

OPERATIONAL STATUS AUSTRIA

Operational model ALADIN-AUSTRIA:

Model Version:	CY25T2
Horizontal resolution:	9,6 km
Number of levels:	45
Number of gridpoints:	300 x 270
Time-step:	415 sec
Coupling model:	ARPEGE
Coupling frequency:	3 hours
Forecast range:	72h / 60h
Output every:	1 hour
Orography:	envelope
Grid:	quadratic
Hardware:	NEC SX-8R, 16 CPU with 0.51 Tflop (32 Gflops/CPU), 128 GB RAM, 4.4TB storage

ALADIN-AUSTRIA is operationally run four times per day. The forecast range is 72h hours for the main runs (00 and 12 UTC) and 60 hours for the intermediate runs (06 and 18 UTC). The LBC-Files are retrieved via ftp from Météo-France and via RMDCN for backup purpose. ALADIN-AUSTRIA uses a modified acnebn-routine to improve the forecast in the case of low stratus (Seidl-Kann-scheme).

Plans:

- Implementation of CY32T2
- Parallel suite using ALARO-0 minus 3MT
- Operationals switch to ALARO-0 minus 3MT

Other operational activities:

Main activities were dedicated to the porting of ALADIN, INCA and all customer and downstream applications from SGI Origin system to the new NEC computer (in the case of ALADIN) and to LINUX Opteron machines in the case of INCA and the customer and downstream applications (strict physical separation between ALADIN and other applications).

INCA:

- Increased portability of INCA by unifying ALADIN import data format (GRIB) and output data format (binary data files).
- Improved temperature analysis in the case of inversions by introduction of inversion factor limiting the 2D correction of the first guess field to valleys/basins/lowlands.
- Improved quantity check of incoming rain gauge measurements by consistency check with radar-data
- Improved filter for suspicious patterns in INCA precipitation fields by additional consistency check with INCA cloud analysis
- Introduction of new INCA parameters icing potential and surface temperature

- Improved version of INCA precipitation type (rain,snow,freezing rain, sleet)
- Improved version of INCA snowfall line (taking into account synop "ww")

LAEF:

- Run in quasi-operational test mode on computing facilities of ECMWF
- ALADIN (CY31 using Lopez-microphysics) is coupled with downscaled ECMWF-
EPS-Members (first 16 members), plus control and deterministic run
- 2 runs per day (00 and 12 UTC), 54h forecast-range
- Large variety of products: probability charts, epsgrams, stamp-charts