FY2008: Regional Integrated Ocean Observing System Development

NOAA continued a merit-based funding process in 2008 to enhance regional ocean observing systems and achieve three long-term outcomes: establishing coordinated regional observing and data management infrastructures, developing applications and products for regional stakeholders, and crafting regional and national data management and communications protocols. In addition, regional associations received planning grant awards designed to assist them in stakeholder engagement, education and outreach, and long-range planning activities.

ALASKA REGION

The Alaska Region includes the entire state of Alaska. The 2008 implementation award to this region is $1,000,000. The 2008 Regional Association Planning Grant award to this region is $399,976.

Project Title:

Alaska Regional Coastal and Ocean Observing System 2008-2010

Recipient/ Lead Principal Investigator:

Seward Association for the Advancement of Marine Science on behalf of the Alaska Ocean Observing System/ Molly McCammon (*mccammon@aoos.org*)

Cost:

Funded: FY 2008 (Year 1) - $1,000,000
Proposed (subject to available funds): Year 2 - $3,499,999; Year 3 - $3,499,918

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 FY08 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 high-resolution wind, wave, and ocean current forecast products provide improved marine safety for recreational and commercial vessel operators and enhance the security to oil tanker traffic in PWS, and will ultimately be expanded to the northern Gulf of Alaska. In addition, AOOS will work to establish its data and web portal as the regional coastal and ocean information system for Alaska, furthering statewide capacity in data management, modeling, and product visualization.

(over)

Schedule:

1. Years 1-2
    - Deploy additional telemetered moorings to improve ocean observations and model forecasts the PWS demonstration project
    - Continue salinity surveys to calibrate ocean forecast model in PWS demonstration project
    - Expand data portal, data acquisition, archiving, access
    - Develop additional data visualization products and tools

2. Year 2
    - Continue development of data management system
    - Test first iteration of PWS forecast models with an Ocean Simulation Experiment (OSE)
    - Assemble and test Harbornet prototype hardware and data system in Seward Harbor

3. Years 2-3
    - Expand remote sensing capacity
    - Create operational center for regional forecast models
    - Develop and implement key themes and messages, public awareness campaign
    - Engage stakeholders/customers with focus groups and workshops
    - Develop K-12 education guide and products, including educator workshops
    - Analyze past SE model data to complete ocean circulation model in SE Alaska
    - Deploy 2 moorings in SE to validate models
    - Test Harbornet prototype in remote Arctic location
    - Identify and develop suite of forecast models for weather, waves, and currents to expand PWS demo system to Cook Inlet/Kenai coast
    - Deploy additional telemetered weather stations required to improve weather observations and forecasts in Cook Inlet/Kenai coast
    - Deploy additional telemetered moorings required to improve ocean observations in Cook Inlet/Kenai coast
    - Deploy 4 moorings across Amukta Pass
    - Deploy 3 autonomous recorders in eastern Bering Sea
    - Develop nearshore climatology with sea ice and fastice atlas
    - Develop nearshore observation system for ice-free season
    - Continue sea ice radar program in Barrow
    - Add additional sea ice radars
    - Improve sea ice forecasts with sea ice thickness measurements

4. Year 3
    - Hold ocean observing virtual field trip
    - Maintain operational components of PWS observing system
    - Analyze data and incorporate into models to complete ocean circulation models in Bering Sea/Aleutians
    - Analyze data, prepare paper on findings, develop comprehensive ambient noise monitoring program

NOAA Contacts:

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