

GHCN-D is a dataset that contains daily observations over global land areas.

Like its monthly counterpart, GHCN-Daily is a composite of climate records from numerous sources that were merged together and subjected to a common suite of quality assurance reviews. The archive includes the following meteorological elements:

- * Daily maximum temperature
- * Daily minimum temperature
- * Temperature at the time of observation
- * Precipitation (i.e., rain, melted snow)
- * Snowfall
- * Snow depth
- * Other elements where available

The format of the GHCN Daily data is different than NCDC's DSI 3200 dataset and may necessitate some changes for users accustomed to receiving monthly updates of DSI 3200. The format documentation of the GHCN Daily period of record station files and list of country codes can be found in the GHCN Daily "readme.txt" file located on the ftp server (<http://www1.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt> or <ftp://ftp.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt>).

This `by_year` directory contains an alternate form of the GHCN Daily dataset. In this directory, the period of record station files are parsed into yearly files that contain all available GHCN Daily station data for that year plus a time of observation field (where available--primarily for U.S. Cooperative Observers). The observation times for U.S. Cooperative Observer data come from the station histories archived in NCDC's Multinetwork Metadata System (MMS). The `by_year` files are updated daily to be in sync with updates to the GHCN Daily dataset. The yearly files are formatted so that every observation (i.e., station/year/month/day/element/observation time) is represented by a single row with the following fields:

station identifier (GHCN Daily Identification Number)
date (yyyymmdd; where yyyy=year; mm=month; and, dd=day)

observation type (see
<ftp://ftp.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt> for definitions)
observation value (see
<ftp://ftp.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt> for units)
observation time (if available, as hhmm where hh=hour and mm=minutes in local time)

The fields are comma delimited.

Further documentation details are provided in the text file
ghcn-daily_format.rtf in this
ftp://ftp.ncdc.noaa.gov/pub/data/ghcn/daily/by_year/ directory.

Users may find data files located on our ftp server at
<ftp://ftp.ncdc.noaa.gov/pub/data/ghcn/daily/all/>.

NOTE:

There is no observation time contained in period of record station files.

GHCN Daily data are currently available to ALL users at no charge. All users will continue to have access to directories for ftp/ghcn/ and ftp3/3200 & 3210/ data at no charge.

For detailed information on this dataset visit the GHCN Daily web page at <http://www.ncdc.noaa.gov/oa/climate/ghcn-daily/>

Please email questions/concerns to nndc.webborder@noaa.gov