

## **NASA DEVELOP – 2021 Summer Potential Project List – updated 2/19/21**

NOTE: These project ideas are **tentative** and **subject to change**. The number of projects listed does not necessarily reflect the number of projects conducted at a given node. Expect that each node will conduct 1-2 projects for the 2021 summer virtual term. This list may be updated throughout the application period.

### **ARC: California – Ames** (Moffett Field, CA)

- ▶ *Louisiana Water Resources: Using NASA Earth Observations to Analyze Coastal Land Loss and Assist Oyster Reef Habitat Restoration Efforts*

### **AZ: Arizona – Tempe** (Tempe, AZ)

- ▶ *Southwest Water Resources: Monitoring Remote Stock-pond Water Levels in the Southwest Using Radar*
- ▶ *Highland Lakes Water Resources: Using NASA Earth Observations to Improve Early Warning Systems for Harmful Algal Blooms in the Highland Lakes Chain*

### **CO: Colorado – Fort Collins** (Fort Collins, CO)

- ▶ *Powder River Basin Water Resources: Mapping Russian Olive for Riparian Restoration*
- ▶ *San Luis Valley Ecological Forecasting: Monitoring Post-fire Cheatgrass Invasion in the Colorado San Luis Valley*

### **GA: Georgia – Athens** (Athens, GA)

- ▶ *Midwest Food Security & Agriculture II: Exploring Phenological Curves and Crop Progress to Enable Crop Diversification Practices in Midwestern Farmlands*
- ▶ *Peru Urban Development: Assessing Urban Expansion in Rural Amazonia in Peru to Inform Public Health Interventions for Zoonotic Disease Prevention*

### **GSFC: Maryland – Goddard** (Greenbelt, MD)

- ▶ *Bering Strait Food Security & Agriculture: Quantifying Sea Ice Thickness to Support Safe Navigation and Food Security of Alaskan Subsistence Hunters*
- ▶ **\*\*Bhutan Special Project\*\*** *Southern Bhutan Ecological Forecasting III: Modeling Asian Elephant (*Elephas maximus*) Habitat Suitability along the Southern Bhutan Border with NASA Earth Observations*

### **ID: Idaho – Pocatello** (Pocatello, ID)

- ▶ *Assateague Island National Seashore Water Resources: Monitoring Shoreline Change and Sediment Transport Before and After Shoreline Nourishment Events*
- ▶ *Seward Peninsula Water Resources: Characterizing Currents off of Coastal Alaska to Protect Sensitive Habitats*

### **JPL: California – JPL** (Pasadena, CA)

- ▶ *Coastal California Ecological Forecasting II: Characterizing and Assessing Estuarine Ecosystems in Coastal California for Better Wetland Monitoring and Management*
- ▶ *Maya Forest Water Resources: Using NASA Earth Observations to Map Wetlands for Traditional Agricultural Practices and Associated Impacts in the Maya Tri-National Forest*

### **LaRC: Virginia – Langley** (Hampton, VA)

- ▶ *Tonle Sap Food Security & Agriculture II: Evaluating Changes in Ecosystem Vitality and Freshwater Health in the Tonle Sap Basin Using Remotely Sensed Data*
- ▶ *Puerto Rico Water Resources: Using Earth Observations to Analyze Shoreline Changes and the Effects of Sea Level Rise on Southern Puerto Rico*

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### **MA: Massachusetts – Boston** (Boston, MA)

- ▶ *Cincinnati & Covington Water Resources II: Assessing Flooding and Landslide Susceptibility Along the Ohio-Kentucky Border*

### **MSFC: Alabama – Marshall** (Huntsville, AL)

- ▶ *Delaware Urban Development II: Assessing Changes in Coastline Subsidence and Evaluating Risk along the Delaware Coast*
- ▶ **\*\*Bhutan Special Project\*\*** *Bhutan Water Resources III: Comparing Precipitation, Temperature, and Phenology Data Trends in Bhutan to Assist the Himalayan Environmental Rhythm Observation and Evaluation System (HEROES) Project*

### **NC: North Carolina – NCEI** (Asheville, NC)

- ▶ *Illinois Disasters: Enhancing Flood and Drought Prediction Models for Illinois using NASA Earth Observations*