




TURKISH STATE METEOROLOGICAL
SERVICE

**Towards New Collaboration
with
ALADIN Consortium**

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Head Of NWP Division

PLAN

- **Short Introduction of Turkish State Meteorological Service**
 - **NWP Activities**
 - **Motivations and Objectives**
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- A stylized, layered mountain range graphic in shades of teal and blue, positioned in the bottom right corner of the slide.

Organization

**Ministry of
Environment and Forestry**



**Turkish State
Meteorological Service**

**Agricultural
Meteorolgy**

**Weather
Forecasting**

**Research
Department**

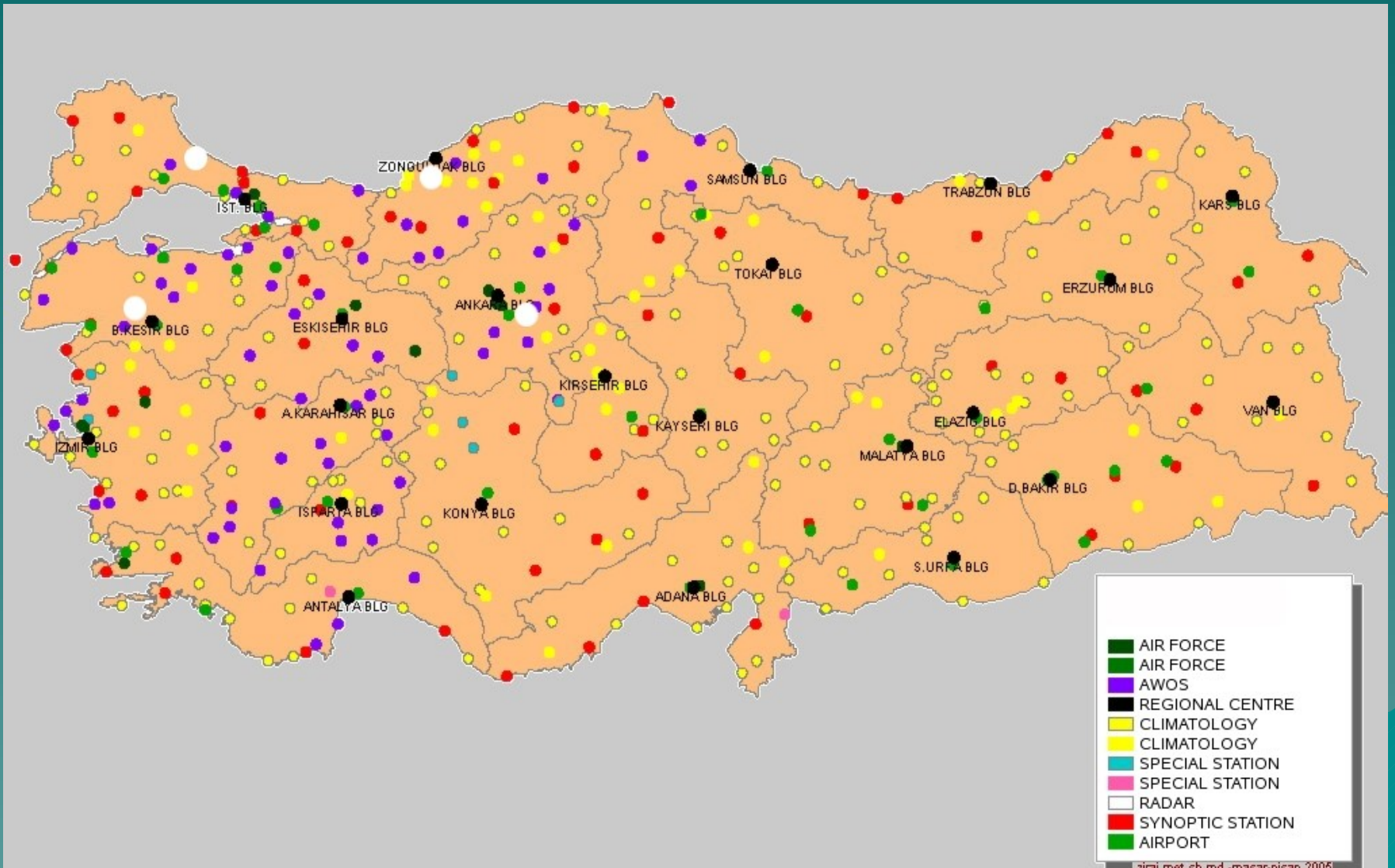
**Human
Recources**

**Administration
and Finance
Department**




**NWP
Division**

Observational Network



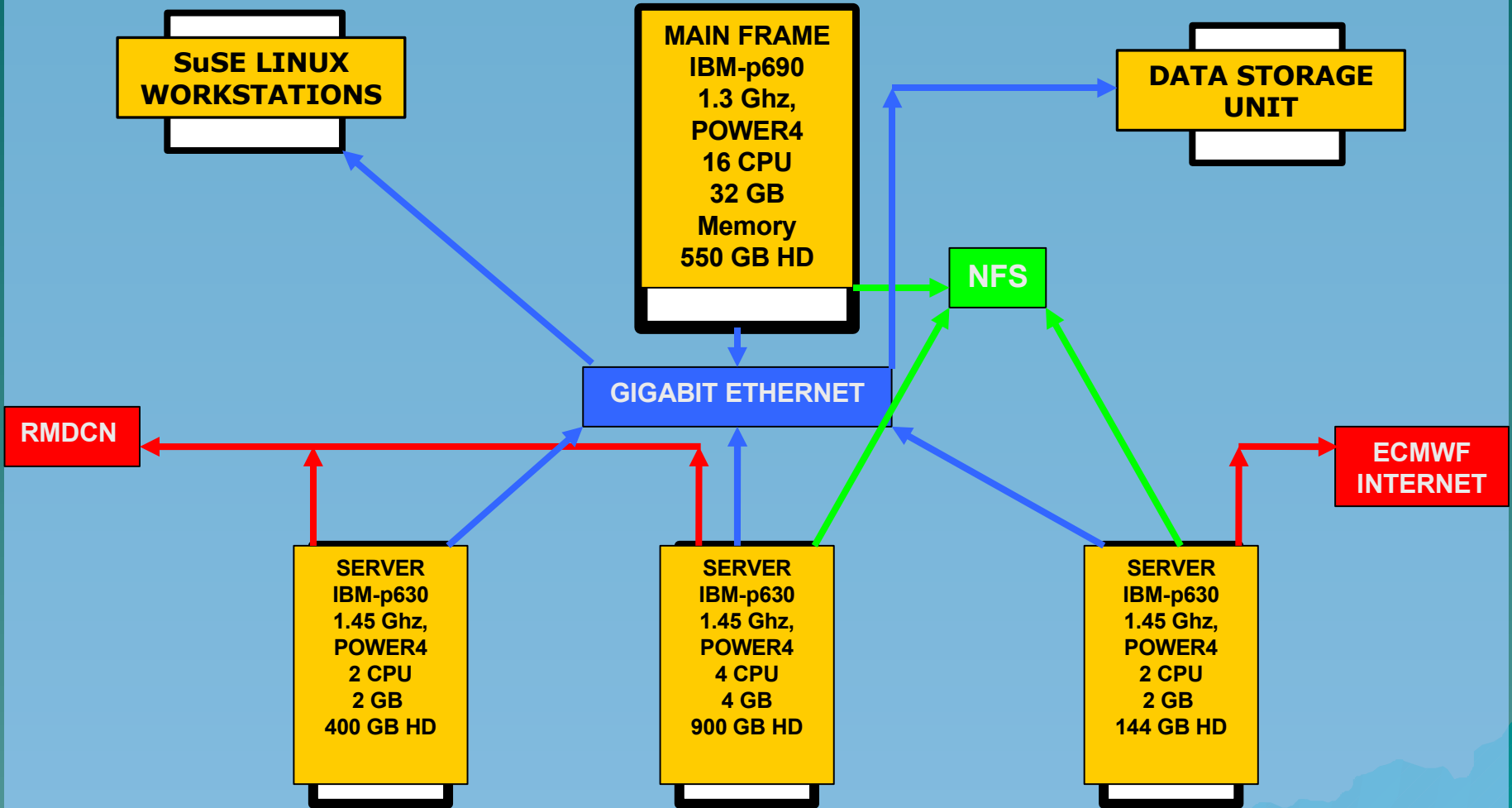
Observational Network

