Advanced Webinar: Integrating Remote Sensing into a Water Quality Monitoring Program

Wednesdays, June 5-19, 2019
10:00-12:00 EDT (UTC-4)

Building on 2018’s advanced webinar series, Processing Satellite Imagery for Monitoring Water Quality, this training will focus on integrating NASA Earth observations into water quality monitoring decision making processes. This will include a brief overview of data products used for water quality monitoring, an overview of aquatic remote sensing-specific criteria, methods and best practices, obtaining NASA Earth observation data for water quality monitoring, and practical skill building in image processing for water quality monitoring of coastal and larger inland water bodies. Weekly, two hour webinars will include lectures, hands-on demonstrations, written instructions to conduct exercises, and a question and answer session. After the third session, participants are invited to participate in an optional, additional two-hour period of unstructured “laboratory” time. Participants will have the opportunity to work on exercises and submit questions to the instructors.

Part One, June 5

This session will cover an overview of remote sensing data products for monitoring coastal water quality. The case study exercise will focus on water quality monitoring in coastal systems using remote sensing data products and SeaDAS.

Part Two, June 12

This session will cover satellite sensors for water quality monitoring of inland water bodies and applications of water quality monitoring. The case study exercise will cover remote sensing data products and SeaDAS focusing on cyanobacterial harmful algal blooms.

Part Three, June 19

This session will cover building a water quality monitoring work flow using remote sensing data products and in situ data observations and the “nuts and bolts” of image processing in SeaDAS. The case study exercise will look at designing a water quality monitoring program.