



**SEACOOS**

Observing Regional Ocean Conditions  
in the Southeastern United States

# **SEACOOS: and Fisheries Oceanography**

**Karen Pehrson Edwards**  
**Department of Marine Sciences**  
**University of North Carolina at Chapel Hill**

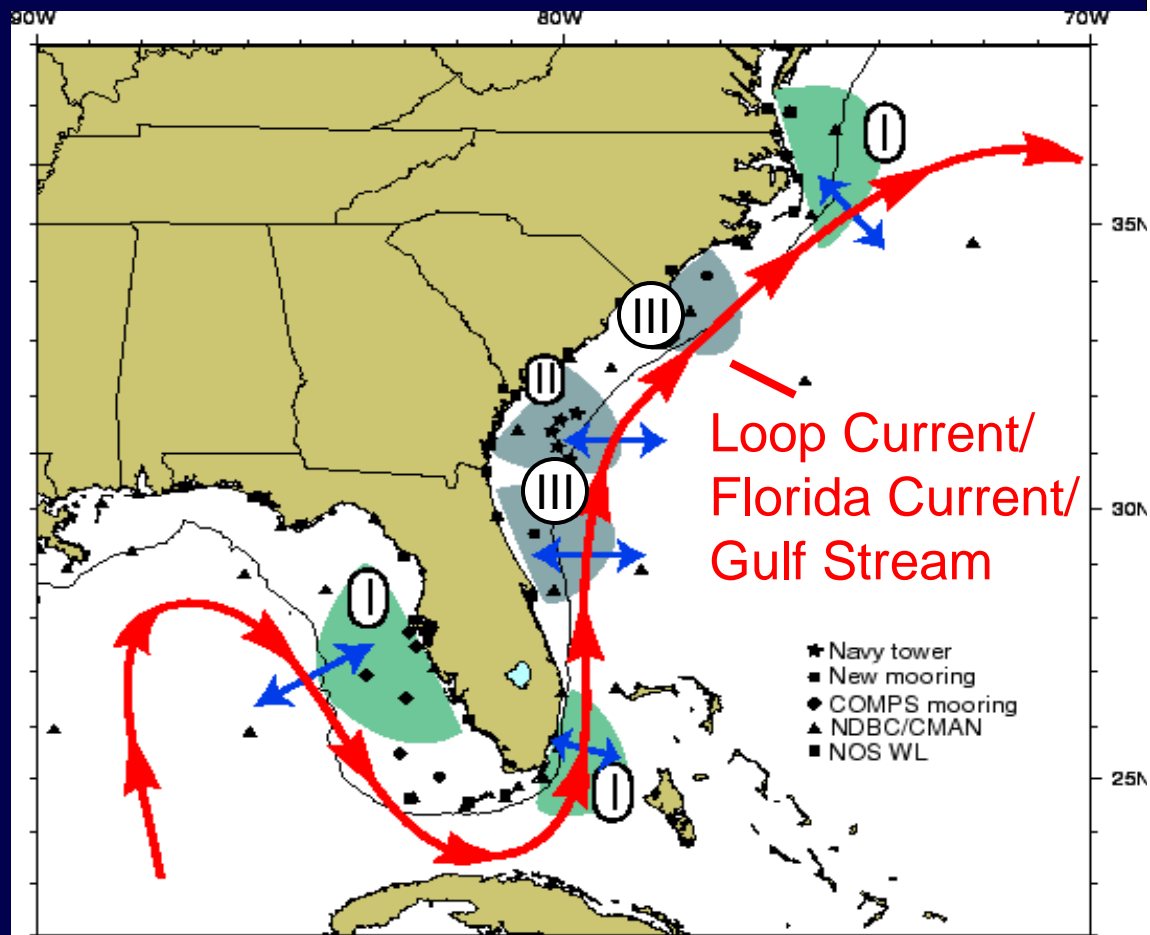
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SE region is linked oceanographically, experiences similar forcing (winds and river runoff) and has a shared biogeography. A merged information system for the region will help address scientific *and* societal issues.



