

A visit report

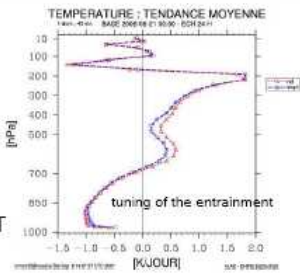
Neva Pristov, EARS - Slovenia
Prague, 15 - 17 September 2008

The tasks of the 3 days visits were:

- to learn about DDH problematic in ALARO and to prepare the presentation on DDH for the “convergence days meeting” in Toulouse (24-25 september 2008).
- to discuss about the work and plans linked with ALARO5 project.
- to explain Tomas Kral the method used for the computation of the NER 'statistical weights'. Together we successfully repeated the computation procedure. Tomas Kral has later upgraded the method and recomputed the weights with an input produced on the basis of the improved basic gaseous transmission functions.

Presentation:

diagnostic DDH



- very useful tool
 - essential in validation of 3MT
- aim is to get clean comparisson between models
 - new data flow brings many advantages
 - aggregation of fluxes (many more in AROME/MesoNH) should reflect the same scientific definitions

diagnostic DDH

- Recall of some 'good' choices
 - time and space averaged budget approach
 - mass based not volume based (suitable for pressure coordinate system)
 - two independent informations for computation of the residual part

diagnostic DDH

Proposal for further development

- $\delta_m=1$ some corrections needed
- computation of the dynamical contribution
 - also for hydrometeors
 - LSPRT=T & microphysics species : grad(T) is not correct
 - Semi-Lagrangian (instead of Eulerian)
 - *heat source/sink projection on pressure (in NH)*

diagnostic DDH

- Conclusions
 - new data flow is a good contribution continuation
 - novelties are addition to current diagnostic (ascending compatibility, e.g. for budget residuals should not be lost)
 - DDH is needed and developments, improvements should continue