- **Regular Stations and AWOS' are connected to headquarters through the dedicated, internet and Satellite lines.**
 - **Additional 11 radars is planed for 2006/2007.**
 - **More than 200 AWOS' covering Eastern Turkey are planed to install in 2006 or 2007.**
 - **Total number of AWOS and Radars will be likely 500 and 15 respectively.**
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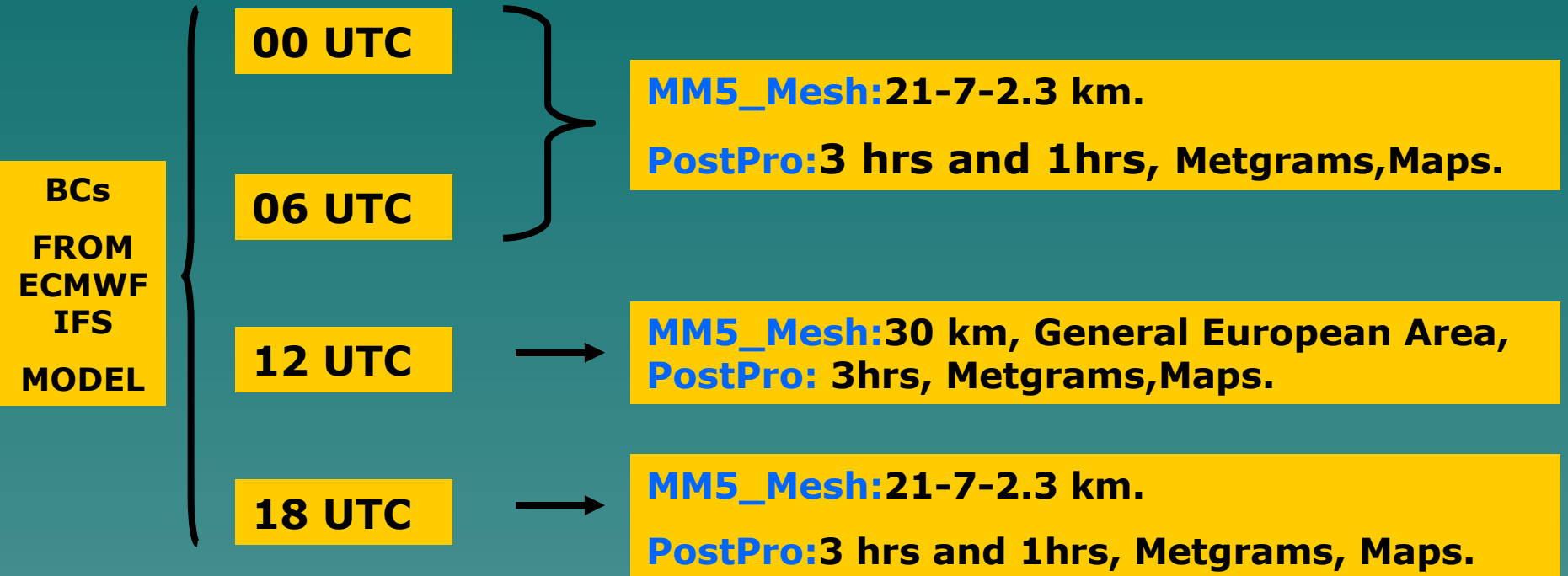
NWP Activities



