Bi-Weekly IOOS® Z-GRAM - 26 November 2010
www.IOOS.gov

The Z-Gram is an informal way of keeping you up-to-date on IOOS® activities. Please advise of additional addressees, or if you are receiving and no longer want to receive. If you think others could benefit from the Z-Gram please pass it on. To see previous Z-Grams go the IOOS website and view under program updates.

IOOS® - Our Eyes On Our Oceans, Coasts, and Great Lakes

Programmatics: We hope that you had a wonderful Thanksgiving Holiday!
Initial Operating Capability - Data Management and Communications (DMAC) Subsystem of IOOS® http://ioos.gov/library/dmac_implementation_2010.pdf

- **NDBC/NODC/IOOS Archive Project**: Derrick met with Ken Casey, Steve Rutz, Tom Ryan, and Mathew Biddle from NODC to discuss the NDBC/NODC/IOOS Archive project. Metadata and file format issues are nearly resolved and the testing of the automatic synchronization of NDBC/NODC ftp sites is set to begin in December. The initial testing will focus on NDBC Weather Buoy data with other program and platform types to follow throughout the year.
- **IOOS Biological Observations Project:** Data/metadata, integration, mapping data to terminology, deploying Web services (for access, discovery, and query), responsibility, and time line were all topics of discussion. Hassan's upcoming trip to Hawaii (December 6 – 10) was discussed; the purpose is to meet with project partners and to discuss customer requirements and data connection to users' applications.
- **IOOS/NCCOS Water Quality Project:** Rob and Jeff met with Doug Pellerin and Oren Perez (NCCOS) to continue moving forward on defining the encoding specifications for water quality data collected by Florida International University (FIU). The meeting's discussion focused on how to best represent the methods or procedures used for a sample in the encoding schema.
- **DMAC FUNCTIONAL AREAS**
    - IOOS Data Catalog (http://www.ioos.gov/catalog/):
        - Metadata regarding the gridded datasets in the Catalog is available in the Web Accessible Folder (WAF) at http://www.ngdc.noaa.gov/metadata/published/iso/IOOS/. This WAF has been harvested by the GEOSS Portal at http://www.geoportal.org/web/guest/geo_home. The WAF will be enhanced with metadata about the in situ data servers (SOS).
        - V2: Tasks for enhancing the Catalog in collaboration with NGDC and GMRI are being planned. Feedback from users about Catalog functionality is welcomed - please contact Jeff.deLaBeaujardiere@noaa.gov.

Interagency Project Collaboration: The Z-Grams are certainly focused on providing information on IOOS® connections to these projects and it is not intended to provide programmatic updates of these specific projects because they all have project leads.

- **High Frequency Radar/Radio (HFR):** Jack is coordinating a CODAR component of the Great Lakes EPA-sponsored freshwater HF radar field experiment to be deployed next spring. He is working with GLOS, Clarkson University (MARACOOS), CODAR Ocean Sensors Ltd., and the HF Radar Technical Steering Team to design a field test. He is also working to obtain loaner radar and build a field team.

- **IOOS and Links to the National Water Quality Monitoring Network:** No update.
- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** No update.
- **Modeling Testbed**: Doug, Zdenka, and Charly held a conference call with NWS/NCEP Director, Louis Uccellini, to review the status of Testbed work to-date and discuss issues and challenges, particularly for NOAA, per sustainability of this work under several different scenarios. This was an extension of discussions from June during a meeting of senior NOAA ocean modelers at NCEP/Camp Springs. Several follow-up items were agreed to, including a meeting in December with Zdenka and SURA's Jerry Drayer.

