



Oslo CTM3; a global chemical transport model

Ole Amund Søvde (1), Michael Prather (2), Terje K. Berntsen (1,3), Gunnar Myhre (1), Ivar S. A. Isaksen (1,3)

(1) Center for International Climate and Environmental Research – Oslo, (CICERO), Norway (asovde@cicero.uio.no), (2) Department of Earth System Science, University of California, Irvine, USA, (3) Department of Geosciences, University of Oslo, Norway

The Oslo CTM3 is an upgrade of the Oslo CTM2, containing tropospheric and stratospheric chemistry plus a number of aerosol modules. The Oslo CTM2 transport was based on the transport of an old version of the CTM from University of California, Irvine (UCI), and recently the UCI CTM transport has been revised. The Oslo chemical and aerosol modules have been included in this new dynamical core, and results are presented. Comparisons with measurements and with Oslo CTM2 are carried out. Also new to the core is the treatment of photodissociation rates (J-values), which now takes the scattering and absorbing aerosols into account and also includes an improved cloud parameterization. The effect of aerosols on J-values is calculated.