

CADB v2 Monthly Summary Output Documentation

Edited: Thomas Collow/Sid Katz

Date last edited: 06/18/2020

This document describes the monthly output files from the Climate Assessment Database (CADB). These files contain monthly summary values based on global station observations. The monthly summary file is updated on the 1st of each month by 8am local eastern time (New York), and is based on the previous month's data.

Background and changes

- Below is a list of changes compared to the previous version of the monthly summary files:
- The station ID format is changed to have 6 characters in accordance with version 3 of the daily summary files (column 1).
- The full city name is added (column 3).
- The state abbreviation is added for U.S. sites (column 4); Region ID number is subsequently removed.
- The country name is added (column 5)
- The month used for the summary is now in column 6 instead of column 1.
- The latitude (column 7) and longitude (column 8) values now have a precision of 4 decimal places (ten-thousandths, i.e. 30.0000 deg N)
- The longitude values are modified to be in the range of -180 to 180 degrees East (as opposed to degrees West as in CADBv1) (column 8).
- The climflag is no longer included

File name and formatting

monthly_summary_YYYY\$mm_v2.csv - ASCII file is comma-delimited. YYYY\$mm denotes the month whose data is used for the summary (Example: The monthly summary that runs on 10/1/2019 uses data from September 2019 and produces an output file called monthly_summary_201909_v2.csv). Below contains more information about the content and format of the data.

Header - First row - contains column names.

Delimiter- Comma delimited with header of column names (CSV).

Missing values - A missing value for all variables is set to -99999

Column info:

Each of the columns in the file are listed in order below (left to right cols). Below info is formatted as:

Name of col - (unit, # decimals) description | Any related format info or notes

stn_id - (NA, NA) Station ID | Represented by 6 characters, prepending Metar station IDs (without a numeric only synoptic ID) with '99' (e.g. KCHO -> 99KCHO).

call - (NA, NA) Station call letters | 4 character identifier for each station

city - (NA, NA) City name. Does not contain commas, apostrophes, or spaces. May contain other symbols.

state - (NA, NA) United States state abbreviation. Represented by 2 characters. For non-U.S. locations this field value is denoted as a missing value.

country - (NA, NA) Country name. Does not contain commas, apostrophes, or spaces. May contain other symbols.

date - (date, NA) Valid date | Formatted as YYYYmm

lat - (deg N, ten-thousandths) Latitude of station | Values range from -90.0000 to 90.0000.

lon - (deg E, ten-thousandths) Longitude of station | Values range from -180.0000 to 180.0000. Negative values are treated as deg W.

elev - (meters, ones) Elevation of station.

atmp - (Deg C, tenths) Average temperature.

ntmp - (Deg C, tenths) Average normal temperature.

nbtmp - (int, NA) Number of maximum/minimum temperature pairs times 2

nyrt - (int, NA) Number of years for temperature normal

eyrt - (int, NA) Ending year for temperature normal yyyy format

amax - (Deg C, tenths) Average maximum temperature.

nbmax - (int, NA) Number of days with maximum temperature reported

amin - (Deg C, tenths) Average minimum temperature.

nbmin - (int, NA) Number of days with minimum temperature reported

himax - (Deg C, tenths) Extreme maximum temperature

hidy - (int, NA) Day of month with extreme maximum temperature

lomin - (Deg C, tenths) Extreme minimum temperature.

lody - (int, NA) Day of month with extreme minimum temperature

totpcp - (mm, tenths) Precipitation total.

nmpcp - (mm, tenths) Normal precipitation total.

nbdypcp - (int, NA) Number of days with final precipitation value

nyrp - (int, NA) Number of years for precipitation normal

eyrp - (int, NA) Ending year for precipitation normal yyyy format

nbtr - (int, NA) Number of days trace precipitation reported

nbdyrep - (int, NA) Number of days with reported precipitation value

nbobs - (int, NA) Number of observations taken at station

totrepr - (mm, tenths) Reported precipitation total