



WEATHER FORECASTS

AT TSMS

Analysis and Forecasts Division

Turkish State Meteorological Service

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Orman ve Su İşleri

Bakanlığı





780.000 km2; 26 basin; 7200 km coast; 4 season; >3000 m 16 mount; 1400 m average

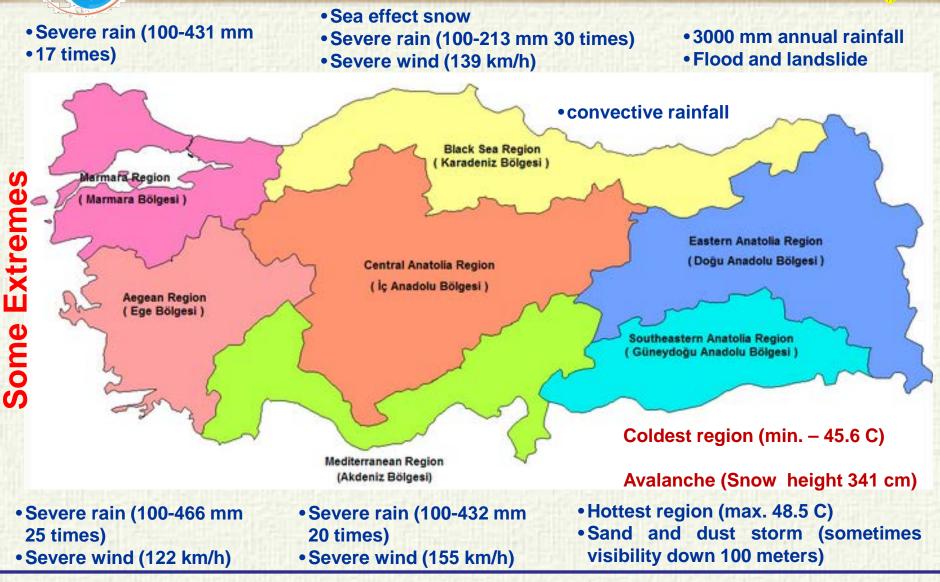
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T.C.

Bakanlığı

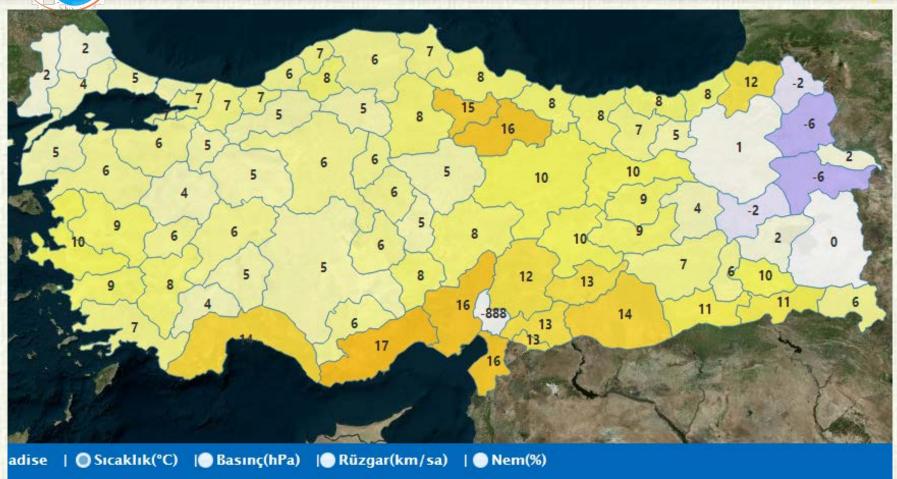
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1050 AWOS 56 Airport AWOS

