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Integrated Science Data Management NAFO Report 2012

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Abstract

ISDM, as the Regional Environmental Data Center for NAFO, is required to provide an annual inventory of environmental data collected in the NAFO area to the NAFO subcommittee for the environment (STACFEN). Inventories and maps of physical oceanographic observations such as ocean profiles, near surface thermosalinographs, drifting buoys, currents, waves, tides and water level measurements for the calendar year 2011 are included. This report will also provide an update on other ISDM activities during 2011 and beyond.

It is important for STACFEN to encourage members to send data and information to the designated data center in order to get significant return for NAFO member countries.

Introduction

ISDM has been recognized since 1975 (back then as MEDS) as the Regional Environmental Data Center for ICNAF and subsequently for NAFO. In order for ISDM to carry out its responsibility of reporting to the Scientific Council, the Designated National Representatives selected by STACFEN are requested to provide ISDM with all marine environmental data collected in the Northwest Atlantic for the preceding years.

Provision of a meaningful report to the Council for its meeting in June 2012 required the submission to ISDM of a completed oceanographic inventory form for data collected in 2011, and oceanographic data pertinent to the NAFO area, for all stations occupied in the year prior to 2011. The data of highest priority are those from the standard sections and stations, as described in NAFO SCR DOC., No. 1, Serial N 1432, 9p.

Data that have been formatted and archived at ISDM are available to all members on request. Requests can be made by telephone (613) 990-0243, by e-mail to isdm-qdsi@dfo-mpo.gc.ca, by completing an on-line order form on the ISDM web site at www.isdm.gc.ca/isdm-qdsi/request-commande/form-eng.asp or by writing to Services, Integrated Science Data Management (ISDM), Fisheries and Oceans Canada, 12th Floor, 200 Kent St., Ottawa, Ont. Canada K1A 0E6.

Data Summaries for 2011

Near-surface and profile data

In the NAFO area, a variety of vertical profiles as well as near-surface observations from parameters such as temperature, salinity, oxygen, nutrients and other chemical and biological variables, are being made every year. ISDM receives these data either in real-time (on average within one month of observation) via the Global Telecommunications System (GTS) or in delayed-mode directly from responsible institutions, and indirectly from national Cruise Summary Reports and other reports of marine activities.

The following inventories and corresponding maps summarize the ocean subsurface and near-surface data processing activities in 2011 for the NAFO area:

- **Table 1, Figure 1:** **Real-time temperature and/or salinity data collected and processed in 2011**
TOTAL: 279 186 stations
- **Table 2, Figure 2:** **Delayed-mode temperature and/or salinity profiles collected in 2011**
TOTAL: 1179 stations
- **Table 3, Figure 3:** **Delayed-mode temperature and/or salinity profiles collected prior to 2011 and processed in 2011**
TOTAL: 5260 stations
- **Table 4, Figure 4:** **Near-surface underway temperature and/or salinity data collected in 2011**
TOTAL: 1270 stations

Data processing at ISDM begins by reformatting files from their original formats into a common format. Quality control is carried out by a combination of specially designed software and trained personnel. The quality control has four main functions. The first is to check and ensure that each data message is properly formatted, units are standardized, and parameter range checks are performed. The second is to identify any duplication, and select the best version based on data type, source of the data, and general qualities in analysis and reporting of the observations. The third check identifies and corrects date/time and geographical positioning errors using computer tests and visual inspection of the track for each cruise. The final quality control procedure uses a series of algorithms to find and flag common instrument failures found in profiles of subsurface measurements. Each subsurface profile of temperature, salinity and other subsurface variables is also visually inspected using software to plot the data and allow a technician to set quality flags to individual points on a profile. www.isdm.gc.ca/isdm-qdsi/ocean/qc-cq-eng.htm

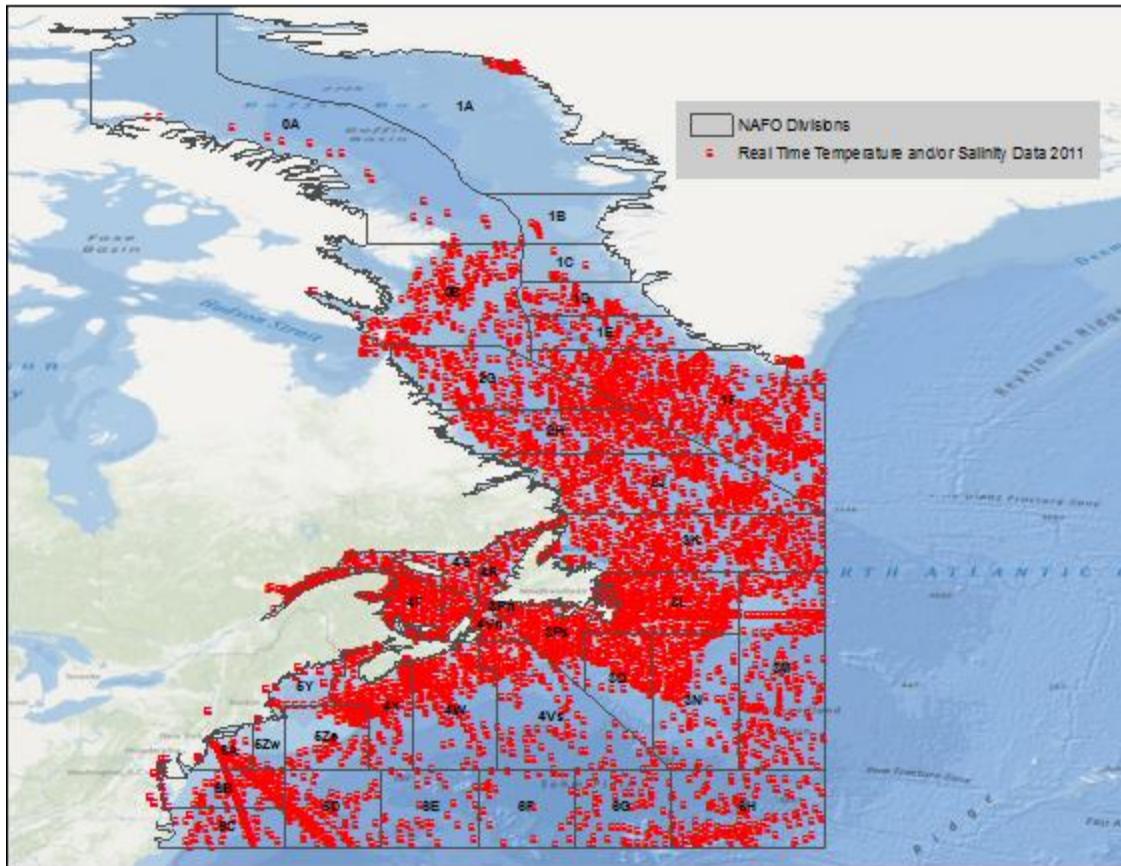


Figure 1: Real-time temperature and/or salinity data collected and processed in 2011

