

NOAA'S PLANNED MOVE OF GEOSTATIONARY SATELLITE FOR IMPROVED COVERAGE OVER SOUTH AMERICA

A Vital Link in Global Earth Observation System of Systems (GEOSS)

The U.S. National Oceanic and Atmospheric Administration (NOAA) has announced plans to move its geostationary satellite, GOES-10, to 60 degrees West to improve environmental satellite coverage over South America, a move that will help protect South Americans from natural hazards.

NOAA received a formal request from the World Meteorological Organization (WMO) Regional Association 3 (Argentina, Brazil, Bolivia, Chile, Paraguay, Peru and Uruguay) and informal requests from other users in the region to consider repositioning the satellite. The request followed discussions with South American colleagues active in the Group on Earth Observations (GEO), which is developing the **Global Earth Observation System of Systems (GEOSS)**.

The GOES satellite move will be a major U.S. contribution to the implementation of GEOSS which, over the next decade, will help make 21st-century technology as integrated as the planet it observes, predicts and protects. The vision developed in the GEOSS 10-Year Implementation Plan represents a global scientific and political view that the assessment of the state of the Earth requires continuous, coordinated observations of our planet on all scales. As a "system of systems," GEOSS will work with and build upon national, regional and international systems to provide comprehensive, coordinated, sustained Earth observations from thousands of instruments worldwide, transforming the data they collect into vital information for society. As indicated below, GEOSS will meet the need for timely, quality long-term global information as a basis for sound decision-making and will enhance delivery of benefits to society in such crucial areas as disaster warnings, human health, energy and water-resource management, weather and climate variability monitoring, ecosystems, agriculture, and biodiversity.

Sixty countries, the European Commission and 43 international organizations are engaged in creating GEOSS. The U.S. Group on Earth Observations (US GEO) has released a complementary Strategic Plan for the U.S. Integrated Earth Observation System.

Keeping the GOES-10 satellite in operation and moving it farther east will enable the GOES satellite constellation to collect data over a greater portion of the Western Hemisphere and with increased frequency. Moving GOES-10 further East will help offset the loss of imager data to South America when NOAA's operational GOES is placed in rapid scan mode. The GOES satellite goes into rapid scan during extreme weather events in North America. During rapid scan mode, the imager focuses on North America and only captures data south of the equator every 3 hours, which impedes the forecasting of severe weather events in South America.

Moving the GOES-10 satellite is contingent on the maintenance of a healthy GOES satellite constellation for the United States. That includes a successful launch and checkout of the GOES-N satellite, scheduled for February of 2006. NOAA currently operates two geostationary satellites at 75 and 135 degrees West. NOAA plans to have the retired GOES-10 satellite in place at 60 degrees West in the October 2006 timeframe.

GEOSS Societal Benefit Areas:

Improve Weather Forecasting

Reduce Loss of Life and Property from Disasters

Protect and Monitor Our Ocean Resource

Understand, Assess, Predict, Mitigate and Adapt to Climate Variability and Change

Support Sustainable Agriculture and Forestry and Combat Land Degradation

Understand the Effect of Environmental Factors on Human Health and Well-Being

Develop the Capacity to Make Ecological Forecasts

Protect and Monitor Water Resources

Monitor and Manage Energy Resources

www.earthobservations.org