NASA DEVELOP National Program

Potential Projects for the 2016 Summer Term (June 6 – August 12)
*** These projects are not finalized and subject to change ***

NASA Ames Research Center – Moffett Field, CA
- San Francisco Bay Health & Air Quality: Comparing Top-Down to Bottom-Up Air Quality Observations to Establish a Greenhouse Gas Monitoring Network in the San Francisco Bay Area
- Elkhorn Slough Ecological Forecasting: Assessing the Impacts of Eutrophication, Sedimentation, Sea Level Rise, and Nutrient Influx in the Elkhorn Slough Salt Marsh
- Caribbean Oceans II: Utilizing NASA Earth Observations to Detect, Assess, and Monitor Sargassum in the Caribbean Sea
- Chile Climate: Creating a Drought Monitoring Tool for Enhanced Water Management in Chile

NASA Goddard Space Flight Center – Greenbelt, MD
- Polar Water Resources: Creating Dynamic Digital Elevation Models for Greenland and Antarctica incorporating ICEBRIDGE and ICESat-2 simulator data
- Florida Ecological Forecasting: Tracking the Red Palm Mite from VIS-NIR satellite remote sensing products in the Americas
- Four Corners Water Resources: Regional Seasonal Forecasting of Water Resources in the Southwestern States
- Chesapeake Bay Agriculture: Utilizing NASA Earth Observations to Monitor Agricultural Conservation Practices for Improving Water Quality in the Chesapeake Bay

NASA Langley Research Center – Hampton, VA
- Peru Climate III: Monitoring and Forecasting Shifting Climate and Land Change Impacts in Peru's Parque de la Papa for Enhanced Agricultural Management
- Appalachian Trail Health & Air Quality: Utilizing NASA Earth Observations to Monitor National Parks Along the Appalachian Trail for National Park Service Land Management
- Everglades Climate: Examining the applicability NASA Earth Observations and Google Earth Engine to Monitor Mangrove Extent in the Florida Everglades
- Middle East Water: Utilizing NASA Earth Observations to Create a Climatology for Jordan, Israel, and the West Bank to Enhance Rainfall Monitoring and Management
- Southeast U.S. Agriculture: Incorporating NASA Earth Observations into the USDA Southeast Regional Climate Hub Lately Identified Geospecific Heightened Threat System (SERCH LIGHTS) to assist farmers in making informed decisions on water and crop management
- CALIPSO Cross-Cutting: Improving CALIPSO Air Parcel Modeling and Database to Improve Smoke Plume Characteristic and Source Identification

NASA Marshall Space Flight Center – Huntsville, AL
- Southeast U.S. Health & Air Quality: Utilizing NASA Earth Observations to Identify Areas Susceptible to Dengue Fever in Southeastern United States
- East Africa Disasters II: Assessing Landslide Characteristics, Developing a Landslide Hazard Map, and Developing a Landslide Susceptibility Map in Malawi, Kenya, and Tanzania
- Texas Water Resources: Utilizing NASA Earth Observations to Monitor the Changes in Groundwater Availability and Water Quality in Texas
- Hawaii Disasters: Assessing Areas at Risk of Coral Bleaching and Creating a Time Series Utilizing NASA Earth Observations

- Thailand Disasters II: Monitoring Risk and Extent of Drought for Enhanced Decision Making and Resource Allocation in the Kingdom of Thailand

NASA Jet Propulsion Laboratory – Pasadena, CA
- Southern California Disasters: Utilizing NASA UAVSAR Data to Determine Coastal Flooding Extent within Southern California
- Costa Rica Ecological Forecasting: Evaluating ECOSTRESS like thermal data products for agricultural management practices in Costa Rica
- Texas Disasters: Utilizing SMAP and GRACE Data to Evaluate the 2015 Texas Flooding Events

NOAA National Centers for Environmental Information – Asheville, NC
- Pacific Water Resources II: Exploring the C-MORPH Climate Data Record in the U.S. Affiliated Pacific Islands
- Missouri River Climate II: Determining the Spatial and Temporal Trends of Climate Variables from NASA Earth Observations and NOAA Climate Data Records in the Missouri River Basin

International Research Institute for Climate & Society – Palisades, NY
- Uruguay Disasters: Using NASA Earth Observations to Predict Drought at a Regional Level
- Malawi Disasters II: Applications of NASA Earth Observations to Develop a Flash Flood Risk Identification Methodology

Mobile County Health Department – Mobile, AL
- Mobile Bay Ecological Forecasting: Monitoring Marsh and Seagrass Conditions in Coastal Alabama by Utilizing NASA Earth Observations to Support the Alabama Coastal Foundation's Restoration and Conservation Initiatives

Maricopa County Department of Public Health at Arizona State University – Tempe, AZ
- Arizona Health & Air Quality III: Enhancing Extreme Heat Intervention and Preparedness Activities in Maricopa County, Arizona with NASA Earth Observations

BLM at Idaho State University – Pocatello, ID
- Idaho Ecological Forecasting: Identifying critical wildlife habitat areas threatened by heightened wildfire susceptibility

USGS at Colorado State University – Fort Collins, CO
- Laramie Mountains Ecological Forecasting II: Utilizing NASA Earth Observations to Evaluate Carrying Capacity of Mule Deer and Elk Habitat in the Laramie Range, Wyoming
- Rocky Mountain National Park Ecological Forecasting: Utilizing NASA Earth Observations to Map Land Cover and Reconstruct Forest Disturbance History in Rocky Mountain National Park, CO

University of Georgia – Athens, GA
- Southeast U.S. Ecological Forecasting III: Using NASA Earth Observations to Map the Spatio-Temporal Distribution of Hydrilla verticillata
- Peru Climate III: Monitoring and Forecasting Shifting Climate and Land Change Impacts in Peru's Parque de la Papa for Enhanced Agricultural Management
- Atlanta Water Resources II: Identifying Key Urban Areas to Reduce Stormwater Runoff in Metropolitan Atlanta and Maximize Conservation Efforts

- Costa Rica Water Resources: Monitoring Risk and Extent of Drought for Enhanced Decision Making and Resource Allocation in Costa Rica

Wise County Clerk of Court's Office – Wise, VA
- African Great Lakes Weather III: Utilizing NASA Earth Observations to Identify Indicators to Help Predict Deadly Storms over African Great Lakes
- Ethiopian Agriculture: Utilizing NASA Earth Observations to Help Estimate and Monitor Drought to Improve Crop Production in Arsi, Ethiopia
- South Dakota Disasters: Utilizing NASA Earth Observations to Map Creeping Landslides in South Dakota Forests