Total = 279186 stations

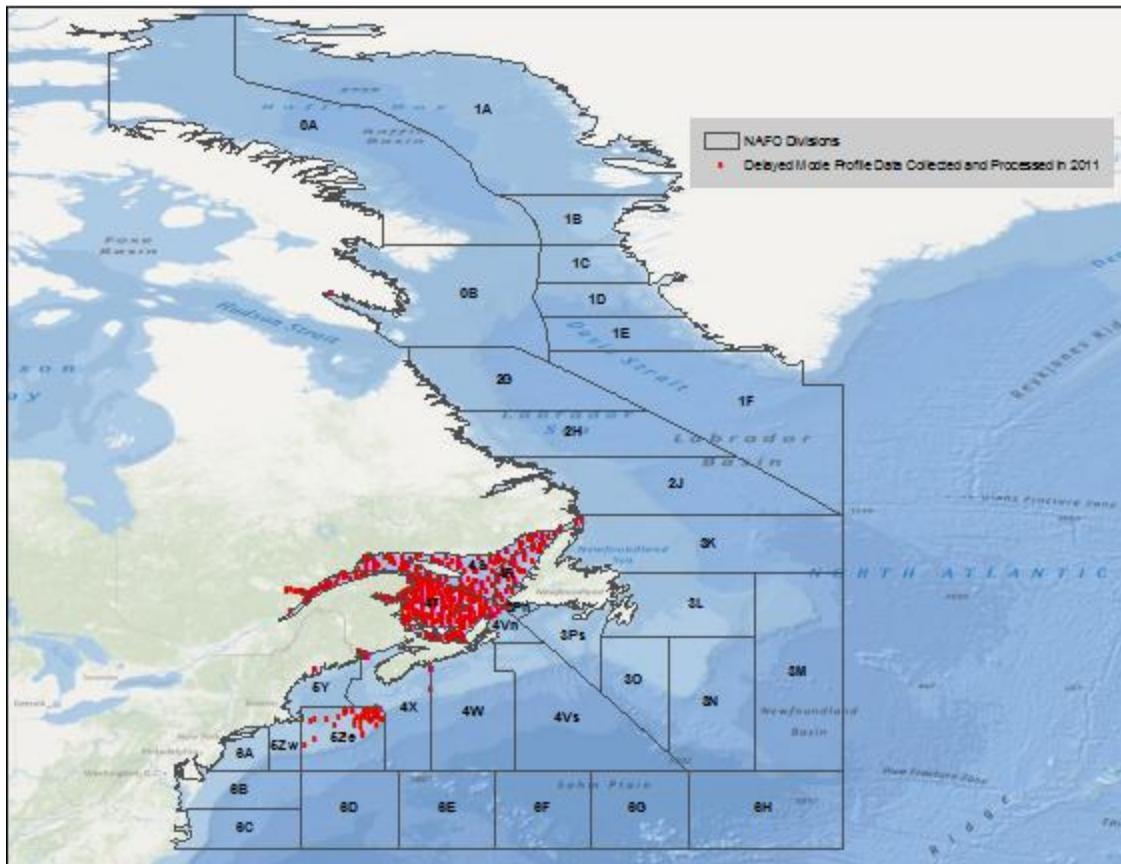


Figure 2: Delayed-mode temperature and salinity profiles collected and processed in 2011
Total = 1179 stations

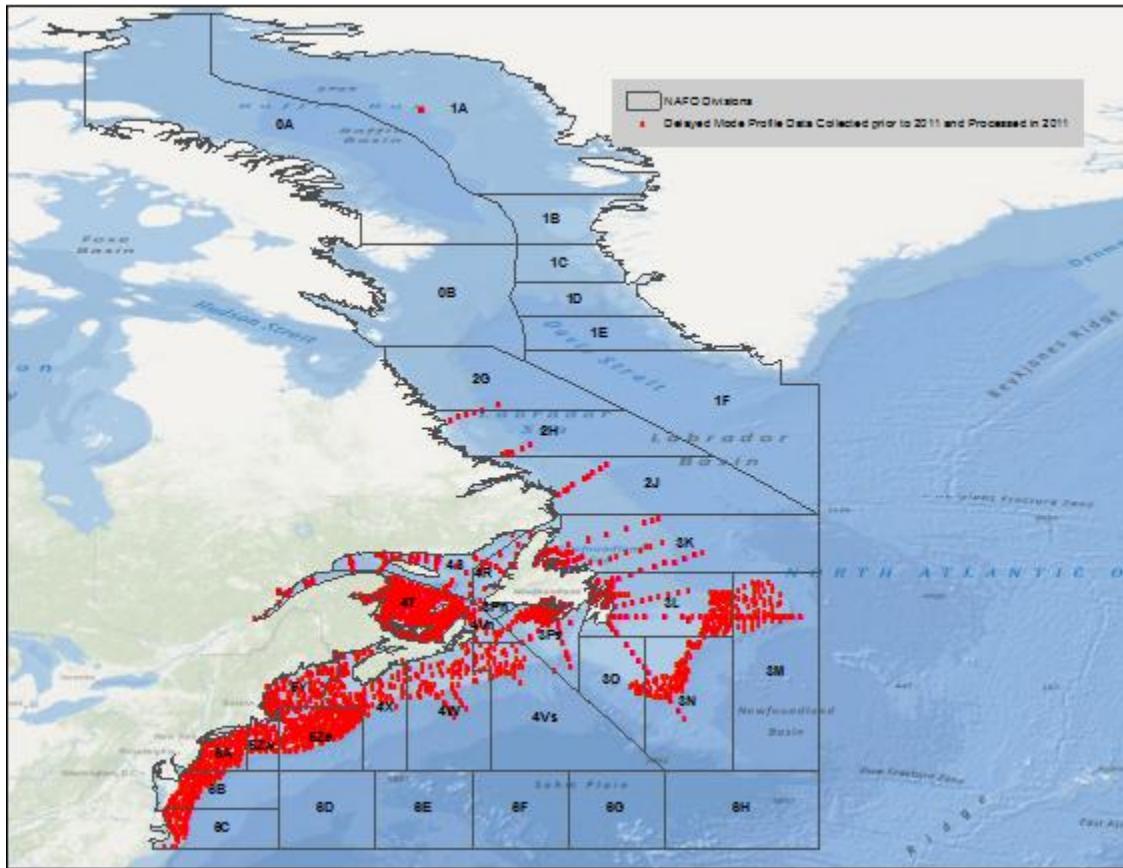


Figure 3: Delayed-mode temperature and salinity profiles collected prior to 2011 and processed in 2011
Total = 5 260 Stations

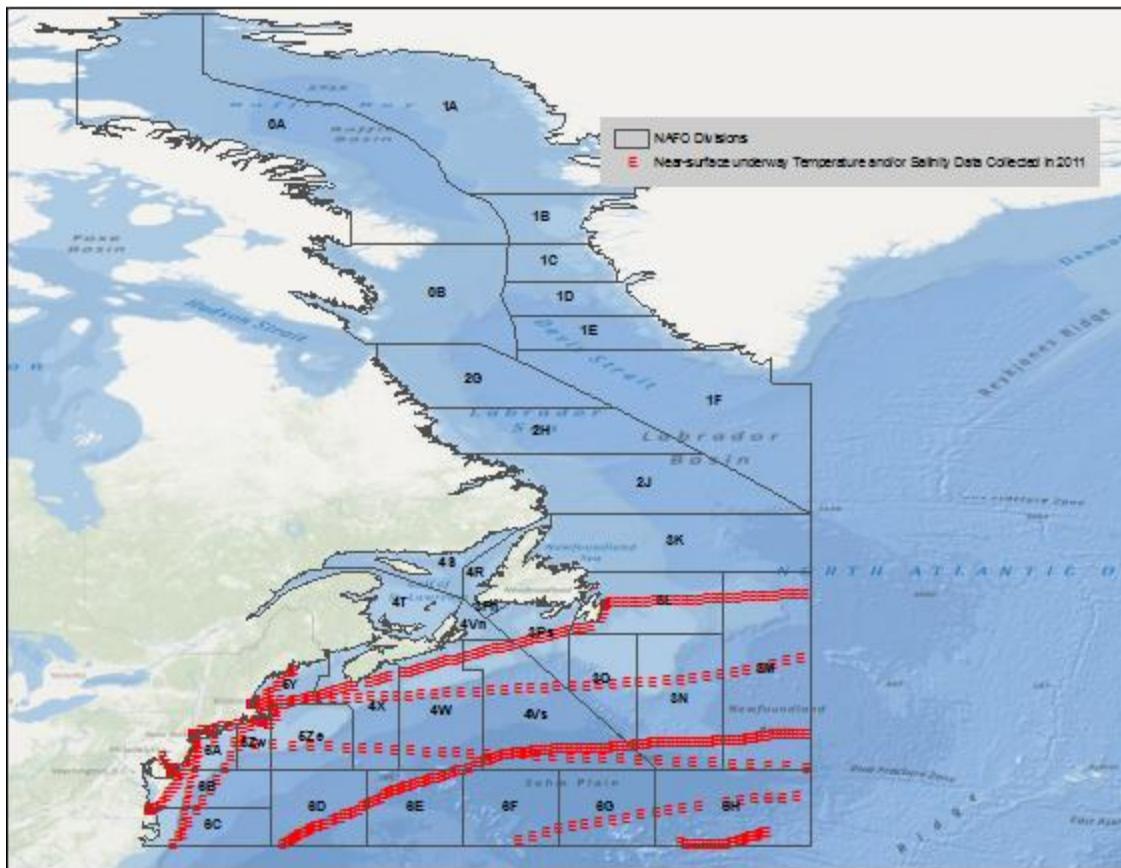


Figure 4: Near-surface underway temperature and/or salinity data collected in 2011
Total = 1,270 Stations

Surface data from drifting buoys

The following inventory and map summarize ISDM drifting buoy data collected and processed in 2011 for the NAFO area:

- **Table 5, Figure 5: Drifting Buoys in the NAFO Area in 2011**
TOTAL = 364 648 messages from 162 buoys

Drifting buoy data are received at ISDM via the GTS. Quality control techniques are much the same as those for the ocean profile data. Drifting buoys report via satellite, at rates of up to every 15 minutes. These messages are checked for format errors, and reformatted for quality control procedures and subsequent archival. Range checks, flags and possible corrections to the data are carried out by trained personnel, using a system of ISDM software, which organize, analyze and display plots of the data. Quality checks use algorithms which check drifting speed and position, and ranges of sea surface temperatures and sea level pressure. The range checks include a comparison to NOAA's Asheville SST Climatology (2.5x2.5 degrees and monthly). Duplicates are checked, which is important for discriminating between data received directly from buoys and messages routed through other data centers. Lower quality data (which are this type of duplicate) are flagged as such.

