



# NASA Earth Science

Introducing 32 Projects Supporting  
the Group on Earth Observations



**These projects advance nine elements in the GEO Work Programme. The projects broaden the involvement in GEO by U.S. organizations, adding their expertise and contributions to realize societal benefits from Earth observations.**

## AmeriGEOSS

<https://www.amerigeoss.org/>

A Capacity Building Center for the Use of SAR in Decision Making. *Franz Meyer, University Of Alaska-Fairbanks*

Community Building and Capacity Development in Support of AmeriGEOSS Food Security and Sustainable Agriculture Area. *Alyssa Whitcraft, University of Maryland-College Park*

Laying the foundations of the Pole-to-Pole Marine Biodiversity Observation Network of the Americas. *Enrique Montes, University Of South Florida-Tampa*

Harnessing Earth Observations to Support Indigenous-led Land Management. *Karyn Tabor, Conservation International*

## EO4Health: Earth Observations for Health

<http://www.geohealthcop.org/>

Myanmar Malaria Early Warning System. *Tatiana Loboda, University of Maryland-College Park*

Environmental Determinants of Enteric Infectious Disease. *Benjamin Zaitchik, Johns Hopkins University*

Predictive assessment of transmission conditions of cholera in the environment and human population using Earth observations. *Antarpreet Jutla, West Virginia University*

GeoHealth: A geospatial surveillance and response system resource for vector borne disease in the Americas. *John Malone, Louisiana State University and A&M College*

## EO4EA: Earth Observations for Ecosystem Accounting

<https://www.earthobservations.org/activity.php?id=111>

Ecosystem extent and a condition account to support the conservation province of West Papua, Indonesia. *Daniel Juhn, Conservation International*

Earth Observation Data in Support of National and Subnational Ecosystem Accounts in the United States. *Austin Troy, University Of Colorado-Denver*

## GEOGLOWS

<https://www.earthobservations.org/activity.php?id=118>

Platform for Rapid Deployment of GEOGLOWS Water and Food Security Nexus Decision Support Apps. *Daniel Ames, Brigham Young University*

Optimizing the Indus Basin Irrigation System and reservoir operations using remotely sensed snow surface properties in the ParBal model. *Karl Rittger, University of Colorado-Boulder*

Monitoring Surface Water Storage Changes over the Lower Mekong with Multiple Satellite Techniques Towards Sustainable Water Management. *Hyeongki Lee, University of Houston*

Evaluation of Risk and Capacity Development for Two Indian River Basins. *Venkat Lakshmi, University of South Carolina*

## Global Flood Risk Monitoring

<https://earthobservations.org/activity.php?id=94>

Global Rapid Flood Mapping System with Spaceborne SAR Data. *Sang-Ho Yun, NASA Jet Propulsion Laboratory*

Integrating Global Remote Sensing and Modeling Systems for Local Flood Prediction and Impact Assessment. *Robert Brakenridge, University Of Colorado-Boulder*

Towards A Global Flood & Flash Flood Early Warning Early Action System Driven by NASA Earth Observations and Hydrologic Models. *Andrew Kruczkiewicz, Columbia University*

### 8 SOCIETAL BENEFIT AREAS



Disaster Resilience



Health Surveillance



Food Security and Sustainable Agriculture



Biodiversity and Ecosystem Conservation



Water Resources Management



Urban Resilience



Energy and Natural Resources Management



Infrastructure and Transport Management

