

S6-01

**Review of satellite radiance observations in
operational numerical weather prediction**

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Satellite data comprise over 95% of the observations that are used in Numerical Weather Prediction (NWP) models to provide the best estimate of the atmospheric state used as the starting point to produce forecasts. A large proportion of these observations are radiance data from infrared and microwave sounder instruments. For most NWP centres, the radiance observations are also the most impactful, and forecast skill is critically dependent on them. This talk will review the status of satellite radiance data assimilation in NWP centres across the world. It will provide an inventory of observations used, a general summary of their impact, and outline some of the scientific problems that the community is currently addressing through research.