Assimilation of IR Cloudy Radiance in NCEP NAMRR

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- Develop and test of the ability to assimilate cloudy radiances from GOES-R to improve the prediction of high impact weather with NCEP NDAS and NMMB model.

- Select EUMESAT Meteosat Second Generation (MSG) Geostationary Satellite SEVIRI as the proxy data before GOES-R launch, since SEVIRI has the similar channels, resolutions as GOSE-R ABI.
Hourly-updated NAM (12/4-km), known as NAM Rapid Refresh (NAMRR), was placed over SEVIRI’s coverage area (i.e. the Atlantic Ocean, Europe and Africa) to get the most complete use of SEVIRI.

All satellite and conventional observation as well as SEVIRI data will be assimilated hourly.
Assimilated SEVIRI All-Sky Radiance

**Clear-sky Brightness Temperature**

**Cloudy Brightness Temperature**

**SEVIRI Radiance Used per Hour**