

## Ocean Observing, The Environment, and Offshore Wind

### **Joseph Brodie**

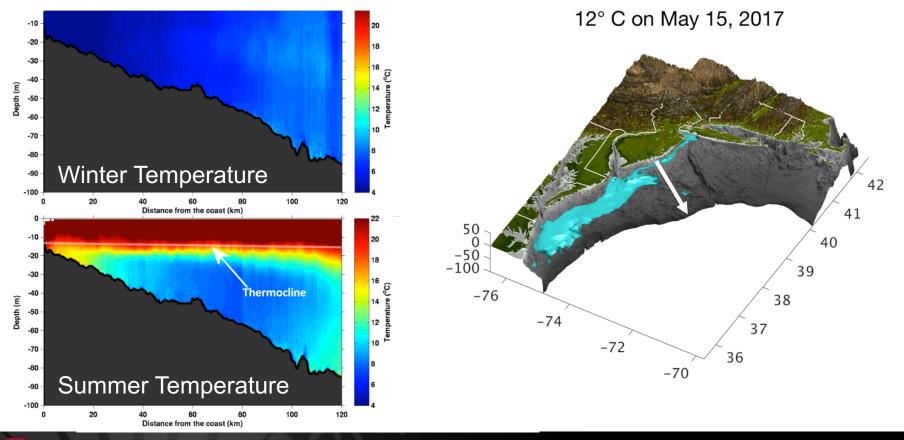
*Time for Turbines* 16 August 2019

Center for Ocean Observing Leadership Department of Marine and Coastal Sciences School of Environmental and Biological Sciences

#### Rutgers University – Center for Ocean Observing Leadership MARACOOS – A forum to bring forward the best science & technology



## **Essential Ocean Feature: Mid-Atlantic Cold Pool**



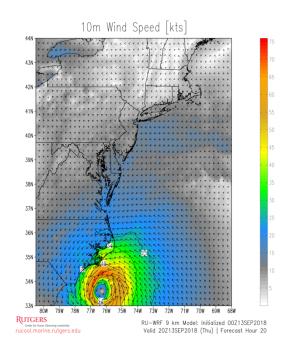
# **Atmospheric Modeling with RU-WRF**

Hurricane

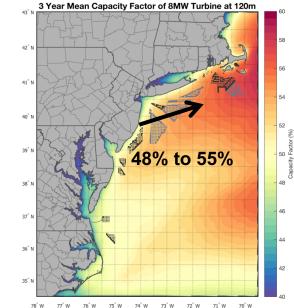
Florence

- Daily weather model run since 2011, generates hourly output
- Includes key ocean temperature data
- Used for research on hurricanes and sea breezes
- Assessment of NJ's offshore wind resource





#### Wind Resource: 3 Year Mean



### **Supporting Fisheries in the Mid-Atlantic Bight:**

It takes a Community



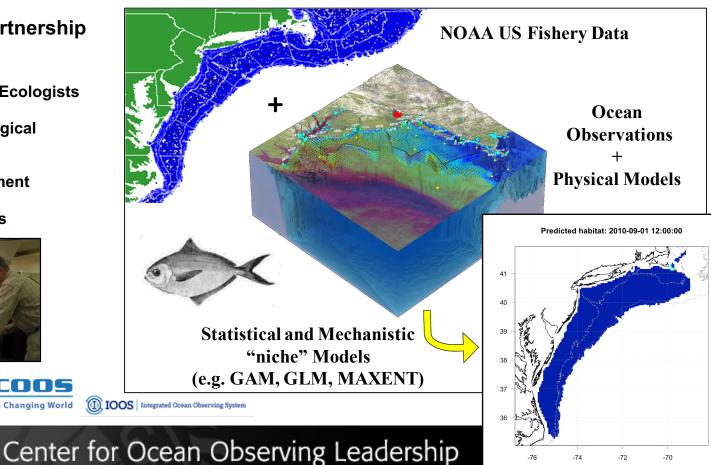
Physical and Biological Oceanographers

**Fisheries Management** 

#### Human Dimensions







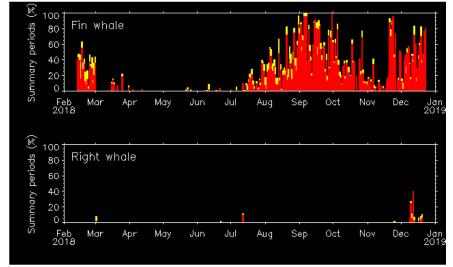
-74

-72

-70

# **Marine Mammals**

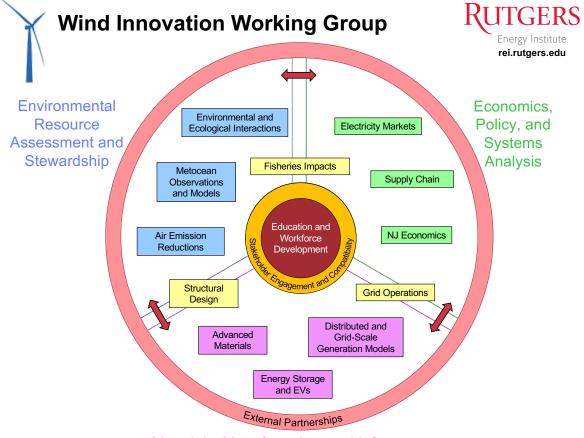




#### Mark Baumgartner, Robots4Whales (WHOI)



Data: Duke University Marine Geospatial Ecology Lab



Materials, Manufacturing, and Infrastructure