Protocol for the workgroup

-Energy Balance / Sodar-

COPS Workshop, Hohenheim, 2007-03-27, 11:30 - 13:00

Sodar / RASS:

- Contributions: site and device descriptions to be downloaded from the UBT webpage, written down by Thomas Foken

  Fußbach BT, (E-Station) (Metek RASS)
  Oberkirch FR (Scintec)
  Gernsbach/Rotenfels UK (T-Station) (Scintec)
  Igelsberg FZK (T-Station) (Scintec)
  Enzklösterle UK (Scintec)
  Deckenpfronn FZK (S-Supersite) (Metek RASS)
  Achern UK (Scintec)
  French Supersite (Remtech)

- Measurement periods:
    - full time run if possible
    - otherwise low mode during night, high mode during convection
- Resolution:
    - Sodar: device depending highest / lowest level, best resolution; logging of wind vector and reflectivity data (except for Scintec Sodars: no reflectivity but Images of possible PBL height)
    - RASS: logging of virtual temperature, responsible for operation permit are operators
- to be discussed:
    - common timestamps, common data formats are under discussion

Scintilometer:

- Contributions: site and device descriptions to be downloaded from the UBT webpage, written down by Thomas Foken
- large aperture
    - contribution to data archive

- common meta data format to be discussed
- small aperture
  - only for comparison with EC methods

Energy balance:

- TK2 software of choice of flux calculations
  - to be checked by Freiburg / Vienna groups for input formats
- Data archiving:
  - Planar Fit for whole period
  - NetCDF format plus additional Metadata file: to be discussed with Hamburg, which file conversion tool to use (Zurich / Wageningen) by Foken
- EC measurement:
  - Contribution template for site and device descriptions to be downloaded and filled out / resubmitted to/from the webpage.
  - 20Hz frequency
  - no matrix calibration
  - no angle of attack correction
  - pFit offset to be switched on/off in TK2
  - quick-look software to be made available on UBT website
- Footprint:
  - 30° sectors: distance from measurement point to change in land use to be submitted by site manager to UBT after June 1.
  - flags for landuse / IBL will be included in TK2 output
  - submission of input file formats to UBT to create TK2 input routine
  - Freiburg group: additional sector with non automatic bad quality ratings to be mentioned in meta data
- Data / meta files for additional profile towers individually

WEB, email

- Subscribe for eMail system at COPS energy balance page, recommendations for creation of possible mail-groups
- WEB will be also used by mesonet network and GPS connected to energy balance stations