

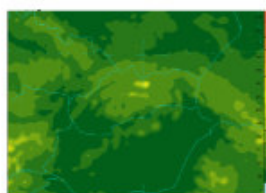


ALADIN related activities at Slovak HydroMeteorological Institute (2004)

PAST

Workstation characteristics

DEC Alpha Xp1000 (Compaq)
 EV6 processor
 1 GB memory
 32 GB HDD
 DIGITAL UNIX V4.0
 Digital F90 compiler V5.2



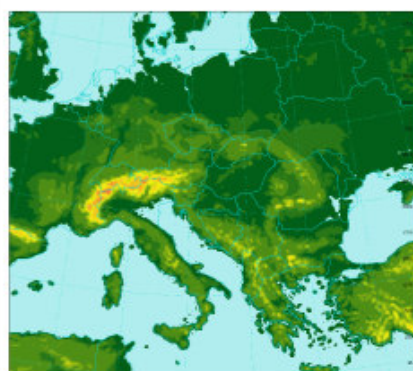
WS version model characteristics

domain size 862x646 km
 (120x90 points in quadratic grid)
domain corners [14.69 ; 46.05 SW]
 [25.26 ; 51.07 NE]
horizontal resolution 7.2 km
vertical levels 31
time step 337.5 s
forecast length 48h / twice per day
 (00 and 12 UTC)
driving model ALADIN/Vienna
coupling frequency mode dynamical adaptation
code version AL12_op6 (CYCORA_bis)

NEAR FUTURE

HPC characteristics

IBM @server pSeries 690
 Type 7040 Model 681
 32 CPUs POWER 4+ 1,7 GHz
 32 GB RAM Memory
 IBM FAST T600 Storage Server + EXP700, 1.5 TB
 AIX 5.2
 one.shmu.sk
 start of operational status planned 01/07/2004



HPC version model characteristics

domain size 2882x2594 km
 (320x288 points in quadratic grid)
domain corners [2.19 ; 33.99 SW]
 [39.06 ; 55.63 NE]
horizontal resolution 9.0 km
vertical levels 37
time step 400 s
forecast length 48h / twice per day
 (00 and 12 UTC)
driving model ARPEGE
coupling frequency mode dynamical adaptation
code version AL25T1

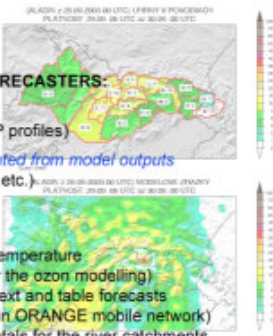
SHMI NWP products

PRODUCTS FOR INTERNAL USE BY FORECASTERS:

- standard meteorological fields (surface and upper air fields, pseudoTEMP profiles)
- additional parameters and indexes computed from model outputs (KO index, Q-vector, Faust, CAPE, T-grad etc.)

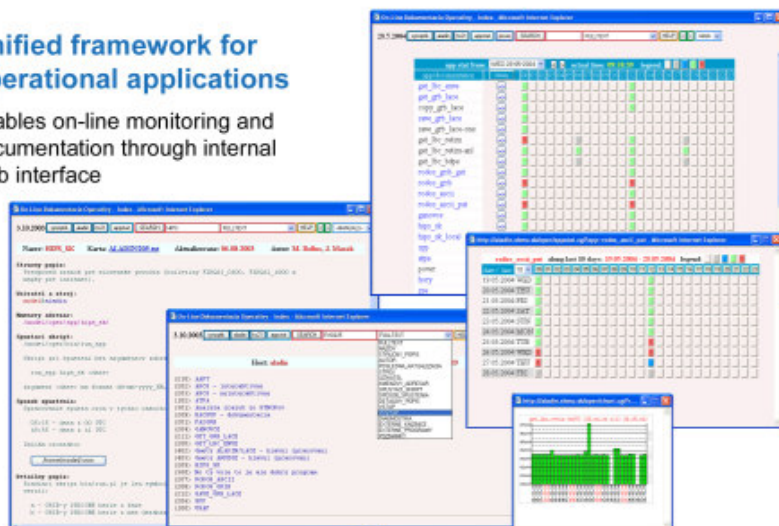
PRODUCTS FOR END CUSTOMERS:

- GANOVICE** - geopotential height and temperature at the pressure levels (for the ozon modelling)
- ORANGE** - automatically generated text and table forecasts (accessible via SMS within ORANGE mobile network)
- HIPS** - forecasted precipitation totals for the river catchments (for Slovak territory and the adjacent regions)
- RODOS** - selected meteorological fields for the dispersion model RODOS (grids and ascii files)
- SPP** - temperature forecast for Slovak regions used by gas company (tables)
- PARAGLIDER** - automatically generated table forecasts for 30 starting positions (min/max T2m, weather, FF, DD for www.paraglider.sk)
- ZSE** - forecast for Bratislava used by power factory (tables with T2m, weather index and FF, DD for 24 h with 3 h step)



Unified framework for operational applications

enables on-line monitoring and documentation through internal web interface



15th ALADIN workshop to be held in Slovakia, spring 2005

Smolenice Castle (60 km NE from Bratislava)
 30/05/2005 - 3/06/2005 (the only possible date)
 only 38 rooms (total 80 beds)



NWP GROUP

- Martin Belluš
- Martin Benko
- Mária Derková
- Richard Habrovský
- Marián Jurašev
- Jana Krajčovičová
- Michal Májek
- Ján Mašek
- André Simon
- Oldřich Španiel
- Jozef Vívoda