

Retrievals of ice clouds, dust and ozone from NOMAD/UVIS on board Exomars TGO

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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 UV retrievals recorded in nadir geometry: spatial and seasonal distribution of ice clouds, dust and ozone.

References

- [1] Vandaele et al. 2018. Space Sci. Rev.
- [2] Vandaele et al. 2015. Optics Express.