NASA DEVELOP – 2018 Fall Project List

AL: Alabama – Mobile (Mobile, AL)
▸ *New Orleans Health & Air Quality: Monitoring the Urban Heat Island Effect on the Health of Residents of the New Orleans Metropolitan Area through with Landsat, Sentinel, and MODIS Land Surface Temperature Products*

ARC: California – Ames (Moffett Field, CA)
▸ *Lake Michigan Water Resources II: Analyzing Cladopphora Habitat Suitability on Wisconsin's Western Shores using Landsat and MODIS and Validating a Cladophora Detection and Monitoring Tool with In Situ Data*

AZ: Arizona – Tempe (Tempe, AZ)
▸ *Tempe Urban Development: Utilizing NASA Earth Observations to Assess Thermal Landscapes and Prioritize Greening Initiatives in Tempe, Arizona*

CO: Colorado – Fort Collins (Fort Collins, CO)
▸ *Wisconsin Agriculture & Food Security: Employing NASA Earth Observations to Model Distributions of Vaccinium Spp. Crop Wild Relatives, in Support of USDA ARS Genetic Resource Conservation Efforts*

▸ *Colorado & New Mexico Disasters: Investigating Forest Mortality and Burn Severity Using NASA Earth Observations to Provide Forest Management Tools for Ranches and Open Lands*

GA: Georgia – Athens (Athens, GA)
▸ *Osa Peninsula Water Resources III: Utilizing NASA Earth Observations to Assess Threats to Mangrove Forests and Coral Reef Health to Prioritize Areas for Restoration in the Osa Peninsula, Costa Rica*

GSFC: Maryland – Goddard (Greenbelt, MD)
▸ *Chesapeake Bay Agriculture & Food Security: Operational Analysis of Winter Cover Crop Environmental Performance Throughout the State of Maryland*

ID: Idaho – Pocatello (Pocatello, ID)
▸ *Idaho Water Resources II: Approximating Evapotranspiration in Semi-Arid Sagebrush Steppe to Improve Water Balance Calculations in Southeast Idaho*

JPL: California – JPL (Pasadena, CA)
▸ *Mojave Desert Ecological Forecasting: Monitoring Bighorn Sheep Habitat by Assessing Satellite Measurements of Vegetation, Precipitation, and Soil Characteristics*

▸ *Alaska Ecological Forecasting: Automated Wetland Hydroperiod Mapping Integrating Optical Satellite Imagery and Synthetic Aperture Radar*

LaRC: Virginia – Langley (Hampton, VA)
▸ *Intermountain West Health & Air Quality II: Utilizing NASA Earth Observations to Help the National Park Service Monitor and Address Visibility in Intermountain Region National Parks*

▸ *Hampton Roads Urban Development: Monitoring Hampton's Coastline and Assessing Barrier Island Transgression to Enhance Coastal Management*

MA: Massachusetts – Boston (Boston, MA)
▸ *Great Bear Lake Water Resources: Analyzing Long-Term Remote Sensing Data to Evaluate Changing Water Temperature and Quality in Great Bear Lake*

MSFC: Alabama – Marshall (Huntsville, AL)

‣ *Ohio River Valley Transportation & Infrastructure: The Application of Synthetic Aperture Radar Data to Identify Optimal Access Routes for Emergency Services After Flood Events in the Ohio River Valley*

‣ *Gulf of Mexico Transportation & Infrastructure: Evaluating the Potential of CYGNSS Wind Data to Assess Tropical Storm Impacts on Energy Infrastructure in the Gulf of Mexico*

NC: North Carolina – NCEI (Asheville, NC)

‣ *Missouri River Basin Disasters: Utilizing NASA Earth Observations and NOAA Climate Data Records to Produce Climate Indicators of Rangeland Health and Wildfire Risk*