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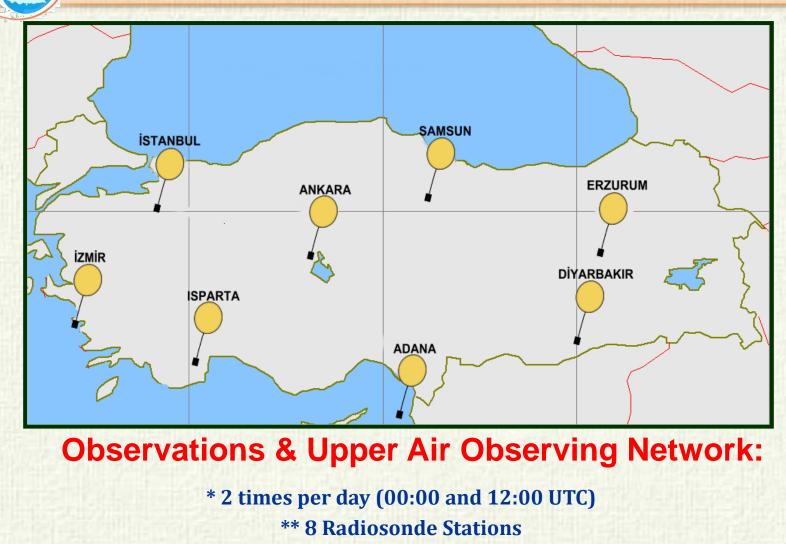
Bakanlığı

70 Marine Observation Systems

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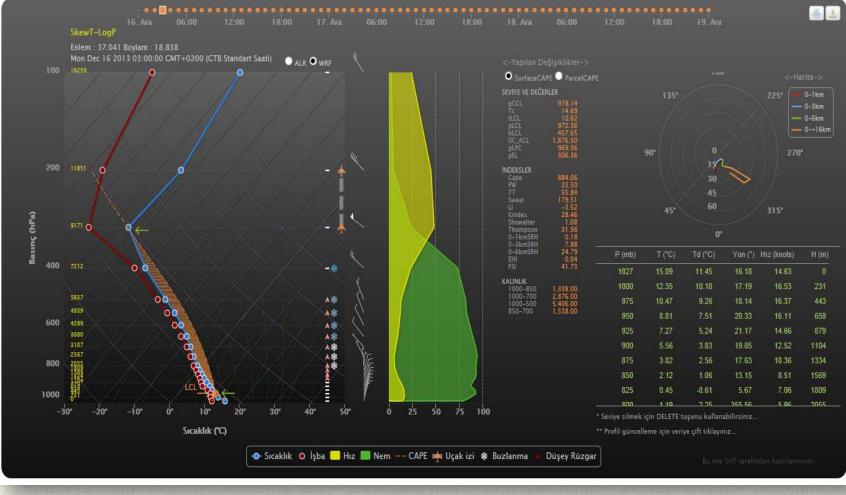
7 more stations are planned for 2014-2017 period.

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Bakanlığı





Interactive Temp Diagram

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Meteorological Radar Network

≻1 HF Radar

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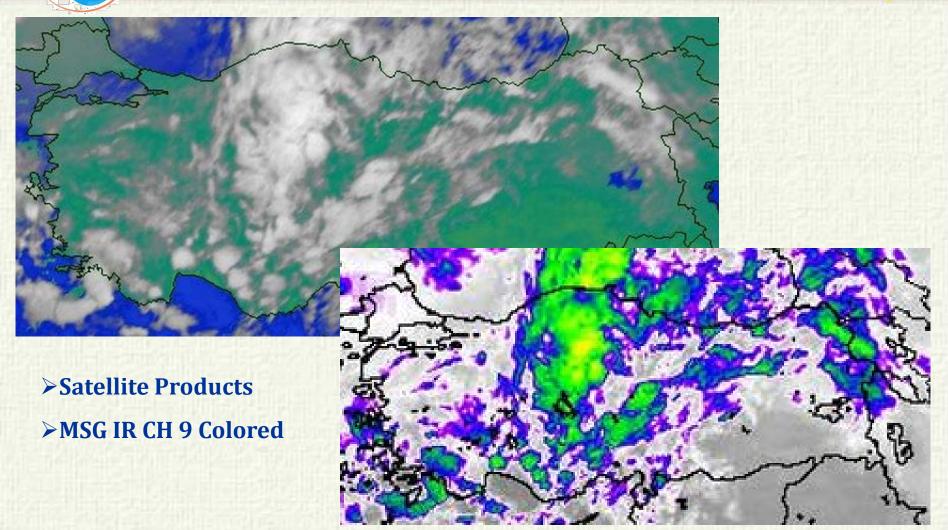
Bakanlığı

