NASA DEVELOP – 2019 Spring Potential Project List

Note: These project ideas are tentative and subject to change. The number of projects listed does not necessarily reflect the number of projects being conducted at a given node.

AL: Alabama - Mobile (Mobile, AL)

New Orleans Health & Air Quality II: Evaluating the Impacts of Urban Heat Island Effects on the Health of Residents of New Orleans Metropolitan Area by Implementing Landsat, Sentinel and Terra MODIS Land Surface Temperature products

ARC: California – Ames (Moffett Field, CA)

Chile Ecological Forecasting: Forecasting Chile's Atacama Desert Salt Marshes Future with NASA Earth Observations

AZ: Arizona – Tempe (Tempe, AZ)

Lake Ontario Disasters: Utilizing Landsat, Sentinel, and MODIS to Assess the Potential for Extreme Flooding in Coastal Cities Along Lake Ontario

CO: Colorado - Fort Collins (Fort Collins, CO)

- ▶ Nevada & Oregon Water Resources: Utilizing Landsat to Identify Surface Water in Support of the USGS's Management Efforts of Equids
- Minnesota Agriculture & Food Security: Validation of Suitable Habitat for Wild Rice Through Modeling Efforts Using NASA Earth Observation

GA: Georgia - Athens (Athens, GA)

 Georgia Energy III: Reducing Conflicts in Siting Solar Power Generating Facilities by Identifying Sensitive Habitats and Wildlife Populations in Areas with High Solar Power Generation Potential

GSFC: Maryland - Goddard (Greenbelt, MD)

Maryland Agriculture & Food Security II: Quantifying Wintertime Agricultural Land Use and Springtime Management of Winter Cover Crops Using Landsat and Sentinel to Support Environmental Conservation Management in Maryland

<u>ID: Idaho – Pocatello</u> (Pocatello, ID)

 Argentina Water Resources: Measuring Soil Moisture and Evapotranspiration in Semi-Arid Climate with NASA Earth Observations to Understand Water Balance in Patagonian Steppe of Argentina

JPL: California - JPL (Pasadena, CA)

- ▶ Great Lakes Water Resources: Improving Wetland change Mapping using Moderate Resolution, Multi Temporal, Optical and Radar Satellite Sensors for the Great Lakes Region
- Alaska Ecological Forecasting II: Automated Wetland Inundation Mapping Using Synthetic Aperture Radar and Optical Satellite Imagery for Enhanced Wetland Management

<u>LaRC: Virginia – Langley</u> (Hampton, VA)

- Patuxent Water Resources: Monitoring Land Use and Land Cover Changes in the Patuxent Reservoirs Watershed to Assess Impacts to Water Quality
- Hampton Urban Development II: Enhancing Coastal Management Through the Application of NASA Earth Observations for Monitoring Hampton's Coastline and Assessing Barrier Island Transgression

MA: Massachusetts – Boston (Boston, MA)

Lake Ontario Disasters: Utilizing Landsat, Sentinel, and MODIS to Assess the Potential for Extreme Flooding in Coastal Cities Along Lake Ontario

MSFC: Alabama - Marshall (Huntsville, AL)

- ► Coastal Alabama Water Resources III: Enhancing Evaluation of Water Quality in Coastal Alabama Using ECOSTRESS
- ▶ Alaska Disasters: Evaluating the Atmosphere-Land Exchange Inverse (ALEXI) Evaporative Stress Index for the Alaska Environment

NC: North Carolina - NCEI (Asheville, NC)

▶ Texas Disasters: Quantification of Damage to Urban Tree Inventories in Texas Following Hurricane Harvey