



RETRO project status overview

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The RETRO project (REanalysis of the TROpospheric chemical composition over the past 40 years) has set out to perform the first comprehensive long-term simulation of tropospheric chemical composition trends and changes over the past 40 years. In the past two years, several new emissions data sets were developed leading to a comprehensive data base of anthropogenic activities and an unprecedented long-term data set of vegetation fire emissions. Underused observational data sets were assessed in terms of quality and coherence, and new multi-annual observational data sets were compiled for the project. A 40-year climatology of the stratospheric ozone variability was developed. Five global atmospheric chemistry models were adopted for use of ERA-40 meteorological data and the new emissions files.

At the time of the conference, first results from the long-term simulations of various models shall be available, and we will present an overview about the past achievements in RETRO and its future plans.