BLLAST Newsletter - November 2010

by M. Lothon, F. Lohou and F. Couvreux

Field-preparation Meeting:

We are planning to meet on **24 February 2010** for the preparation of the field campaign. The Experimetal Plan document will be written as much as possible by then.

Forecast planned during the field:

We will have two kinds of forecast during the field:

- AROME and ALADIN forecast model outputs (PI: E. Bazile). A set of diagnostics to be part of the outputs for BLLAST field campaign in June. This set of diagnostics is listed in the following annex. Please let us know by mid-December, if you have some other suggestions (contact: Fleur Couvreux).
- A local forecast from the Centre Météorologique de Tarbes (an operational meteorological Météo-France station) from Patrick Bornuat.

Proposals:

- E. Pardyjak submitted the NSF proposal, along with Z. Sorbjan and H. S. Fernando.
- D. Pino and J. Vila submitted the EUFAR-TA proposal.
- J. Bange will make a DFG proposal for BLLAST data analysis and for the 2012 field experiment in Lindenberg
- A associate professor position from UPS has been submitted for a 1-month position for D. Pino during the field.

New studies:

Maria Antonia Jimenez and Joan Cuxart (university of Baleares) are starting a mesoscale simulation over the area of BLLAST 2011 field experiment, at 2 km horizontal resolution, with Meso-NH model. 2 days of summer 2010 have been chosen, with the conditions that we hope for in 2011: 23 June, and 1st of July 2010.
This simulation is bound to study the mesoscale dynamics over the area in anticyclonic conditions with weak winds over the area and valley wind regime, with a closer look to the late afternoon transition, and following day-night transition and wind reversing.

ANNEX

About potential forecast model outputs by Météo-France/CNRM/GMME (E. Bazile, Y. Seity).

ARPEGE model is currently running at 10km horizontal resolution, and AROME at 2.5 km horizontal resolution.

Lannemezan is already considered as an output grid point, so that vertical profiles of prognostic variables (T,q, u,v) and their budgets at this gridpoint every hour until 36h (for ARPEGE only) are operational outputs.

Current diagnostics (hourly outputs):

- Boundary layer height (defined as the first level with TKE < 1.E-2 m2/s2)
- Low clouds (<700hPa)
- Vertical profiles (at model levels) of T, q, ,u, v and their budgets (including turbulent fluxes of heat, moisture and momentum)

Proposition of supplemental diagnostics:

- Vertical profile of TKE and its budget
- Time series of T,q, u, v at the lowest levels, at the highest time rate.
- Horizontal TKE cross section at a given level
- Surface Latent and sensible fluxes
- Friction velocity

Suggestions welcome before the end of November