

A. K. Sharma, NOAA/NESDIS/OSDPD*
 T. Yu, Science and Technology Corporation

The National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Services (NOAA/NESDIS) generates and distributes atmospheric sounding products as a part of its operation for operating a fleet of civilian, Polar Orbiting Environmental Satellites (POES) and providing users and researchers a suite of operational atmospheric and environmental data products. Sounding products are generated using the advanced TIROS Operational Vertical Sounder (ATOVS) measurements. ATOVS consists of three instruments, two Advanced Microwave Sounding Units (AMSU), AMSU-A and AMSU-B, and a High-resolution Infrared Radiation Sounders (HIRS/3) instrument. The National Weather Services (NWS) deployed the Advanced Weather Interactive Processing System (AWIPS) to support its field operations and services to Weather Forecast Offices (WFO) and River Forecast Centers (RFC).

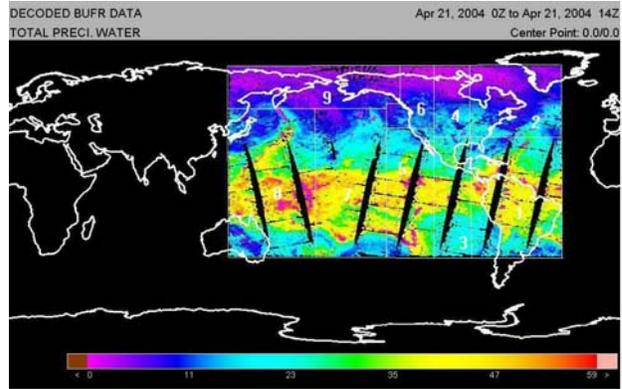


Figure 1: Total Precipitable Water Over AWIPS Area

The AWIPS program required that ATOVS sounding products conform to the Binary Universal Format for the Representation of Meteorological data (BUFR). BUFR is a standard data format used within the World Meteorological Organization (WMO) for data exchange. The area covered by ATOVS AWIPS extends from 35 South to 75 North and 130 East to 35 West. This area is sub-divided into 9 regions. Selected sounding products are sorted by region then encoded for distribution via the National Weather Service Telecommunications Gateway (NWSTG) to the AWIPS system. Figure 1 is a sample day's worth of coverage showing total precipitable water over the AWIPS area.

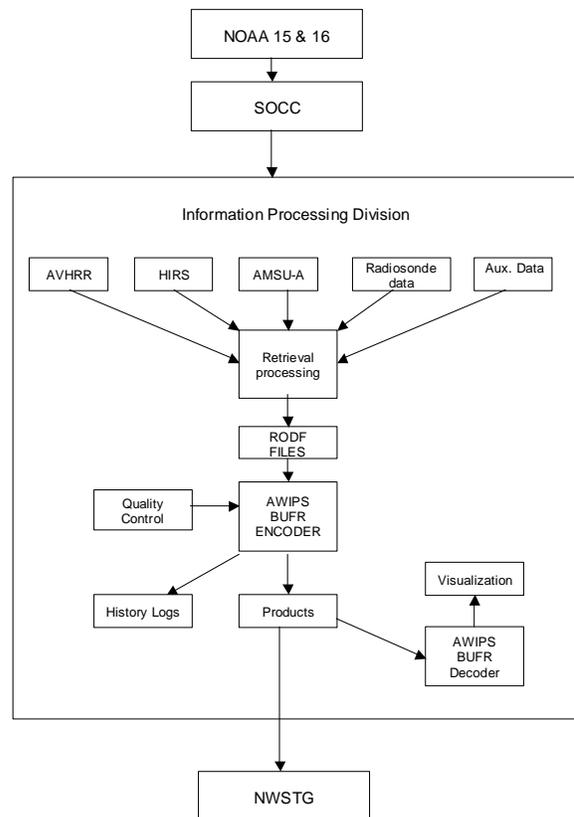


Figure 2: ATOVS AWIPS System in IPD

* Corresponding Author Address:
 A. K. Sharma
 NOAA/NESDIS/OSDPD
 E/SP13, Federal Building 4, Room 0312,
 5200 Auth Road, Suitland, MD 20746-4304, USA
 e-mail: Awdhesh.Sharma@noaa.gov