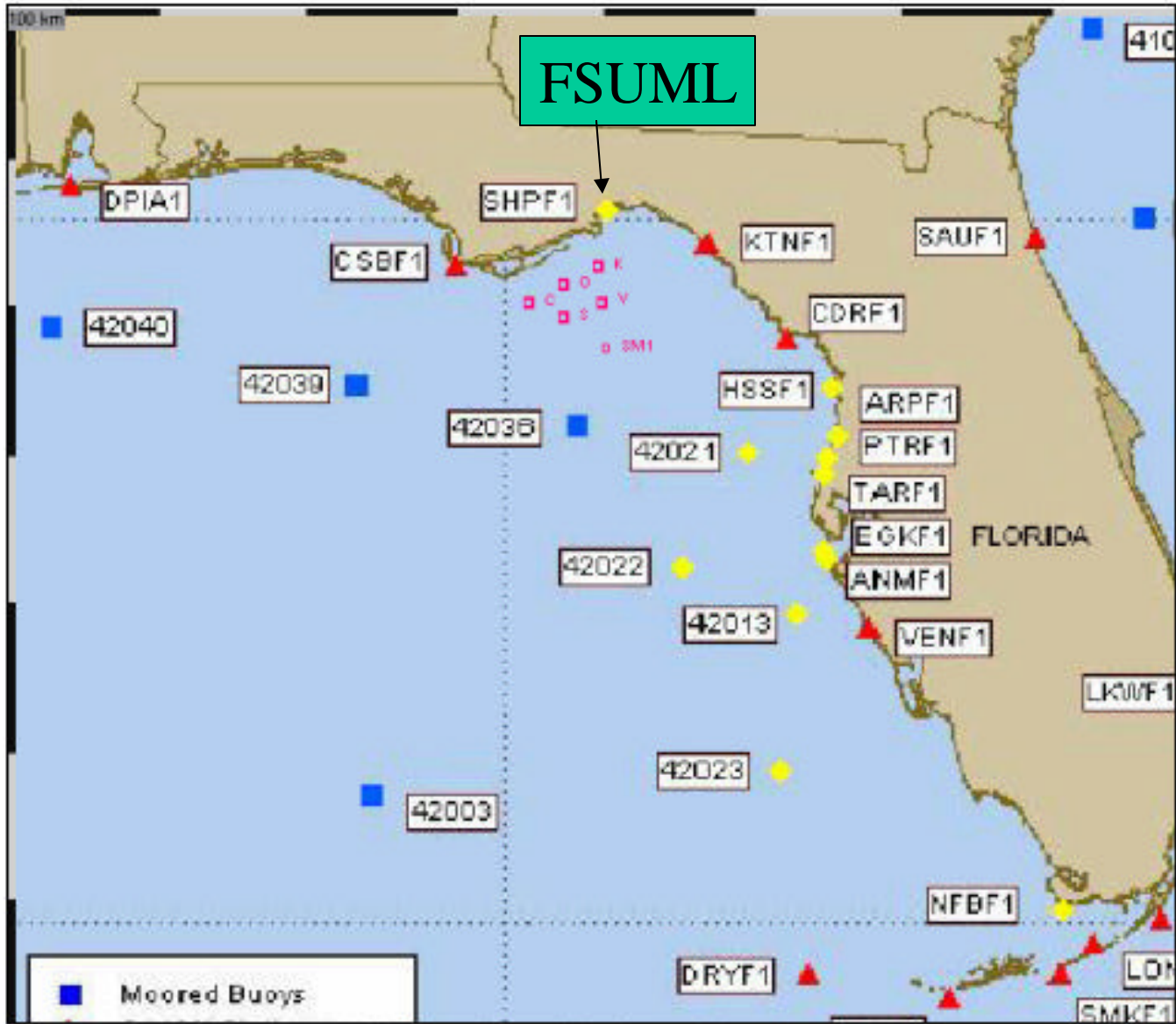


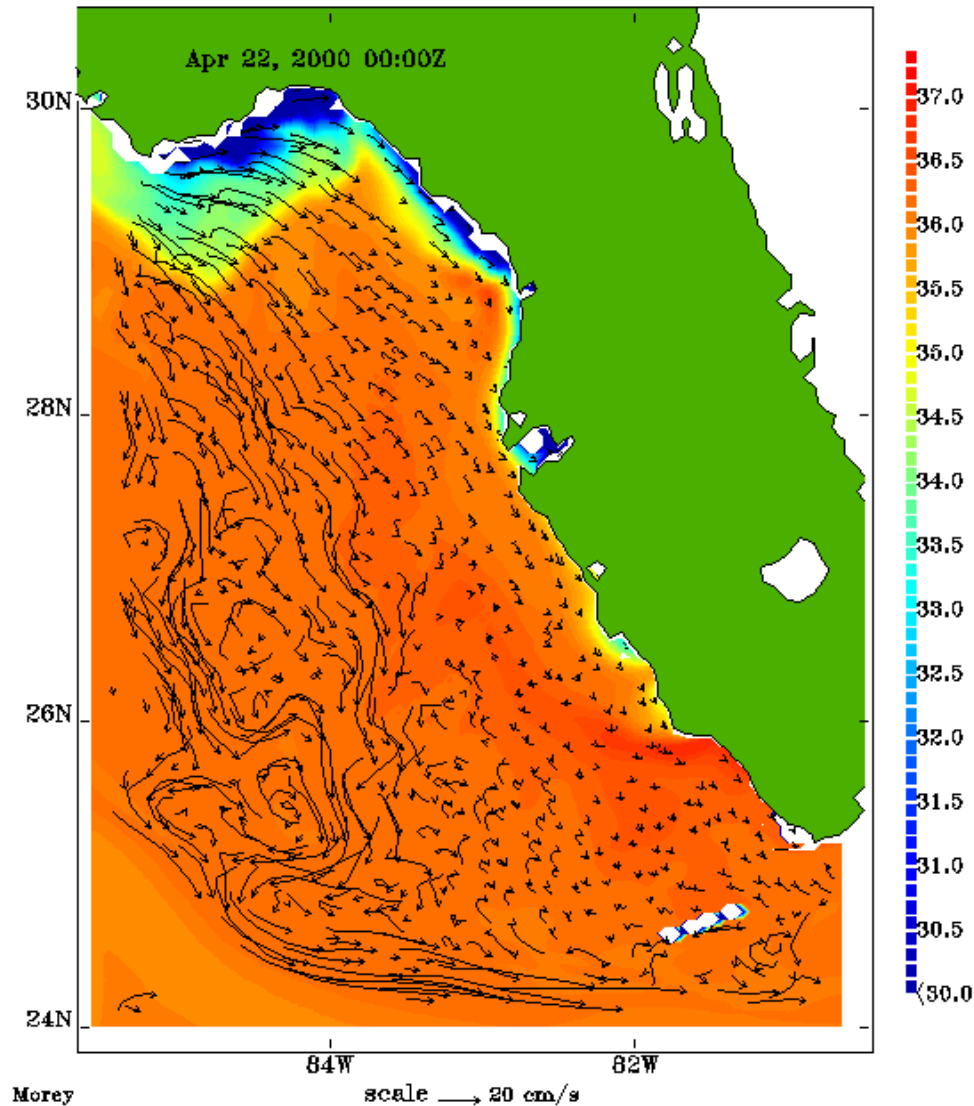
# FSU COOS Interests and Plans



# Wind-driven transport of riverine