Training course: EUMETSAT/ECMWF NWP-SAF satellite data assimilation



Contribution ID: 7

Type: not specified

## The microwave spectrum - measurement, modelling and information content

Monday, 7 March 2022 14:00 (1h 15m)

The main uses of the microwave spectrum in weather prediction are temperature and moisture sounding and the estimation of surface properties. Typical microwave instruments like AMSU-A and SSMIS will be introduced. The interaction of microwave radiation with the surface will be described in the context of microwave imaging channels. The spectroscopy of the 60 GHz oxygen line will be examined along with the temperature sounding channels that it makes possible. The AMSU-A 60 GHz temperature channels are perhaps the most important single source of observations in weather-forecasting and their practical use at ECMWF will be described.

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