

Bi-Weekly Z-GRAM - 24 November 2009

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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.

Programmatic:

- Farewell: As quickly as we bid a welcome to John Ulmer we say farewell. He landed a full time position that will keep him in Charleston, SC.
- **Congressional Report:** In review at OMB
- **FY10:** We remain in a CR until 18 December 2009.

Initial Operating Capability - Data Management and Communications (DMAC) subsystem of IOOS®

- **What the DIF:** For all documents and information, please visit the www.ioos.gov website.
- **IOOS DMAC ENHANCEMENTS and TECHNICAL EFFORTS:**
 - **IOOS Registry, Catalog and Viewer (RCV):** The requirements document was revised based on input received from the IPT, WSDE and RDI and redistributed to these groups.
- **IOOS DMAC CUSTOMERS - We always welcome your participation. If these projects intersect with what you are doing and you want to be a part of the action, please contact Charly Alexander - charles.alexander@noaa.gov**
 - **Coastal Inundation:** Enhanced SLOSH Display Program was successfully used during Tropical Storm Ida (Nov. 9-10, 2009) for the Gulf of Mexico coastline near Mobile, AL. The information was used in a Hurricane Local Statement issued by Weather Forecast Office (WFO) New Orleans at 9 p.m. November 9. Excellent feedback was received from WFO forecasters and emergency managers that viewed the time series of water levels and winds. The SLOSH Display was used again November 11-14, 2009 during a Nor'easter (remnants of TS Ida) off the North Carolina coast. One WFO (NYC) used the SDP for that time frame and the National Hurricane Center (NHC) used it to monitor water levels. A final project meeting to discuss recent feedback, suggestions and possible next steps will be scheduled for the Dec./Jan. time frame.
 - **Coastal Inundation follow on projects:** A conference call was held on 11/23 to discuss ideas for a follow on CI project. Participants included: WFO Wakefield (Tony Siebers), TPC (Jamie Rhome), CSC (Dave Eslinger), new NOAA Storm Surge Portfolio Manager Jesse Feyen from CSDL, MDL (Will Shaffer), and IOOS Program Office (Carmel, Alex, Jeff, Marcia). General agreement was reached to focus on an evaluation of IOOS funded CI projects and identify needed

datasets and standards used, as well as visualization systems in use, and assist suppliers in implementing IOOS standards.

- **Climate Project:** A climate project has been proposed to Tom Karl for nesting ocean model outputs into higher resolution coastal models. Funding needed to move forward on this project
- **Marine Mammal Tracking/Monitoring:** Jeff met with Greg Silver and Shannon Bettridge (NMFS Office of Protected Resources) and Jack Harlan regarding use of HFR for whale recovery activities.
- **SAVE THE DATE: IOOS Regional DMAC Workshop scheduled for March 23-24, 2010 in Silver Spring, MD:** We have begun working with the Regions on potential agenda items. In the next few weeks, a steering team will come together to begin process of developing the agenda.
- **Regional SOS Implementation:** Rob Cermak (AOOS) is working with Damian Ruiz (CaRA) to establish SOS Web services in the region. A conference call was set up on 11/16 to facilitate discussion between Rob and Damian on first steps for implementing SOS in CaRA. The SOS server is up, but now data must be sent to the database. CaRA's data should be visible in SOS Web Services by the end of December.

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.

- **HFR Frequency Management Update:** Dr. Lubchenco and NFRA both signed out letters of support for the US proposal to obtain operational frequencies for HFR. Jack Harlan is working with IWGOO members to obtain similar letters from their agencies.
- **IOOS and Links to the National Water Quality Monitoring Network:** No update.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** No update.
- **Interagency modeling activity:** No update.

