

HPC/OPC/SAB GOES-R Proving Ground 2012

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The GOES-R Proving Ground (PG) Program was organized to demonstrate the next generation geostationary satellite products and capabilities that will be incorporated into NOAA operations. Starting in July 2011, proxy GOES-R data and products were demonstrated for forecasters at the Hydrometeorological Prediction Center (HPC), the Ocean Prediction Center (OPC), and the Satellite Analysis Branch (SAB) of the National Environmental Satellite, Data, and Information Service (NESDIS). These pre-operational demonstrations allowed forecasters to use and evaluate proxy and simulated GOES-R data from research and operational satellite instruments (MODIS, AIRS, IASI, and SEVIRI), WRF model forecasts, and lightning networks in a quasi-operational environment to support their forecast and warning decision making. In evaluating these products, the forecasters were exposed to the strengths, limitations, and constraints of the new GOES-R capabilities prior to its launch and provided valuable feedback to the product developers. The product developers then have an opportunity to use these evaluations to improve the products before they are incorporated into operations.

The GOES-R products that are being demonstrated at HPC, OPC, and SAB include the WRF-simulated Advanced Baseline Imager products (cloud and moisture imagery), the Enhanced "V" / Overshooting Top Detection and the Red, Green, Blue (RGB) Air Mass product. In this paper, we describe the initial results and lessons learned during these demonstrations.