ISDM drifting buoy archive contains over 100 million records for the world's oceans, from 1978 to present, and is currently growing at a rate of one million messages per month. A drifting buoy message is comprised of the buoy position and one or more of the following parameters: surface and subsurface water temperature, air pressure and temperature, wind speed and direction.

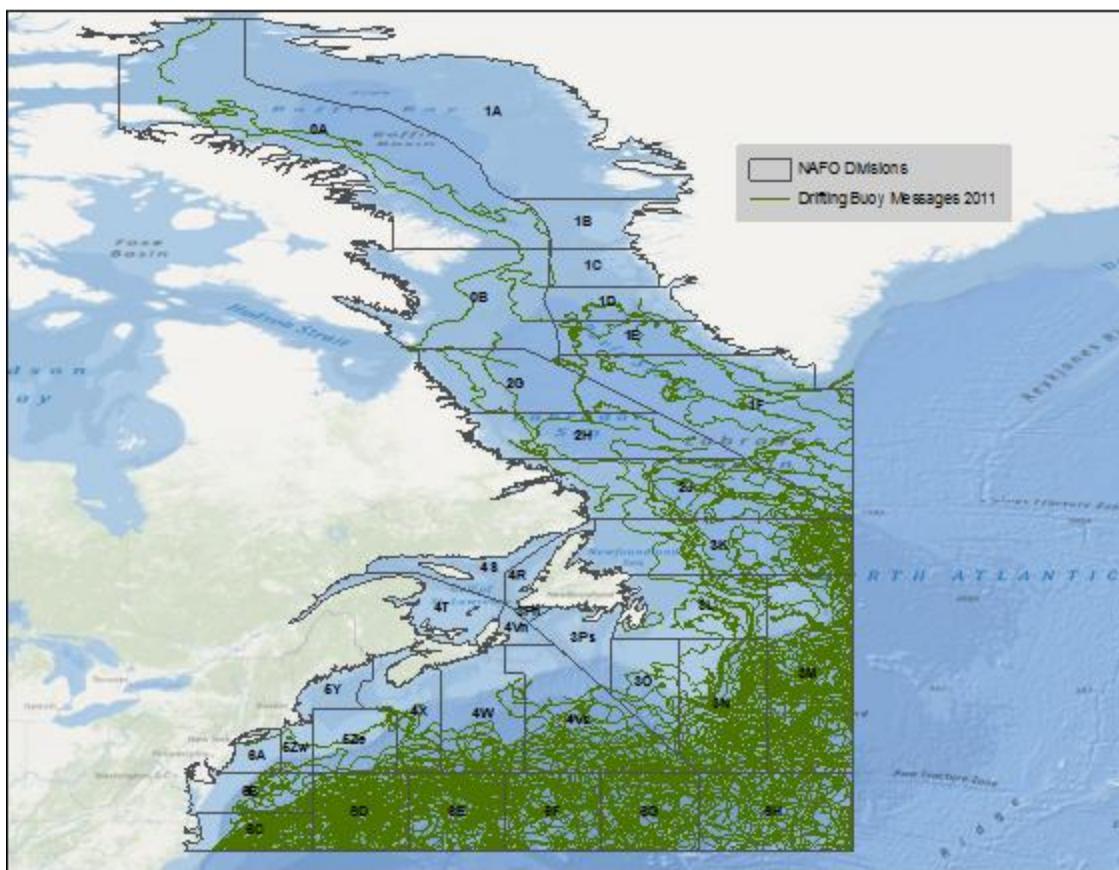


Figure 5: Drifting Buoy messages 2011
Total = 364 648 messages, 162 platforms

Current Meter Data

The following maps and inventory summarizes current meter data deployments and data processing in 2010 and 2011 in the NAFO area:

Table 6a, Figure 6: Current meters recovered from 2010 to 2011 and processed

Table 6b, Figure 7: Current meters recovered from 2010 to 2011 but not yet processed

Current meters have been deployed in the NAFO area for many years. These data are processed and archived at the Bedford Institute of Oceanography (BIO), Dartmouth, Nova Scotia and are available online at: bluefin2.dfo-mpo.gc.ca/odigr/index-e.html

