for the Northeast region (hereafter referred to as NE). In order to complete the spatial interpolation of point estimates, HDSC requires spatially interpolated grids of MAM (Mean Annual Maximum) precipitation. The contractor, the PRISM Climate Group at Oregon State University (OSU), was tasked with producing a series of grids for rainfall frequency estimation using an optimized system based on the Parameter-elevation Regressions on Independent Slopes Model (PRISM) and HDSC-calculated point estimates for the NE.

#### **2. Background**

HDSC used L-moment based regional frequency analysis approach to estimate precipitation frequencies. In this approach, the mean of the underlying precipitation frequency distribution is estimated at point locations with a sufficient history of observations. The form of the distribution and its parameters are estimated regionally. Once the form of the distribution has been selected and its parameters have been estimated, precipitation frequency estimates can be computed from grids of the MAM. The grids that are the subject of this report are spatially interpolated grids of the point estimates of the MAM for various precipitation durations. The point estimates of the MAM were provided by HDSC. HDSC selected an appropriate precipitation frequency distribution along with regionally estimated parameters and used this information with the grids of the MAM to derive grids of precipitation frequency estimates.

The PRISM Climate Group has performed similar work previously to produce spatially interpolated MAM grids for updates of precipitation frequency estimates in the Semiarid Southwest United States, the Ohio River Basin and Surrounding States, Puerto Rico/US Virgin Islands, Hawaiian Islands, California, Alaska, and Midwest/Southeast study areas.

### 3. Report

This report describes tasks performed to produce mean annual maximum (MAM) grids for 17 precipitation durations: 15 and 30 minutes; 1, 2, 3, 6, and 12 hours; and 1, 2, 3, 4, 7, 10, 20, 30, 45, and 60 days for the NE. The tasks described were not necessarily performed in the order described, nor were they performed just once. The process was dynamic and had numerous feedbacks.

#### 3.1. Adapting the PRISM system

The PRISM modeling system was adapted for use in this project after a small investigation was performed for the Semiarid Southwest United States, and subsequently used in the Ohio River Basin and Surrounding States, Puerto Rico/Virgin Islands, Hawaiian Islands, California, Alaska, and Midwest/Southeast study areas. This investigation and adaptation procedure is summarized below.

PRISM is a knowledge-based system that uses point data, a digital elevation model (DEM), and many other geographic data sets to generate gridded estimates of climatic parameters (Daly et al. 1994, 2002, 2003, 2006, 2008) at monthly to daily time scales. Originally developed for precipitation estimation, PRISM has been generalized and applied successfully to temperature, among other parameters. PRISM has been used extensively to map precipitation, dew point, and minimum and maximum temperature over the United States, Canada, China, and other countries. Details on PRISM formulation can be found in Daly et al. (2002, 2003, 2008), which are available from <http://prism.oregonstate.edu/docs/>.

Adapting the PRISM system for mapping precipitation frequencies required an approach slightly different than the standard modeling procedure. The amount of station data available to HDSC for precipitation frequency was much less than that available for high-quality precipitation maps, such as the peer-reviewed PRISM 1971-2000 mean precipitation maps (Daly et al. 2008). Data sources suitable for long-term mean precipitation but not for precipitation frequency included snow courses, short-term COOP stations, remote storage gauges, and others. In addition, data for precipitation durations of less than 24 hours were available from hourly precipitation stations only. This meant that mapping precipitation frequency using HDSC stations would sacrifice a significant amount of the spatial detail present in the 1971-2000 mean precipitation maps.

A pilot project to identify ways of capturing more spatial detail in the precipitation frequency maps was undertaken. Early tests showed that mean annual precipitation (MAP) was an excellent predictor of precipitation frequency in a local area, much better than elevation, which is typically used as the underlying, gridded predictor variable in PRISM applications. In these initial tests, the DEM, the predictor grid in PRISM, was replaced by the official USDA digital map of MAP for the lower 48 states (USDA-NRCS 1998, Daly et al. 2000). Detailed information on the creation of the USDA PRISM precipitation grids is available from Daly and Johnson (1999). MAP was found to have superior predictive capability over the DEM for locations in the southwestern US. The relationships between MAP and precipitation frequency were strong because many of the effects of various physiographic features on mean precipitation patterns had already been incorporated into the MAP grid from PRISM. Preliminary PRISM maps of 2-year and 100-year, 24-hour precipitation were made for the Semiarid Southwest and compared to hand-drawn HDSC maps of the same statistics. Differences were minimal, and mostly related to differences in station data used.

Further investigation found that the square-root transformation of MAP produced more linear, tighter and cleaner regression functions, and hence, more stable predictions, than the untransformed values; this transformation was incorporated into subsequent model applications. Square-root MAP was a good local predictor of not only longer-duration precipitation frequency statistics, but for short-duration statistics, as well. Therefore, it was determined that a modified PRISM system that used square-root MAP as the predictive grid was suitable for producing high-quality precipitation frequency maps for this project.

For this study, an official USDA grid of MAP for the study region (1981-2010 average) was used (Figure 1). This grid was developed under funding from the USDA Natural Resources Conservation Service, and is an update to the 1971-2000 grids described in Daly et al. (2008).

### 3.2. PRISM configuration and operation for the NE

In general, PRISM interpolation consists of a local moving-window regression function between a predictor grid and station values of the element to be interpolated. The regression function is guided by an encoded knowledge base and inference engine (Daly et al., 2002, 2008). This knowledge base/inference engine is a series of rules, decisions and calculations that set weights for the station data points entering the regression function. In general, a weighting function contains knowledge about an important relationship between the climate field and a geographic or meteorological factor. The inference engine sets values for input parameters by using default values, or it may use the regression function to infer grid cell-specific parameter settings for the situation at hand. PRISM acquires knowledge through assimilation of station data, spatial data sets such as MAP and others, and a control file containing parameter settings.

The other center of knowledge and inference is that of the user. The user accesses literature, previously published maps, spatial data sets, and a graphical user interface to guide the model application. One of the most important roles of the user is to form expectations for the modeled climatic patterns, i.e., what is deemed “reasonable.” Based on knowledgeable expectations, the user selects the station weighting algorithms to be used and determines whether any parameters should be changed from their default values. Through the graphical user interface, the user can click on any grid cell, run the model with a given set of algorithms and parameter settings, view the results graphically, and access a traceback of the decisions and calculations leading to the model prediction.

For each grid cell, the moving-window regression function for MAM vs. MAP took the form

$$\text{MAM value} = \beta_1 * \text{sqrt}(\text{MAP}) + \beta_0 \quad (1)$$

where  $\beta_1$  is the slope and  $\beta_0$  is the intercept of the regression equation, and MAP is the grid cell value of mean annual precipitation.

Upon entering the regression function, each station was assigned a weight that is based on several factors. For PRISM MAP mapping (used as the predictor grid in this study), the combined weight of a station was a function of distance, elevation, cluster, vertical layer, topographic facet, coastal proximity, and effective terrain weights, respectively. A full discussion of the general PRISM station weighting functions is available from Daly et al. (2008).

Given that the MAP grid incorporated detailed information about the complex spatial patterns of precipitation, only a subset of these weighting functions was needed for this study. For the NE, the combined weight of a station was a function of distance and clustering, respectively. A station is down-weighted when it is relatively distant from the target grid cell, or when it is clustered with other stations (which can lead to over-representation).

The moving-window regression function was populated by station data provided by the HDSC. A PRISM GUI snapshot of the moving-window relationship between  $\text{sqrt}(\text{MAP})$  and 24-hour MAM in south-central Maine is shown in Figure 2.

There were relatively few stations with data for durations of 12 hours or less from which to perform the interpolation. In addition, it was clear that the spatial patterns of durations of 12 hours or less could be very different than those of durations of 24 hours or more. This issue was encountered in a previous study for Puerto Rico. During that study the following procedure was developed, and adopted here:

(1) Convert available  $\leq 12$ -hour station values to an MAM/24-hr MAM ratio (termed R24) by dividing by the 24-hour values;

- (2) using the station R24 data in (1), interpolate R24 values for each  $\leq 12$ -hour duration (15, 30, and 60 minutes; and 2, 3, 6, and 12 hours) using PRISM;
- (3) using bi-linear interpolation from the cells in the R24 grids from (2), estimate R24 at the location of each station having data for  $\geq 24$ -hour durations only;
- (4) multiply the estimated R24 values from (3) by the 24-hour value at each  $\geq 24$ -hour station to obtain estimated  $\leq 12$ -hour values;
- (5) append the estimated stations from (4) to the  $\leq 12$ -hour station list to generate a station list that matches the density of that for  $\geq 24$  hours; and
- (6) interpolate MAM values for  $\leq 12$ -hour durations with PRISM, using MAP as the predictor grid.

The interpolation of R24 values using PRISM (step 2 above) is normally performed with PRISM in inverse-distance weighting (IDW) mode. However, in the NE, a lack of station data and strong spatial gradients in R24 made it difficult for the IDW parameterization to produce an adequate field of R24 values, especially in mountainous areas. R24 values are typically lower in the wetter mountain areas than in the drier lowlands. Mountain areas receive high total precipitation amounts, but intensities at short durations, as a proportion of the 24-hour values, are less than in the drier lowland areas.

Experimentation with more sophisticated parameterizations of PRISM showed that there was a useful relationship between MAP and R24 that could be used to add skill to the R24 interpolation process. Further testing indicated that the square root of the MAP provided the most linear fit. Therefore, the moving-window regression function for R24 vs. MAP took the form

$$R24 = \beta_1 * \text{sqrt}(\text{MAP}) + \beta_0 \quad (2)$$

A PRISM GUI snapshot of a moving-window relationship between square root of MAP and 12-hour R24 in the Berkshire Mountains of New York is shown in Figure 3.

Relevant PRISM parameters for applications to 60-minute R24 and 24-hour MAM statistics are listed in Tables 1 and 2, respectively. Further explanations of these parameters and associated equations are available in Daly et al. (2002, 2008).

The values of radius of influence ( $R$ ), the minimum number of total ( $s_i$ ) stations required in the regression were based on information from user assessment via the PRISM graphical user interface, and on a jackknife cross-validation exercise, in which each station was deleted from the data set one at a time, a prediction made in its absence, and mean absolute error statistics compiled (see Results section).

The input parameter that changed readily among the various durations was the default slope ( $\beta_{1d}$ ) of the regression function. Slopes are expressed in units that are normalized by the average observed value of the precipitation in the regression data set for the target cell. Evidence gathered during PRISM model development indicates that this method of expression is relatively stable in both space and time (Daly et al. 1994).

Bounds are put on the slopes to minimize unreasonable slopes that might occasionally be generated due to local station data patterns; if the slope is out of bounds and cannot be brought within bounds by the PRISM outlier deletion algorithm, the default slope is invoked (Daly et al., 2002). The maximum slope bound was set to a uniformly high value of 30.0, to accommodate a large range of valid slopes; lower values were not needed to handle extreme values, because all values were within reasonable ranges. Slope default values were based on PRISM diagnostics that provided information on the distribution of slopes across the modeling region. The default value was set to approximate the average regression slope calculated by PRISM. For these applications, default slopes typically increased with increasing duration (Table 3). In general, the longer the duration, the larger the slope. This is primarily a result of higher precipitation amounts at the longer durations, and the tendency for longer-duration MAM statistics to bear a stronger and steeper relationship with MAP than shorter-duration statistics.

### **3.3. Preparation and review of draft grids**

Draft grids for the 60-minute, 24-hour and 10-day durations were produced and made available to HDSC for evaluation. All of the necessary station data were provided by HDSC. The process began with a careful scrutiny of the station data and PRISM behavior. A version of PRISM which predicts for stations locations in the absence of each station (termed jackknifing) was run, and stations that were difficult for PRISM to predict for were identified, and sent to HDSC for review. HDSC removed the stations, modified their values, or determined that the stations were accurate as-is. This process was performed iteratively, until an acceptable station data set was produced. The draft PRISM grids were subsequently completed and submitted to HDSC for review. HDSC submitted the draft PRISM grids for external review, and revised the station data accordingly.

### **3.4. Final grids**

Having found the revised draft grids acceptable, HDSC requested that grids for all durations be completed. Before delivering the final grids to HDSC, the PRISM Climate Group checked them for internal consistency. In other words, the value of the MAM at each grid point for each duration must have been greater than the value for shorter durations at the same grid point. If an inconsistency of this nature occurred, the convention was to start with the 24 duration as a baseline, and set longer durations to slightly higher values and shorter durations to slightly lower values.

The final delivered grids inherited the spatial resolution of the latest 1981-2010 PRISM mean annual precipitation grids for NE, which is 30 arc-seconds (~800 meters). The grid cell units are in mm\*100. Final MAM grids delivered to HDSC are as follows: 15-minute, 30-minute, 60-minute, 2-hour, 3-hour, 6-hour, 12-hour, 24-hour, 48-hour, 3-day, 4-day, 7-day, 10-day, 20-day, 30-day, 45-day, 60-day (17 total).

### **3.5. Performance evaluation**

PRISM cross-validation statistics for 60-minute/24-hour MAM ratio and the 60-minute and 24-hour MAM intensities were compiled and summarized in Table 4. These errors were estimated using an omit-one jackknife method, where each station is omitted from the data set, estimated in its absence, then replaced. Since the 60-minute/24-hour MAM ratio was expressed as a percent, the percent bias and mean absolute error are the given as the bias and MAE in the original percent units (not as a percentage of the percent).

For the 60-minute/24-hour MAM ratio, the overall percent bias was -0.18% and the mean absolute error (MAE) 4.92 percent. For the 60-minute, 24-hour, and 10-day MAM intensities, biases were 0.15 percent or less, and the MAEs less than 4 percent. Biases were less than 1% for all durations. MAEs generally decreased from 3.9 percent at the 15-minute duration to 3.1 percent at the 60-day duration. Given the lack of independent data at durations of less than 24 hours, one would have expected the 15-minute to 12-hour MAM errors to be substantially higher than those for the 24-hour to 60-day MAMs. A likely reason why this was not the case was that the addition of many synthesized stations, derived from a PRISM interpolation of R24 values, resulted in a station data set that was spatially consistent, and thus, somewhat easier to interpolate with each station deleted from the data set. Therefore, it is likely that the true interpolation errors for the 60-minute MAM are higher than those shown in Table 4.

Table 1. Values of relevant PRISM parameters for interpolation of 60-minute/24-hour mean annual maximum ratio (60-minute R24) for the NE. See Daly et al. (2002) for details on PRISM parameters.

Name	Description	Value
<u>Regression Function</u>		
$R$	Radius of influence	10 km*
$s_t$	Minimum number of total stations desired in regression	45 stations
$\beta_{1m}$	Minimum valid regression slope	-5.0 <sup>+</sup>
$\beta_{1x}$	Maximum valid regression slope	5.0 <sup>+</sup>
$\beta_{1d}$	Default valid regression slope	0.0 <sup>+</sup>
<u>Distance Weighting</u>		
$A$	Distance weighting exponent	2.0
$F_d$	Importance factor for distance weighting	1.0
$D_m$	Minimum allowable distance	0.0 km
<u>Elevation Weighting</u>		
$B$	MAP weighting exponent	NA/NA
$F_z$	Importance factor for MAP weighting	NA/NA
$\Delta z_m$	Minimum station-grid cell MAP difference below which MAP weighting is maximum	NA/NA
$\Delta z_x$	Maximum station-grid cell MAP difference above which MAP weight is zero	NA/NA

\* Expands to encompass minimum number of total stations desired in regression ( $s_t$ ).

<sup>+</sup> Slopes are expressed in units that are normalized by the average observed value of the precipitation in the regression data set for the target cell. Units here are  $1/[\text{sqrt}(\text{MAP}(\text{mm})) * 1000]$ .

Table 2. Values of relevant PRISM parameters for modeling of 24-hour mean annual maximum statistics for the NE. See Daly et al. (2002) for details on PRISM parameters.

