Report on system session

M. Hortal (chair)

- 5 Presentations were included
  - Ulf Andrae: Nightly builds and daily runs. The HARMONIE testbed
  - Ryad El Khatib: Profiling ARPEGE/ALADIN/AROME
  - Toon Moene: Review of HIRLAM work on SRNWP Interoperability project.
  - Andras Horanyi: ALADIN-Climate: latest achievements at tha Hungarian Met Service.
  - Sami Niemela: Verification of high-resolution precipitation forecast using the SAL method

HARMONIE testbed

- Many flavours of HARMONIE
- All meaninful switches should work
- Avoid duplicated work whenever possible
- Run using mSMS
- Local implementations included as tests deviating from the default

Conclusions

- The testbed is valuable tool to test the available meaningful configurations in HARMONIE

- It has been useful for the technical testing of the last cycle (35h1.2) and will be useful for technical and meteorological evaluation of future cycles.

- Documentation https://hirlam.org/trac/wiki/HarmonieSystemDocumentation/

  - -> Evaluation/HarmonieTestbed

- Nightly build script https://svn.hirlam.org/trunk/contrib/util/TestHarmonie

Profiling

- ECMWF HPC workshop in 2008
- Results from last year mostly confirmed
- Benchmarkers "Mitraillette"
- Tuning of NPROMA in vector processors
- Profiling tools:
  - Dr Hook
  - Gstats
  - Vendor supplied profiling tools

HIRLAM work on Interoperabiolity project

- Sample output sent to the central server
- Produce output in a common format: GRIB2
- Need for several convertors
- Some of them included in GL

ALADIN Climate

- ALADIN used as regional climate model
- Several host "models"
- ERA40

Verification using SAL

- The SAL method (Structure Amplitude Location)
- On the average, the SAL scores for AROME are very good
- There are some characteristics about overforecasting and underforecasting
- SAL is included in the GL tool
- Instructions in the WIKI page