

AIR QUALITY MANAGEMENT IN TURKEY

Dust Storms Effect

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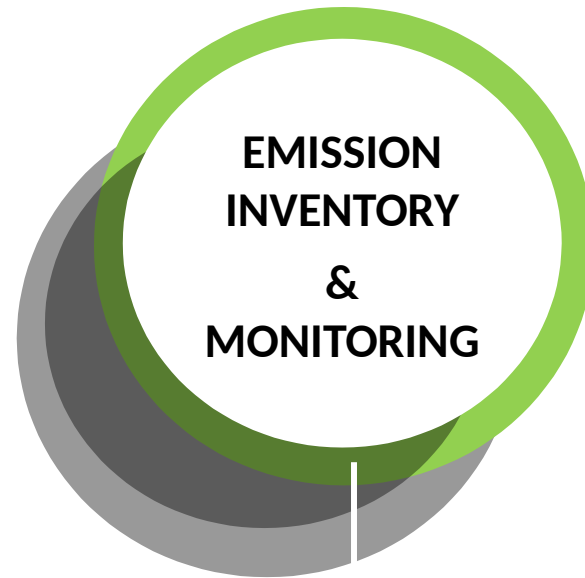


**FIGURES
FACTS**



AIR QUALITY

Cappadocia, Nevşehir



- **Limit values almost aligned to EU standards**
- **Local Clean Air Action Plans (64 cities out of 81)**
- **Cycling is encouraged**
- **Low Emission Zones are on the way**

- **Online monitoring of air quality via 339 stations**
- **7 Regional Clean Air Centers**
- **Reporting of National Air Emission Inventory since 2011**

DISSEMINATION OF CYCLING PATHS

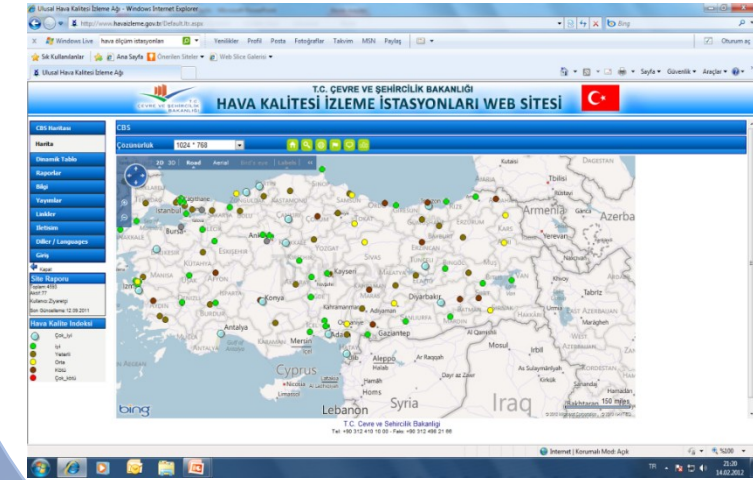


AIR QUALITY MONITORING

Mountain Nemrut, Adiyaman

AIR QUALITY MONITORING

- National Air Quality Monitoring Network in 81 provinces
- Measurement results are online at www.havaizleme.gov.tr
- 339 active station
- All of these stations are equipped to measure SO₂ and PM₁₀, some of them can measure CO, NO_x, O₃, PM_{2,5} and meteorological parameters.



CLEAN AIR CENTERS

Clean Air Centers established to support Ministry for monitoring air quality and identifying pollutant sources.



1) Marmara THM (2010)

2) Ege THM (2017)

3) Kuzey İç Anadolu THM (2016)

4) Güney İç Anadolu THM (2016)

5) Orta Karadeniz THM (2016)

6) Doğu Anadolu THM (2016)

7) Güney Doğu Anadolu THM (-)

8) Akdeniz THM (2017)

