



Welcome to the second issue of the NASA Satellite Needs Working Group (SNWG) Implementation TEAm (NSITE) quarterly newsletter. Your source for the latest updates on the assessment, implementation, and impact of SNWG solutions.

Issue 2, July 2026

This quarter we celebrated many achievements! The NSITE team hosted the first ever Harmonized Landsat and Sentinel-2 virtual workshop, we've had a multitude of stakeholder engagement activities resulting in real-world decision making, the 2026 SNWG Survey kicked-off, and we have been working diligently at on-boarding the selected solutions from the previous cycle. Make sure to read on to learn more.

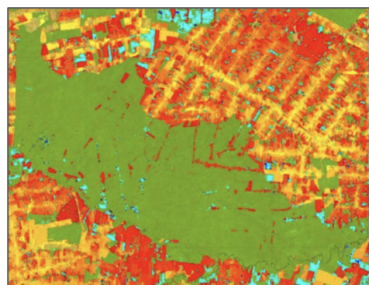
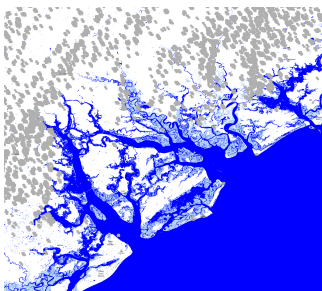
We also started to plan an SNWG 10-year Showcase for November 5th, 2026, at NASA Headquarters in Washington D.C., in recognition of 10 years of filling the Earth observation data needs of federal agencies. To date, 35 agencies have participated in this process, we have received over 500 surveys, and have developed some of NASA's most critical datasets and services. We'd love to celebrate with you there!

We continue to be excited by the new ideas submitted each survey cycle, and the integration of our existing solutions into agency science and decision making. As the NSITE Project Scientist, I am eager to hear from all of you on how we can better work together to ensure solution impact. Please enjoy the highlights in the newsletter below, and feel free to reach out if you would like to learn more, get involved, or brainstorm new ideas.

-Pontus Olofsson
NSITE Project Scientist

STAKEHOLDER ENGAGEMENT

Inaugural HLS Workshop Draws Nearly 1700 Registrants



HLS supported SNWG solution imagery, above from left: OPERA DSWx, OPERA DIST, and HLS-VI

Credits: NASA

On May 12 and 13, 2026, NSITE hosted a virtual workshop to connect HLS data to real-world use. Over 850 participants joined in real time, from over 40 countries to hear from 43 speakers on how HLS has improved their scientific and decision making capabilities. The workshop

featured speakers and live demos from across industries including NASA, Google, Microsoft, Planet Labs, Esri, USDA, University of Tennessee, Boston University, and USGS. The workshop also showcased innovative approaches in AI, including the NASA/IBM Prithvi-EO model. Due to high demand and positive feedback, NSITE is planning to host follow-on needs-based workshops and events for advanced integration of HLS.

“Implementing HLS shifts our operational capabilities from a reactive, macro-regional response to a proactive, site-specific, and near-real-time decision-making framework, maximizing the climate resilience of our agricultural and water resources.”

- Workshop participant

[**READ MORE AND ACCESS WORKSHOP RECORDINGS AND MATERIALS HERE**](#)

SNWG CYCLE 6

The 2026 SNWG Survey is Now Open!

The Satellite Needs Survey opened June 4, 2026, and will close on August 21, 2026. Internal agency deadlines for submission will vary, with some agencies initiating internal review before August 21, 2026. Survey respondents are encouraged to communicate with their agency’s SNWG representative regarding agency-specific timelines.

Survey kickoff presentation links:

[**SNWG kickoff recording**](#)

[**SNWG kickoff presentation**](#)

[**NASA kickoff presentation**](#)

[**READ MORE AND ACCESS THE SURVEY HERE**](#)

SOLUTION SPOTLIGHT

Air Quality Sensors and Forecasts

The Air Quality Sensors and Forecasts solution is actively working to expand air quality networks in data sparse regions and those with high levels of air pollution. Through engaging with the Department of State, Environmental Protection Agency, United States Department of Agriculture, National Parks Service, and other agencies, 14 new Pandora instruments have been installed across the globe (see map right), 9 of those within the United States and 5 at US Embassy locations. Air quality forecasts, using a combination of these instrument observations, NASA’s global atmospheric forecasting models, and machine learning are being made available on a webpage for selected locations, enabling locally-optimized forecasts of pollutants at these sites.

