

Workshop 14-16 August 2013, Bergen

Location: East Wing Auditorium of the historic building of the Geophysical Institute

Workshop planned presentations of ongoing studies

(discussions included within presentation timing)

Wednesday afternoon

13h30-13h45: **Introduction**

13h45-14h15 **Eric Bazile :**

Weaknesses of forecast models, that could be addressed with BLLAST dataset

14h15-14h45 **Wayne Angevine:**

"Soil moisture initialization for fine-scale episodic modeling."

14h45-15h15 **Ian Faloona:** Estimating and understanding the mesoscale subsidence during BLLAST

15h15-15h45 **Mariano Sastre Marugan:**

"Sensitivity of LSM and PBL schemes in WRF simulations of the Atmospheric Boundary Layer during the BLLAST campaign "

COFFEE BREAK 30 min

16h15-16h45 **Eric Pardyjak:** - Flux gradient theory during the transition period
- Decay of temperature variance

16h45-17h15 **Anneke van de Boer:**

"Entrainment influences on surface-layer measurements; detection and impact on Monin-Obukhov similarity theory"

17h15-17h45 **Daniel Martinez / Jochen Reuder:**

"Small scale surface temperature heterogeneities: effect on the Surface Energy budget"

"Monin-Obukhov similarity theory in the 2-m column of thermocouples in the Small-scale heterogeneity site"

18h00: Ice-breaker at the GFI cantina

Thursday morning

8h30-9h00 **David Pino** : Role of the residual layer and large-scale subsidence on the development and evolution of the convective boundary layer

9h00-9h30 **Marie Lothon:** Case study of 20 June 2011: LES set up and addressed issues

9h30-10h00 **Clara Darbieu:** Vertical and temporal evolution of turbulence spectra in the late afternoon transition

10h00-10h30 **Fabienne Lohou:** TKE decay at surface during BLLAST

COFFEE BREAK 30 min

11h00-11h30 **Erik Nilsson** :

Summary of previous studies, with some relations to BLLAST.

Evaluation of the performance of a GRAW radiosounding system from a short field campaign in the Baltic Sea

11h30-12h00 **Jochen Reuder:**

Overview of RPAS data analysis

12h00-12h30 **Line Båserud:**

Wind tunnel calibrations of the SUMO turbulence probe, and first results on u^* and TKE from the BLLAST SUMO measurements.

12h30-13h00 **Guylaine Canut:**

“Back on the high frequency measurements produced by tethered balloon during 12 IOPs of BLLAST”.

Thursday afternoon

Continuing of the presentations (if more time needed) and associated discussions, Reports from group activity

Jochen Reuder:

for S. Wacker, J. Gröbner, J. Reuder, H. Pietersen, O. Decoster :
“Analysis of the surface energy budget for the BLLAST 2011 campaign.”

Mariano Sastre Marugan:

Summary of activities of Univ. Complutense de Madrid 's group

- "Gravity waves observed during the BLLAST campaign"
- "A comparison between atmospheric boundary layer evening transitions at two experimental sites"

Anneke van de Boer:

Summary of the activities of the Wageningen group

COFFEE BREAK 30 min

Discussions:

1. Close to the instruments and data process

Updates on Scintillometers, RPAS, Aircraft , Radiosoundings, Ground flux stations, radiation data, aerosol in situ analysis, microbarometer

2. Estimates of key variables

Updates on “Z_i”, advection, large scale subsidence, entrainment

3. Modeling activities

Updates on:

- Forecast models evaluation, Mesoscale model intercomparison, single-column models (mixed layer and stable layer), Large Eddy Simulations
- Boundary-layer parameterization

Choice of the topics discussed in Friday working session

19h30: Social diner downtown

Friday morning

8h30-10h30: **Free topics and working discussions**

- SUMO and TB turbulence measurements
- Model intercomparison, parameterizations
- Subsidence
- TKE decay, spectra and lengthscale study

COFFEE BREAK 30 min

Other topics

11h00-12h00:

- BLLAST perspectives.

Discussion around the DFG proposal from Frank Beyrich and Jens Bange to make a new experiment in Lindenberg: Lessons from BLLAST, and interests in getting involved.

- Data base / pictures

Database: still missing data ?

To be opened to all now!

- Web
- Overview paper and ACP special issue
- Upcoming conferences
- Fundings
- Next workshop