



Reactive gases in the chemistry climate model ECHAM6-HAMMOZ

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The recently developed global chemistry climate model ECHAM6-HAMMOZ contains comprehensive and detailed schemes for tropospheric aerosol (HAM) and reactive gases chemistry (MOZ). The MOZ chemistry module consists of more than 300 species and 650 reactions, including relatively detailed degradation pathways for various volatile organic compounds in the troposphere and stratosphere. State-of-the-art parameterisations for chemical and physical processes are included. The poster will provide a general overview of the model components and present evaluation results from a multi-year simulation of the present-day atmospheric composition including observational data from various platforms and sources. This will document the model performance and document the strengths and weaknesses of this new model system. The model exhibits a tendency to overestimate surface ozone concentrations in the northern hemisphere during spring, similar to several other global models. We analyze the potential reasons for this bias and also look at data of various ozone precursor species.