

Monitoring Coastal and Estuarine Water Quality Using Remote Sensing and In Situ Data

November 30th and December 7th, 2021

10:00-12:00 or 14:00-16:00 ET

This two-part, advanced webinar series is a follow-on to the training on coastal and estuarine water quality held in September 2021. It is a hands-on training with demos provided by instructors, followed by an hour of lab time for participants to use Level-1 MODIS and VIIRS data provided by the Ocean Biology DAAC (OB.DAAC) and SeaDAS and OCSSW software for deriving water quality parameters. These will include chlorophyll-a concentration, sea surface temperature, and suspended particulate matter from optical satellite imagery and in situ measurements using the SeaWiFS Bio-optical Archive and Storage System (SeaBASS), a public repository of in situ oceanographic and atmospheric data, and SeaDAS, a comprehensive software package for the processing, display, analysis, and quality control of remote sensing data. This training will provide participants with the skills to combine in situ measurements and optical remote sensing data to assess water quality for their area of interest.

Part 1: In Situ Data Acquisition using SeaBASS and Image Processing using SeaDAS - November 30

Trainers: Amita Mehta & Sean McCartney

- Review of MODIS and VIIRS data
- Review of SeaDAS imagery processing
- Overview of SeaBASS and in situ data acquisition
- Lab time for participants to download SeaBASS in situ data for a selected estuary or coastal region
- Q&A

Part 2: Practical - Monitoring MODIS- and VIIRS-Based Water Quality in Selected Estuaries - December 7

Trainers: Amita Mehta & Sean McCartney

- Demonstration of deriving water quality parameters from MODIS and VIIRS using SeaBASS and SeaDAS for the Chesapeake Bay
- Lab time for participants to derive water quality parameters for a selected estuary or coastal region
- Q&A



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