Name	Description	Value
<u>Regression Function</u>		
$R$	Radius of influence	3 km*
$s_t$	Minimum number of total stations desired in regression	30 stations
$\beta_{1m}$	Minimum valid regression slope	0.0 <sup>+</sup>
$\beta_{1x}$	Maximum valid regression slope	30.0 <sup>+</sup>
$\beta_{1d}$	Default valid regression slope	2.8 <sup>+</sup>
<u>Distance Weighting</u>		
$A$	Distance weighting exponent	2.0
$F_d$	Importance factor for distance weighting	1.0
$D_m$	Minimum allowable distance	0.0 km
<u>Elevation Weighting</u>		
$B$	Elevation weighting exponent	0.0
$F_z$	Importance factor for elev weighting	0.0
$\Delta z_m$	Minimum station-grid cell elev difference below which MAP weighting is maximum	NA
$\Delta z_x$	Maximum station-grid cell elevation difference above which station is eliminated from data set	NA

\* Expands to encompass minimum number of total stations desired in regression ( $s_t$ ).

<sup>+</sup> Slopes are expressed in units that are normalized by the average observed value of the precipitation in the regression data set for the target cell. Units here are  $1/[\text{sqrt}(\text{MAP}(\text{mm})) * 1000]$ .



*Table 3. Values of PRISM slope parameters for modeling of MAM statistics for the NE for all durations. For durations of 12 hours and below, station data were expressed as the ratio of the given duration's MAM value to the 24-hour MAM value, and interpolated; this was followed by an interpolation of the actual MAM values. See text for details. See Table 1 for definitions of parameters.*

Duration	NE		
	$\beta_{1m}$	$\beta_{1x}$	$\beta_{1d}$
15-minute/24-hour ratio	0.0	0.0	0.0
30-minute/24-hour ratio	0.0	0.0	0.0
1-hour/24-hour ratio	0.0	0.0	0.0
2-hour/24-hour ratio	0.0	0.0	0.0
3-hour/24-hour ratio	0.0	0.0	0.0
6-hour/24-hour ratio	0.0	0.0	0.0
12-hour/24-hour ratio	0.0	0.0	0.0
15-minute MAM	0.0	30.0	2.3
30-minute MAM	0.0	30.0	2.3
1-hour MAM	0.0	30.0	2.3
2-hour MAM	0.0	30.0	2.3
3-hour MAM	0.0	30.0	2.4
6-hour MAM	0.0	30.0	2.5
12-hour MAM	0.0	30.0	2.7
24-hour MAM	0.0	30.0	2.8
48-hour MAM	0.0	30.0	3.0
3-day MAM	0.0	30.0	3.1
4-day MAM	0.0	30.0	3.2
7-day MAM	0.0	30.0	3.6
10-day MAM	0.0	30.0	3.8
20-day MAM	0.0	30.0	4.2
30-day MAM	0.0	30.0	4.5
45-day MAM	0.0	30.0	4.6
60-day MAM	0.0	30.0	4.8

*Table 4. PRISM cross-validation errors for 60-minute/24-hour MAM ratio and 24-hour MAM applications to the NE. Since the 60-minute/24-hour MAM ratio was expressed as a percent, the percent bias and mean absolute error are the given as the bias and MAE in the original percent units (not as a percentage of the percent).*

<b>Statistic</b>	<b>N</b>	<b>% Bias</b>	<b>% MAE</b>
60-minute/24-hour MAM ratio	289	-0.18	4.92
60-minute MAM	703	0.09	3.47
24-hour MAM	703	0.05	3.54
10-day MAM	703	0.15	3.25

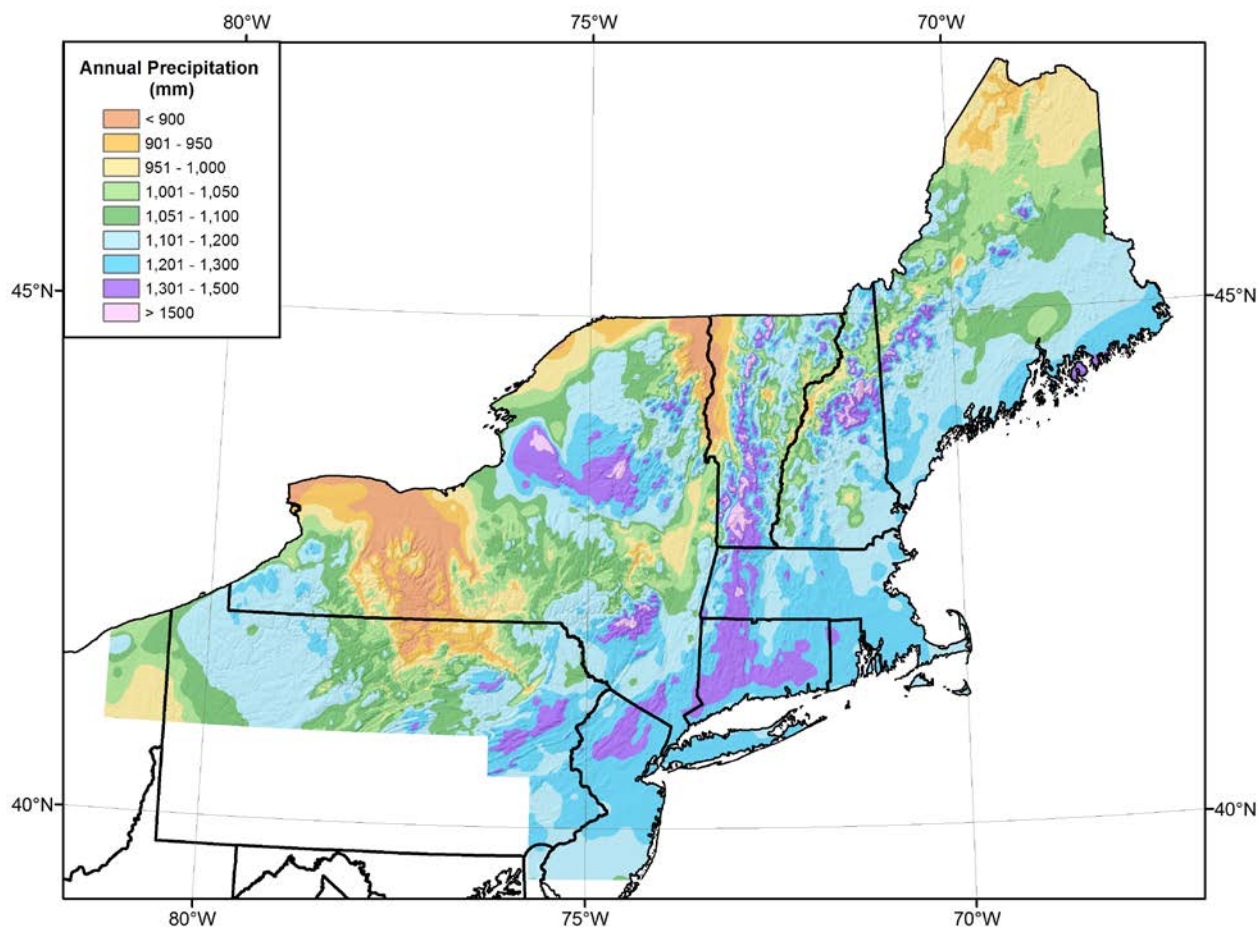


Figure 1. PRISM 1981-2010 mean annual precipitation (MAP) grid for the NE region.

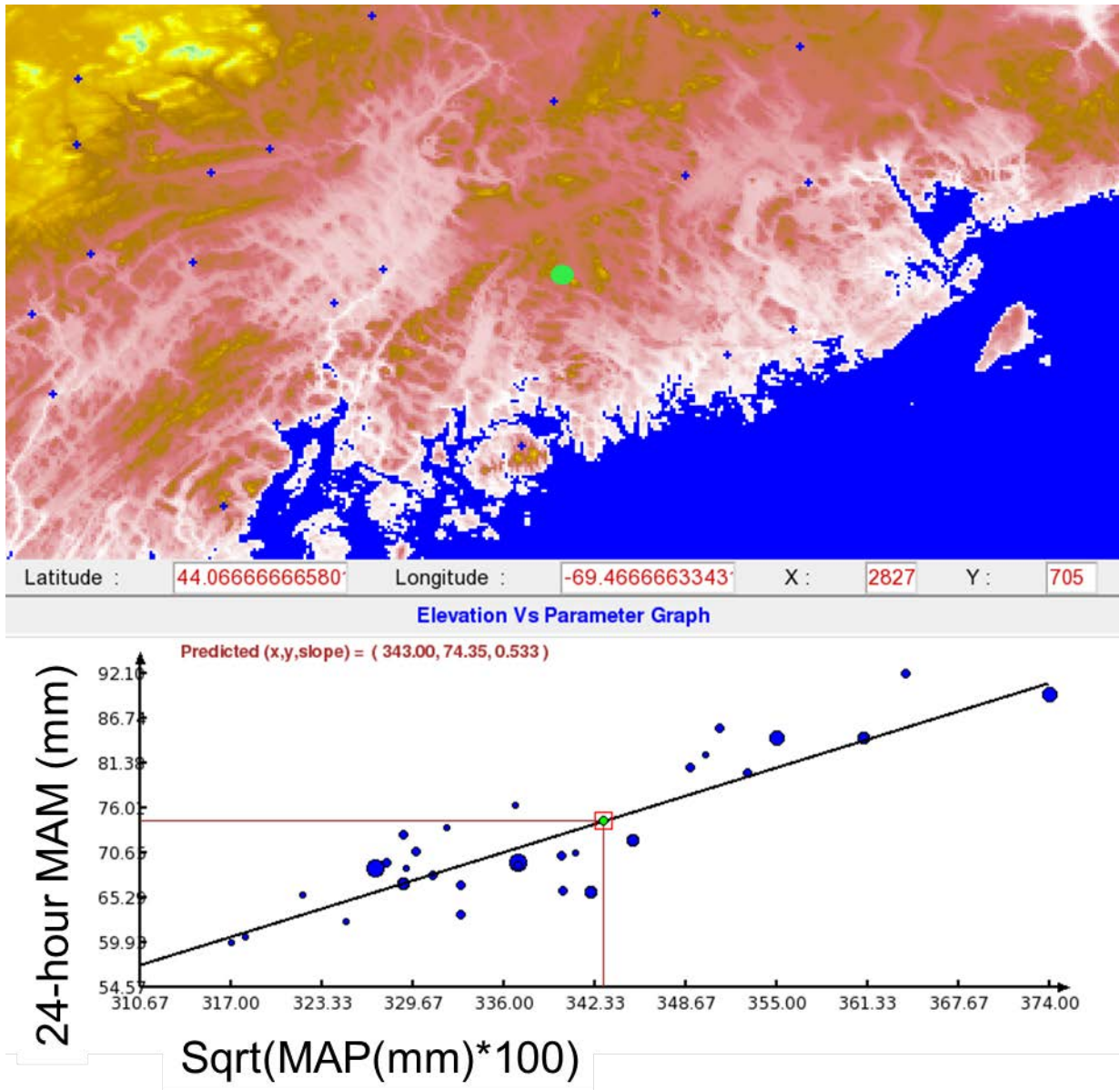


Figure 2. PRISM GUI snapshot of the moving-window weighted regression between the square root of mean annual precipitation and 24-hour mean annual maximum precipitation (MAM) in south-central Maine. Model is being run for the green dot location; stations are shown as blue pluses.

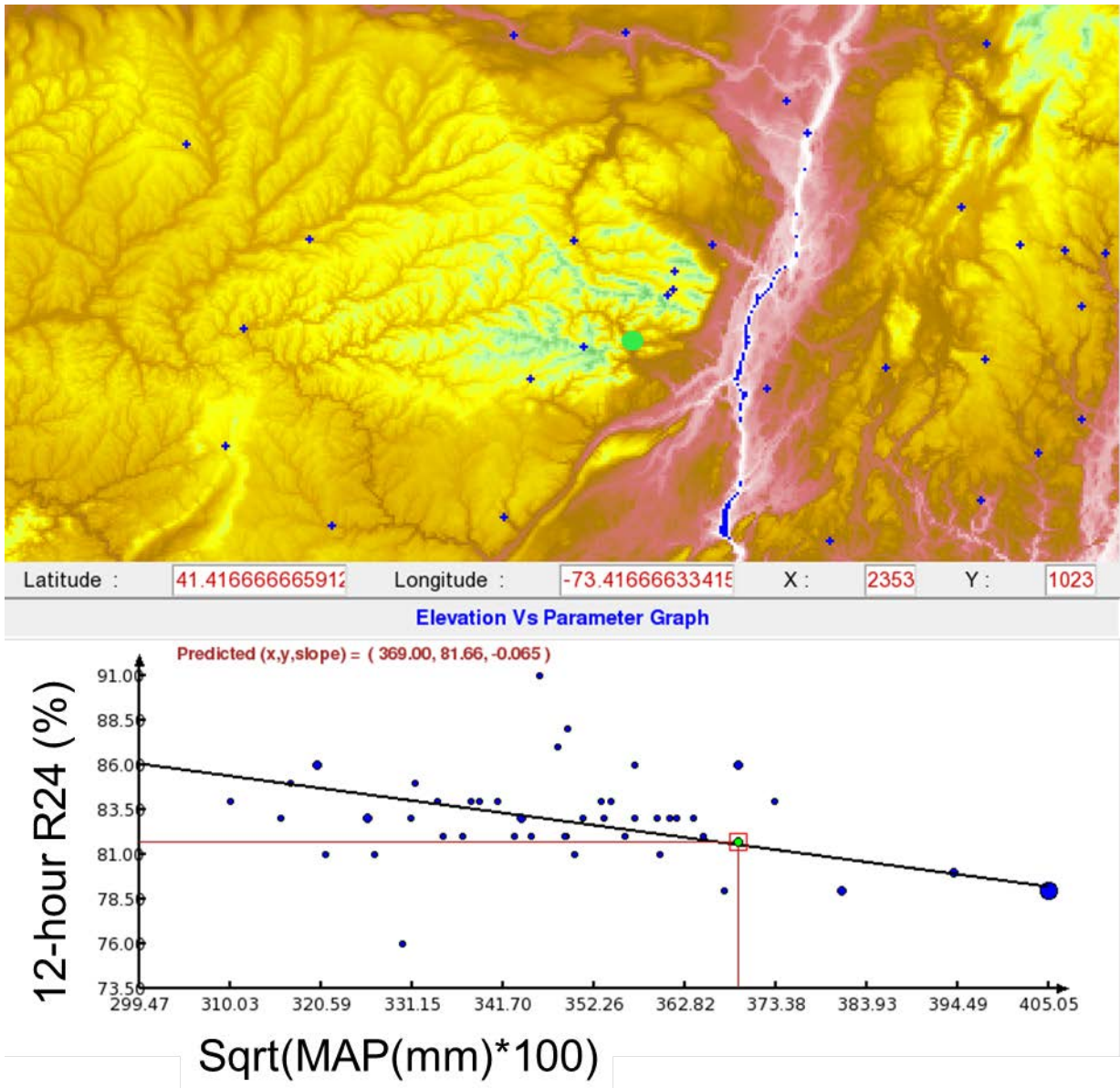


Figure 3. PRISM GUI snapshot of the moving-window weighted regression between the square root of mean annual precipitation and 12-hour R24 (ratio of 12-hour to 24-hour MAM, expressed in percent) in the Berkshire Mountains of New York. Regression is for the pixel marked with the green dot. Stations are shown with a blue “+”.

