

## Real-Time Data Education Products

This resource list was compiled as part of the focus group study: *SWMP/IOOS Real-Time Data in K-12 Classrooms* (for more information on this study, go to <http://marine.rutgers.edu/outreach/rtd/>).

In the spring of 2006, stakeholders and teachers cited the activities and projects listed below as ones that are currently being used to learn about scientific data and how to incorporate data and real-time data into classrooms. Where possible, we have attempted to identify relevant web sites to the datasets and programs mentioned by participants.

AccuWeather	<a href="http://home.accuweather.com">http://home.accuweather.com</a>
Aviation Weather	<a href="http://aviationweather.gov/">http://aviationweather.gov/</a>
American Meteorological Society (AMS) Education Programs	<a href="http://www.ametsoc.org/amsedu/">http://www.ametsoc.org/amsedu/</a>
AMS DataStreame	<a href="http://www.ametsoc.org/amsedu/DataStreameFrames.html">http://www.ametsoc.org/amsedu/DataStreameFrames.html</a>
Argo Ocean	
Audubon Society bird counts	<a href="http://www.audubon.org/bird/">http://www.audubon.org/bird/</a>
AWS (school weather systems)	<a href="http://www.aws.com">http://www.aws.com</a>
Bermuda Atlantic Time-series Program (BATS)	<a href="http://www.bbsr.edu/cintoo/bats/bats.html">http://www.bbsr.edu/cintoo/bats/bats.html</a>
Boston Harbor sampling	<a href="http://www.mwra.state.ma.us/harbor/html/bh_wq.htm">http://www.mwra.state.ma.us/harbor/html/bh_wq.htm</a>
B-WET	<a href="http://sanctuaries.noaa.gov/news/bwet/welcome.html">http://sanctuaries.noaa.gov/news/bwet/welcome.html</a> <a href="http://www.csc.noaa.gov/psc/bwet.html">http://www.csc.noaa.gov/psc/bwet.html</a>
California Air Resources Board (air pollution info)	<a href="http://www.arb.ca.gov/knowzone/knowzone.htm">http://www.arb.ca.gov/knowzone/knowzone.htm</a> <a href="http://www.arb.ca.gov/aqd/aqinfo.htm">http://www.arb.ca.gov/aqd/aqinfo.htm</a>
Cool Classroom	<a href="http://coolclassroom.org">http://coolclassroom.org</a>
The COOL Room (RU COOL)	<a href="http://thecoolroom.org">http://thecoolroom.org</a>
COSEE – MA	<a href="http://www.macosee.net/">http://www.macosee.net/</a>
COSEE – National	<a href="http://www.cosee.net/">http://www.cosee.net/</a>
Digital Library for Earth System Education (DLESE)	<a href="http://www.dlese.org/library/index.jsp">http://www.dlese.org/library/index.jsp</a>
Eclipse Webcast 2006	<a href="http://www.exploratorium.edu/eclipse/2006/index.html">http://www.exploratorium.edu/eclipse/2006/index.html</a>
EPA	<a href="http://www.epa.gov/">http://www.epa.gov/</a>
EPA Empact Data	<a href="http://iaspub.epa.gov/edr/empact\$.startup">http://iaspub.epa.gov/edr/empact\$.startup</a>
Estuaries Live	<a href="http://www.estuarylive.org/">http://www.estuarylive.org/</a>
Eyes on the Bay	<a href="http://mddnr.chesapeakebay.net/eyesonthebay/index.cfm">http://mddnr.chesapeakebay.net/eyesonthebay/index.cfm</a>
Gas mileage	<a href="http://www.fueleconomy.gov/">http://www.fueleconomy.gov/</a>
GLOBE	<a href="http://www.globe.gov">http://www.globe.gov</a>
GoMOOS (Gulf of Maine buoy data)	<a href="http://www.gomoos.org/">http://www.gomoos.org/</a>
Gulf stream (sea surface temperatures, eddies, 'tagging along')	
Gulf Stream Voyage	<a href="http://www.k12science.org/curriculum/gulfstream/index.shtml">http://www.k12science.org/curriculum/gulfstream/index.shtml</a>
Heal the Bay website	<a href="http://www.healthebay.org/">http://www.healthebay.org/</a>
HOT Hawaii Ocean Time-series	<a href="http://hahana.soest.hawaii.edu/hot/hot_jgofs.html">http://hahana.soest.hawaii.edu/hot/hot_jgofs.html</a>
Hurricane data from various sources	<a href="http://www.nhc.noaa.gov/">http://www.nhc.noaa.gov/</a> <a href="http://www.wunderground.com/tropical/">http://www.wunderground.com/tropical/</a>
LabPros with Vernier software to collect data & view on laptops	<a href="http://www.vernier.com/">http://www.vernier.com/</a>
LiMPETS – Monterey Bay National Marine Sanctuary	<a href="http://limpets.noaa.gov/">http://limpets.noaa.gov/</a>
Lobster larval (Hatch to Catch)	<a href="http://www.bigelow.org/hatch_to_catch/">http://www.bigelow.org/hatch_to_catch/</a>
Maryland DNR	<a href="http://www.dnr.state.md.us/">http://www.dnr.state.md.us/</a>
MBARI Education and Research: Testing Hypotheses (EARTH)	<a href="http://www.mbari.org/earth/">http://www.mbari.org/earth/</a>
NANOOS	<a href="http://www.nanoos.org/">http://www.nanoos.org/</a>

