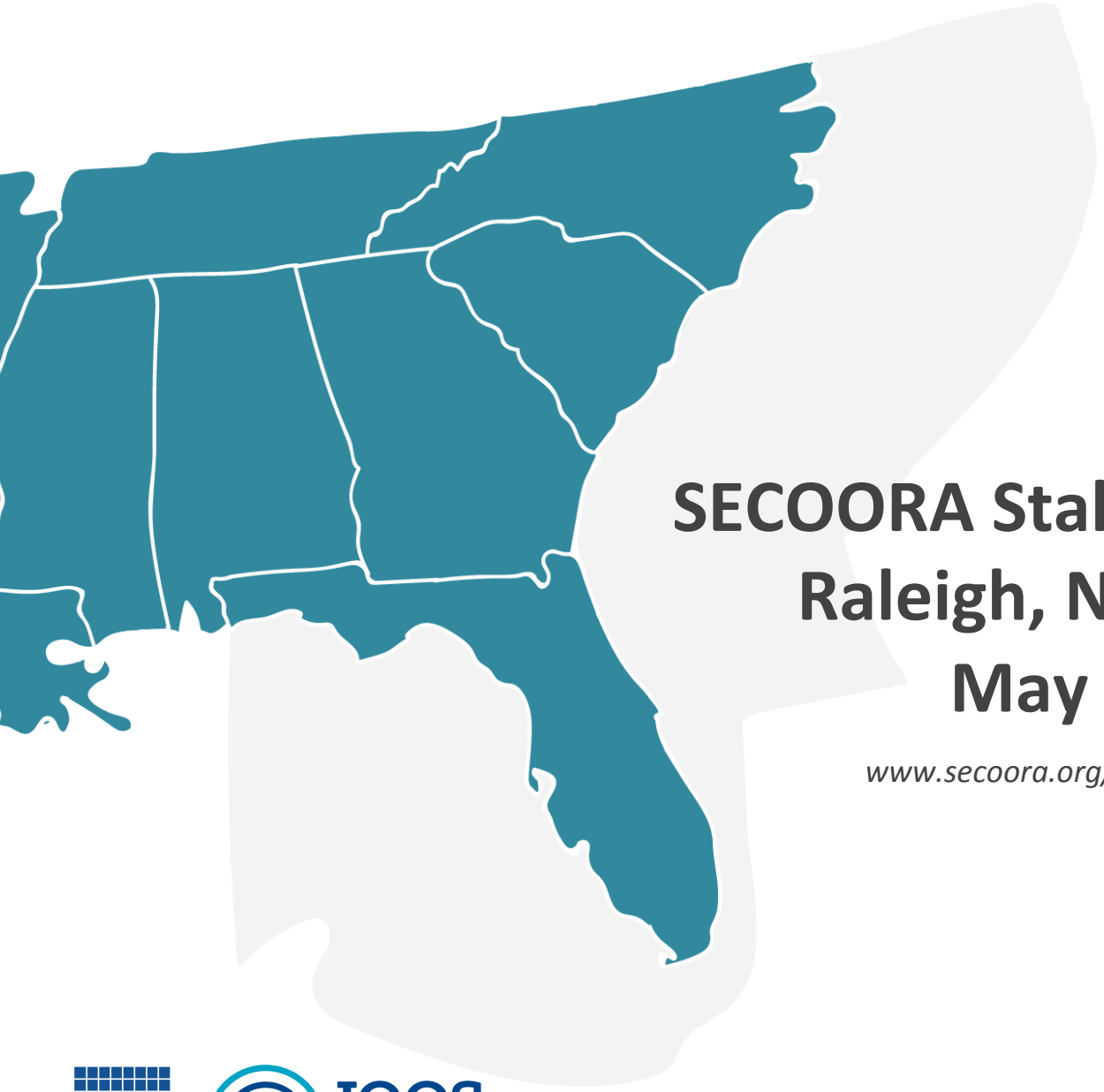

SECOORA
Southeast Coastal Ocean Observing Regional Association

SECOORA Stakeholder Meeting
Raleigh, North Carolina
May 19, 2016

www.secoora.org/Annual_Meeting_2016

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IOOS Integrated Ocean Observing System

#SECOORA2016AnnualMeeting

Agenda

9:00am – 9:05am	Welcome to NCSU (Dr. Ray Fornes, Associate Dean for Research, NCSU College of Sciences)
9:05am – 9:10am	Welcome (Conrad Lautenbacher, SECOORA Chair)
9:10am – 9:50am	State of US IOOS (Zdenka Willis, US IOOS Director)
9:50am – 10:05am	State of SECOORA (Debra Hernandez, SECOORA Executive Director)
10:05am – 10:20am	Gold Sponsor: YSI Xylem (Scott Kindelberger, Field Engineer, Southeast, YSI Xylem)
10:20am – 11:00am	Break with Sponsors (Room 5)
11:00am – 11:20am	Big Data Keynote (Edward Kearns, Technical Lead, NOAA's Big Data Partnership)
11:20am – 12:20pm	Big Data Panel (see agenda)
12:20pm – 1:20pm	Lunch (Room 7)
1:20pm – 2:40pm	Understanding Ecological Interactions in the Southeastern U.S. Panel (see agenda)
2:40pm – 3:00pm	Break with Sponsors
3:00pm – 3:30pm	SECOORA Data Portal Demonstration (portal.secoora.org)
3:30pm – 4:15pm	Program Managers Open Mic Session (see agenda)
4:15pm – 4:30pm	Wrap Up and Adjourn
4:30pm – 4:50pm	Meet at McKimmon Center Lobby for Bus Travel Buses
4:50pm – 5:15pm	Travel to Hotel

Thank you!

Sponsor Recognition

Gold Level Sponsors

YSI

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Silver Level Sponsors

OTT Hydromet

CODAR OCEAN SENSORS

TELEDYNE RD INSTRUMENTS
A Teledyne Technologies Company

Planning Committee Members

Ruoying He (NCSU)

Jennifer Warrillow (NCSU)

Gale Peek (NOAA)

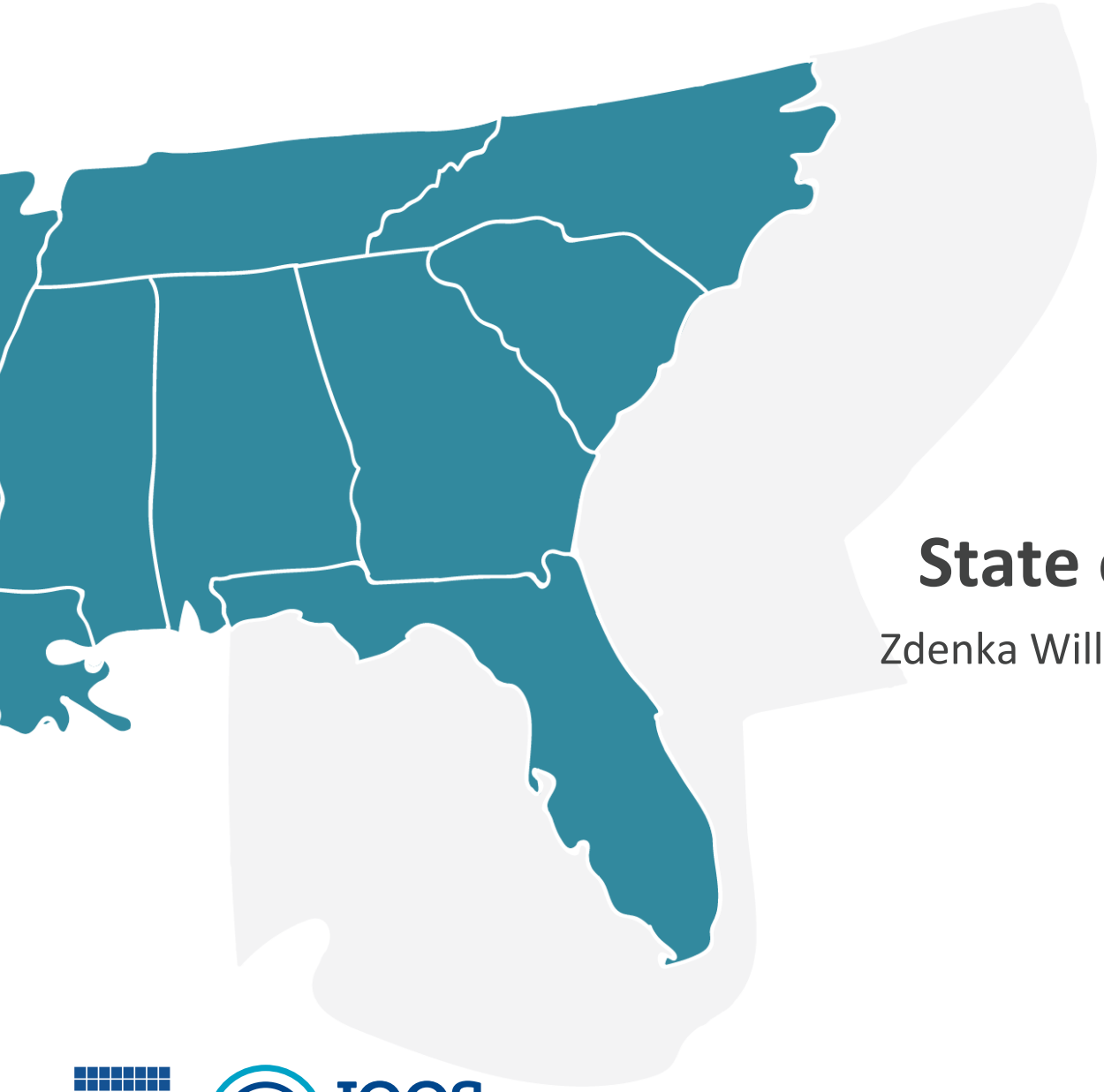
Harvey Seim (UNC CH)

Peter Hamilton (Leidos)

Lynn Leonard (UNCW)

Abbey, Megan, Vembu & Debra (SECOORA)

Thank you!



