

NASA Develops Central American Monitoring System

February 5 2005

A state-of-the-art environmental monitoring facility in Panama is the first to employ NASA Earth science research and space-based observations to provide Central American decision makers with early warning about a variety of ecological and climatic changes. Developed by NASA scientists, the innovative regional monitoring system is called SERVIR, a Spanish term meaning to serve. It is also the Spanish acronym for the Regional Visualization and Monitoring System for Mesoamerica. Panamanian President Martin Torrijos, NASA, other U.S. and Central American officials were on hand for the inauguration of the Panamanian SERVIR Center yesterday.

Featuring a massive, Web-based data archive of maps and satellite imagery, decision-support tools and interactive visualization capabilities, SERVIR is designed to aid government and industry across the seven countries of Central America and the southern Mexican states.

"NASA's science mission begins here on Earth, with greater awareness and understanding of our changing planet, and new solutions for protecting our environment, resources and human lives," said Dr. Ghassem Asrar, NASA's Deputy Associate Administrator for Science. "SERVIR technology, our partnership with various organizations and with the people of Central America reflects NASA's commitment to improving life on our home planet for all people," he said.

The system contains user-friendly, interactive tools. It is designed to make NASA Earth observations and predictions freely and readily

accessible to anyone with an Internet connection. Designed to track weather, climate and ecological events, the system has already shown results in Central America, monitoring wildfires, red tides, and blooms of toxic algae threatening local fishing areas.

"SERVIR is an excellent tool for gauging slow or periodic shifts in climate that could lead to drought and other long-term problems, as well as identifying quick-forming weather phenomena that threaten human lives and operations on land and at sea," said Daniel Irwin, SERVIR project manager at the Marshall Space Flight Center, Huntsville, Ala.

NASA devised the system in partnership with the U.S. Agency for International Development; the World Bank; City of Knowledge, Panama; Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC); Central American Commission for Environment and Development; and Cable & Wireless Panama. Scientific and technical collaborators include the University of Alabama, Huntsville, Ala.; Oak Ridge National Laboratory, Oak Ridge, Tenn.; the University of Arkansas, Fayetteville, Ark.; and Science Systems and Applications Inc., Lanham, Md.

"We're extremely proud of this combined effort," said Tom Sever, SERVIR principal investigator at Marshall. "Without the partnership of these organizations, we never could have integrated the resources to create such a robust system -- combining space-based observations with local knowledge of ecosystems to enable constant, real-time monitoring of this environmentally vital region."

The Panamanian SERVIR Center is housed at the City of Knowledge, at CATHALAC. The City of Knowledge is an international consortium of health, science and academic organizations including UNESCO, the World Food Program, numerous universities and research institutes. City of Knowledge institutions will benefit from SERVIR's environmental

monitoring tools.

Source: NASA

Citation: NASA Develops Central American Monitoring System (2005, February 5) retrieved 5 July 2024 from <https://phys.org/news/2005-02-nasa-central-american.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.