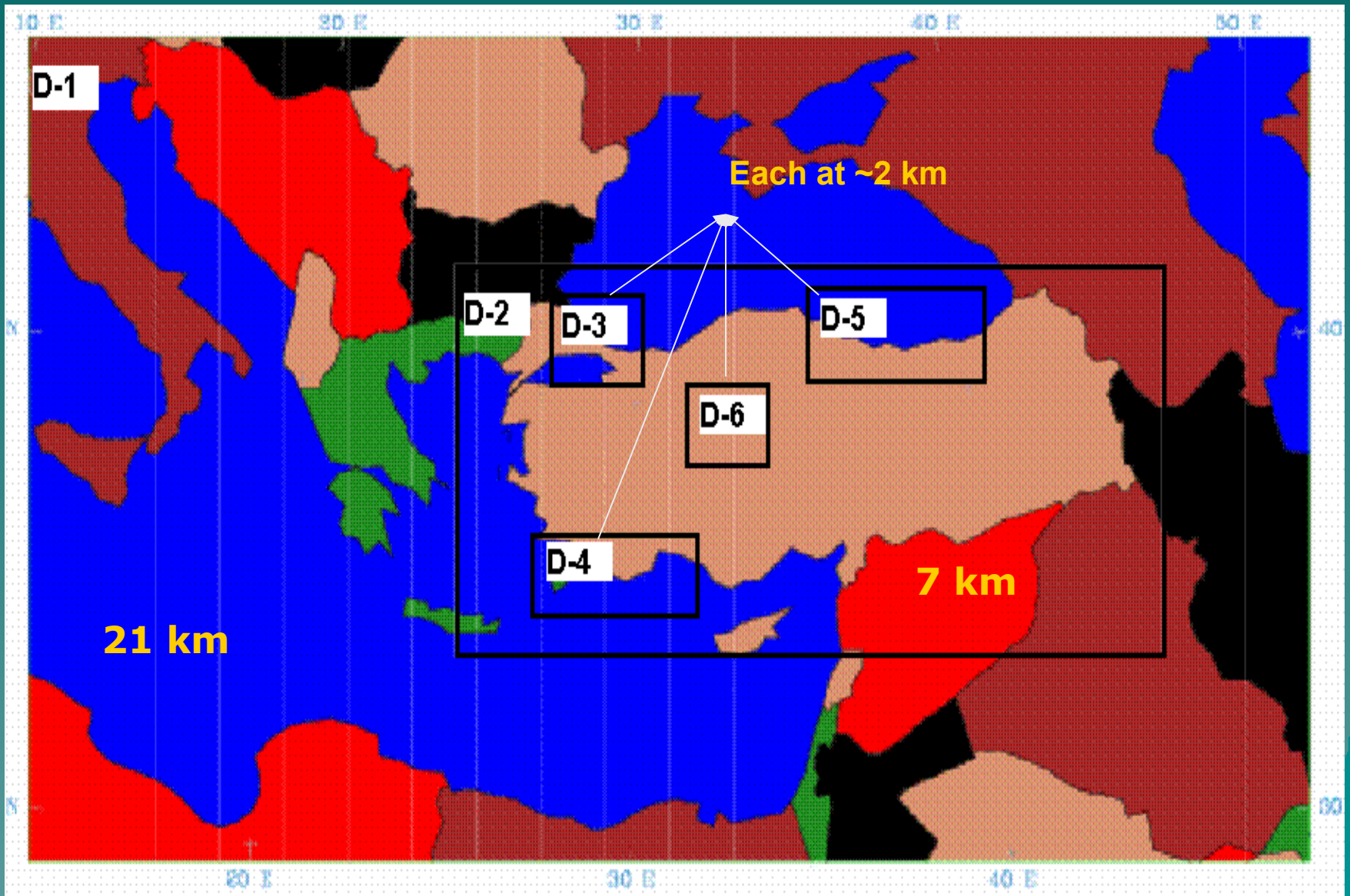
Computer Environment



