

FY2012 U.S. IOOS Regional Association Ocean Acidification Monitoring Activities

<b>Partner</b>	<b>Activity</b>	<b>Funding Source</b>
<b>ACT</b>	FY12 – pH sensor evaluation	ACT
	Fy10 and FY11 – pCO <sub>2</sub> sensor evaluation <sup>1</sup>	ACT
	Working Group and Synthesis Paper on lessons learned for making in situ measurements of pCO <sub>2</sub>	ACT
	In Situ pH and pCO <sub>2</sub> Monitoring Design Requirements Workshop	ACT
	Ocean Acidification Instrument Training Workshop (CERF 2013)	ACT
<b>AOOS</b>	AOOS funds OA sampling of an existing, ongoing oceanographic time series transect (Seward Line) in the northern Gulf of Alaska two times per year to quantify the physical and biogeochemical controls on OA.	AOOS
	AOOS contributes funds to a consortium to support maintenance of OA sensors on moorings in the Bering Sea, the Chukchi Sea, and Resurrection Bay in the Gulf of Alaska.	AOOS
	Prior to FY12, AOOS funds were used to add OA sensors to an NSF-funded mooring in the Chukchi Sea, enabling it to collect OA data year-round.	AOOS
<b>CariCOOS</b>	Operation and maintenance of the NOAA PMEL MAPCO <sub>2</sub> buoy at La Parguera.	NOAA OA Program
	Biweekly sampling at the La Parguera CO <sub>2</sub> buoy.	NOAA OA Program
	Periodic sampling to 200m depth at Caribbean Time Series Station CaTS for pH and Total Alkalinity	CariCOOS
	Development of a chromatographic method for Ca/Mg analysis	CariCOOS/SeaGrant/UPRM
<b>CeNCOOS</b>	Support for West Coast OA monitoring	CeNCOOS

<sup>1</sup> Text in blue indicates investments made prior to FY2012

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	Participation in CA State Water Resources Board pilot project to evaluate methodology for measuring ocean acidification in nearshore waters	CeNCOOS and CA SWRCB
<b>GCOOS</b>	GCOOS is supporting a joint NOAA-University of Southern Mississippi study, working with Liquid Robotics, to measure OA parameters pH and PCO <sub>2</sub> . The project will also integrate wave glider data into the GCOOS data streams in support of the CO <sub>2</sub> Waveglider Northern Gulf Pilot Project. GCOOS funding will support the development and maintenance of the capacity to convert project data (including CTD, pCO <sub>2</sub> , pH, and other data) and serve them to USM and the GCOOS Data Portal in near real-time for data fusion, visualization, and dissemination.	GCOOS
<b>GLOS</b>	None reported	
<b>MARACOOS</b>	None reported	
<b>NANOOS</b>	NANOOS operates and maintains an OA detection observation buoy off La Push, WA, and funding from U.S. IOOS was used to support the on-line NVS application for four different shellfish growers to monitor data in support of their daily operations.	NOAA OA Program
<b>NANOOS</b>	Collection of meteorological, pCO <sub>2</sub> , chlorophyll, and other oceanographic observations in coastal Washington, Oregon, Puget Sound, and Willapa Bay. In addition to support from U.S. IOOS, shellfish growers have received support for their ocean acidification monitoring from NOAA's Ocean Acidification Program (OAP).	NANOOS

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	Providing observational data to customers, including the shellfish hatcheries and growers, through the NANOOS visualization system (NVS).	NANOOS
	FY11 funds were used to support two OA workshops in 2012 – one on international collaboration and one on data management.	NOAA OA Program
<b>NERACOOS</b>	MAPCO2 buoy operation and data analysis (partner: U. of New Hampshire)	NOAA OA Program and IOOS Program
	Support for the 2012 Gulf of Mexico and East Coast Carbon (GOMECC-2) cruise (the second comprehensive survey of inorganic carbon, nutrients and other biogeochemical parameters along the Gulf and East coasts of the USA, ending in Boston, MA).	NOAA OA Program
<b>PacIOOS</b>	None reported	
<b>SCCOOS</b>	Support for West Coast OOS OA monitoring, including the West Coast Governors Alliance data management effort.	SCCOOS
	9 stations of CalCOFI CTD & Bottle Samples taken repetitively since 2004 at the 20 m isobath	SCCOOS
	Dissolved oxygen sensors added to Spray 11 underwater glider for monitoring hypoxia in coastal waters and to estimate pH and aragonite saturation	SCCOOS
	3 active Ocean Acidification Buoys with the following sensors – CTD: SBE 37, o2:Zebra Tech optode, pH: SeaFET or MBARI sensor, Temp: Onset Hobotemps thermistor	Provider: Santa Barbara Channel Long Term Ecological Research/OMEGAS project
<b>SCCOOS</b>	Support for West Coast OA monitoring	SCCOOS
<b>SECOORA</b>	None reported	