#### Bi-Weekly Z-GRAM - 10 July 2009 <u>www.IOOS.gov</u> Note new website name - we just launched the US IOOS website - check it out

The Z-Gram is an informal way of keeping you up-to-date on IOOS<sup>®</sup> 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:**

- Congressional Report: No change.
- **Congrats:** Congratulations to Carl Gouldman who competed successfully for the Division Chief/PPEBS Program Manager in IOOS. No stranger to IOOS; Carl will start his new position on 19 July. He will then be officially designated as the PPBES program manager. I have been the program manager but Carl has been doing the heavy lifting.
- FY09: Congrats to the following on FY09 IOOS awardees. As always I recognize that there are many partners involved in each award and I am listing the organization and institution for the IOOS Regional Associations and Regional Coastal Ocean Observing Systems (RCOOS) Awards. For the final year of our IOOS projects I will list the lead PI and institution. IOOS Regional Association Awards: AOOS - Seward Association for the Advancement of Marine Science; CaRA – University of Puerto Rico; CeNCOOS – MBARI; GCOOS – Texas A&M Research Foundation; NANOOS – University of Washington; NERACOOS - Woods Hole Oceanographic Institution; PacIOOS -University of Hawaii; SECOORA - South Carolina Sea Grant Consortium. For RCOOS development: NERACOOS - Woods Hole Oceanographic Institution; NANOOS -University of Washington; SECOORA – Center for Marine Science, UNC-Wilmington; GCOOS - Texas A&M Research Foundation; CaRA - University of Puerto Rico. IOOS Applications: MACOORA – CIPS Chesapeake Research Foundation (Kevin Sellner); SECOORA - University of North Carolina, Chapel Hill (Rick Luettich); SECOORA -University of Florida (Peter Sheng); GCOOS – Texas A&M (Ann Jochens). Sensor Validation and Verification: The Alliance for Coastal Technologies (ACT) - University of Maryland.
- FY10: No change.
- FY11: NOAA is in the process of answering questions from DOC regarding our budget submission. Like other programs we have been responding to quick turnaround questions.
- FY12-16: No change.

## Initial Operating Capability - Data Management and Communications (DMAC) subsystem of $IOOS^{\circ}$

In FY09 we are focused on 6 areas for this subsystem: (1) Data Integration Framework (DIF) support to Customer Applications; Harmful Algal Blooms Forecast System (HAB-FS); Integrated Ecosystem Assessments (IEAs); Coastal Inundation; Hurricane Intensity; (2) DIF

Regional Implementation; (3) DIF Evolution & Enhancements; (4) Development of the best approach to DMAC; (5) High Frequency Radar (HFR) – A National Network; and (6) Continue strong support, with the Interagency Working Group on Ocean Observations (IWGOO), to the IOOS DMAC Standards Process and working with the DMAC Steering team.

- IOOS DMAC Standards Process Get Involved: http://ioosdmac.fedworx.org/ioos/dmac.nsf/WhatsNew?OpenForm
- What the <u>DIF</u>: For all documents and information, please visit the <u>www.ioos.gov</u> website.
  - <u>IPT Workshop (August 11-12)</u>: The NOAA IOOS IPT is having a two-day workshop, August 11-12, in Silver Spring. The workshop will focus on four data management activities: Metadata, IT Security, Archives, and Registries. Presently, findings and recommendations for moving forward in each of these areas are being developed to be briefed at the workshop.

## • **CUSTOMER IMPLEMENTATION**:

- <u>Hurricane Intensity</u>: NOAA's National Center for Environmental Prediction (NCEP) has finished experimenting with the assimilation of DIF data for the basin-wide model, which means the first test case, Hurricane Emily, is complete. The basin-wide model run is a crucial first step to successfully running the coupled model.
- <u>Harmful Algal Blooms</u>: NOAA's National Centers for Coastal Ocean Science (NCCOS) is working to complete the HABs forecast analysis using modeled currents from NOAA's Coast Survey Development Laboratory (CSDL). The operational HABs Bulletins from the study period (November 1, 2004 to January 31, 2006) will be used as the baseline forecasts. These baseline forecasts will be evaluated against hindcasts of bloom events, in the study period, using the new modeled current data.
- <u>REGIONAL DIF IMPLEMENTATION:</u> No change.
- **<u>DIF ENHANCEMENTS:</u>** 
  - **NDBC**: A new version of DIF services has been released on the NDBC website. A subset of CO-OPS data collections are now available through NDBC's site and are also being incorporated into the enhanced SLOSH Display Project.

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

- Interagency Modeling Activities: No update.
- **IOOS and Links to the National Water Quality Monitoring Network:** We will be having a Webinar: *Gulf of Maine Data Exchange* on July 15 from 10:00-11:30 AM. To participate: <u>https://usgs.webex.com/usgs/j.php?ED=123567342</u>. Teleconference number: 218-844-0840, passcode 356188#. Meeting number: 713 909 322. Meeting password: (This meeting does not require a password.) For those new to WebEx, please check and prepare your computer a day or two in advance of the meeting by doing as follows: (1) Start your web browser; (2) Visit <u>http://usgs.webex.com</u>; and (3) Select Setup/Meeting manager (left side of page).

• IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI): No update.

#### **Other:**

- The Scarlet Knight (RU27) crosses the half-way point: The Scarlet Knight has crossed the half-way point of its trans-Atlantic journey– traveling 4,270 km in 70 days. Sign up for the daily blogs and follow along: <u>http://www.i-cool.org/?cat=38</u>
- **IOOS in Action through SECOORA**: SECOORA partners at the University of South Florida have worked with the The National Park Service (NPS) to put the Everglades Marine Monitoring Sites data online. Approximately 25 in-situ sites are now online on the National Data Buoy Center (NDBC) site. Currently water temperature and tide data are getting pushed to NDBC. This is an important milestone as to getting the NPS data on the NDBC map.
- Rate NOAA's water level, tidal current products, and customer service: The NOAA NOS Center for Operational Oceanographic Products and Services (CO-OPS) invites customers to participate in an American Customer Satisfaction Index Survey. Your participation would help CO-OPS improve its water level and tidal current products and customer services. For over 200 years, CO-OPS and its predecessors have gathered data along our nation's coasts and turned those data into meaningful information to protect life, property, and the environment. CO-OPS would like to determine user satisfaction and would appreciate your feedback. CFI Group, an independent research and consulting firm, is conducting this survey, which will take approximately 20 minutes to complete. The survey is hosted via a secure server and responses will remain strictly confidential and anonymous. We would greatly appreciate it if you would take a few minutes to rate CO-OPS performance via the Internet by clicking on the link below. Click on the following link to start: <a href="https://svy.cfigroup.com/cgi-">https://svy.cfigroup.com/cgi-</a>

<u>bin/qwebcorporate.dll?idx=9W8NQD&rk=MG6UFW</u>. RAs and RCOOSs are invited to include the link on their websites as appropriate. Questions about the survey can be directed to <u>Diana.Perfect@noaa.gov</u>.

- **IOOS in Action through GCOOS:** GCOOS will be the recipient of ocean data collected at a wind platform off Texas. Researchers from Texas A&M University have deployed the state's first water quality monitoring system off the Texas coast to provide hourly updates on water temperature, salinity, oxygen, waves, and other information, and the system has already provided an important finding it has detected low oxygen levels indicating the return of the dead zone to coastal Texas. Read more: <a href="http://geosciences.tamu.edu/communications/news/28-oceanography/533-new-gulf-monitoring-system-detects-texas-dead-zone">http://geosciences.tamu.edu/communications/news/28-oceanography/533-new-gulf-monitoring-system-detects-texas-dead-zone</a>
- Meeting with Florida Atlantic University (FAU): I met with Dr. Camille Coley, Mr. James Murley, and Mr. Frank Steinberg of FAU. They briefed me on the climate and offshore energy work they are doing. We discussed how to expose FAU data to IOOS through SECOORA, update on HFR systems that will soon be online, and their modeling efforts. We talked about connecting FAU to the Integrated Ocean and Coastal Mapping program through NOAA's Coastal Services Center's Digital Coast to give FAU further insight on the usability of the Lidar data they have. I look forward to continued dialog and partnership with FAU.

