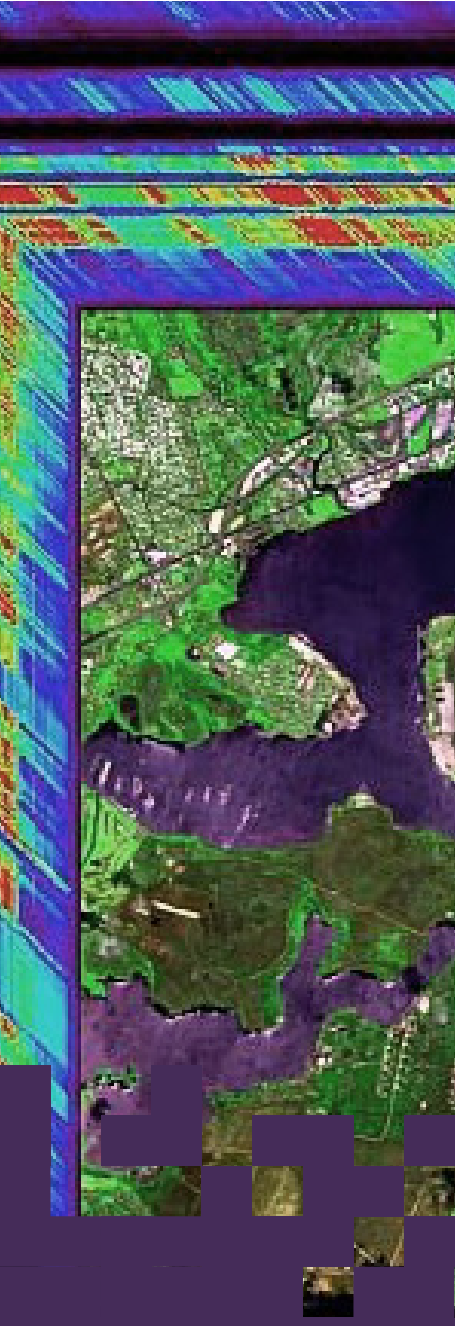

National Aeronautics and
Space Administration

# Introductory Webinar: Hyperspectral Data for Land and Coastal Systems

January 19th, 26th, and February 2nd, 2021

11:00-12:30 EST (Session A) or 16:00-17:30 EST (Session B)

Hyperspectral data presents a unique opportunity to characterize specific vegetation types and biogeochemical processes across the land and oceans. Applications of hyperspectral data include plant species identification, invasive species management, assessment of phytoplankton functional types, mapping of wetlands and shallow benthic communities, and detection of harmful algal blooms (HABs). The ability of hyperspectral data to characterize chemical, physiological, and morphological traits allows decision-makers to better understand critical components of ecosystem dynamics such as invasive species encroachment, forest decline and pest infestation, and ocean dynamics. This training is also an opportunity to build capacity in a large user community prior to the launch of the highly anticipated global hyperspectral SBG mission.

**Part 1: Overview of Hyperspectral Data**

- Introduction to hyperspectral data
- Satellite- and airborne-based hyperspectral imagers
- Processing and assessing hyperspectral data
- Q&A session

**Part 2: Hyperspectral Data for Land Management**

- Applications of hyperspectral data for invasive species management, agricultural management, wildfire impacts, and forest decline and pest infestation
- Case study examples
- Q&A session

**Part 3: Hyperspectral Data for Coastal and Ocean Systems**

- Use of hyperspectral imaging for wetland vegetation communities
- Use of hyperspectral imaging for coastal shallow-water ecosystems
- Use of hyperspectral imaging for marine debris
- Case study examples
- Q&A session

ARSET empowers the global community through remote sensing training.

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