



A multi-model analysis of the tropospheric ozone budget

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As part of the wide-ranging ACCENT global tropospheric chemistry model intercomparison, 20 models simulated and archived full 3-D, monthly mean fluxes of ozone chemical production, chemical destruction and surface deposition. These have all been processed in exactly the same way, to produce model estimates of the global tropospheric ozone budget. There are significant differences compared to the budget presented in the IPCC Third Assessment Report. These new results perhaps represent our current best estimate of the spatial and temporal distributions of the tropospheric ozone budget terms, for a given set of anthropogenic emissions. The analysis will focus on where the inter-model differences are largest, with the aim of highlighting the root causes of these uncertainties.