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#### **Appendix A.4. Peer review comments and responses**

*A peer review of preliminary results for the NOAA Atlas 14 (NA14) Volume 10 precipitation frequency project was carried out during a five-week period starting on 1 October 2014. The request for review was sent via email to individuals who were suggested by agencies that funded this work as potential reviewers, expressed interest in participating in the review, or who have subscribed to the HDSC mailing list-server.*

*The review package included the following items, together with the peer review instructions document:*

- a. Station metadata. Reviewers were asked to examine the accuracy of stations' metadata and provide comments on suggested stations' deletions and merges. Stations were presented in two tables: NE\_Metadata\_Stations used.xlsx for stations used in frequency analysis, and NE\_Metadata\_Stations not used.xlsx for stations that were examined but not retained for the analysis. The metadata tables included information on each station's name, state, name of agency that provided the data, assigned station ID, latitude, longitude, elevation, and period of record. For stations used in the analysis, the first table also showed if the station was merged with another station, if the station was co-located with another station with a different ID, and if metadata at the station were changed. A brief comment on why their data were not used was provided for stations not retained for the analysis in the second table. Generally, stations were not used either because there was another nearby station with a longer period of record, station data were assessed unreliable for this specific purpose, or the station's period of record was not long enough, and the station was not a candidate for merging with any nearby station.*
- b. At-station depth-duration-frequency (DDF) curves. Reviewers were asked to examine the DDF curves for stations retained in the analysis for 60-minute to 10-day durations and for 2-year through 100-year average recurrence intervals and to comment on their reasonableness.*
- c. Spatially-interpolated estimates. Reviewers were invited to comment on the overall and local patterns in spatially-interpolated precipitation frequency estimates for 2-year and 100-year ARIs and for 60-minute, 6-hour, 24-hour, and 10-day durations.*

*Reviewers' comments and HDSC's responses (in italic font) are shown below. The comments and their respective HDSC responses have been grouped into five categories:*

- 1. Station metadata*
- 2. Patterns of spatially interpolated precipitation frequency estimates*
- 3. Comparison with projects done by other agencies*
- 4. Effects of non-stationary climate on estimates*
- 5. Miscellaneous.*

## 1. Station metadata

- 1.1. The period of record for the two central Rensselaer County stations in eastern New York look to be incorrect. The Averill Park site (77-0001), e.g., lists the period of record as 1965-2014. This station only goes back to 1987. There may be other stations with the same issue.

*During the initial screening of the data, we looked at nearby stations (usually within 3 miles, but up to 5 miles in flat terrain) with consideration to climatological characteristics of extreme precipitation, terrain, distance from the coast, statistical test results, etc. to see if they can be merged to form a single longer record. This approach is described in more detail in Section 4.4 of this document. The excel file of stations used in frequency analysis that was prepared for the peer review showed periods of record after all merges and extensions have been done.*

*For the Averill Park, NY station (77-0001 DLY), data is available since 1987, but the station was merged with nearby NCEI's station West Sand Lake 2 S, NY (30-9303 DLY) which extended its record back to 1965.*

- 1.2. The number of sites in Maine is limited. I know the cooperative weather stations utilized by the product Cornell was involved with were not identical, still with some checks on quality control the data has been valuable, especially when looking at current flood generating rainfalls.

*We made every effort to collect all reasonably available precipitation data. For this Volume, we collected and reviewed the data from 21 agencies in addition to NCEI (see Table 4.2.1), including all the stations included in the Cornell University, Northeast Regional Climate Center's (NRCC) project (<http://precip.eas.cornell.edu/>). However, it is possible that some of the stations used in the NRCC project were not retained in NA14 because they did not pass all criteria for determining suitability for use in frequency analysis (described in Sections 4.4 and 4.5).*

*Table A.4.1 below shows the number of daily, hourly and sub-hourly stations used in NA14 and NRCC projects for the whole project area and each state separately. For Maine, specifically, the total number of stations used in NA14 is almost double the number of stations used in the NRCC project, with 21 sub-hourly stations used in NA14 versus 2 stations available for the NRCC project.*

*Table A.4.1. Number of daily (DLY), hourly (HLY) and sub-hourly (15M) stations used in NOAA Atlas 14 and NRCC projects per state and for the whole project area.*

State	NOAA Atlas 14				NRCC			
	DLY	HLY	15M	Total	DLY	HLY	15M	Total
CT	85	23	8	116	61	12	1	74
MA	210	38	17	265	112	19	2	133
ME	126	37	21	184	76	21	2	99
NH	123	34	14	171	64	22	1	87
NY	538	129	59	726	319	74	7	400
RI	22	10	2	34	8	2	1	11
VT	97	33	17	147	59	17	1	77
<b>Total</b>	<b>1201</b>	<b>304</b>	<b>138</b>	<b>1643</b>	<b>699</b>	<b>167</b>	<b>15</b>	<b>881</b>



- 1.3. NWS Coop Station 30-3033 (Fredonia NY) was moved to Portland NY and continues as 30-6747 (Portland 1SW). The Lat/Lon of Portland is: 42.3717 -79.4866. These stations may be linked together.

*Period of record for Fredonia, NY daily station (30-3033 DLY) is January 1914 - February 2012. We extended its record until December 2014 using aggregated data from hourly station Dunkirk (55-0058 HLY), approximately 3.6 miles away. Portland station (30-6747 DLY), which is approximately 10 miles away from Fredonia, was not considered for merging, as we typically merge only stations within 3 miles, or up to 5 miles in flat terrain.*

- 1.4. Why is the period of record from some sites through 2014 while others 2012? An example, Fredonia moved to Portland on 03/22/2012 yet one Fredonia station shows the "Period of record" 1984 – 2014 while Wales (30-8910) indicates the "Period of record" is 1948 - 2012 (the station is still active and reporting daily, although it did move 4 miles west 05/06/2014).

*During 2013, we collected data for this project from 22 agencies. Some agencies sent us their data directly, and others provided links for data download. Stations from the datasets sent to us typically have data by the end of 2012. Datasets available online we updated a couple of months before the peer review and then again in early 2015, so they often have data by the end of 2014. However, not all of online datasets were up-to-date, either; for example, for the latest update, data for NCEI's sub-daily stations was available only up to December 2013.*

*For clarification on Fredonia, NY daily station's period of record, please see our response to comment 1.3. For the Wales station (30-8910) initially we had three co-located stations 30-8910 15M/HLY/DLY. During the co-located check, 30-8910 DLY was deleted because it had a shorter period of record than other two co-located stations and did not appear to add any useful information. For daily durations, we retained South Wales (30-8058 DLY) station, approximately 4.85 miles away, with daily observations from 1931 until 1982, and extended its record through merge with Wales (30-8910 HLY) station up to 2012. In 2015, we extended stations' records to include data for 2013 and 2014, where available, and extracted corresponding AM if they passed all quality control checks. In this case, due to extended periods of poor data quality and no significant events during the last two years, it was decided not to extract corresponding daily AM values.*

- 1.4. Brockport NY (30-0937) shows a period of record from 1893 to 2012 (the station closed 02/15/1995)!

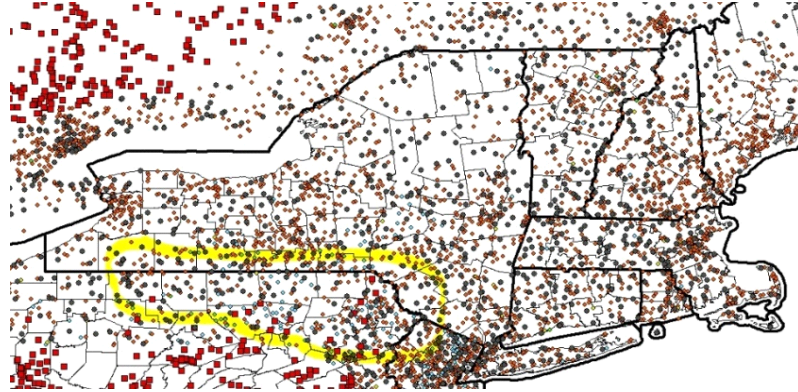
*The original period of record for NCEI's daily station Brockport, NY (30-0937 DLY) is 1893-1993. Through merge with nearby CoCoRaHS station Brockport 0.6 WNW (69-1282 DLY), its record was extended until 2012. The metadata file prepared for the peer review showed a period of record after stations were merged. More detailed information is provided in Appendix 1.*

- 1.5. Watertown Airport (30-9005) shows a period of record from 1839-2014...we show the station began 05-01-1949. This site is not compatible climatologically with the city of Watertown.

*The original period of record for NCEI's station Watertown Intl Ap, NY (30-9005 DLY) is 1949-2014. Through merges with NCEI's stations Adams Ctr (30-0015 DLY) and Madison Barracks (30-4957 DLY), and FORTS station Madison Barracks (52-4957 DLY) its record was extended back to 1839. None of the four stations are in the vicinity of the city of Watertown. NCEI's daily station Watertown (30-9000 DLY; period of record 1893-2014) is the City gauge and its data represent climatology of extreme precipitation for the city.*

- 1.6. One thing I noticed when looking at metadata for *not* used stations was that the "buffer" around the analysis area appeared to vary. Many areas had a consistent "buffer" where stations outside the

analysis area were included to improve the analysis within the study area. I measured roughly 50-75 miles for a typical buffer. A few stations, however, were removed based upon the "outside project area" reasoning but were barely 15 miles from the analysis area. These stations would appear to be helpful to the analysis and this made me think that the reasoning was in error or perhaps the lat/lon location was in error.



*The reasoning for removing those stations in the NE\_Metadata\_Stations not used.xlsx efile was incorrectly labeled as "outside project area" while it should be "AMS quality concerns." We have fixed the error.*

## **2. Patterns in spatially interpolated precipitation frequency estimates**

- 2.1. The spatial pattern, over all, the pattern is quite good. Due to an absence of stations at the highest elevations, I suspect that there may be a missing contour around some of these locations.

*High elevation stations are sparse and frequently have record lengths inadequate for frequency analysis, but in some areas, like in the Catskill Mountains, we were able to retain several stations by extending their records through digitization of additional data and merging records from nearby stations (for more details, see comment 2.3). For other high elevation areas, we interpolated estimates using the PRISM hybrid statistical-geographical interpolation technique for mapping climate data, which accounts for variations in terrain (see Section 4.8).*

- 2.2. In terms of the magnitude, they seem reasonable for the stations presented. However, in the absence of comparison data, this is no more than a guess. I might add that for stations with periods of record confined to the last two decades, a positive bias may exist due to above-normal precipitation during this period in the Northeast.

*Stations with short periods of record could, and often do, bias estimates. Figure A.4.1, shows as an illustration, precipitation frequency curves for a station with 109 years of observations when frequency analysis is done on the latest 10, 20, 30, 50 years or from the complete record. In NA14 we reduce the effect of this bias by retaining only stations with minimum 30 years of data and by weighting station-specific statistics based on its record length in calculation of regional statistics (see Section 4.6.2 for more information).*

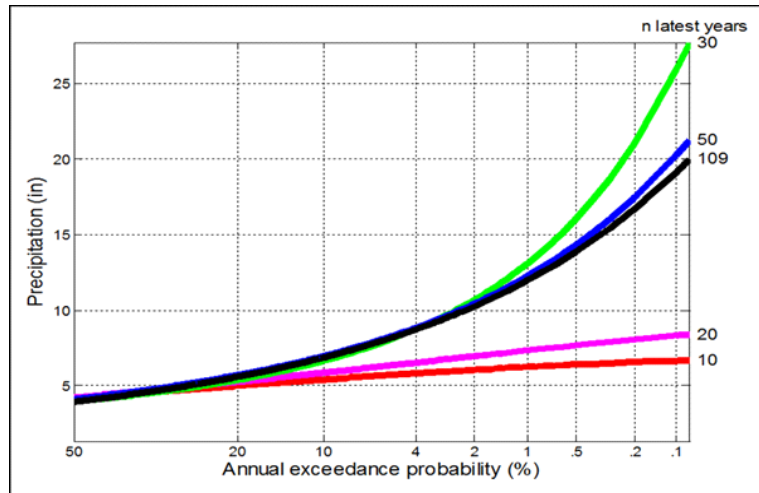
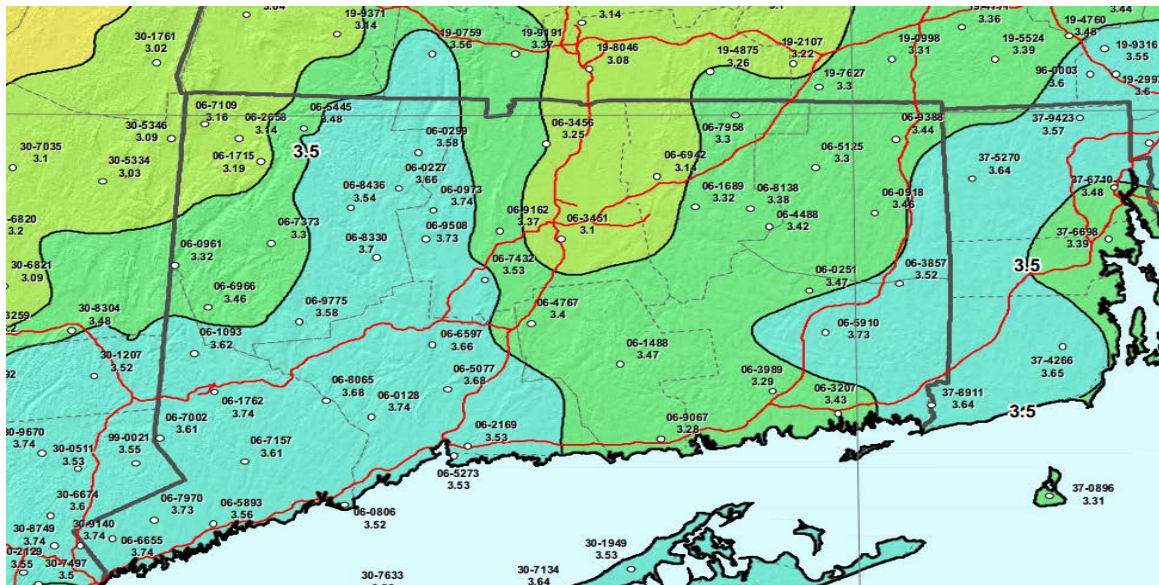


Figure A.4.1. An example of an effect of record length on precipitation frequency estimates.

- 2.3. In Connecticut, I would have expected a pattern similar to the pasted image (average annual) especially across northern sections of Fairfield, New Haven, Middlesex, and New London counties. Granted I am used to looking at means and averages for the state but at the 2-year ARI I especially thought I would see artifacts of this pattern.

The northern section of these counties is the first upslope for winds with a Southerly component. I would think that many of the maximum events, especially for longer durations, would be when the wind has this component. Even in the second image from the NE Climate Center of 2 year 24 hour picks up on this pattern, at least in SW CT in the first upslope in Northern Fairfield, and New Haven counties, but further south than I would have thought in New London county, but it is still apparent.



Spatial patterns in 2-year estimates are similar to corresponding patterns in the mean annual maxima (MAM) across all durations. Linear relationship between the 2-year/MAM and mean annual precipitation (MAP) estimates are typically relatively strong at longer daily durations (10-day or above) but weakens as duration decreases (see also Appendix A.3).

*Besides climatological reasons, there are other factors that may contribute to disparity in spatial patterns. One of them is a mismatch in record lengths between NA14 MAM and PRISM MAP time series; in NA14 we calculated MAMs based on 68 years of data on average, while PRISM MAP maps were derived based on 30 years of data from 1981-2010 period.*

*Comparison based on visual inspection of cartographic maps may also be misleading. For 24-hour duration, for example, patterns in 2-year estimates would look more like the patterns seen in the MAP and 2-year NRCC estimates if we selected more contour intervals to match contours used to represent spatial patterns in MAPs. In Connecticut, maximum 2-year values do occur across northern Fairfield, New Haven, Middlesex, and New London counties, and lower estimates occur over north central and extreme northwestern portions of the state.*

### 3. Comparison with projects done by other agencies

#### New York State Department of Environmental Conservation (NYSDEC), “New York State Stormwater Management Design Manual,” 2015

[\[https://www.dec.ny.gov/docs/water\\_pdf/swdm2015entire.pdf\]](https://www.dec.ny.gov/docs/water_pdf/swdm2015entire.pdf)

- 3.1. The Bureau of Water Permits within the Division of Water of the New York State Department of Environmental Conservation just finalized a similar exercise as part of the New York State Stormwater Management Design Manual update (public noticed on July 30, 2014) to update the 90th percentile, 1 year 24 hour, 2 year 24 hour, 10 year 24 hour, and 100 year 24 hours design storm event maps. For the purpose of this peer review, NYSDEC, focused on the comparison of the 100-year 24 hour rain event provided by NYSDEC to that proposed by NOAA. In general the location and magnitude of the isopluvials presented by these two sources are in good agreement (within the expected error), with the exception of Ulster county and Green County (Catskill Mountain range). The cartographic map for the 100-year 24 hour predicted events provided by NOAA shows two isolated locations where the rain depth predicted is upwards of 12 inches, where the maps produced by NYSDEC does not predict these high of values. As a comparison of these differences NYSDEC focused on four (4) data points, given below:

	All Years	Years After 1963	NYSDEC prediction for 100-yr 24 hour (in)	NOAA prediction for 100-yr 24 hour (in)
USC00307799	65	50	10.61	11.2
USC00306479	17		-	10.53
USC00308403	12		-	11.74
USC00302366	29	29	12.61	11.66

NYSDEC choose to only include rain stations that had greater than 20 years of data including at least 10 years of data succeeding 1963. Rain stations USC00306479 and USC00308403 did not meet this criteria and were not included. When producing the contour map in GIS there was too few data points to create isolated isopluvials such as the ones proposed in the maps created by NOAA.

