Status of ALADIN operational activities at SHMU (changes between 02/2007 and 10/2007)

HARDWARE

- Computer [no change]:
  - ➔ IBM Regatta
  - ➔ 32 CPUs of 1.7 Ghz
  - ➔ 32 GB RAM
  - ➔ 1.5 TB disk array

- Archiving facility [no change]:
  - ➔ IBM Total Storage 3584 Tape Library with IBM Tivoli Storage Manager
  - ➔ current capacity of tapes around 24 TB
  - ➔ used for automatic backup of ICMSH files, GRIBs and selected products

OPERATIONAL SUITE

- Domain and geometry [no change]:
  - ➔ 309 x 277 points (C + I zone)
  - ➔ dx = 9.0 km
  - ➔ quadratic truncation
  - ➔ envelope orography
  - ➔ 37 vertical levels

- Operational model version [no change]:
  - ➔ al28t3 with "czech physics"

- Integrations:
  - ➔ 4 runs per day (00, 06, 12 UTC up to 72 hours, 18 UTC up to 60 hours)
  - ➔ initialization of upper air fields by digital filter blending with 6 hour cycling, surface fields taken from ARPEGE analysis [since 19-09-2007]

OTHER OPERATIONAL ACTIVITIES

- ALARO-0 minus 3MT on cycle 29t2 was tested in parsuite during March-May 2007. Verification against SK SYNOP stations showed mostly neutral impact. Main improvement could be seen in 24 hour cumulated precipitation field verified against 600 SK rainguages. Most probably it can be attributed to microphysics.

- Precipitation analysis is produced operationally every 15 minutes. Inputs are taken from meteorological (ASTA) and hydrological (MARS) automatic stations and radar (2 km CAPPI product). Only SK stations/radars are available. Output format is GRIB file with 1 km mesh size.

- Backup latlon GRIBs for ZAMG are provided 4x per day (00, 06 and 12 UTC runs up to 72 hours, 18 UTC run up to 60 hours).

- RC LACE web page was extended by selected LAEF products produced at ZAMG and by multigrams from ALADIN Verification Project produced in Ljubljana.

PORTING STATUS

ALARO-0 plus 3MT on cycle 32t1 was ported. Validations showed problem with SLHD scheme specific for IBM platform, which still have to be fixed.

ARPEGE LBC DOWNLOAD

Both assimilation and production LBC are downloaded 4 times per day. Primary channel is internet/BDPE. LBC backup is done via ECMWF and ZAMG. There was one critical internet failure on provider's side, which caused 2 missing integrations.

PLANS

- Operational switch to ALARO-0 minus 3MT, including cycling of hydrometeors.

- Switch to mean orography.

- Implementation of surface blending.

- Testing of ALARO-0 plus 3MT.

- Development of robust method for precipitation analysis.