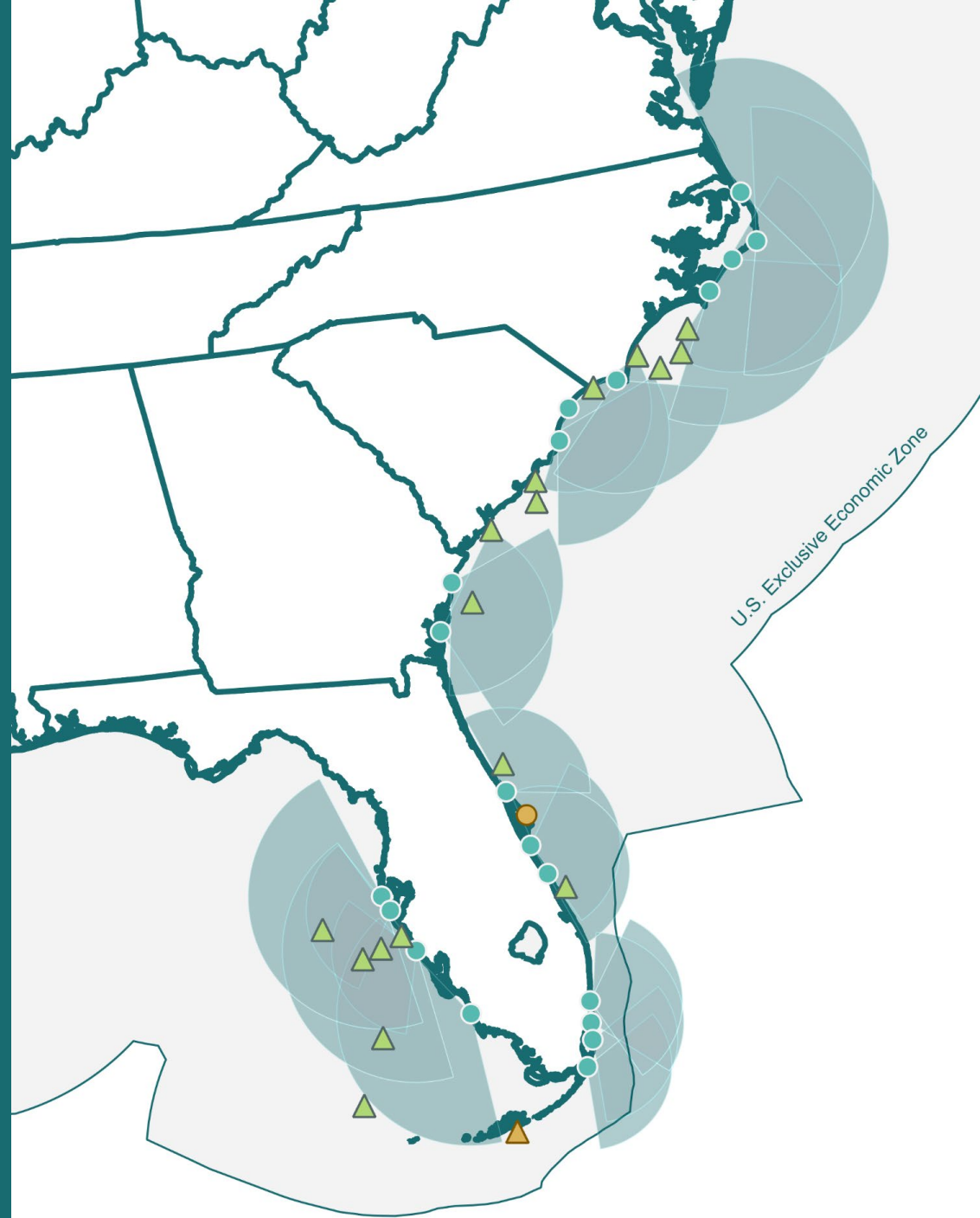


Data Management

Axiom Data Science
Lauren Showalter



Overview

- Curate multiple data streams from the sensors and models supported by SECOORA as well as from independent data providers
- Document data using IOOS-approved metadata standards
- Provide data to users via standard services and data products
- Archive data in long-term archives



