



## **Past changes in stratospheric ozone over northern middle latitudes: modelling the chemical and dynamical impacts**

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The first results from a chemically-forced decadal simulation of stratospheric ozone (with emphasis on the middle latitudes) are presented here. The SLIMCAT chemical-transport model is run with a full chemistry stratospheric scheme from 1958 to 2004 driven by the ECMWF ERA-40 and operational analyses. The model is updated with sulphuric acid fields from major volcanic eruptions and the bottom boundary (at 350K) is overwritten by changing source gases (halogens, nitrous oxide and methane) concentrations. The modelled ozone time-series are compared with ground-based and satellite measurements. The chemical and dynamical contributions (which are both included in the model) of past long-term changes in ozone are assessed.