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State of US IOOS

Zdenka Willis, US IOOS Director

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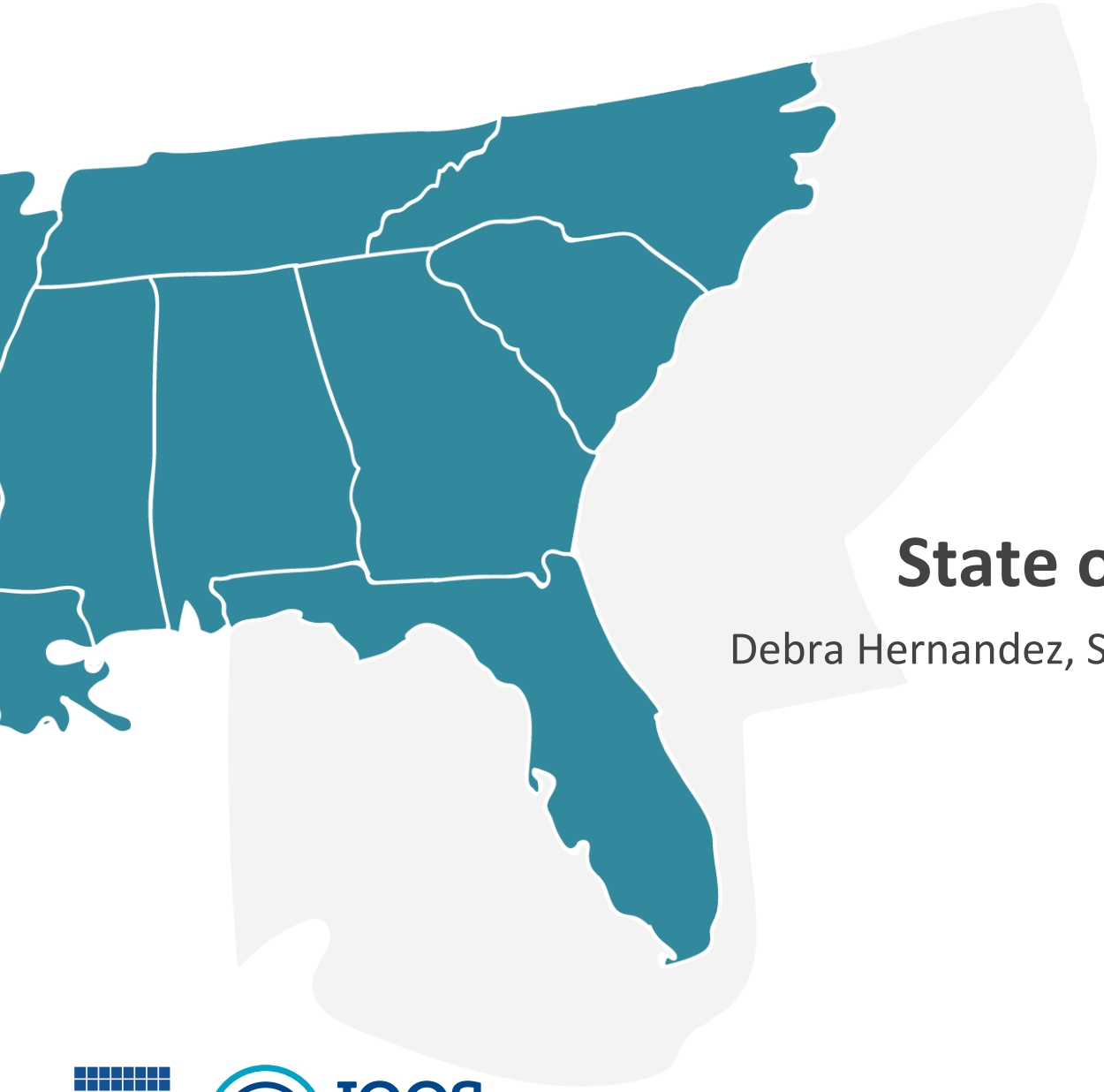

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State of SECOORA

Debra Hernandez, SECOORA Executive Director

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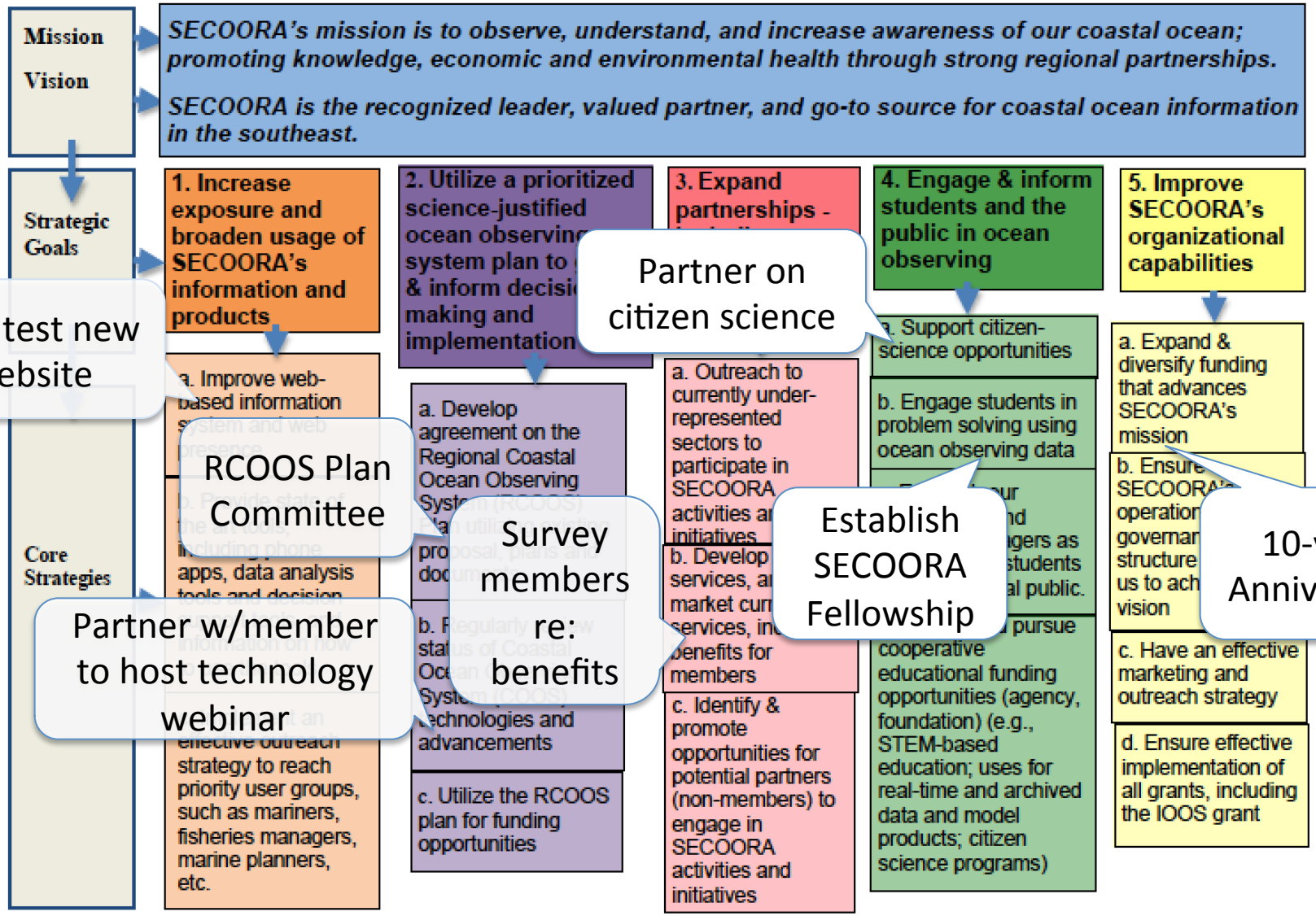
Member Focus & Opportunities



2015 ANNUAL REPORT

Leveraging local resources. Meeting regional needs. Supporting national priorities.

43 SECOORA MEMBERS

JOIN TODAY!

