

Ocean Observing, The Environment, and Offshore Wind

Joseph Brodie

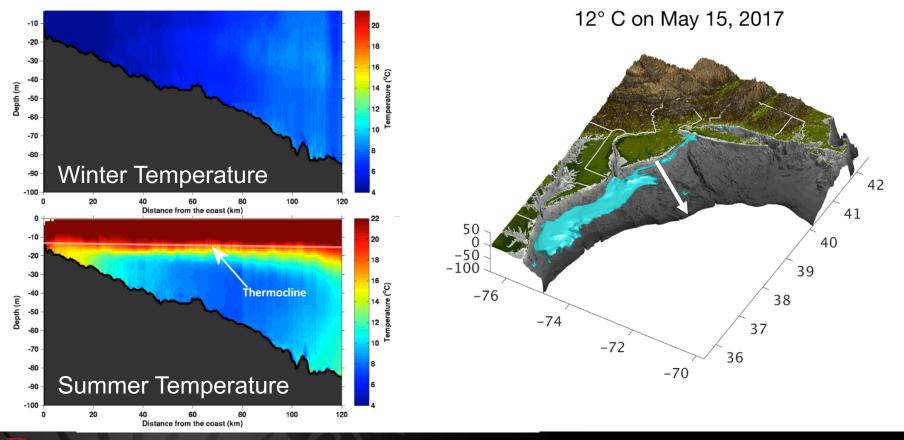
Time for Turbines 16 August 2019

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



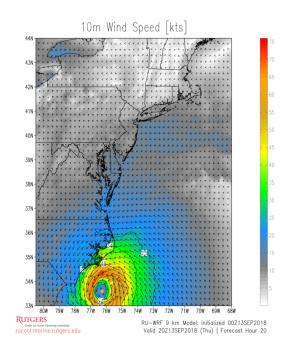
Atmospheric Modeling with RU-WRF

Hurricane

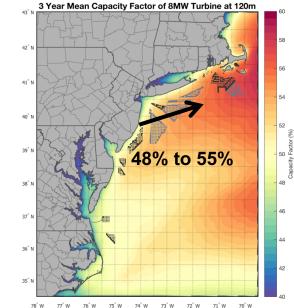
Florence

- 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



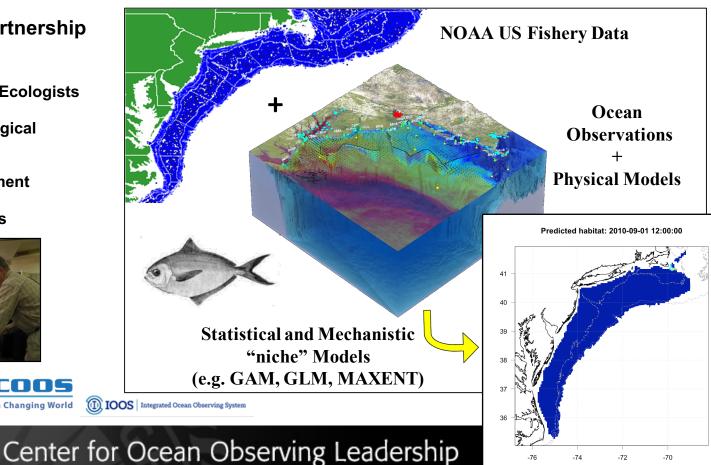
Physical and Biological Oceanographers

Fisheries Management

Human Dimensions







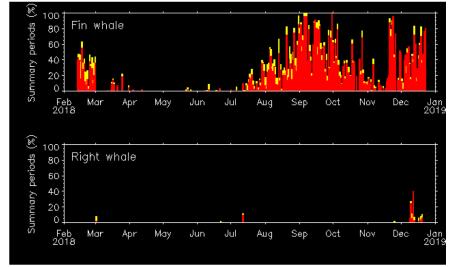
-74

-72

-70

Marine Mammals

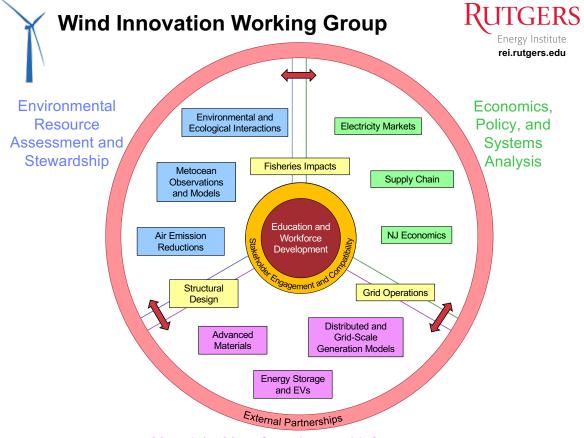




Mark Baumgartner, Robots4Whales (WHOI)



Data: Duke University Marine Geospatial Ecology Lab



Materials, Manufacturing, and Infrastructure