

GOES-10 Repositioned to Provide Enhanced Coverage for Latin America

As part of the emerging GEOSS (Global Earth Observation System of Systems) in the Americas, NOAA is partnering with Latin America to improve the quantity and quality of real-time remote sensing data available to observe and forecast severe weather and mitigate the effects of natural disasters. In December 2006, GOES-10, which previously provided backup capability for the two primary Geostationary Operational Environmental Satellites (GOES-11/west and GOES-12/east), was repositioned to 60° W at the Equator to provide dedicated services to Latin America and improved spatial and temporal capabilities for imaging and sounding the atmosphere over Central and South America. The agreement between NOAA and several Latin American countries and scientific organizations was formalized in April 2007. GOES-10 will provide Latin American meteorological services with imagery every 15 minutes and coverage across the full extent of the South American continent. Data from GOES-10 have already made significant impacts. In March 2007, Argentina used imagery from GOES-10 to track a low pressure system and accurately issue a high-rainfall and flood warning that helped save lives in Buenos Aires and other highly-populated areas. The enhanced coverage is also contributing to improved fire detection in the Amazon rainforest of western Brazil.

Climate Sensor Restored to NPOESS Preparatory Project

The National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) have agreed to restore the Limb Sensor to the Ozone Mapping and Profiler Suite (OMPS) that will be flown on the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) when it is launched in late 2009. The Limb sensor will measure the along-track scattered solar radiance in the Earth's limb from which "high" resolution (~ 3km layers) vertical profiles of atmospheric ozone from the troposphere to 60 km altitude will be derived. The Limb sensor will complement the OMPS Nadir sensor that will make measurements of total column ozone. Restoring the OMPS Limb sensor directly addresses one of the recommendations of the National Research Council's report on "Earth Science Applications from Space: National Imperative for the Next Decade and Beyond." NOAA and NASA will share the cost of restoring the OMPS Limb sensor to the NPP mission. NPP will provide risk reduction for four of the critical sensors on NPOESS and the ground control, communications, and data processing systems. NPP will also provide continuity of observations with NASA's Earth Observing System satellites and overlap with NOAA's heritage Polar-orbiting Operational Environmental Satellites (POES).

COMET Releases New Training Module on Satellite Microwave Remote Sensing

The Cooperative Program for Operational Meteorology, Education and Training (COMET) has released a new on-line training module entitled "Microwave Remote

Sensing: Microwave Resources." This resource provides background information on microwave remote sensing from polar-orbiting satellites, including spatial coverage, orbits, and data latency issues of current operational and research satellites. The module contrasts active vs. passive microwave remote sensing, advantages and limitations of different microwave instrument scanning strategies, and satellite viewing geometry. Improvements in microwave remote sensing that are expected from the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) and NPOESS are highlighted. The module reviews the microwave spectrum and special characteristics of microwave energy necessary for creating satellite imagery and derived products. The training module is available at http://www.meted.ucar.edu/npoess/microwave_topics/resources/index.htm and takes approximately 1 hour to complete.

Submitted by Craig Nelson for the NWA Remote Sensing Committee.