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Prepared by EUMETSAT

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## **EUMETSAT REPORT ON WMO DUST PROJECT TRAINING SUPPORT**

In response to CGMS action/recommendation 38.32

The document summarises the regular training activities in support of the WMO SDS-WAS project, which are supported by EUMETSAT, the Barcelona Supercomputing Center, AEMET, WMO and several host institutes. In 2010, a two-week training course involving representatives of 22 countries in Africa and the Middle East took place in Barcelona. In 2011, the second course of these series is planned for November 21-25 in Antalya (Turkey), organised by the Turkish State Meteorological Service together with the above mentioned supporting partners.

Action proposed: CGMS is invited to take note

## **EUMETSAT Report on WMO Dust Project Training Support**

### **1 INTRODUCTION**

The WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS) was established in 2007 in response to the intention of 40 WMO member countries to improve capabilities for more reliable sand and dust storm forecasts. Research forecasting products from atmospheric dust models substantially contribute to a risk reduction in many areas of societal benefit. The programme relies on the real-time delivery of products, mainly through the Web.

### **2 Training cooperation**

Created by an agreement between the State Meteorological Agency for Spain (AEMET) and the National Supercomputing Center-Barcelona (BCS-CNS), Barcelona is the official home of one of the two regional centres of SDS-WAS. Barcelona (Spain) is the Regional Centre for Northern Africa, Middle East and Europe, whereas Beijing (China) is the other Regional Centre, for Asia. BCS in Barcelona provides access to observations and semi-operational numerical predictions of sand and dust events. In addition to the model predictions, a reanalysis product also provides a long-term record of sand and dust events, critical to studies of health impacts.

EUMETSAT cooperates with the SDS-WAS project by supplying training on Dust features and encouraging other partners to participate within the scope of the programme. A first training event took place in Barcelona in November 2010.

#### **2.1 Second dust training course in 2011**

As agreed during a meeting at the BSC facilities in Barcelona early in 2011, the 2<sup>nd</sup> Training Course for the WMO SDS-WAS project (on satellite and ground observations and modelling of atmospheric dust) will be held in Antalya, Turkey from 21-25 November 2011. It is organized and funded by the Turkish State Meteorological Service (TSMS), the World Meteorological Organization (WMO) and EUMETSAT. It counts on the collaboration of the Spanish State Meteorological Agency (AEMET) and the Barcelona Supercomputing Center (BSC-CNS). Participants from Northern African and Middle-East countries have been invited.