> 10 Meteorological Radars

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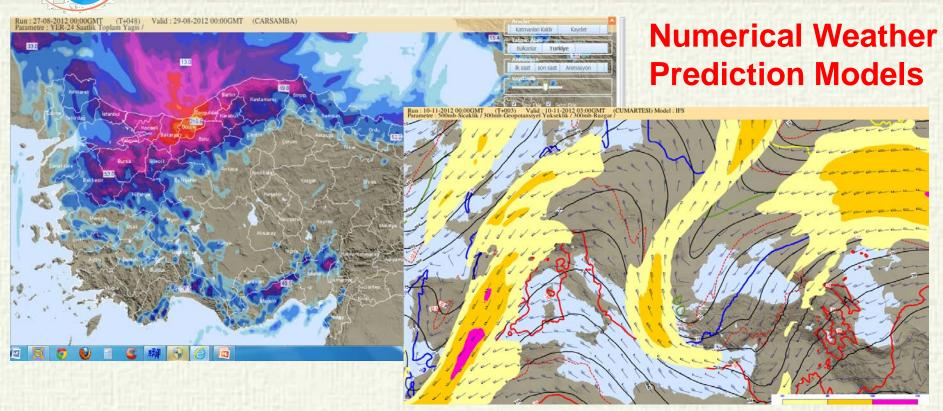
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Medium Range, Monthly and Seasonal Forecasts: ECMWF/IFS, ECMWF/EPS, ECMWF Monthly and Seasonal Forecast Models

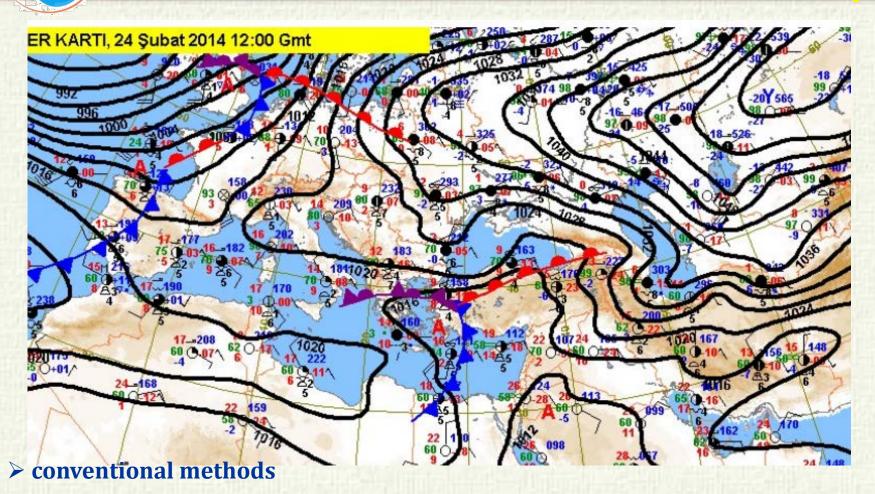
Short Range Forecasts: ALADIN, MM5 and WRF

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Marine Forecasts: METU-3, SWAN, ECMWF Wave Model

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- charts at different pressure levels
- > long term experiences

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Daily meteorological briefings

