Additional information needed to process Wüstebach tower EC data

Applies to data sets:

wuestebach-tower-ec raw 2011 03.tar.bz2 onward.

Uncompressing the data:

Linux:

tar -xjvf wuestebach-tower-ec raw xxxx xx.tar.bz2

Windows:

Some compression tools that advertise being able to handle tar.bz2 files are 7zip (http://www.7-zip.org/), and WinZip (commercial). You might be reqired to change the filename extension from .tar.bz2 into .tbz or .tb2. (untested)

On the command line use bzip2 (http://gnuwin32.sourceforge.net/packages/bzip2.htm) to uncompress the file

bzip2 -d wuestebach-tower-ec raw xxxx xx.tar.bz2

then tar (http://gnuwin32.sourceforge.net/packages/gtar.htm) to extract the individual data # gtar -xvf wuestebach-tower-ec_raw_xxxx_xx.tar

Mac OSX:

The default OSX archiving program should be able to handle the file format (untested)

Data file organization:

Each period is covered by two data files (yyyy is the data logger serial and xxx... is the start time of the file)

TOA5 yyyy.ts data xxxx xx xx xxxxx.dat, which contains the 20-Hz data and

TOA5_yyyy.rpv_data_xxxx_xx_xxx_xxx.dat, which contains 10-min averages

Each day is packed into one pairs of files, except for days, when the instruments were subject to maintenance. Data from such days are split at the time of the maintenance.

The *rpv_data* files additionally contain columns for battery voltage and 10-min averages of some of the 20-Hz data, which are intended remote function monitoring should not be used.

Note:

From 2011-03-01 12:52 on, the **CSAT3** diagnostic word and **LiCor-7500** diagnostic variable are contained in the ts_data files, as output by the respective device.

Site information:

Instrument height 38 m above ground

Surrounding forest height 30 m

Predominant tree species spruce plantation (picea abies)

CSAT heading (negative x-axis): 182° distance CSAT to LI7500 15 cm

heading of connecting line

from LI7500 to CSAT 182°

Tower is shadowing wind direction 343° to 25°

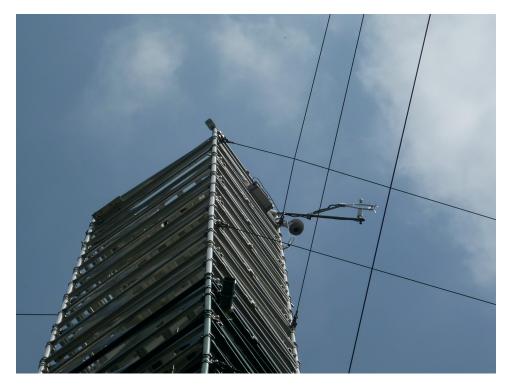
Geographic Position:

Spatial Reference System: EPSG:4326

easting: 6.330920219421387 northing: 50.50490188598633

TERENO identifier WU_K_002

View of the instruments:



Picture by Clemens Drüe, Umweltmeteorologie, Uni Trier, 2011