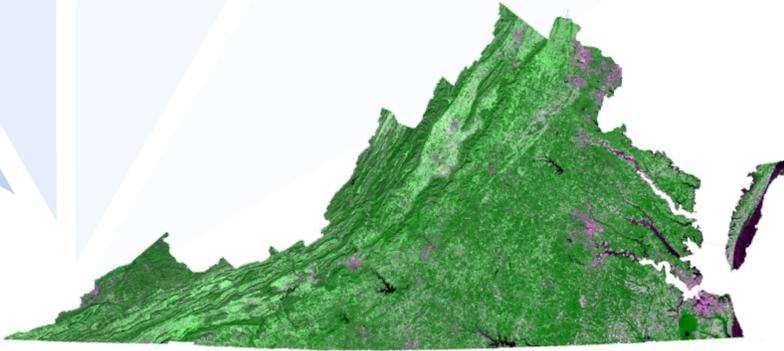




DEVELOP VIRGINIA

NASA's Applied Sciences'
Capacity Building
DEVELOP
National Program



What is DEVELOP?

DEVELOP addresses environmental and public policy issues through interdisciplinary research projects that apply the lens of NASA Earth observations to community concerns around the globe. Bridging the gap between NASA Earth science and society, DEVELOP builds capacity in both participants and partner organizations to better prepare them to address the challenges that face our society and future generations.

Teams of DEVELOP participants partner with decision makers to conduct rapid feasibility projects that highlight relevant applications of Earth observing missions, cultivate advanced skills, and increase understanding of NASA Earth science data and technology.

DEVELOP conducts feasibility projects that utilize NASA satellite and airborne observations for customized applications that demonstrate the utility of remote sensing data for decision makers.

STATE IMPACT

DEVELOP is headquartered at NASA Langley Research Center, operating a network of 12 locations throughout the US. In 2018, DEVELOP provided 55 workforce development opportunities in Virginia, impacting 10 of 11 congressional districts. 7% of participants were active duty military or veterans and 41% were female.

DEVELOP's Virginia locations conducted 13 projects in support of environmental community concerns across the US, including projects focusing on Health & Air Quality in Richmond and Urban Development in the Hampton Roads area.



2018 PARTICIPANT IMPACT BY DISTRICT

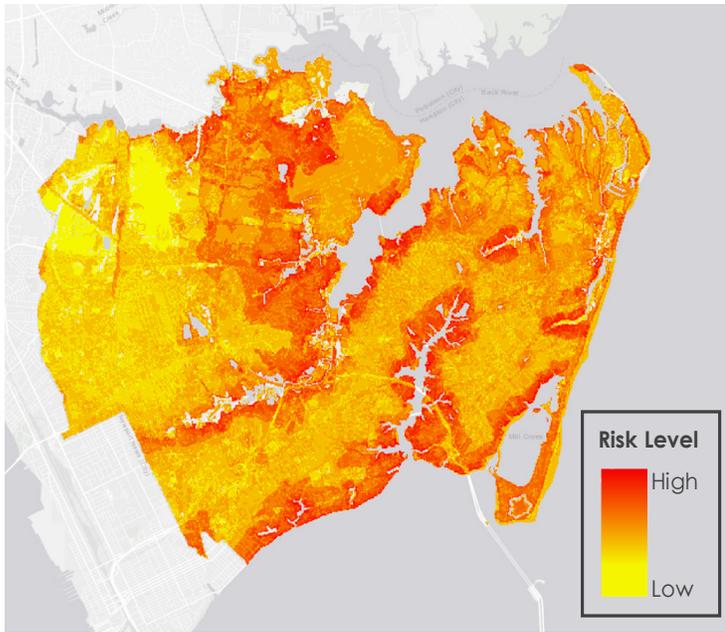


DEVELOP

SCIENCE SERVING SOCIETY

Recent Project Example

Hampton Roads Urban Development



Situated at the mouth of the Chesapeake Bay, Hampton, Virginia is one of the most vulnerable areas in the United States for environmental stressors such as flooding, sea level rise, and storm surge. The city is engaged in several initiatives and partnerships to aggregate geospatial data to improve their coastal resilience planning. A DEVELOP feasibility study partnered with the City of Hampton to enhance visualization capabilities using NASA Earth observations. The team derived coastline maps by consolidating multiple satellite images from each year to generate annual average coastline locations, which were then incorporated into risk assessment maps and an ArcGIS story map. The results delineate areas that are at-risk to shoreline loss while demonstrating that there is a more recent trend towards modest shoreline inundation and transgression. By building a greater understanding of the fluctuations of Hampton's coastline, city planners can more effectively build resilience plans and communicate with policy makers.

What are NASA Earth Observations?

Space is one of the best vantage points from which to study Earth. NASA satellites and airborne missions are continually collecting information about Earth's ocean, atmosphere, and land surfaces. This Earth observation imagery can be applied to environmental issues and provide decision makers with new information to enhance their response.

Project Process



How to Engage

DEVELOP collaborates with a wide variety of organizations (state and local governments, NGOs, federal agencies, international organizations, etc.) to conduct rapid feasibility projects focused on applying NASA Earth observations to environmental decision-making processes. DEVELOP is built on strong projects that stem from robust partnerships. The program seeks engaged partners who value scientific collaboration, and most importantly, regular communication during the short 10-week term.

Any organization interested in partnering with DEVELOP can contact the National Program Office and discuss potential project ideas by completing a project request form and submitting it through email. The form can be found online at <https://develop.larc.nasa.gov/projects.php>



www.nasa.gov

NP-2019-01-002-LaRC

More About DEVELOP - [DEVELOP.larc.nasa.gov](https://develop.larc.nasa.gov)