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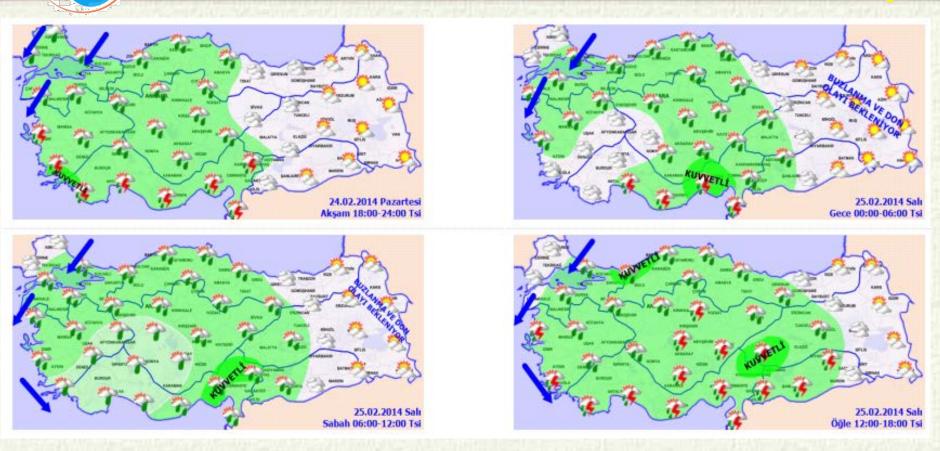
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Products: Daily forecast

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Periods: 06 - 12 - 18 - 00

Updated 3 times a day (06, 12, 18 Local time)

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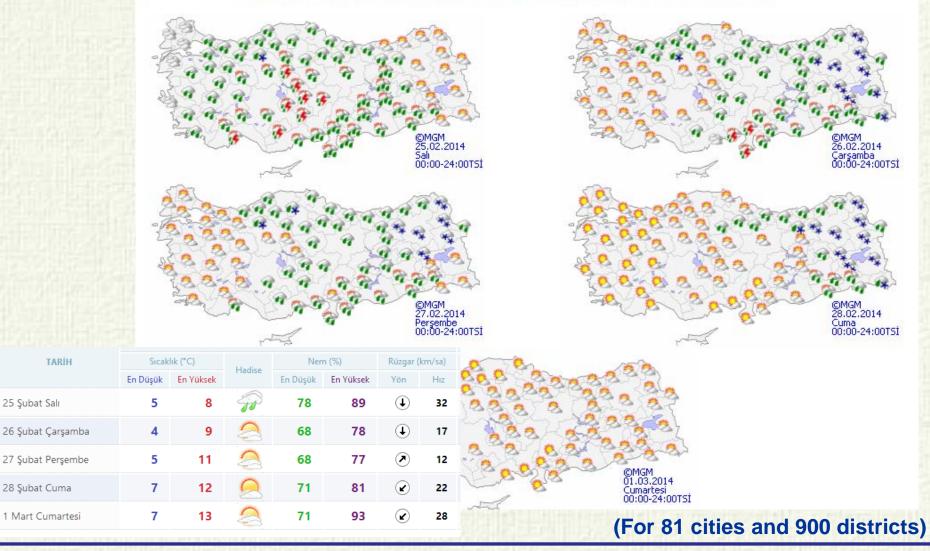
Products: 5 days forecast

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ler



« 25 Şubat, Salı 26 Şubat, Çarşamba 27 Şubat, Perşembe 28 Şubat, Cuma 1 Mart, Cumartesi »



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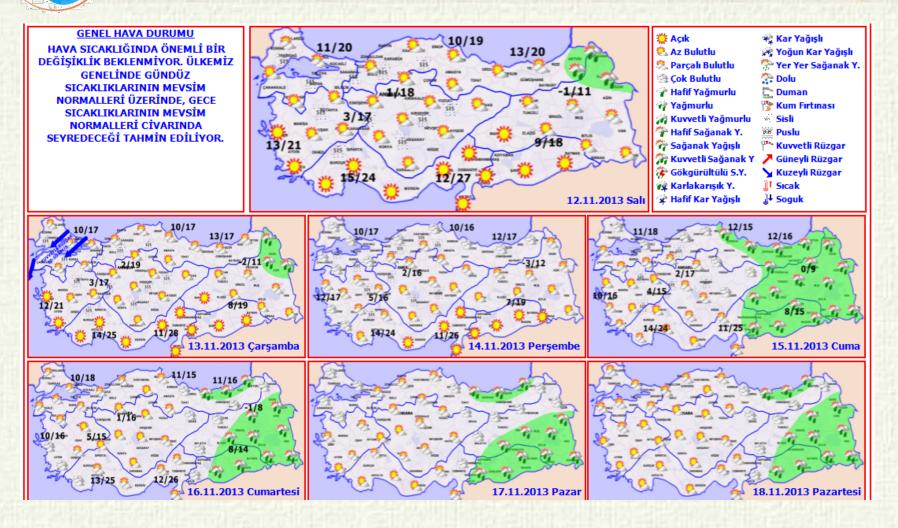
Products: Weekly forecast

