Operational Report

Martin Janoušek

General Assembly of ALADIN Partners Ljubljana 2007

ARPEGE operations

- 9th May: Météo-France operations migrated to the new supercomputer NEC SX-8
 - no change of ARPEGE configuration and schedule
 - semi-transparent for ALADIN operational models
 - successful lesson: coordinated testing and evaluation before the event => a smooth switch
- the march towards higher-resolution ARPEGE has started

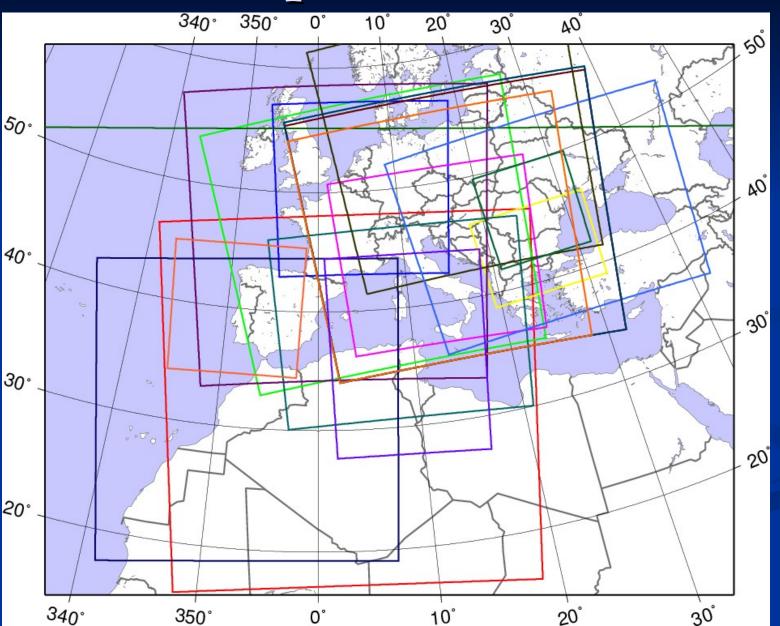
ARPEGE resolution increase

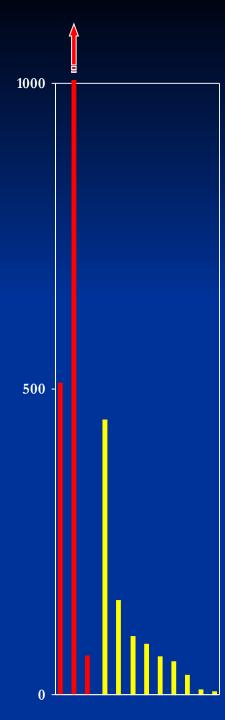
- from 23 km (in France), 46 levels to 15.5 km, 60 levels
- scheduled to December '07 January '08
- increase of resolution of coupling files for ALADIN applications
 - file size increase (factor of 2) impact on data transfer
 - careful preparation and tests necessary (starting soon)
 - Partners are asked for their plans on the coupling files resolution upgrades

ALADIN operational systems

- 19 ARPEGE-driven ALADIN operational implementations
- only 3 data assimilation systems operational
- new ALADIN implementation coming soon: Turkey
- Increasing diversity in physical parameterization (ALADIN/France, 2 versions of ALARO-0)

ALADIN operational domains





Operational hardware

- large variety of HPC: from a PC-size Linux box to a 5 TFlops/s vector system
 - 3 major upgrades in 2007
 - AROME used in benchmarks
- archiving systems varies 0.5-300 TB
 - lack of capacity limits R&D
 - e.g. ALADIN/CZ: +9 TB/year
 - more demands from ensemble forecasting

Telecommunications

- new **RMDCN** (since June)
 - "meteorological Internet"
- Toulouse

Reading

Brussels |

- CZ: good stability and bandwidth for ALADIN data
- LACE: backup coupling files stored at ECMWF
- open option for all connected Partners, with care
- most of Partners use Internet
 - cheap, fast (often faster then the model)
 - no backtrack in case of problems, vulnerable in the severe weather situation