

NASA DEVELOP National Program

2014 Fall Term Proposed Projects *(tentative, subject to change)*

NASA CENTER LOCATIONS

Ames Research Center - Moffett Field, CA

- Navajo Nation Climate: Assessing Climate Change Impacts on Water Resource Availability and Drought Vulnerability in the Navajo Nation Using NASA Earth Observations
- Sierra Nevada Ecological Forecasting: Implementation of an Online Decision Support System Within an End-User Organization to be Used for Sustained Management Practices

Goddard Space Flight Center - Greenbelt, MD

- Idaho Disasters: Using NASA Earth Observations, Climate Model Outputs, and the RECOVER Decision Support System to Enhance Bureau of Land Management and Idaho Department of Lands Wildfire Management Capabilities
- Maryland Ecological Forecasting: Utilizing NASA Earth Observations to Forecast Future Habitat Suitability for the Conservation and Survivorship of Maryland's Sea Turtles

Jet Propulsion Laboratory - Pasadena, CA

- Gulf of Mexico & Coastal Colombia Ecological Forecasting: Utilizing Spaceborne and Airborne Sensors to Monitor the Health of Coastal Wetlands along the Gulf of Mexico and the Coast of Colombia
- Western U.S. Water Resources: Novel Methods for Detecting and Monitoring Drought Conditions in the United States from Atmospheric Conditions Detected with NASA's Atmospheric Infrared Sounder (AIRS)

Langley Research Center - Hampton, VA

- Northeast U.S. Agriculture: Impact Analysis of Climate Change on Growing Degree Days for Insect Pest Management
- Great Lakes Ecological Forecasting: Monitoring Wetland Loss Due to Lake Level Rise and Development
- Connecticut Climate: Monitoring Impacts of Climate Change to Connecticut's Coastal Ecosystems and Waterways for Adaptation and Mitigation
- Peru Water Resources: Using NASA EOS Evapotranspiration Data to Assist in the Creation of a Comprehensive Water Budget for the Gran Chimú Province of Peru
- Cross-Cutting Technology: Creation of DEVELOPEdia and Mobile Application Development

Marshall Space Flight Center - Huntsville, AL

- Andes Mountains Disasters: Using NASA Earth Observations to Develop a Monitoring Tool for the Copahue Volcano in the Andes Mountains
- Cumberland Plateau Ecological Forecasting: Mapping Invasive Shrubs in the Cumberland Plateau by Combining NASA Earth Observations and a Phenological Approach for Decision Support
- Alabama Water Resources: Incorporating NASA's Earth Observations in Spatial and Temporal Water Quality Monitoring of Alabama's Inland Waters

Stennis Space Center - Stennis, MS

- Louisiana Ecological Forecasting: Utilizing NASA Earth Observations to Aid the Louisiana Department of Wildlife and Fisheries and Ducks Limited, Inc. in Quantifying Rates of Change in Select Habitats within Catahoula Lake Area
- Mississippi Water Resources: Utilizing NASA Earth Observations to Assist the Pascagoula River Audubon Center's Migratory and Coastal Bird Habitat Monitoring and Restoration Planning Activities

REGIONAL LOCATIONS

International Research Institute for Climate & Society - Palisades, NY

- East Africa Health & Air Quality: Using a Flood Forecasting Tool Built from NASA Earth Observations to Create Inundation and Epidemiological Early Warning Systems to Understand the Relationship between Rainfall Extreme Events, Inundation, and Epidemic Dynamics in East Africa
- Zanzibar Health & Air Quality: Creating a Land Cover Map Using NASA Earth Observations to Identify Locations of Malaria Transmission in Zanzibar

Mobile County Health Department - Mobile, AL

- Mississippi Water Resources: Mapping the Extent and Land Use of Endangered Watersheds to Assist Conservation and Restoration Efforts Using NASA Earth Observations

NOAA National Climatic Data Center - Asheville, NC

- California Climate: Improving Methods of Predicting Extreme Weather Events or Drought Conditions for Water Resource Managers in Southern California

Patrick Henry Building - Richmond, VA

- Coastal Mid-Atlantic Water Resources: NASA Earth Observations and Unmanned Autonomous System Inputs for Estimating Water Balance in Coastal Virginia, Maryland and North Carolina

University of Georgia - Athens, GA

- Colombia Ecological Forecasting: Utilizing NASA Earth Observations to Enhance the Conservation Efforts of Colombia's Most Endangered Primate, the Cotton-top Tamarin
- Georgia Inland Water Quality: Developing a Cyanobacteria Detection Tool for Georgia Inland Waters Using NASA Landsat-8 OLI Data for Water Quality Protection and Restoration

USGS Colorado State University - Fort Collins, CO

- Arizona Ecological Forecasting: Using Unmanned Aerial Vehicles and Landsat 8 for Enhanced Invasion Risk Assessment of Tamarisk in the Havasu National Wildlife Refuge
- Ethiopia Water Resources: Application of Landsat 8, Aqua/Terra MODIS for Mapping Critical Wetlands of Eastern Ethiopia

Wise County Clerk of Court's Office - Wise, VA

- Appalachia Energy: NASA Earth Observation Detection of Burned and Blighted Areas for Creation of an Unhealthy Forest Index to Prioritize Harvest for Biofuel Production
- East Africa Water Resources: Mapping and Modeling Ground Water Storage and Watershed Health to Enhance Water Management Practices