

# NWP activities in Austria in 2009/2010

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# Model in operation

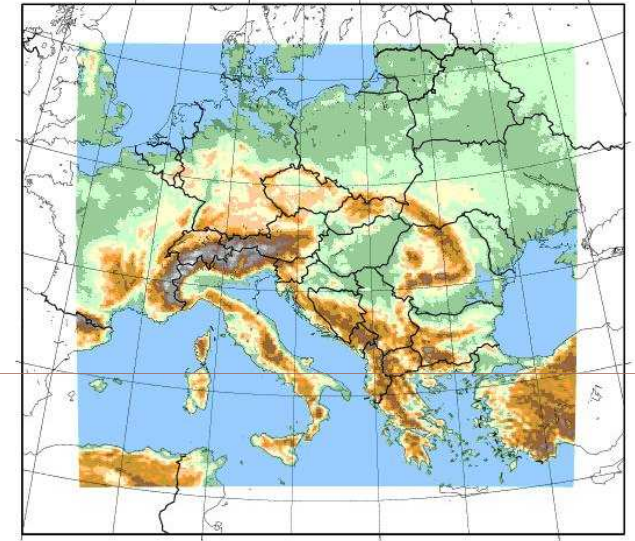
## ALADIN-Austria:

- ALADIN CY35t1 (ALARO + 3MT version), coupled with ARPEGE
- 9.6km horizontal resolution, 60 levels in vertical
- 4 runs at 00, 06, 12, 18UTC, up to 60h and 72h.

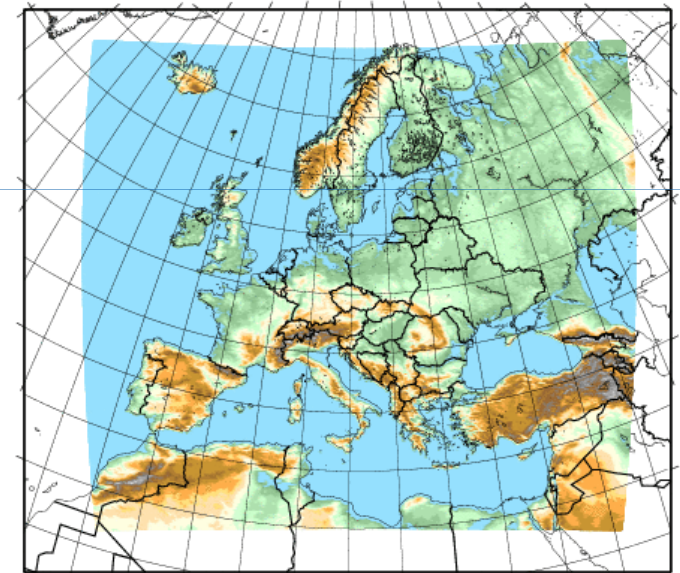
## ALADIN-Europe:

- ALADIN CY33 (ALARO version), coupled with ECMWF
- 6.5 km horizontal resolution, 45 levels in vertical
- 2 runs at 00, 12 UTC, up to 72h.

ALADIN-AUSTRIA Domain & Topography



ALADIN-EUROPE



# ALADIN-LAEF: operational

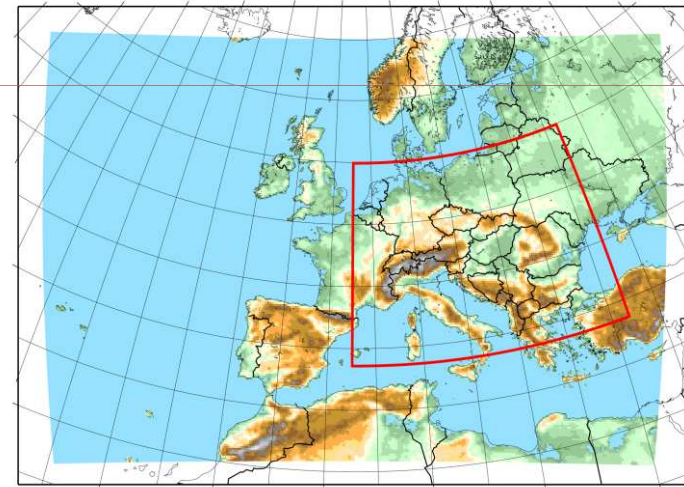
## ALADIN-LAEF (Limited Area Ensemble Forecasting) :

- ALADIN Blending of 16 ECMWF EPS members
- Multi-physics, Non-Cycling surface Breeding
- 18km horizontal resolution, 37 vertical levels
- 2 runs per day at 00 and 12UTC, up to 60h
- Products at MARS archiving for partners

## Research going on:

Stochastic physics, higher resolution (11km),  
surface perturbation, LBC perturbation  
predictability studies on cloud permitting scale

ALADIN-LAEF Domain & Topography



# Model and Assimilation in test

## **AROME-Austria:**

- ALADIN cy35, coupled with ALADIN-AUSTRIA
- 2.5km horizontal resolution, 60 levels in vertical
- 2 runs at 00,12UTC, up to 30h.

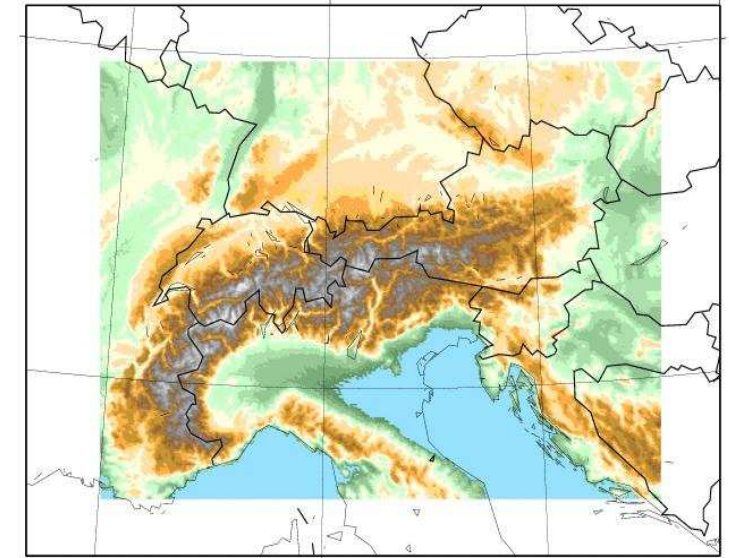
## **ALARO-Austria (4.9km):**

- 4.9 km horizontal resolution, 60 levels in vertical

## **ALADIN-Austria data assimilation:**

- ALADIN 3D-Var
- CANARI
- 6h cycling

AROME-AUSTRIA Domain & Topography



## Recent and ongoing R & D:

- Nowcasting INCA
- GPS assimilation
- Surface data assimilation EKF/ASCAT
- Study on precipitation forecast over mountain with AROME