

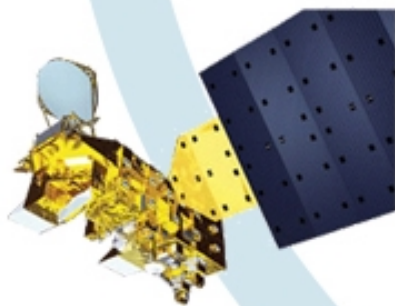
NESDIS ATOVS Operational Sounding Products Processing and Distribution

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Since 1979 the National Oceanic and Atmospheric Administration National Environmental Satellite, Data, and Information Service (NOAA/NESDIS) has been providing the operational sounding products from the polar orbiting satellites continuously with a suite of infrared and microwave radiation sounder measurements, and derived temperature and moisture sounding products on a global scale. NOAA's primary mission for sounding data products represents a unique source of global, atmospheric, weather information, with a demonstrated positive impact on Numerical Weather Prediction (NWP) forecasts. Current polar orbiting satellites provide measurements from the HIRS/3, AMSU-A and AMSU-B sounder instruments on board NOAA-15, NOAA-16 and NOAA-17. Advanced TIROS (Television and Infrared Observation Satellite) Operational Vertical Sounding (ATOVS) sounding products from NOAA-15 were operationally implemented by NESDIS in April 1999 and AMSU-B processing was delayed until May 2000. NOAA-16 and NOAA-17 were made operational in March 2001 and October 2002 respectively. There are over 500,000 soundings made every day from the ATOVS on aboard NOAA-15, 16 and 17 series of Polar Orbiting Environmental Satellites (POES). Monitoring sounding data products generation systems on a 24 hours basis is important. A web-based user interface has been developed and implemented for monitoring the products generation systems. Quality of the data products and timeliness for processing and distribution are extremely important factors in designing the operational systems at the NESDIS. This presentation will include the discussion on the improvements on the quality and timeliness and the operational changes required by the systems to accommodate the future instruments data processing such as pipeline processing for granules instead of orbits. The processing changes required for the upcoming launches of the NOAA satellites NOAA-N and NOAA-N' and the European Organization for the Exploitation of Meteorological (EUMETSAT) satellites, Meteorological Operational Satellite (MetOp)-1 and MetOp-2 will be discussed. Re-hosting of operational systems from a slower processor CRAY machine to a faster processor IBM machine will also be discussed.

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