Development of GOES-R IR Clear-Sky and All-Sky Radiance Products for NCEP

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Abstract

GOES-R provides a major advancement in the spatial, spectral and temporal information content of geostationary IR radiance measurements. This proposal seeks funds to extend and complete the existing efforts to provide NWS/NCEP/EMC with GOES-R IR radiance products for data assimilation. The efforts include the verification of the initial implementation of the all-sky radiance (ASR) and clear-sky radiance (CSR) products from EUMETSAT, development of spectrally optimized cloud mask to increase the information from IR absorption channels and the updating of the BUFR formatting tools necessary to provide the data to NCEP. The groups involved in this two year effort are NOAA/NESDIS/STAR, UW/CIMSS and NWS/NCEP/EMC.