At the end of September, Tom Hanisco and Kelley Murphy will present at a Utah State University speaker series event on the solution and progress, as well as visit the recently installed Pandora instrument at Dinosaur National Monument and with National Parks Service partners.

[**CLICK TO READ MORE**](#)

[**CLICK HERE TO ACCESS THE FORECAST WEBPAGE**](#)



Image caption: Map of installed Pandora instrument for this solution. Green icons indicate installed instruments, black icons indicate upcoming installations. Inset to the left is an example Pandora sensor. Image credit: Kelley Murphy (map), Tom Hanisco (sensor)

SOLUTION IMPACT

The EPA's New England Region uses DIST-ALERT to Rapidly Identify Unpermitted Land Clearing

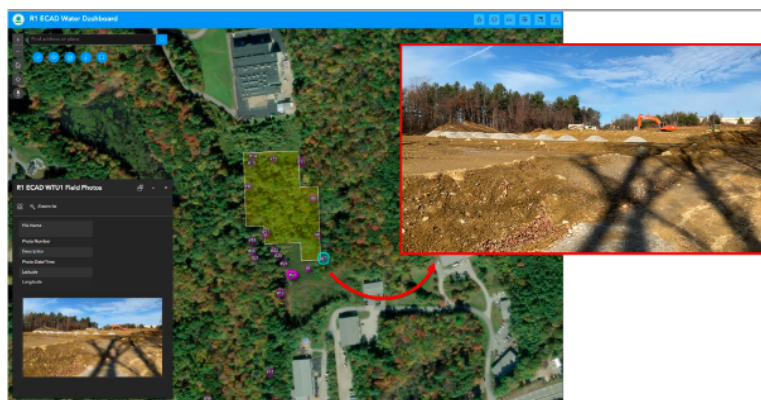


Image caption: DIST-ALERT flagged this polygon as vegetation loss, whereas latent higher resolution data still showed this area as forested. A field visit (above right) found a construction site, validating DIST-ALERT's findings. Credit: EPA

Construction is a leading cause of pollution and sediment runoff into waterways, threatening America's access to clean water. To avoid costly water cleanup efforts, the EPA ensures that companies obtain permits before starting construction in protected watersheds. Unfortunately, many land clearing projects happen without permitting, increasing contamination risk. Traditional EPA efforts to monitor unregulated land clearing are often unable to quickly or reliably detect violations in remote areas.

The EPA's New England Region now uses weekly satellite-based loss detections from SNWG OPERA's DIST-ALERT system with Harmonized Landsat and Sentinel-2 imagery to quickly identify unpermitted land clearing.

By identifying high-priority unregulated construction sites region-wide, DIST-ALERT improves the EPA's ability to quickly intervene and support businesses with construction approaches that avoid costly water quality issues. DIST-ALERT also makes the most of taxpayer dollars by helping dispatch regional field staff more efficiently in remote areas.

The EPA is enthusiastic about the results and is exploring replicating the system in additional regions.

“More than half of site visits identified by DIST-ALERT data resulted in corrective actions to return sites to compliance with the Clean Water Act. The DIST-ALERT data has greatly improved EPA’s Clean Water Act compliance programs.” - EPA Staff

[READ MORE ABOUT APPLICATIONS OF DIST-ALERT HERE](#)

Upcoming Events

2026 OPERA Stakeholder Engagement Workshop September 10th, 2026 (8:30 am - 1:00 pm PDT); hybrid at JPL and online

Participation is open to US federal agencies, contractors, the commercial sector, and academic researchers. To register and receive the meeting link, please use the [OPERA 2026 Workshop Registration Form](#).

In this OPERA workshop, we will report on the following:

- OPERA's continued operation.
- Geospatial artificial intelligence (GeoAI) development with OPERA.
- Learn how stakeholders are using OPERA products.
- OPERA product updates from **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 including Google Earth Engine, QGIS, ArcGIS, etc.

