Virtual BSC RS/ ES inDust Webinar: AEROCOM - Aerosol model intercomparison overview

Objectives

Abstract: The lecture will overview the main results and lessons learnt by the AEROCOM community (https://aerocom.met.no/). AEROCOM is an open international initiative of scientists interested in the advancement of the understanding of global aerosol and its impact on climate.

Multi-component aerosol modules in global models promise a much needed better seasonal and regional characterization of aerosol. However, the added complexity may have introduced many (potentially offsetting) errors. Thus, a rigorous validation effort is needed. Initial comparisons model evaluation efforts to remote sensing data (e.g. Kinne et al and Penner et al) illustrated the need for more detailed comparisons. Only a much expanded model output will permit process studies, like pioneering comparisons of near surface sulfate mass (COSAM). This study also indicated that unwanted difficulties arise from differences in model initialization (e.g. source strength or meteorology). Concepts of a new model-intercomparison and model-evaluation effort were discussed during IAMAP 2001 and introduced to modelers or interested by-standers during IGAC 2002. A driving force behind the new inter-comparison is availability of more accurate aerosol products from satellite, a tighter ground network of aerosol measurements and a multitude of results from field experiments.

Short bio: Michael Schuls is Deputy head of Climate Modelling and Air Pollution section, Research Department, Norwegian Meteorological Institute overseeing there the development of the NorESM earth system model.

Speakers

Dr Michael Schulz, Deputy head of Climate Modelling and Air Pollution section, Research Department, Norwegian Meteorological Institute overseeing there the development of the NorESM earth system model.

Host: Sara Basart, BSC Earth Sciences Recognised researcher, Atmospheric Composition Group

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