SMHI HARMONIE reanalyses

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Overview

- **Main deliverable: 50 year reanalysis, 1961-present**

- Using the HARMONIE model with
  ALADIN physics
  or
  ALARO physics

- Analysis: 3D-Var

- Dynamic description of physiographic properties.

- Lateral boundaries: ERA40+ERA-Interim
  or ERA-CLIM if available

- Large scale mixing (e.g. Jk) of lateral boundary data

- Store in MARS at SMHI or ECMWF

Short term perspective

- Decide area coverage

- Decide model version

- Make structure functions and set up 3D-Var

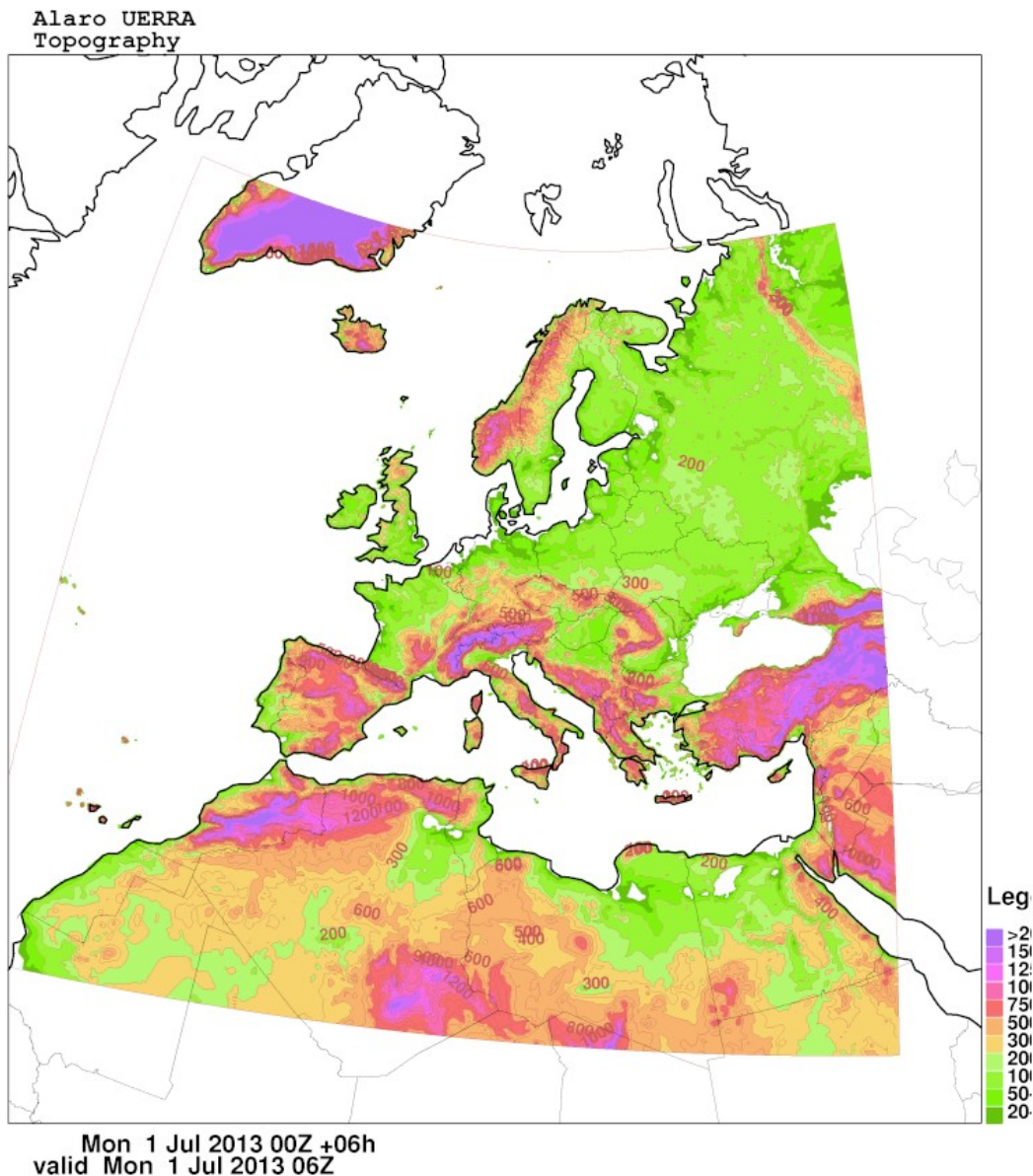- Run a 5 year period with ALADIN and ALARO

Status

Area: 565x565 grid points
11 km horizontal resolution
65 vertical levels

Version: cy38

Forecast model tested at ECMWF
With ALARO

Need a namelist for ALADIN (cy38)

Alaro UERRA
Topography

Mon 1 Jul 2013 00Z +06h
valid Mon 1 Jul 2013 06Z

Urgent tasks

Derive structure functions for 3D-Var

Decide large scale mixing method

    1: Jk

    2: LSMIXBC
       Combine host model large scales and
       regional model small scales