

Subject: Google Earth, CBOS, and more updates
From: MACOORA <info@macoora.org>
Date: Thu, 06 Aug 2009 08:07:44 -0400
To: MACOORA <info@macoora.org>



To: Friends of MACOORA
From: Judith T. Krauthamer, Executive Director
Date: August 6, 2009
Regarding: Ocean Observing Updates and More

MACOORA AND GOOGLE EARTH

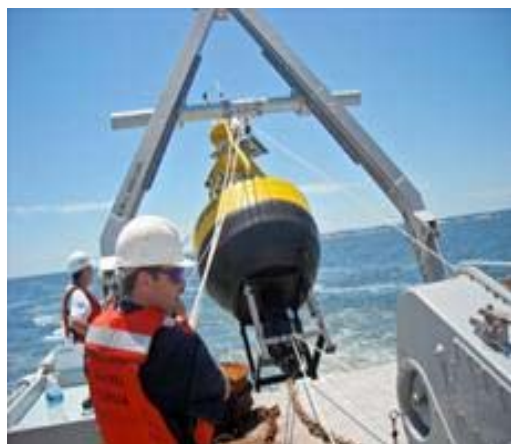


The Stevens Institute of Technology has a rich data catalog of meteorological and oceanographic observations and predictions from the New York Harbor Observing and Prediction System (*NYHOPS*) that is actively utilized by diverse groups. The data are now accessible in Google Earth, greatly expanding the potential user audience [see <http://hudson.dl.stevens-tech.edu/maritimeforecast/google/index.shtml>]. Google Earth features, such as panning, zooming, and fly-throughs, allow the user to view the *NYHOPS* forecasts interactively in a realistic, virtual 3D world. Oceanographic phenomena (including freshwater events) are easily explored through 24-hour animations of forecasted fields such as currents, temperature, and salinity. Future developments include automatic generation and dissemination of navigation route maps. These maps will be used to aid ships in safe passage through the harbor approaches and interior waters. The route maps will also be used by devices such as autonomous unmanned underwater vehicles.

With the experimental Google Earth-based product, under development, a user can easily determine the precise geographic location (latitude/longitude) of an event or condition in which he or she is interested, and then follow that event as it unfolds across 24 hours. Since multiple parameters can be selected at once, direction of currents can be overlaid on top of sea surface salinity maps, for example, to track the spreading of a coastal plume. This product is a collaborative effort between Jet Propulsion Laboratory (Dr. Ashit Talukder, Anand Panangadan) and Stevens Institute of technology (Dr. Alan Blumberg, Nickitas Georgas, Dave Runnels).

Ocean observing technology has attracted the attention of fisheries managers. For an animated gif of a blue (B) and a Mako (M) shark track swimming in the MARCOOS temperature fields [click here](#). Contact matt.j.oliver@gmail.com for more information. Or, visit <http://www.marcoos.us/products.htm> for an inside look at google earth, MARCOOS, and coding. Want more visualizations? [click here](#)

BUOY RE-ESTABLISHED IN THE CHESAPEAKE BAY



The [Chesapeake Bay Observing System \(CBOS\)](#), an association of

data users and providers engaged in creating integrated ocean observation, data management and distribution systems, provides real-time information about the Chesapeake Bay to a myriad of users. Further enhancing the system, an ocean-observing buoy was reestablished in the mid-channel of Chesapeake Bay on July 8.



The CBOS mid-Bay buoy was developed and deployed by a team of oceanographers from Horn Point Laboratory led by Bill Boicourt, including technicians Carole Derry and Tom Wazniak, the Captain and crew of the University of Maryland's Research Vessel *Rachel Carson*, and an auxiliary vessel piloted by Doug Wilson from the NOAA Chesapeake Bay Office in Annapolis, a CBOS partner. Located at $38^{\circ} 28.42'$ N, $076^{\circ} 22.80'$ W, the buoy is currently reporting standard meteorological data (wind speed and direction, air temperature, relative humidity) and near-surface water temperature and salinity. In September, an acoustic Doppler current profiler (ADCP) will be added.

This program is funded by the Maryland Port Administration, which is interested in the beneficial use of material dredged from shipping channels approaching the Port of Baltimore. Of specific interest is the possibility of restoring nearby James Island, which is in danger of disappearing from erosion. The Port Administration and the U.S. Army Corps of Engineers are presently restoring Poplar Island, 15 miles to the north, using dredged materials. The buoy data are valuable: in addition to the monitoring of water circulation and changes in circulation associated with the restoration project, short-term current measurements in the vicinity of James Island can be related to the long-term records from the CBOS program.

RENEWABLE ENERGY

MACOORA states are in the forefront of developing offshore, renewable [wind] energy. An "Offshore Renewable Energy Regulatory Primer" by Stephanie Showalter and Terra Bowling, National Sea Grant Law Center, July 2009 provides an introduction to the major federal laws and regulations governing renewable energy development offshore and coastal state authority under those laws. The primer also discusses local concerns about offshore

renewable energy projects and marine spatial planning, a possible emerging solution, to provide a backdrop to controversy surrounding these types of projects. It is available, for free, at <http://www.olemiss.edu/orgs/SGLC/National/offshore.pdf>

On July 20, the Minerals Management Service provided details on the procedures to develop renewable energy projects in federal waters offshore (74 Fed. Reg. 35204, July 20). In the notice, MMS provided addresses for filing applications for renewable energy leases and grants for projects in the Outer Continental Shelf (OCS). For more information: <http://edocket.access.gpo.gov/2009/E9-17163.htm>; Maureen A. Bornholdt, program manager, Office of Offshore Alternative Energy Programs, (703)787-1300.

On July 29, the House passed the Wind Energy Research and Development Act of 2009 (H.R. 3165). The bill would provide for a program of wind energy research, development, and demonstration. The bill was introduced by Representative Paul Tonko (D-NY) on July 9 and was co-sponsored by six representatives. To read the bill: <http://www.thomas.gov/cgi-bin/query/z?c111:H.R.3165>

FUNDING

NOAA's Center for Sponsored Coastal Ocean Research (CSCOR)/Coastal Ocean Program have announced a competitive grant opportunity for the Coastal Hypoxia Research Program (CHRP), Harmful Algal Blooms Program and Sea Level Rise.

Proposals under the HARMFUL ALGAL BLOOMS PROGRAM closes 3:00 p.m. Eastern Time October 14, 2009. (Please note: Letters of Intent for the Harmful Algal Blooms Program, although not required, should be received by 5 p.m. Eastern Time, August 17, 2009).

The full Announcements of Federal Funding Opportunity and Federal Register Notices can be accessed through the Grants.Gov website at <http://www.grants.gov/search/basic.do>

SAVE THE DATE

To better serve our federal partners, we have changed the dates of our annual meeting to Nov 17 and 18. Mark your calendars! In addition to a workshop on DMAC, we will have panels on ocean observations and industry, state governments' information needs, projects with our federal partners, and future directions for the observing world.

NOT A MEMBER?

Join online at www.macoora.org. Membership has its benefits.

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Questions, comments or concerns? Let us know: info@macoora.org