**ALADIN-TURKEY**

Current operational suite:
- Model version: cy35T1
- ALARO-0 with 3MT

**Model geometry:**
- 4.5 km horizontal resolution
- 450 X 720 grid points
- 60 vertical model levels
- Quadratic spectral truncation
- Lambert projection

**Forecast settings**
- Digital filter initialization
- 300 sec time-step
- Hourly post-processing
- 4 runs per day at 00.06,12 UTC (up to t+72) and 18 UTC (up to t+60)
- LBC coupling at every 3 hours
- Transfer ARPEGE LBC files from Meteo France (Toulouse) via Internet

**Major Highlights**
- 1st January 2010: cy35T1 ALARO-0 daily parallel run on SGI
- 10th February 2010: ALARO-0 under SMS
- 1st March 2010: cy35T1 ALARO-0 runs operationally
- 1st July 2010: Four runs per day
- 1st April 2011 cy35T1 Paralel Run

**HPC System**
- SGI Altix 4700
- 512 cores based Intel Xeon2 Montvale each at 1.67 GHz
- Total Peak performance 3.4 TFlops
- Total memory 1 TB
- Total Disk Space: 20 TB

**Verification Studies**

- Turkish radiosonde observed data that coincides well with the model sigma level are verified with the corresponding model forecasts.
- Scores computed: RMSE and BIAS
- Parameters used: Geopotential height, temperature, dew point temperature, wind speed and direction.
- Preliminary results indicate that the model performs very well for geopotential height and temperature.

Scores for all Turkish stations.

**Highways Weather Forecasting System v3**

The Highways Weather Forecasting System is an effective and friendly system for trip planning. It is also being used by General Directorate of Highways for highway maintenance.

The system has been developed on PHP, and it makes use of “Google Map API” for computing shortest distance algorithm. Then the HPS utilizes ALARO 00, 06, 12 and 18 UTC model outputs for the respective trip sections.

**Interactive Web Page**

TSMS is a web-based visualization tool which aims to give interactive services that provide parameterized graphical products to authorized users. The framework is designed to use Magics++ with python (sometimes Fortran) for generating products.

For more info, please visit: [http://www.dmi.gov.tr/tahmin/karayollari-tahmin-sistemi.aspx](http://www.dmi.gov.tr/tahmin/karayollari-tahmin-sistemi.aspx) (Note that currently we provide a Turkish version.)