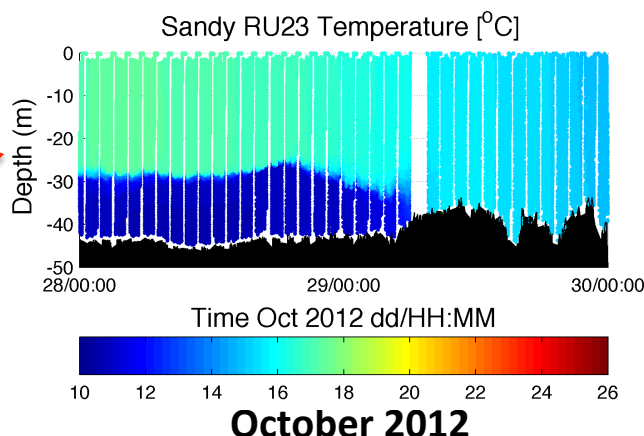
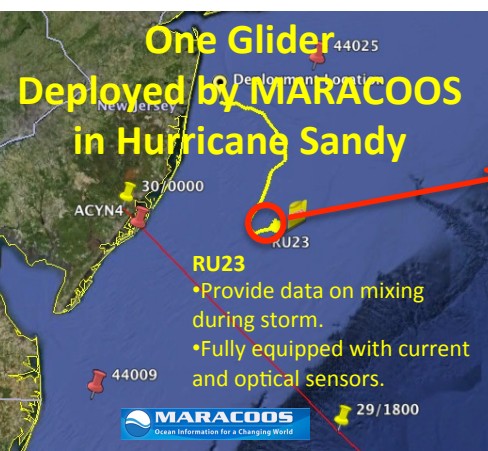


New Technology – Hurricane Gliders

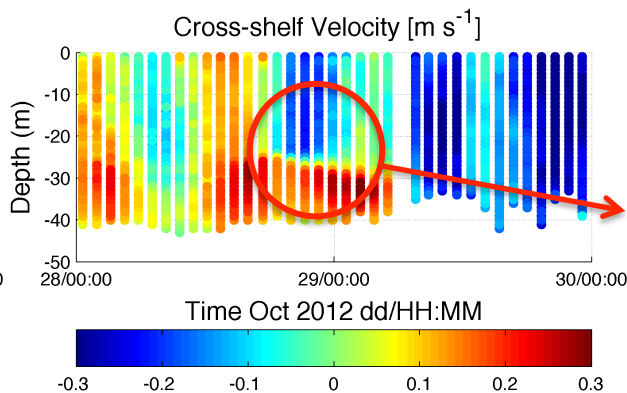
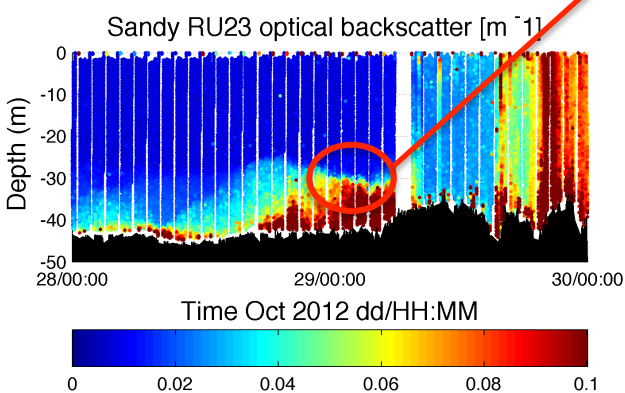


MARACOOS glider deployed based on Sandy track forecast

Additional current & optical sensors from student proposal

Sandy was later in the year when surface temperatures are already cooler

New Science – Ocean Modeling Challenges

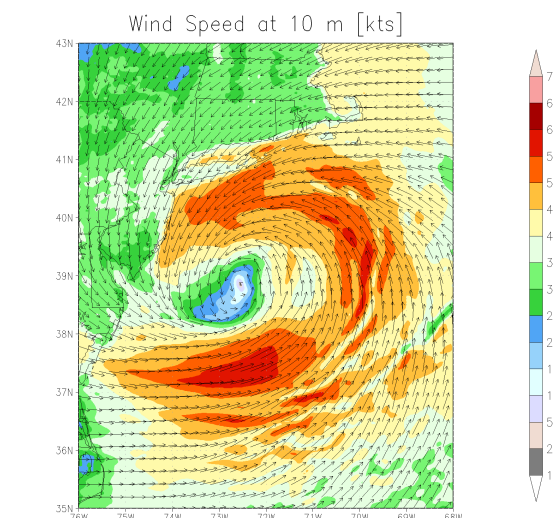
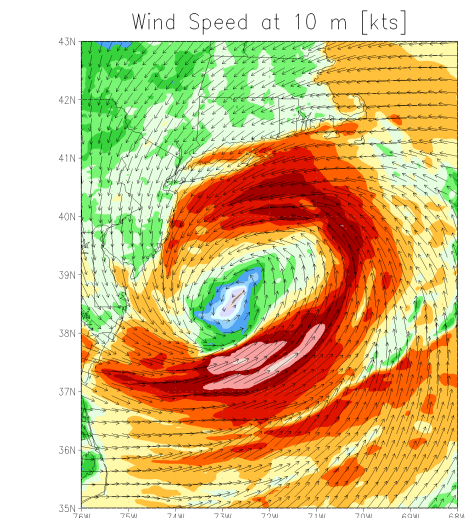


Optical sensors indicate little mixing of sediment across thermocline, full water column mixing after

Currents indicate different directions of advection in each layer

Sandy presents ocean models with different challenges, like little mixing and complex advection

Impacts on Atmospheric Forecasts



Hurricane Sandy acceleration and intensification properly forecast with observed cool SST

Hurricane Sandy sensitivity over the warm SST observed before Irene produces 15 knot increase in intensity