

ASOS 1- Minute Data Set

Author:

National Centers for Environmental Information

1.0 Data Set Description

This dataset contains one minute resolution surface meteorological data from the Automated Surface Observing System (ASOS) network of ~860 stations (Fig. 1) in the United States and a few locations around the world primarily at US military bases. These data were collected and archived by the National Centers for Environmental Information (NCEI; formerly the National Climatic Data Center).

Data Version: 1.0

Release Date: 7 June 2022

Data Status: Final and continuing

Time period: January 2022 to nearest month

Location: United States and scattered locations around the world

Data Frequency: One minute

Data source: National Centers for Environmental Information

Data set restrictions: None

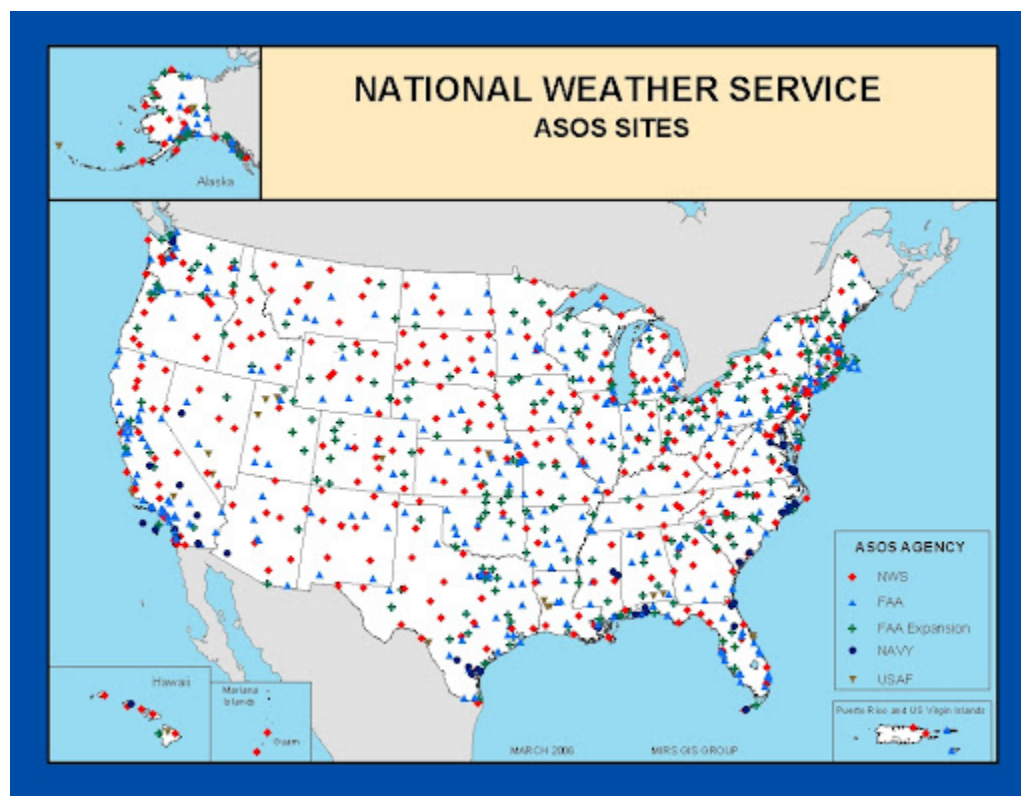


Figure 1. ASOS locations only those in the contiguous US are included in this dataset.

2.0 Instrument Description

ASOS instrumentation is described in the ASOS User's Guide document included with this dataset.

3.0 Data Collection and Processing

ASOS data collection and processing is described in the ASOS User's Guide document included with this dataset.

4.0 Data Format

The ASOS data are in two formats, "Page 1" and "Page 2". Page 1 files contain visibility and wind data and Page 2 files contain precipitation, pressure, temperature, and dew point data.

The data are in monthly tar files by data type. The tar files contain monthly data by ASOS station. The station file naming convention is:

asos-1min-pg1-K1J0-202209.dat

asos-1min-pg2-K1J0-202209.dat

Where pg? Signifies which page of data are included, K1J0 is the call sign for the station and 202209 is the four digit year and two digit month.

A summary of the file formats can be found in the asos-1min-pg1_documentation.pdf and asos-1min-pg2_documentation.pdf files that are included with this dataset.

5.0 Data Remarks

These are the real time data from the ASOS stations retrieved by NCEI and no additional quality control has been performed beyond that done by the ASOS software.

6.0 References

NCDC, 2022: DATA DOCUMENTATION FOR DATA SET 6405 (DSI-6405). Retrieved from <https://www.ncei.noaa.gov/data/automated-surface-observing-system-one-minute-pg1/doc/> on 6 October 2022.

NCDC, 2022: DATA DOCUMENTATION FOR DATA SET 6406 (DSI-6406). Retrieved from <https://www.ncei.noaa.gov/data/automated-surface-observing-system-one-minute-pg2/doc/> on 6 October 2022.

NOAA, 1998: ASOS User's Guide. Retrieved from <https://www.ncei.noaa.gov/data/automated-surface-observing-system-one-minute-pg1/doc/> on 6 October 2022.

NOAA, 1998: ASOS User's Guide Appendices. Retrieved from <https://www.ncei.noaa.gov/data/automated-surface-observing-system-one-minute-pg1/doc/> on 6 October 2022.