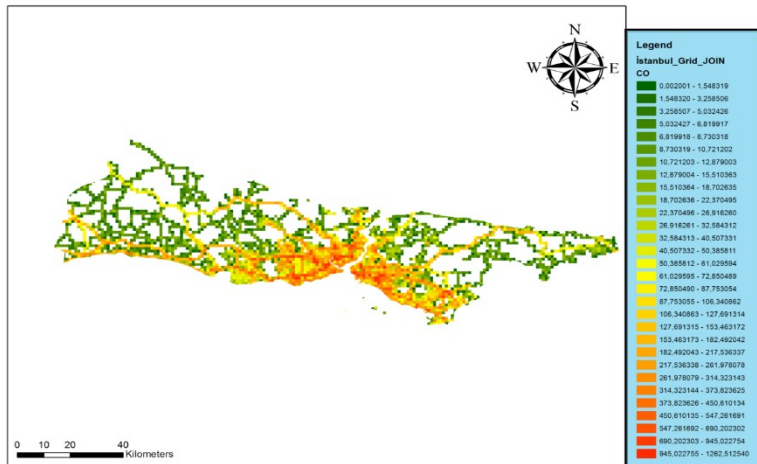
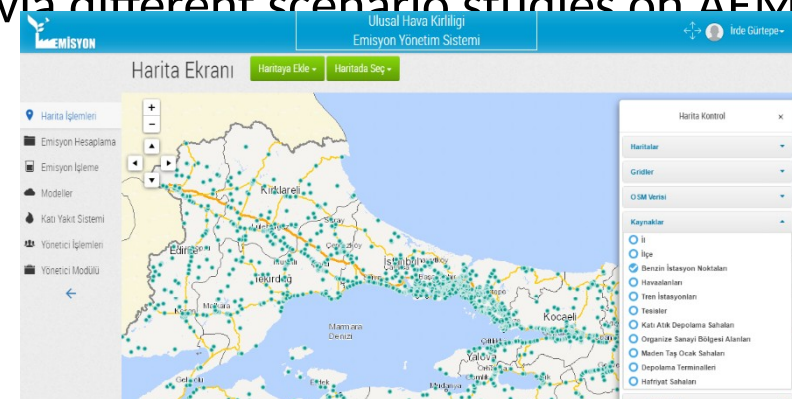
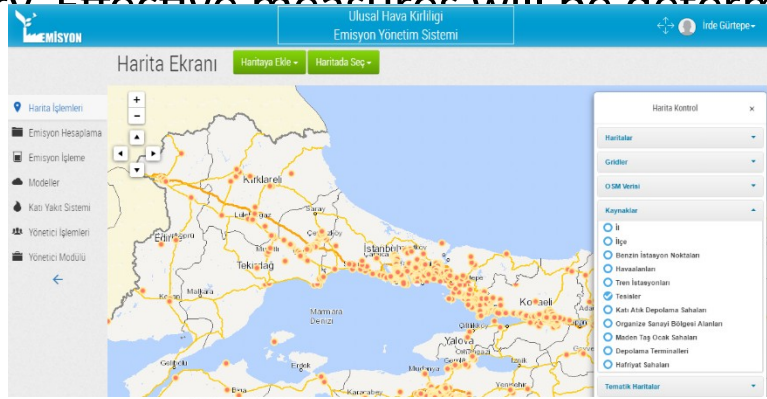
A wide-angle photograph of a flock of flamingos walking across a vast, flat, white salt flat under a clear blue sky. The birds are in various stages of movement, some walking towards the left and others towards the right. The ground is covered in small, white, crystalline salt deposits. The sky is a uniform light blue. The text 'AIR EMISSION MANAGEMENT PORTAL' is overlaid in the center in a bold, red, sans-serif font. A thick black rectangular frame surrounds the text, with the top and bottom bars being slightly shorter than the side bars.

AIR EMISSION MANAGEMENT PORTAL



AIR QUALITY MANAGEMENT

- GIS based Air Emissions Management(AEM) Portal that covers all pollutant sources data was established.
- National and regional strategic air quality maps can be prepared by AEM Portal.
- Air quality maps are finalized for Marmara region until, 2023 AEM will be spread to whole over country. Effective measures will be determined via different scenario studies on AEM Portal.