Although NYSDEC does want to acknowledge that the data reported in this area is within the acceptable error. NYSDEC does want to state that there are a lot of high priority projects that occur in this area and having two maps that visually look substantially different could create conflict. As such DEC would like to respectively request more information from NOAA in regards to the method used for predicting extreme storm events including specific fitted distributions and any data

quality constraints, information on the data that was used for USC00308403 and USC00302366, and information on the interpolation method used to produce the cartographic maps.

*For the Catskill Mountains area, we were able to significantly improve estimates by extending records of several stations in the area, by extending their records through merging data from nearby stations and by digitizing and appending pre-1948 data that was sent to us by the New York City Department of Environmental Protection (NYCDEP), Bureau of Water Supply.*

*Specifically, without that effort, from the four stations listed in the table, only 30-7799 DLY (USC00307799) station with 65 years of data would have been retained for the analysis. However, we were able to retain all four stations after we extended their records through digitization and merging efforts (more details are shown in Table A.4.2). We interpolated at-station estimates using PRISM hybrid statistical-geographical interpolation technique for mapping climate data, which was designed to account for variations in terrain. More details on interpolation are provided in Section 4.8.*

*Considering that we had several stations with relatively long records, we feel confident about our estimates in the area. After the peer review, we made some improvements for the regionalization task, which resulted in a slight decrease in estimates at locations referenced in the table.*

*Table A.4.2. Number of data years for selected stations before and after digitization and station merges.*

Station ID	Merged stations' IDs	Data years			
		original	digitized	merged	final
30-7799 (USC00307799)		65	30	0	95
30-8403 (USC00308403)	30-8405, 30-6649, 30-8406	12	20	45	77
30-6479 (USC00306479)	99-0003	16	6	13	35
30-2366 (USC00302366)	30-2362	29	20	11	60

**Northeast Regional Climate Center (NRCC), Cornell University: “Extreme Precipitation in New York & New England,” 2012 [<http://precip.eas.cornell.edu/> ]**

- 3.2. As a hydrologist I have compared the data generated at <http://precip.eas.cornell.edu/> with the preliminary precipitation frequency results in Atlas 14 Vol 10: they are consistently lower in Atlas 14 Vol 10 than that generated by the NRCC, sometimes by as much as 15%. Is any attempt being made to correlate this data? TP 40 has underestimated rainfall since it was released. We do not need to have an update issued 50 years later that perpetuates that misestimating.

*While we do understand the concern, we think that NOAA Atlas 14 estimates are accurate. To identify where and why NOAA Atlas 14 estimates are “consistently lower” than corresponding NRCC estimates, we compared 100-year estimates at 60-min and 24-hour durations. Maps showing differences in 100-year estimates between the two projects are shown in Figures A.4.2 and A.4.3. While at 24-hour duration, differences vary between -1.77 inches and 4.29 inches (in the Catskill Mountains area; see also comment 3.1), NA14 60-minute estimates are lower than NRCC estimates over most of the project area.*

*To understand the causes of the differences between the two projects, we looked at different factors that potentially affect estimates. Dissimilarities in types of data used in the analysis, frequency analysis methods (regionalization, distribution selection, parameterization, etc.) and interpolation techniques (NA14 accounting and NRCC not accounting for terrain) used in two projects all affect*

estimates, particularly at higher ARIs. Interpolation accuracy is also directly linked to a number and spatial distribution of gauged locations, and as discussed in response to comment 1.2, almost twice as many stations were available for NA14 project than for the NRCC project (see Table A.4.1).

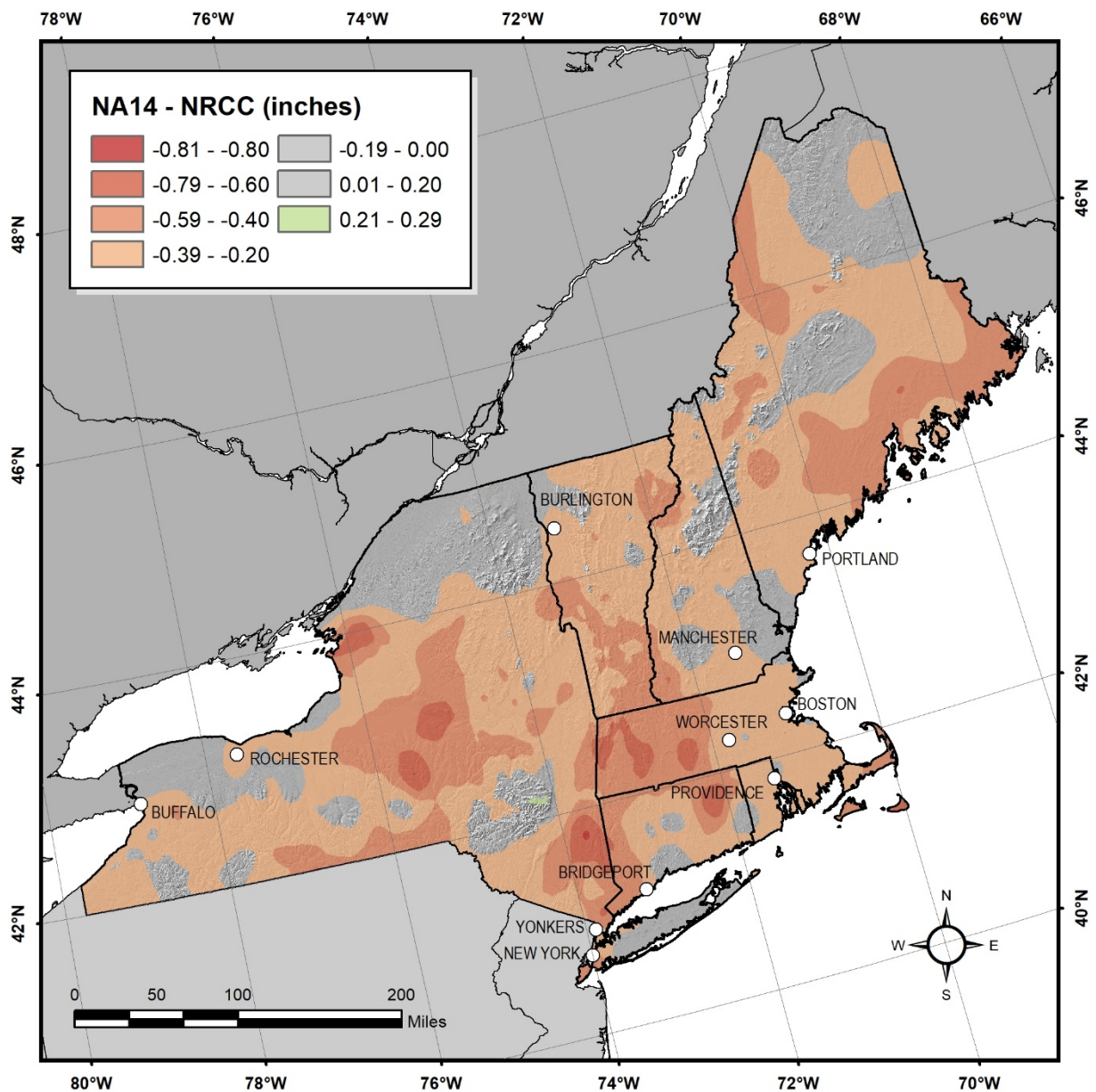


Figure A.4.2. Map showing differences in 100-year NA14 and NRCC estimates for 60-minute duration.

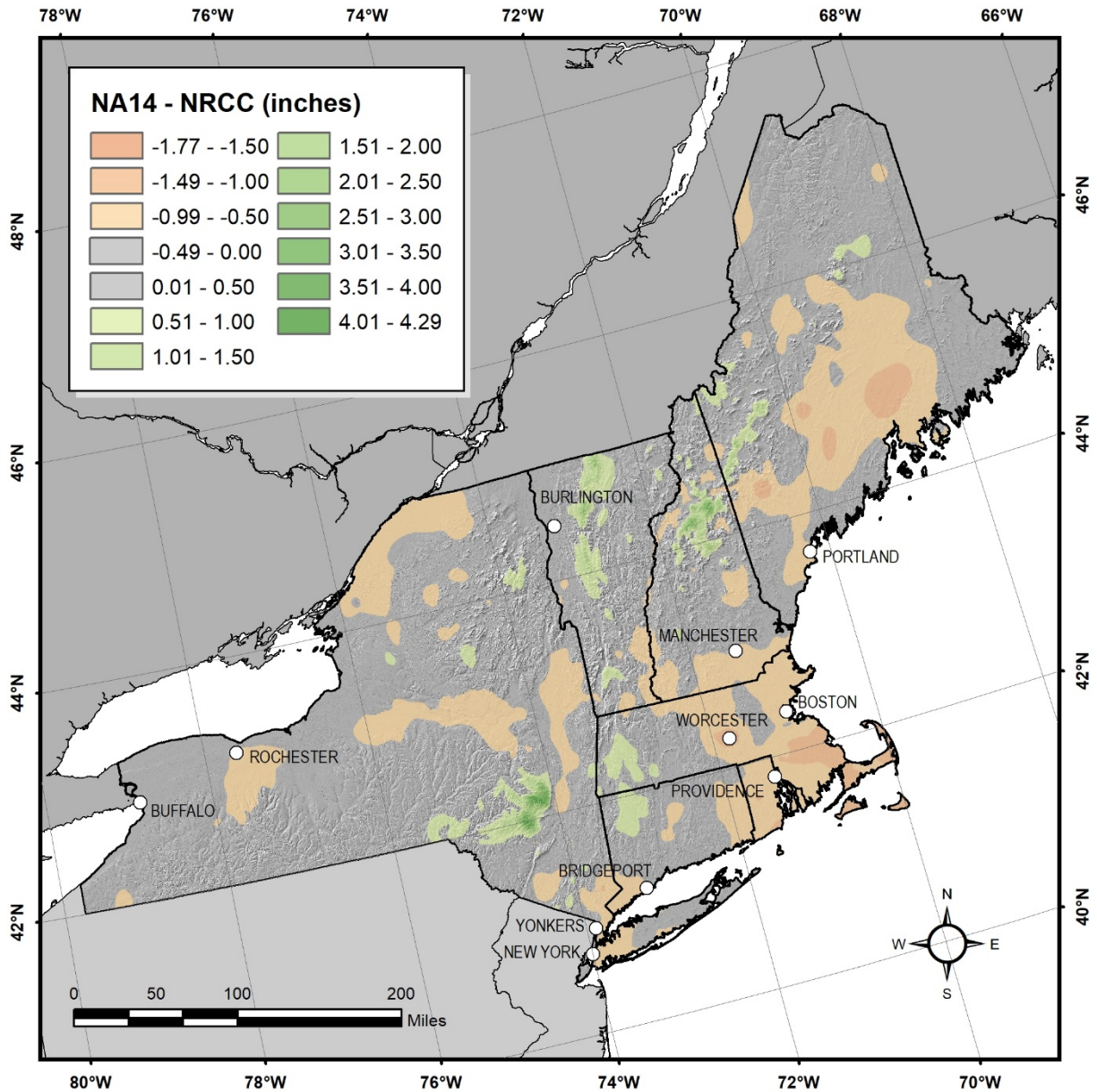


Figure A.4.3. Map showing differences in 100-year NA14 and NRCC estimates for 24-hour duration.

However, we believe that the significant effort that we put in data collection and quality control made a crucial impact on accuracy of NA14 estimates. Record length is one of the factors that have a profound effect on estimates (see our response to comment 2.2), and for many stations we extended records through digitization and merges. For example, NA14 100-year 24-hour estimate at ATT801 (96-0002 DLY) station in Attleboro, MA is about one inch lower than corresponding NRCC estimate of 8.89 inches. For this location, we digitized MADCR data for 1937-2013 period and merged it with 1893-1936 record from station 37-5882. Considering that the maximum 1-day amount observed during 118 years long period in the area is 6.47 inches, we think that 100-year NA14 estimate of 7.86 inches is reasonable. Similarly, NA14 100-year estimates are approximately 10% lower than corresponding NRCC estimates for both durations for the Boston station (19-0770 HLY/DLY). For this station, we extended records at both co-located stations with hourly data we

digitized for 1892-1948 period. Daily station's record was also merged with records from nearby stations 52-2895 DLY and 19-0775 DLY, which resulted in a total of 156 years of data across daily durations.

We also invested a lot of effort on screening questionable data at high (and low) extremities (Section 4.5). In the process, we identified and corrected many erroneous measurements, such as multi-day accumulations recorded as daily or hourly amounts or snowfall data reported as snow water equivalent (ratio of snowfall to snow water equivalent is typically assumed to be 10:1 if no other relevant information is available). Such errors are not easy to identify through automatic quality control procedures, such as the one used in the NRCC project. For example, we identified the top three amounts from the NRCC hourly time series for Plymouth, NY (30-6685 HLY) as a snowfall (3.81 inches on 8 December 1970, 2.50 inches on 4 January 1971, 2.34 inches on 2 April 1962); as well as the second, third, and fourth top amounts in the daily series for Taunton, MA (19-8367 DLY); the first and third top events in the daily time series for Dannemora, NY (30-1966 DLY), etc. Fixing those errors would lower NRCC estimates.

Furthermore, at several locations where NA14 estimates were lower, top amounts in the NRCC time series were from consecutive time intervals from a same storm event (time series data used in analysis should be independent). For example, top two hourly amounts at Watertown, NY station (30-9000 HLY) were consecutive hourly amounts from the 18 August 1949 storm event.

- 3.3. In general, the spatial patterns and relative magnitudes of the estimates meet our expectations. The results of the analysis are similar to, although in some areas higher than, the estimates that can be obtained on the NRCC-NRCS-NRCS web tool "Extreme Precipitation in New York & New England" (Precip.net). We look forward to the anticipated publication of Volume 10 of Atlas 14 in September 2015.

*NA14 estimates at un-gaged locations were developed using the PRISM hybrid statistical-geographical interpolation technique for mapping climate data, which accounts for topographic effects, and they are typically higher than corresponding NRCC estimates in higher elevation areas. In some high elevation areas, like in the Catskill Mountains, through the process of digitizing the data, merging data from nearby stations, etc. we ended up with a good number of reliable stations that further improved estimates.*

- 3.4. One of the issues in the NRCC-NRCS effort was smoothing of ARI for coastal communities. I did not review coastal locations because of limited time. The issue with smoothing along the coast is there are no precipitation stations in the ocean (or virtually only a few recognizing NOAA does have observation buoys some of which may collect precipitation data). It would be helpful if NOAA could QA/QC a few coastal stations to see if smoothing affects the results as one proceeds in distance from a weather stations. Locations in particular that would be beneficial to review are Chatham, MA, Hyannis, MA and Nantucket, MA. One of the features that the NRCC-NRCS offers that I would like to see the web based NOAA Atlas 14 offer is the ability to turn on or turn off the smoothing.

