National Aeronautics and
Space Administration

Connecting Citizen Science with Remote Sensing

January 24, 26, & 31, 2023

11:00-12:30 (English) or 14:00-15:30 (Spanish) EST (UTC-5)

This training will provide attendees an overview of citizen science efforts that use Earth Observations, and how to engage with community members in a supportive and meaningful manner to achieve project goals. Attendees will also be provided with case-study examples of successful citizen science projects, in particular those funded under NASA's Applied Sciences Program. We will highlight projects like NeMO-Net, a global coral reef classification with 2D and 3D images application combined with machine learning; Floating Forests, a Giant Kelp monitoring platform where participants can classify kelp in Landsat images; Snapshot Wisconsin, a project that uses images of wildlife from trail cameras to assist with habitat mapping; and Soundscapes to Landscapes, where bird diversity in California is monitored by identifying specific species through sound recordings. We will also highlight the Global Learning and Observations to Benefit the Environment (GLOBE) Program, an international science and education program, and GLOBE Observer, a citizen science app that allows volunteers in GLOBE countries to take observations and contribute to the community.

Part 1: Overview of Citizen Science

Trainers: Juan L. Torres-Pérez, Amber McCullum, Britnay Beaudry

- Overview of citizen science
- Effective and equitable community engagement
- Building a citizen science application
- Data standards and quality assurance

Part 2: NASA's Citizen Science for Earth Systems Program

Trainers: Juan L. Torres-Pérez, Amber McCullum, Britnay Beaudry

- Overview of NASA's Citizen Science Program
- Coastal/Oceans Case Study Examples:
  - NeMO-Net
  - Floating Forests

Part 3: Citizen Science at NASA with Land Applications

Trainers: Juan L. Torres-Pérez, Amber McCullum, Britnay Beaudry, Russanne Low, Peder Nelson

- Land Case Study Examples:
  - Snapshot Wisconsin
  - Soundscapes to Landscapes
  - GLOBE Observer Mosquito Habitat Mapper and Land Cover Tools
    - Citizen Science Supporting Community Health and Sustainability

ARSET empowers the global community through remote sensing training.

appliedsciences.nasa.gov/arset