

Campbell Data

Overview

Imports time series data from files in CSV format with four header lines containing a description of the time series:

- The first line contains the location id in the second column and the timestep in the last column
- The second line contains the IDs of the parameters
- The third line contains the units of the parameters
- The fourth line contains the qualifiers ids
- All other lines contain the time (in yyyy-mm-dd HH:MM:SS format) as the first field and the values for each time series in the next fields.
- "NAN" values are regarded as missing values.

Import type

The import type is CSV. There is no particular file extension required.

Example

Here is an example:

```
"TOA5","HUACARETA","CR1000","50133","CR1000.Std.25","CPU:Huacareta COOPI_v2_4_ftp.CR1","31621","Min15"
"TIMESTAMP","RECORD","Presion_mb","PCPN_Tot","TA","RH","ETos","Rso","RS_Flujo_W","RSTOTAL_Mj_Tot","WS_ms","
WindDir","WS_ms_Max","WS_ms_TMx"
"TS","RN","mbar","mm","Deg C","%","Deg C","Deg C","W/m^2","MJ/m^2","meters/second","degrees","meters/second","
meters/second"
"","","Smp","Tot","Smp","Smp","ETsz","RSo","Smp","Tot","Smp","Smp","Max","TMx"
"2012-10-01 20:35:00",0,0,0,25.5,37.57,0.001,0,0,0,1.025,234.9,1.025,"2012-10-01 20:35:00"
"2012-10-01 20:40:00",1,0,0,25.32,38.24,0.042,0,0,0,1.463,221.2,1.563,"2012-10-01 20:39:00"
"2012-10-01 20:45:00",2,0,0,25.04,39.04,0.057,0,0,0,1.8,277.4,1.8,"2012-10-01 20:45:00"
```

Details of the import format

The field separator is a comma (,) the decimal separator is a period (.)

Parameters with a "TMx" and "TMn" qualifier signal that the parameter stands for the time a maximum or minimum occurred. In the above example the last column with parameter "WS_ms_TMx" has a qualifier "TMx" and in the time series a time is shown. This should be interpreted as the exact time "WS_ms_Max", which is a maximum value parameter in the column before, occurred. Because at the time of writing this the exact use of this parameter for FEWS is unknown it will be skipped during import. A log warning will be shown: "parameter X will be skipped because of unknown use".

Java source code

[CampbellTimeSeriesParser.java](#)