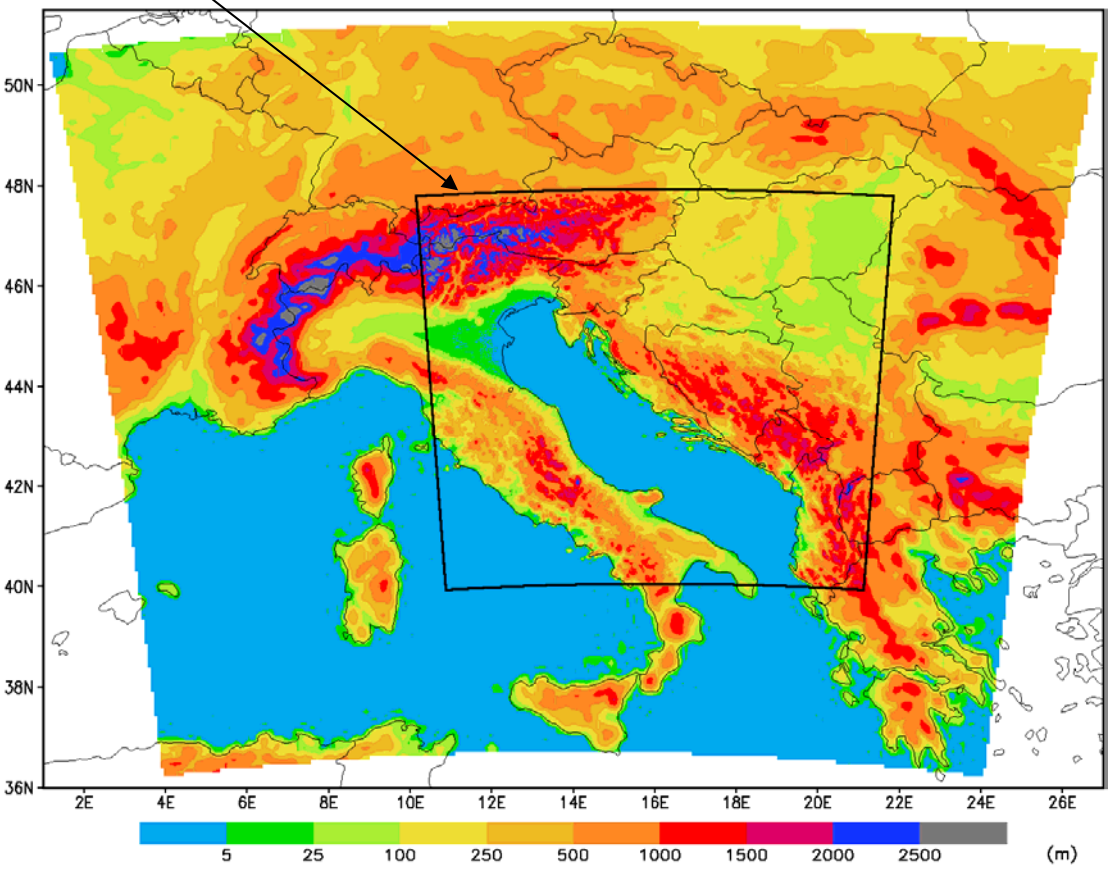
NWP in Croatian Meteorological and Hydrological Service
Current status of the operational suite September 2008.

Computer
SGI Altix LSB-3700 BX2 Server with 24 Intel Itanium2 1.6GHz/6MB
48 GB standard system memory, 2x146 GB/10Krpm SCSI disk drive
OS SUSE Linux Enterprise Server 9 for IPF with SGI Package
Intel Fortran & C++ compilers version 9.0.031
Queuing system (PBS Pro)

LBC files and lines
global model ARPEGE, coupling frequency 3 hrs
Internet and **RMDCN** through ecgate as backup from July 2006

Domains, model set-ups and forecast range
8 km - main integration domain: 8 km horizontal resolution, 37 levels in the vertical, 229x205 (240x216) grid points, Corners: SW (36.18,3.90), NE (50.68,26.90)
AL32T3 – ALARO0-3MT version with old radiation scheme 72 hrs forecast range with 1 or 3 hrs time resolution depending on product type, Digital Filter Initialisation.
2 km - high resolution dynamical adaptation domain:
- 2 km horizontal resolution, 15 levels in the vertical, 439x439 (450x450) grid points
- just 10 m mean wind and wind gust forecast,



Major changes in operational suite in year 2008

- Reduction of the operational suite to one model version Alaro0-3MT, after more than one year of parallel suite (Dec 2006-Feb 2008),
- Change of the operational version from AL29T2mxl to AL32T3 at 12 UTC 25th February 2008,
- Introduction of the huge 2 km domain for 10 m wind dynamical adaptation instead of 6 small ones (problems with lateral boundary conditions disappear and it is much easier to control the operational suite),
- Replacement of the old visualisation machines with new Linux machine, number of the operational machines for visualisation of the operational products and operational verification results reduced from 6 to only 1,
- Start of the preoperational assimilation parallel suite (at the moment just cycling of the surface OI),
- Start with operational production of the ALADIN meteorological input for RODOS dispersion model.

Start of the preoperational assimilation suite

Preoperational assimilation suite (at the moment just for SINOP data CANARI OI inside) starts after a lot of trouble with installation and conversion of the measurements in proper format. Surface fields over land inside assimilation cycle are output from the CANARI OI applied on 6 hrs forecast from the last assimilation cycle serving as guess. BC, upper-air fields and surface fields over sea are taken from ARPEGE long cut-off. Temporally 6 hrs forecast from assimilation cycle + CANARI OI for surface fields are used as initial file for 24 hrs forecast event. Newest short cut-off coupling files are used for BC same like it is in dynamical adaptation mode.