

## NASA DEVELOP – 2024 Spring Proposed Project List (v2. Oct 2, 2023)

NOTE: These project ideas are **tentative** and **subject to change**. Projects will be conducted either in-person\* at a DEVELOP location or virtually, and each node will conduct 1-3 projects for the 2024 spring term. This list may be updated throughout the application period.

The DEVELOP spring 2024 term will offer opportunities for in-person or virtual participation, by project. The work environment of the opportunity will be dependent on the project and DEVELOP location. When selecting your preferred location(s), please pay attention to the type of opportunity selected based on the location and project offers on this document.

### In-Person and Virtual Project Opportunities

Location	In-Person Project(s)	Virtual Project(s)
AL – Marshall	X	
CA – Ames	X	
CA – JPL	X	
CO – Fort Collins	X	
GA – Athens	X	
ID – Pocatello	X	X
MA – Boston	X	
MD – Goddard	X	
NC – NCEI	X	X
VA – Langley	X	X
EJ – Environmental Justice		X
PUP – Pop-up Project at University of Wyoming	X	
PUP – Pop-up Project at University of Virginia	X	

### Proposed Project List by DEVELOP Location

#### AL – Marshall

- ▶ **Big Bend Ecological Conservation:** Integrating Earth Observations into Invasive Species Management Decisions in Big Bend National Park in Texas (in-person project)

#### CA – Ames

- ▶ **San Joaquin Valley Health & Air Quality II:** Assessing Urban Heat Island Distribution and its Intersections with Air Quality to Understand Converging Vulnerabilities (in-person project)
  - Note: This project has an environmental justice focus

#### CA – JPL

- ▶ **Hawaii Climate:** Utilizing NASA Earth Observations to Assess Thermal Stress Impacts on Coastal Native Hawaiian Fisheries (in-person project)
- ▶ **Southern California Water Resources:** Using NASA Earth Observations to Monitor Seagrass Extent and Water Quality Parameters in Southern California (in-person project)

#### CO – Fort Collins

- ▶ **Colorado Eastern Plains Agriculture II:** *Monitoring Rangelands for Informed Grazing Management in Colorado's Eastern Plains* (in-person project)
- ▶ **Oklahoma Agriculture:** *Mapping Grassland Productivity on South Central Oklahoma Ranch Lands to Evaluate Management and Quantity Soil Carbon Fluxes* (in-person project)

#### GA – Athens

- ▶ **Platte River Basin Water Resources:** *Assessing Urban Flood Vulnerability to Select Restoration Sites for Urban Woods and Prairies in the Great Plains* (in-person project)

#### ID – Pocatello

- ▶ **Southeast Idaho Water Resources:** *Quantifying the Effects of Hydrologic Restoration in the "Sohodai" Wetland Complex, Camas National Wildlife Refuge & Mud Lake Wildlife Management Area* (in-person project)
- ▶ **Rhode Island Ecological Conservation:** *Methods for Monitoring Rhode Island Habitats, Contributing to a Framework for Targeted Bird Conservation and Management* (virtual project)

#### MA – Boston

- ▶ **Alaska Ecological Conservation:** *Using NASA Earth Observations to Identify Recent Changes in River Ice Phenology and Its Impacts on Caribou Migration* (in-person project)

#### MD – Goddard

- ▶ **Coronado Disasters:** *Monitoring Geohazards and Slope Failure Along Newly Constructed Border Fence Roads in Coronado National Memorial* (in-person project)
- ▶ **Baltimore Transportation & Infrastructure:** *Assessing Urban Heat Vulnerability in Baltimore Neighborhoods to Inform Transportation Resiliency Planning Efforts* (in-person project)

#### NC – NCEI

- ▶ **Eastern Kentucky Water Resources:** *Monitoring Antecedent Conditions Preceding Flash Flood Events to Map Predictors of Flood Risk in Eastern Kentucky* (in-person project)
- ▶ **Brazil Agriculture:** *Measuring Crop Yields to Evaluate Fluctuations in Agricultural Production and Support Crop Estimation During El Niño Conditions in Brazil using Earth Observations* (virtual project)

#### VA – Langley

- ▶ **Cape Hatteras Ecological Conservation:** *Delineating Shoreline and Mapping Change along the Cape Hatteras National Seashore for Coastline Management and Transportation Corridor Adaptation Strategies* (in-person project)
- ▶ **Coastal Virginia Water Resources:** *Mapping Wetlands and Impervious Surfaces in Norfolk, VA to Inform Design Standards and Adaptation Planning* (in-person project)
- ▶ **Sarasota Climate:** *Monitoring Heat and Assessing Heat Vulnerability to Identify Locations for Heat Mitigation Efforts in Sarasota, Florida* (virtual project)
- ▶ **Cali Water Resources:** *Using NASA Earth Observations to Assess Wetlands and Land Reclamation in Cali, Colombia* (virtual project)

#### EJ – Environmental Justice

- ▶ **Bridgeport Urban Development:** *Leveraging NASA Earth Observations and Sociodemographic Data to Assess Urban Heat Vulnerability and Inform Cool Corridors in Bridgeport, Connecticut* (virtual project)

**PUP – PUP at University of Virginia**

- ▶ **California Disasters:** *Monitoring Tropical Storm-Induced Flood Damage and Assessing Future Flood Risk Using NASA Earth Observations (in-person project)*

**PUP – PUP at University of Wyoming**

- ▶ **Montana Wildland Fires:** *Mapping Tree Mortality and Burn Patches using NASA Earth Observations to Determine Fire Risk and Inform Forest Management Practices (in-person project)*