*We smoothed spatially interpolated precipitation frequency grids primarily to avoid station-driven contours showing up in areas of flat terrain. We applied a dynamic filter with adjustable parameters controlling the amount of smoothing, with no smoothing at the coastline and in the mountains, maximum smoothing in flat terrain, and a gradual transition in-between. Changes in NA14 estimates due to smoothing are typically miniscule. For more details, see Section 4.8.2.*

- 3.5. The other item the web based NRCC Atlas offers that I would like to see in NOAA Atlas 14 is the ability to download the actual AMS or PDS data series used in the analysis at individual weather stations. For each weather station used in the NRCC analysis, the partial duration series can be



downloaded. The “time series data” available through Atlas 14 appears to partially address this because at least in the case of the Ohio River valley States, it only appears to be available for some weather stations, but not all used in the analysis.

*[Time series](#) page provides access and information to the data used in NA14 precipitation frequency analysis. Starting with Volume 4, we derived PDS-based frequency estimates from the AMS data, and consequently only AMS data are available for download. The AMS series for a selected location in Massachusetts, for example, can be downloaded from the [PFDS page for MA](#) (after station location is selected).*

- 3.6. Because of the limited information available through the draft, our comments are limited. For purposes of my review, I downloaded the daily data series for Worcester Airport, Worcester, Massachusetts available from the NCDC. I converted the daily values to a 24-hour value using the relationship described in TP40. I then developed an annual maxima series (AMS) for Worcester Airport and fit them to the GEV, EV-I and Log Pearson Type III distributions, then compared those to results from TP40 and the NRCC-NRCS online atlas. In general, I found that for the Worcester Airport, that the draft Volume 10 had larger values than TP40, which I expected, but smaller values than the NRCC-NRCS atlas. The NRCC-NRCS used a partial duration series (PDS), which in general produces higher results than the AMS series, and fit them to a Beta-P distribution, which may be more right tailed than the GEV distribution. The draft values for the Worcester Airport were larger though than those I derived from the AMS I developed. Without knowing how daily data was transformed to a 24-hour value, whether a PDS or AMS was used, the period of record used, and whether some years in the series were censored (for instance due to QA/QC which may have found some values were inconsistent with geographically nearby stations), I was unable to reproduce the results for the Worcester Airport. Therefore, in the final product, an explanation should be provided for each Station what period was used, whether a PDS or AMS was used, what yearly values (if any) were censored, and what statistical distribution that data was fit to.

*NCEI’s Worcester RGNL AP daily station (19-9923 DLY) was merged with the nearby Worcester station (19-9928 DLY) and in that process, its record was extended back to 1889 (118 data years). The AMS series for this location could be downloaded from the [PFDS page for MA](#) (after station location is selected).*

*In the peer review instructions document (page 1, paragraph 4), we refereed reviewers to Section 4 of [NOAA Atlas 14 Volume 9](#) to learn more about NOAA Atlas 14 methods and process in general until documentation accompanying Volume 10 estimates is ready. For this document, we aimed to describe all aspects of the development of each NA14 artifact for this project area in sufficient depth to allow the knowledgeable user to understand the basis of the estimates and their scope and applicability.*

#### **4. Effects of non-stationary climate on estimates**

- 4.1. In particular, although entire period of record is used in such analyses (minus any censored years), because of an increasing trend in annual precipitation, clustering of annual maxima towards the end of the current period, and storms greater than 1-inch or 1.5 in a day, an examination should be conducted to determine if the ARI trend has increased such that earlier years should be censored, to make the ARI more representative of current conditions today. This approach would be similar to NOAA’s use of climate normal periods (e.g. 1981-2010, latest 30-year period) versus using the entire period of record to calculate averages.

As discussed in response to comment 2.2, record length has a substantial effect on estimates. Also, the ARI trend will not always increase if earlier years are censored. Some of the top amounts in the AM series at several locations came from the newly digitized pre-1948 period. Figure A.4.3a) shows, as an example, hourly AMS data for the Ithaca, NY hourly station (added data is shown in red) and Figure A.4.3b) corresponding precipitation frequency estimates from original data (black) and from the extended record (red). The newly added data increased at-station 100-year estimate from 1.6 to 2.6 inches. This newly digitized hourly data affected AMS at daily durations, as well; for example, 1935 and 1937 1-day AMS numbers for the Ithaca station nearly doubled and in fact 1935 value ended up being the highest 1-day AM.

We carefully examined the relative magnitude of any trend in the AMS for each station and each climate region (see Appendix A.4). Analysis demonstrated that for this project area, AMS trends across all durations were statistically significant for less than 20% of stations and that their effect on estimates was much smaller than the impact of record length. This finding led to the conclusion that the entire period of record is suitable for analysis as opposed to attempting to select a smaller and specific period of record that might be representative of some future climate.

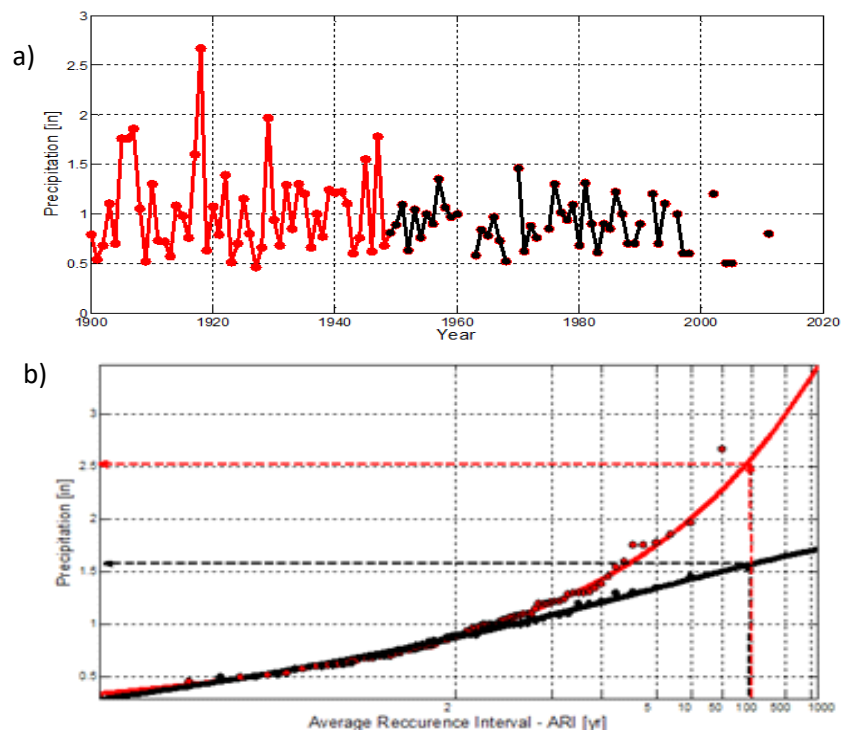


Figure A.4.3. a) 60-min AMS time series for the Ithaca, NY station (added data is shown in red); b) corresponding precipitation frequency estimates from original data (black) and from the extended record (red).

- 4.2. Given climate change, it would be helpful if the NOAA HDSC could produce future estimates of precipitation intensity on a design storm basis. The reality is that public and private infrastructure sized using the new Atlas 14 may become undersized at some point in the future, at least here in New England and New York State, because Atlas 14 only represents current climate, not future climate. Also, the effort to update Atlas 14 will likely not happen again in the near future given potential lack of federal and state funds. Providing a sister tool to predict future design storm intensity by ARI would allow States and engineers engaged in land development the opportunity to

design to future conditions, versus current conditions, to extend the longevity of public and private infrastructure.

*Current NA14 frequency analysis methods assume stationarity in both the historical data used in making the estimates and in the future conditions. We test the assumption of stationarity by applying various statistical tests to the AMS data. So far, tests have shown very little observable or geographically consistent temporal change in these data (see Appendix A.2).*

*There has been a growing concern among users of NA14 products that they have been developed for stationary conditions and as such may not appropriate in the presence of non-stationary climate. To understand the potential impact of non-stationary climate conditions on precipitation frequency estimates, we have developed the NA14 non-stationary frequency analysis method, testing the feasibility of incorporating climate projections into precipitation frequency analysis and assessing the added value of new precipitation frequency estimates with respect to traditional NA14 estimates.*

*Despite significant effort we put into this task, we still do not have a definite answer to whether a non-stationary approach is advantageous for the NA14 process. There is substantial uncertainty associated with modeling precipitation frequency estimates associated with different components of the process and we are evaluating uncertainty due to the stationarity assumption relative to other sources of errors. As an example, in order to address the non-stationarity issue, we had to change the current NA14 distribution parameterization method, and that change often had a larger impact on estimates than inclusion/exclusion of non-stationarity. Also, there is tremendous uncertainty associated with our ability to predict future extreme precipitation at high resolution spatial and temporal scales of interest to NA14 products. Nonetheless, we continue the investigation on this topic with our partners from academia and with the funding from the FHWA. We will gladly accept any suggestion or contribution. If you would like to follow the progress of this project, please check the latest Quarterly Progress Report published here: [Current Projects](#).*

## **5. Miscellaneous**

- 5.1. For the draft electronic NOAA Atlas 14 for Massachusetts, only curves were provided. For the final product, tables similar to those for other States already with operational Atlas 14's via the web must be provided. In the tables, it will be helpful to also include a row for daily (1-day) values, in addition to the 24-hour value, to prevent parties from confusing the 1-day value with the 24-hour value. Often after a significant precipitation event, parties relate the values of the 1-day storm with the 24-hour storm and without being properly transformed, the values aren't directly comparable. It would also be helpful to list the annual exceedance probabilities corresponding with the ARI (i.e. 1% AEP = 100-year ARI, list both), as USGS has transitioned to utilize only AEP, as the general public may get confused for instance when a 10-year storm occurs multiple times over a short period.

*As described in the peer review instructions document, only a limited set of estimates was shared with peer reviewers via a webpage that was developed for the review purposes only. Final products for this volume, which were released via [Precipitation Frequency Data Server \(PFDS\)](#) on 30 September 2015 are similar in format and type to products developed for all previous NOAA Atlas 14 volumes.*

*In the PFDS precipitation frequency tables, we provide only un-constrained estimates. If we were to provide both, constrained and un-constrained estimates, we would have to do that for all durations (for example, 60-min vs. 1-hr, 120-min vs. 2-hr, 24-hr vs. 1-day, 48-hr vs. 2-day).*

*Correction factors from Section 4.5.2 can easily be applied to convert constrained to unconstrained values, and vice versa.*

*In the tables, we provide estimates for frequencies expressed as ARI or AEP. We use the term AEP with AMS-based estimates and ARI with PDS-based estimates. Please see Section 4.6 for more details.*

- 5.2. On my very quick look I find it relatively hard to navigate. We use the old IDF (PF) data for 5min to 24 hours most frequently for relatively small coastal and mountain drainage basins, small pipes and catch basins. Changes in the IDF data with time would also be helpful information. For example if 30 min. rainfall intensities are increasing the most relative to other frequencies – that would be very helpful. I understand the Cornell data included the changes in the storm intensity with time.

*Regarding the web page navigation, please see our response to comment 5.1; regarding changes in the IDF data with time, please see our response to comment 4.2.*

## Appendix A.5. Temporal distributions

### 1. Introduction

Temporal distributions of precipitation amounts exceeding precipitation frequency estimates for the 2-year recurrence interval are provided for 6-, 12-, 24-, and 96-hour durations. The temporal distributions are expressed in probability terms as cumulative percentages of precipitation totals at various time steps. To provide detailed information on the varying temporal distributions, separate temporal distributions were also derived for four precipitation cases defined by the duration quartile in which the greatest percentage of the total precipitation occurred.

Stations were grouped into two climate regions, shown in Figure 4.1.2, and separate temporal distributions were derived for each climate region. Regions were delineated based on the climatology of extreme precipitation and the seasonality analysis of annual maxima from stations through the project area.

### 2. Methodology and results

The methodology used to produce the temporal distributions is like the one developed by Huff (1967) except in the definition of precipitation cases. In accordance with the way a precipitation case (“event”) was defined for the precipitation frequency analysis, a precipitation case for the temporal distribution analysis was computed as the total accumulation over a specific duration (6-, 12-, 24-, or 96-hours) and may contain parts of one or more storms. Because of that, temporal distribution curves presented here may be different from corresponding temporal distribution curves obtained from the analysis of single storms. Also, precipitation cases for this project always start with precipitation but do not necessarily end with precipitation, resulting in potentially more front-loaded cases when compared with distributions derived from the single storm approach. Cases were selected from all events of a given duration that exceeded the 2-year average recurrence interval at each station.

For each precipitation case, cumulative precipitation amounts were converted into percentages of the total precipitation amount at one-hour time increments. All cases for a specific duration were then combined and probabilities of occurrence of precipitation totals were computed at each hour. The temporal distribution curves for nine deciles (10% to 90%) were smoothed using a linear programming method (Bonta and Rao, 1988) and plotted in the same graph.

The cases were further divided into four categories by the quartile in which the greatest percentage of the total precipitation occurred. Table A.5.1 shows the total number of precipitation cases and number of cases in each quartile for each region and duration. Unlike the cases of 12-, 24-, and 96-hour durations in which the number of data points can be equally divided by four, the cases of 6-hour duration contain only six data points and they cannot be evenly distributed into four quartiles. Therefore, in this analysis, for the 6-hour duration, the first quartile contains precipitation cases where the most precipitation occurred in the first hour, the second quartile contains precipitation cases where the most precipitation occurred in the second and third hours, the third quartile contains precipitation cases where the most precipitation occurred in the fourth hour, and the fourth quartile contains precipitation cases where the most precipitation occurred in the fifth and sixth hours. This uneven distribution affects the number of cases contained in each quartile for the 6-hour duration.

From the [PFDS](#), regional temporal distribution data are available in a tabular form for a selected location under the “Supplementary information” tab or through the [Temporals](#) page. For 6-, 12- and 24-hour durations, temporal distribution data are provided in 0.5-hour increments and for 96-hour duration in hourly increments.

*Table A.5.1. Total number of precipitation cases and number (and percent) of cases in each quartile for selected durations for Interior region (1) and Coastal region (2).*

<b>Duration</b>	<b>Region</b>	<b>All</b>	<b>First quartile</b>	<b>Second quartile</b>	<b>Third quartile</b>	<b>Fourth quartile</b>
6-hour	1	4138	1355 (33%)	1188 (28%)	1063 (26%)	532 (13%)
	2	2308	451 (20%)	645 (28%)	790 (34%)	422 (18%)
12-hour	1	4303	1313 (30%)	1107 (26%)	1190 (28%)	693 (16%)
	2	2425	449 (19%)	682 (28%)	773 (32%)	521 (21%)
24-hour	1	3943	1240 (32%)	1107 (28%)	909 (23%)	687 (17%)
	2	2229	515 (23%)	679 (31%)	648 (29%)	387 (17%)
96-hour	1	3771	1588 (42%)	766 (20%)	739 (20%)	678 (18%)
	2	2163	998 (46%)	463 (21%)	325 (15%)	377 (18%)

### 3. Interpretation

Figures A.5.1 through A.5.4 show, as an example, temporal distribution curves for the first-, second-, third-, and fourth-quartile cases in the Interior region for 6-hour, 12-hour, 24-hour and 96-hour durations, respectively. First-quartile plots show temporal distribution curves for cases where the greatest percentage of the total precipitation fell during the first quarter of the duration (e.g., the first 3 hours of a 12-hour duration). The second, third, and fourth quartile plots are similarly for cases where the most precipitation fell in the second, third, or fourth quarter of the duration. Figure A.5.5 shows the temporal distribution curves of all precipitation cases in the Interior region for the 6-, 12-, 24-, and 96-hour durations. For these plots, time steps were converted into percentages of total durations for easier comparison.

The temporal distribution curves represent averages of many cases and illustrate the temporal distribution patterns with 10% to 90% occurrence probabilities in 10% increments. For example, the 10% curve in any figure indicates that 10% of the corresponding precipitation cases had distributions that fell above and to the left of the curve. Similarly, 10% of the cases had temporal distribution falling to the right and below the 90% curve. The 50% curve represents the median temporal distribution.