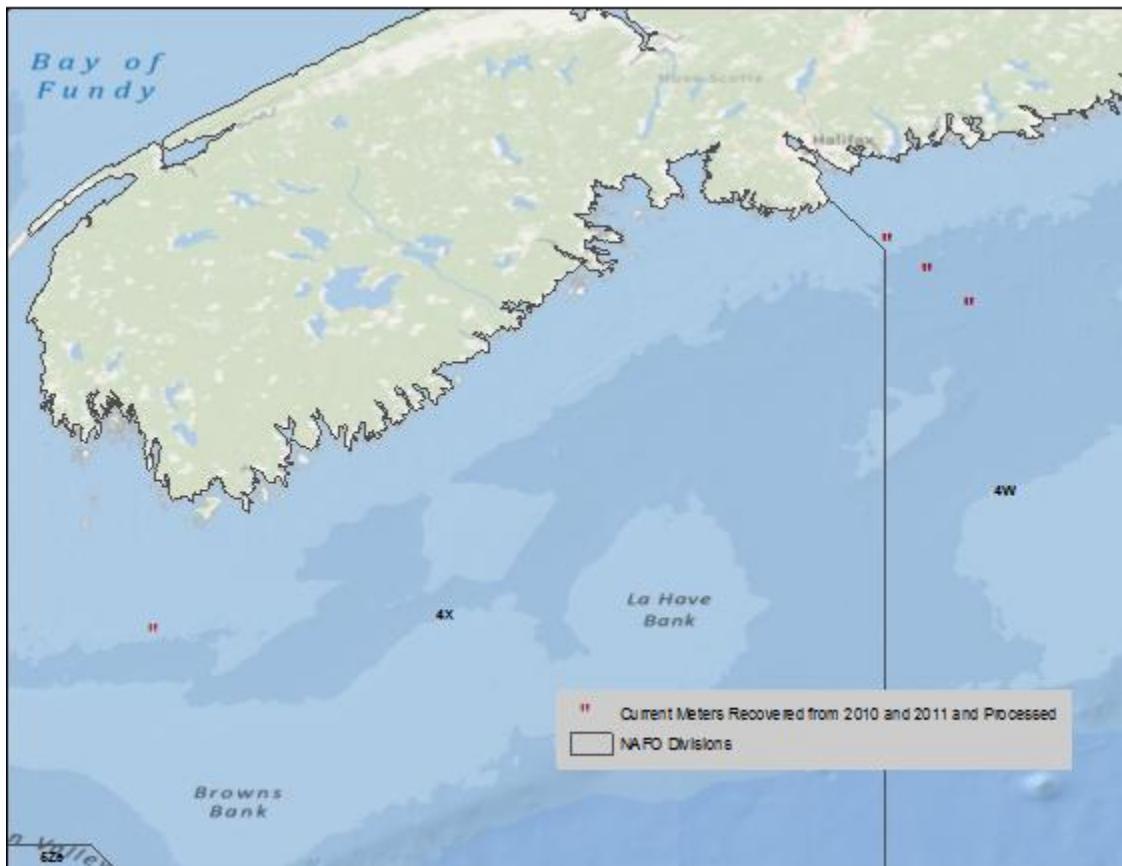


Figure 6: Current Meters Recovered from 2010 and 2011 and processed

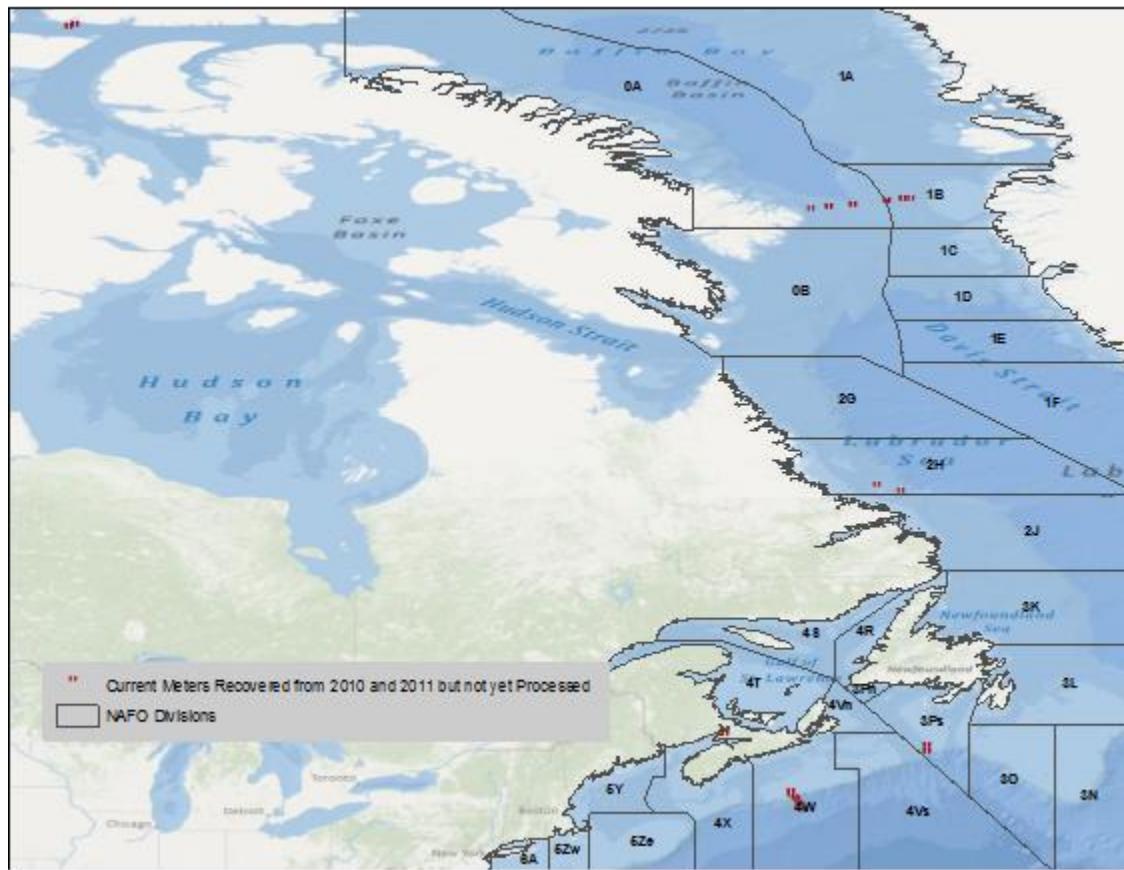


Figure 7: Current Meters recovered from 2010 and 2011 but not yet processed

Wave Data

The following map displays where ISDM wave data were collected in 2011:

- **Figure 8: Wave Buoys in the NAFO Area in 2011**

13 Environment Canada meteorological buoys
6 Wave Instruments from the Oil and Gas industry
(Datawell and Triaxys buoys, MIROS RADAR and ADCP)

ISDM continued to process and archive operational surface wave data on a daily basis around Canada. Wave spectra, calculated variables such as the significant wave height and peak period, concurrent wind observations, and raw digital time series of water surface elevations are stored. Data are quality controlled with a visual inspection and with ISDM software to set flags on data showing instrument failures. During 2011, data was collected from 19 buoys in the NAFO area. All real-time and historical wave data are made available on-line from the ISDM web site:

www.isdm.gc.ca/isdm-qdsi/waves-vagues/index-eng.htm

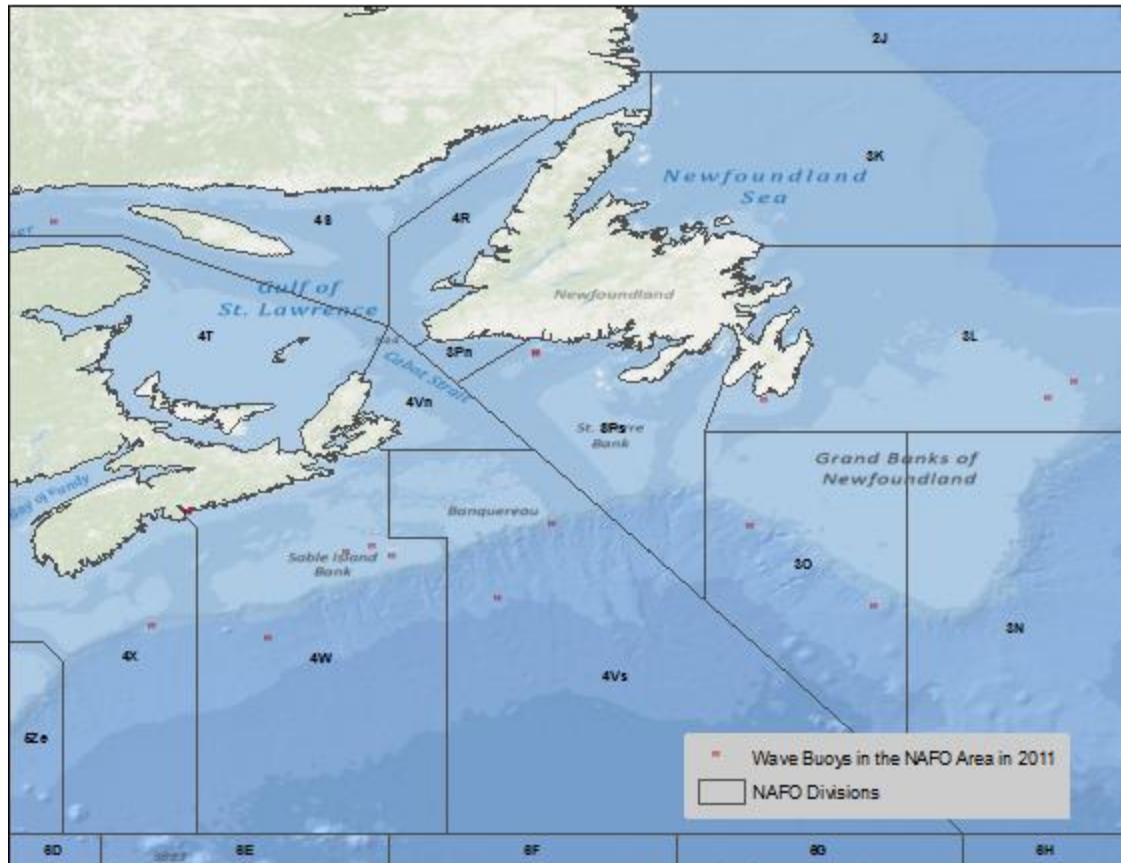


Figure 8: Wave Buoys in the NAFO Area in 2011
Total = 19 Platforms

Tide and Water level Data

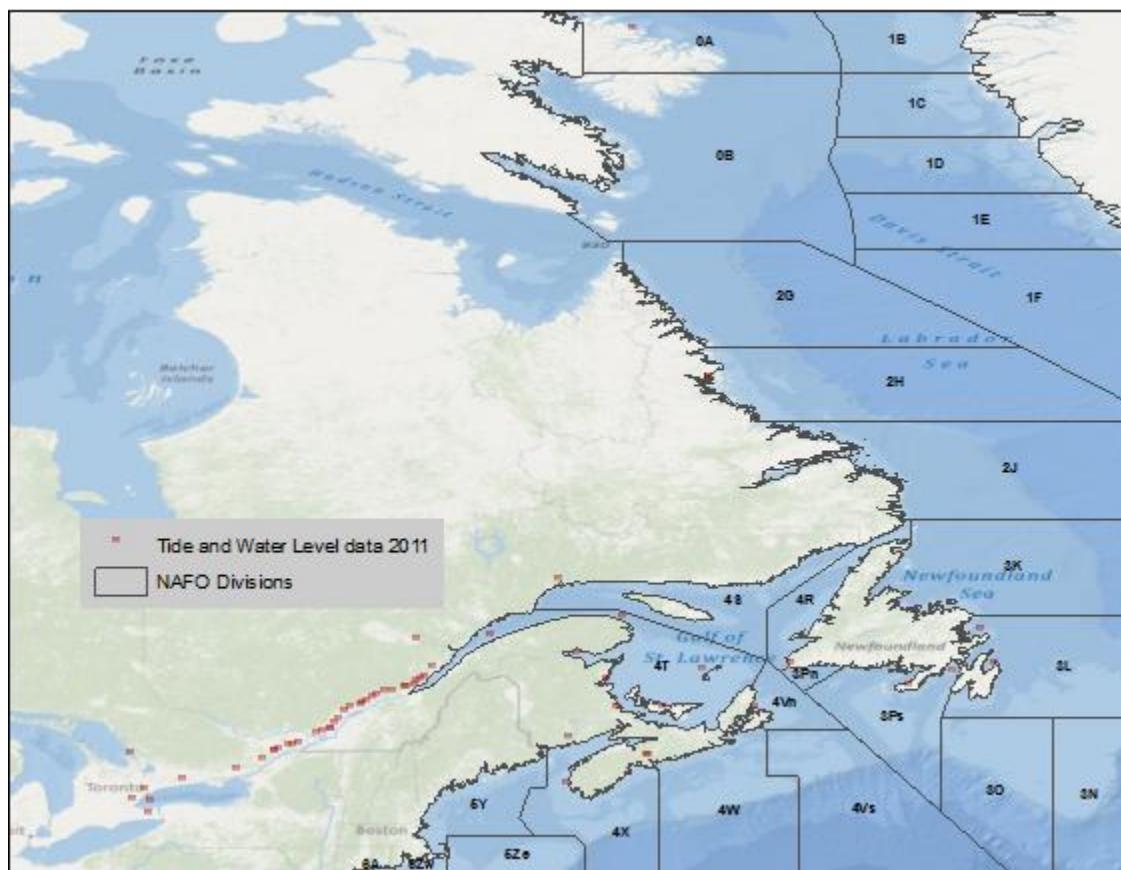
As the designated data center, ISDM processes and archives observed water level data collected from the gauge network maintained by the Canadian Hydrographic Service (CHS). There are four main CHS regions: Pacific, Central & Arctic, Quebec, and Atlantic region. Data is also exchanged with Environment Canada every year. Over 2 million new observations are archived every month. The historical tide and water level data archive has digital records with the earliest dating back before the turn of the century.

