Geophysical Research Abstracts, Vol. 9, 04587, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-04587

Study of the 130.4 nm oxygen line at Mars from SPICAM on Mars Express

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The SPICAM instrument aboard Mars Express offers the opportunity to sound the Martian upper atmosphere thanks to the observation of the UV airglow such as the oxygen atomic triplet at 130.4nm. During limb observations from 2004 to 2006 the SPICAM UV imaging spectrometer on Mars Express measured this airglow for different altitudes and solar zenith angles for a period of medium solar activity. One spectrum was recorded each second, resulting in more than 1000 spectra for each observation. We will present the data processing and first results obtained by comparing the data with a spherical radiative transfer model in order to estimate the density of the atomic oxygen between 200-400 km. We will compare these results with previous observations made by Mariner's mission.