For more information please refer to [this website](#)

If you would like to attend in person please contact opera.sep@jpl.nasa.gov

Celebrating 10 Years of Satellite Needs Working Group!

See the flyer below for all the details! Don't forget to register

[Click here to access the event web page](#)



Satellite Needs Working Group 10-Year Showcase

Celebrating a decade of innovation, partnership, and collaboration from the Satellite Needs Working Group (SNWG). Welcoming all past and current survey participants, solution teams, stakeholders, and partners. This event will showcase SNWG impact across federal agencies, support continued collaboration, and explore a path forward for the next decade and beyond.

+ LOCATION

James E. Webb Memorial Auditorium
Mary W. Jackson NASA Headquarters
300 E. Street SW, Washington D.C.

+ DATE

November 5, 2026
1 pm - 5 pm, ET

*More information, including the agenda, available at
<https://www.earthdata.nasa.gov/events/snwg-10-year-showcase>*

**Register to attend BY OCTOBER 1, 2026
by emailing Rhea Bridgeland
(rhea.h.bridgeland@nasa.gov)**

NASA Earth

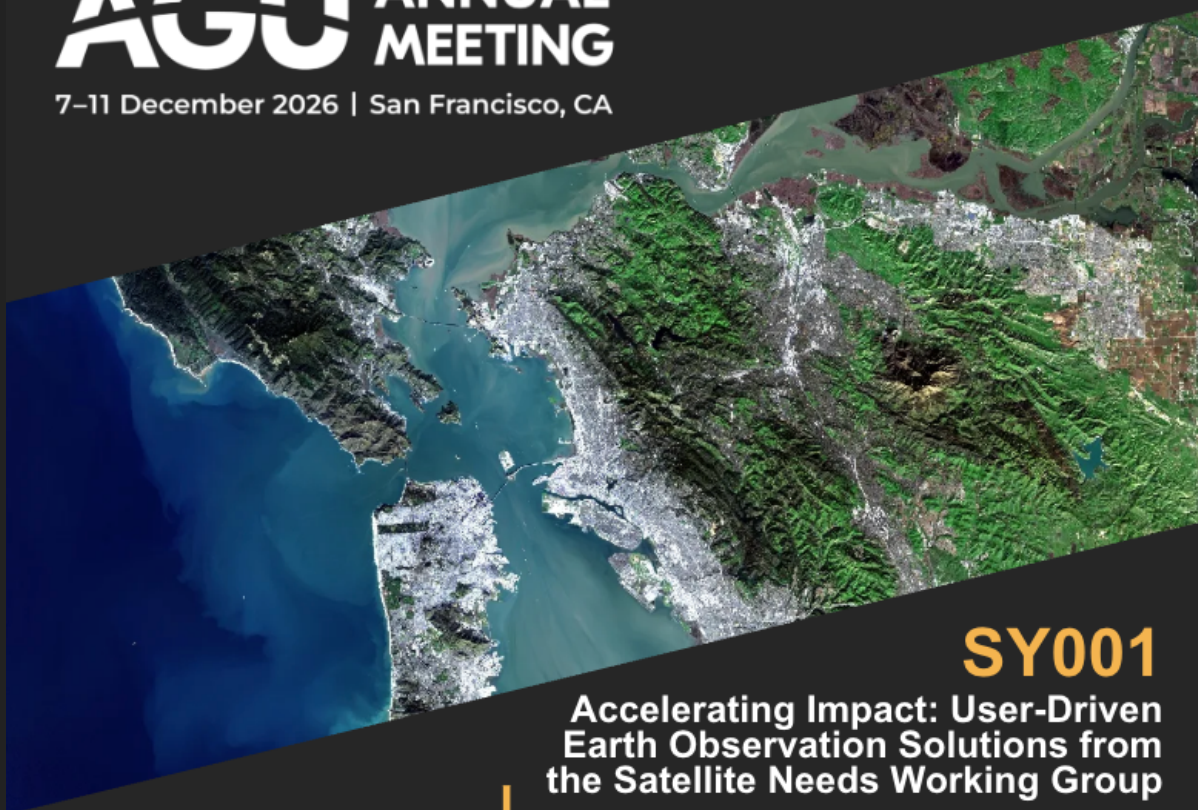
nasa.gov

A reception will be behind a security checkpoint.
RSVP is essential for attendance, last minute requests
may not be able to be accommodated.

