

# Canada

January 2012

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## Summary of Operational and Planned Oceanographic Observation Programs

### Moorings

Buoy status report: <http://shylock.pyr.ec.gc.ca/~wbs/bplatstat.html>

Papa Station:

<http://www.pac.dfo-mpo.gc.ca/science/oceans/data-donnees/line-p/index-eng.htm#Map>

Cruises planned each February, June and August to 2014 [marie.robert@dfo-mpo.gc.ca](mailto:marie.robert@dfo-mpo.gc.ca)

Labrador Sea (AR7W) Monitoring Program – 1 mooring deployed May 2011, 3 others Planned. See below for TS Hydrography and Bio/Chem

Scotian Slope/Rise (XHL) Monitoring Program – 6 moorings presently deployed with UK RAPID program; re-deployment planned for fall 2011; see below for TS Hydrography and Bio/Chem

<http://www.bio.gc.ca/monitoring-monitorage/azomp-pmzao/slope-pente/slope-pente-eng.htm>

ANTARES participant – study of the long-term changes in the marine ecosystems around Latin America.

Partner with US in the Gulf of Maine (GoMOOS) program <http://www.neracoos.org/>

24 ocean moorings reported active 27 January 2012

<http://osmc.noaa.gov/Monitor/OSMC/OSMC.html>

### XCTD/XBT/TSG

Most Canadian XBT/CTD data (AZMP, AR7W, XHL) are submitted to the GTS.

See monthly global maps of real-time ocean profile data at:

[http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/OCEAN/Realtime\\_e.htm](http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/OCEAN/Realtime_e.htm)

See TS Hydrography and AR7W below

### ARGO

102 active 25 January 2012. To see latest status of floats go to:

<http://wo.jcommops.org/cgi-bin/WebObjects/Argo.woa/wa/default> and select

Monitoring and Countries or [http://www.jamstec.go.jp/J-ARGO/index\\_e.html](http://www.jamstec.go.jp/J-ARGO/index_e.html)

### Surface Drifters

12 drifters active 27 January. 5 are Ice Buoys

<http://osmc.noaa.gov/Monitor/OSMC/OSMC.html>

## **Sea Level**

6 GLOSS MSL and 8 FAST delivery stations (5 are both modes). FAST data posted at Hawaii as of December. <http://ilikai.soest.hawaii.edu/uhs/c/woce.html>  
Latest MSL data posted by PSMSL 2010. <http://www.psmsl.org/data/obtaining/>  
See also <http://www.ioc-sealevelmonitoring.org/index.php> for near real-time data

Canadian Tides and Water Levels Data Archive

[http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/TWL/TWL\\_e.htm](http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/TWL/TWL_e.htm)

16 GPS positioned stations, 6 of which are GLOSS.

<http://www.sonel.org/spip.php?page=cgps>

## **TS Hydrography**

Labrador Sea: AR7W section completed annually in spring/summer since 1990 (WOCE). Initial cruise was July 1990, latest May 2011, plan to continue indefinitely. Objective is to occupy 33 CTD stations and deploy at least twice that number of XBTs. See Moorings for weblink

Scotian Slope/Rise: Extended Halifax Line (XHL) occupied at least once annually since 2006. Latest occupations in May 2011; plan to continue indefinitely. Objective is to occupy 7 stations in addition to 7 AZMP stations. See Moorings for weblink.

Atlantic Zone Monitoring Program (AZMP) -13 sections and 7 fixed hydro stations; 8 water level stations. [http://www.meds-sdmm.dfo-mpo.gc.ca/zmp/main\\_zmp\\_e.html](http://www.meds-sdmm.dfo-mpo.gc.ca/zmp/main_zmp_e.html)  
<http://www.bio.gc.ca/monitoring-monitorage/azmp-pmza/index-eng.htm>

Barrow and Nares Straits 2009 and 2010. Davis Strait 2009, 2010 and 2011(planned) USA/Canada [http://www.go-ship.org/RefSecs/Table&Meas\\_May2010b.pdf](http://www.go-ship.org/RefSecs/Table&Meas_May2010b.pdf)  
<http://www.bio.gc.ca/monitoring-monitorage/azomp-pmzao/labrador/labrador-eng.htm>

PR6 (Papa Line), 3 times/yr: Feb, May and Sept. See Moorings above

## **Bio/Chem**

Carbon measurements:

Labrador Sea: AR7W Line annually; carbon since 1993 and plankton since 1994; ongoing. See TS Hydrography above.

Scotian Slope/Rise: XHL occupied at least once annually since 2006; chemistry (including carbon) and plankton; ongoing. See TS Hydrography above.

P1 (Canada/Japan) 1995-2001 completed

P15N 2004, then every 5 years. PR6, 3 times/yr, PAPA line.

Scotian Shelf 44.68N 63.61W CARIOCA buoy, hourly 2007 – Arctic coastal waters, 1/year, 2004 -, ArcticNet Domain

Continuous Plankton Recorder on line Z (Iceland to Newfoundland) and line E (Newfoundland to Maine)

### **Satellite**

RADARSAT 1 (1995) and 2 (2007). SAR-Ice improves ice-edge detection, ice-type discrimination, and ice topography and structure information.

<http://www.asc-csa.gc.ca/eng/default.asp>

RADARSAT Constellation series which will meet the core demands of RADARSAT 2 are planned for launch in 2014 and 2015.

<http://www.asc-csa.gc.ca/eng/satellites/radarsat/overview.asp>

SMOS – launched November 2009 (with Russia). Sea Surface Salinity

<http://www.asc-csa.gc.ca/eng/satellites/smos/default.asp>

### **Sea Ice**

Observations of sea ice concentration, extent and velocity off the coast of Labrador, in the Gulf of St Lawrence and in the Canadian Arctic. Also re-establishing key Arctic sea level gauges and sea ice thickness moorings

### **VOS**

21 VOS-VOSClm ships reporting 19 January 2021. Potential of VOSClm ships is 51.

<http://osmc.noaa.gov/Monitor/OSMC/OSMC.html>

<http://www.ncdc.noaa.gov/oa/climate/vosclim/vosclim.html>