**SEACOOS** was initiated in 2002 with ONR funding to develop a coastal ocean information system for FL, GA, SC and NC

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## Observing Regional Ocean Conditions in the Southeastern United States

SEACOOS includes the coasts of NC, SC, GA and FL, from the EEZ to head of tide, and is organized into working groups :

An observing subsystem (measures and transmits data)



An information management subsystem  
(organizing and disseminating information)



A modeling and products subsystem  
(translating data into products for users – computer modeling)



Outreach and education subsystem – to assess users needs,  
develop educational material and help develop needed products



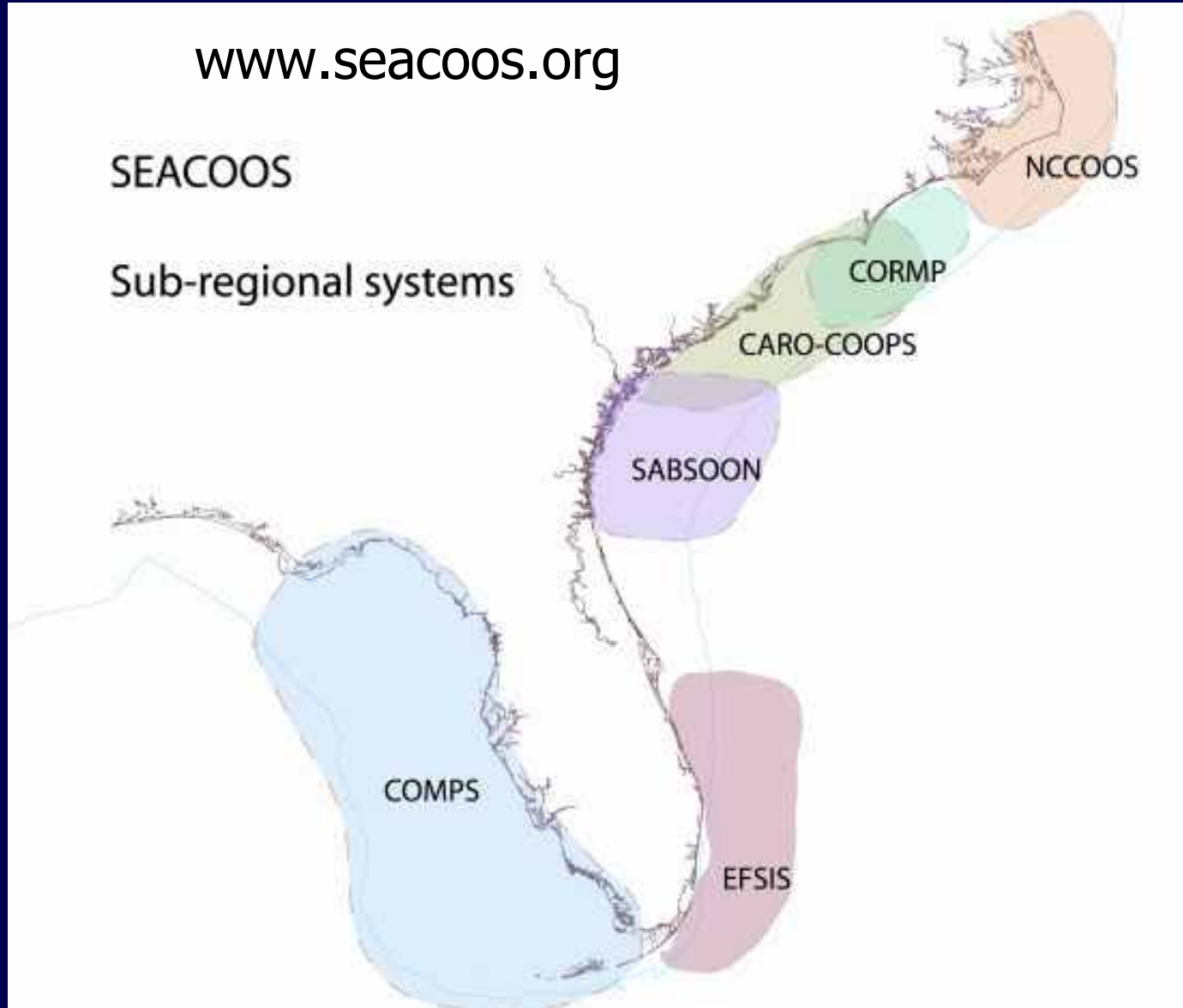
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[www.seacoos.org](http://www.seacoos.org)

