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Satellite use in Bureau of Meteorology modelling and analysis products

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The Bureau of Meteorology assimilates data from a range of satellite platforms into its global Numerical Weather Prediction (NWP) model. They are a major contributor to reduced forecast error for Australia's official weather service. Satellite data assimilation is also a key component of Bureau's operational ocean and landscape water balance modelling. Other satellite data applications include observation analysis products used in current services and newer products being prepared for future deployment.

This presentation will give an overview of the satellite data currently used in operational data assimilation across Bureau's NWP, ocean and land modelling, including newer data feeds being prepared for operational use. A summary of their relative impact on current NWP forecast skill from Forecast Sensitivity to Observations analysis will be provided, along with an overview of data used in satellite-based analysis products for sea temperature and flood information.