



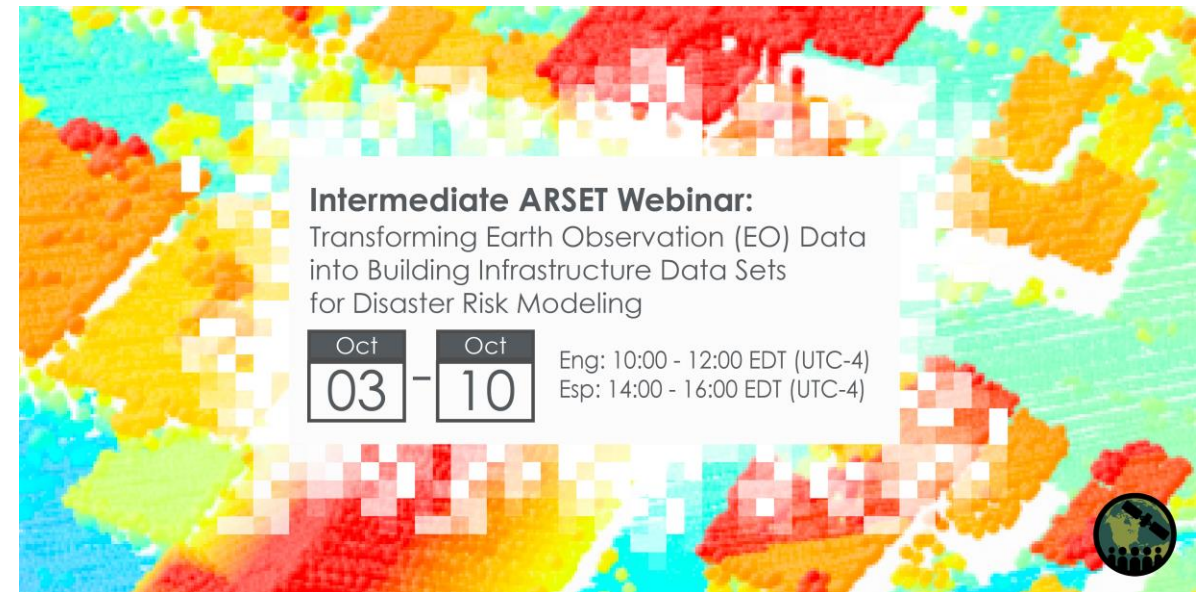
# NASA Applied Remote Sensing Training (ARSET)

<https://appliedsciences.nasa.gov/arset>



The ARSET Program delivers cost-free training on the use of Earth Observations for decision making

- Our trainings are:
  - Online and in-person
  - Live, instructor-led, or self-guided
  - Provided at no cost, with materials and recordings available from our website
  - Often multi-lingual
  - Range in level from **introductory** to **advanced**



## ARSET Training Themes



[Disasters](#)



[Agriculture](#)



[Land](#)



[Water Resources](#)



[Climate](#)



[Health & Air Quality](#)

# Transforming Earth Observation (EO) Data into Building Infrastructure Data Sets for Disaster Risk Modeling

October 3, 5, 10, 2023

## Audience

Advanced-level students interested in risk assessment and climate change adaptation, emergency managers, risk modelers, GIS analysts, EO researchers and analysts, Structural Engineers, climate adaptation researchers and planners

## Course Format

Three, 2-hour parts

## Registration is Open

### [Training Webpage \(English\)](#)

14:00-16:00 UTC (16:00-18:00 CEST)

### [Training Webpage \(Spanish\)](#)

18:00-20:00 UTC (20:00-22:00 CEST)

## By the end of this training attendees will be able to:

- Recognize what building vulnerability is and why it is important for risk modeling
- Identify the core elements of natural hazard risk modeling and asset loss estimation
- Identify fundamental approaches for developing building-exposure models using Earth Observation data and tools
- Apply a basic procedure to model built infrastructure exposure and vulnerability characteristics from Earth Observation data
- Evaluate building-specific exposure data sets to identify key components for fit, validity, consistency and rectify bias
- Evaluate the appropriate use of modeled building exposure data to a given community
- Apply strategies to identify and address equity and bias considerations
- Apply approaches to validate building data with imagery for regional datasets
- Document your exposure development process through metadata so that others can understand the process used, the limitations, and how to update if necessary