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Sub-regional systems



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# Fisheries Management Observations

C. Barans & G. Sedberry, SCDNR

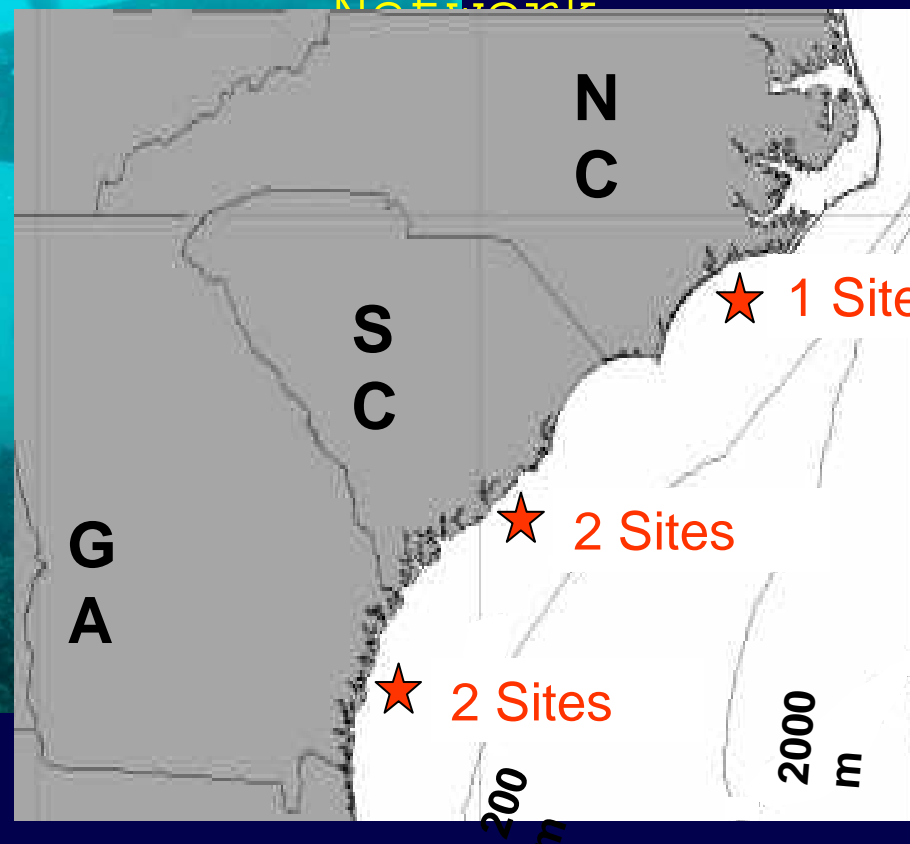
## Ecosystem Based Fisheries Management

- Cyclic movements
- Interactions
- Spawning times
- Recruitment

## High Temporal Resolution:

- Microwave Transmission System
  - Near real-time data
- ## Autonomous Video Loggers
- Regional coverage
  - Latitudinal/ depth