SNWG at AGU - Submit your Abstracts Now! Deadline August 5th, 2026

SY001: Accelerating Impact: User-Driven Earth Observation Solutions from the
Satellite Needs Working Group

[Submit Abstracts Here](#)



SY001

Accelerating Impact: User-Driven Earth Observation Solutions from the Satellite Needs Working Group

Conveners:

Pontus Olofsson

NASA Marshall Space Flight Center

Natasha Sadoff

NASA Headquarters

Emily Adams

NASA Marshall Space Flight Center

The Satellite Needs Working Group (SNWG), a U.S. Government inter-agency organization, identifies Earth observation needs across federal agencies, starting with a biennial survey. In response, NASA develops a wide range of solutions that benefit those agencies and the Earth science community. Through this process, SNWG has enabled some of NASA's most impactful datasets and mission improvements. This session invites presentations from across the community on their applications of SNWG solutions. Solutions such as the Harmonized Landsat and Sentinel 2 (HLS) dataset, TEMPO near real-time data products, and OPERA products (land disturbance or displacement, surface water extent), are operational and already impactful. Others are more nascent in their development and actively co-designing with users, such as the Multi-Sensor Ocean Surface Winds product, the Planetary Boundary Layer products, the NISAR soil moisture product, and the Global Algal Bloom Assessment Network. Presentations on the process of co-development are also welcomed.



View and submit abstracts at agu.org/annual-meeting.
Deadline: Wed, August 5, (23:59 EDT/03:59 +1 GMT)

MWOW at AMS - Submit your Abstracts Now! Deadline August 11th, 2026

Session Topic ID 75780: The Golden Age of Observing Ocean Surface Winds: Importance, Instruments, Missions, Products, and Applications

[Submit AMS Abstracts Here](#)

Topic Description: Ocean surface winds and stress are one of the key components of the Earth system, identified as Essential Climate Variables (ECV) by the Global Climate Observing System (GCOS). These winds and stress reflect air–sea exchanges of momentum and heat, and in turn modify the boundary layers of both the atmosphere and the ocean. Through thermodynamic processes (air–sea heat fluxes) and dynamic mechanisms (momentum transfer, turbulence generation, and horizontal convergence of wind and flux), these exchanges

influence boundary-layer structure and variability. They also support the development and evolution of vertical circulation in both the atmosphere and the ocean, ultimately affecting circulation across a wide range of spatial and temporal scales.

We are entering a golden age of satellite observations, driven by a rapidly expanding international constellation of scatterometers, Synthetic Aperture Radars (SAR), and radiometers, including advanced polarimetric systems. These capabilities are transforming our ability to observe, understand, and predict ocean surface winds and their role in the Earth system.

This session welcomes contributions spanning a wide range of topics, from the scientific and operational importance of ocean surface winds and stress, to current and emerging satellite missions, and the development of new and Program-of-Record (PoR) products. We also encourage presentations on advances in modeling, forecasting, and validation, as well as innovative applications of ocean surface wind and stress observations for Earth science research and operational decision-making.

Reach out to Svetla Hristova-Veleva or Bryan Stiles for more information



Announcing: The NASA Earth Sciences Applications Guidebook

The [NASA Earth Science Applications Guidebook](#) offers practical insights, expert tips, interactive examples, and downloadable content based on the experience of more than 50 NASA and NASA-funded researchers. Its three sections cover:

- Earth Science at NASA
- Developing Earth Action proposals
- Managing an Earth Action project

The Guidebook's innovative format enables visitors to navigate quickly to the content they want. It is an essential resource for any scientist intending to propose to an Earth Action Research Opportunities in Space and Earth Science (ROSES) solicitation.

[CLICK HERE TO WATCH A PROMOTIONAL VIDEO](#)

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