

Future Programmes of EUMETSAT for Weather, Climate and Environmental Monitoring

Being the leading user-governed operational agency for European Earth observation satellite programmes, EUMETSAT's primary objective is to establish, maintain and exploit European operational meteorological satellite systems. A further objective is to contribute to operational climate monitoring and detection of global climatic changes. Through fulfilling these objectives, EUMETSAT contribute to environmental monitoring, where interactions with the ocean and the atmosphere are involved.

EUMETSAT's mandatory programme comprises the METEOSAT satellites in GEO and the METOP satellites in LEO. With MTG and EPS-SG new generations of Earth observation satellites are under development for GEO and LEO respectively with both planned for operational service in the 2020-2040 timeframe. With also a new generation of remote sensing instruments on board, EUMETSAT will contribute with a wide variety of operational observation data for the global weather, climate and environmental monitoring.

In the frame of the Copernicus program EUMETSAT will participate to High Precision Ocean Altimetry activities with its responsibility to operate the Sentinel-3, Jason-2 and Jason-3 satellites and contribute with the development of its Jason-CS program to the implementation of the Sentinel-6 mission. In addition, EUMETSAT will be in charge for the operation of the Sentinel-4 and Sentinel-5 instruments on MTG and METOP-SG respectively serving to the observation of atmospheric composition in terms of aerosols and trace gases both from low-earth orbit as well as from geostationary orbit.

The presentation will provide an overview of the future EUMETSAT programmes focussing also on the wide range of remote sensing instruments embarked on the satellites and the products planned to be generated for weather, climate and environmental monitoring.