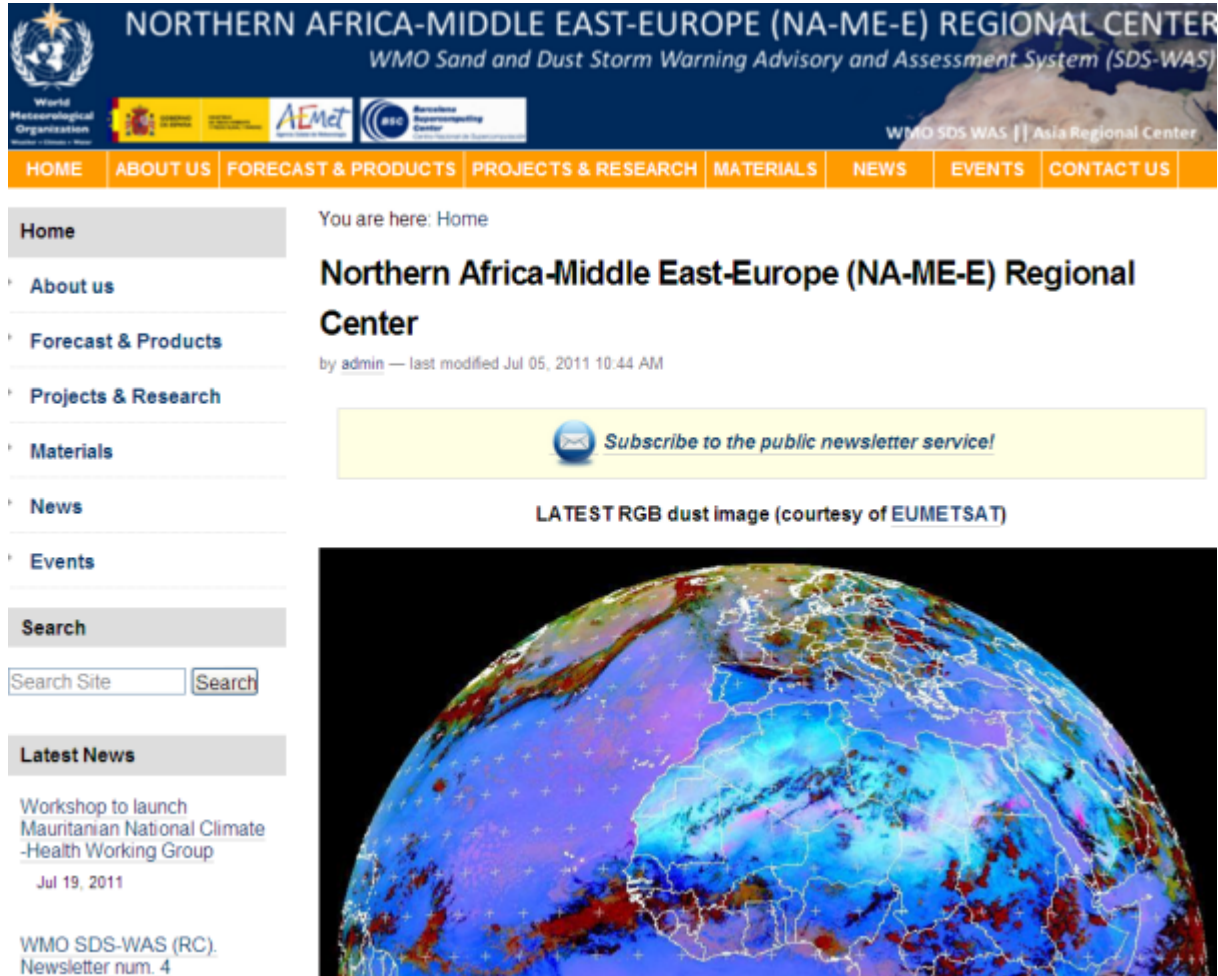
The Oman WMO VLab Centre of Excellence for Training in Satellite Meteorology, which was involved in the first course, will be also lecturing in the next autumn course.



**Trainers and participants from 18 African countries, Irak, Iran, Turkey and Oman attended the two week course in Barcelona in November 2010**

Information on registration for this course, addressed mainly to countries in Northern Africa and the Middle East, can be found in:

<http://sds-was.aemet.es/events/2nd.-training-course-on-wmo-sds-was>



The screenshot shows the homepage of the Northern Africa-Middle East-Europe (NA-ME-E) Regional Center for the WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS). The page features a navigation menu with options like Home, About Us, Forecast & Products, Projects & Research, Materials, News, Events, and Contact Us. A sidebar on the left contains a search bar and a 'Latest News' section with two entries: 'Workshop to launch Mauritanian National Climate-Health Working Group' dated Jul 19, 2011, and 'WMO SDS-WAS (RC). Newsletter num. 4'. The main content area displays the title 'Northern Africa-Middle East-Europe (NA-ME-E) Regional Center' and a 'LATEST RGB dust image (courtesy of EUMETSAT)' which is a satellite-derived dust composite image of the Earth's surface, showing dust concentrations over the Sahara and surrounding regions.

SDS-WAS web page, showing the DUST RGB composite as a product with aerosol monitoring application

### 3 CONCLUSION

Dust and aerosol in the atmosphere have received much attention in the last years mainly due to the improved satellite detection capabilities. The Sahara desert supplies a major portion of the total load of floating dust. The cooperation of the nodal centres through the WMO SDS-WAS programme and the emphasis on training in cooperation with satellite operators, like EUMETSAT, contributes to an extended awareness of the impact of dust on health and climate evolution.