



TROPOMI in-flight calibration and commissioning phase first results

Quintus Kleipool (1), Antje Ludewig (1), Rolf Bartstra (1,2), Jonatan Leloux (1,3), Erwin Loots (1), Emiel van der Plas (1), Nico Rozemeijer (1,3), Robin Landzaat (1,3)

(1) Royal Netherlands Meteorological Institute KNMI, De Bilt, The Netherlands, (2) S&T Science and Technology B.V., Delft, The Netherlands, (3) TriOpSys B.V., Utrecht, The Netherlands

The Sentinel-5 Precursor (S5P) mission represents the first in a series of atmospheric observing systems within Copernicus. The S5P mission is a single-payload satellite in a low Earth orbit that provides daily global information on concentrations of trace gases and aerosols important for air quality, climate forcing, and the ozone layer. The payload of the mission is the TROPOspheric Monitoring Instrument TROPOMI, which is jointly developed by the The Netherlands and ESA, and consists of a spectrometer with spectral bands in the ultraviolet, the visible, the near-infrared and the shortwave infrared.

The S5P mission was launched on 13 October 2017 and has been injected into a near-polar, near sun-synchronous orbit by a ROCKOT launcher. The initial 6 months of in-orbit operation will cover spacecraft, TROPOMI and ground segment level commissioning activities (Phase E1). The E1 Phase will be followed by a 6.5 years exploitation E2 Phase.

We report on the inflight calibration status as derived during the E1 commissioning phase.