water over Apalachee Bay

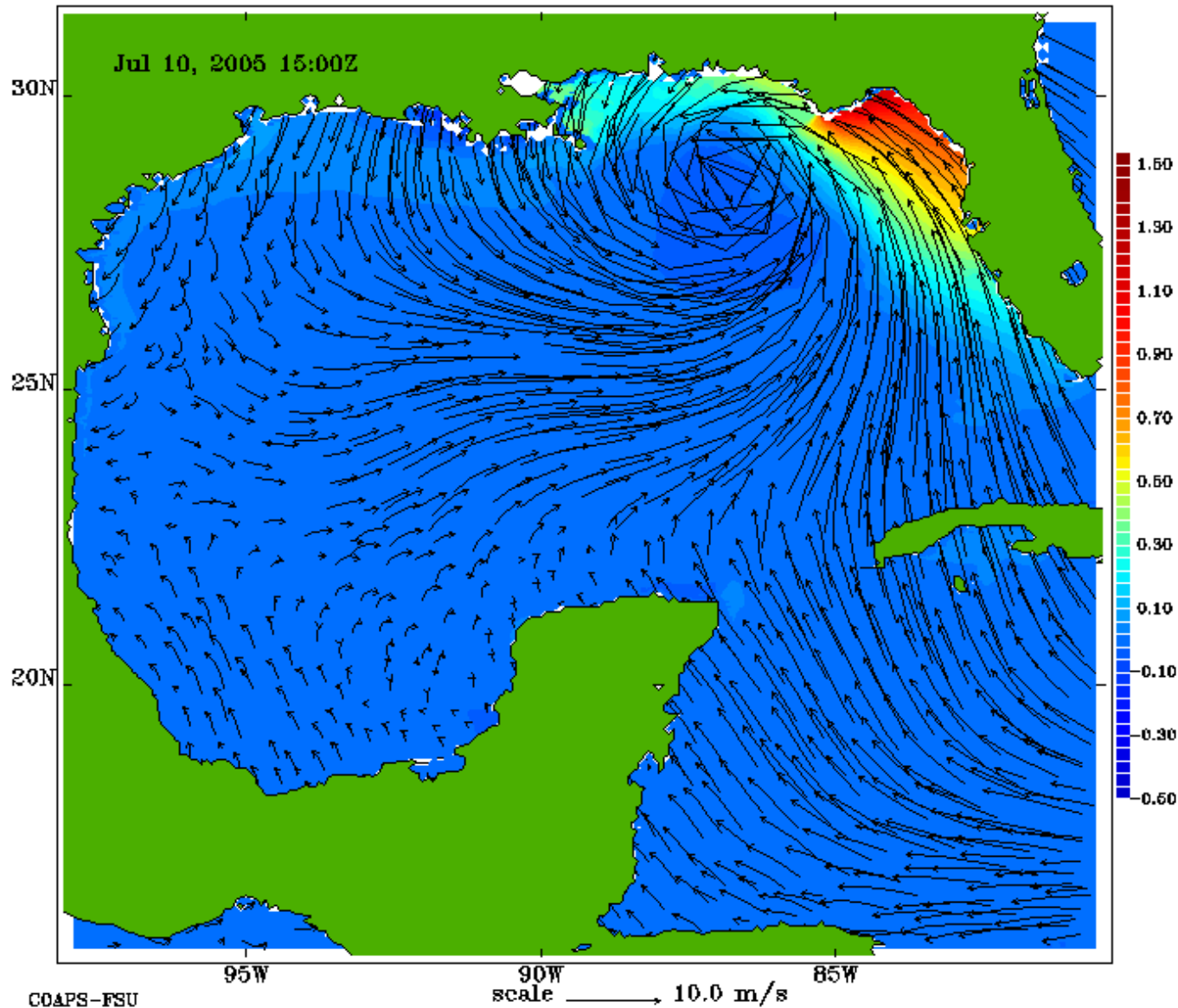
## Ocean model surface particle trajectories and salinity

NCOM QuikSCAT/Eta 