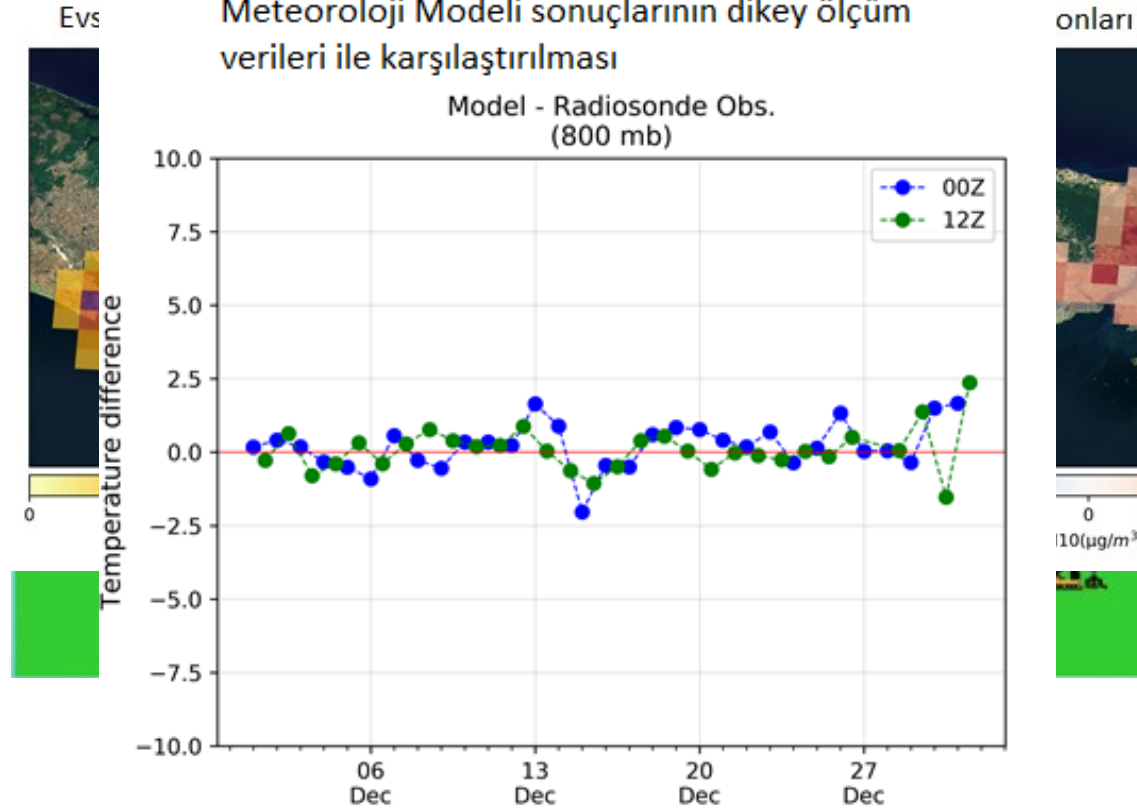


AEM PORTAL-Source Identification and Modelling Studies

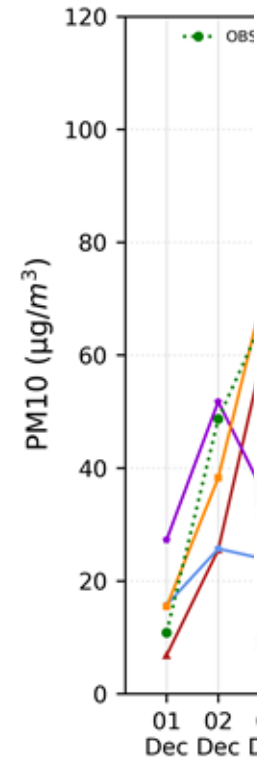
İstanbul ili evsel ısınma emisyonlarının hava kalitesi etkisi

Meteoroloji Modeli sonuçlarının dikey ölçüm verileri ile karşılaştırılması

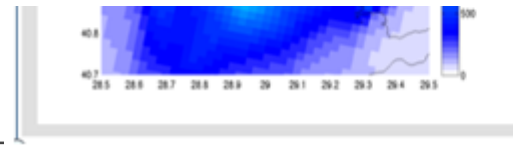
Model - Radiosonde Obs.
(800 mb)