In 2011, data was reported from 96 stations with 26 of those stations in the NAFO region. Data are quality controlled by the regional CHS tidal officers and ISDM before they become available to the public.

The following map displays where ISDM tide and water level data were collected from:

- **Figure 9: Tide and water level data in the NAFO Area in 2011**

Historical water level data and station benchmarks are available on-line from the ISDM web site:
www.isdm.gc.ca/isdm-qdsi/twl-mne/index-eng.htm



Activity Updates

The International Argo Project

Argo is an international program which started in 2000 with aims to deploy profiling floats on a 3 by 3 degree grid in the oceans of the world. Each profiling float samples and reports both temperature and salinity from 2000 m to the surface every 10 days. Some of the floats also report oxygen. Data are distributed on the Global Telecommunications System (GTS) within 24 hours of collection and made available on two Global servers located in France and the US. There are currently approximately 3500 Argo profiling floats sampling the world oceans.

ISDM's role is to carry out the processing of the data received from Canadian floats, to distribute the data on the GTS and global servers within 24 hours and to perform the delayed mode processing.

ISDM maintains a Canadian web site www.isdm.gc.ca/isdm-gdsi/argo/index-eng.html that contains data and information about Canadian floats as well as general information and statistics about the global array. Global information is also available from the Argo Information Centre in Toulouse at argo.jcommops.org.

During 2011, the Argo Canada program deployed 15 Argo floats in the NAFO region, and they all reported some data in the NAFO area. In addition to these newly deployed floats, 49 Canadian profilers (for a total of 64) were active in NAFO areas in 2011, 6 of which also reported oxygen. Details of which NAFO regions were sampled are given in table 1 ("PROFILE FLOAT", "CANADA"). Only 36 of 64 floats were still active as of early 2012, 3 of which are reporting oxygen. It is unclear which ones have stopped reporting because of ice coverage or because of a mechanical / power failure, more time is needed to assess which floats have become inactive.

The total number of profiles reported in NAFO areas by Canadian profilers were 1378 (temperature and salinity) and 122 (oxygen). In addition to be sent to the GTS within 24 hrs, the data were sent to the Argo GDACs as netCDF files in the same timelines. Figure 10 shows the Canadian Argo profilers sampling and drifting in the North Atlantic during 2011. The red lines indicate floats that stopped transmitting in 2011, whereas the blue lines indicate the newly deployed floats in 2011.

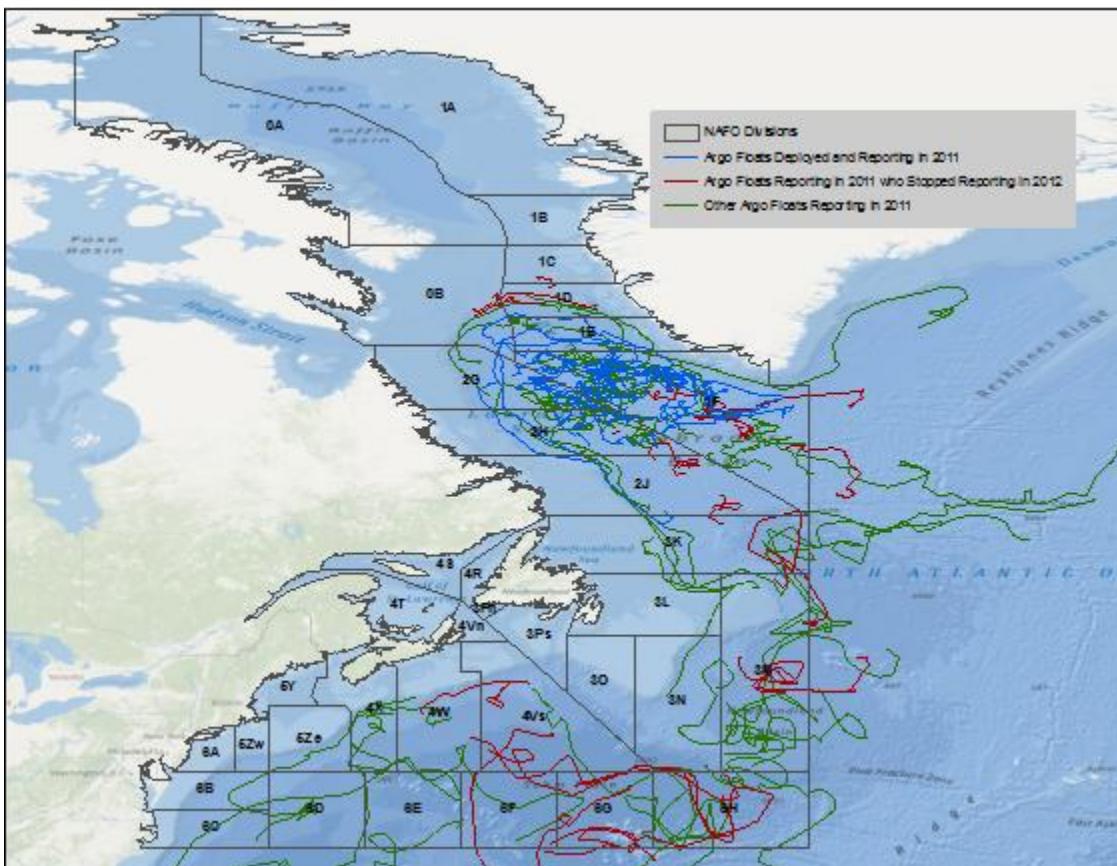


Figure 10: Canadian Argo profiling floats 2011

Atlantic Zone Monitoring Programme (AZMP)

The DFO Atlantic Zone Monitoring Programme activities include regular sampling for 7 fixed stations and 14 standard sections, and research cruises in the AZMP area to collect other physical, chemical and biological data. As part of ISDM's activities in data management, ISDM continues to build and maintain the AZMP web site: www.isdm.gc.ca/isdm-qdsi/azmp-pmza/index-eng.html.

The wealth of data and information on the site includes:

- Physical and chemical data from 1999 to the present such as CTD, bottle and bathythermograph measurements
- Climate indices showing long term trends of physical variables in the water and atmosphere.
 - The surface distribution of temperature at the bottom is presented for NAFO sub-areas 4X, 4W, 4Vn and 4Vs
- Water level data for 9 gauges ranging from 1895 to present
- Graphical representations of biological data (phytoplankton, zooplankton)
- Remote Sensing links for Ocean Colour, SST and Primary Productivity product

This year, a section regularly sampled by IML across NAFO regions 4T and 4S was added to the website. The section has been sampled for the first time in 2000 and regularly since 2003.

The data collected as part of AZMP is also compiled in figures and tables 1 to 3.

