

NASA DEVELOP – 2024 Spring Proposed Project List (v1. Aug 25, 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)
- ▶ **Southeast US Agriculture II:** Evaluating the Spatial and Temporal Distribution of Flash Droughts within Agricultural Areas and Regional Crop Calendars in the Southeast using Earth Observations (in-person project)

CA – Ames

- ▶ **Cali Water Resources:** Using NASA Earth Observations to Assess Wetlands and Land Reclamation in Cali, Colombia (in-person project)

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 Quantify 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

- ▶ **Great Slave Lake Water Resources II:** *Mapping Changes in Delta Dynamics Within Great Slave Lake Using NASA Earth Observations* (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:** *Enhancing Crop Classification Mapping Using Optical and Radar Satellite Sensors to Enhance Agricultural Management and Policymaking in Brazil* (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)
- ▶ **Richmond Climate:** *Monitoring Heat and the Urban Heat Island Effect in Richmond, Virginia in Support of Groundwork RVA's Climate Safe Neighborhoods Program* (in-person project)
- ▶ **Miami Climate:** *Quantifying Impacts of Sustainability and Climate Change Mitigation Investments in Support of Decarbonization Efforts in Miami, Florida* (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)

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