



FY2007: Regional Integrated Ocean Observing System Development

NOAA initiated a competitive funding process in 2007 to continue building capacity for regional ocean observing systems towards three long-term outcomes; establishing coordinated regional observing and data management infrastructure, developing applications and products for regional stakeholders, and establishing regional and national data management and communications protocols. These projects are contributing to these outcomes.

ALASKA REGION

The Alaska Region includes the entire state of Alaska. The 2007 award to this region is \$750,000.

Project Title:

Alaska Regional Coastal and Ocean Observing Systems

Recipient/ Lead Principal Investigator:

Seward Association for the Advancement of Marine Science/
Molly McCammon (mccammon@aos.org)

Cost:

Funded: \$750,000

Performance:

The Alaska Ocean Observing System (AOOS) is focused on four key issues: climate change and its impacts, sustainability of fisheries and marine ecosystems, mitigation of natural hazards, especially coastal erosion, and safety of marine operations and health of coastal communities. Priorities in FY07 include continuing the development of the Prince William Sound (PWS) Ocean Observing System pilot project that collects observations for use by stakeholders and develops and tests forecast models as a demonstration of an end-to-end observing system in Alaska. The project will complete development of the three primary models for Alaska: ocean circulation (Regional Ocean Model System (ROMS)), waves (Simulating WAVes Nearshore (SWAN)), and Nutrient-Phytoplankton-Zooplankton (NPZ). The high-resolution wind, wave, and ocean current forecast products provide expanded and improved marine safety for recreational and commercial vessel operators and enhance the security to oil tanker traffic in PWS.

Schedule:

1. Continue the capture, archive, and dissemination of real-time (and other) data streams at the AOOS Data Management and Analysis Group (DMAG) at the University of Alaska Fairbanks.
2. Create animations of ocean forecasts, current trajectories, and interpretation of real-time data streams by the AOOS DMAG.
3. Maintain Prince William Sound (PWS) observing system to provide high-resolution wind, wave and ocean current forecast products. Assess which observing system components are critical to

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meeting the needs of the major stakeholder groups in PWS and should be maintained over the long term.

4. Complete the development of a real time data assimilation model for PWS based on the ROMS as well as the SWAN wave model, and add the Nutrient-Phytoplankton-Zooplankton (NPZ) component.
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