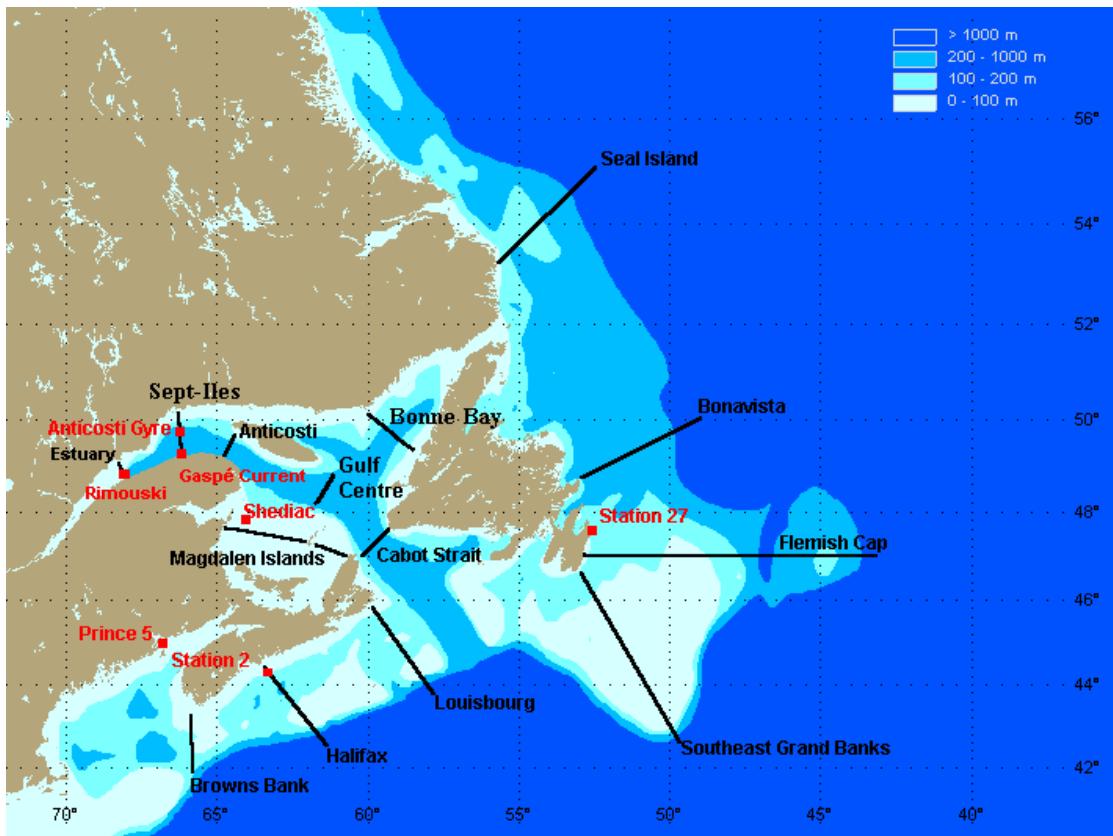


Figure 11: Map of AZMP sections and stations

Aquatic Invasive Species (AIS)

Aquatic Invasive Species are a major threat to Canada's fisheries and aquaculture industry and have been entering Canadian waters for centuries but never as rapidly as today. Every decade, some 15 alien species establish themselves in our coastal or inland waters. In the absence of their natural predators, the most aggressive of them spread rapidly. They can radically alter habitat, rendering it inhospitable for native species. The zebra mussel and sea lamprey are examples of such species that have greatly affected the Great Lakes.

The most effective approach to dealing with this threat involves managing the pathways through which invasive species enter and spread through Canadian waters. For aquatic species these pathways are shipping, recreational and commercial boating, the use of live bait, the aquarium/water garden trade, live food fish, unauthorized introductions and transfers, and canals and water diversions. The shipping pathway is considered the largest single source of new aquatic invasive species. Ballast water that is taken on in foreign ports, for ship stability and safety at sea, is discharged in Canadian waters, along with undesirable "hitchhikers" - foreign species ranging from bacteria to larger organisms.

The Canadian Aquatic Invasive Species database and web application was developed in 2004-5. The main objective was to provide a geo-referenced repository for all invasive species observations gathered in Canada by DFO scientists, provincial departments, other federal or municipal departments and the general public. The second objective was to create a decision making tool that would allow the production of augmented value products that would illustrate trends and movements over time and various locations and thus allow the department to be proactive rather than reactive to observations made.

Currently there is data from the Great Lakes, the Maritimes and some from the Vancouver area. Most of the data are observations of location name, long-lat, species name, date, and any metadata provided.

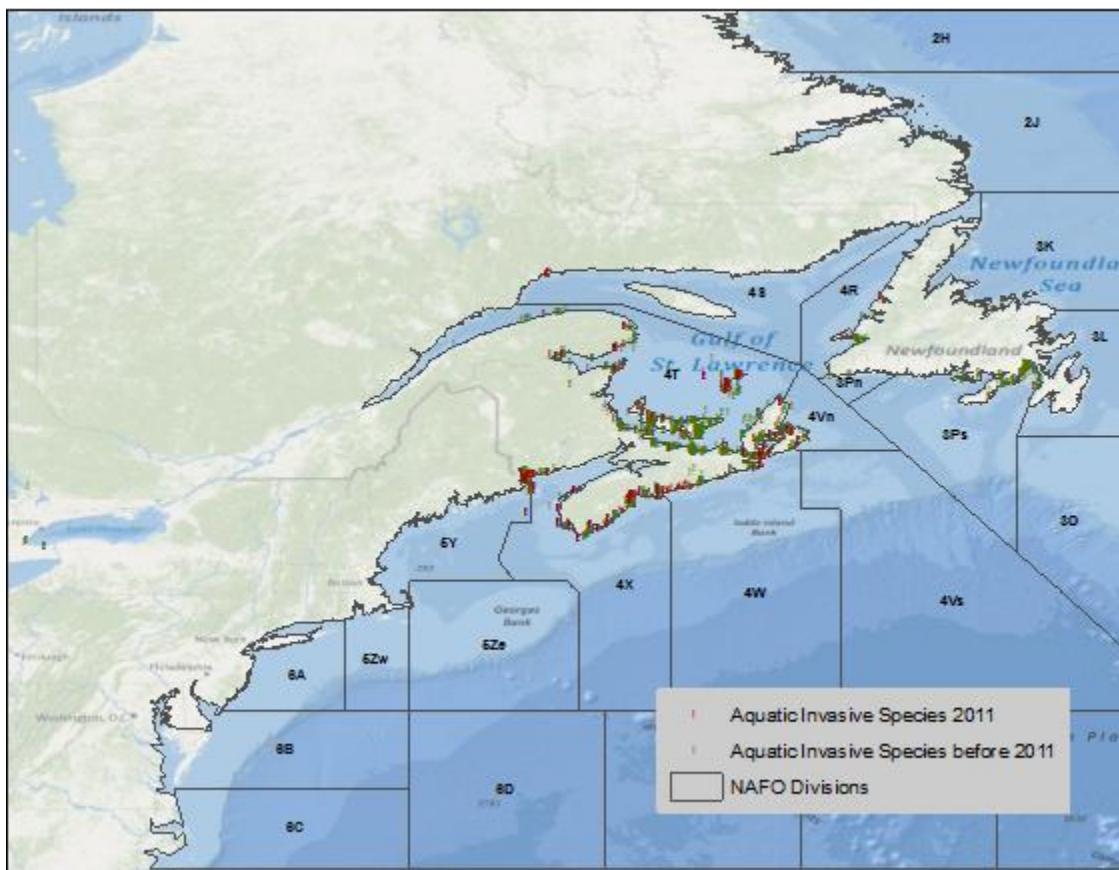


Figure 12: Map of Aquatic Invasive Species

National Science Data Management Committee (NSDMC)

This committee was funded in 2011-12 to a total of \$1.1M. From this, 16 projects were funded. Five projects address primarily data archival issues, nine projects address primarily data access and one addresses primarily standards. Some funds were also set aside for governance. A new project aiming at making physical ocean model outputs (waves, winds) accessible through open source protocols was initiated. Ongoing projects aiming at improving infrastructure, building a metadata repository, creating a detailed gridded bathymetry around Canada, establishing a national multispecies tagging system, creating databases for data types with no home (ADCP, Acoustic Data), rescuing data at risk (plankton in the St. Lawrence) and achieving the rescue of multi-regional freshwater temperature data, received renewed funding. The development and application of a national policy for physical sample archive management is also continuing from last year.

References

List of NAFO Standard Oceanographic Sections and Stations. The reprint of NAFO SCR DOC., NO. 1, Serial N1432, 9p. Printed and distributed by: NAFO, P.O. Box 638, Dartmouth, Nova Scotia, Canada B2Y 3Y9.

Table 1: Real-time temperature and /or salinity data collected and processed in 2011

Total: 279 186 measurements from 182 platforms; a measurement consists of a profile or surface measurement at one place and time.