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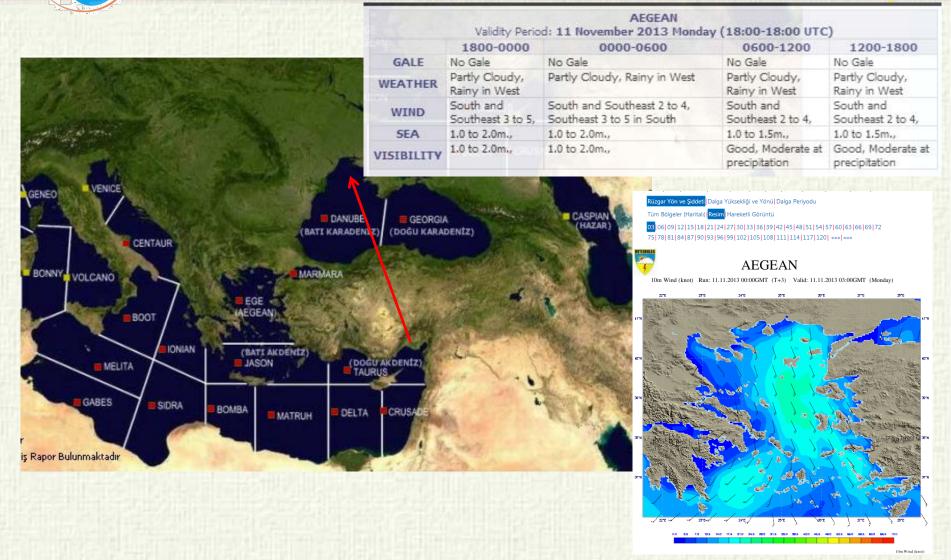
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Products: 3 Days marine forecast

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Aylık Tahmin | Mevsimlik Tahmin

11.11.2013 - 17.11.2013



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Haftalık Tahmin <mark>2. Hafta</mark> 3. Hafta 4. Hafta



Hava sıcaklığının yurt genelinde mevsim normallerinin biraz üzerinde seyredeceği tahmin edilmektedir. Yağışın ise yurt genelinde mevsim normalleri civarında gerçekleşeceği öngörülmektedir.

Monthly Forecast based on ECMWF's Monthly Forecast Model is being prepared 2 times a week.

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Aylık Tahmin | Mevsimlik Tahmin

Aralık 2013

такан



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Bakanlığı

Kasım 2013 Aralık 2013 Ocak 2014



Seasonal Forecast based on ECMWF's Monthly Forecast Model is being prepared once a month.

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Early Warnings and general risk assessments are done for the following severe meteorological event:

- Heavy Rain/Shower/Thunderstorm
- Heavy Snow

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- Strong Wind and Gale
- Dust and Sand Transport
- Snow Melt Avalanche Risk
- > Agricultural Frost
- Cold/Warm Waves
- Ice and Frost
- ≻ Fog



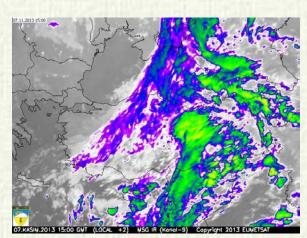
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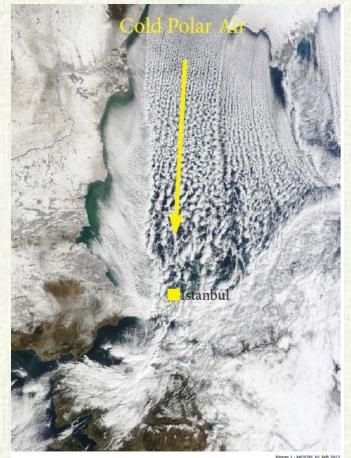


based on NWP and forecaster <u>experience</u>. about the time, place and intensity of the severe weather. prepared 0-6 hours