Other:

- **VICTORY The Scarlet Knight (RU27):** The Rutgers team will leave the United States on 30 November to prepare for the pick up of Scarlet Knight. Between heavy weather, compensating for biology, currents that have proven at times to be difficult to traverse and dodging heavy shipping traffic, the mission is not complete until Scarlet Knight is successfully recovered. Working in partnership with Peurtos del Estado, PLOCAN, Universidad de Les Palmas and the University of Azores the team will get underway on 1 Dec to recover Scarlet Knight. It has been a real team effort to get this far and keep your fingers cross as good luck is always helpful in these missions. The town of Baiona, Spain has graciously offered to host the landing event of Scarlet Knight and the entire town is participating. I have attached pictures from the school children who are counting down the days to this event. <http://www.i-cool.org/?cat=38>.
- **IOOS SUCCESSFULLY demonstrated at the GEO VI; Busy week with Plenary, IGOS meeting and GEOSS Americas symposium 17-20 November:** Sincere thanks to Jeff DLB who organized a superb demonstration of IOOS at the US GEO booth. We

were able to show good collaboration across our partners with Ken Casey and Tess Brandon (National Oceanographic Data Center, NODC & GHRSSST), Darrell Duncan (NDBC/SAIC), Bill Sweet (CO-OPS), and Arthur Taylor (NWS & SLOSH Display Program). Thank you very much to SAIC who provided their demo and Darell to support us. We had a chance to brief Dr. Lubchenco, Dr.. Marcia McNutt (United States Geological Survey); Alice Hill - Senior Counselor DHS; Mary Glackin Deputy Under Secretary, NOAA; other Senior US government officials and delegates from the 81 GEOSS members. Each of our presenters did a great job and IOOS was well received. The United States was very fortunate to have Shere Abbot, Associate Director, Energy and Environment Division, White House Office of Science & Technology Policy (OSTP) chair the meeting. I attended, as part of the US Delegation, the 2 day GEOVI Plenary and it was highlighted that this meeting focused on content outcomes of GEOSS and was a great success. This was followed by the IGOS Symposium and the GEOSS Americas where the Coastal Zone Community of Practice efforts were highlighted. Paul DiaGiacomo, Co-Chair, on the Panel on Integrated Coastal Observations, Global Ocean Observing System (GOOS) has been working on an implementation plan for the coastal component of GOOS worldwide. He along with Michael Bruno, Stevens Institute and their fellow international co-chairs have been conducting workshops on best practices for Coastal Zone communities. A workshop is being in planned in Fall 2010, under the GEOSS Americas' banner with IOOS CaRA partially sponsoring this effort. IGOS which produced a number of excellent strategic documents has now merged into GEOSS and concluded its efforts. GEOSS Americas is an effort under GEOSS that focuses on terrestrial, atmospheric and oceanic issues across North and South America. Efforts include GEONETCast (led by NOAA NESDIS) - which uses GOES satellites and a downlink station that provides environmental products to areas without internet; Mexico Bi-National Harmful Algal Bloom Observing System (HABSOS) {led by NOAA's National Coastal Data Development Center, under NODC} and the SERVIR program (led by NASA) to name a few. Helen Wood, NOAA's GEOSS manager kicked off GEOSS America's event, hosted by our Canadian partners at the Canadian Embassy, and Jack Dunnigan, NOS AA provide a look a head.

- **MACOORA Annual Meeting (Portsmouth, VA; Nov. 17-18):** The theme of the meeting was *Understanding the Coastal Ocean: Partnerships for a Changing World*. Over 135 participants, from 70 different organizations and eleven different branches of NOAA, attended. Jack Dunnigan provided the kick off from a Federal partnership perspective. Suzanne Skelley, Marcia Weeks, Rob Ragsdale attended from the NOAA IOOS Program. Marine Spatial Planning, climate change, alt. energy (specifically, wind), and water quality were common themes. Better communication of the data and about the data to the public and emergency managers was a thread carried through the workshop presentations. On day one, a water quality breakout session, with a focus on needs and requirements, was facilitated by Bob Tudor (Delaware River Basin Commission). Other breakout sessions covered coastal inundation/climate change, maritime safety, ecological decision making, and alternative energy. A few of needs of the water quality group included higher spatial resolution of observations in coastal waters between estuaries and three miles offshore for coastal assessment reporting, improved visualization tools and better predicative modeling capabilities, and better exposure of the data for public use. On day two, in one of two workshop session, Eoin

Howlett briefed on DMAC - presenting common components in a simplified, easy to understand way. For more information about the meeting and MACOORA:

<http://www.macoora.org/annualmeeting.html>.

