

Highlights and challenges -Looking back at the past year

Jeanette Onvlee Workshop/ASM 2013, Reykjavik 15 -19 April, 2013

Last year: Scientific challenges (a personal selection)

- ✓ How to make the best use of hi-res observations (preprocessing, assimilation and cycling strategies, ...)
- ✓ Description of low clouds/fog, and winter stable boundary layer
- ✓ Convection-permitting EPS
 - Not merely constructing a workable EPS, but how to guarantee that it is constructed optimally and provides useful results?
- ✓ Transversal activities: more interaction between DA, EPS and UA/SU physics needed, how to organize?
- ✓ Computational efficiency on <u>all</u> of our HPC platforms
- ✓ OOPS/COPE developments => wider need for C++ expertise than originally envisaged
- ✓ And so on and so forth...

Last year:

...plus plenty of challenges other than purely scientific

- ✓ Ensuring international exchange/access to high-resolution observations
 - Should be an SEP (Someone Else's Problem), really...
 - But we are the ones that suffer, so...
- ✓ Operational cooperation:
 new task but no prospects of additional man power ⊗ ??
- ✓ Securing working together in hard economic times
 - make use of videoconferencing
 - ensure that meeting places alternate fairly
- ✓ Training, training, training...

So, how have we dealt with all of this in the past year?



Highlights of the past year (a personal view)

✓ Data assimilation and use of observations:

Progress made in the access to and quality control of high-resolution observations (radar, Mode-S, ATOVS, IASI,...) and in the algorithms to assimilate them (4DEnsVar, field alignment, cloud initialization...)

OOPS/COPE: the implications for our work are gradually becoming clearer...

√ Forecast model:

Stable boundary layer work and workshop Cloud and convection working group Progress on handling of high-resolution orographic/physiographic data

✓ GLAMEPS/HarmonEPS:

Better embedding in Reference and monitoring/verification system "Transversal" DA/physics/EPS activities: start made, but needs to be taken further...

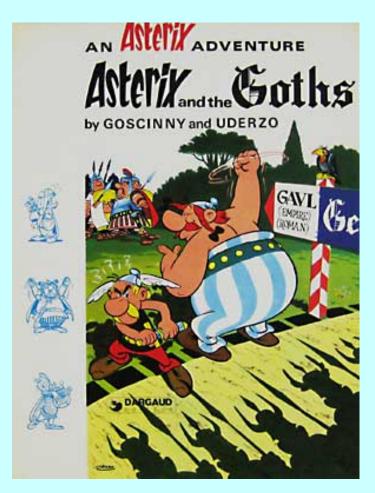
✓ Verification/system:

HARP: a common effort on spatial and probabilistic verification Discussions HIRLAM-ALADIN on common pre-validation of cycles Towards a RCR for Harmonie

✓ Training, C++, working more with videoconferencing, ...



The struggle to get radar data across borders...



An ongoing quest:

- Discussions with OPERA/Odyssey
- Testing of Baltrad QC toolbox
- Request to Eumetnet Assembly
- Asking NMS's for radial velocity data and soon:
- Test of "other" radar data
- Feasibility test of real-time exchange

It's not easy to get radar data to cross borders and in good shape - but we're getting there!



The stable boundary layer workshop

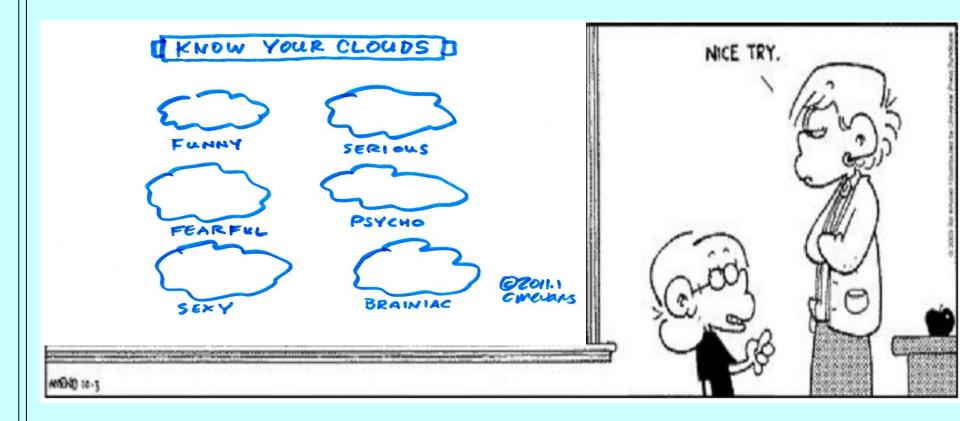


Discussions, presentations and working groups:

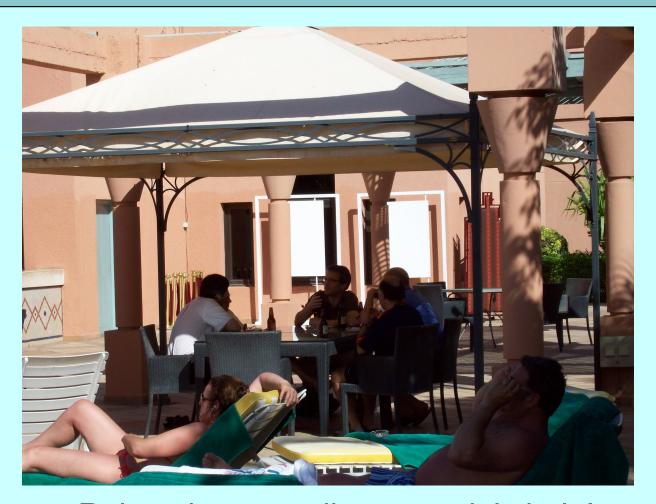
- Alternative turbulence concepts for the SBL
- Preparations for GABLS-4
- Practical arrangements for developing EFB scheme



Clouds/convection wg: aiming to better understand/describe clouds in the model



The take-off of HARP...



Relaxed surroundings certainly help!
This bodes well for the future, because...



...there are also plenty of nice pools in Iceland!



Have a productive and fun meeting!