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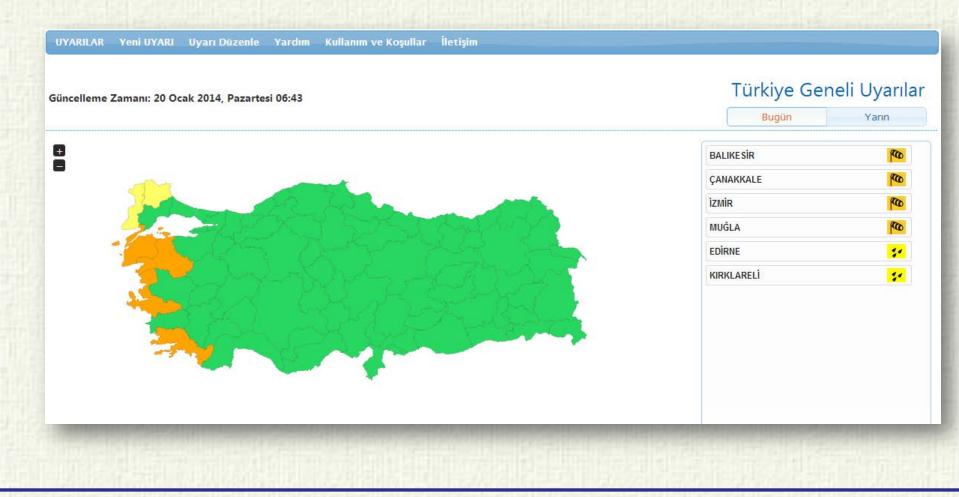


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MeteoAlarm Colored Warning System



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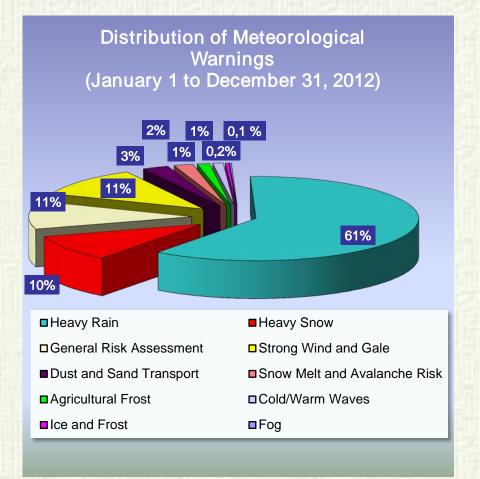


2012

Types of Meteorological Warnings	Number of Warnings
Heavy Rain/Shower/Thunderstorm	352
Heavy Snow	58
General Risk Assessment	62
Strong Wind and Gale	65
Dust and Sand Transport	15
Snow Melt and Avalanche Risk	11
Agricultural Frost	7
Cold/Warm Waves	6
Ice and Frost	2
Fog	1
Total	579

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2013

Types of Meteorological Warnings	Number of Warnings			
Heavy Rain/Shower/Thunderstorm	251			
Heavy Snow	27			
General Risk Assessment	47			
Strong Wind and Gale	79			
Dust and Sand Transport	4			
Snow Melt and Avalanche Risk	6			
Agricultural Frost	11			
Fog	2			
Total	427			



