



Operational multi-model performance analysis for ozone and particulate matter over Europe and North America in the context of AQMEII Phase 2

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The Air Quality Model Evaluation International Initiative (AQMEII) aims to promote policy-relevant research on regional air quality model evaluation across the European and North American atmospheric modeling communities through the exchange of information on current practices and the identification of research priorities. The second phase of AQMEII brings together a large community of developers and users of online-coupled regional air quality models. Fourteen modelling groups from Europe and four from North America applied their modelling systems to continental-scale domains in North America and Europe for 2010 with the goal of model inter-comparison and evaluation. This presentation provides an overview of the AQMEII Phase 2 activity and presents the preliminary results of the collective operational model evaluation for ozone and particulate matter. These results are based on comparing the models against a large set of observations from surface station networks, ozone soundings and remote sensing instruments over the two continents. The analysis is performed using various spatial and temporal subsets of data to better characterize the sources of model strengths and deficiencies and thus setting the stage for the development of the next generation of regional scale on-line atmospheric modelling systems.