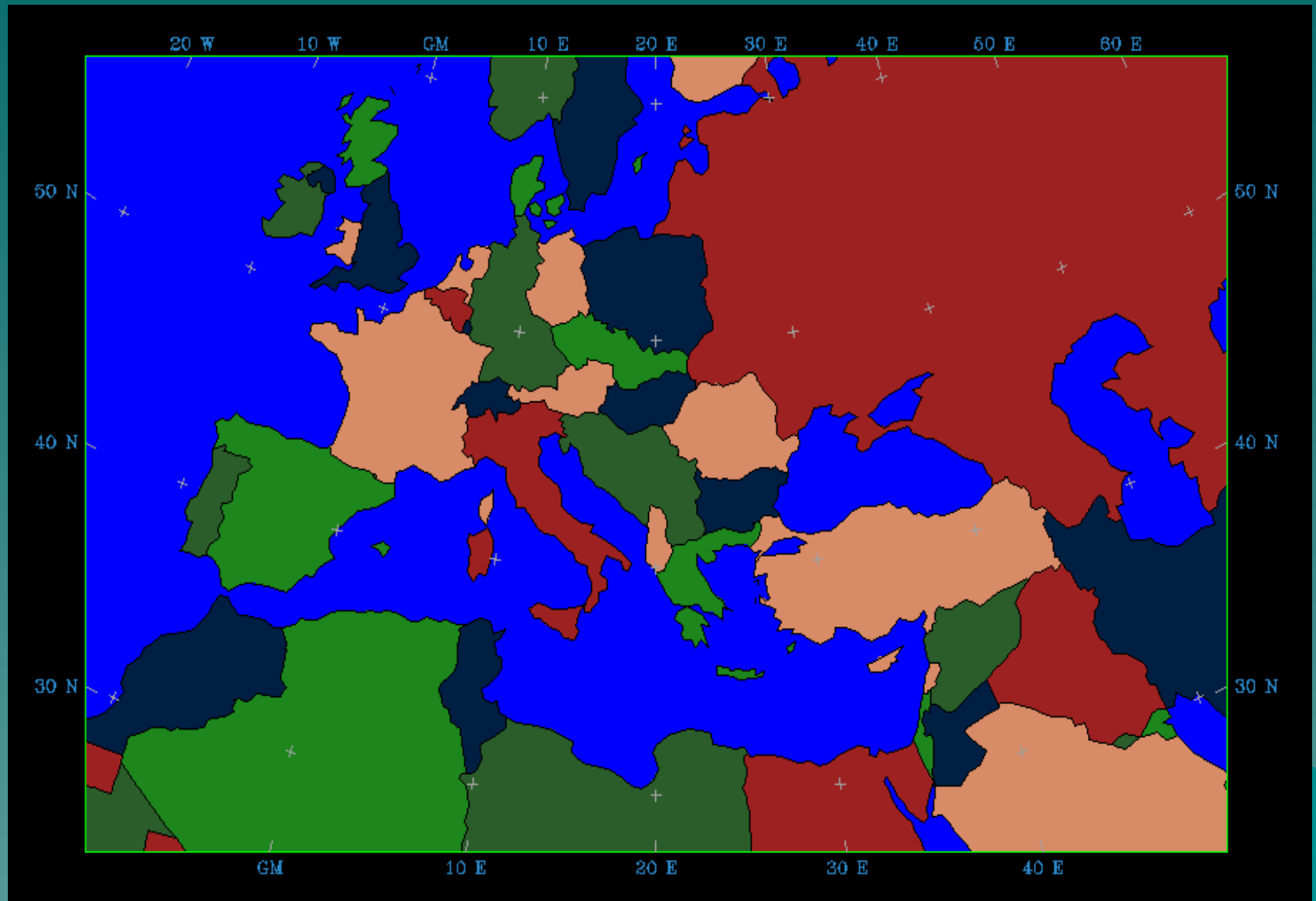
Operational Short-Range Forecasting Scheme