Other:

Regional Coordination Workshop and RA reviews were successfully completed. Sincere thanks to Dave Easter, Josie Quintrell, Cassie Durette, and Charlie Alexander, who organized a superb meeting. On the first day we engaged the Interagency Members of IOOS and saw many new faces from our Federal Partners. Thank you very much to David Kennedy, Acting Assistant Administrator - National Ocean Service (NOAA) and IOOC co-chair, who lead the first day-and-a-half of the workshop. We appreciate the generosity of his time given the very demanding duties of the AA. We were very pleased to have the new National Ocean Council staff join us for the meeting. The first day was spent presenting case studies that combined the National (Federal) and Regional support to the areas of Marine Operations, Water Quality, Coastal and Marine Spatial Planing, and Climate Change and Ocean Acidification. Thank you to Margaret Davidson, Ned Cyr, Dick Feeley and Libby Jewett (from NOAA) who also participated in the panels. On the second morning we had, as David Kennedy stated, a "Rock Star" panel to talk about the Federal Agencies need for Ocean Observing. Thank you to Dr. Robinson, Assistant Secretary of Commerce for Conservation and Management and Deputy Administrator of NOAA; Jerry Miller - White House - Office of Science Technology and Policy; Bob Winokur, Deputy Oceanographer/Navigator of the Navy; and Major General Bill Grisoli, Deputy Commanding General for Civil and Emergency Operations, United States Army Corps of Engineer for their time an insight.

On day three the IOOS office held a review of the IOOS Regional Associations and ACT. Each of them provided us with successes and challenges and I offer them below:

Success:

SECOORA:

- Process complete for fiscal independence

- Development of Strategic Priorities Plan, which guided the proposal process and will inform the development of a concept of operations plan
- Full engagement with the South Atlantic Alliance as a member of the Executive Planning Team
- Expanded communications via a new Website and newsletter delivered biweekly

SCCOOS:

- Glider mission map visualization available online; Partnership with RISA, Pacific Ocean RAs
- Statewide CA HAB website development and partnership with HABMAP & Bight '10 collaboration
- Integrated website for Point Mugu Naval Air Station (NAVAIR) & NWS Marine User Site
- Pressure sensor burial & video cam installation to validate wave-driven inundation model
- Education and Outreach: Ocean Observing Podcast with COSEE NOW/CeNCOOS; Aquarium of the Pacific and Wrigley Institute

PacIOOS:

- CMSP Proposal through State ORMP - PacIOOS/SOEST MSP effort via cable survey
- 3 HF Radars online covering Oahu's south shore; in-kind support from USCG to calibrate & validate them (ship time and 70 drifting buoys)
- NOAA Collaborations: Working to integrate inundation & water level forecast into NWS coastal flood warnings; Partnership with PSC to develop education & outreach content for flat-panels in public places; PIFSC/NMFS IEA along Kona Coast--PacIOOS providing DMAC infrastructure & ROMS models

NERACOOS:

- Led New England and Canadian Collaborative Planning Initiative – 13 regional organizations
- Supporting CMSP in the NE working with NROC
- Incorporating new information and products: 2 new stations including DeepCWind buoy, right whale buoys; Bottom DO prediction tool for Long Island Sound
- Expanding Outreach and Education Activities

NANOOS:

- Benefited from awards from Murdock Charitable Trust made to the University of Washington Center for Coastal Margin Observation and Prediction (CMOP) for ~$1M observing assets; activity leveraged many regional partners
- Collaborative efforts with Native Americans in ocean observing via NANOOS, leveraging CMOP, involving students & faculty at Northwest Indian College, etc
- Accessible to wider audiences via iPhone/Droid & Facebook

- Actively engaged in CMSP with West Coast Governors' Agreement and the three west coast RAs, and also within PNW region; NANOOS co-hosted workshop at OCEANS 2010 with WA and OR state agencies and TNC

MARACOOS:

- Leveraging and partnering has led to MARACOOS success in serving its primary themes observing assets; activity leveraged many regional partners
- HF Radar and STPS operational in US Coast Guard Search and Rescue (SAROPS): 80-80 goal and diverse fisheries groups fully engaged
- Addressing new theme needs through expanding local successes in water quality and inundation (CIPS; Testbed) to regional scale
- Seizing opportunities of offshore wind power
- Increase in interest (meetings) and membership (up 50%)

GLOS:

- Completion of strategic plan/revised business plan
- Great Lakes Restoration Initiative funding
- Canadian-America GEO Great Lakes Test Bed

GCOOS:

- Prepared layout for build-out and operation of a comprehensive GCOOS with initial cost estimates.
- Enhancing data portal with federal and non-federal data sets, model output, and historical data sets.
- Initiated SW Florida data integration pilot project with collaboration of GOMA.
- Provided significant, interoperable, routine, non-federal data assets immediately for oil spill response.

