

United States

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Summary of operational and planned GOOS participation

Observations

Comments

Surface Drifter

1277 active and on the GTS February 2010

Hurricane Array Deployments

ftp://ftp.aoml.noaa.gov/pub/phod/pazos/data/hur/dep_hur07.html

Waves

All NDBC moored buoys report significant wave height.

<http://www.ndbc.noaa.gov/> see moorings below.

Gulf of Maine Ocean Observing System (10 sites reporting waves, SST, and some sub-surface temp, salinity and currents. <http://www.gomoos.org/>

Scripps Institute wave rider/pier sea level program

http://www.ndbc.noaa.gov/Maps/Southwest_inset.shtml

Moorings

NOAA Marine Observations Backbone

<http://mob.ndbc.noaa.gov/cgi-bin/mob.cgi>

NDBC Partners

http://www.ndbc.noaa.gov/pstat_ocean.shtml

TAO, PIRATA (plus NTAS mooring)

<http://www.pmel.noaa.gov/tao/>

http://www.pmel.noaa.gov/pirata/pir_implementation.html

NOAA/NDBC: 97 coastal and off-shore moored buoys, 80 of which are operational February 2010.

<http://www.ndbc.noaa.gov/wstat.shtml>

RAMA- Indian Ocean

USA/India: 3 surface moorings, 2 flux reference sites and 1 ADCP moorings deployed near the equator at 80E. 2 surface moorings planned for deployment 2008 along 80E. USA/Indonesia: 4 surface moorings along 90E. USA/France: Flux reference site 66E, 8S Full IO array and plans can be seen at:

<http://www.pmel.noaa.gov/tao/disdeld/disdeld.html>

Fixed Off shore drilling units:

http://www.ndbc.noaa.gov/to_station.shtml

Data from 202 moorings reported by (JCOMMOPS) February 2010. 7 additional with India, 2 with US-ASCLME and

3 US-INDO.

Tsunami – Network of 48 (39 maintained by the USA) Deep-ocean Assessment and reporting of Tsunamis (DART) buoys in place January 2010. 7 buoys have been deployed in the Western Atlantic, 4 in the Indian Ocean (Indonesia, Thailand and Australia), 4 others by Australia (2 of which are in the Southern Ocean) and Chile maintains 1 off it's coast.

<http://www.ndbc.noaa.gov/dart.shtml>

XBTs

XBT SOOP Lines supported by USA:

Atlantic – AX- 04, 07, 08, 10, 18, 22 & 32

Pacific – PX-06, 08, 09, 10, 13, 31, 37, 37S, 38, 44, 50 and 81.

Indian –IX-15/31, 21 and 6.

AOML HDX Program

http://www.aoml.noaa.gov/phod/hdenxbt/high_density_home.html

SIO HDX Program <http://www-hrx.ucsd.edu/index.html>

ARGO

1879 active February 2010. 123 deployments planned in 2010 as of February 2010. Argo Global Data Center

www.usgodae.org/argo/argo.html

Sea Level

27 GLOSS MSL as of 10/2009, all reporting well (ie 2007 or later data posted at Bidston) except Miami, Johnston Is and French Frigate Shoals. 38 FAST stations reporting well. FAST data posted at Hawaii through January 2010.

<http://ilikai.soest.hawaii.edu/uhslc/datai.html>

NOAA/NOS Water Level Observation Network. 262 stations of this network are relevant to GOOS. These stations are located in 20 coastal States of the lower 48, Alaska and coasts of Hawaii.

24 sites are located on non US Islands

<http://tidesandcurrents.noaa.gov>

http://tidesandcurrents.noaa.gov/station_retrieve.shtml?type=Tide%20Data&state=All%20Stations&id1=

54 GPS positioned stations, 22 of which are GLOSS MSL and/or FAST <http://www.sonel.org/phpgen/projects/survey.cgps.php3>

TS Hydrography

Latest and next US Repeat Hydrographic sections (standard WOCE sampling):

A5, 24N – RAPID 2004 and 2011. With UK and Spain in 2010
A10- 30S, 2009 (UK) and 2010 (USA).