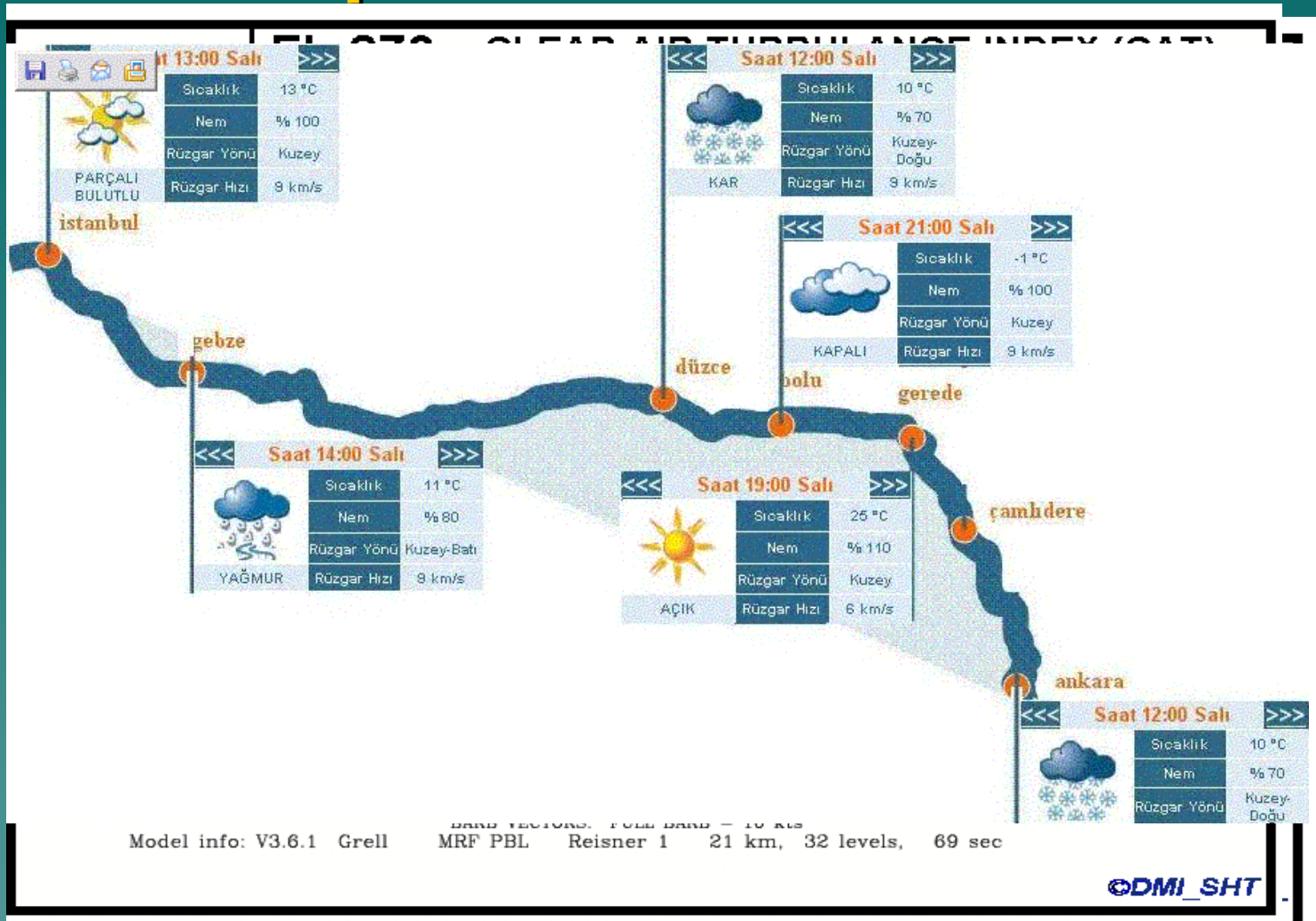
Operational MM5 Domains



Operational MM5 European Domain



Sample MM5 Products



Saat 13:00 Salı

Sıcaklık	13 °C
Nem	% 100
Rüzgar Yönü	Kuzey
Rüzgar Hızı	9 km/s

istanbul

gebze

Saat 14:00 Salı

Sıcaklık	11 °C
Nem	% 80
Rüzgar Yönü	Kuzey-Batı
Rüzgar Hızı	9 km/s



Saat 12:00 Salı

Sıcaklık	10 °C
Nem	% 70
Rüzgar Yönü	Kuzey-Doğu
Rüzgar Hızı	9 km/s

düzce

Saat 21:00 Salı

Sıcaklık	-1 °C
Nem	% 100
Rüzgar Yönü	Kuzey
Rüzgar Hızı	9 km/s

bolu

gerede

Saat 19:00 Salı

Sıcaklık	25 °C
Nem	% 110
Rüzgar Yönü	Kuzey
Rüzgar Hızı	6 km/s

çamlıdere

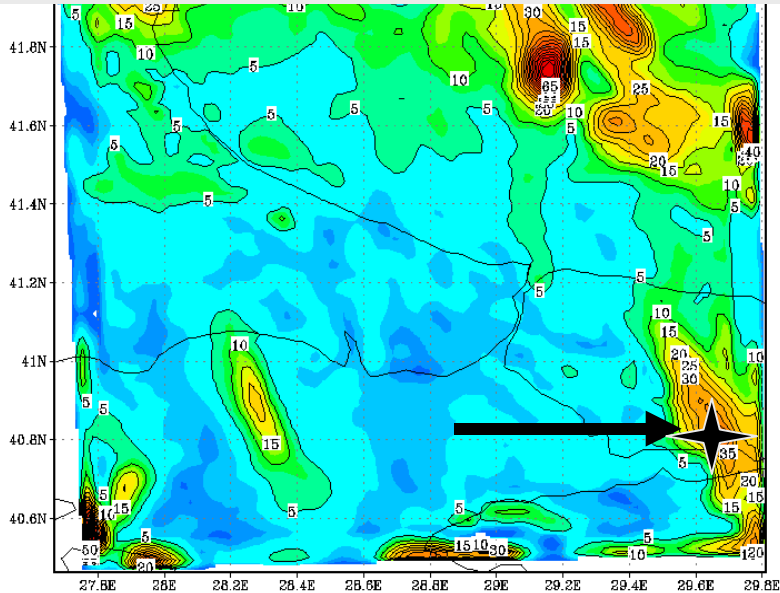
ankara

Saat 12:00 Salı

