

**Integrated Ocean Observing System (IOOS®) Data Management and Communications
(DMAC) and Common Products Initiative Workshop**

10-12 September 2013

**IOOS® Program Office
Silver Spring, MD**

Summary Report

Introduction

The DMAC workshop convened the DMAC coordinators from the Integrated Ocean Observing System (IOOS®) 11 Regional Associations, in addition to federal DMAC personnel from NOAA CO-OPS, NDBC, NODC, NCCOS, NGDC, CBO, and Fisheries and USACE, USGS, BOEM, MMC, and OBIS-USA to discuss progress-to-date in FY13 and future activities in FY 14. The thirty-plus attendees participated in a three-day discussion on IOOS DMAC.

First day of Workshop

The first day discussion topics' underscored the importance of the web services' development. Most of the day was committed to talking about the services (i.e. THREDDS, 52N and ncSOS) that IOOS data providers are setting up. Presentations were made by Rich Signell (USGS), Shane StClair (Axiom) and Kyle Wilcox (ASA) that segued into an active discussion on features and capabilities and communication. The System Integration Test that will be conducted in FY 14 was the final topic in the series of web service discussions that day. The test was framed by Derrick Snowden whom gave the "why" and possible "how" it will be done and projected timeline.

Two more presentations that day described processes. The IOOS Biological Data Services Enrollment Procedures describe the publication process of biological data via web services. Philip Goldstein (USGS / OBIS-USA) and Hassan Moustahfid (U.S. IOOS) showed the different types and steps for making data available through this process. Steve Rutz (NODC) led a discussion about setting up an automated process to archiving data at NODC. He illuminated the confusion that exists about the type of data to archive and the confusion of the standards to follow and then provided the archiving project guidance.

Second day of Workshop

The second day offered an array of speakers and discussions. The first two topics featured the IOOS Glider DAC design and plans addressed by John Kerfoot, from Rutgers University.

Tony Lavoie, NOAA's Geospatial Information Officer went through a list of topics on the national geospatial landscape, marine planning and IOOS and geospatial coordination.

Certification, quality control and data management planning always sparks a discussion and the brief led by John Ten Hoeve, and co-presented by Jeff de La Beaujardiere and Dave Easter, was no different. John developed an IOOS-specific Data Management Plan (DMP) template for the IOOS regions that would satisfy both NOAA requirements for a DMP and IOOS certification requirements. The template provided *example* responses that 1. serve as a guide, and 2. would satisfy each of items in the DMP. A lively debate regarding tort liability, quality control, and "if funding would be tied to certification" took place. Regions appear to still be confused about what is required for certification, and what it means for a region to be certified or not certified. An additional conversation with RA Directors about these topics may be useful.

Over the lunch break, we were fortunate to have Jamie Kinney (Amazon) lead a discussion about Amazon Web Services and the valuable features and capabilities that can be ascertained from working in the cloud. He gave a great presentation and showed practical examples. This was an enlightening brief to many of the attendees that are considering use of a virtual workspace.

The final brief of the day was contributed by Anna Milan, from NGDC, in a well-articulated overview of the IOOS registration process and its components. Registering your data is critical to making it discoverable.

Third day of Workshop: Common Product Initiative

On the final day, Josie Quintrell, IOOS Association Director, led a Common Products Workshop with the purpose of scoping common products for implementation at the regional scale that demonstrate the national capacity provided by the RAs. Aric Bickel first presented an inventory of all existing and in-progress IOOS tools/products across the 11 RAs. The inventory grouped all of the products into themes, such as "model visualization," "climatologies," and "inundation." Based on these themes, the attendees broke up into working groups and discussed 2-3 possibilities for common products within these themes. The meeting was a great starting point for this discussion, and also had the unintended consequence of initiating discussion between DMAC coordinators about existing best practices, code, and tools in these theme areas.

The workshop adjourned.