36 Hour Surface Trajectories and Salinity (PSU)



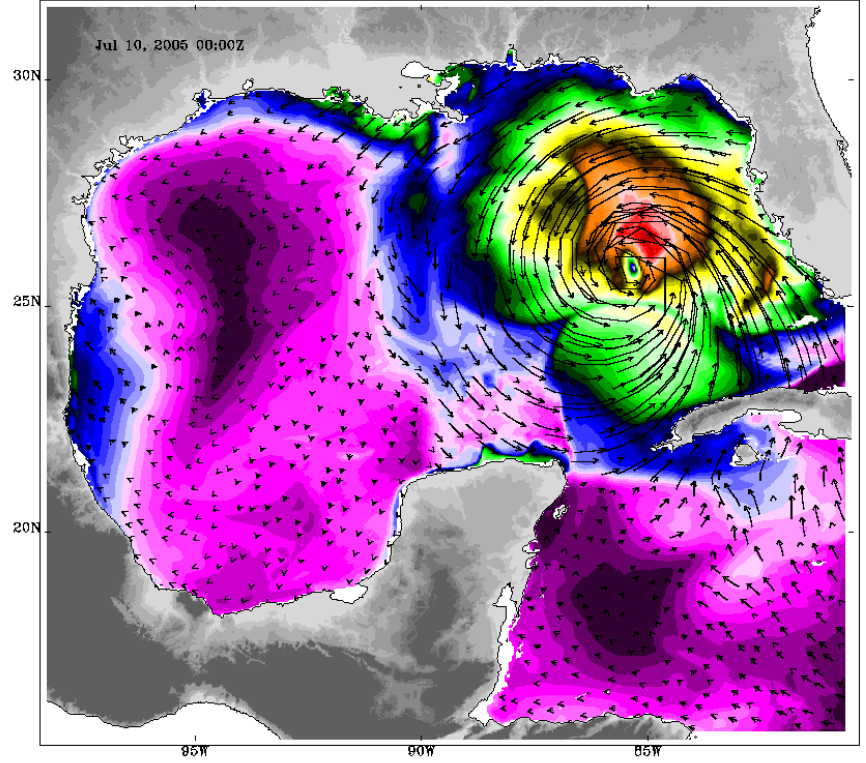
# Wind trajectories and model SSH during Hurricane Dennis