## Fisheries Observation

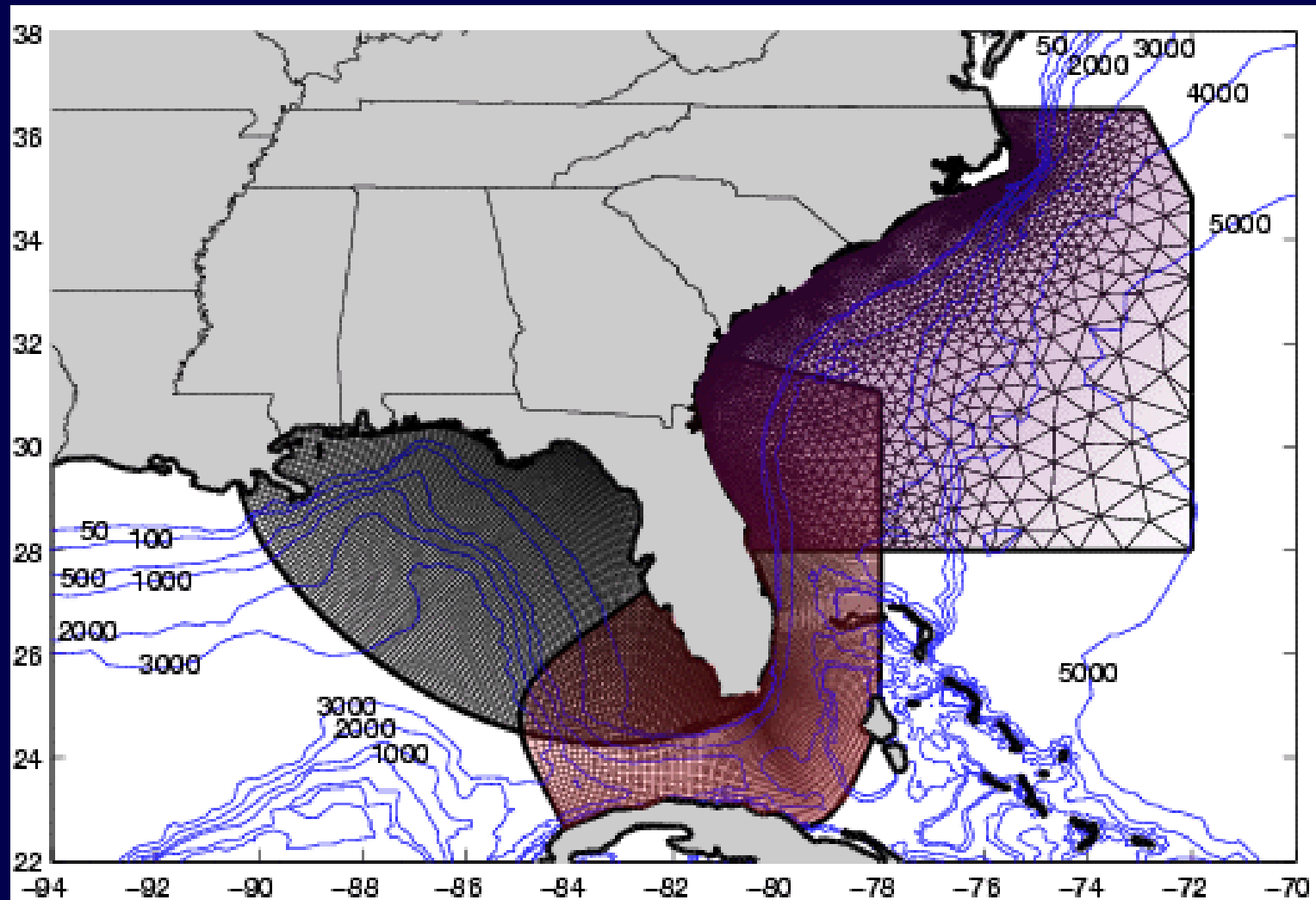




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## Subregional Models



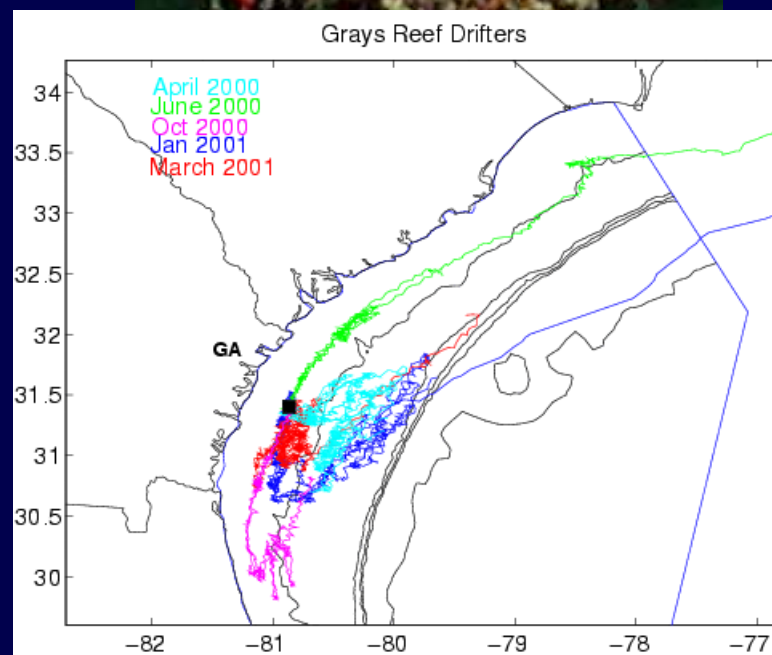
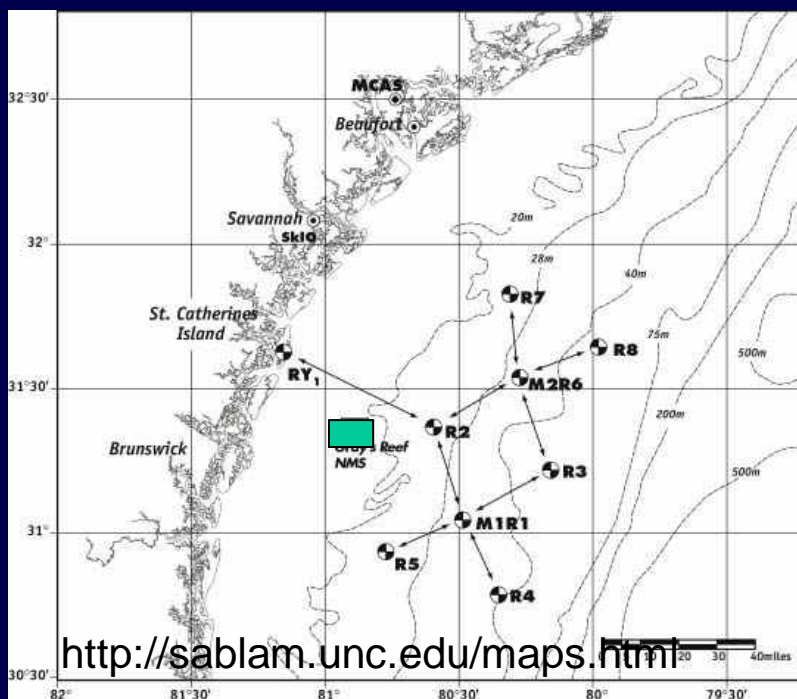
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# Defining Larval Dispersal Kernels at GNRMS



Couple physical and biological modeling to define the dispersal kernels of fish larvae at GRNMS