| Platform Name | Country | Call Sign | Report Period | BATHY | TESAC | NAFO Subarea |
|--------------------------|------------|-----------|-----------------|-------|-------|---|
| BOSTON | USA | 44013 | Apr-13 - Dec-05 | 0 | 5670 | 5ZW |
| VIRGINIA BEACH 64NM, VA | USA | 44014 | Jan-01 - Dec-19 | 0 | 8284 | 6C |
| BUOY N NORTHEAST CHANNEL | USA | 44024 | Jan-01 - Dec-31 | 0 | 8590 | 4X |
| DISCUS 3 | USA | 44027 | Nov-17 - Dec-31 | 0 | 1064 | 5Y |
| MASS. BAY/STELLWAGEN | USA | 44029 | Jan-01 - Dec-31 | 0 | 8740 | 5ZW |
| WESTERN MAINE SHELF | USA | 44030 | Jan-01 - Dec-31 | 0 | 8660 | 5ZW |
| CENTRAL MAINE SHELF | USA | 44032 | Jan-01 - Dec-31 | 0 | 8753 | 5Y |
| WEST PENOBSCOT BAY | USA | 44033 | Jan-05 - Sep-19 | 0 | 6158 | 5Y |
| EASTERN MAINE SHELF | USA | 44034 | Jan-01 - Dec-31 | 0 | 8749 | 5Y |
| JORDAN BASIN | USA | 44037 | Jan-01 - Dec-05 | 0 | 7842 | 5Y |
| JAMESTOWN | USA | 44041 | Jan-01 - Dec-31 | 0 | 8482 | 6B |
| POTOMAC | USA | 44042 | Jan-01 - Dec-31 | 0 | 7462 | 6B |
| PATAPSCO | USA | 44043 | Aug-26 - Dec-31 | 0 | 2954 | 6B |
| SUSQUEHANNA | USA | 44057 | Jun-10 - Dec-31 | 0 | 4754 | 6B |
| STINGRAY POINT | USA | 44058 | Apr-26 - Dec-31 | 0 | 5562 | 6B |
| GOOSEES REEF | USA | 44062 | Jan-11 - Dec-31 | 0 | 7115 | 6B |
| ANNAPOLIS | USA | 44063 | Jan-01 - Dec-31 | 0 | 8112 | 6B |
| FIRST LANDING | USA | 44064 | Aug-27 - Aug-28 | 0 | 34 | 6B |
| MAERSK VILNIUS | SINGAPORE | 9V8503 | Apr-11 - Nov-22 | 35 | 0 | 5ZW,6A,6B,6D |
| AIRCRAFT | UNKNOWN/IN | AF303 | Aug-27 - Aug-27 | 4 | 0 | 6C |
| AIRCRAFT | UNKNOWN/IN | AF306 | Aug-28 - Aug-28 | 5 | 0 | 6A |
| RAILROAD, CHESAPEAKE RES | USA | BRIM2 | Jan-01 - Dec-31 | 0 | 30411 | 6B |
| EXPLORER | BAHAMAS | C6TN4 | Jun-21 - Jun-21 | 14 | 0 | 6H |
| OPILO | CANADA | CFD2576 | May-26 - Aug-19 | 0 | 36 | 4T |
| SHAMOOK | CANADA | CG2676 | Jan-23 - Oct-25 | 0 | 227 | 3K,3L |
| ALFRED NEEDLER | CANADA | CG2683 | Feb-05 - Dec-04 | 57 | 1036 | 3L,3N,3O,3PS,3PN,4R,4VN,4VS,4W,4X,5Y,5ZE |
| BELUGA | CANADA | CG3161 | Apr-13 - Jul-14 | 0 | 8 | 4T |
| NSC CALANUS II | CANADA | CG3187 | May-13 - Oct-19 | 0 | 93 | 4S,4T |
| F.G. CREED | CANADA | CG3198 | Aug-09 - Oct-24 | 0 | 18 | 4R,4S,4T |
| TELEOST | CANADA | CGCB | Apr-05 - Dec-20 | 149 | 858 | 2G,2H,2J,3K,3L,3M,3N,3O,4R,4S,4T,4VN |
| MARTHA L. BLACK | CANADA | CGCC | Feb-06 - Feb-25 | 0 | 8 | 4S,4T |
| HUDSON | CANADA | CGDG | Apr-07 - Dec-10 | 24 | 433 | 1E,1F,2G,2H,2J,3K,3L,3M,3N,3O,3PS,4R,4S,4T,4VN,4VS,4W,4X,5Z |
| CCGS VIOLA M DAVIDSON | CANADA | CGEC | Jan-17 - Dec-12 | 0 | 21 | 4X |
| SWEET HALL, CHESAPEAKE B | USA | CVQV2 | Jan-04 - Mar-15 | 0 | 5854 | 6B |
| METEOR | GERMANY | DBBH | Jul-12 - Jul-31 | 0 | 64 | 1F,2H,2J,3K,3L,3M |
| CELTIC EXPLORER | IRELAND | EIGB | Feb-06 - Mar-03 | 0 | 2 | 3L |
| OYSTER RIVER | USA | GBQN3 | Apr-28 - Nov-29 | 0 | 19874 | 5ZW |
| CHESNUT NECK | USA | JCQN4 | Mar-27 - Dec-31 | 0 | 25970 | 6A |
| BUOY 126, JACQUES COUSTE | USA | JCTN4 | Apr-18 - Dec-31 | 0 | 22753 | 6A |
| EMPIRE STATE | USA | KKFW | May-14 - May-15 | 5 | 0 | 6F,6G,6H |
| OTTER POINT CREEK | USA | LTQM2 | Apr-12 - Dec-17 | 0 | 23205 | 6B |
| T - WHARF BOTTOM | USA | NAQR1 | Jan-01 - Dec-28 | 0 | 26700 | 5ZW |

| | | | | | |
|---------------|-------------|----------|-----------------|----|------------------------------|
| NUKA ARCTICA | DENMARK | OXYH2 | Mar-17 - Sep-21 | 0 | 10 1F |
| REYKJAFOSS | NETHERLANDS | PCCM | Mar-17 - Mar-23 | 37 | 0 1F,2J,3K,3L,4X,5Y,5ZE,5ZW |
| PROFILE FLOAT | FRANCE | Q1901214 | Aug-01 - Dec-09 | 0 | 12 1F |
| PROFILE FLOAT | FRANCE | Q1901215 | Jul-22 - Aug-22 | 0 | 5 1F |
| PROFILE FLOAT | FRANCE | Q1901217 | Jul-26 - Oct-25 | 0 | 11 1F |
| PROFILE FLOAT | FRANCE | Q1901218 | Jul-29 - Oct-28 | 0 | 11 2H,2J |
| PROFILE FLOAT | USA | Q1901465 | Dec-27 - Dec-27 | 0 | 1 6C |
| PROFILE FLOAT | USA | Q3900582 | Jan-09 - Mar-10 | 0 | 7 3M |
| PROFILE FLOAT | USA | Q4900356 | Jan-06 - Mar-16 | 0 | 5 3N,4VS,6H |
| PROFILE FLOAT | USA | Q4900357 | Jan-10 - Jun-28 | 0 | 4 6C,6D |
| PROFILE FLOAT | USA | Q4900442 | Jan-08 - Dec-30 | 0 | 28 4VS,4W,4X,5ZE,6C,6D,6E,6F |
| PROFILE FLOAT | USA | Q4900480 | Jun-27 - Nov-23 | 0 | 8 6C,6D |
| PROFILE FLOAT | CANADA | Q4900500 | Jan-04 - Mar-05 | 0 | 7 1F |
| PROFILE FLOAT | CANADA | Q4900503 | Jan-08 - Mar-20 | 0 | 5 1F |
| PROFILE FLOAT | CANADA | Q4900504 | Jan-05 - Mar-06 | 0 | 7 3M |
| PROFILE FLOAT | CANADA | Q4900505 | Jan-03 - Apr-13 | 0 | 11 6F,6G |
| PROFILE FLOAT | CANADA | Q4900506 | Jan-25 - May-05 | 0 | 11 6G |
| PROFILE FLOAT | CANADA | Q4900507 | Jan-02 - Mar-03 | 0 | 7 3M |
| PROFILE FLOAT | CANADA | Q4900635 | Jan-03 - Sep-10 | 0 | 26 1F |
| PROFILE FLOAT | CANADA | Q4900678 | Jan-04 - Apr-24 | 0 | 12 2J,3K |
| PROFILE FLOAT | CANADA | Q4900682 | Jan-01 - Jun-20 | 0 | 18 1F |
| PROFILE FLOAT | CANADA | Q4900683 | Jan-07 - Jul-16 | 0 | 20 1F,2H,2J |
| PROFILE FLOAT | USA | Q4900782 | Sep-20 - Dec-09 | 0 | 8 6H |
| PROFILE FLOAT | USA | Q4900788 | Jan-04 - Jan-14 | 0 | 2 6G |
| PROFILE FLOAT | USA | Q4900790 | Mar-07 - Apr-06 | 0 | 4 6C |
| PROFILE FLOAT | USA | Q4900801 | Jan-08 - Dec-24 | 0 | 36 1F,2J,3K |
| PROFILE FLOAT | USA | Q4900803 | Jan-02 - Dec-28 | 0 | 33 4W,4X,5ZE,6D,6E,6F |
| PROFILE FLOAT | CANADA | Q4900875 | Jan-06 - May-06 | 0 | 13 2J,3K,3M |
| PROFILE FLOAT | CANADA | Q4900876 | Jan-13 - Mar-04 | 0 | 4 3K,3M |
| PROFILE FLOAT | CANADA | Q4900878 | Jan-06 - Mar-07 | 0 | 7 4VS,6G,6H |
| PROFILE FLOAT | CANADA | Q4900881 | Jan-08 - Mar-19 | 0 | 8 4VS |
| PROFILE FLOAT | CANADA | Q4900882 | Jan-02 - Apr-02 | 0 | 10 4VS,6F |
| PROFILE FLOAT | USA | Q4901057 | Nov-11 - Dec-31 | 0 | 6 6H |
| PROFILE FLOAT | CANADA | Q4901075 | Jan-04 - Jan-14 | 0 | 2 2H |
| PROFILE FLOAT | CANADA | Q4901076 | Jan-05 - Apr-25 | 0 | 12 4VS,4W |
| PROFILE FLOAT | CANADA | Q4901078 | Jul-26 - Dec-23 | 0 | 16 4W,4X,6B,6C,6D,6E,6F,6G |
| PROFILE FLOAT | CANADA | Q4901080 | Jan-05 - Nov-21 | 0 | 32 3N,4VS,4W,6F,6G,6H |
| PROFILE FLOAT | CANADA | Q4901082 | Jan-05 - Jun-14 | 0 | 17 3N,4VS,6F,6G,6H |
| PROFILE FLOAT | CANADA | Q4901092 | Jan-13 - Dec-29 | 0 | 37 1F |
| PROFILE FLOAT | CANADA | Q4901093 | Jan-10 - Nov-06 | 0 | 26 3M,6H |
| PROFILE FLOAT | CANADA | Q4901094 | Jan-09 - Feb-28 | 0 | 6 1D |
| PROFILE FLOAT | CANADA | Q4901102 | Jan-08 - Sep-05 | 0 | 24 3N,6G,6H |
| PROFILE FLOAT | CANADA | Q4901104 | Apr-07 - Oct-14 | 0 | 16 3M |
| PROFILE FLOAT | CANADA | Q4901123 | Jan-06 - Dec-22 | 0 | 36 1F,2H |
| PROFILE FLOAT | CANADA | Q4901124 | Jul-05 - Dec-22 | 0 | 18 1D,1E,1F |
| PROFILE FLOAT | CANADA | Q4901125 | Jan-05 - Dec-31 | 0 | 37 0B,1E,1F,2G |
| PROFILE FLOAT | CANADA | Q4901126 | Jan-05 - Jan-05 | 0 | 1 2J |
| PROFILE FLOAT | CANADA | Q4901127 | Jan-04 - Dec-30 | 0 | 37 1E,1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901129 | Jan-01 - Dec-27 | 0 | 37 3M,3N |
| PROFILE FLOAT | CANADA | Q4901130 | Jan-10 - Mar-01 | 0 | 6 0B,1D |

