

A Multi-Model Analysis and Prediction System for Chemical Weather in Asia

Several meteorological centers have extended the concept of "weather forecasting" to "environmental forecasting" with an important component that includes the daily prediction of "chemical weather" at the global to regional to local scales. Such models include a procedure to assimilate space and surface observations and a detailed formulation of surface exchanges (emissions and deposition). Together with different partners, we have developed a multi-model analysis and forecasting system for air quality in different regions of the emerging world where high levels of air pollutants are reported. The World Health Organization (WHO) estimates that each year more than 3 millions persons die prematurely from bad air quality in the world.

The forecast system, which provides an ensemble of quasi-operational daily forecasts based on 7 independent models, will be described, and some examples of specific results for Asia and particularly for eastern China will be discussed. Some ideas (MAP-AQ initiative) to expand this system to other regions of the world in cooperation with the World Meteorological Organization (WMO) will be presented.

Dr. Brasseur from Max Planck Institute for Meteorology is invited by the MPI-Directors

Bundesstraße 53, Room 22/23 (ground floor)