225,929 WEBSITE PAGEVIEWS

57% FROM 2014

75.9 MILLION OBSERVATIONS

SERVED ANNUALLY ON WWW.SECOORA.ORG/MAPS/

39% ARE NON-FEDERAL OBSERVATIONS

6.8 MILLION WEBPAGE VIEWS OF SECOORA DATA AND INFORMATION ON WWW.NBDC.NOAA.GOV

5 NEW MEMBERS JOINED IN 2015

5 MODELING PROJECTS

15 HF RADARS

20 IN-SITU STATIONS

SECOORA

Southeast Coastal Ocean Observing Regional Association

Clam Bayou Outreach and Education

85+ Undergraduate Students

5 Lab visits 2014-2016

Partners

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COMPS Coastal Ocean Monitoring and Prediction System

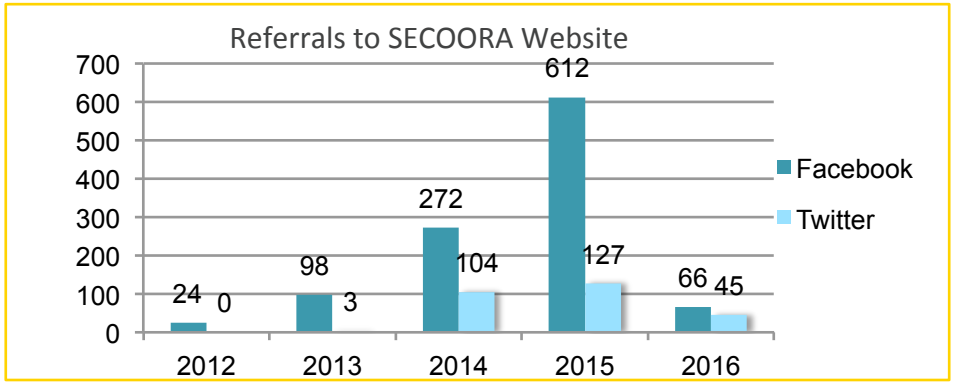
USF University of South Florida College of Marine Science

57% Increase in website views

Working with Axiom to create a new website for 2016

287 Facebook Likes

310 Twitter followers



NOAA Educational Partnership Program

EDUCATIONAL PARTNERSHIP PROGRAM with MINORITY SERVING INSTITUTIONS

4 States- NC, SC, GA, FL

MISSION

Advance estuarine, coastal and ocean acidification research, collaboration and communication in the southeast region

SOCAN

Southeast Ocean and Coastal Acidification Network

25 Steering Committee Members

14 Calls | **1** In Person Meeting

1 Editorial submitted to *Estuaries and Coasts*

LEARN MORE: *www.secoora.org/socan*

$30k Committed by NOAA OAP over 2 years

NOAA OCEAN ACIDIFICATION PROGRAM

20 State of Science Webinars

833 Attended

(missing numbers from 4 webinars)

803 Views on YouTube

(missing numbers from 2 webinars)

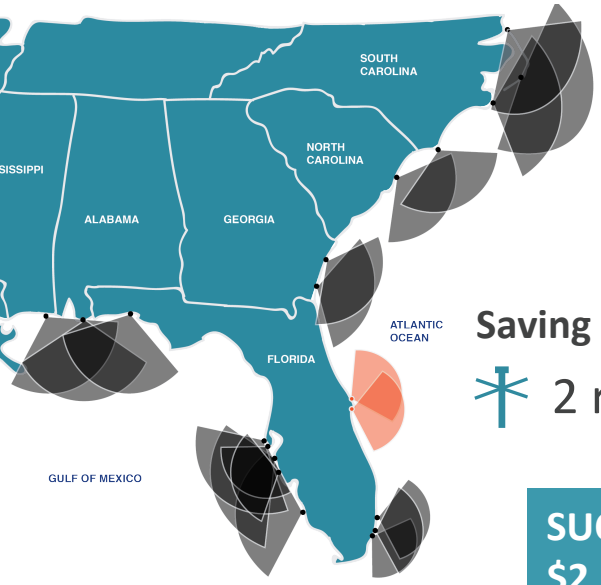
IOOS ASSOCIATION

- ✓ Reauthorization of the Integrated Coastal and Ocean Observation System (ICOOS) Act of 2009
- ✓ Increase Appropriations
- ✓ Elevate IOOS and SECOORA in our congressional delegation

14 House Reps. Visited in 2015/2016

5 Senators Visited in 2015/2016

FY 17 Appropriations Request



$3.1 million to install 12 high frequency radar systems

Saving Lives off Florida's Coast

2 radars needed

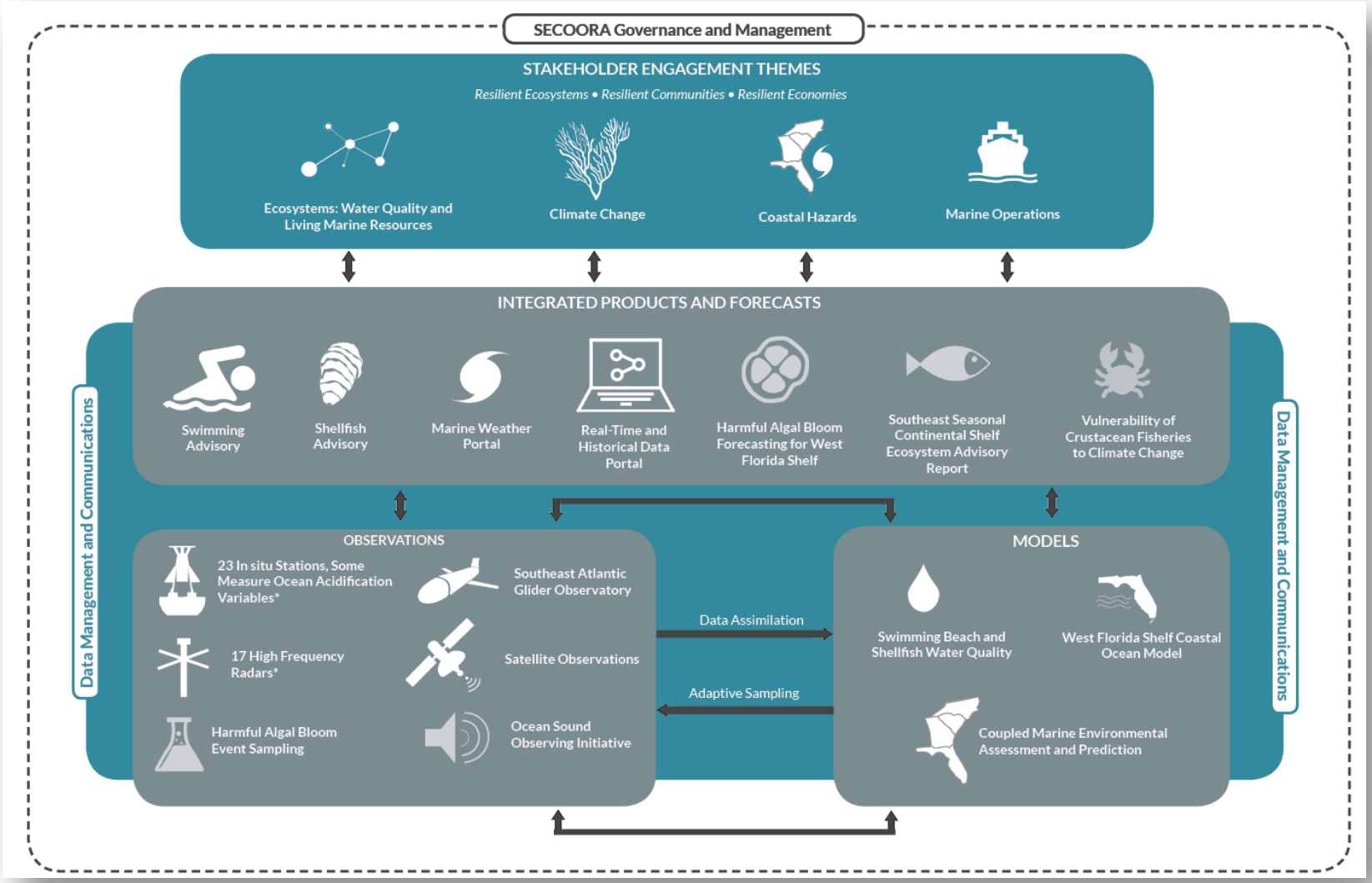
Reauthorization

26 House Co-sponsors
23% from SECOORA region

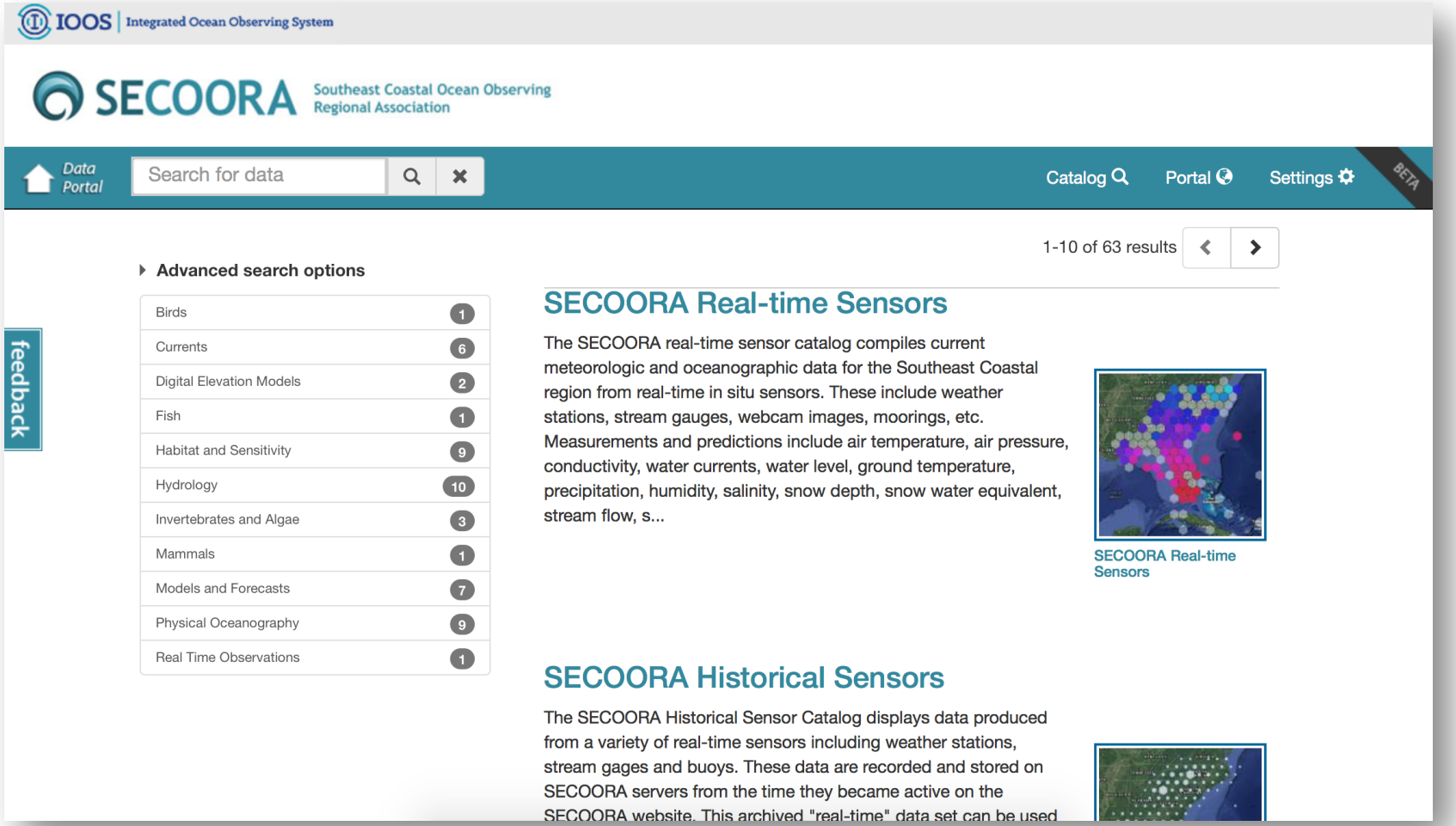
5 Senate Co-sponsors
0% from SECOORA region

