

Data Submission Guide for the Global Surface Databank

This provides a description of the process for providing raw native digitized (Stage 1) data to the global databank*. Adhering to these guidelines will ensure data are accurately and efficiently added to the databank with the fewest complications. The stages of data in the global databank are described online at http://www.gosic.org/GLOBAL_SURFACE_DATABANK/GBD.html.

TYPE OF DATA

The global databank aims to be a repository for original raw climate observations that have not been subjected to quality control or homogeneity adjustments. If only quality controlled or bias corrected data are available, please provide information on the procedures used and relevant flagging schemes associated with each observation.

Although this guide provides information on submitting raw native digitized data, if imaged forms containing observations are available their submission also is encouraged. Imaged forms or data in hard copy only can be submitted by following the instructions at the IEDRO video linked from <http://www.surface temperatures.org/databank/data--rescue-task-team>

WEATHER AND CLIMATE ELEMENTS

The highest priority is on collection of temperature data on Daily and Monthly timescales. The databank hosts also would like to collect precipitation data and other elements as well as data collected on sub-daily timescales (e.g., hourly) if they are available.

Element Priority

1. Daily Maximum Temperature
2. Daily Minimum Temperature
3. Daily Mean Temperature
4. Monthly Mean Maximum Temperature
5. Monthly Mean Minimum Temperature
6. Monthly Mean Temperature
7. Daily Precipitation total
8. Monthly Precipitation total
9. Daily Snowfall total
10. Daily Snow Depth
11. Monthly Snowfall totals
12. Other weather and climate elements and timescales

DATA FORMAT

The data should be provided in the original native format. Examples of possible formats include ASCII text, Microsoft Excel, XML, NetCDF, and any other used to originally digitize the raw observations.

ANCILLARY INFORMATION TO ACCOMPANY THE DATA

A minimum of two files of ancillary information are needed to properly process the data submission. A third file containing additional metadata information would be extremely beneficial as well as any data access and read software that could be used as a starting point for use of the stage 1 data.

1. Description of data file format and contents (Required)

- a. With each data submission provide a detailed description of the data file format and what data are contained within each column of the file.
- b. Also provide information regarding the original source of the data.
 - i. If original observations exist in paper form.
 - ii. If original observations exist in paper forms that have been imaged.
 - iii. The host organization where the original paper or imaged forms are archived.
 - iv. Indicate if the data were collected from automated sensors for which no hard copy or image exists. If the data were provided by automated sensors, please indicate the host organization where the original engineering unit data are archived.

2. Station Metadata information (Required)

Provide a second file containing metadata information on each station. The minimum requirements for this file include:

- i. Station name
- ii. City, State, and Country where located
- iii. Latitude and Longitude of station (preferably in decimal degrees to as much precision as possible)
- iv. Station elevation in meters or feet
- v. Time of Observation (for example, midnight local, midnight UTC, 0700 local)
- vi. National policy for reporting daily observation (Is observation recorded on the day the observation was taken or the previous day)

3. Additional Metadata information (Encouraged)

Additional metadata, if available, would be very helpful in assuring the highest data quality.

- i. Station History Information (dates of station moves and/or instrument changes)
- ii. Type of Instrument Sensor
- iii. Formulas used in computing means
- iv. Type of Observation; Manual or Automated
- v. Any other information you believe pertinent to characterizing the station or station environment.

4. Data access/read software (Encouraged)

Data providers can assist the databank by providing any available software that may simplify reading and access to the data.

DATA SUBMISSION

Data can be submitted to the databank through either anonymous ftp, e-mail, or mailing a CD-ROM via the postal service.

1. FTP: Consideration should be given to packaging all files together in a single zip'd or tar'd file. Use the following anonymous ftp location to place the data files and ancillary files.
<ftp://ftp.ncdc.noaa.gov>
Set the connection mode for data transfer to passive.
Change directories to /pub/upload/.
Put (upload) the file(s).
Send an e-mail to data.submission@surfacetemperatures.org notifying the databank hosts of the filenames and when the files were uploaded.
2. E-MAIL: E-mail the data and ancillary files directly to data.submission@surfacetemperatures.org. Large data files should be compressed. Consideration should be given to packaging all files together in a single zip'd or tar'd file.
3. CD-ROM: Copy the data and ancillary files to a CD-ROM and mail to the following address
World Data Center for Meteorology
National Climatic Data Center
Global Surface Temperature Databank, GCAD
151 Patton Avenue
Asheville, NC 28801

*The global databank is hosted by the Global Observing Systems Information Center (GOSIC) at http://gosis.org/GLOBAL_SURFACE_DATABANK/GBD.html .