- **Chesapeake Bay Inundation Prediction System (CIPS) Project Presentation (Portsmouth, VA; Nov. 18):** Following the MACOORA Annual Meeting, the CIPS PI's briefed the project with data collected during the recent mid-Atlantic Nor'easter event (Nov. 11-14). As a result of this presentation, NWS' David Green (OCWWS) and Ken Pavelle (OHD) requested a follow-up briefing about the CIPS's performance during the November 11-14 Nor'easter. A seminar has been scheduled for December 11, 2009. The agenda for this brief was developed in cooperation with David G., Ken P. and Jesse Feyen and discussed with CIPS PI's on November 24, 2009.
- **Scrapps DataZoo Biological Database:** The DataZoo database is a regional data repository and publishing system currently in use by multiple projects including the California Cooperative Oceanic Fisheries Investigation (CalCOFI) and two Long Term Ecological Research (LTER) sites, California Current Ecosystem (CCE), and Palmer (PAL). DataZoo provides a web-based interface to a database storing multidisciplinary data, metadata, and study information. IOOS funded the web access of zooplankton data from CalCOFI as well as the Monterey Line in FY08 and FY09.
- **CeNCOOS in Action: San Francisco Bay Web:** A fact sheet has been released on the CeNCOOS website detailing the SF Bayweb project (Part I and Part II) conducted from May 1-Aug 6. The goal was to collect data on ocean currents and demonstrate the feasibility of using advanced moorings combined with undersea and wireless networking to move real-time data to the internet. Although real-time transmission of data was unsuccessful, useful information on the subsurface currents in SF Bay was gathered. <http://www.cencoos.org/>
- **UMD and GLOS in action: Underwater Glider in Lake Superior:** On September 26th 2009, Jay Austin, professor at the University of Minnesota, Duluth successfully recovered his Autonomous Underwater Glider (AUG) after a 9-day data collecting mission. During its mission, it "flew" around 250km in the Western Arm of Lake Superior, making an equivalent of nearly 1000 CTD casts. "While running it can be a bit un-nerving, this thing is really cool and provides a sort of data impossible to collect from ships or moored platforms," Austin said. "Hopefully this is just the first of many gliders in the Great Lakes!" Currently, the data the AUG is collecting is limited to temperature. Eventually Austin would like to collect data on a wide range of things, from oxygen levels to chlorophyll content. For more information contact: Jay Austin at jaustin@d.umn.edu
- **PacIOOS in Action: Water Quality Systems:** PacIOOS has begun fabricating water quality systems for deployment in the broader Pacific Islands region. Within the coming months, systems will be deployed in the Republic of the Marshall Islands, American Samoa, Guam, the CNMI, and the Federated States of Micronesia. These systems will server realtime data on water properties from coastal locations deemed important by local stakeholder bodies.
- **SECOORA Update on the Basic Observation Buoy (BOB):** BOB network is growing! BOB, a scaled-down, but operational, floating buoy is an instrumented platform that can carry a suite of environmental sensors. BOB is designed for quiet waters, moored to the bottom or a dock. Another version of the BOB is the Fixed Local Observation (FLO), a

device fixed to a piling or dock structure. In January 2009, Doug Levin from the NOAA Chesapeake Bay Office guided SECOORA researchers and educators through a 2-day workshop to construct 20 BOBs, seven equipped with sensors. The workshop was funded through COSEE SE and hosted at SkIO. As participants began testing their BOBs, they discovered a need for an online data entry port to post data and share information. A beta version of a data entry port has been developed, thanks to UNC Wilmington and SECOORA. A few people are now pilot testing the port before it goes to the BOB network. For more information contact Lundie Spence, Lundie.Spence@scseagrant.org