SUCCESS! IOOS regional line is **$31.5 million**
$2 million ABOVE the President's request (in FY 16)

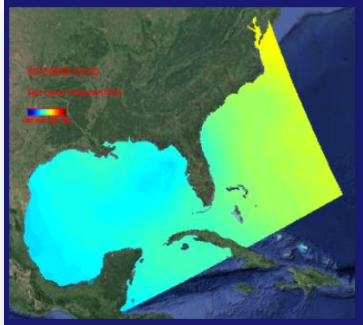
SECOORA - IOOS Cooperative Agreement (2016 – 2021)



SECOORA Data Management



Coupled Ocean-Atmosphere-Ecosystem Model (NCSU)

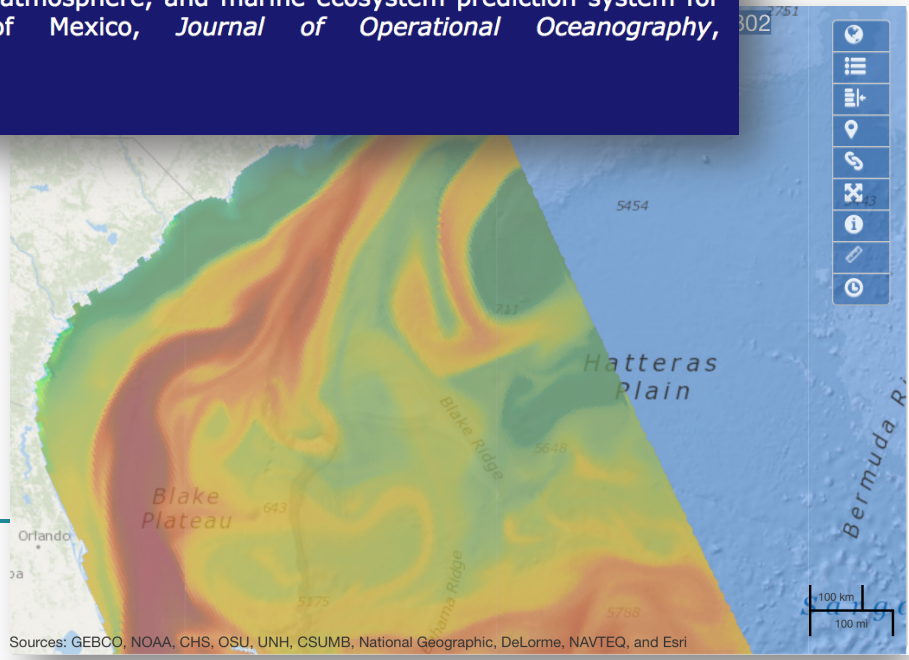


The South Atlantic Bight - Gulf of Mexico (SABGOM) model is a three-dimensional marine environment nowcast and forecast model developed by the Ocean Observing and Modeling Group. This system provides predictions of ocean circulation, wave, and atmosphere conditions over the South Atlantic Bight and Gulf of Mexico on a daily basis. The model domain covers the U.S. east coast from New Jersey southward, including the South Atlantic Bight, Gulf of Mexico, northwest corner of the Caribbean Sea, and western edge of the Sargasso Sea.
Maps of model-generated regional dynamics are organized into four sections:

- **Marine Weather**, with variables of wind speed at 10 m above sea surface, air temperature at 2 m above sea surface, and sea-level air pressure;
- **Ocean Waves**, showing significant wave height and direction;
- **Ocean Circulation**, with variables of ocean temperature, salinity, and currents that can be displayed at specific depths.
- **Marine Ecosystem**, with variables of chlorophyll, phytoplankton, and zooplankton.

Details of the model and its verification can be found in Xue, Z., J. Zambon, Z. Yao, Y. Liu, and R. He (2015) An integrated ocean circulation, wave, atmosphere, and marine ecosystem prediction system for the South Atlantic Bight and Gulf of Mexico, *Journal of Operational Oceanography*, doi:10.1080/1755876X.2015.1014667. [PDF]

go to SABGOM site



SECOORA Southeast Coastal Ocean Observing Regional Association

IOOS Integrated Ocean Observing System

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Ecological Connections: Fisheries

Fisheries and Climate Workshop

Advance our understanding of the impacts of climate variability on fisheries resources and management in the large marine ecosystems of the Gulf of Mexico, South Atlantic and Caribbean Sea

Breakout 1: Research and Monitoring/Observing Needs to Track, Understand and Project Climate-related Changes in Fish Populations.

Topic: Given that fish populations (including all marine resources and habitat) are going to respond to climate variability and change, what is the critical information we need to address climate-related impacts related to productivity, recruitment, migration, behavior and physiology, as well as spatio-temporal changes?

Top Priorities

1. *Research:* Research on climate/environmental related vulnerabilities/thresholds/tolerances/ impacts on all aspects of fish life history (phenology) and habitat.
2. *Monitoring/Observing:* Fishery independent monitoring and links between environmental conditions and the fish with better catch data. This includes expanded tagging ("having the fish tell us") activities.

Breakout 2: Research and Monitoring/Observing Needs to Track, Understand and Project Climate-related Changes in the Fisheries.

Topic: How will the fisheries respond to climate change? This addresses the information needed to track, understand and project climate-related changes in fisheries including fishermen behaviors, responses, socio-economic effects with climate-related effects on fish stock availability, vulnerability, catchability and selectivity.

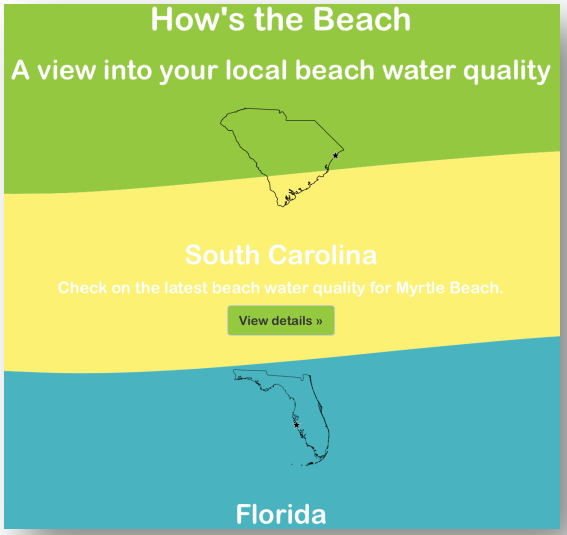
Top Priorities

1. *Research:* Comprehensive social and economic evaluation of why fisherman are operating the way they are including end to end costs, net revenue, and ripple economic effects. This subject contains the question: What are recreational and commercial fishers perceptions of climate change and are they adapting?
2. *Monitoring/ Observing:* High spatial and temporal resolution catch and effort data for both recreational and commercial fishing. This includes the development of relatively inexpensive reporting solutions for smaller vessels, e.g. electronic notebooks and tablets.

