

## SCIENTIFIC ADVISORY BOARD

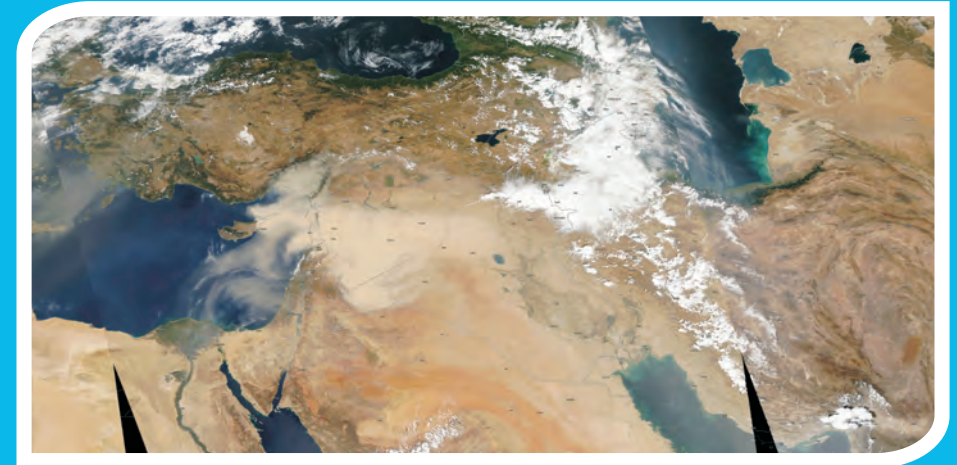
- Enric TERRADELLAS, Spanish Meteorological Agency (AEMET)
- Dr. Alexander BAKLANOV, World Meteorological Organization (WMO)
- Dr. Abdul-Majeid HADDAD, UNEP-ROWA
- Dr. Ali M. AL-DOUSARI, Kuwait Institute for Scientific Research
- Dr. Emin ÖZSOY, Istanbul Technical University (ITU)
- Dr. Günay ERPUL, Ankara University
- Dr. Mazen MALKAWI, World Health Organization (WHO)
- Dr. Murat TÜRKEŞ, Boğaziçi University
- Dr. Mustafa COŞKUN, Turkish State Meteorological Service (TSMS)
- Dr. Nicholas MIDDLETON, University of Oxford
- Dr. Peter TOZER, Washington State University
- Dr. Sara BASART, Barcelona Supercomputing Center (BSC)
- Dr. Slobodan NICKOVIC, University of Belgrade
- Dr. Tareq HUSSEIN, University of Jordan



# 5<sup>th</sup> INTERNATIONAL WORKSHOP ON SAND AND DUST STORMS

(DUST SOURCES AND THEIR IMPACTS IN THE MIDDLE EAST)

23-25 October 2017, Istanbul, TURKEY



## ORGANIZATION COMMITTEE



**Turkish State Meteorological  
Service (TSMS)**

**General Directorate of Combating  
Desertification and Erosion (ÇEM)**

**Cihan DÜNDAR**  
Director of Atmospheric Modeling Division

**Yaşar ÇAKIROĞLU**  
Head of Erosion Control Department

**Ayşe Gökçen IŞIK**  
Engineer

**Sevilay SUNAMAK**  
Director of Dry and Semi-Dry Areas Division

**A. Hande TÜRKYILMAZ**  
Translator and Interpreter

**Ali KÜÇÜMEN**  
Engineer

## SUPPORTING ORGANIZATIONS



# PROGRAM

October 23, 2017 - Monday

SDS, Dust Sources and Dust-Climate-Drought Interaction

TIME	SUBJECT	SPEAKER
08:30-09:15	Registration	
09:15-10:00	Opening Speeches	
	<b>SESSION I</b>	<b>MODERATOR - Dr. Emin ÖZSOY</b>
10:00-10:20	SDS Warning Advisory and Assessment System (SDS-WAS)	Enric TERRADELLAS, <i>Spanish Meteorological Agency (AEMET)</i>
10:20-10:40	Climate-Dust Interaction in the Middle East	Dr. Ali AL-DOUSARI, <i>Kuwait Institute for Scientific Research</i>
10:40-11:10	<b>COFFEE BREAK</b>	
11:10-11:30	Climatology and Spatiotemporal Variations of Synoptic Meteorological Dust Events Observed over the Middle East and Surrounding Regions during the 2003-2016 Period	Dr. Murat TÜRKEŞ, <i>Center for Climate Change and Policy Studies, Boğaziçi University, Turkey</i>
11:30-11:50	Sand and Dust Storm Sources in Kuwait	Dr. Mohamed F. YASSIN, <i>Kuwait Institute for Scientific Research</i>
11:50-12:10	Drought Evaluation over the Middle East	Dr. Abdullah CEYLAN, <i>TSMS, Turkey</i>
12:10-13:00	<b>Group Discussion and Group Report</b>	
13:00-14:30	<b>LUNCH</b>	
	<b>SESSION II</b>	<b>MODERATOR - Dr. Ali AL-DOUSARI</b>
14:30-14:50	Standard Aerosol Optical Depth Index (SAODI) and Application in the Middle East	Zekâi ŞEN, <i>Turkish Water Foundation (TWF)</i>
14:50-15:10	Methodology Framework for SDS Sources Identification	Dr. Ali DARVISHI, <i>University of Tehran, Iran</i>
15:10-15:30	Monitoring the Changes in the Mesopotamian Marshlands during Drought Periods	Dr. Orkan OZCAN, <i>ITU Eurasia Institute of Earth Sciences, Turkey</i>
15:30-16:00	<b>COFFEE BREAK</b>	
16:00-16:20	SDS-WAS Regional Cooperation in the Middle East	Dr. Tareq HUSSEIN, <i>University of Jordan</i>
16:20-16:40	Change of Water Masses-Dust Storms Interaction in Syria and Iraq	Dr. Halil GUNEK, <i>Firat University, Turkey</i>
16:40-17:00	Frequent Interval of Sand and Dust Storms in Jordan	Dr. Ziyad BALASMEH, <i>Jordan Meteorological Department</i>
17:00-17:30	<b>Group Discussion and Group Report</b>	

