

Each file contains the following variables:

datetime dd/mm/yyyy hh:mm:ss

date dd/mm/yyyy

[some variable code from list below]

raw original values of variable

chk_note this field defines the quality of the record (see controlled vocabulary below)

chk_fail this field qualifies chk_note when not 'good' (see controlled vocabulary below)

Variable codes

at air temperature (C)

bphg air pressure (mmHg)

dp dew point (C)

rh relative humidity (%)

sr solar radiation (W/m² interval total, μ J/m²/s for interval max/min)

wd wind direction

ws wind speed (km/hr)

the suffix 'mn' is interval minimum

the suffix 'mx' is interval maximum

Controlled Vocabulary

CHK_NOTE: good, bad, doubtful, missing, adjusted

CHK_FAIL: Calibration, Persistence, Range, Spike, Step, Sensor Fail, Gap Filled

Data Curation:

Only the interval average data have been curated. All interval max/min files (those with the mn/mx suffixes) are still at provided by the ACP.

Curation steps:

- missing records added

- data are visually examined for outliers and obvious problems with calibration. Data are corrected when problems are of short duration; otherwise, they are marked as 'bad'. Some records are marked as 'doubtful' when they seem unusual, but not enough to be labelled as 'bad'
- missing records are gap filled – where possible. Gaps of 4 records or less are automatically gap filled using a simple linear regression. Larger gaps, up to approximately 24 hours, are filled by eye based on known patterns in the data. Most gaps are filled by linear regression, but others are fitted by manually entered curves.