For Priorities Visit

http://secoora.org/fisheriesclimateworkshopsummary

How's the Beach (USC & U Maryland)



Sarasota Water Quality Prediction Results

Prediction for: 2016-05-16 00:00:00

Prediction executed: 2016-05-16 07:00:30

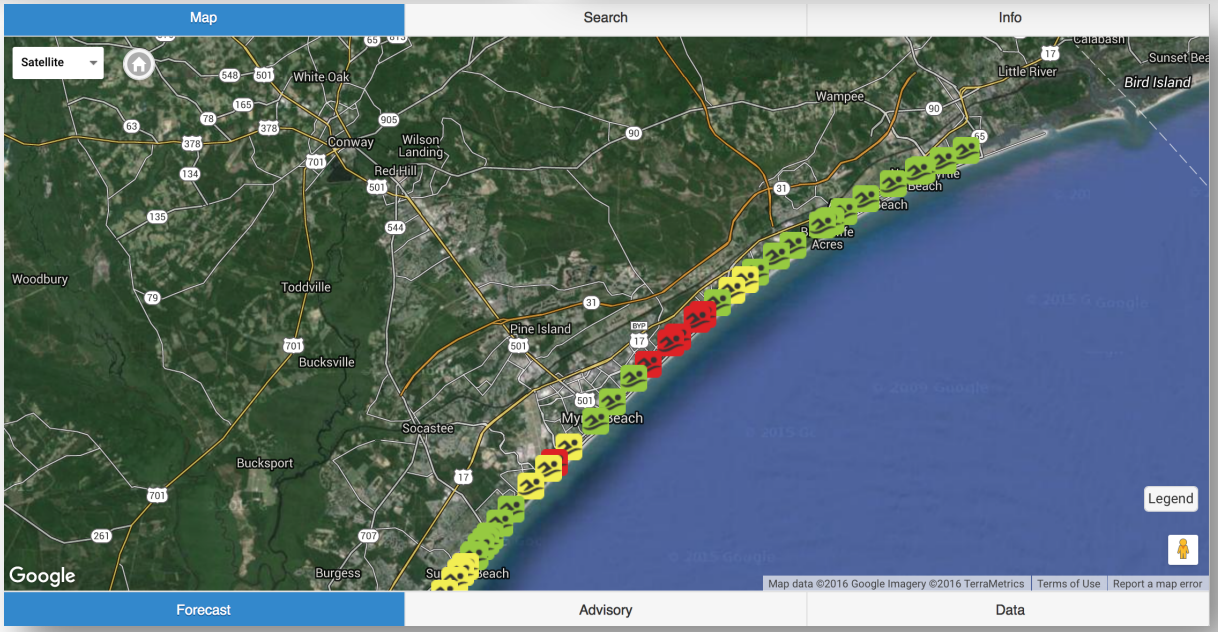
Report File Click here if the report below displays incorrectly.

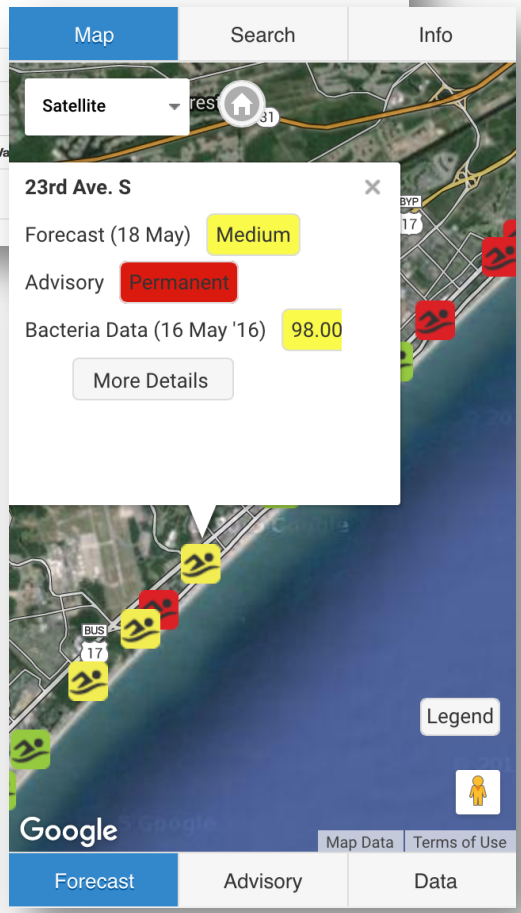
Site: SOUTH LIDO BEACH

Overall Prediction: LOW

Minimum Entero	Maximum Entero	Average Entero	Median Entero
5.57	10.52	8.09	8.60

Model Name	Prediction Level	Prediction Va
Option A	LOW	10.14
Option A transformed	LOW	9.50





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Gold Sponsor- YSI Xylem

Scott Kindelberger, Field Engineer, Southeast,
YSI Xylem

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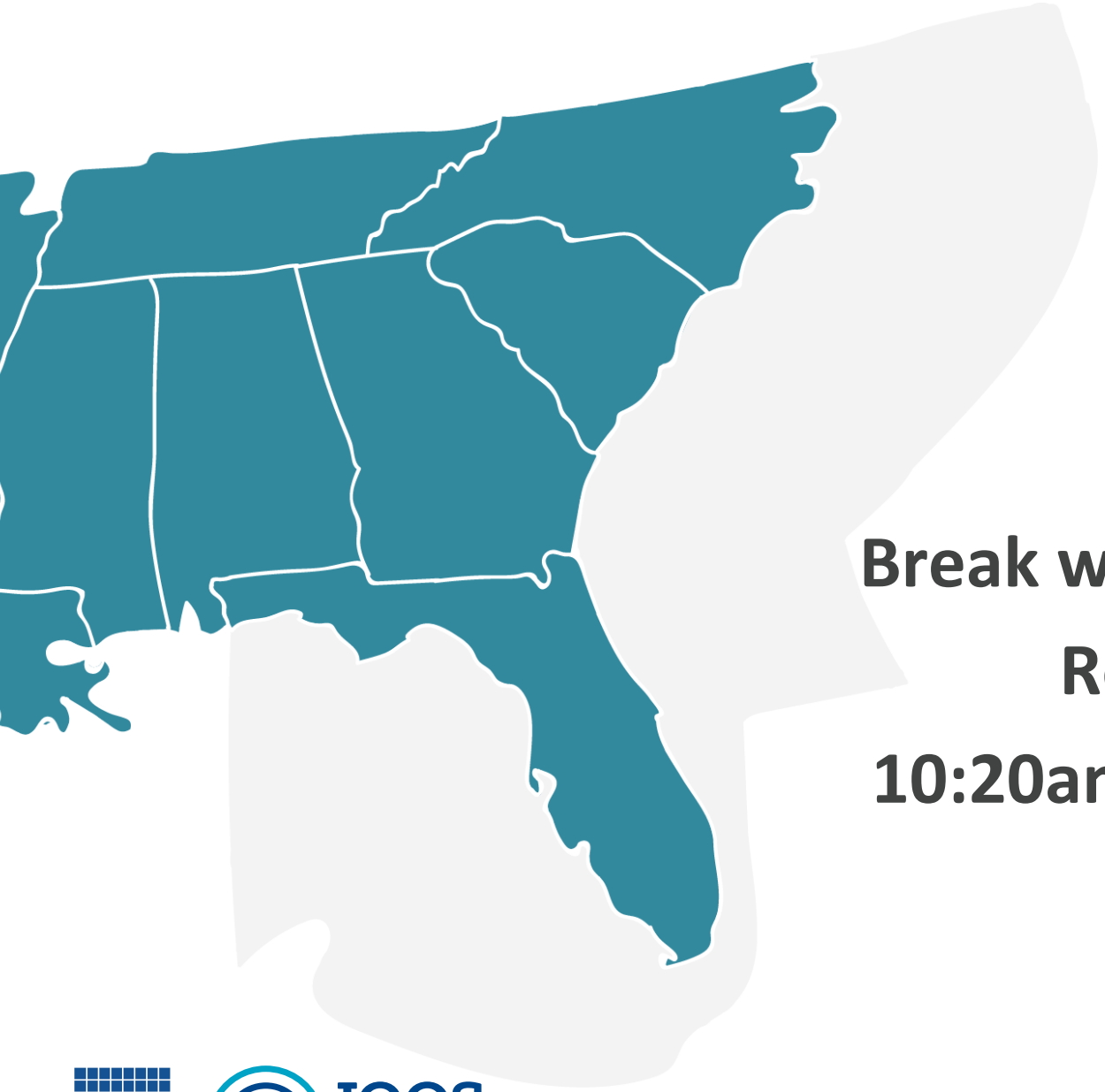

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Break with Sponsors

Room 5

10:20am – 11:00am

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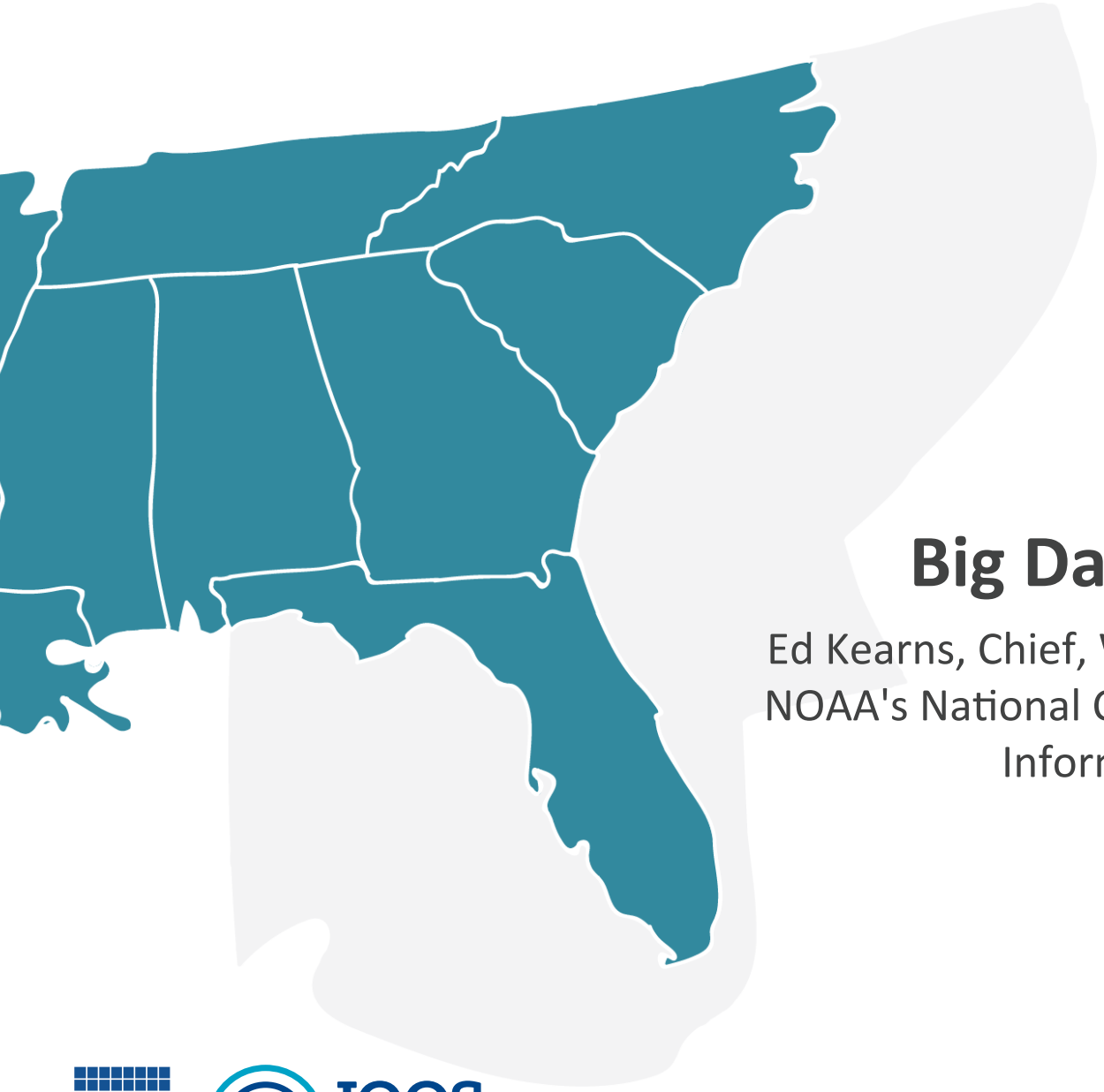

