3rd training course/workshop on

EddyUH: a software for eddy covariance flux calculation

23 – 27.02.2015, University of Helsinki, Kumpula Campus, Helsinki, Finland

Final programme

Monday 23.02.2015

14:00 – 14:30 Welcome and Introduction to the workshop (Ivan Mammarella)

14:30 – 15:15 Eddy covariance fluxes: basic concepts and background (Timo Vesala)

15:15 - 15:30 Coffee break

15:30 – 16:15 Eddy covariance fluxes: basic concepts and background (Timo Vesala)

16:15 -17:00 Downloading, installing and testing EddyUH on trainee's computers (Ivan Mammarella/Olli Peltola).

Tuesday 24.02.2015

09:15 – 10:30 System design, set-up and calibration (Risto Taipale/Sigrid Dengel)

10:30 - 10:45 Coffee break

10:45 – 11:30 Rawdata post processing (Ivan Mammarella)

11:45 – 12:45 Lunch

12:45 – 14:00 Practical work with EddyUH: Setup and run pre-processor (Olli Peltola/ Ivan Mammarella)

14:15-15:00 Eddy Covariance of non-CO_2 GHGs (Olli Peltola)

15:00 - 15:30 Coffee break

15:30 – 16:00 Practical work with EddyUH: spectral analysis and planar fit tools (Olli Peltola/ Ivan Mammarella)

16:00 – 16:30 Visit to SMEAR III urban measurement station in the University Campus (Leena Järvi)

16:30 – 17:30 Practical work continues... (Olli Peltola/ Ivan Mammarella)

Wednesday 25.02.2015

09:15 – 10:15 Flux corrections (Ivan Mammarella)

10:30 - 10:45 Coffee break

10:45 – 12:00 Practical work with EddyUH: Lag times and transfer functions (Ivan Mammarella)

12:15 – 13:15 Lunch

13:30 – 15:00 Flux quality criteria and uncertainty (Olli Peltola)

15:00 - 15:30 Coffee break

15:30 - 17:00 Flux gap-filling methods(Pasi Kolari/ Sigrid Dengel)

Thursday 26.02.2015

09:15 – 10:30 Scientific presentations by the participants (15 min each)

10:30 - 10:45 Coffee break

10:45 – 12:00 Scientific presentations by the participants (15 min each)

12:15 – 13:15 Lunch

13:30 – 14:00 Scientific presentations by the participants (15 min each)

14:00 – 15:45 Practical work with EddyUH: calculate final flux values (Olli Peltola/ Ivan Mammarella)

15:45 - 16:00 Coffee break

16:00 – 17:30 Overview of ICOS (Werner Kutsch)

18:30 - Workshop dinner downtown.

Friday 27.02.2015

09:15 – 10:30 Practical work with EddyUH (Olli Peltola/ Ivan Mammarella)

10:30 - 10:45 Coffee break

10:45 – 11:45 Flux footprint (Üllar Rannik)

11:45 – 12:15 Summary and conclusion of the course/workshop (Ivan Mammarella)

Participant's presentations on Thursday (15 min each):

- R. Morrison, "Greenhouse gas flux measurements at eddy covariance sites in England and Wales".
- A. Krasnova, "SMEAR Estonia: overview".
- J. Braden-Behrens, "Eddy Covariance measurements for stable isotopes – A brief Overview".
- E. E. Ago, " Diurnal and seasonal variability of CO2 fluxes over a cultivated Savannah in Sudanian region in the northern part of Benin (West Africa)".
- K. Mukwashi, "Using eddy covariance measurements to assess the effects of land use (change) and climate change on carbon and turbulent energy fluxes in Southern African Savannah ecosystems".

Coffee break

- A. Bagavathsingh, "Micrometeorological measurements and turbulent fluxes at a tropical coastal site of Kalpakkam, India".
- L. Gentsch, "Eddy-covariance methane flux measurements over a European beech forest".
- N. Rößger, "Spatio-temporal variability of CO2 and CH4 fluxes in the Siberian Lena River Delta".
- F. Kittler, "Assessing the net effect of long-term drainage on a permafrost ecosystem through year-round eddy-covariance flux measurements".
- N. Vendrame, "Comparison of CO2 fluxes from eddy covariance and soil chambers measurements in a vineyard".

Lunch break

- A. Cumming, "Annual CO_2 fluxes measured at an intensively cultivate peatland in East Anglia, over multiple crop cycles".
- H. Wang, "Modelling carbon dioxide flux at a lowland peatland in East Anglia,UK".