



OPERA: Observational Products for End-Users from Remote Sensing Analysis

2026 OPERA Stakeholder Engagement Workshop

September 10th, 2026, 8:30am - 1:00pm PST, Hybrid workshop hosted at the Jet Propulsion Laboratory, Pasadena, CA



Free registration using link or QR Code:
<https://tinyurl.com/2026-OPERA>

NASA’s OPERA project delivers satellite-derived products that enable federal and state agencies, local communities, emergency responders, and commercial users to monitor land surface change, natural hazards and resources, and critical infrastructure. OPERA products provide accessible and actionable information to support the resilience and prosperity of the United States.

Agenda

- OPERA’s continued operation.
- Geospatial artificial intelligence (GeoAI) development with OPERA.
- Learn how stakeholders are using OPERA products.
- OPERA product updates:
 - NISAR-based DSWx and DISP products beginning in 2026
 - Sentinel-1 and NISAR-based VLM products beginning in 2028
 - Current product suite (2023-present): Dynamic Surface Water eXtent (DSWx), Surface Disturbance (DIST), and Surface Displacement (DISP).
- Demonstrate how to access OPERA products via common platforms:
 - Google Earth Engine, QGIS, ArcGIS, etc.

The OPERA project, managed by the Jet Propulsion Laboratory and funded by the Satellite Needs Working Group, creates remote sensing products to address Earth observation needs across U.S. civilian federal agencies. OPERA is funded by NASA under the Satellite Needs Working Group.

National Aeronautics and Space Administration

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Target Audience
Satellite Needs Working Group (SNWG) government agencies, other federal and local government agencies, academia, commercial sector.

Consultation
We offer technical guidance and expert consultations to federal agency end-users in using OPERA data products to address their analysis and observation needs and facilitate integration into their decision making. End-users are encouraged to contact the OPERA team (opera.sep@jpl.nasa.gov).

OPERA data are freely available via the NASA Earthdata Satellite Needs Working Group portal <https://tinyurl.com/snwgOPERA>

Dynamic Surface Water Extent (DSWx)



Delivers water maps — empowering users to track water resources, map floods, protect habitat, and drive smarter decision making.

Images: Wanzuitou Wetland Park, China; DSWx data. Credit: Wikimedia Commons/NASA/JPL-Caltech.

Surface Disturbance (DIST)



Detects vegetation and surface change — such as wildfire, logging, mining, and urban expansion — enabling land managers to assess conditions, prioritize areas of concern, and plan mitigation or recovery actions.

Images: 2012 fire in Roosevelt National Forest, Colorado, USA; DIST data. Credit: U.S. Department of Agriculture/NASA/JPL-Caltech.

Surface Displacement (DISP)



Tracks ground movement from many natural and human-driven processes (e.g., subsidence, landslides, earthquakes, volcanic activity) to inform hazard assessment and planning.

Images: 2010 earthquake in Concepción, Chile; DISP data. Credit: Wikimedia Commons/NASA/JPL-Caltech.

Vertical Land Motion (VLM)



Tracks uplift and subsidence, informing decisions about relative sea-level rise, oil/gas extraction, infrastructure safety, community planning, and long-term land-change management.

Images: Structures affected by subsidence in Amsterdam, Netherlands; VLM data. Credit: Wikimedia Commons/NASA/JPL-Caltech.

Refer to our workshop landing page for updates, and to access recordings and slides after the meeting: jpl.nasa.gov/go/opera/opera-workshops
If you would like to attend in person, please contact us at opera.sep@jpl.nasa.gov.