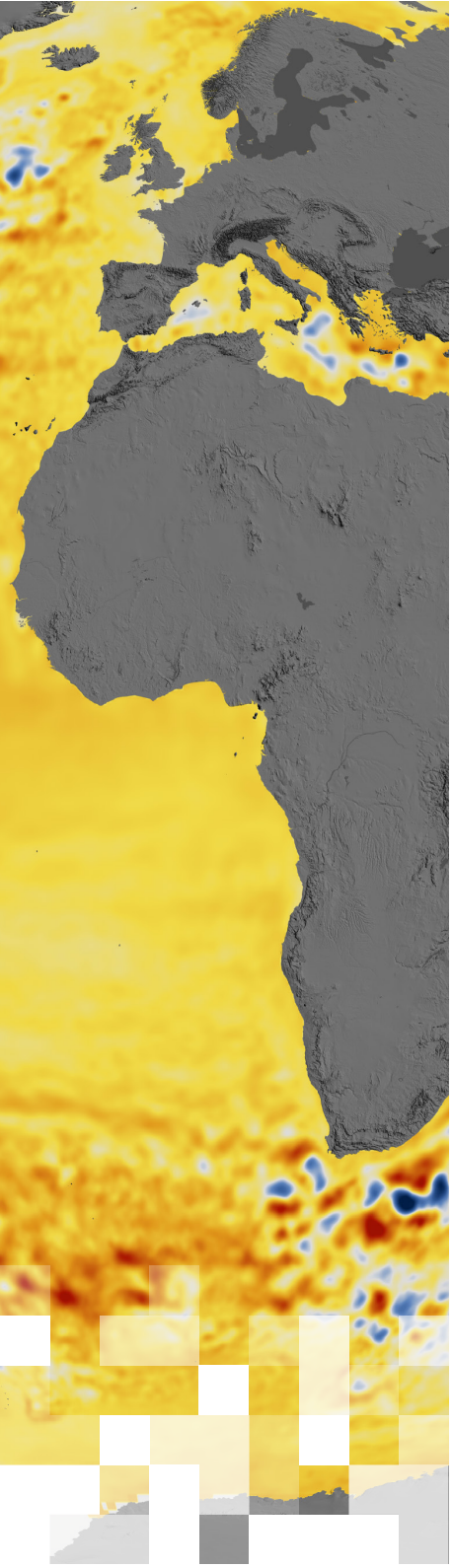

National Aeronautics and
Space Administration

Sea Level Change Tools for Planning and Decision Support

June 10 & 17, 2025

11:00-12:30 (Session A) or 14:00-15:30 (Session B) EDT (UTC-4)

Global sea level has been rising at a rate of 3 mm/yr, and this rate is projected to continue to increase sea level over the next century. Scientists use observations from the ground, air, and space, along with theoretical models and scenarios of future emissions, to monitor and study past, present, and future sea-level rise. This information is a fundamental basis for mitigation, adaptation, and risk management planning in all parts of the world and across many elements of society and ecosystems. This two-part introductory webinar series will focus on NASA products and tools available to assess historical sea-level rise, access and understand projections of sea level, and investigate impacts. Participants will be exposed to the causes behind regional and global sea-level changes and explore climate and analysis tools to access, visualize, and perform statistical analysis using NASA data.

Part 1: Overview of Sea Level Change – Regional to Global

ARSET Trainers: Sean McCartney

Guest Instructors: Angelica Rodriguez, Denis Felikson, Bob Kopp

- Sea-Level Change Overview
- Processes Contributing to Sea-Level Change
- Impacts of Sea-Level Change
- NASA's Unique Capabilities in Both Remote Sensing and Modeling
- Overview and Demonstration of Sea-Level Explorer (earth.gov/sealevel)
- Summary and Q&A

Part 2: Assessment Tools for Sea Level Change

ARSET Trainers: Sean McCartney

Guest Instructors: Phil Thompson, Denis Felikson

- Overview and Demonstration of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) Projections Tool (https://sealevel.nasa.gov/data_tools/17/)
- Overview and Demonstration of the Pacific Islands Flooding Analysis Tool (https://sealevel.nasa.gov/data_tools/19/)
- Summary and Q&A

ARSET empowers the global community through remote sensing training.