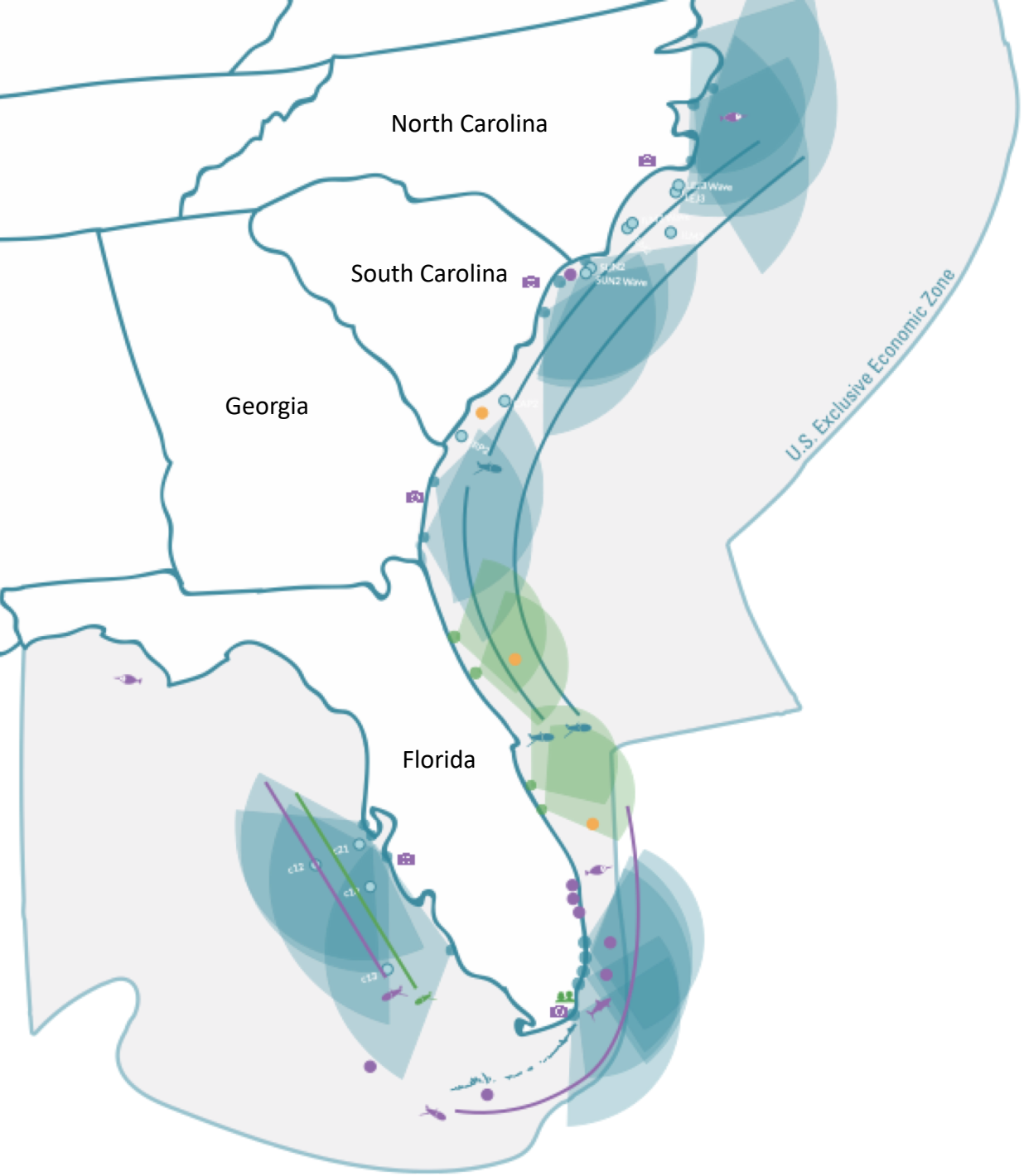

SECOORA
Southeast Coastal Ocean Observing Regional Association

Monitoring and forecasting pelagic Sargassum in the South Atlantic Bight

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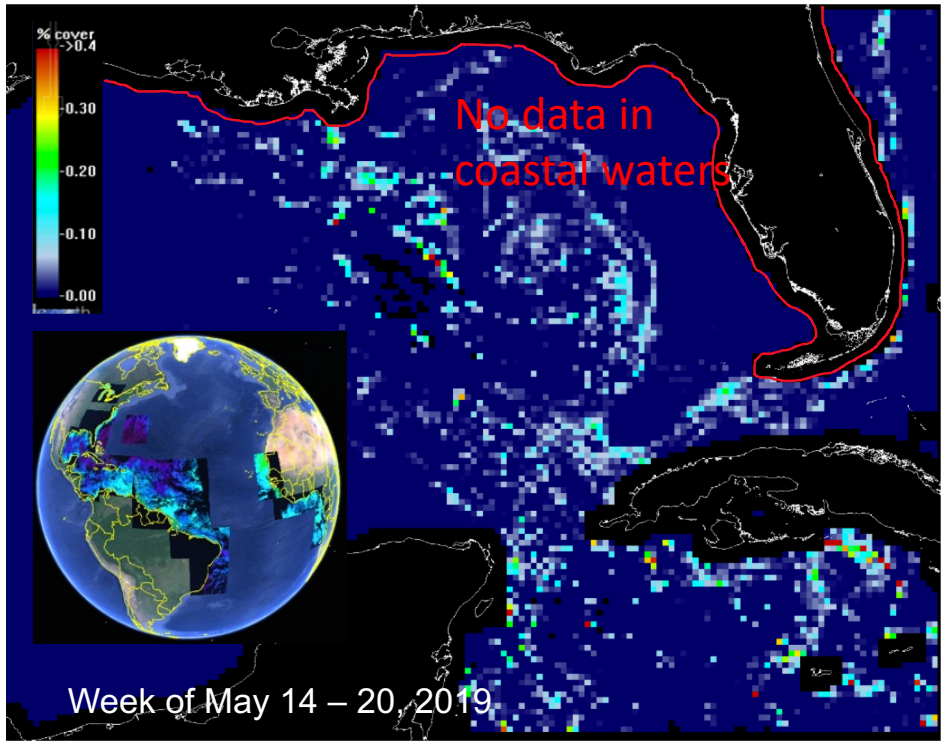
CODAR OCEAN SENSORS
In-Situ
IOOS Integrated Ocean Observing System

Overview of the Project

Overarching goal: to develop and operate a high-resolution, Web-based system to monitor and forecast pelagic Sargassum in several coastal zones of the Florida Keys and South Atlantic Bight.

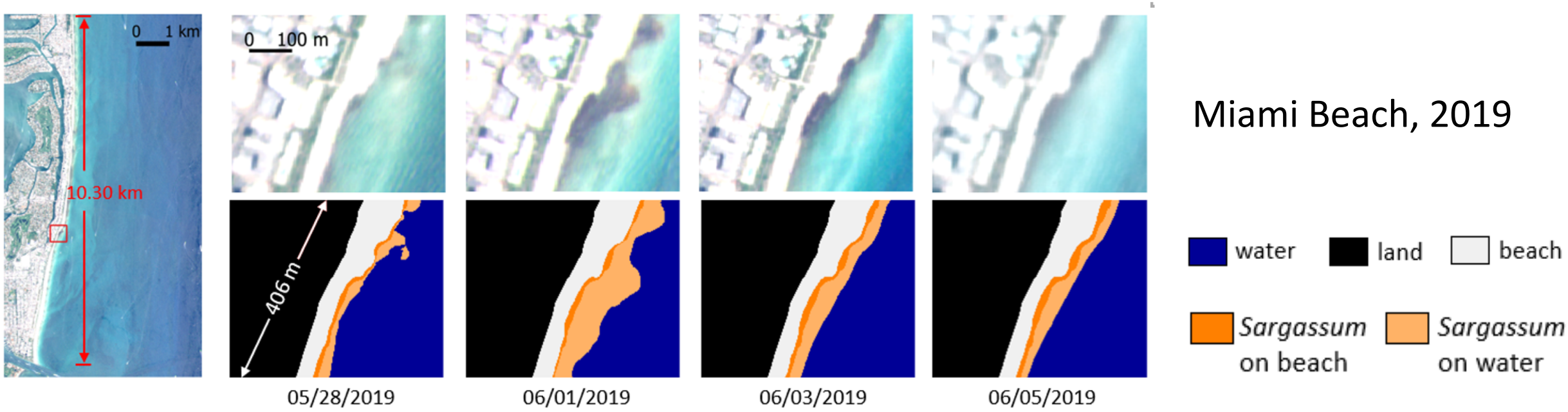
Year 1 objectives:

1. to develop and validate algorithms suitable for high-resolution satellite data to map and quantify *Sargassum* distribution and abundance
2. to generate prototype high-resolution imagery products to map and quantify *Sargassum* distribution and abundance



Accomplishments

- Developed algorithm to detect *Sargassum* on beaches and in nearshore waters from high-resolution (3-4 m) satellite imagery (Zhang et al., 2022)
- This will make it possible to monitor the beach environment



Challenges and Looking Ahead

Challenges:

- Applicability for other beaches and nearshore environment
- Near real-time satellite data stream from the data provider
- Implementation for automatic production on the Web

Plans for next year:

- Further test and validate algorithm for general applicability
- Explore ways for near real-time satellite data downloading

Sargassum abundance
May 24-30, 2022