SPARC Water Vapor Assessment: MIPAS observations of water vapour and its isotopologues
Stefan Lossow; Tobias Schieferdecker; Jörg Steinwagner; Norbert Glatthor; Sylvia Kellmann; Andrea Linden; Michael Kiefer; Thomas von Clarmann; Gabriele Stiller

Karlsruhe Institute of Technology, Germany

Leading author: stefan.lossow@kit.edu

Since 2002 the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on board Envisat provides water vapour information based on observations of thermal emission in the mid-infrared. Here we present on the one hand validation results for stratospheric H2O and HDO, the former carried out in the framework of the SPARC data initiative. The H2O time series of MIPAS and HALOE were merged to study the long-term and inter-annual variability of the H2O budget in the stratosphere and their dependence on oscillation patterns. We also present studies of the water vapour budget in the monsoon regions.