

"The DESIS L2A processor and validation of L2A products using AERONET and RadCalNet data"

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The hyperspectral instrument "DLR Earth Sensing Imaging Spectrometer" (DEGIS) is a VNIR sensor on-board of the International Space Station (ISS) and operational since October 2019.

DEGIS acquires images of Earth on user request with a swath of about 30 km width and 235 bands with a Full Width at Half Maximum (FWHM) of 3.5 nm in the spectral range 400 to 1000 nm.

In this contribution we will present the basis of the atmospheric correction by PACO software, implemented inside the DESIS Ground Segment as L2A processor.

The resulting L2A products will be validated against independent in-situ measurements. The aerosol optical thickness and water vapor will be compared with the Aerosol Robotic Network (AERONET) measurements and the surface reflectance will be validated with the Radiometric Calibration Network (RadCalNet) data.