A16N-Iceland to 5S, 2003 and 2012.

A16S-5S to 60S, 2005 and 2013.

A20-52W, 2003 and 2012.
A22-66W, 2003 and 2012.
A13.5-Equator, Cape Town to Ghana, 1983 and 2010.
P2-30N, 2004 and 2013.
P16N/S-112-102W, 2005/6 and 2014.
S4P-Nominal 67S, connects with S41 and SR4, 1992 Russia
and 2011 USA.
I10-I2+I10 from 8S+111E, 1995 USA, 2011-2012 Japan.
I41 1996 USA and 2012-13 Japan
Davis Straits, 2009 and 2010 USA/Canada.
RUSALCA, Bering and Chukchi Seas, USA 2009 and 2010
http://ushydro.ucsd.edu/repeathydro_map.html

OceanSITES –See
<http://www.oceansites.org/network/index.html>

BATS - Hydrostation S www.bios.edu
HOTS http://hahana.soest.hawaii.edu/hot/hot_jgofs.html
Calcofi <http://calcofi.net/cruises/sms-cruisestatus.html>

Biological

NOAA operates 2 Continuous Plankton Recorders(CPR)
between Boston/Nova Scotia and New York/Bermuda.
Pacific CPR program
http://192.171.163.165/pacific_project_data.htm

Carbon

PMEL - Moored pCO₂ network: 5 low latitude mid Pacific (TAO),
Hawaii (HOT), Station PAPA, Kuroshiro Extension (with Japan),
and Stratus (20S).

Underway pCO₂ measurements along 8 TAO lines during routine
redeployment/ recovery cruises. Coastal component with NDBC at
sites in Oahu, Seattle, Georgia and New Hampshire.

http://www.pmel.noaa.gov/co2/uwpc02/eq_pacific.html
<http://www.jamstec.go.jp/iorgc/ocorp/ktsfg/data/jkeo/>

AOML – Research Ship and VOS underway CO₂ Program.
Ships: Ron Brown, Polar Star, Explorer, Palmer, Skogafoss,
Baldrige and Xuelong.
<http://www.aoml.noaa.gov/ocd/gcc/index.php>

Sea also: Carbon Underway Measurements-Global
<http://ioc3.unesco.org/ioccp/Underway/TablePDFs/UWGlobalNov07.pdf>

PMEL CO₂ moorings http://www.pmel.noaa.gov/co2/moorings/btm/btm_main.htm

PMEL Underway PCO₂ <http://www.pmel.noaa.gov/co2/uwpc02/>

PMEL Coastal CO₂ Moorings <http://www.pmel.noaa.gov/co2/coastal/>

Lamont-Doherty <http://www.ldeo.columbia.edu/res/pi/CO2/>

- Sea Ice National Ice Center: a multi-agency operational center
www.natice.noaa.gov <http://nsidc.org/data/>
- VOS 540 VOS and 17 VOSCLim ships active February 2010 (potential 2889 ships). VOSCLim target is 50 ships.
<http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/2/wo/MyLY0ASxMoBkOynG4oqbFM/2.0.104> and go to PLATFORMS and VOS US
- Coastal NOAA/NDBC C-MAN stations (49 sites overall January 2010). Report sea level pressure, wind, air temp, SST (13 sites) and tides (3 sites) <http://www.ndbc.noaa.gov/wstat.shtml>
- Several local networks exist, for example: Caro-COOPS, Carolinas Coastal Ocean Observing and Prediction System, University of South Florida network in the Gulf of Mexico, and the Texas Coastal Ocean Observing Network. See the complete list and further information at: www.ndbc.noaa.gov/to_station.shtml
- Coral Reef – Install meteorological and oceanographic monitoring stations at all major US coral reef areas by 2010
<http://coralreefwatch.noaa.gov>
- SeagrassNet – www.seagrassNet.org
- ANTARES Participant – study of the long-term changes in the marine ecosystems around Latin America.

For further information on the US component of GOOS visit – The National Office for Integrated and Sustained Ocean Observations http://www.ocean.us/ioos_system