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Big Data Keynote

Ed Kearns, Chief, Weather Science Division, NOAA's National Centers for Environmental Information (NCEI)

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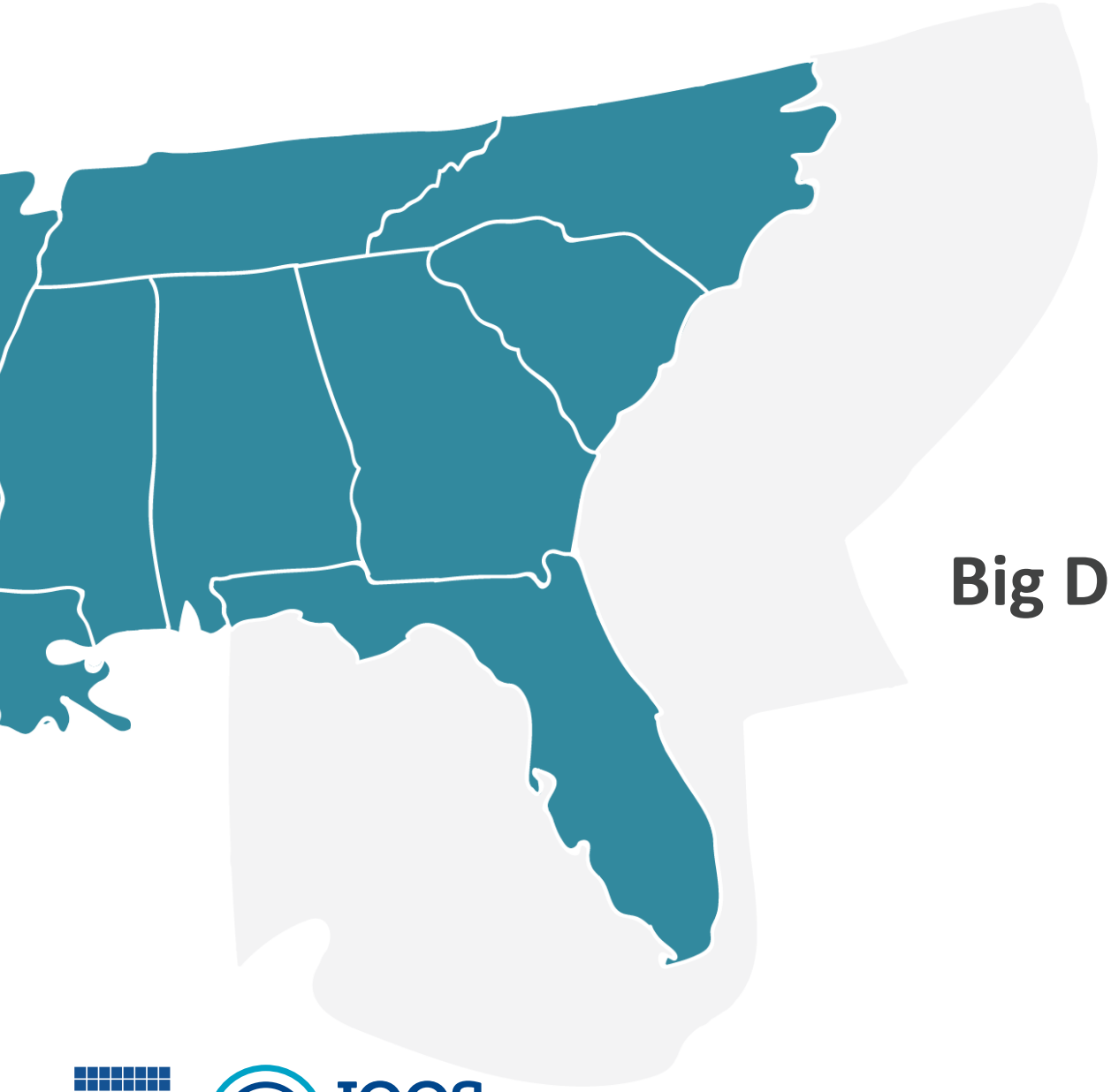

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Big Data Panel

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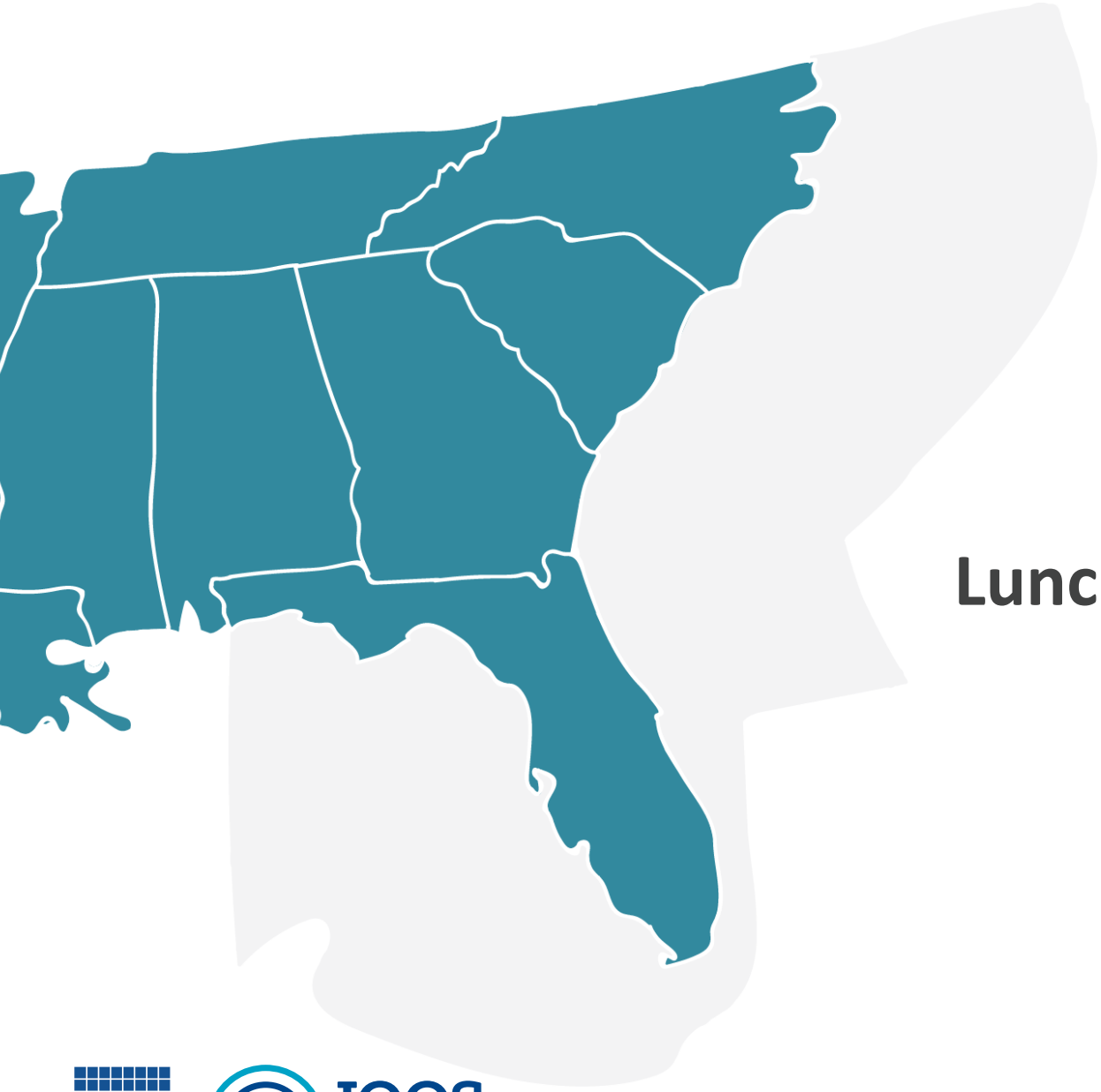