Accomplishments

- **Enhanced data center server access security**
 - Built, installed, and provisioned a new persistence server cluster
 - Decommissioned old generation compute servers in favor of more performant hardware
 - Developed deployment topology for compute nodes with high performance NVMe storage
 - Improved web server deployment configuration update procedure for increased stability
 - Developed enhanced storage appliance monitoring dashboards
- V1 to V2 sensor migration is functionally complete. QARTOD is now easily applicable to any real-time sensor.
- Completed initial implementation of mobile interface for viewing regional real-time sensor data
- **Leverage modern portal image format to optimize home page load times**
 - Update metadata and sensor database hardware and software, reducing initial metadata load time from ~7 seconds to ~1.8 seconds
- Compiled and sent out data portal asset spreadsheet to survey RA priority layers
- Participation and presentation at IOOS RA shared users group on Dec 8
- Support and data ingestion for the water level team
- Glider support updates
- Updates to stations- can now have defined Datum conversions
- WebCOOS updates, support, and management
- Support and tool development for the Estuarine Soundscape Observatory Network and FACT programs, and the glider team
- Development of SECOORA AI gateway site
- Support for SE SEAMAP program
- Ingestion and visualization of other relevant data



Is AI Right for My Project?

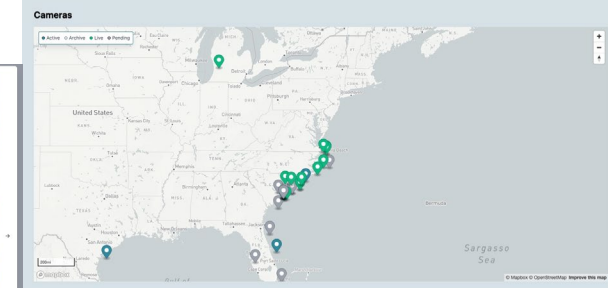
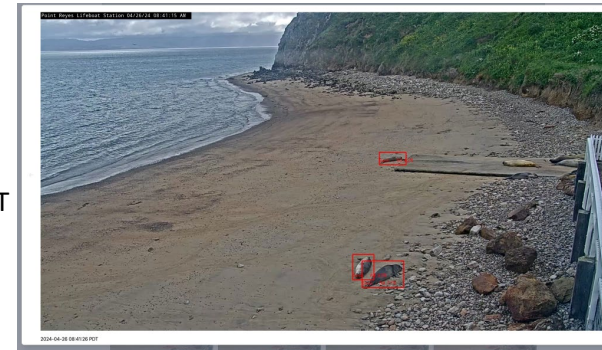
Navigate through the decision tree to identify the most suitable AI/ML approaches for your ocean science endeavors. Click on the nodes to expand more options.

Web Camera Observation Network

Web cameras are a low-cost coastal observing system transforming how environmental monitoring is conducted. Web camera data has demonstrated value to address significant gaps in the nation's ability to monitor and accurately forecast various weather, ocean, ecological and public health hazards. This project, Webcam Coastal Observation System (WebCOOS), promises to expand webcams to:



[JOIN OUR NETWORK](#) [SEE HOW WEBCAM DATA ARE BEING USED](#)



News

- Strength in Numbers: The Power of Joining Forces**
Over six partners have joined forces to install a web camera, water level sensor, and an air quality monitor at the South Carolina Maritime Museum located on the banks of the Santee River in Georgetown, SC.
[Read More](#)
- Camera Footage of Marine Mammal Releases Available to View on WebCOOS**
The public can now watch marine mammal releases by the Marine Mammal Center in Point Reyes National Seashore thanks to a new partnership with WebCOOS.
[Read More](#)
- Eyes on Ice: Data Resources**
The WebCOOS website was shared as Hurricane Ian was approaching. This new observing system allows users to stream live camera feeds in real-time in some locations, and see snapshot images in other locations.
[Read More](#)



Looking Ahead

- Planning for Next Generation data portal
- Scaling to national WebCOOS capabilities
- Visualization of SE-SEAMAP data
- Ingestion and visualization of Surface Elevation Table (SET) data
- Continued support for all SECOORA funded efforts
- Improvements to exiting storage and search capabilities