NASA	<a href="http://www.nasa.gov/">http://www.nasa.gov/</a> <a href="http://science.nasa.gov/">http://science.nasa.gov/</a> <a href="http://earthobservatory.nasa.gov">http://earthobservatory.nasa.gov</a>
Naval Astronomical Observatory	<a href="http://aa.usno.navy.mil/">http://aa.usno.navy.mil/</a>
NMEA Bridge	<a href="http://www.vims.edu/bridge/">http://www.vims.edu/bridge/</a>
NMS GIS Edges	<a href="http://www.evisual.org/www/Instr/MOS.html">http://www.evisual.org/www/Instr/MOS.html</a>
NOAA Data Sources	<a href="http://www.noaa.gov/">http://www.noaa.gov/</a>
NOAA Real-Time Weather data	<a href="http://www.weather.gov/">http://www.weather.gov/</a>
NOAA global sea surface data	
NOAA TAO Array Data	<a href="http://www.pmel.noaa.gov/tao/jsdisplay/">http://www.pmel.noaa.gov/tao/jsdisplay/</a>
nowCOAST	<a href="http://nowcoast.noaa.gov/">http://nowcoast.noaa.gov/</a>
NSF's Ocean Observatories Initiative (OOI) and ORION program	<a href="http://www.orionprogram.org/default.html">http://www.orionprogram.org/default.html</a>
National Weather Service	<a href="http://www.nws.noaa.gov/">http://www.nws.noaa.gov/</a>
NWS Extreme Weather	
Ocean buoy data	<a href="http://www.ndbc.noaa.gov/">http://www.ndbc.noaa.gov/</a>
Ocean Globe Project (study of the effects rainfall/winter storms have on beach erosion, marine life and beach debris)	
Ocean Institute @ Dana Point	<a href="http://www.ocean-institute.org/index2.html">http://www.ocean-institute.org/index2.html</a>
OceanObs	<a href="http://oceanobs.org/">http://oceanobs.org/</a>
Pacific Tsunami Warning Center sites (combined with Google Earth)	<a href="http://www.prh.noaa.gov/ptwc/">http://www.prh.noaa.gov/ptwc/</a>
Peak Project – study energy use in the home	
Phytopia	<a href="http://www.bigelow.org/phytopia/">http://www.bigelow.org/phytopia/</a>
Sanctuary Splash	
Santa Monica Bay Observatory	<a href="http://quercus.igpp.ucla.edu/sambo/">http://quercus.igpp.ucla.edu/sambo/</a>
SCCOOS	<a href="http://www.sccoos.org/">http://www.sccoos.org/</a>
Science House	<a href="http://www.science-house.org/">http://www.science-house.org/</a>
Sea Turtle Tracking project	<a href="http://www.seaturtle.org/tracking/">http://www.seaturtle.org/tracking/</a>
SEACOOS	<a href="http://www.seacoos.org/">http://www.seacoos.org/</a>
SERC	<a href="http://www.serc.si.edu/">http://www.serc.si.edu/</a>
Stowaway Project	<a href="http://www.ciese.org/curriculum/shipproj/">http://www.ciese.org/curriculum/shipproj/</a>
Surfrider Foundation	<a href="http://www.surfrider.org/">http://www.surfrider.org/</a>
Sustainable Seas	<a href="http://oceanservice.noaa.gov/websites/retiredsites/supp_SSEretired.html">http://oceanservice.noaa.gov/websites/retiredsites/supp_SSEretired.html</a>
SWMP	<a href="http://nerrs.noaa.gov/Monitoring/">http://nerrs.noaa.gov/Monitoring/</a>
Tide Data	<a href="http://tidesandcurrents.noaa.gov/">http://tidesandcurrents.noaa.gov/</a>
Tagging Data Edges	
Traffic cams	
USDA/NRCS	<a href="http://www.nrcs.usda.gov/">http://www.nrcs.usda.gov/</a>
USGS River Gauge Data	<a href="http://waterdata.usgs.gov/nwis/">http://waterdata.usgs.gov/nwis/</a>
USGS Seismic Data	<a href="http://earthquake.usgs.gov/">http://earthquake.usgs.gov/</a>
Weather Bug	<a href="http://www.weatherbug.com/">http://www.weatherbug.com/</a>
Weather Channel	<a href="http://www.weather.com/">http://www.weather.com/</a>
Weather data from DataStrems Oceans	<a href="http://www.ametsoc.org/amsedu/DS-Ocean/home.html">http://www.ametsoc.org/amsedu/DS-Ocean/home.html</a>
Weather tracking	
Weather Underground – includes local stations	<a href="http://www.wunderground.com/">http://www.wunderground.com/</a>
Weeks Bay Estuary (changes during Hurricane Katrina)	<a href="http://nerrs.noaa.gov/WeeksBay/welcome.html">http://nerrs.noaa.gov/WeeksBay/welcome.html</a>
Woods Hole Oceanographic Institute – Dive and Discover	<a href="http://www.divediscover.whoi.edu/">http://www.divediscover.whoi.edu/</a>
Woods Hole Research Center – Green	

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**Other Custom Data Sources**

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- Classroom labs/experiments
- Local pond study
- Science fair projects or research
- Student-collected data
- Water quality data
- Water temperature studies
- Weather data

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