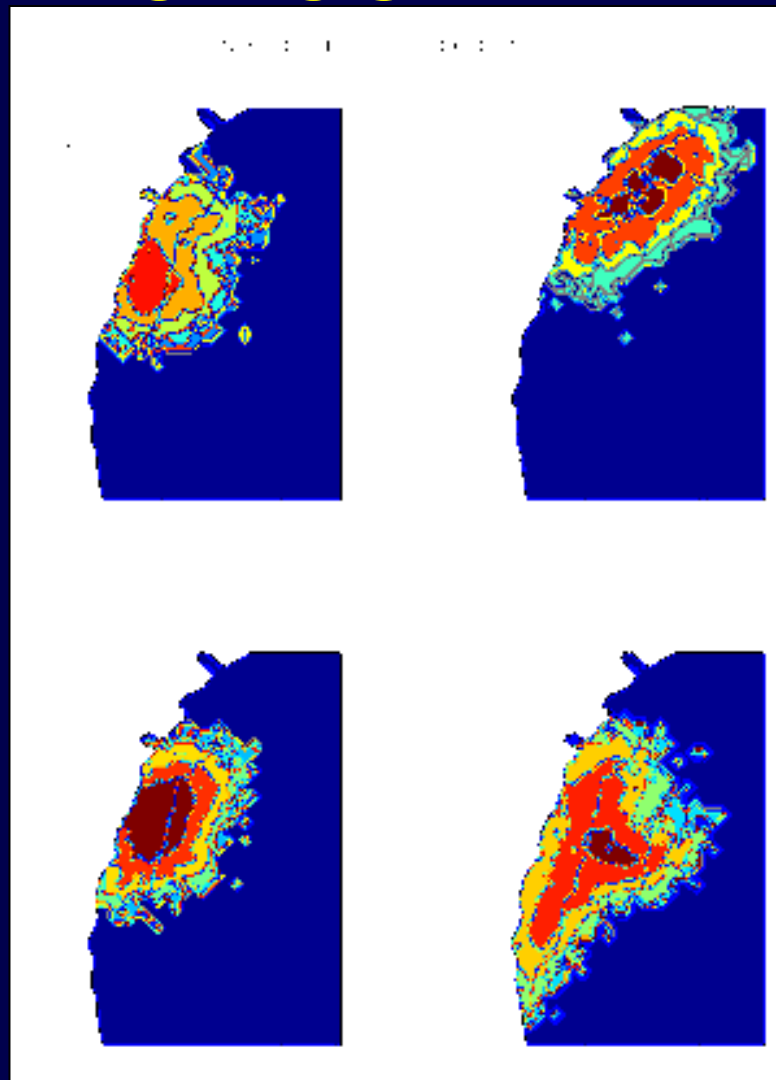
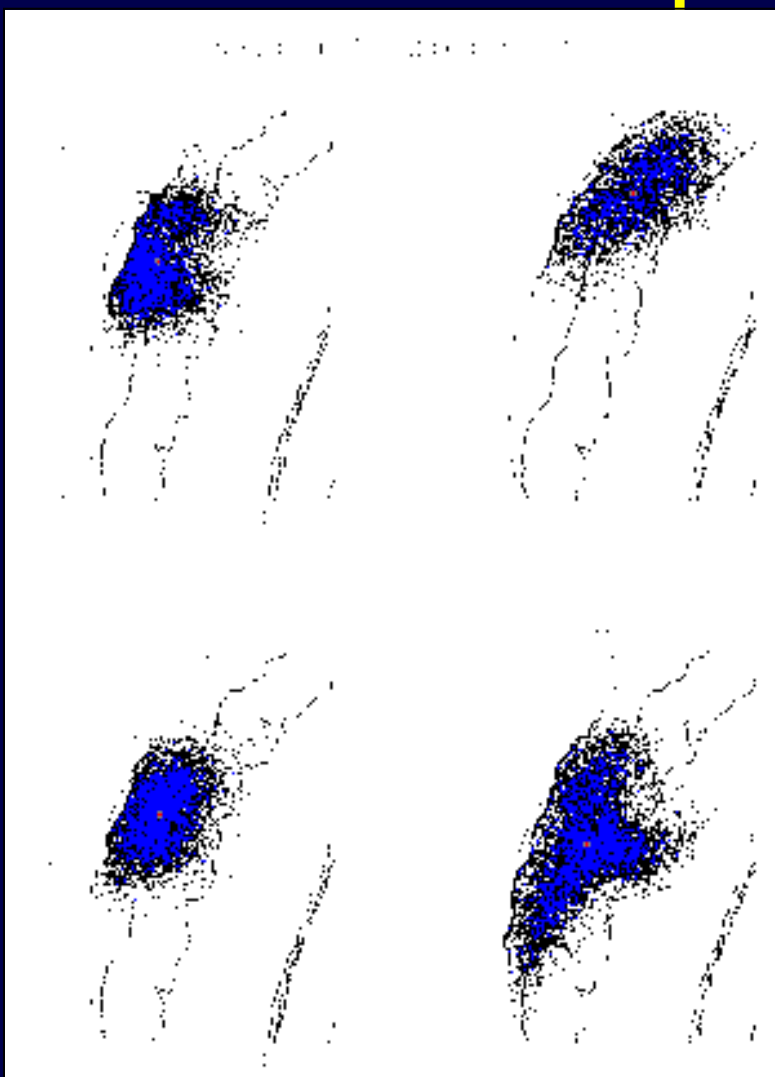
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## 2D Dispersal Kernels