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Verification of forecast

Year	Ave.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Agu.	Sep.	Oct.	Nov.	Dec.
2004	88,5	84	83	90	90	87	87	93	87	90	89	91	92
2005	87,0	90	87	85	86	82	88	89	88	86	89	86	90
2006	89,6	87	88	89	87	88	89	89	91	90	88	96	94
2007	89,8	94	89	88	90	86	87	93	89	93	89	88	91
2008	89,0	92	90	90	84	86	88	91	90	89	88	89	91
2009	87,4	89	87	87	87	86	83	86	91	88	87	93	86
2010	86,9	87,1	82,6	84,7	85,9	84,2	81,6	86,6	93,1	85,6	87,0	94,2	90,5
2011	87,3	90,5	84,6	85,7	81,1	80,9	83,5	89,2	89,1	91,1	90,8	90,7	90,3
2012	89,5	90,6	93,7	90,6	87,2	81,9	91	89,7	91	92,8	86,4	89,7	89,8
2013	89,4	87	90	86	90	84	88	91	92	91	95	89	92
Ave.	84,4	82,9	83,1	83,6	81,4	80,6	83,6	87,6	88,2	87,8	85,9	86,3	83,5

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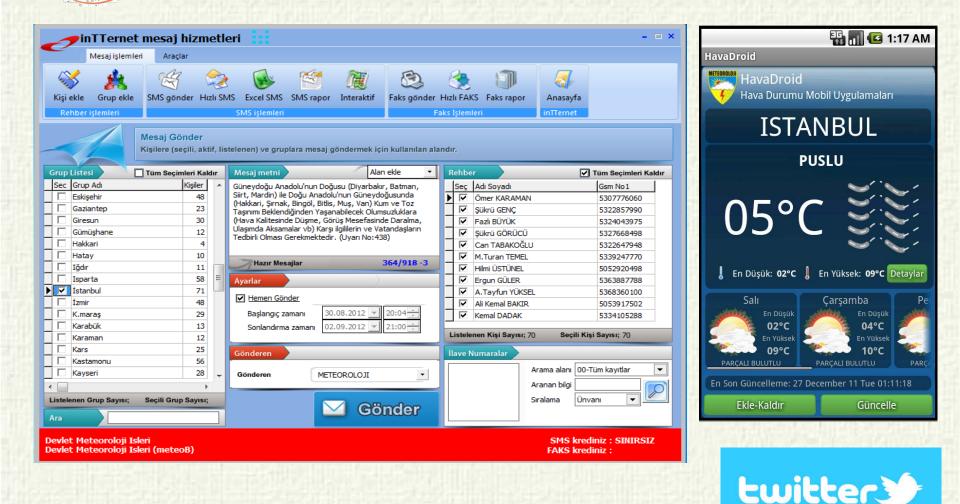
SMS & Mobile Apps

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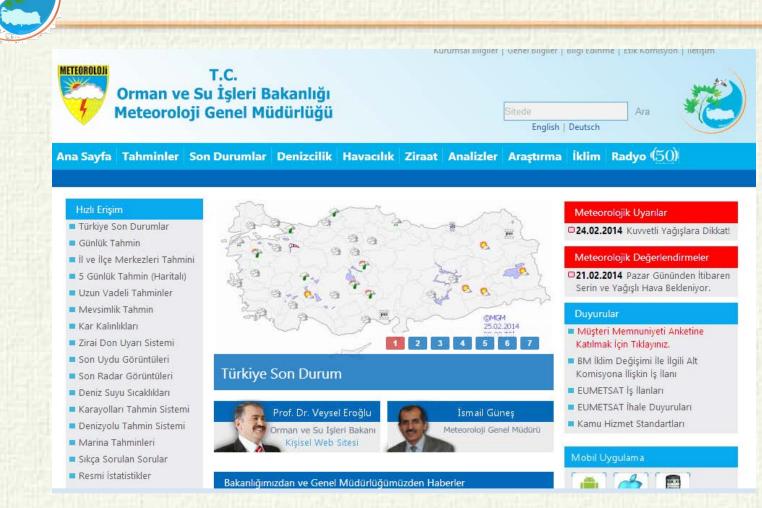
Internet: www.mgm.gov.tr

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Bakanlığı

Orman ve Su İşleri





reaching 3 millions (Avarage 1.7 Millions) visits per day

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thank you for your attention...

Analysis and Forecasts Division Turkish State Meteorological Service

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