Use of Satellite data for Air Quality Modeling and Data Assimilation in Europe

Henk Eskes
KNMI, Climate research, De Bilt, Netherlands (eskes@knmi.nl, +31 30 221 0407)

In my presentation I will discuss recent air quality forecasting, modelling and data assimilation initiatives in Europe. Especially in the context of the GMES project there is a major effort to provide detailed and high-quality air pollution information to the citizens. The “GMES Atmosphere Service” precursor project MACC (2009-2011) will set up an operational air pollution forecasting system. Advanced assimilation approaches are used to exploited the available near-real time observations from surface networks and from satellites. In the presentation these projects will be introduced. I will show examples of the use of air-quality relevant satellite data (OMI, IASI) in GEMS. The experiences with the assimilation of OMI NO2 data in the Dutch Lotos-Euros model will be discussed.