

Bi-Weekly Z-GRAM - 18 Sept 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.

Programmatics:

- Congressional Report: **No change.**
- **Welcome Aboard:** We welcomed two new teammates to the IOOS office on 14 September.
 - Arthur Taylor joins us for a 5-month detail through a Department of Commerce Leadership Program. He hails from the National Weather Service's (NWS) Meteorological Development Lab (MDL) and he has been working closely with us on the DIF Coastal Inundation project. Arthur's principle assignment will be to help define collaboration opportunities with the Ocean Observatories Initiative's Cynberinfrastructure. Arthur joined NWS's MDL storm surge unit where he has worked on storm surge since 1996. The exception was a detail with the National Digital Forecast Database (NDFD) unit to create a decoder now used by more than 5,000 people to access the World Meteorological Organization's (WMO) GRIB2 file formats. While continuing to support the decoder, he designed and implemented into NWS operations the probabilistic hurricane storm surge model for which he received the NWS's highest award: the 2009 Issac Cline award in meteorology.
 - Dr. Hassan Moustahfid joins the IOOS team permanently. We now have our Marine Biologist back on board! Hassan successfully competed for the position vacated by Dr. Becky Shuford. Hassan, formerly from the Ocean Biogeography Information System (OBIS), Institute of Marine and Coastal Science - Rutgers University - where he served as a research program manager and contributed the development of the data quality standard program, expanded OBIS large database to include fisheries independent surveys data and developed the OBIS community portal. Prior to joining OBIS, Dr. Moustahfid was a research associate at the Northeast Fisheries Science Center, Woods Hole, MA. He has published in several journals, including the International Council for the Exploration of the Sea (ICES) Journal of Marine Science, Bulletin of Marine Science, and the North American Journal of Fisheries Management. Dr.Moustahfid has worked on fishery problems since graduate school; his research background is in fisheries oceanography, resource assessment, and ecosystem modeling. He served as a coordinator for the Food Agronomic Organization (FAO) stock assessment working groups in the Central East Atlantic. He was involved in the Nansen Program, "Fisheries Management and Marine Environment," lead by the Institute of Marine Research (IMR), Norway and in the pelagic ecosystem program (Canary Current upwelling ecosystem) lead by the Atlantic Research Institute of

Marine Fisheries and Oceanography, Russia (AtlantNIRO). He participated in more than 20 hydro-acoustic and oceanographic surveys in the Northeast Atlantic, Central East Atlantic and Northwest Atlantic. Dr. Moustahfid is currently serving as a coordinator of the Ocean Tracking Network (OTN) for the Strait of Gibraltar and the Northeast Atlantic tracking projects.

- **Grants Training** for Regional Coastal Component: The IOOS office will provide a Grants training session via webinar scheduled for October 22, 2:00-4:30 PM. Please contact Regina Evans, Regina.Evans@noaa.gov

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.
- **CUSTOMER IMPLEMENTATION:**
- **REGIONAL DIF IMPLEMENTATION:** FY09 goal has been accomplished: **All 11 IOOS Regions are presently serving data in at least one of the IOOS DIF Web services.**
 - Regional SOS Implementation Site Visits: The NDBC site visit to Woods Hole Oceanographic Institute is set for September 23- 24, 2009. Regional DIF Implementation Team members: Eric Bridger (NERACOOS) and Eoin Howlett (MACOORA) will be attending.
- **DIF ENHANCEMENTS:**
 - Ocean Color: Data Content Standards: The IOOS DIF Ocean Color working group collaborated to finalize and update the Ocean Color Data Content Standard this week. Updates were necessary to address issues discovered in the implementation and testing of IOOS DIF standards by CoastWatch. Carmel Ortiz and Alex Birger (Skjei Telecom) will assure distribution and availability of the document via several avenues (IOOS website, WSDE Wiki, etc). Kent Hughes, the new CoastWatch Program Manager, agreed to implement ocean color for all CoastWatch regions by the end of the FY10 Quarter 1. Currently ocean color data is only available for the Gulf of Mexico on the operational THREDDS4 server in IOOS/DIF formats. Using a suggestion made by Rich Signell that substantially reduces the effort on the part of CoastWatch to implement ocean color data, ocean color availability in IOOS/DIF standards will be significantly expanded (see <http://coastwatch.noaa.gov> for coverage).
 - National Data Buoy Center (NDBC) has implemented a new capability to get tsunami post-event alert data. NDC is offering KML (KML + JSON) as an alternative output format that were agreed to with Google.
 - Center of Operational Oceanographic Products and Services (CO-OPS) has implemented a THREDDS Server for their operational forecast system (model data outputs).
 - Roy Mendelsohn reported the Environmental Data Connector (EDC) tool has been completed. This tool allows arcGIS to access data in OPeNDAP file formats.