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Lunch Room 7

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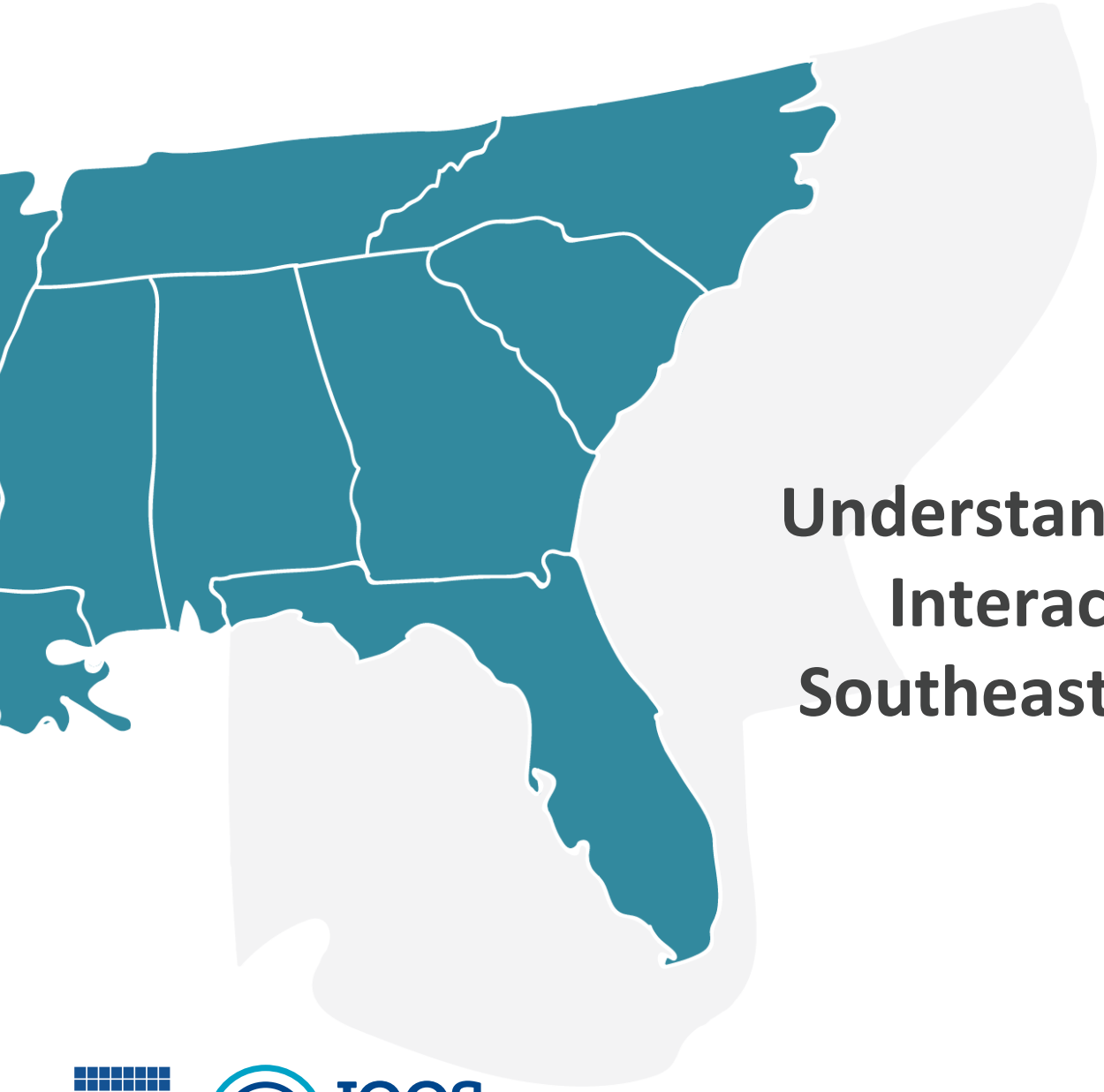

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Understanding Ecological Interactions in the Southeastern U.S. Panel

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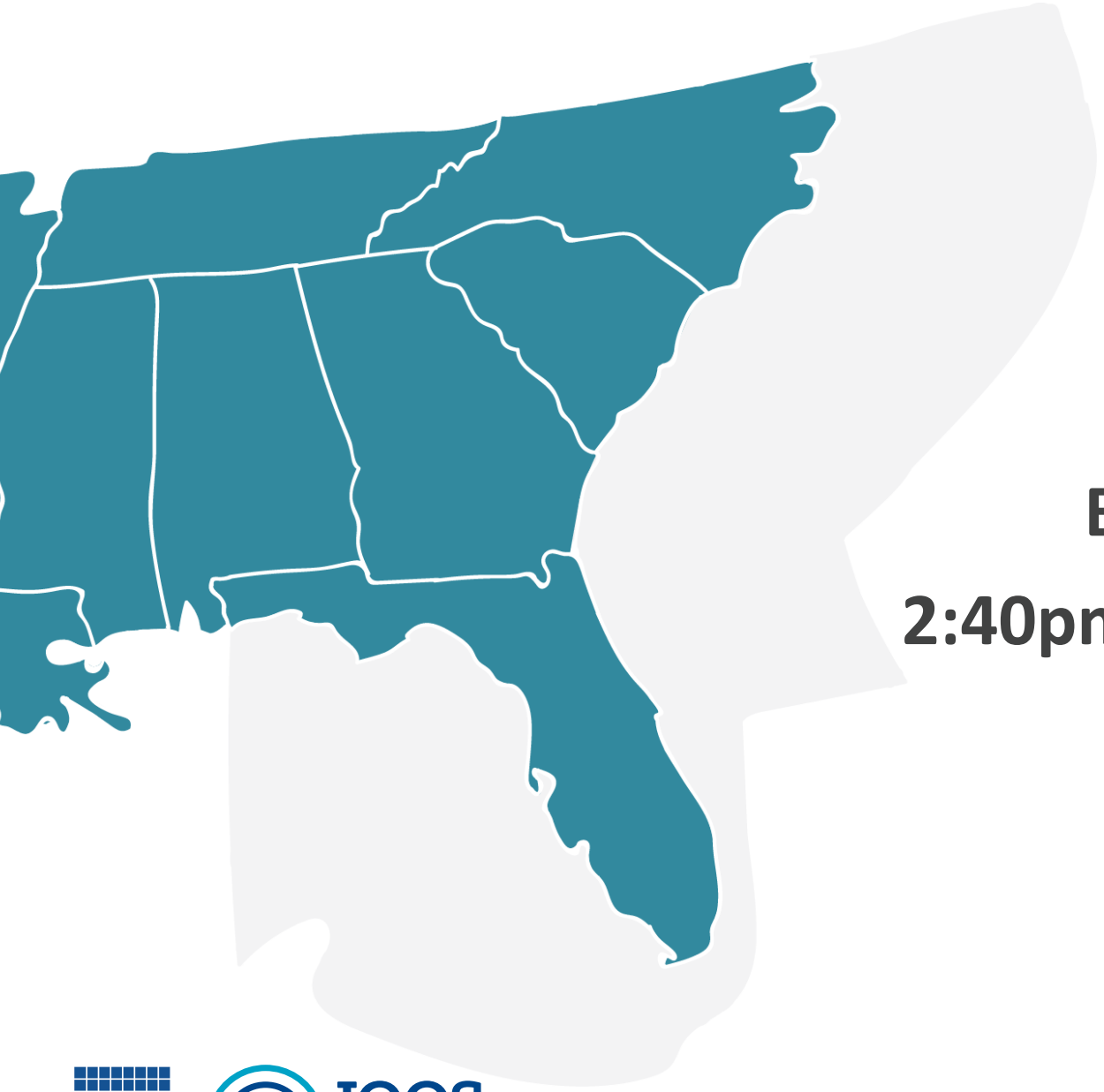

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Break

2:40pm – 3:40pm

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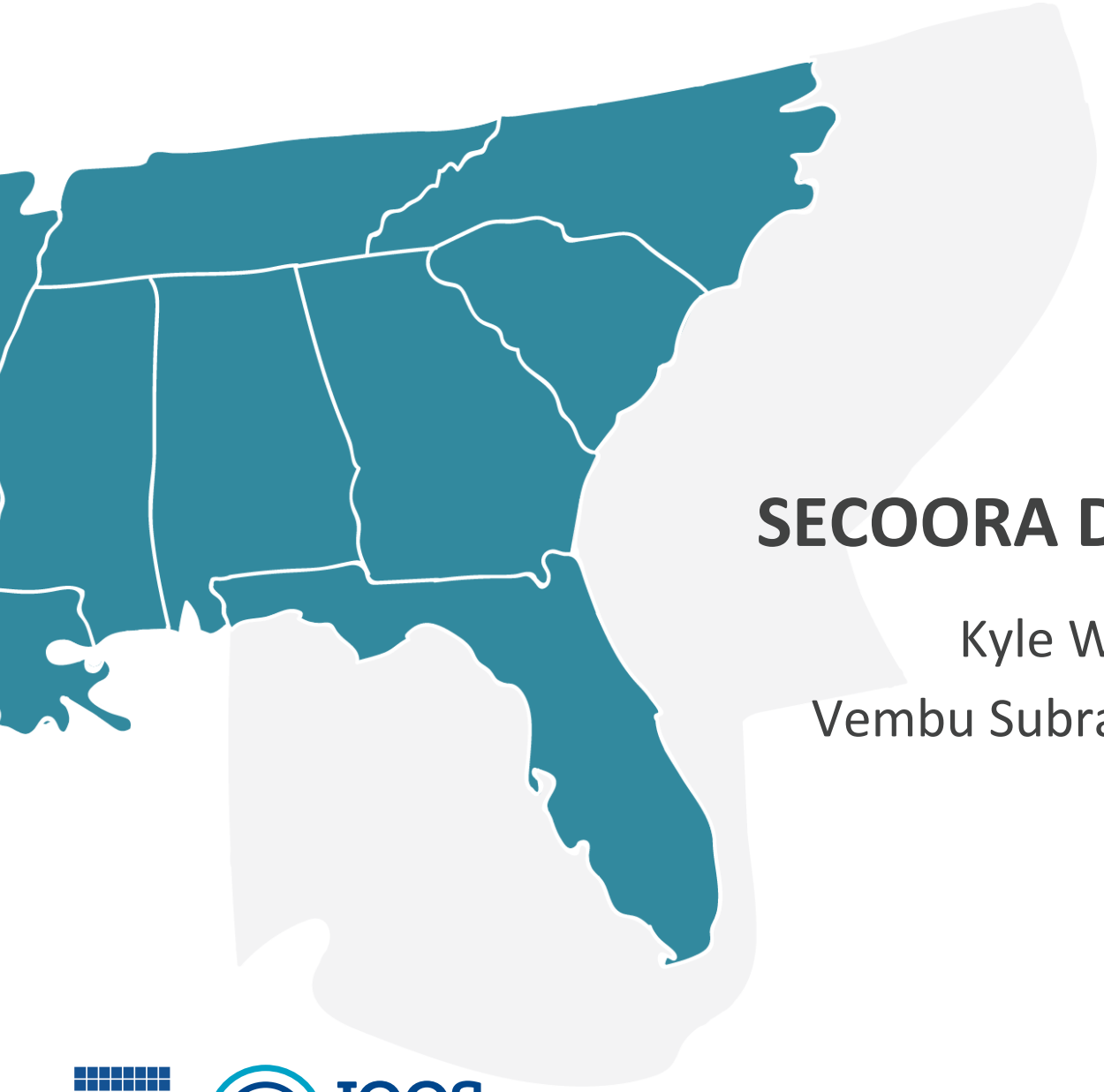

