

Sentinel 5p in the framework of the EU Copernicus programme

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ABSTRACT:

The Copernicus programme is a cornerstone of the European Union's efforts to monitor the Earth and its many ecosystems, whilst ensuring that its citizens are prepared and protected in the face of crises and natural or man-made disasters. Building on the foundations of deeply rooted scientific knowledge and on decades of EU investment in research and technological development, the Copernicus programme is exemplary of European strategic cooperation in space research and industrial development. The Copernicus programme places a world of insight about our planet at the disposal of citizens, public authorities and policy makers, scientists, entrepreneurs and businesses on a full, free and open basis.

Copernicus aims at providing Europe with a continuous, independent and reliable access to observation data and information. The EU investment aims at filling the observation gaps, providing access to existing assets and developing operational services.

Copernicus is structured in six Services: Marine, Atmosphere, Land and Climate change monitoring as well as support to Emergency and Security. Copernicus uses data from satellites and in-situ sensors such as buoys, balloons or air sensors to provide timely and reliable added-value information and forecasting to support for example, agriculture and fisheries, land use and urban planning, the fight against forest fires, disaster response, maritime transport or air pollution monitoring. Copernicus services are based on information from a dedicated constellation of EU-owned satellites, known as "Sentinels", as well as tens of third-party satellites known as "contributing space missions", complemented by "in situ" (meaning local or on-site) measurement data.

Sentinel 5p was designed as a 'precursor' mission to close the data gap between the demise of ENVISAT and the dedicated Copernicus missions for atmospheric composition monitoring, Sentinel 4 and 5, which will be launched into orbit in the early 2020s.

Sentinel 5p was launched on 13 October 2017. It is the first Copernicus dedicated mission that will deliver measurements of atmospheric chemistry to the Copernicus Atmospheric Monitoring Service (CAMS) and the Copernicus user communities. Sentinel-5p will support scientists, decision-makers, governments and value-adding companies and will significantly improve the European Union's capacity for air quality monitoring.

The presentation will focus on the role of Sentinel 5p in the Copernicus programme, its governance, data access and user requirements.