



Global upper tropospheric/lower stratospheric water vapor from satellites

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The past decade has been a "golden age" for observations of middle atmospheric trace gas distributions from space since numerous satellite instruments have been in orbit. One of the most important trace species with respect to its impact on global climate and stratospheric chemistry is water vapor. The presentation will provide an overview on the currently available data base, and on climatologies derived from the satellite data sets covering the altitude range from the upper troposphere to the lower mesosphere. The current and planned efforts within the SPARC Water Vapor Assessment II (WAVAS II) to intercompare the available satellite data sets and perform a quality assessment will be presented, with some focus on the difficulties which we are facing on the way to a consistent multi-instrument long-term data set covering the last 30 years. Finally, future perspectives for the continuation of middle atmosphere water vapor observations from space will be discussed.