

National Meteorological Administration Romania

ALADIN operational activities

The operational suite is almost unchanged from the end of January 2006.

- 2 domains (quadratic grid, Lambert projection, mean orography)
 - ALADIN-Romania: 41 vertical levels, 144x144 grid points ($\Delta x=10$ km)
 - ALADIN-Selam: 46 vertical levels, 120x90 grid points ($\Delta x=24$ km)
- Characteristics:
 - Model version: Cy28t3
 - Dynamical adaptation mode, DFI initialisation
 - 2TL Semilagrangian scheme; $\Delta t= 450$ s for 10km and 900s for 24 km
 - Physics set-up:
 - old radiation scheme (ACRANEB)
 - climatologic profile for ozone
 - prognostic albedo for snow
 - new gravity wave drag formulation
 - Xu-Randall cloudiness formulation
- 4 runs per day (from August 2006):
 - Arpege LBC (from Meteo-France via internet); 6hours coupling frequency forecast range: 78h for 00 run, 66h for 12 run, 48h for 06 and 18 UTC run
- Post-processing:
 - in line FPOS on geographical regular grid, every 3 hours (pressure & near surface standard levels output in grib format, routed towards the visualization systems in Bucharest and to the Regional Meteorological Centres)
 - of line FPOS on model grid, every 3 hours
 - additional post processing: stability indexes, pseudo-temp, different isotherms height
- Graphical products: meteograms, pseudo – satellite images, cloudiness, 1.5 PV surface height, minimum and maximum temperature, equivalent potential temperature, MSL pressure, accumulated precipitation over 12h and 24 h, height of specific isotherms, stability indexes, etc, available on the intranet ALADIN web page.
- Statistical adaptation
- Operational verification (common verification project)
- Input for downstream applications: wave models (WAM and VAGROM), sea circulation models, hydrological models

Foreseen changes: hourly outputs up to 48 hours integration for the needs of hydrological models, including the radiation information (pre-operationally from February 1, 2007 for 06 run)