Monitoring of the Gulf of Mexico Conditions during the Deepwater Horizon Oil Spill
An AOML - wide effort

As part of NOAA’s mission to study the role of the ocean in climate and ecosystems, AOML scientists have for many years been devising methods and tools to allow for the real-time monitoring of ocean conditions. Following the Deepwater Horizon explosion in April 2010, AOML mounted a scientific response effort building upon these capabilities. A web portal (http://www.aoml.noaa.gov/phod/dhos) was designed to provide data and graphical products about ocean currents, sea surface temperature, sea level, ocean color, and particle displacement, obtained using direct ocean measurements, remote observations collected via satellite, and outputs from numerical models. AOML and NMFS/SEFSC organized an oceanography workshop in Miami on July 1-2, 2010, where observations, methods, and strategies were discussed. AOML scientists also participated on spill related research panels lead research cruises focused on assessing the extent of the spill in the greater Gulf of Mexico and the potential for entrainment via the Loop Current to downstream ecosystems, and published scientific manuscript related to the ocean conditions during the oil spill.

Upper left:  Altimetry-derived Gulf of Mexico surface currents, available via the web portal.  Upper right and lower left: Cruise tracks and sampling operations conducted on AOML oil spill response cruises.  Lower right: AOML and SEFSC personnel prepare a neuston net to sample for tar balls.