Sıcaklık	10 °C
Nem	% 70
Rüzgar Yönü	Kuzey-Doğu

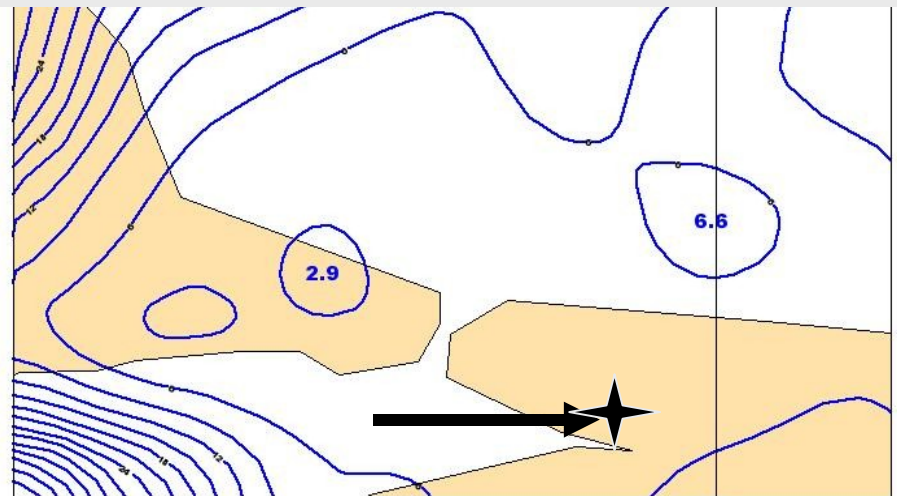
4 July 2005 in the morning, Eastern Part Of Istanbul wake up to hard rain that was well predicted by MM5 2 km run. No satisfied signal was given by ECMWF-IFS.

**MM5, 12 hourly total rain forecast
Verification time 06:00 UTC, 4 July 2005**



SAYISAL HAVA TERMIN SUYU MİDDİRLİĞİ (SMT)

**ECMWF 18 hourly total rain forecast
Verification time 06:00 UTC, 4 July
2005**



30°E

Operational Wave Forecasting Scheme

METU-3 is a wave model that was developed in cooperation of TSMS and Middle East Technical University-Ankara through a NATO project in early 90's.