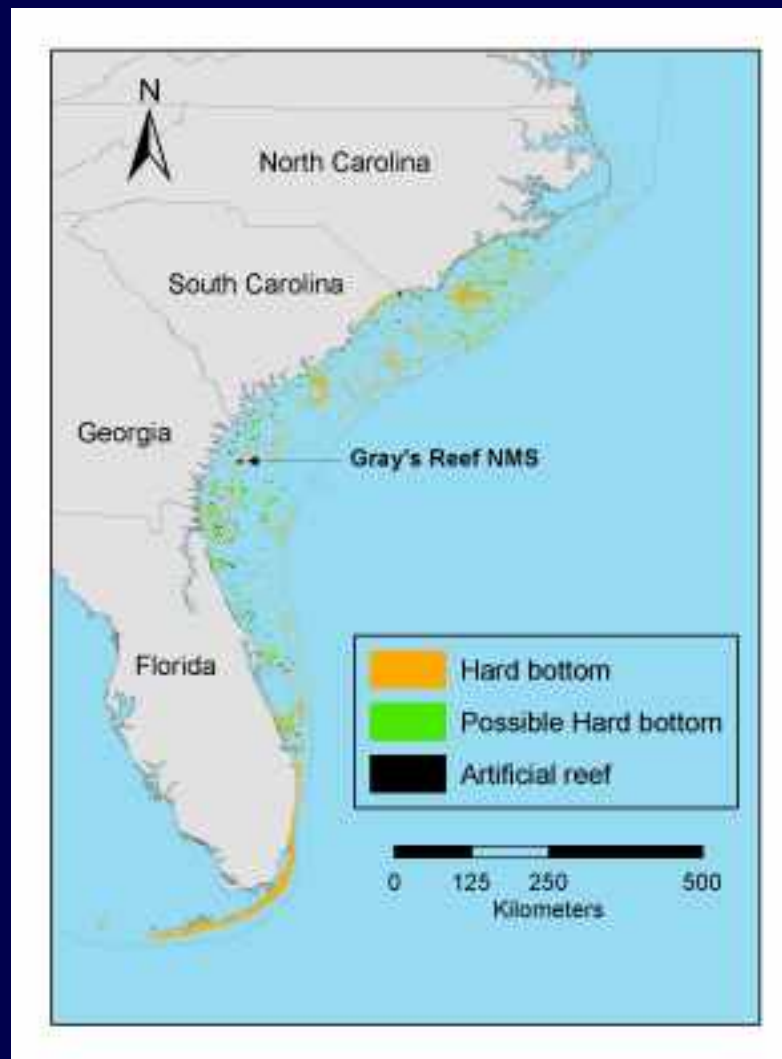
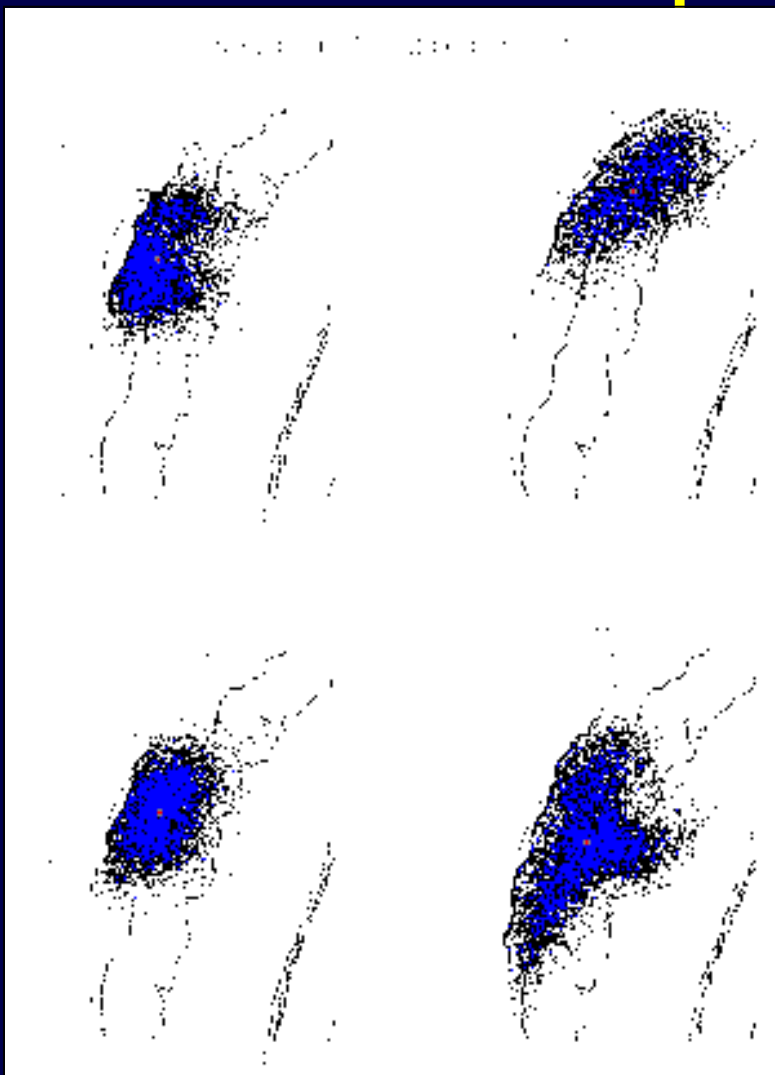
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# 2D Dispersal Kernels



