

ANALYSIS OF SOLAR CYCLE DEPENDENCE OF CHEMICAL HEATING RATES

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Global measurements of chemical heating rates can be derived from SCIAMACHY OH emission measurements. The measurements cover a latitude band between 50° S and 80° N between 2002 and 2009. Because of its excellent radiometric calibration and long term stability the data set gives a good possibility to study long term trends. The chemical heating rate shows a decreasing trend of 0.5 - 1.5 K/d depending on latitude during this time period. An opposite trend is shown in atomic hydrogen.

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