

Status of the Sentinel-5 Precursor Mission

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Sentinel-5 Precursor (S-5P) is the first of a series of atmospheric chemistry missions within the European Commission's Copernicus Programme. It was launched on 13 October 2017 with a nominal lifetime of 7 years and flies in loose formation with the S-NPP satellite. S-5P provides continuity in the availability of global atmospheric data products between its predecessor missions SCIAMACHY (Envisat) and OMI (AURA) and the future Sentinel-4 and -5 series. The S-5P satellite carries a single payload, namely TROPOMI (TROPOspheric Monitoring Instrument), which was jointly developed by The Netherlands and ESA. Covering spectral channels in the UV, visible, near- and short-wave infrared, it measures various key species including total columns of tropospheric/stratospheric O₃, NO₂, SO₂, CO, CH₄, CH₂O as well as cloud and aerosol parameters. Global coverage is achieved within 1 day with a spatial sampling of 7x3.5 km. The Commissioning Phase was successfully finalised end of April 2018 and the S-5P ground-segment is currently gradually upgraded to reach its the Full Operations Capacity early March 2019. This presentation includes an overview of the actual status of the mission and its products that have been released to the public since early July 2018.