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Nadir retrieval of ice clouds and dust from NOMAD/UVIS on board Exomars TGO

Yannick Willame[1], Jon Mason[2], Ann C. Vandaele[1], Justin Erwin[1], Arianna Piccialli[1], Cédric Depiesse[1], Michael J. Wolff[3], Frank Daerden[1], Ian R. Thomas[1], Bojan Ristic[1], Manish R. Patel[2], Giancarlo Bellucci[4], and Jose-Juan Lopez-Moreno[5]

[1]Belgian Institute for Space Aeronomy (IASB-BIRA), Brussels, Belgium (yannick.willame@aeronomie.be)

[2]School of Physical Sciences, The Open University, Milton Keynes, UK

[3]Space Science Institute, Boulder, CO, USA

[4]Istituto di Astrofisica e Planetologia Spaziali (IAPS/INAF), Rome, Italy

[5]Instituto de Astrofisica de Andalucia (IAA/CSIC), Granada, Spain

The NOMAD ("Nadir and Occultation for MArs Discovery") spectrometer suite on board the ExoMars Trace Gas Orbiter (TGO) has been designed to investigate the composition of Mars' atmosphere using a suite of three spectrometers operating in the UV-visible and infrared. NOMAD is a spectrometer operating in ultraviolet (UV), visible and infrared (IR) wavelengths covering large parts of the 0.2-4.3 μm spectral range [1].

The UV-visible "UVIS" instrument covers the spectral range from 200 to 650 nm and can perform solar occultation, nadir and limb observations [2]. The main purpose of UVIS is dedicated to the analysis and monitoring of ozone and aerosols such as dust and ice clouds. In the present work we will present preliminary results of the aerosol retrieval in the UV recorded in nadir geometry: spatial and seasonal distribution of ice clouds and dust.

References

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