FAQ: Importing a *.dat climate file

There are a variety of climate file formats that can be imported into T*SOL and PV*SOL but only the *.dat format is human-readable via a text program like Windows Notepad. This also means they can be edited. An example file can be downloaded from <here>. https://www.solardesign.co.uk/docs/Aberporth-hour.dat

If your climate data is available in hourly format (i.e. 8760 values each for temperature, global radiation, wind and relative humidity) then you can read these into the programs by saving the data as a tab-separated text file ASCII file, separating the rows of data with a TAB and eventually saving the file name to end as '****.dat'.

First row (the file headers) uses Quotation Marks each side of the location name: Example location Like This >>>>> "Location-name-as-it-will-appear-in-program"

Second row: Decimal latitude, Decimal longitude, altitude (m.o.s.l), time to nearest hour relative to Greenwich (eg -1 for Germany), and -30 should always be included at the end for legacy reasons. Here use commas to delineate

Example Header Like This >>>>>>> 48.1866,-16.3426,170,-1,-30

Third row: blank empty line

Fourth row: should be as shown below, each couplet separated by a TAB: Example 4th row Like This >>>>> Ta Gh FF RH

5th to 8764th Rows : external temperature (i.e. $7.0\,^{\circ}\text{C}$) – global radiation onto the horizontal (i.e. 98 Wh/m²) - wind speed (i.e. 5 m/s)- relative humidity (i.e. $72.3\,\%$); separated by a TAB. i.e. :

Data NOT LIKE THIS >>>> -5,0 0 1,8 75,5
Data Like This >>>>>>>> -5 0 0 1 8 75 5

The new file should be saved in any memorable temporary directory and the file renamed/saved with the suffix ******.dat

From the program choose the Climate dialogue (Meteosyn) and the 'Options' tab. The 'Import' button will allow the previously saved *****.dat file to be imported. Note the file type drop-down bottom right has to be first selected as *.dat.