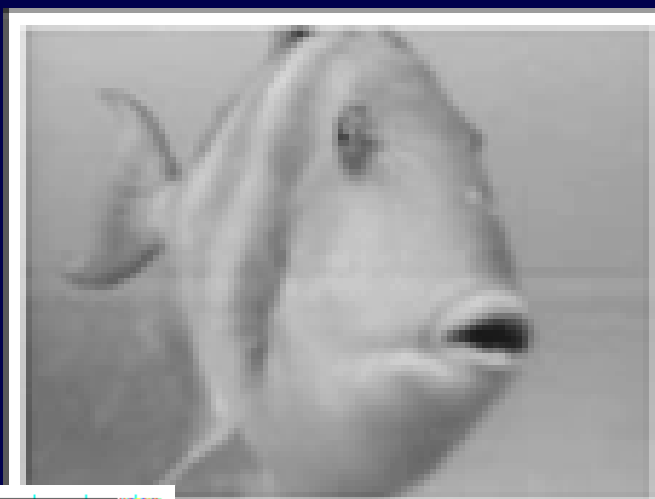
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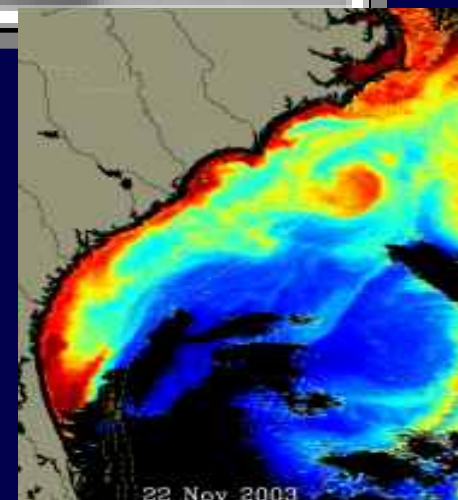
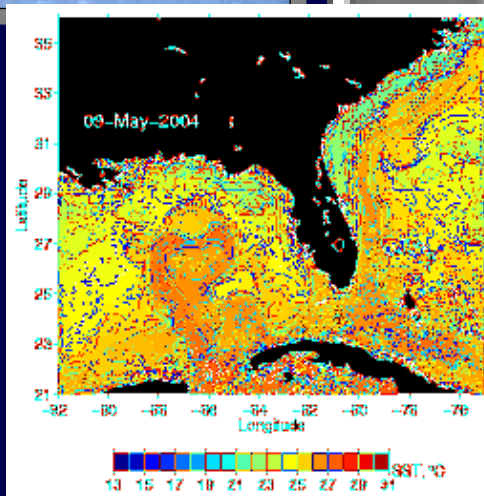
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# Fisheries-Ecosystem Application Team – Summer 2005



2 Case Studies  
Identified:

- Oculina Banks coral
- Gag grouper on SAB





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Camera 1

**Mola Mola**

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