Temporal distribution curves are provided in order to show the range of possibilities. Care should be taken in the interpretation and use of temporal distribution curves. For example, the use of different temporal distribution data in hydrologic models may result in very different peak flow estimates. Therefore, they should be selected and used in a way to reflect users’ objectives.

The following is an example of how to interpret the results using the figure in the upper left panel of Figure A.5.1 for 6-hour first-quartile cases in the Interior region (region 1):

- In 10% of the first-quartile cases, 50% and 90% of the total precipitation fell in approximately 0.7 and 1.6 hours, respectively.
- A median case of this type will drop half of the precipitation (50% on the y-axis) in approximately 1.5 hours.
- In 90% of the cases, 50% of the total precipitation fell by 2.8 hours and 90% of precipitation fell in less than 5.5 hours.

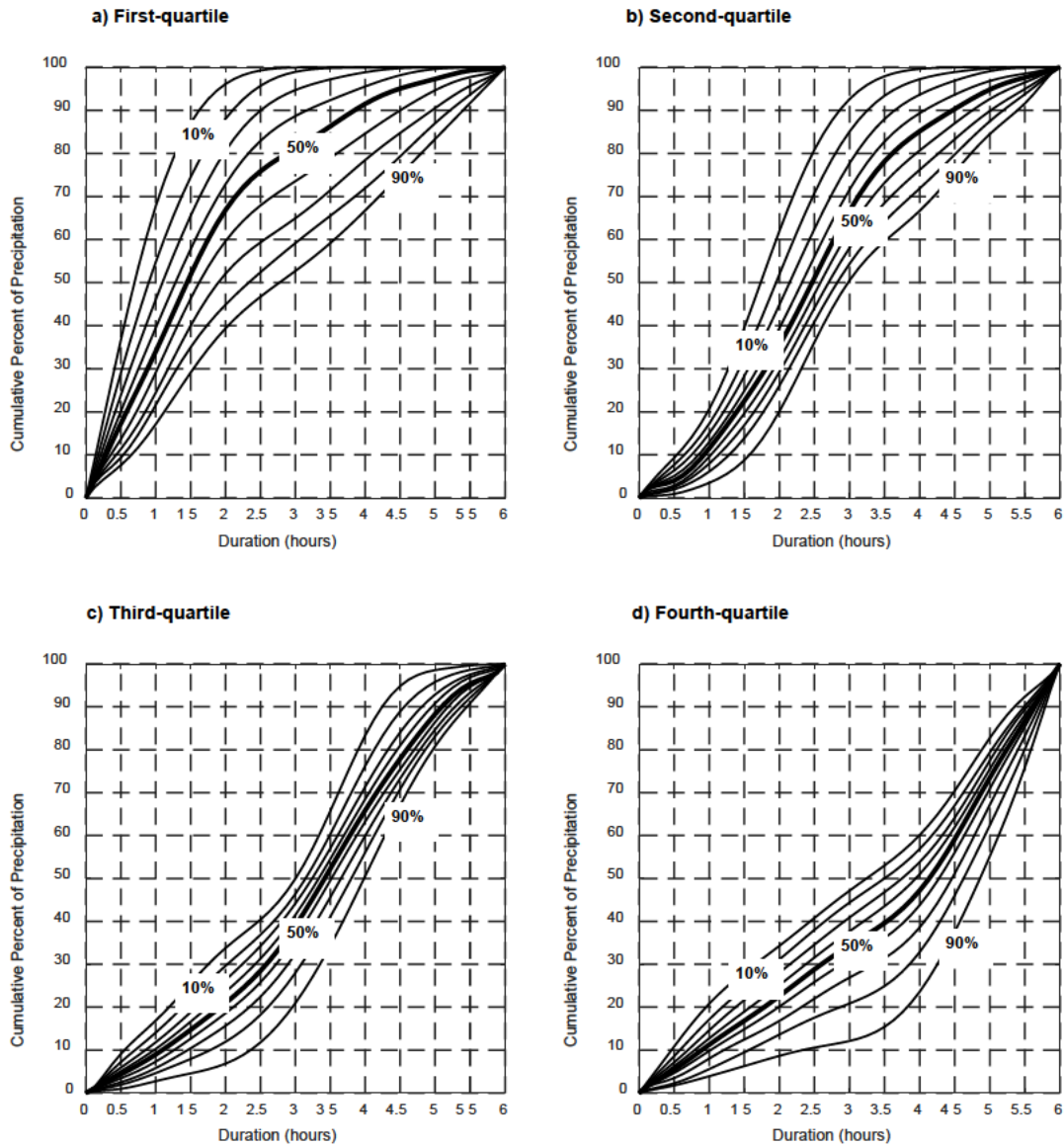


Figure A.5.1. 6-hour temporal distribution curves for the Interior region (region 1): a) first-quartile, b) second-quartile, c) third-quartile, and d) fourth-quartile cases.

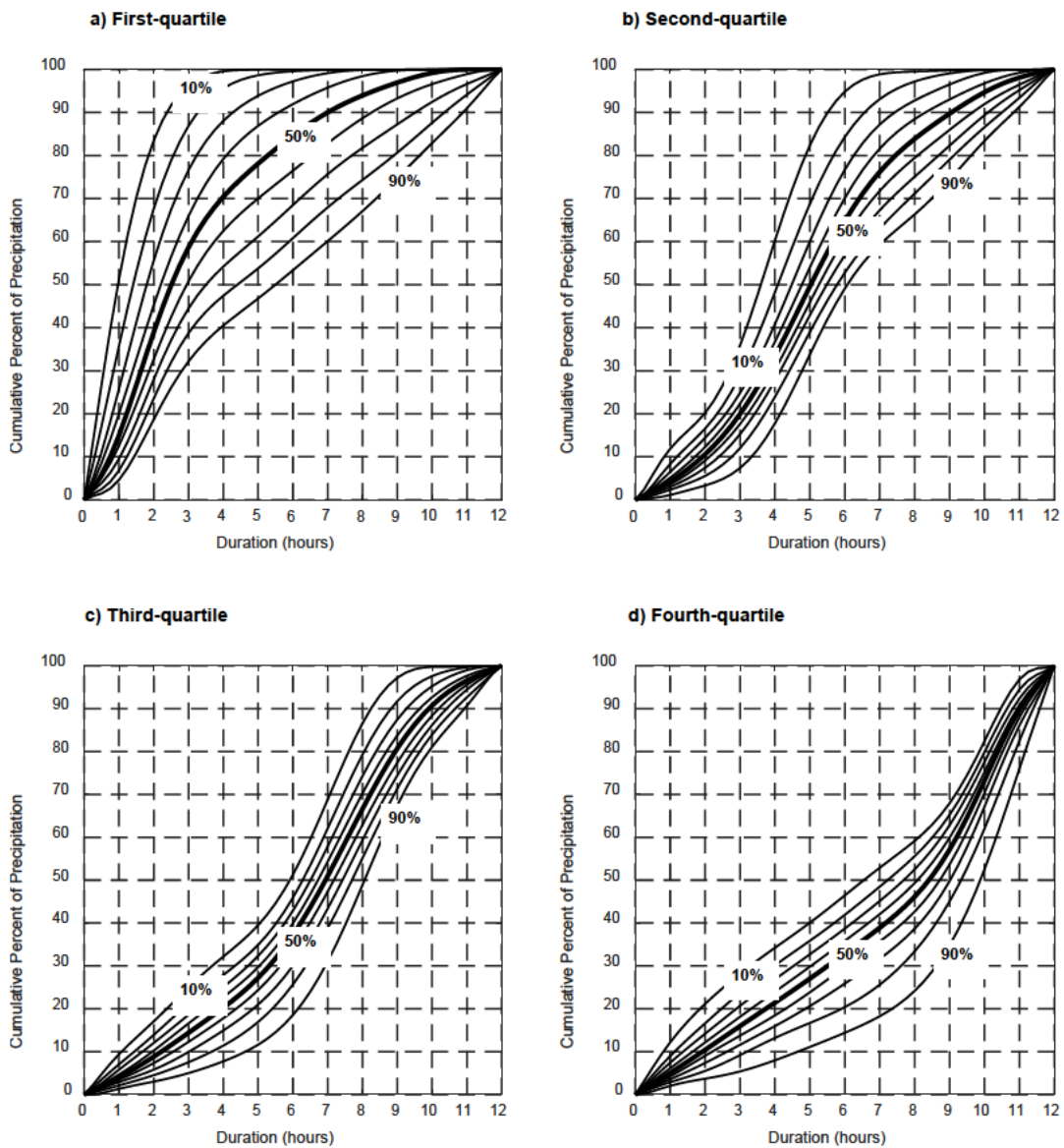


Figure A.5.2. 12-hour temporal distribution curves for the Interior region (region 1):  
 a) first-quartile, b) second-quartile, c) third-quartile, and d) fourth-quartile cases.



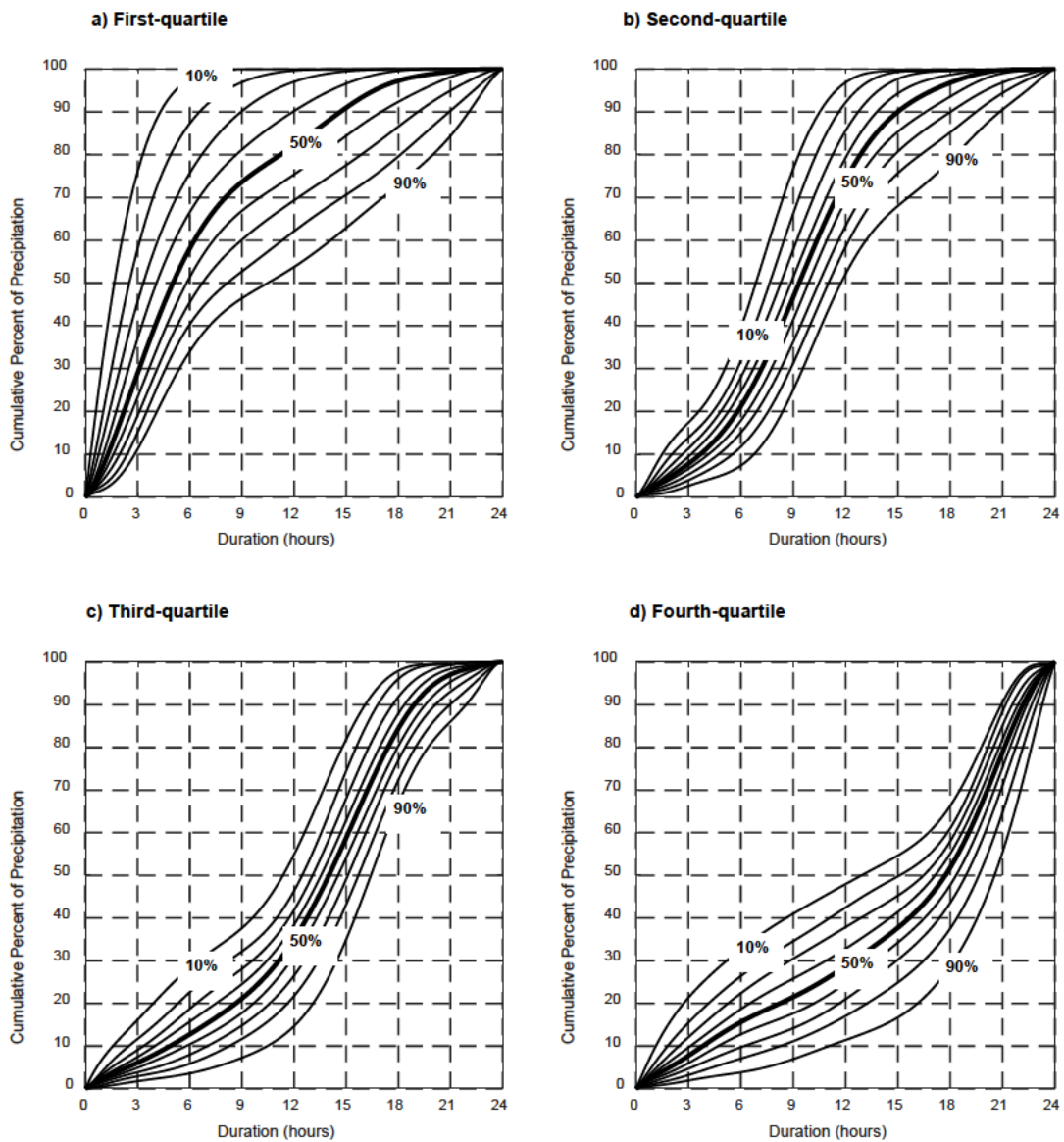
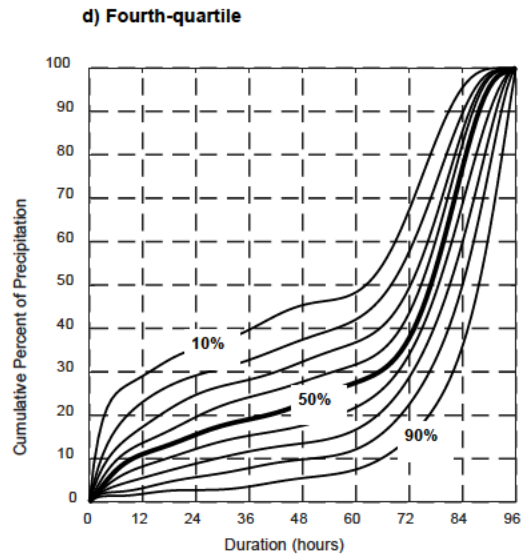
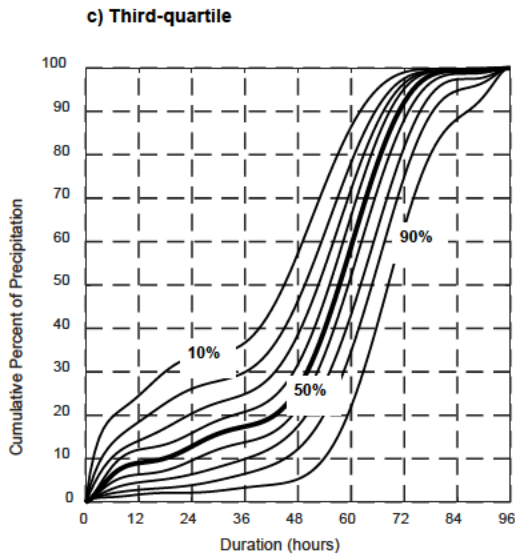
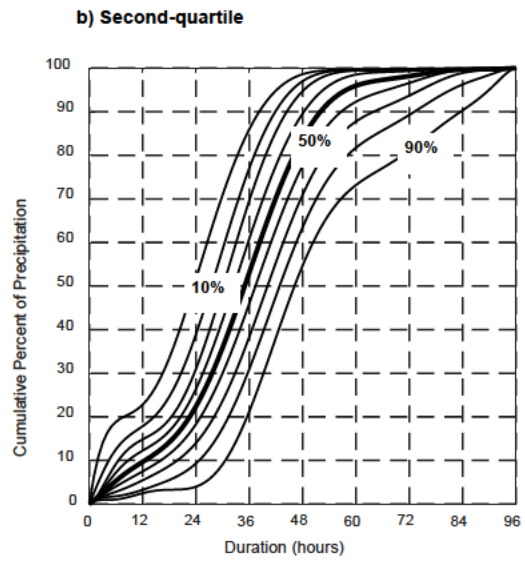
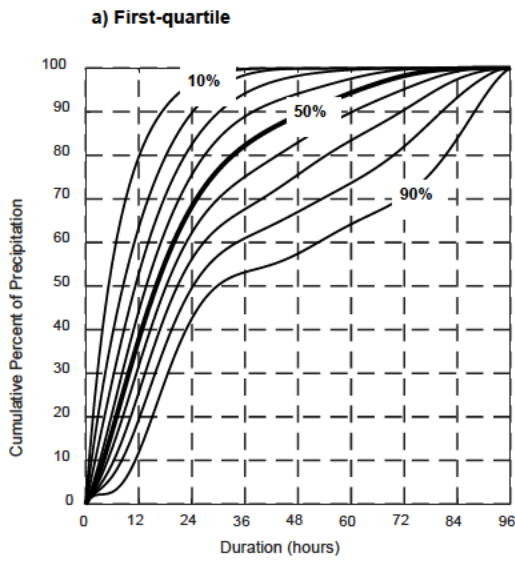


Figure A.5.3. 24-hour temporal distribution curves for the Interior region (region 1):  
 a) first-quartile, b) second-quartile, c) third-quartile, and d) fourth-quartile cases.



