

**COASTAL UPDATE for the
SURA COASTAL RESEARCH COMMITTEE
October 14, 2008**

Summary

Since the April Board of Trustees Meeting, SURA's coastal activities have emphasized four immediate needs while continuing to be guided by the central mission of the DCL, which is *to enable transformational coastal science*. The four immediate needs, all of which were highlighted at the CRC meeting during the April BOT Meeting in Hampton, are:

- (1) Delivering a hardened and generally accessible demonstration of the SCOOP capabilities;
- (2) Creating a test bed undergraduate education project as a driver for engaging a broader user community by bringing research quality information into the classroom;
- (3) Continuing to build out the SCOOP infrastructure and modeling capabilities. This has included adjusting funding priorities and allocations for the remainder of the current, and "final" contract period (which now ends December 31) to ensure that needs (1) and (2) are met and that an enduring legacy for SCOOP remains after the contract period ends;
- (4) Preparing a proposal to NOAA to fund the DCL and pursuing other specific (and smaller) funding opportunities.

In addition, we have had several meetings with private industry and defense agencies to explore possible partnerships and synergies. The status of these activities is as follows.

Hardened Demonstration: <http://www.openioos.org>

Philip Bogden and Luis Bermudez, with help from several SCOOP partners, are focusing on a working interactive SCOOP demonstration. The demonstration is currently available on the OpenIOOS website at: <http://www.openioos.org>.

The demo includes the following capabilities:

- An improved Catalog Interface for research scientists;
- A prototype workflow for inundation prediction that uses SCOOP components and SURAGrid;
- A professional and accessible web presence for information "products" .

Education Applications of SCOOP Capabilities:

<http://www.grid-appliance.org/wiki/index.php/SCOOP:Index>

The meeting participants at the April CRC meeting in Hampton endorsed the idea of utilizing undergraduate and graduate education to engage and inform students *and faculty*. Accordingly, we have been exploring vehicles for testing the "hardened" demo in higher educational settings. SURA SCOOP is contracting with Dr. Peter Sheng and Dr. Renato Figueiredo at the University of Florida to develop a SCOOP Educational Virtual Appliance. Based on the CI-TEAM Grid Appliance, UF developed and deployed a SCOOP educational virtual appliance. The appliance includes SCOOP catalog and archive interfaces as well as the ability to conduct retrospective model simulations and perform visualizations. Coastal science and cyberinfrastructure educational use cases and lessons are being developed using the appliance. Following the recommendations from the CRC at the April BOT meeting, we hope to explore vehicles for testing the appliance in higher educational settings. In the near future, we hope to be able to conduct a survey of key educators identified at the CRC meeting in order to refine the product and ensure that information is presented in the most accessible and intuitive format. Joanne Bintz and Don Wright met with Consortium for Ocean Leadership educators Sue Cook and Leslie Peart in June to

discuss the idea. Strong interest and willingness to assist was expressed so we will also solicit input from those educators.

SCOOP News

Funding Status and Ongoing Proposal Preparations

- **Budget Concerns:** We estimate that our NOAA funding will expire at the end of 2008, although the 2007 NOAA grant has been extended through Aug 2009
- **NOAA BAA** – We are currently preparing a proposal to NOAA in response to their most recent BAA focused on the expansion of the existing SCOOP program to the broader Distributed Coastal Laboratory. The proposed program will facilitate the fusion of the observed information with models in three intersecting science domains: *1. coastal inundation, 2. meteorology, and 3. river hydrology*. We are actively recruiting new partners. Professor Chris Mooers is participating as lead PI.
- **Future Extensions of DCL-** As we build out the infrastructure we are planning for future expansions into other science domains including hypoxia and ecosystem modeling.
- **Foundations-** SURA submitted a letter to the Sloan Foundation on October 7 on behalf of the Coastal Research Program.
- **OOSTethys/IOOS 1.0 Proposal-** SURA is advancing an "IOOS 1.0" white paper with the NOAA/IOOS program office. This is expected to give rise to a proposal and a funded initiative that leverages SCOOP accomplishments with the NOAA/IOOS program mission and goals. In particular, we are proposing to help NOAA/IOOS create a Data Integration Framework that integrates NOAA contributions to IOOS with the Regional Associations that are contributing to the IOOS.