IAF EARTH OBSERVATION SYMPOSIUM (B1) Future Earth Observation Systems (2)

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INTRODUCTION TO EUMETSAT'S FUTURE GEOSTATIONARY METEOSAT THIRD GENERATION (MTG) PROGRAMME

Abstract

EUMETSAT has provided the user community with more than three decades worth of satellite data, starting with the mandatory geostationary missions of 1st generation Meteosat, and since 2002 the Meteosat Second Generation (MSG) series satellites. The fourth, and the last satellite in the series, MSG-4 was launched in July 2015 and was stored in orbit until beginning of 2018 when it was re-activated to take over the main mission. EUMETSAT is currently developing the future geostationary programme. Meteosat Third Generation (MTG) will host a more advanced 16-channel VIS/IR Flexible Combined Imager as well as a Lightning Imager on its geostationary imaging platform, whereas the sounding platform will host the MTG InfraRed Sounder and the Copernicus Sentinel-4 ultraviolet/near-infrared sounding mission. The launch of the first two satellites MTG-I1 and MTG-S1 hosting the imaging and sounding instruments, respectively, is foreseen in the early 2020s. EUMETSAT products are developed either centrally at the EUMETSAT Headquarters or at the Satellite Application Facilities (SAF) distributed among the Member States. With the range of new instruments becoming operational in the next decade, and some with very limited heritage in space such as the Lightning Imager or the InfraRed Sounder, it is a challenge for their development, but also for the user community to make best use of these missions early on. The presentation will give an overview of the MTG system, its observations missions and products and will provide the status of the development programme. With the future MTG programme completed by the future Low Earth Orbit satellite programmes – EUMETSAT will provide continuity of observations and data services for weather, environment and climate from space with the aim of saving lives, preventing economic loss and supporting sustainable development and innovation.