

THE UTILISATION OF EUMETSAT METEOROLOGICAL SATELLITES

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ABSTRACT:

This presentation will provide new information on the utilisation of the current polar (Metop) and geostationary (Meteosat) satellites of EUMETSAT. The presentation includes examples of the impact of the data and products on the user side, notably the importance of the satellite observations to Nowcasting, Numerical Weather Prediction (NWP) and climate monitoring. In particular we will demonstrate the capability of geostationary satellites to monitor cloud development and to derive atmospheric wind fields, and the capability of polar satellites to observe inter alia temperature, humidity, trace gases, soil moisture and wind fields over the ocean. The second part of the presentation addresses the development work at EUMETSAT toward the provision of continuous and improved observations far into the future through new programmes which will follow the current Meteosat and Metop series. A new element is EUMETSAT's operational role in sea level observations with altimeters, which are key to a climate monitoring system. The status of those future programmes will be described and it is recalled that pertinent progress is firmly based on the evolution of user requirements through a close interaction with the user communities. Furthermore it is outlined how the EUMETSAT contribution to the operational space-based Global Observing System is coordinated with other space agencies resulting in complementary observations of weather and climate from space.

TOPIC: Operational remote sensing programs

ALTERNATIVE TOPIC: Remote sensing applications