

Earth Science to Action Strategy

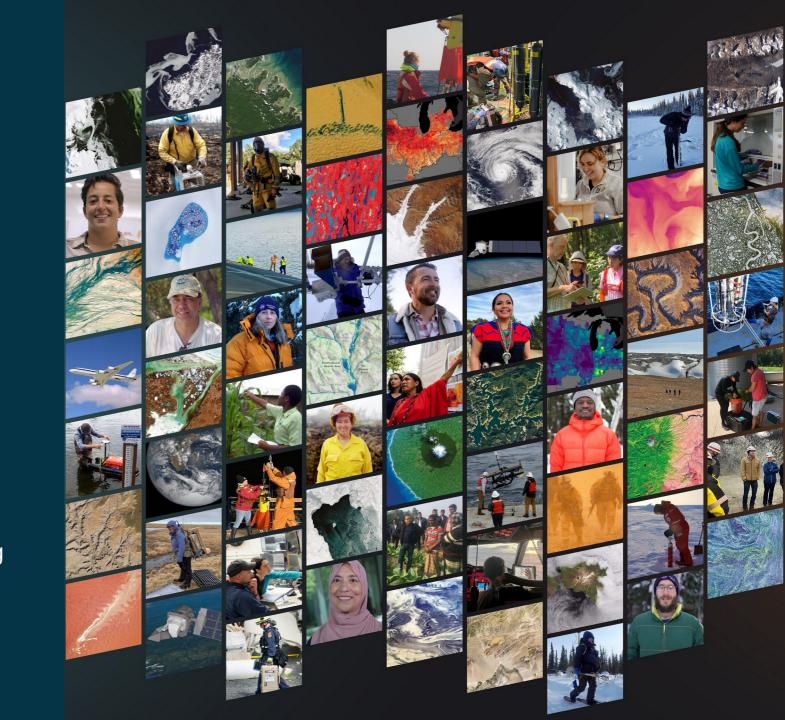


NASA DISASTERS PROGRAM

Co-develop operational tools to scale disaster management decisions that reduce impacts to communities

Provide near-real time science and technological support to operational responders during active disasters

Foster partnerships and build collective knowledge and capabilities for strengthening global disaster resilience



DISASTER SCIENCE TO ACTION PORTFOLIO LANDSLIDES **EARTHQUAKES** FLOODS Armenia Quejá landslide Maximum Hazard GEDI Score EL SALVADO

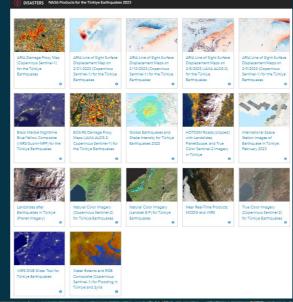
DISASTER RESPONSE COORDINATION SYSTEM (DRCS)

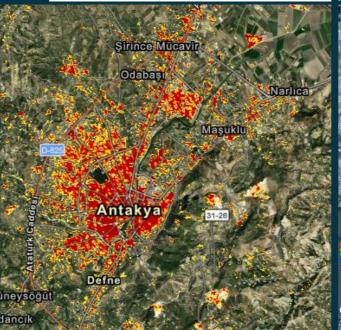
TÜRKIYE & SYRIA EARTHQUAKES 2023

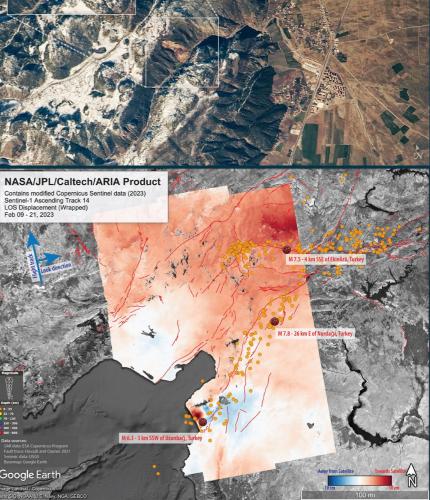
M7.3 earthquake and hundreds of aftershocks, caused over 50,000 casualties.

Stakeholders included USAID, US State Dept., USGS, NIST, California Seismic Safety Commission, the World Central Kitchen, Miyamoto Global Disaster Relief, and others

Provided over 17-event based tailored products and services based on partner needs.