October 24, 2017 - Tuesday

Monitoring and Forecast of SDS

TIME	SUBJECT	SPEAKER
	<b>SESSION III</b>	<b>MODERATOR - Dr. Murat TÜRKEŞ</b>
09:00-09:40	Official Opening (With the participation of the Minister Prof. Dr. Veysel EROĞLU)	
09:40-10:00	Ground Observation of Dust	Dr. Sergio RODRIGUEZ, <i>Spanish Meteorological Agency (AEMET)</i>
10:00-10:20	EUMETSAT SDS Products for the Middle East	José PRIETO, EUMETSAT
10:20-10:40	Challenges and Perspectives in Dust Modeling	Dr. Carlos PEREZ, <i>Barcelona Supercomputing Center (BSC)</i>
10:40-11:20	<b>COFFEE BREAK</b>	

October 24, 2017 - Tuesday

Monitoring and Forecast of SDS

TIME	SUBJECT	SPEAKER
11:20-11:40	High Resolution SDS Forecast Requirement for the Middle East	Dr. Sara BASART, <i>Barcelona Supercomputing Center (BSC)</i>
11:40-12:00	SDS-WAS: Ensemble Prediction of Airborne Dust	Gerardo García-CASTILLO, <i>Spanish Meteorological Agency (AEMET)</i>
12:20-12:40	Seasonal AOD Variability Using Satellite Data and its Comparison over Saudi Arabia for the Period 2002-2013	Arfan ALI, <i>King Abdulaziz University, Jeddah, Saudi Arabia</i>
12:40-13:20	<b>Group Discussion and Group Report</b>	
13:20-14:30	<b>LUNCH</b>	
	<b>SESSION IV</b>	<b>MODERATOR - Dr. Carlos PEREZ</b>
14:30-14:50	Analysis of Aerosols over the Middle East (2003-2016)	Cihan DÜNDAR, <i>TSMS, Turkey</i>
14:50-15:10	Analysis of DOD and Dust Emissions over the Middle East by using CAMS	Dr. Richard ENGELEN, <i>ECMWF</i>
15:10-15:30	Contribution of Desert Dust Transport to Daily PM10 Concentrations in Aksaray, Istanbul: A long-term study	Dr. Rosa Maria FLORES, <i>Marmara University, Turkey</i>
15:30-15:50	Dust Sources and Monitoring the Changes on the Sources over the Middle East	Hassan HERSI, <i>Africa Nature Conservation Organization, Somalia</i>
15:50-16:10	<b>COFFEE BREAK</b>	
16:10-16:30	Dust Variability in the Middle East Recorded in the Elbrus Mt. Ice Core.	Dr. Stanislav KUTUZOV, <i>Russian Academy of Sciences, Moscow</i>
16:30-16:50	15 Years View of Aerosol Dust over the Middle East	Dr. Saviz SEHATKASHANI, <i>Atmospheric Science and Meteorological Research Center, Iran</i>
16:50-17:30	<b>Group Discussion and Group Report</b>	

October 25, 2017 - Wednesday

Impacts of SDS

TIME	SUBJECT	SPEAKER
	<b>SESSION V</b>	<b>MODERATOR - Dr. Moutaz Al-DABBAS</b>
09:00-09:20	Health Effects of SDS Focusing on the Middle East	Dr. Mazen MALKAWI, <i>World Health Organization (WHO)</i>
09:20-09:40	The Effects of SDS Events on the Chemical Composition of Particulate Matter in the Middle East	Dr. Najat SALIBA, <i>American University of Beirut, Lebanon</i>
09:40-10:00	Evaluation of the Effects of Settled Desert Dust on Socioeconomic Activities in Turkey on the Basis of Some Provinces in the Southeastern Anatolian Region	Dr. Taner ŞENGÜN, <i>Firat University, Turkey</i>
10:00-10:30	<b>COFFEE BREAK</b>	
10:30-10:50	The Mineralogical and Micro-Organisms Effects of Regional Dust Storms over the Middle East	Dr. Moutaz AL-DABBAS, <i>University of Baghdad, Iraq</i>
10:50-11:10	Review of Dust Control Projects in Ahwaz, Iran and Solutions toward Sustainable Development	Ali HAMIDIAN, <i>University of Tehran, Iran</i>
11:10-11:30	Monitoring of Irrigable Agricultural Lands in Euphrates-Tigris River Basin (Syria-Iraq)	Dr. Ayhan ATEŞOĞLU, <i>Bartın University, Turkey</i>
11:30-12:00	<b>Group Discussion and Group Report</b>	
12:00-13:30	<b>Preparation of Workshop Report Chairs and Reporters Session and Closure</b>	<b>MODERATOR - Enric TERRADELLAS Chairs and Reporters Session</b>
13:30-14:30	<b>LUNCH</b>	