METU-3

**Turkish
Wave
Model**

**00
UTC**

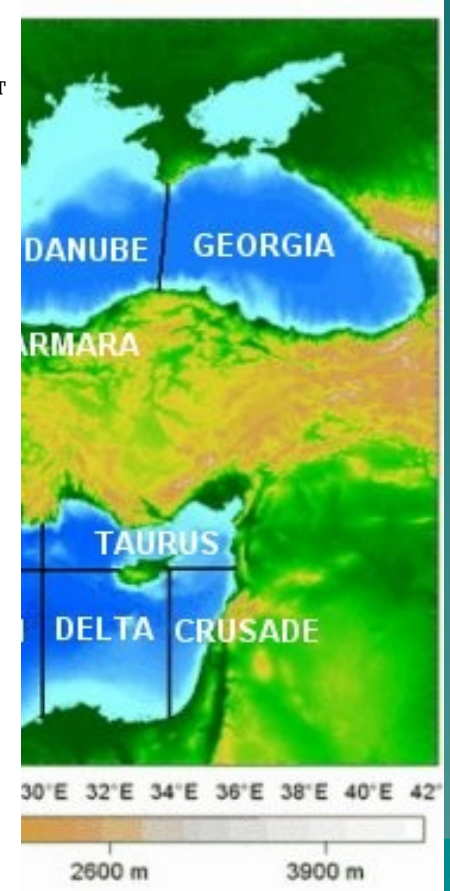
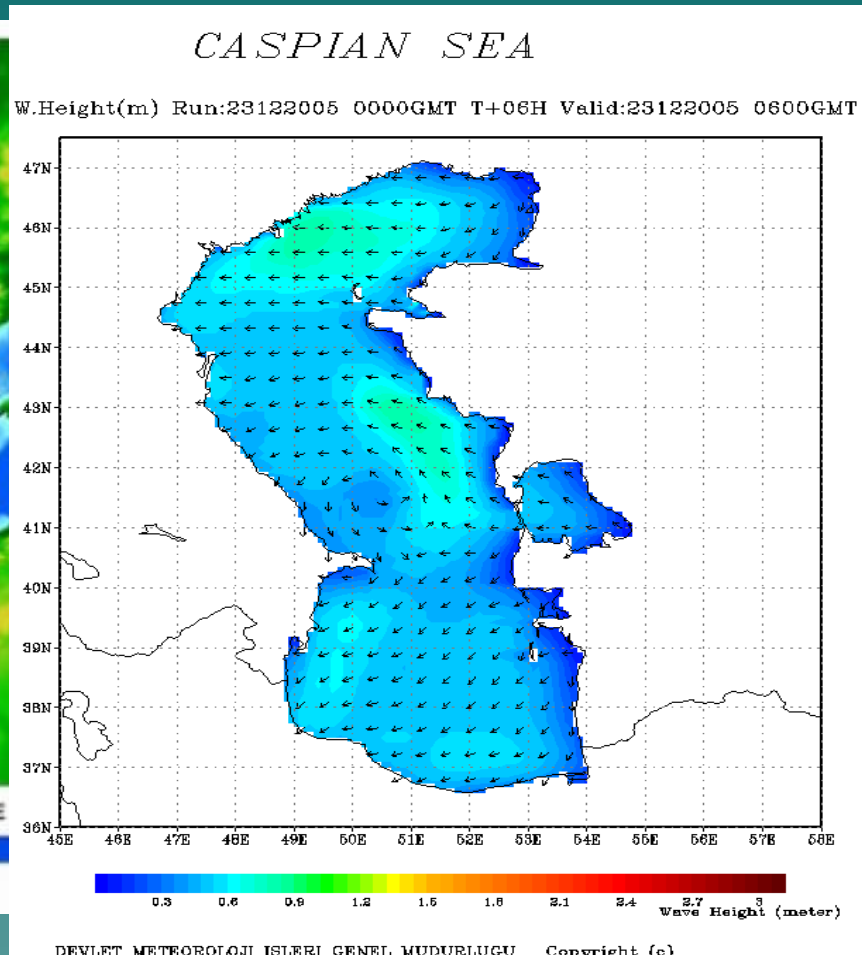
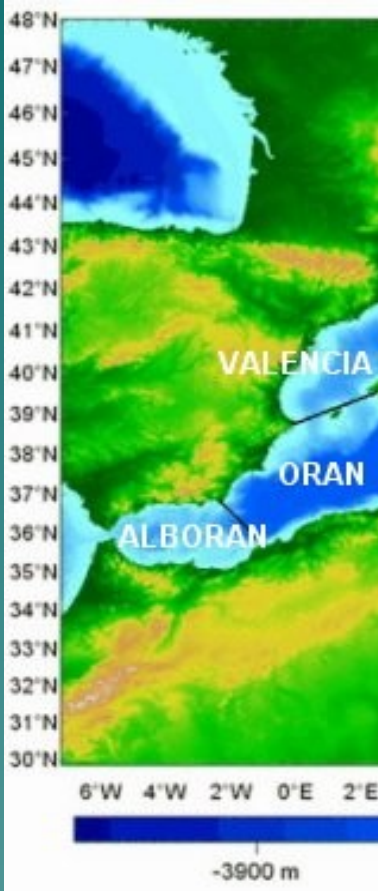
**12
UTC**

Operational METU-3 Domains:

<u>Black Sea</u>	:3 km,72 hrs, 3 hrs postpro.
<u>Marmara Sea</u>	:1 km,72 hrs, 3 hrs postpro.
<u>Mediterranean Sea</u>	:9 km,72 hrs, 3 hrs postpro.
<u>Caspian Sea</u>	:9 km,72 hrs, 3 hrs postpro.

Fields :Significant Wave height and Direction, Wave Period and Wind.

METU-3



• **Motivations and Objectives**

- **To become a part of a Mesoscale Forecasting Community**
 - **To exchange experiences and R&D activities**
 - **Customer based weather forecasting and risk management for Meteorological Natural Disasters**
 - **To benefit from current and future Observational network(Data Assimilation)**
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