NCOM QuikSCAT/EWIND/NCEPR2 3-Hour Wind Trajectories and SSH (m)



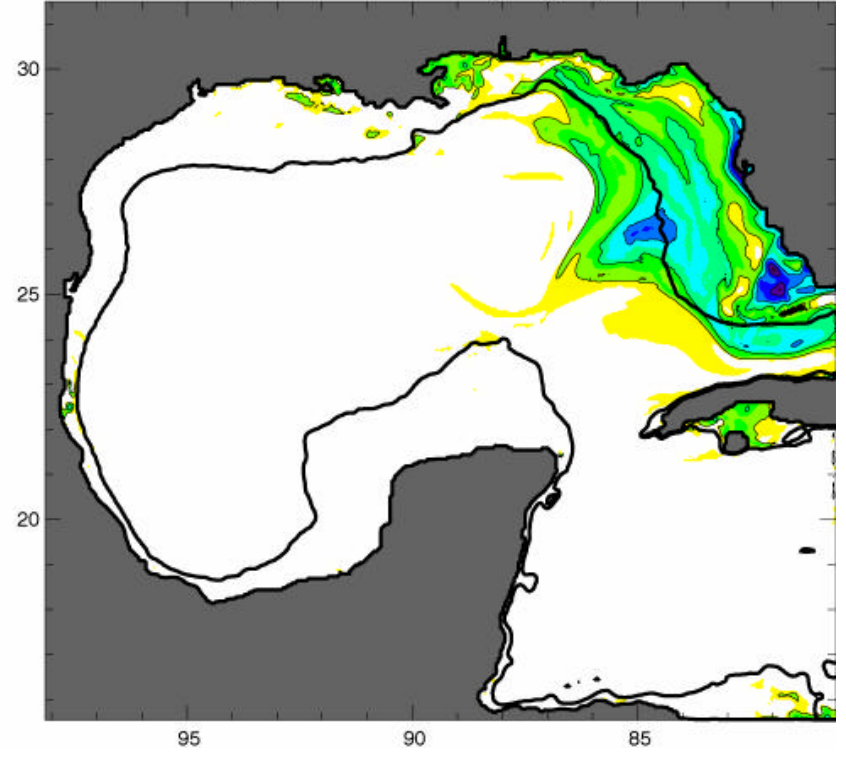
# Wind trajectories and surface heat fluxes during Hurricane Dennis

Wind Stress (Pa) and Latent+Sensible Heat Flux ( $W/m^2$ )



# Cooling over the shelf produced by Hurricane Dennis

d) NCOM SST anomaly: July 12, 2005



# Future Plans

- Develop a high-resolution ocean model of the northeastern Gulf of Mexico.
- Operate the model in real-time assimilating data from an array of in-situ instruments and remotely sensed data, nested within the 1/12°Atlantic HYCOM.
- Couple with a mesoscale atmospheric model.
- Couple the physical model with an ecosystem model.
- This will evolve into a tool for research and monitoring of the physical oceanography, marine ecosystems, fisheries management, marine and coastal hazards, and connectivity between the coastal environment and the deep ocean in the northeastern Gulf of Mexico.