CeNCOOS:

- Launched the CeNCOOS data portal and products; wave climatology, glider transects, SST&Chl, Drop-In Drifter
- Launched First Podcast and Video; In partnership with COSEE NOW and SCCOOS
- Improving HAB research, connectivity and outreach
- Strengthening Partnerships: OPC SAT's Ocean Observing Consensus Statement; State Passes Resolution to Support Ocean Observing - http://www.opc.ca.gov/2010/02/opc-meeting-march-3-2010/; Fantastic California and the World Ocean Conference Presence!; Coordinated Letter to West Coast Governors Agreement and NOAA CMSP Federal Funding Opportunity

CaRA:

- Deployment and operation of CariCOOS core observing system: Two coastal data buoys and twelve coastal weather stations providing essential (and unprecedented) real-time wind, wave and current data
- CariCOOS data and product interface in use by diverse coastal stakeholder sectors including federal (NWS, USCG), State and private sectors (maritime, recreational and media)
- CariCOOS - NWS San Juan WFO collaborative implementation & validation of weather (WRF) and wave (SWAN) models supporting regional forecasts
- Development of a wide partnership base (University of Maine, WeatherFlow Inc., PR DNRE, DHS Center for Secure and Resilient Maritime Commerce, Rutgers University, TAMU, NOAA Coast Watch, European Space Agency), promoting regional human and technological resource development

AOOS:

- New Transition Data Portal now functional with four interactive applications
- Three successful stakeholder/scientist workshops on NFRA themes to help prioritize AOOS future activities
- Successful Prince William Sound demonstration project: Integrate obs with models & provide dynamic forecasts for users; expand to Cook Inlet: held modeling workshop; formed a Cook Inlet Modeling group, facilitating interaction between circulation, wind, and wave modelers to improve science and forecasting in Cook Inlet
- First CDIP wave buoy to be deployed in Alaska
- Support for long-term ocean acidification monitoring: GOA & Arctic

ACT:

- Completed pCO2 analyzer Demonstration
- Supported development of HAB detection technologies and methodologies
- Collaborating with USGS and NWQMC on Methods of Environmental Measurements and Observations (MEMO)

Challenges

- Federal agency "vestedness" in IOOS & RAs; Recognition/appreciation as a priority program to augment & help implement
- Diverse constituents/target audiences
- No real willingness to pay for monitoring
- Managing expectations and capabilities according to funding level; prioritization of assets in the water
- Image of IOOS/ocean observing as a bluewater academic enterprise
- Working with regional organizations as they react to the National Ocean Policy and funding opportunities
- Orchestrating leveraged opportunities into continuous, sustained operation, Inability to budget for contingencies (repairs, replacements) under level funding budgets; logistical difficulties of operations and maintenance

- Recruiting and maintaining voluntary data providers
- Finding other funding sources; labor intensive

Congressional: No Update
Communications and Outreach: No Update
IOOS Conference Involvement: Highlights those conferences where IOOS is a sponsor or has a session: No update
Upcoming Meetings: To see the IOOS calendar, please visit:
http://www.usnfra.org/calendar.html or http://ioos.gov/calendar/

- CMSP Discovery Variables Workshop: Derrick; December 1-3; Woods Hole, MA
- CMSP Data and Tools Team Meeting: Charly; Thurs December 2, (conference call) Silver Spring, MD
- Modeling Testbed Coastal Inundation Meeting: Doug; December 6 & 7; Chapel Hill, North Carolina
- IOOS Biological Observations Project Meeting: Hassan; December 6 – 10; Hawaii
- NOAA Data Archiving Working Group (DARWG) Meeting: Jeff, et al., December 8-10, Silver Spring, MD

Cheers,
Zdenka

--