



Solar Cycle Dependence of Atomic Hydrogen Abundance as Derived from Satellite Measurements

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We present global measurements of atomic hydrogen abundance as derived from SCIAMACHY and GOMOS satellite instruments. These observations extend about 30S–70N in latitude. The time-span of the dataset (2002–2009) covers the declining phase of the 23rd solar cycle.

The excellent radiometric calibration and long term stability give good confidence into this data for long term analyses. During this period, atomic hydrogen densities increase by 10–30%, depending on latitude, whereas ozone abundance as well as chemical heating rates show an opposite trend.