

2.3. SLOVAKIA

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HARDWARE

Computer [no change]:

IBM p690 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 30 TB (plus 10 TB of external tapes) used for automatic storage 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

37 vertical levels

Operational model version [no change]:

cy32t1 - ALARO with 3MT + bug correction by J.Masek

SLHD scheme

Integrations [no change]:

4 runs per day (00, 06 and 12 UTC up to 72 hours; 18 UTC up to 60 hours)

Pseudo assimilation cycle (upper air spectral blending):

4 runs per day (00, 06, 12 and 18 UTC up to 6 hours with long cut-off ARPEGE LBC)

assimilation guess is used to copy hydrometeors, TKE and 3MT prognostic fields; remaining 3D prognostic fields (temperature, wind, humidity) are blended with ARPEGE analysis.

surface analysis is interpolated from ARPEGE

ARPEGE LBC DOWNLOAD

Both assimilation and production LBC are downloaded 4 times per day. Primary channel is internet connection to BDPE. Backup channel is routed via ECMWF and ZAMG (sequence of RMDCN and internet). Capacity of internet lines is sufficient.

Fixing bug in xrd library causing X-pattern, J. Mašek

Bug in packing of spectral fields written to FA file was localized. It was hidden in xrd library for many years and under specific circumstances caused so called X-pattern. Fix was first prepared and validated in operational ALADIN/SHMU version based on cycle 35t1, and then it was phased into official ARPEGE/ALADIN cycle 36t1bf5. Detailed bug report can be found on RC LACE forum:

<http://www.rclace.eu/forum/>-> Bug and Problem Reports -> X-pattern produced by configuration ee927

Fig.: X-pattern produced by blending procedure in v-wind component on lowest model level, projected to 10m wind field.

Main operational highlights

12/09 – 02/10 Gradual transfer of operative suite to new server

12/09 – 02/10 Transfer of web-based monitoring system to new server

15/03/10 New procedure to include local orography to clim-files

08/03/10 Packing in historical files switched off (NVGRIB=0) to avoid X-pattern

08/10/09 Migration to new visualization software

15/07/09 Optimization of operative suite

17/06/09 New gribex000370 implementation into suite