

## **SPARC Water Vapor Assessment: MIPAS observations of water vapour and its isotopologues**

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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 H<sub>2</sub>O and HDO, the former carried out in the framework of the SPARC data initiative. The H<sub>2</sub>O time series of MIPAS and HALOE were merged to study the long-term and inter-annual variability of the H<sub>2</sub>O budget in the stratosphere and their dependence on oscillation patterns. We also present studies of the water vapour budget in the monsoon regions.