*Figure A.5.4. 96-hour temporal distribution curves for the Interior region (region 1): a) first-quartile b) second-quartile, c) third-quartile, and d) fourth-quartile cases.*

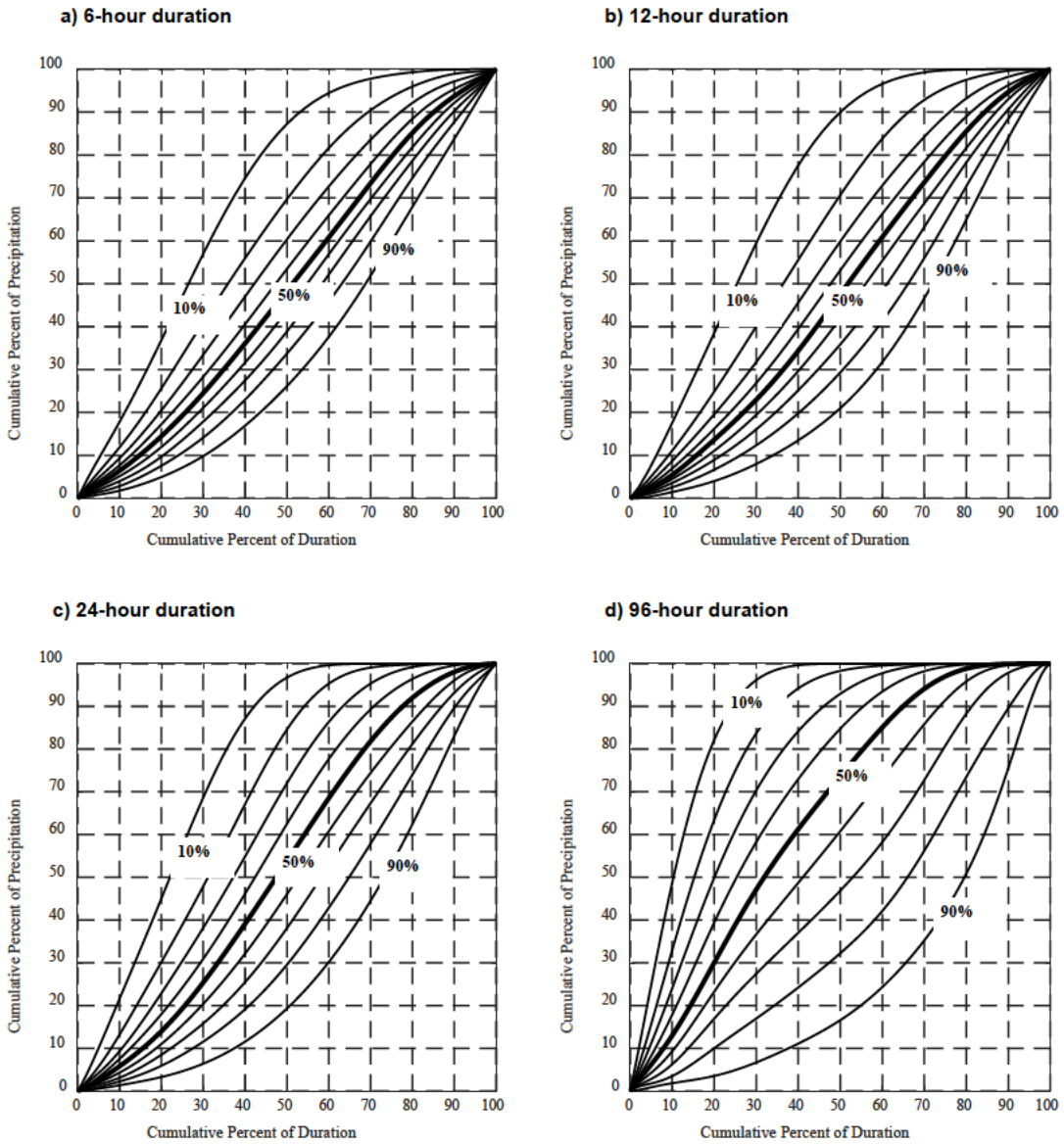


Figure A.5.5. Temporal distribution curves for the Interior region (region 1) all cases for: a) 6-hour, b) 12-hour, c) 24-hour, and d) 96-hour durations.

## Appendix A.6. Seasonality

### 1. Introduction

To portray the seasonality of extreme precipitation throughout the project area, annual maxima that exceeded precipitation frequency estimates (quantiles) with selected annual exceedance probabilities (AEPs) for chosen durations were examined for the two climate regions described in Section 4.1. Graphs showing the monthly variation of the exceedances for a region are provided for each location in the project area via the [Precipitation Frequency Data Server \(PFDS\)](#). For a selected location, seasonal exceedance graphs can be viewed by selecting “V. Seasonality analysis” from the “Supplementary information” tab on the output page.

### 2. Method

Separate seasonal exceedance graphs were created for the Interior region (region 1) and the Coastal region (region 2) shown in Figure 4.1.2. They show the percentage of annual maxima for a given duration from all stations in a region that exceeded corresponding precipitation frequency estimates at selected AEP levels in each month. Results are provided for 60-minute, 24-hour, 2-day, and 10-day durations and for AEPs of 1/2, 1/5, 1/10, 1/25, 1/50, and 1/100.

To prepare the graphs, first the number of annual maxima exceeding the precipitation frequency estimate at a station for a given AEP was tabulated for each duration. Those numbers were then combined for all stations in the region, sorted by month, normalized by the total number of data years in the region, and finally plotted via the PFDS.

### 3. Results

The exceedance graphs for a selected location (example in Figure A.6.1) indicate percent of annual maxima exceeding the quantiles with selected AEPs for various durations. The percentages are based on regional statistics. On average, 1% of annual maxima for a given duration in a year (i.e., the sum of percentages of all twelve months) are expected to exceed the 1/100 AEP quantile, 4% are expected to exceed the 1/25 AEP quantile, etc.

Note that seasonality graphs are not intended to be used to derive seasonal precipitation frequency estimates.

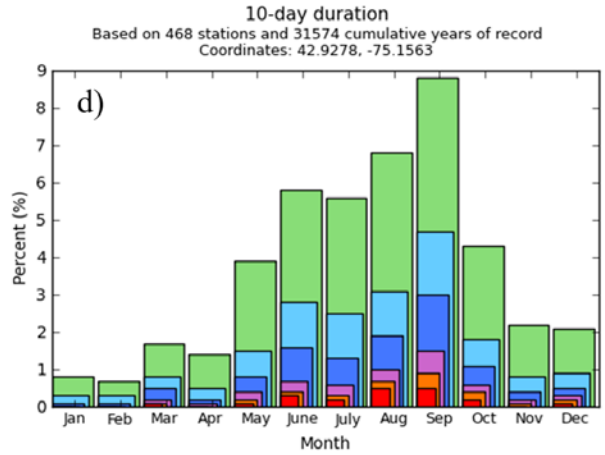
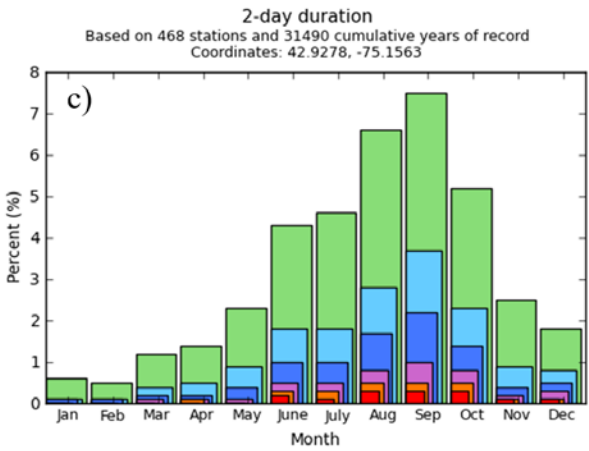
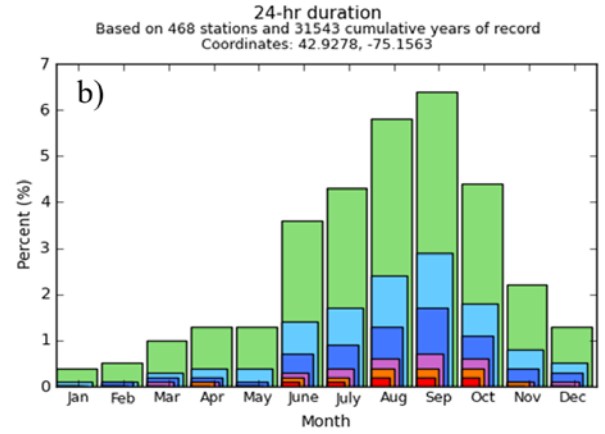
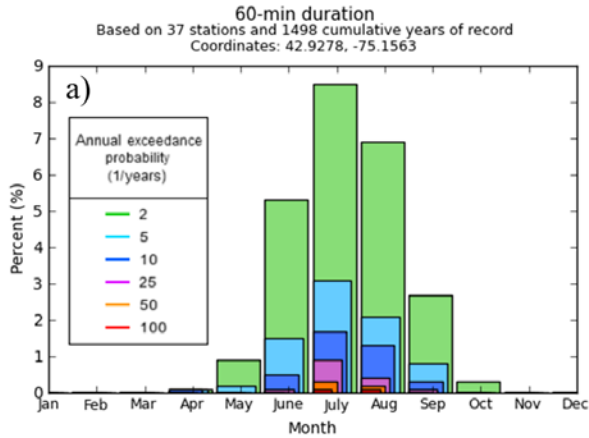


Figure A.6.1. Example of seasonal exceedance graphs for a location in the Interior region for the: a) 60-minute, b) 24-hour, c) 2-day, and d) 10-day durations.

## Acknowledgments

Funding for this project was provided by the CT Department of Transportation, MA Department of Transportation, ME Department of Transportation, NH Department of Transportation, NY Department of Transportation and VT Agency of Transportation. Geoffrey Bonnin, Edward Capone and George McKillop from NOAA were instrumental in promoting NOAA Atlas 14 and raising funds, and Kornel Kerenyi and Cynthia Nurmi coordinated activities of the Federal Highway Administration's Transportation Pooled Fund Program used to transfer funds to NOAA.

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The following colleagues provided feedback during the peer review (in alphabetical order): Michael E. Hogan, CT Department of Transportation; Thomas Maguire, MA Department of Environmental Protection; Alexander Mann, ME Department of Transportation; Dan Kelly, NWS Weather Forecast Office Buffalo NY; Scott Lincoln, NWS Lower Mississippi River Forecast Center; Dave Riley, NWS National Water Center; Bob Gaza, NY State Department of Environmental Conservation; David Follansbee, NY State Department of Environmental Conservation; Patrick Garner, Patrick C. Garner Co. Inc.; and Simeon Benson, USACE Fort Worth District.

Lastly, we'd like to acknowledge the contributions from the OWP colleagues: ZhiXin Li, who built peer-review and final PFDS web pages for this volume; Sarah Dietz, Debbie Martin, Ishani Roy, and Michael Yekta who worked on data collection for this volume; Geoffrey Bonnin (retired) and Ken Pavelle who provided wide-ranging support.

We would like to thank them all for their help and apologize in advance to those who were unintentionally omitted.

## Acronyms, abbreviations

(For list of abbreviations used to identify data sources, please see Table 4.2.1.)

AEP	Annual Exceedance Probability
AMS	Annual Maximum Series
ARI	Average Recurrence Interval
ASCII	American Standard Code for Information Interchange
ASOS	Automated Surface Observing System
CDMP	Climate Database Modernization Program
COOP	NWS Cooperative Observer Program
CV	Coefficient of Variation
DEM	Digital Elevation Model
GEV	Generalized Extreme Value
GHCN	Global Historical Climatology Network
HDSC	Hydrometeorological Design Studies Center
MAM	Mean Annual Maximum
MAP	Mean Annual Precipitation
NA14	NOAA Atlas 14
NCEI	National Centers for Environmental Information
NOAA	National Oceanic and Atmospheric Administration
NRCC	Northeast Regional Climate Center
NWS	National Weather Service
NYC DEP	New York City Department of Environmental Protection
OWP	Office of Water Prediction
PCHIP	Piecewise Cubic Hermite Interpolating Polynomial
PDS	Partial Duration Series
PFDS	Precipitation Frequency Data Server
PMP	Probable Maximum Precipitation
POR	Period of Record
PRISM	Parameter-Elevation Regressions on Independent Slopes Model
SID	Station Identification Number
TP	Technical Publication
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

## Glossary

*(All definitions are given relative to precipitation frequency analyses in NOAA Atlas 14 Volume 10.)*

**ANNUAL EXCEEDANCE PROBABILITY (AEP)** – The probability associated with exceeding a given amount in any given year at least once; the inverse of AEP provides a measure of the average time between years (and not events) in which a particular value is exceeded at least once. The term is associated with analysis of annual maximum series (see also **AVERAGE RECCURENCE INTERVAL**).

**ANNUAL MAXIMUM SERIES (AMS)** – Time series of the largest precipitation amounts in a continuous 12-month period (calendar or water year) for a specified duration at a given station.

**ASCII GRID** – Grid format with a 6-line header, which provides location and size of the grid and precedes the actual grid data. The grid is written as a series of rows, which contain one ASCII integer or floating point value per column in the grid. The first element of the grid corresponds to the upper-left corner of the grid.

**AVERAGE RECURRENCE INTERVAL (ARI; a.k.a. RETURN PERIOD, AVERAGE RETURN PERIOD)** – Average time between *cases of a particular precipitation magnitude* for a specified duration and at a given location; the term is associated with the analysis of partial duration series. However, ARI is frequently calculated as the inverse of AEP for the annual maximum series; in this case it represents the average period between years in which a given precipitation magnitude is exceeded at least once.

**CONSTRAINED OBSERVATION** – A precipitation measurement or observation bound by clock hours and occurring in regular intervals. This observation requires conversion to an unconstrained value (see **UNCONSTRAINED OBSERVATION**) because maximum 60-minute or 24-hour amounts seldom fall within a single hourly or daily observation period.

**DATA YEARS** – See **RECORD LENGTH**.

**DEPTH-DURATION-FREQUENCY (DDF) CURVE** – Graphical depiction of precipitation frequency estimates in terms of depth, duration, and frequency (ARI or AEP).

**DISTRIBUTION FUNCTION (CUMULATIVE DISTRIBUTION FUNCTION)** – Mathematical description that completely describes frequency distribution of a random variable, here precipitation. Distribution functions commonly used to describe precipitation data include 3-parameter distributions such as Generalized Extreme Value (GEV), Generalized Normal, Generalized Pareto, Generalized Logistic, and Pearson type III, the 4-parameter Kappa distribution, and the 5-parameter Wakeby distribution.

**FREQUENCY** – General term for specifying the average recurrence interval or annual exceedance probability associated with specific precipitation magnitude for a given duration.

**FREQUENCY ANALYSIS** – Process of derivation of a mathematical model that represents the relationship between precipitation magnitudes and their frequencies.

**FREQUENCY ESTIMATE** – Precipitation magnitude associated with specific average recurrence interval or annual exceedance probability for a given duration.

**INTENSITY-DURATION-FREQUENCY (IDF) CURVE** – Graphical depiction of precipitation frequency estimates in terms of intensity, duration and frequency.



**INTERNAL CONSISTENCY** – Term used to describe the required behavior of the precipitation frequency estimates from one duration to the next or from one frequency to the next. For instance, it is required that the 100-year 3-hour precipitation frequency estimates be greater than (or at least equal to) corresponding 100-year 2-hour estimates.