DISASTER RESPONSE COORDINATION SYSTEM (DRCS)

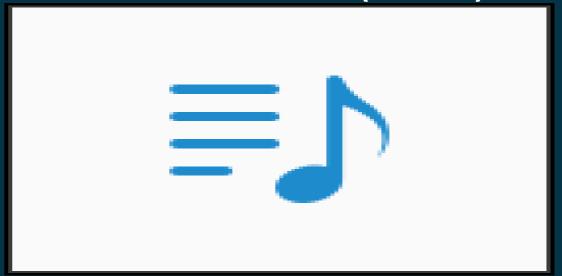
Hunga Tonga Hunga Ha'Pai Submarine Volcano

In January 2022 an explosive eruption of the underwater volcano with the power of 10-15 megatons and a ~36-mile-high plume. Most powerful eruption of the satellite era.

Lofted volcanic ash and gas launched into the atmosphere causing heavy ashfall and sever lightning storms in Tonga, while global impacts included the triggering of tsunamis, meteotsunamis, and atmospheric gravity waves across the globe.

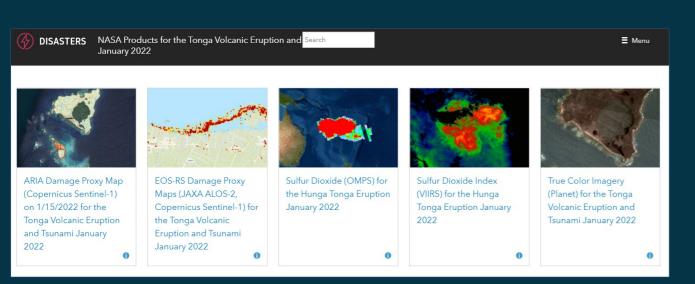
11 event-based services

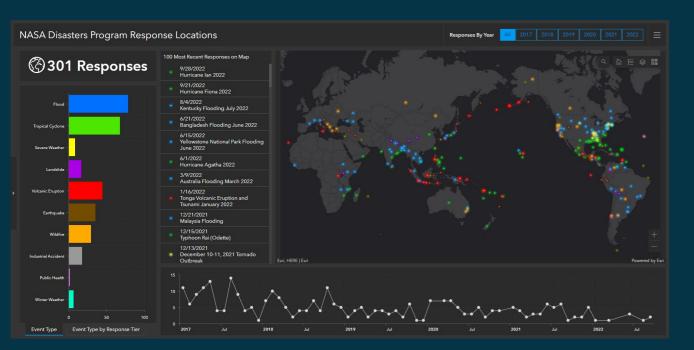
- SAR-derived damage proxy maps
- Surface Disturbance Maps
- SO2 emissions data

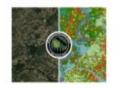




PARTNERSHIP & LEARNING PLATFORM







AGRICULTURE

ARSET - Large Scale Applications of Machine Learning using Remote Sensing for Building Agriculture Solutions

TRAINING TYPE: Cinline Instructor-Led

DATE: March US, 2024 - March 19, 2024



WATER RESOURCE

ARSET - Overview of SeaDAS 8.4.1 for the Processing, Analysis, and Visualization of Optical Remote Sensing Data for Water Quality Monitoring

TRAINING TYPE: Online Instructor-Led

LEVEL: Advanced

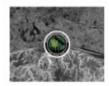
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APPLIED SCIENCES, CAPACITY BUILDING, FUNDAMENTALS

ARSET - Developing Sustainable Earth Science Applications

TRAINING TYPE: Cooling Self-Po



DISASTERS

ARSET - SAR para la Detección y el Monitoreo de Inundaciones, el Hielo Marino y la Subsidencia del Suelo por Extracción de Agua

TRAINING TYPE: Online Instructor-L LEVEL: Advanced

DATE: October 24, 2023 - November 01, 2023



DISASTERS

ARSET - SAR for Detecting and Monitoring Floods, Sea Ice, and Subsidence from Groundwater Extraction

TRAINING TYPE: Online Instructor-Led

LEVEL: Advanced

DATE: October 24, 2023 - November 01, 2023

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