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SECOORA Data Portal Demo

Kyle Wilcox, Axiom
Vembu Subramanian, SECOORA

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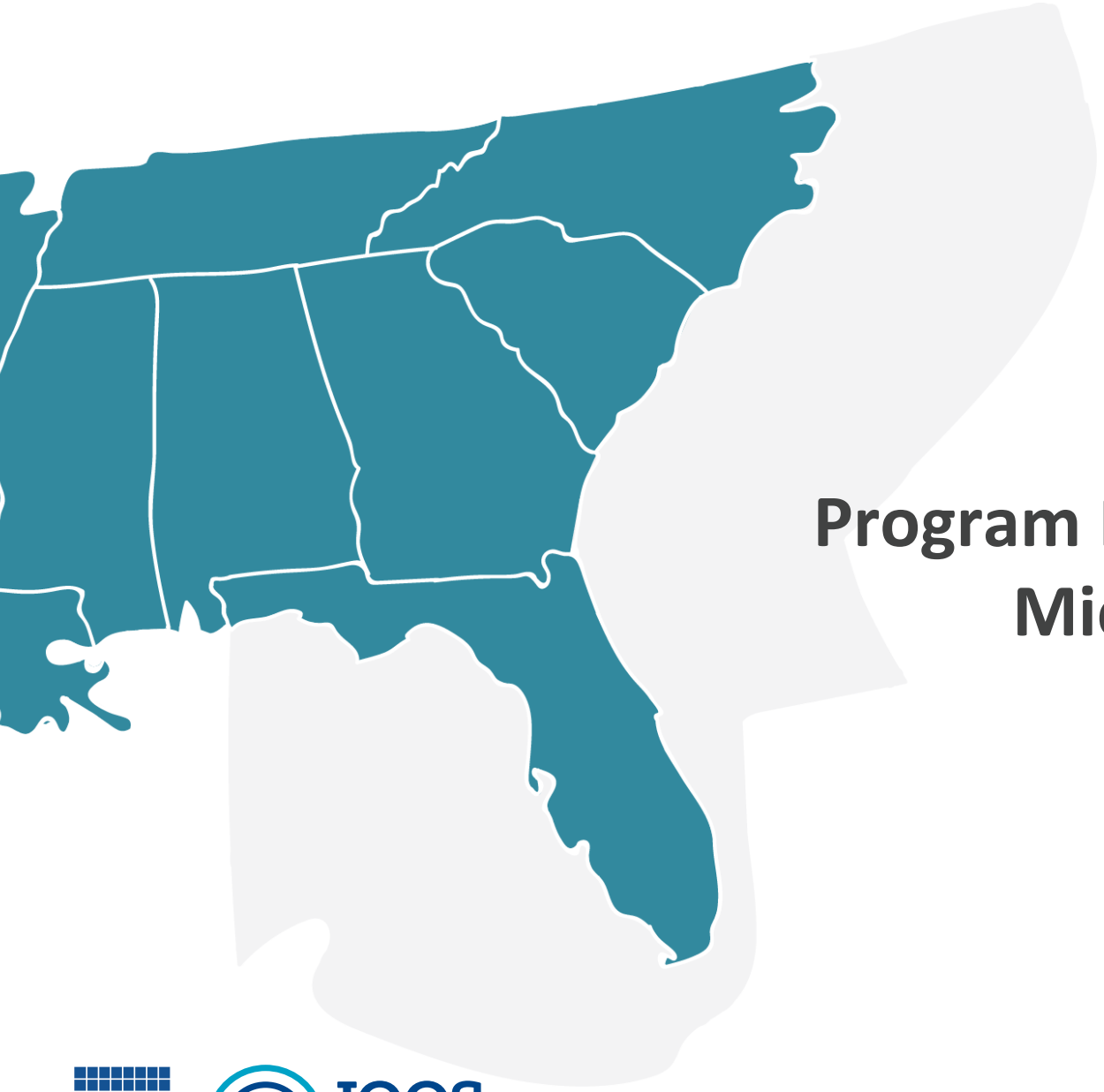

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Program Managers Open Mic Session

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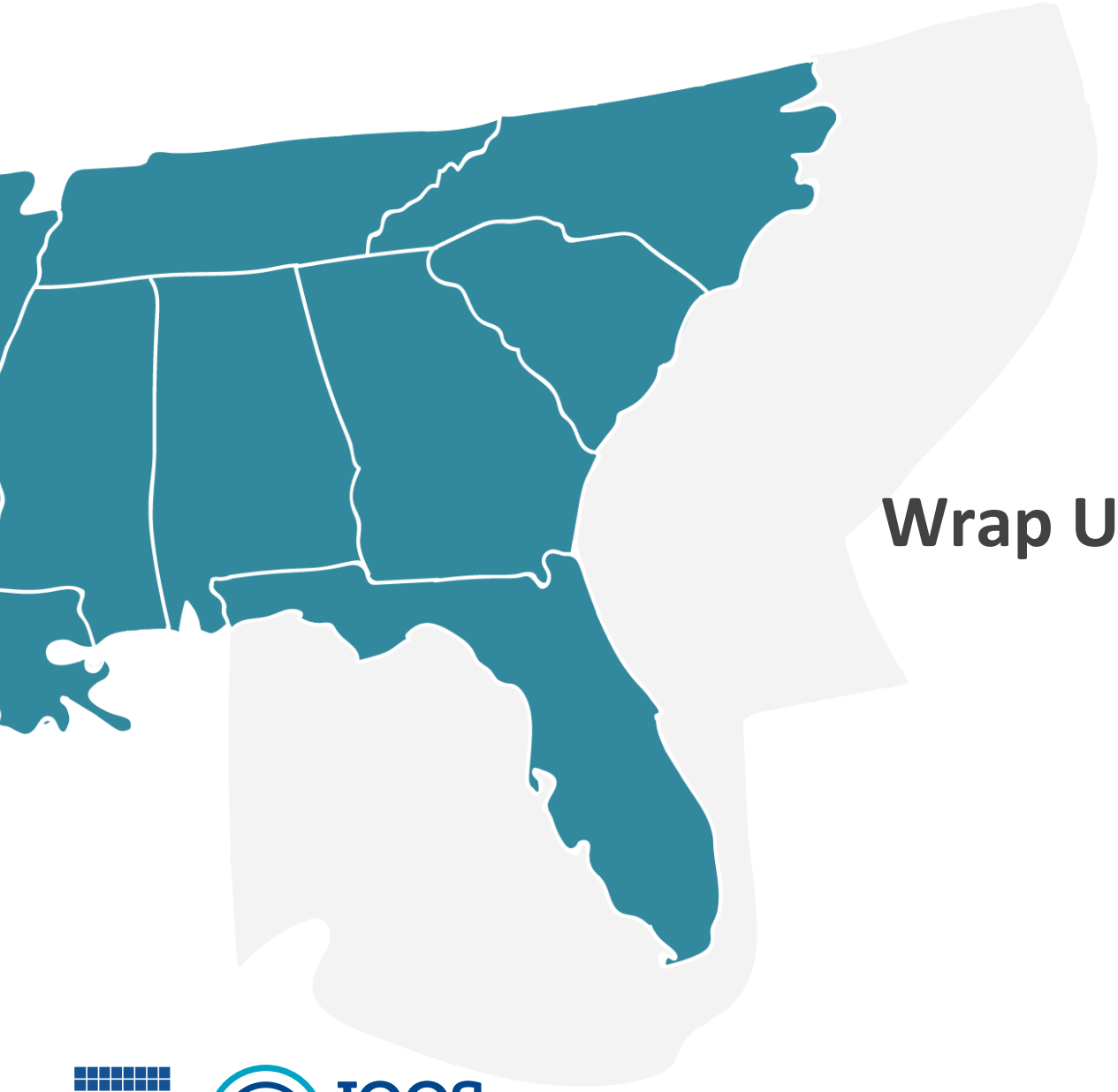

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Wrap Up and Adjourn

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