NASA DEVELOP National Program

Potential Projects for the 2017 Summer Term (June 5 – August 11)
*** These projects are not finalized and subject to change ***

NASA Ames Research Center – Moffett Field, CA

- Lassen National Park Disasters: Utilizing NASA Earth Observations to Monitor Fuel Loading in High Elevation Alpine Forests in Response to Potential Wildfire Occurrence
- U.S. Virgin Islands Oceans: Using NASA Earth Observations to Assess Land-use Changes and Impacts on Terrestrial and Marine Environments of the U.S. Virgin Islands
- Chile Climate II: Estimating Glacier Mass Balances from NASA Earth Observations and Quantifying Relationship to Water Availability for Agriculture Production in Central Chile
- Costa Rica Oceans: Utilizing NASA Earth Observations to Assess Changes in Shoreline and Marine Communities at the Isla del Coco Marine Reserve

NASA Goddard Space Flight Center – Greenbelt, MD

- New York & Connecticut Health & Air Quality II: Utilizing NASA Earth Observations to Create a Predictive Analytics Toolset for the Prevention of Tick-borne Disease
- Chesapeake Bay Eco Forecasting: Partnering with The Nature Conservancy and Maryland Department of Natural Resources to Monitor Wetlands and Marsh Health in the Chesapeake Bay

NASA Jet Propulsion Laboratory – Pasadena, CA

- California – Mexico Eco Forecasting: Utilizing NASA UAVSAR Data to Determine Coastal Flooding Extent within Southern California
- Southern California Oceans: Using NASA Earth Observations to Evaluate Grunion Response to Ecosystem Changes Forced by Recent Environmental Conditions in California's Oceans
- California Health & Air Quality: Utilizing NASA Earth Observations to Identify and Quantify Methane Emissions in California

NASA Langley Research Center – Hampton, VA

- Chesapeake Bay Water Resources II: Assessing Water Clarity to Identify Potential Areas of Submerged Aquatic Vegetation (SAV) in the Chesapeake Bay
- Shenandoah National Park Health & Air Quality: Monitoring Visibility in Shenandoah National Park to Address National Park Service Initiatives Using NASA Earth Observations
- Mojave National Preserve Eco Forecasting: Utilizing NASA Earth Observations to Assess Habitat Suitability and Connectivity to Enhance National Park Service Decision Making
- Albemarle-Pamlico Water Resources: Assessing NASA Earth Observation Integration in Estuarine Modeling in the Albemarle-Pamlico National Estuary
- Hampton Roads Disasters: Monitoring Seal Level Rise in the Hampton Roads Area to Support Mitigation and Coastal Community Planning
- Mississippi Sound Water Resources II: Synthesizing Trends in Water Quality Parameters that Affect Oyster Reef Health in the Mississippi Sound Using NASA Earth Observations
- CALIPSO Cross-Cutting: Enhancing the Usability of *Visualization of CALIPSO* (VOCAL) Through a Test-Case-Driven Approach

NASA Marshall Space Flight Center – Huntsville, AL

- Thailand Water Resources: Assessing the Use of NASA Precipitation and Land Surface Products to Develop an Experimental Operational Hydrologic Model for Thailand
- Mobile Bay Oceans: Utilizing NASA Earth Observations to Enhance Salinity Monitoring in the Mobile Bay

- Rwanda Eco Forecasting: Monitoring Wetlands in Rwanda using NASA Earth Observations in Support of the UN Sustainable Development Goals

BLM at Idaho State University – Pocatello, ID

- Idaho Disasters: Identifying Composition of Vegetation Types Pre- and Post- Wildfire Rehabilitation Using NASA Earth Observing Systems
- Idaho Eco Forecasting: Modeling Special Plant Species Distribution Utilizing NASA Earth Observations to Identify Suitable Habitat and Controls of Population Presence/Absence

Maricopa County Department of Public Health and Arizona State University – Tempe, AZ

- Phoenix Health & Air Quality II: Utilizing NASA Earth Observations to Reduce Heat Related Health Impacts of Transit Riders in Phoenix, Arizona

Mobile County Health Department – Mobile, AL

- Southeastern United States Health & Air Quality: Analyzing the Human Health and Socioeconomic Impacts of Drought and Wildfire in Gatlinburg Tennessee and the Surrounding States
- Gulf Coast Ecological Forecasting: Analyzing the Effects of Changes in Water Resources and Drought on Manatee Habitat Suitability Along the Gulf Coast

NOAA National Centers for Environmental Information – Asheville, NC

- Philippines Disasters: Utilizing Storm Intensity Methodologies Derived from NASA and NOAA Earth Observations to Analyze Cyclone Vulnerability in the Philippines
- U.S. Affiliated Pacific Islands Oceans: Utilize NASA and NOAA Earth Observations to Create a Sea-Surface Height Climatology for Normal Conditions and ENSO Events

University of Georgia – Athens, GA

- Northwest Georgia Ecological Forecasting: Utilizing NASA Earth Observations to Support Assessment of the Appalachian Regional Port
- Eastern India Eco Forecasting: A Multi-Sensor Approach to Enhance the Prediction of Mangrove Biophysical Characteristics in Chilika Lagoon and Bhitarkanika Wildlife Sanctuary, Odisha, India
- Southeast United States Disasters: Monitoring Drought, Wildfire Damage, and Forest Recovery Using Data Products Derived from NASA Earth Observations
- Costa Rica Climate: Monitoring the Effects of a Changing Climate and Exotic Animal Species in the Marine-Terrestrial Areas of the Isla del Coco by Utilizing NASA Data
- Georgia Agriculture: Using NASA Earth Observations to Assess Conservation in Georgia's Agricultural, Timber and Environmentally Sensitive Lands

USGS at Colorado State University – Fort Collins, CO

- Alaska Eco Forecasting: Utilizing NASA Earth Observations and Future Climate Scenarios to Predict the Presence and Potential Distribution of New Invasive Species in Alaska
- Arizona Water Resources II: Assessing Tamarisk Invasion Risk in Riparian Areas Using Landsat 8 for Riparian Restoration Efforts

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

- Texas Health & Air Quality: Utilizing NASA Earth Observations to Monitor Exceptional Air Pollution Events in Texas
- Morocco Water Resources: Utilizing NASA Earth Observations to Create a Precipitation Climatology of Morocco to Identify Optimal Rainwater Harvesting Locations
- Colorado Health & Air Quality: Utilizing NASA Earth Observations to Detect Changes in Light Pollution in the Colorado Plateau