

Ozone-forecasts for Austria with ALADIN/CAMx

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Daily ozone-forecasts for Austria have been run in a pre-operational mode during summer 2005 and 2006. The model system has been set up for Austria in cooperation of the Central Institute for Meteorology and Geodynamic (ZAMG) and the University of Natural Resources and Applied Life Sciences. The meteorological fields are supplied by the limited area model ALADIN, which is run twice a day at ZAMG. 48-hours forecasts are computed with a horizontal resolution of 9.6 km covering Austria and 29 km for Central Europe. The dispersion modelling is done with the Comprehensive Air quality Model CAMx (version 4.10) with the SAPRC99-mechanism for gas phase chemistry.

Comparisons of the modelled ozone concentrations to the measurements of the Austrian air quality observational network are presented. The model results are especially evaluated concerning the prediction of the information threshold for ozone of $180 \mu\text{g}/\text{m}^3$ (Directive 2002/3/EC, March 2002).

Some short-comings encountered during the test phase of summer 2005 – e.g. an over-estimation of the ozone background level in the second half of the summer period –led to several improvements of the model system which were implemented before summer 2006.