**L-MOMENTS** – L-moments are summary statistics for probability distributions and data samples. They are analogous to ordinary moments, providing measures of location, dispersion, skewness, kurtosis, and other aspects of the shape of probability distributions or data samples, but are computed from linear combinations of the ordered data values (hence the prefix L).

**MEAN ANNUAL PRECIPITATION (MAP)** – The average precipitation for a year (usually calendar) based on the whole period of record or for a selected period (usually 30 year period such as 1971-2000).

**PARTIAL DURATION SERIES (PDS)** – Time series that includes all precipitation amounts for a specified duration at a given station above a pre-defined threshold regardless of year; it can include more than one event in any particular year.

**PRECIPITATION FREQUENCY DATA SERVER (PFDS)** – The on-line portal for all NOAA Atlas 14 deliverables, documentation, and information (<https://hdsc.nws.noaa.gov/hdsc/pfds/>).

**PARAMETER-ELEVATION REGRESSIONS ON INDEPENDENT SLOPES MODEL (PRISM)** – Hybrid statistical-geographic approach to mapping climate data developed by Oregon State University's PRISM Climate Group.

**QUANTILE** – Generic term to indicate the precipitation frequency estimate associated with either ARI or AEP.

**RECORD LENGTH** – Number of years in which enough precipitation data existed to extract meaningful annual maxima in a station's period of record (or data years).

**UNCONSTRAINED OBSERVATION** – A precipitation measurement or observation for a defined duration. However, the observation is not made at a specific repeating time, rather the duration is a moveable window through time.

**WATER YEAR** – Any 12-month period, usually selected to begin and end during a relatively dry season. In Volume 10, it is defined as the calendar year (January 1 to December 31).

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NOAA Atlas 14 Volume 10 Addendum

# Precipitation-Frequency Atlas of the United States

Volume 10 Version 3.0: Northeastern States

(Connecticut, Maine, Massachusetts, New Hampshire,  
New York, Rhode Island, Vermont)

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## 1. SUMMARY

The NOAA Atlas 14 Volume 10 Version 3 update reflects changes made to the precipitation frequency estimates for the Volume 10 project area. The changes include:

1. Adjusted precipitation frequency estimates for 100-year and above average recurrence intervals at two locations;
2. Changed smoothing function used to improve the shape of the depth-duration-frequency curves;
3. Minor adjustments on lower bounds of 90% confidence interval at longer daily durations to improve overall consistency across durations.

Volume 10 Version 3 information supersedes information in Version 2.

## 2. UPDATES

### 2.1. Improved precipitation frequency estimates at the Warren, NH (27-8885) and Woonsocket, RI (37-9423) stations

1000-year estimates at the Warren, NH (27-8885) station and estimates for ARIs of 100-year and above at Woonsocket, RI (37-9423) from Version 2 were unreasonably high, due to a data-entry error. This error affected the most estimates at 24-hour. After correction, the 100-year 24-hour estimate for Warren decreased from 6.75 to 6.13 inches and the 1000-year estimate went down to 8.97 inches from 11.75 inches. The 1000-year 24-hour estimate at Woonsocket changed from 13.36 inches to 12.63 inches. The map in Figure AD.1 illustrates the differences between Version 3 and Version 2 1000-year 24-hour estimates in inches.

### 2.2. Improved shape of depth-duration-frequency curves

The cubic spline smoothing function used in Version 2 to improve the shape of the depth-duration-frequency curves was replaced in Version 3 with a PCHIP (Piecewise Cubic Hermite Interpolating Polynomial) function (Fritsch and Carlson, 1980). Overall change to estimates across all durations and frequencies due to this modification was trivial. Figure AD.2 shows the difference in inches between 20-day 200-year estimates from Versions 3 and 2 where the highest adjustment was observed. Section 4.6.3 provides more information on this process.

### 2.3. Adjustments on lower bounds of 90% confidence interval

Version 2 lower bounds of 90% confidence interval for durations longer than 20-day and ARIs above 100-year from Version 2 failed consistency checks in some locations by fractions of an inch. In Version 3 that error was fixed. Figure AD.3 shows, as an example, the areal extent and magnitude (in inches) of the changes to the 60-day lower bounds at 1000-year ARI where the highest adjustments were observed.

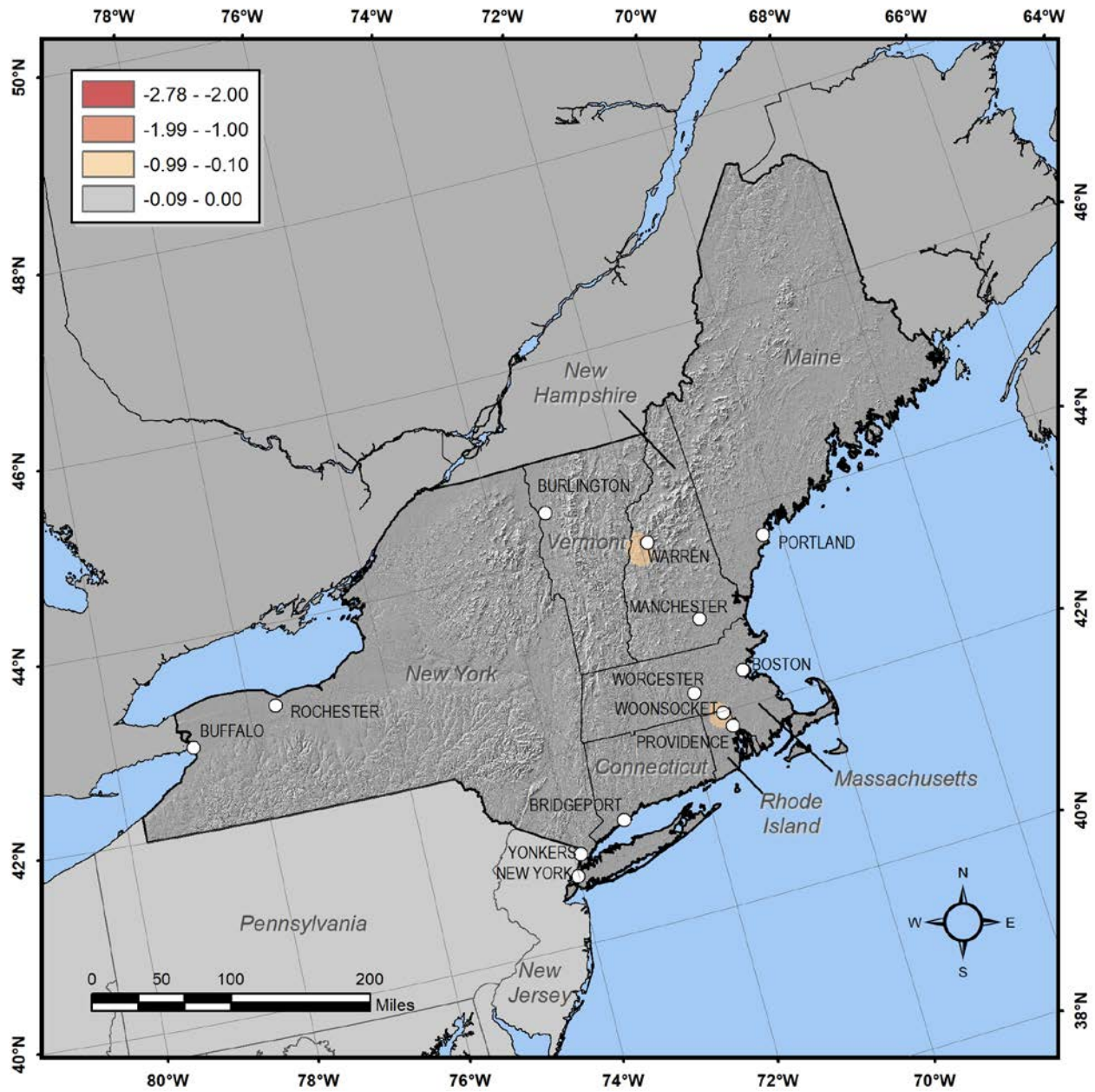


Figure AD.1. Differences (in inches) for 1000-year 24-hour estimates from Version 3 and Version 2.

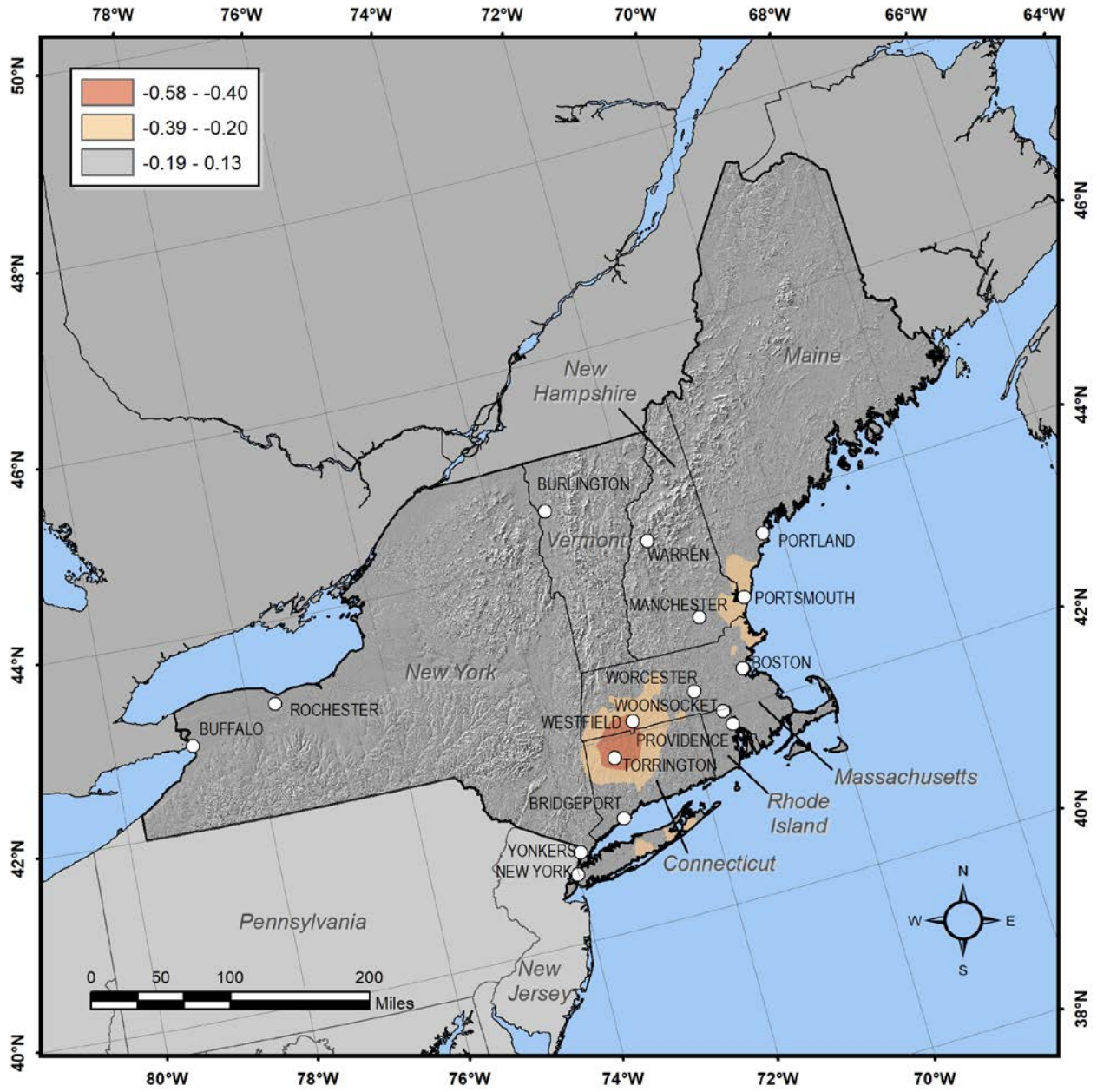


Figure AD.2. Differences (in inches) for 200-year 20-day estimates from Version 3 and Version 2.



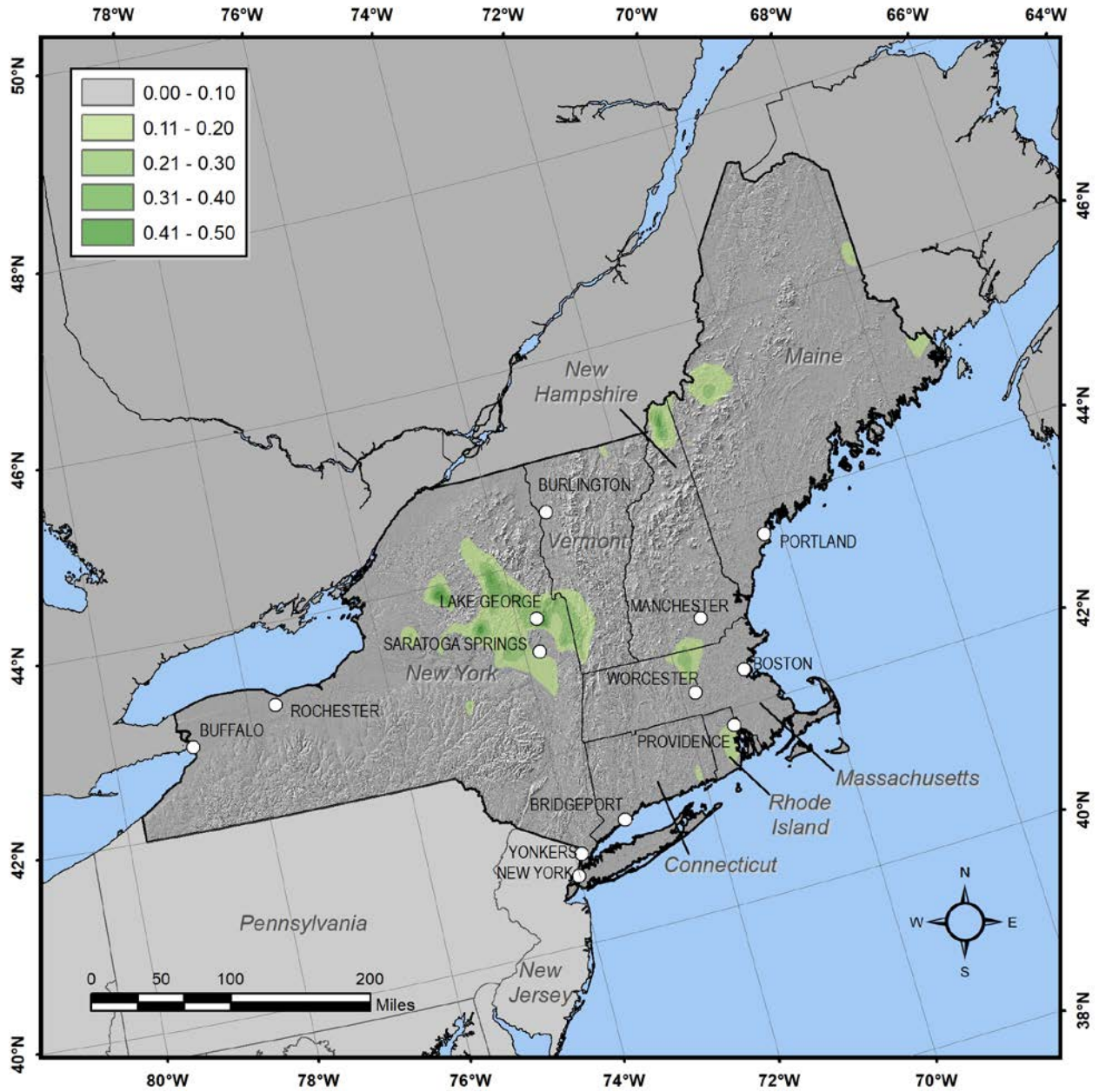


Figure AD.3. Differences (in inches) between Version 3 and Version 2 lower bounds of 90% confidence interval for 1000-year 24-hour estimates.