

Training Week on WMO SDS-WAS Products

The 'Training Week on WMO SDS-WAS Products' was held in Barcelona between 15 and 19 November 2010. It has been jointly organized and financed by the Spanish State Meteorological Agency (AEMET), the Barcelona Supercomputing Center (BSC), EUMETSAT and the World Meteorological Organization (WMO). The language was English.

The objectives of the training course have been:

- Build capacity of participants to use products of observation, analysis and forecast of atmospheric mineral dust in order to integrate them into future national systems of monitoring, forecasting and warning dust-related events.
- Communicate the needs and requirements of users to the institutions involved in the generation of observational and forecast products or supporting dust-related research.

Seven representatives of African NMHSs (Morocco, Algeria, Mali, Mauritania, Burkina Faso, Niger and Nigeria) as well as a representative of the African Centre for Meteorological Applications to Development (ACMAD) attended the course. The organization has covered the travel and subsistence expenses of all of them.

On the other hand, representatives of five Middle Eastern NMHSs (Oman, Saudi Arabia, Iran, Irak and Turkey) as well as a student of the University of Milan have attended the training course at their own expenses.

The following professors have participated in the training activities:

- AEMET: Emilio Cuevas and Enric Terradellas
- BSC: Sara Basart and Ángel Rincón
- CSIC: Xavier Querol
- UPC: Adolfo Comerón
- EUMETSAT: José Prieto, Jochen Kerkmann and Yves Govaerts
- Universidad de Colonia: Yaping Shao
- Leibniz Institute for Tropospheric Research: Ina Tegen

The lectures have been held at the campus of the Technical University of Catalonia (UPC). Visits to several technical facilities in the campus were arranged:

- Radiometric station managed by the BSC and integrated in the AERONET network
- Lidar managed by the UPC and integrated in the EARLINET network.

- Air quality station managed by the Institute of Environmental Assessment and Water Research.
- MareNostrum supercomputer managed by the BSC

The agenda of the training course was as follows:

- Opening. Practicalities. The WMO SDS-WAS programme (1 hour). Enric Terradellas
- Physical processes of sand and dust removal and transportation (1 hour). Yaping Shao
- Physical and chemical characterisation of dust (1 hour). Yaping Shao
- Sand and dust concentration estimations with SEVIRI (2 hours). Yves Govaerts
- Dust estimation based on infrared images (2 hours). José Prieto
- Ground based observation of dust (2 hours). Emilio Cuevas
- Dust forecasting models (2 hours). Sara Basart
- Dust variability (1 hour). Ina Tegen
- Dust-climate interactions (1 hour). Ina Tegen
- Practical sessions (6 hours). José Prieto, Jochen Kerkmann, Emilio Cuevas
- Technical visits (5 hours). Xavier Querol, Adolfo Comerón, Ángel Rincón
- Presentations of participants (4 hours). Enric Terradellas
- Conclusions. Closure (1 hour). Enric Terradellas



Picture of the participants in the Training Week on WMO SDS-WAS products. Barcelona, 19 Novembre 2010