- **NANOOS: New Capabilities:** Rhythms of the Coast, an online interactive learning tool, lets users explore how salinity within the Yaquina Bay Estuary changes over the course of a year (daily and seasonally). Designer Sarah Mikulak, part of NANOOS' Education and Outreach team, says the tool seeks to "... facilitate the public's understanding of the natural variability within an estuary, ultimately helping them make more informed decisions about the environment. The learning tool uses data from NANOOS member WET Labs' Land/Ocean Biogeochemical Observatory (LOBO)'s sensor from 2006 — 2008, and rainfall data averaged over 10+ years from USGS. Rhythms of the Coast, developed with funds from WET Labs and partially supported by NANOOS, is also a computer based exhibit at the Hatfield Marine Science Center Visitors Center in Newport, OR. See http://www.nanoos.org/education/learning_tools/lobo/lobo_exhibit.php.

Congressional:

- Suzanne and April had very successful meeting with House Natural Resources Majority Staff (Dave Jansen) and Senate Commerce Minority Staff (Mike Conathan). Both the House and the Senate was encouraged by the efforts IOOS is making towards beginning to implement the ICOOS Act and requested that NOAA provide routine updates.

Communications:

- Scarlet Knight news: Impressive article in El Pais http://www.elpais.com/articulo/sociedad/robot/submarino/cruza/Atlantico/elpepusoc/20091125elpepusoc_10/Tes
- Connect to Scarlet Knight Video: <http://rucool.marine.rutgers.edu/atlantic/press.html>
- DAILY ASTORIAN, Tuesday, November 24, 2009: *Newly installed buoy crashes - Storm knocks out two wind meters* by Cassandra Profita. Continues to demonstrate that Ocean Observing is HARD.
- NEWSROOM NEW JERSEY (Web news site); *Rutgers' robotic underwater glider reaches Spanish waters*; Wednesday, 25 November 2009 by Christina Reed

Upcoming Meetings: For more detail on Regional IOOS meetings go to:
<http://www.usnra.org/calendar.html>.

- November 30: SCCOOS Board of Governors and Executive Steering Committee Meeting at Scripps Institution of Oceanography, La Jolla, CA

- November 30-December 3: NOAA Hurricane Conference - Arthur Taylor to represent IOOS
- December 1: CaRA General Assembly
- December 2-3: DMAC ST Review Meeting - Washington, DC
- December 7-11: Open Geospatial Consortium Meeting: Mountain View, CA - Jeff to represent IOOS
- December 9: Biological Data Project Meeting: Charly, Hassan - Hawaii
- December 9: Scarlet Knight Event, Baiona, Spain: Dr. Jerry Miller, White House Office of Science & Technology Policy; Dr. Rick Spinrad, AA OAR; Dr. Dean Goodman, Dean - Rutgers University; Zdenka
- January 5-7 2010: Earth Science Information Partnership (ESIP): Washington DC
- January 25-26, 2010: IOOS Regional Water Quality Workshop; Baltimore, MD
- February 22-26, 2010: AGU Ocean Sciences Meeting; Portland, OR

Cheers,
Zdenka



NEW JERSEY ES UNO DE LOS 50 ESTADOS DE LOS ESTADOS UNIDOS.
 LIMITA AL NORTE CON NUEVA YORK,
 AL ESTE CON EL OCEANO ATLANTICO,
 AL SURESTE CON DELAWARE Y AL OESTE CON PENNSILVANIA

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CRUZOU XN AS AZORES E
 VEN CANA ÁS COSTAS DE
 DAIONA.

PODERÍA SER O PRIMERO
 ABOOT SUBMARINO
 QUE CRUZE O OCEANO

FALTAN...
 13 DÍAS!