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SCIAMACHY nadir ozone profiles over Antarctica in comparison with limb measurements

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Stratospheric profile retrieval of ozone in the Hartley-Huggins band in nadir viewing geometry is one of very few options of obtaining a farreaching timeseries of ozone profiles. SCIAMACHY (Scanning Imaging Absorption Spectrometer for Atmospheric ChartographY) launched on ENVISAT in March 2002 measures sunlight, transmitted, reflected and scattered by the earth atmosphere or surface (240 nm - 2380 nm) in both nadir and limb viewing geometry. With its long lifetime of close to 10 years and its overlap with both GOME on ERS-2 and GOME II on MetOp it is a good candidate for the start of such a long time series. In order to counter instrument dependant effects and degradation a spectral calibration is neccessary. In this study ozone profiles from SCIAMACHY nadir profile retrieval will be compared with profiles retrieved in limb geometry and the effects of different types of spectral calibration will be shown.