İstanbul il sonuçları



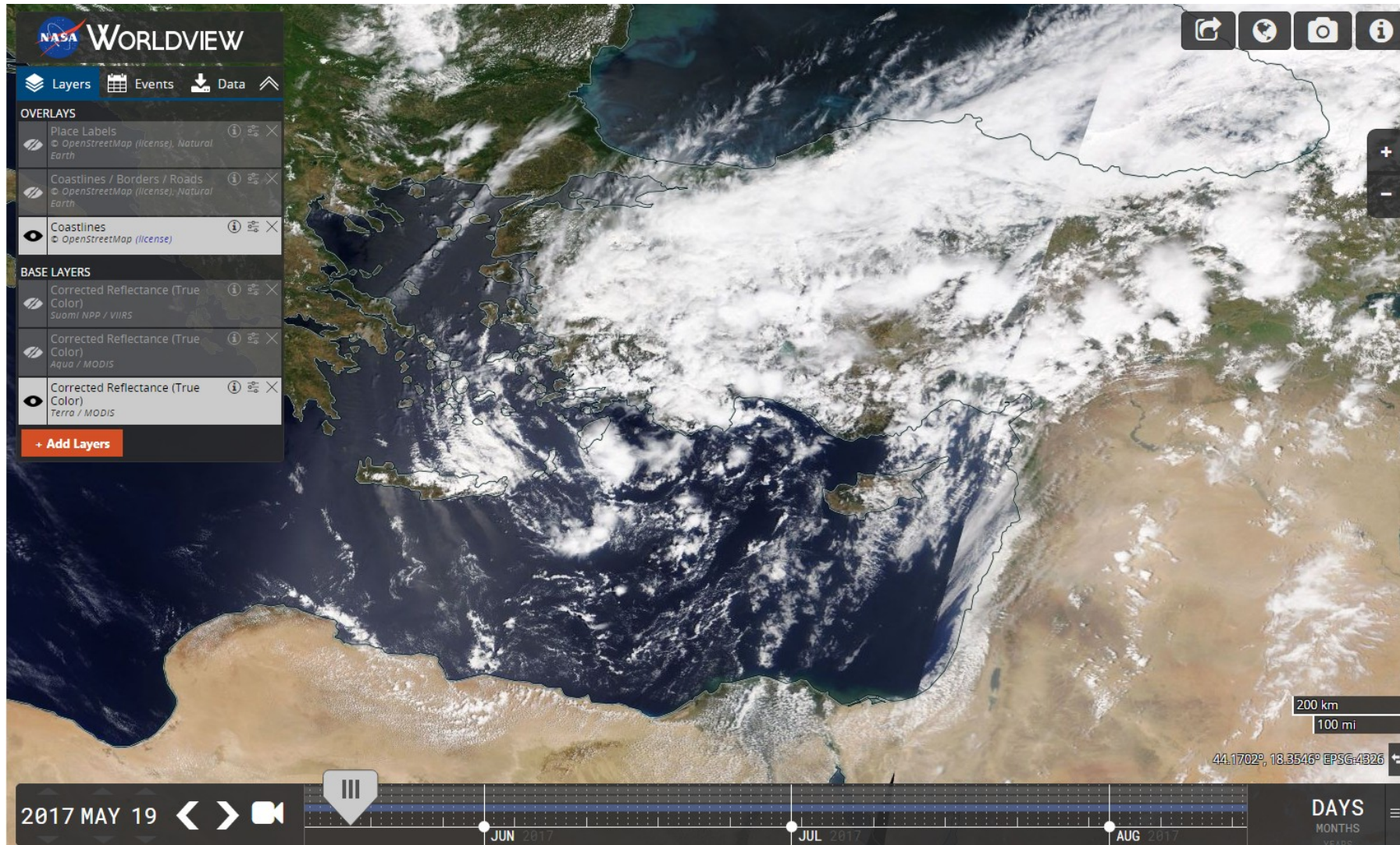
Belirlenen model çalışma alanları





SAND AND DUST STORMS EFFECT

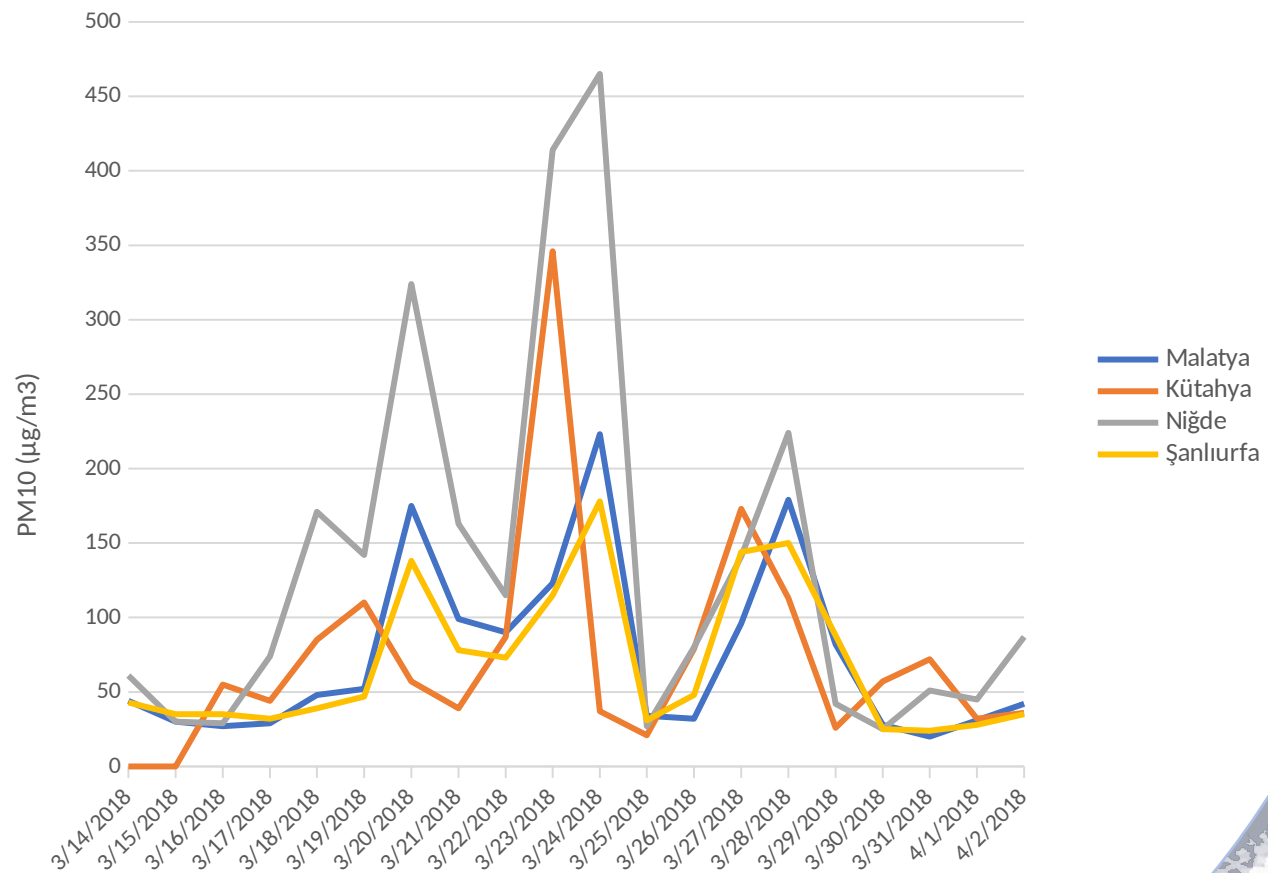
EXAMPLE, 19.05.2017







Dust storm effect on urban air quality



SDS



SDS MANAGEMENT

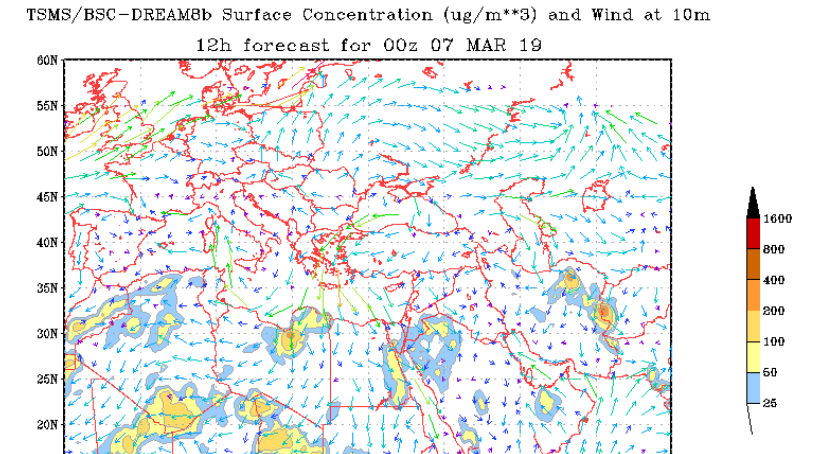
➤ Turkish State Meteorological Service is responsible for SDS forecasts.

➤ DREAM model have been operated by using ECMWF initial and boundary data.

➤ The system is in operational use providing 72 hours forecasts for the Mediterranean region covering Europe, Northern Africa and the Middle East. The results are available on the internet.

➤ SDS episodes are noted by MOEU AQ experts, SDS contribution not discarded in line with CAFE Directive.

The screenshot shows the Turkish State Meteorological Service website. The header includes the logo and navigation links for Weather, Satellite & Radar, Marine Meteorology, Calibration Center, and Dust & Climate. The main content area is titled "Sand and Dust Storm (SDS) Forecast". Below this, there are several interactive elements: "Type" with "Map" selected and "Animation" as an option; "Region" with "Euro-Mediterranean" selected and "Middle East" as an option; "Parameter" with "Concentration" selected and "Dust Load", "Dry Deposition", and "Wet Deposition" as options; and "Hour" with a range of time slots from 00 to 72, where "12" is currently selected.



A scenic view of the Maiden's Tower in Istanbul, Turkey. The tower is a prominent stone structure with a white upper section and a dark dome, situated on a small island in the Bosphorus. In the foreground, a small boat with a white canopy is moving across the blue water. The background shows the city skyline with various buildings and minarets under a bright blue sky with scattered white clouds. A dark grey frame is overlaid on the right side of the image, containing the text 'THANK YOU FOR YOUR ATTENTION' in yellow capital letters.

**THANK YOU FOR
YOUR ATTENTION**

Istanbul, Turkey