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.

- **DMAC Steering Team Assessment:** The IWGOO is conducting a DMAC Steering Team Review. A revised set of questions for a survey to be executed to current DMAC Steering Team member and others has been completed. Dates for the assessment workshop are set for December 2-3 (Wed/Thurs). A local hotel for those coming in from out of town and a workshop venue will be announced soon.
- **IOOS and Links to the National Water Quality Monitoring Network:** On 14 September representatives from USGS, EPA, NOAA, MACOORA, ACT, NFRA and NERACOOS met to continue discussions on connecting IOOS and the NWQMN. The meeting was comprised of briefings and discussion on the water quality network objects, several regional projects, and a proposed water quality workshop. Ru Morrison (NERACOOS) presented work being conducted in Great Bay, NH to develop nutrient criteria from multiple data sources and Pixie Hamilton (USGS) provided an example of an integrated assessment of water quality in Narragansett Bay using a variety of data streams. From such examples, development of stories is a possible deliverable to take to the NWQMN Conference in April 2010. The second topic of discussion was a proposal for a multi-regional, interagency workshop to be held in the Mid-Atlantic Region in January 2010. The proposal was to identify and focus the workshop on one or two water quality issues: Nutrients, Dissolved Oxygen or Harmful Algal Blooms are candidate topics. Data integration issues – ex. linking to data to assessment tools and models; multiple formats – will be another component of the agenda. A proposed outcome will be briefed at the NWQMN Conference in April 2010. The meeting logistics, goals, and outcomes will be developed in the next month.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** The IOOS team of Charly Alexander, Rich Signell, and Arthur Taylor was pleased to be part of the OOI-Cyberinfrastructure kick-off meeting. Our team appreciated being part of this remarkable process of cumulative illumination on the who, what, when, where, how, and why of the OOI/CI project via this "kick-off" meeting for the extended team and partners who will be participating in the development of this crucial component of the overall Ocean Observatories Initiative - a \$484M NSF-funded project (\$40M for the CI component) that will be built over the next five years. If you would like to view the workshop materials they are posted at the following website, including the agenda, participants, and associated documents and recent papers.
<http://www.oceanobservatories.org/spaces/display/WS/CI+Project+Kick-Off+Meeting>. It is our goal that US IOOS DMAC and OOI Cyberinfrastructure share as much as possible. Both programs support access to all types of ocean, coast, and Great Lakes data.
- **USGS National Hydrologic Modeling Structure Workshop, Denver, CO:** Attended by Rich Signell, the USGS is planning to use the same approach used in the IOOS Regions to serve CF-compliant data via OPeNDAP (a DMAC-approved standard for gridded data). They will use NcML to allow existing non-standard NetCDF files to be served via the THREDDS Data Server

- **National Surface Current Monitoring Plan Released:** The U.S. IOOS has published "A Plan to Meet the Nation's Needs for Surface Current Mapping." Go to www.ioos.gov to download your copy. Responding to clear requirements for increased and improved coastal surface current measurements throughout United States coastal waters, NOAA and its regional IOOS partners - including federal, state, academia and industry - developed this plan to create a national surface current measurement, nowcast, and forecast capability. The most cost-effective technology for meeting the present-day requirements of the 21st century is High Frequency Radar (HFR). If you have questions please contact Jack Harlan - Jack.Harlan@noaa.gov.

Other:

- **The Scarlet Knight (RU27):** As of 17 September, Scarlet Knight is 1400km from the pickup point of 42.25 N, 10.25 W, just offshore the Port of Vigo. For back of the envelope numbers, we often take 20km/day as a typical distance made good, so that's 70 days, with wide error bars. I am excited to see that the class at Rutgers has grown in popularity. The Atlantic Crossing class has about 30 undergrads enrolled this semester, which is a 10-fold increase over the last 2 years. As Scott stated, there is nothing like having gliders at sea to build student interest. Keep in the loop by visiting <http://www.i-cool.org/?cat=38>
- **Ocean Task Force Releases interim Policy:** Taken from the Council on Environmental Quality Press Release: Obama Administration officials today released the Interagency Ocean Policy Task Force Interim Report for a **30-day public review and comment period**. The Interagency Ocean Policy Task Force, led by White House Council on Environmental Quality Chair Nancy Sutley, consists of 24 senior-level officials from Administration agencies, departments, and offices. The report provides proposals for a comprehensive national approach to uphold our stewardship responsibilities and ensure accountability for our actions. "This Interim Report represents a wide spectrum of views and considerations, not just from within the federal government, but from members of the public, local officials, stakeholders and experts from coast to coast," said Nancy Sutley, Chair of the White House Council on Environmental Quality. "It delivers on President Obama's request for recommendations that will move this country towards a more robust national policy for our oceans, coasts and the Great Lakes and recognizes that we have a responsibility to protect the oceans and coasts for the benefit of current and future generations." "America's oceans are vital to our prosperity, health, security and quality of life," said Dr. Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere and Administrator of the National Oceanic and Atmospheric Administration. "This is a historic day -- for the first time, we as a nation say loudly and clearly that healthy oceans matter."

I was pleased to see that the task force called out: Ocean, Coastal, and Great Lakes Observations and Infrastructure: Strengthen and integrate federal and non-federal ocean observing systems, sensors, and data collection platforms into a national system and integrate that system into international observation efforts. It is certainly what US IOOS and OOI are all about.

- **Ocean Policy Field Meetings:** I encourage you to participate in the field hearings of the Ocean Task Force
[\(http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/\)](http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/)
 - September 24 in Providence, Rhode Island
 - If you cannot attend the meeting in-person, view the [live webcast](#)
 - Call into the listen-only phone line:
 United States: (866) 658-7997 (up to 100 lines); Participant code: 4319624
 International: (517) 833-7464; Participant code: 4319624
 - September 29 in Honolulu, HI
 - September 28 or October 7 in Cleveland, OH (TBD)
 - October 19 in New Orleans, LA (TBD)
- **Fifth Meeting of the Quality Assurance of Real-Time Ocean Data (QARTOD) Working Group will be held November 17-19, 2009** at Omni Hotel in Atlanta, Georgia: QARTOD is composed of oceanographers, data managers, and data providers from agencies interested in addressing the quality assurance and quality control issues of evolving ocean observing systems, such as the Integrated Ocean Observing System (IOOS) community. The QARTOD V meeting will focus on the quality control of some different physical ocean parameters from past QARTOD meetings (e.g., conductivity, dissolved oxygen, turbidity, and pH) as well as provide additional input for parameters such as waves and ocean currents to complete the QARTOD To Open Geospatial Consortium (OGC) or Q2O effort. More information on Q2O can be found at <http://q2o.who.edu>. We will also explore ways to expand our interaction with similar international efforts. Please register at <http://qartod.org> and forward this announcement to others who share in our goals and interests. This meeting is sponsored by NOAA's National Data Buoy Center.
- **Meeting with Beacon Institute:** NOAA (Office of Hydrology, North Atlantic Regional Team and IOOS) met with the John Cronin, Director of the Beacon Institute and Jim Bonner of the Beacon Institute on how we can connect the Hudson watershed to the coastal IOOS. We are exploring a meeting to identify a specific pilot project and a CRADA to connect better between the extensive observation and IT infrastructure that Beacon Institute is installing on the Hudson and the work of the federal partners in this region. One of the elements that John will bring to this effort is the use of HFR. This effort will look at using HFR in a river setting.
- NOAA met with the Chinese State Oceanic Administration: Jeff de La Beaujardiere attended the panel meeting and delivered a IOOS briefing.
- NOAA meeting with the Korea Ocean Research and Development Institute (KORDI): Suzanne Skelley and Jack Harlan attended the briefing with NOS AA Jack Dunnigan and Dr. Jung-Keuk Kang, President of KORDI. Jack briefed on our HFR network. The Koreans have expressed an interest in HF Radar.

Congressional: No update.

Communications: No update

Upcoming Meetings:

- 21-25 September: OceanOBS09: Zdenka Willis and Jeff de La Beaujardiere to represent NOAA IOOS

- 26-29 October: MTS/IEEE Oceans 09 - US IOOS and OOI - Ocean Observing for the Nation
- 20 October: SCCOOS/CeNCOOS Joint Strategic Advisory Committee - Oakland, CA
- 10 November: AOOS board meeting
- 17-18 November: MACOORA annual conference, Understanding the Coastal Ocean: Partnerships for a Changing World - www.macoora.org (Jack Dunnigan invited)

Cheers,
Zdenka