Visit with PacIOOS: 3 days, 17 meetings, a hike to see the first PacIOOS High • Frequency Radio, some up-close observing on Reef 42, 2 dinner meetings and a breakfast meeting - we covered the waterfront. PacIOOS has been working hard on all fronts. They have installed both water quality sensors and buoys, partnered with NOAA's Pacific Marine Environmental Laboratory (PMEL) in the launch of coastal carbon buoys; they are working closely with the Kilo Nalu Observatory Group to extend sensors on the cable in conjunction with REMUS deployments; they are setting up high resolution mesoscale modeling and data assimilation along with glider runs to provide the 3D data to the model; they are working with stakeholders for port and harbor reports; they've completed extensive outreach and education that have included TV spots, lecture series at the Outrigger Hotels, Hanauma Bay, Kona ReefTalks, and Waikiki Aquarium, events at the Bishop Museum and work on educational efforts targeted at the 4th- and 5th-grades entitled, "A Teacher's guide to Navigating Change"; and putting into place the PacIOOS DMAC system. In partnership with Sea Grant, PacIOOS is working to collect observation and information needs as the Hawaii SeaGrant collects the research needs and information. We met with a number of NOAA programs including the National Weather Service Pacific Region, Pacific Services Center (PSC), Pacific Fish Science Center -Coral Reef Ecosystem Division (CRED), and the Superintendents (NOAA and the State of Hawaii) for the Papahanaumokuakea Maine National Monument. We discussed how PacIOOS could be more involved in NOAA's Regional effort. We will support NWS's region-wide effort to determine observation needs and on educational and data management efforts with PSC. We had a great discussion with Dr. Rusty Brainard, CRED, on his extensive observation system - a true ecosystem observation system - and how we can all work together to bring in the full suite of biological, physical, and chemical oceanographic variables. His efforts in observing coral reefs and baseline of ecological information is very important work being conducted through the NOAA Corals Program. We look forward to partnering with CRED and the data efforts underway at the Monument and with PacIOOS as we put more focus on incorporating the full suite of ecosystem data into IOOS DMAC. We met with the United States Coast Guard District Commander, Rear Admiral Manson Brown, to discuss how PacIOOS and specifically the HFR can support local operations. We met with the United States Navy's Naval Maritime Forecast Center and the Department of Defense Joint Typhoon Warning Center to understand their needs. The meeting resulted in PacIOOS being invited to provide the Navy and Air Force a full briefing on their capabilities in August. The hike to the first HFR on Koko Head (first data received on 9 July) reinforced what we need to go through to set up the observing systems. PacIOOS has been working diligently on siting permits and this often takes tremendous coordination among many parties. Discussions with the Center for Island Climate Adaptation and Policy, and with the Office of Hawaiian Affairs, gave me insight into the local needs. Finally, my visit to the Hawaii Institute of Marine Biology was a great way to conclude my trip, to talk about the exciting research being done at the Institute and the fascinating work being done by Whit Au of the Marine Mammals Group. Thank you to Dr. Brian Taylor, Dean, University of Hawaii at Mānoa, School of Ocean and Earth Science and Technology, and Chris Ostrander for their hospitality. Special thanks to Chris, who did the heavy lifting and for all his efforts as the PacIOOS Regional Coordinator. He has done an amazing job leading PacIOOS to where it is today. I look forward to continued greatness.

- Public Input Requested on Ocean Strategy Plan: Charting the Course for Ocean Science in the United States for the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy (Charting the Course) were published in January 2007. 'Charting the Course' was based on input gathered from public and private sources over a period of several months, and it has provided a basis for coordinated ocean science and technology investments. In view of scientific advancements and recognition of new ocean management challenges, the Joint Subcommittee on Ocean Science and Technology (JSOST) is embarking upon an effort to update and refresh 'Charting the Course.' A Federal Register Notice has been published that solicits public input to inform the drafting of an updated 'Charting the Course.' Public comments can be submitted to comments@jsost.org and must be received by July 17, 2009. A full version of the notice can be found in the June 22, 2009 Federal Register, Vol. 74, No. 118.
- NOAA SeaGrant publishes, "Report: West Coast needs more research on fisheries, marine science, climate change": NOAA provided funds through the National Sea Grant College Program to develop regional plans in coastal regions around the country. The Washington, Oregon, California, and University of Southern California Sea Grant programs partnered to develop a marine research and information plan for the West Coast region. The primary goal of this Sea Grant West Coast planning process has been to identify continued and new research and outreach related to the California Current Large Marine Ecosystem (CLME) that would contribute to the transition toward an ecosystem-based approach to ocean and coastal management. The document is the culmination of nearly three years of input from state, federal, and tribal agencies, as well as extensive public comment gathered from Web surveys and at 16 workshops held in California, Oregon, and Washington in 2007-2008. IOOS and the IOOS West Coast Regional Associations are included as strong partners in achieving the research needs outlined in the report. For more information:

http://www.csgc.ucsd.edu/NEWSROOM/NEWSRELEASES/2009/WestCoastRegionalR eport.html

• MACOORA launches a new website: Check it out! http://www.macoora.org

#### **International News:**

• Australian Integrated Marine Observing System (IMOS): Announces public access to all of its data-holdings through the IMOS Ocean Portal (http://imos.aodn.org.au). IMOS is a nationwide collaborative program designed to observe the oceans around Australia, including waters over the continental shelves and the 'bluewater' open oceans. IMOS will provide data to support research on many of the critical issues facing Australia, most importantly the role of the ocean in climate change and the sustainability of marine ecosystems that are under pressure from climate change. The development of IMOS, based at the University of Tasmania, began in 2007, and received a major boost from the government's Super Science Initiative announced in this year's budget. The program is now set to run at least until 2013. The IMOS records are currently focused on the major boundary and ocean currents and the offshore environments along the 30,000-km-long Australian coast. IMOS includes national facilities for Argo floats, ocean gliders, moorings, coastal radar networks, and ocean remote sensing. In many cases IMOS is using technologies that have never been used before in Australia.

# **Congressional:** No update. **Communications:**

• Just posted on <u>www.ioos.gov</u>: 'Linking IOOS with the Integrated Ocean and Coastal Mapping'

### **Upcoming Meetings:**

- 19-23 July: Coastal Zone '09 Rob Ragsdale is presenting and Carl Gouldman is attending for the NOAA IOOS Program Office
- 26-30 July: AOOS site visit
- 11-12 Aug: DIF IPT workshop, Silver Spring

Cheers, Zdenka