



## First results of QUANTIFY model evaluation of global chemistry models

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The main goal of the EU FP6 Integrated Project QUANTIFY is to quantify the climate impact of global and European transport systems for the present situation and for several scenarios of future development. Among other activities within the project, Atmospheric Chemistry Models (ACMs) are one of the major tools used to improve the understanding of key processes relevant for the effects of different modes of transportation, and their representation in global models. The performance of the ACMs is being tested through extensive comparisons with the ETH model evaluation global database for the UT/LS region (*ETHmeg*). The *ETHmeg* database contains data from numerous measurement campaigns making use of both scientific and commercial aircraft as observation platforms, ozone soundings, and surface data. These data have been processed in a way to support an easy and direct comparison with model output. QUANTIFY model evaluation is set up of two parts: 1. a direct comparison of model results with observations including a point-to-point comparison as previously carried out in the TRADEOFF project. Since model evaluation focuses on the year 2003, observational data to compare model data with are the SPURT and CONTRACE campaigns, as well as MOZAIC, ozone sounding, and surface data. The second part of QUANTIFY model evaluation comprises a model-to-model intercomparison of diagnostics describing relevant key processes (e.g., convective transport, STE, and long-range transport). First results of this model evaluation will be presented.