



The National Requirement: The Nation requires a cadre of scientists and computing systems dedicated to developing pre-operational products that will infuse improvements into existing operational satellite products and services. The Nation also requires applications-focused research that will develop and evaluate prototype products and algorithms that will harness the capabilities of next generation operational satellites for NOAA's operational satellite product processing and distribution program. This capability is an important component of NOAA's mission to continually improve protection of US lives and property, and enhancement of the Nation's environmental, national, homeland, and economic security.

NOAA's Response: NOAA's Satellite and Information Service's Product Development, Readiness, and Application program ensures the highest accuracy of NOAA's current satellite data and products via a robust and rigorous operational environmental satellite data calibration/validation program. This effort improves product quality for the benefit of all users. The program supports pre-operational development of products for weather, atmospheric, climate, land, wildland fire, and oceans and coasts applications. NOAA's Ocean Remote Sensing Program supports sea surface temperature, ocean color, satellite altimetry, oceanic rainfall measurements, and coastal monitoring tools for the CoastWatch program. The Joint Center for Satellite Data Assimilation accelerates the application of satellite data for improving weather forecast models. Through competitively awarded Cooperative Institutes with academic institutions (Universities of Wisconsin, Maryland, Colorado State, and Oregon State, City College of New York) academic expertise and the results of investigations are infused into product development, readiness, and applications that lead to improvements in existing products or the development of new products or sensors.

Partners and Customers: NOAA Product Processing and Distribution, all NOAA Offices (Weather, Fisheries, Ocean and Coasts, Research), NASA, Department of Defense, academic community, state and local governments.

Financing: NOAA requests a FY 2005 total of **\$26.008 million** for the Product Development, Readiness, and Application program to keep pace with the demands for pre-operational products and services.

For additional information: http://orbit-net.nesdis.noaa.gov/ora and www.nesdis.noaa.gov

