

Author: Oscar Hartogensis (oscar.hartogensis@wur.nl)
Version: 1.0 (Date: 21-Dec-18)

PAR WUR-MAQ – TR32-CloudRoots

General:

The Meteorology and Air Quality group of Wageningen University (WUR-MAQ) deployed two Photosynthetically Active Radiation (PAR) sensors at the TR32-Selhausen site as part of the CloudRoots experiment.

Instrument:

Kipp&Zn PAR-Lite sensors - SN050514 (PAR1) + SN050541 (PAR2)

Data availability: 06May-13July 2013

Location:

Selhausen.

Latitude: N50 51.954

Longitude: E6 26.840

Installation:

See pictures



Data:

- Timestamp is given in UTC
- Data were collected on same datalogger as IRGASON Eddy Covariance system
- Raw 20Hz data are organized in one netcdf-file per day (RAW subdirectory)
- Averaged data organized in one file for the whole experiment are available at 01s, 06s, 1min, 5min, 10min and 30min intervals in txt, netcdf, and matlab data formats (SLOW subdirectory):
 - On the datalogger data are already averaged and in post-processing the data are subsequently averaged to larger intervals. This is indicated in the filenames, e.g. *CloudRoots_PAR_in01min_out05min.txt* where the "in01min" indicates that the a datalogger averaged 01min series was averaged to a 5min series ("out05min").
 - For the files with "in01min", "in10min" and "in30min" also some averaged variables from the IRGASON Eddy Covariance system are included in the data-set.
 - Data are provided with self-explanatory headers which include the variable units

YYYY,DOY,HHMM,SS,P_Vaisala,Ux,Uy,Uz,Ts,H2O_EC100,CO2_EC100,cell_pressEC100,H2O_LiCor7500,CO2_LiCor7500,P_LiCor7500,PAR1,PAR2
[-],[-],[-],[-],kPa,m/s,m/s,m/s,C,g/m3,mg/m3,kPa,g/m3,mg/m3,kPa,mmol/m2/s,mmol/m2/s