| | | | | | |
|---------------|--------|----------|-----------------|---|--------------------------|
| PROFILE FLOAT | CANADA | Q4901133 | Jan-02 - May-03 | 0 | 8 3K,3M |
| PROFILE FLOAT | CANADA | Q4901139 | Jan-05 - Dec-31 | 0 | 28 4W,4X,5ZE,6E,6F |
| PROFILE FLOAT | CANADA | Q4901140 | Jan-09 - Nov-05 | 0 | 31 3N,4VS,6G,6H |
| PROFILE FLOAT | CANADA | Q4901141 | Jan-04 - Mar-15 | 0 | 8 0B,1D |
| PROFILE FLOAT | CANADA | Q4901142 | Jan-03 - Dec-29 | 0 | 37 0B,1D,1E,1F,2G |
| PROFILE FLOAT | CANADA | Q4901143 | Jan-06 - Dec-22 | 0 | 30 3K,3M |
| PROFILE FLOAT | CANADA | Q4901149 | Jan-09 - Dec-25 | 0 | 36 4X,5ZE,6B,6C,6D |
| PROFILE FLOAT | CANADA | Q4901150 | Jan-04 - Dec-30 | 0 | 37 3K,3L,3M,3N |
| PROFILE FLOAT | CANADA | Q4901151 | Jan-07 - Jul-26 | 0 | 21 2H,2J,3K,3L,3M |
| PROFILE FLOAT | CANADA | Q4901152 | Jan-08 - Dec-24 | 0 | 36 1F |
| PROFILE FLOAT | CANADA | Q4901153 | Jan-07 - Dec-23 | 0 | 36 1F,2H |
| PROFILE FLOAT | CANADA | Q4901154 | Jan-07 - Dec-23 | 0 | 35 2G,2H,2J,3K,3L,3M |
| PROFILE FLOAT | CANADA | Q4901155 | Jan-05 - Dec-21 | 0 | 36 4W,4X,5ZE,6E |
| PROFILE FLOAT | CANADA | Q4901156 | Jan-03 - Dec-29 | 0 | 37 1F,2G,2H,2J,3K,3L |
| PROFILE FLOAT | CANADA | Q4901157 | Jan-06 - Dec-22 | 0 | 36 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901158 | Jan-05 - Apr-04 | 0 | 10 1C,1D |
| PROFILE FLOAT | CANADA | Q4901159 | Jan-07 - Dec-23 | 0 | 36 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901160 | May-15 - Dec-21 | 0 | 23 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901161 | May-17 - Dec-23 | 0 | 23 1E,1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901162 | May-26 - Dec-22 | 0 | 21 1F |
| PROFILE FLOAT | CANADA | Q4901163 | May-21 - Dec-27 | 0 | 23 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901164 | May-21 - Dec-27 | 0 | 23 1F |
| PROFILE FLOAT | CANADA | Q4901165 | May-21 - Dec-27 | 0 | 23 1F,2G |
| PROFILE FLOAT | CANADA | Q4901166 | May-20 - Dec-26 | 0 | 23 1F |
| PROFILE FLOAT | CANADA | Q4901167 | May-14 - Dec-30 | 0 | 24 1F,2H |
| PROFILE FLOAT | CANADA | Q4901168 | May-13 - Dec-29 | 0 | 24 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901169 | May-20 - Dec-26 | 0 | 23 1D,1E,1F |
| PROFILE FLOAT | CANADA | Q4901170 | May-20 - Dec-26 | 0 | 23 1E,2G,2H,2J,3K |
| PROFILE FLOAT | CANADA | Q4901171 | May-15 - Dec-31 | 0 | 24 1F,2H |
| PROFILE FLOAT | CANADA | Q4901172 | May-14 - Dec-30 | 0 | 24 1F,2G,2H |
| PROFILE FLOAT | CANADA | Q4901173 | May-16 - Dec-22 | 0 | 23 1E,1F |
| PROFILE FLOAT | CANADA | Q4901174 | May-16 - Dec-22 | 0 | 23 1F |
| PROFILE FLOAT | USA | Q4901206 | Mar-21 - Mar-21 | 0 | 1 6F |
| PROFILE FLOAT | USA | Q4901214 | Jan-08 - Jan-28 | 0 | 3 6E |
| PROFILE FLOAT | USA | Q4901216 | Jul-19 - Aug-18 | 0 | 4 6C,6D |
| PROFILE FLOAT | USA | Q4901217 | Feb-19 - Dec-26 | 0 | 28 3N,3O,4VS,6G |
| PROFILE FLOAT | USA | Q4901218 | Feb-22 - Dec-29 | 0 | 26 3N,4VS,6C,6D,6E,6F,6G |
| PROFILE FLOAT | USA | Q4901278 | Apr-12 - Dec-27 | 0 | 15 6B,6D |
| PROFILE FLOAT | USA | Q4901290 | Jul-30 - Dec-26 | 0 | 15 3N,4VS,6D,6E,6F,6G,6H |
| PROFILE FLOAT | USA | Q4901291 | Aug-15 - Dec-03 | 0 | 10 6B,6C |
| PROFILE FLOAT | FRANCE | Q5902299 | Sep-21 - Oct-21 | 0 | 4 1E,1F |
| PROFILE FLOAT | USA | Q5903377 | Dec-07 - Dec-27 | 0 | 5 6B,6C,6D |
| PROFILE FLOAT | USA | Q5903387 | Apr-27 - Dec-27 | 0 | 25 2H,2J |
| PROFILE FLOAT | USA | Q5903390 | Apr-30 - Dec-30 | 0 | 25 2H,2J |
| PROFILE FLOAT | USA | Q5903392 | May-01 - Dec-31 | 0 | 25 2H,2J |
| PROFILE FLOAT | USA | Q5903393 | Jul-11 - Dec-31 | 0 | 16 1F |
| PROFILE FLOAT | USA | Q5903395 | Apr-28 - Dec-28 | 0 | 24 1F,2J |
| PROFILE FLOAT | USA | Q5903396 | Apr-29 - Dec-29 | 0 | 25 3K |
| PROFILE FLOAT | USA | Q5903397 | Apr-29 - Dec-29 | 0 | 25 2J,3K |
| PROFILE FLOAT | USA | Q5903398 | Jul-04 - Jul-24 | 0 | 3 3K,3M |

| | | | | | |
|-------------------|------------|----------|-----------------|-----|--|
| PROFILE FLOAT | USA | Q5903399 | May-01 - Dec-31 | 0 | 25 3K,3L,3M |
| PROFILE FLOAT | EU | Q6900344 | Jan-08 - Jan-08 | 0 | 1 1D |
| PROFILE FLOAT | FRANCE | Q6900491 | Jan-07 - Jul-26 | 0 | 16 1F,3K |
| PROFILE FLOAT | FRANCE | Q6900492 | Jan-09 - Aug-17 | 0 | 23 1D,1E |
| PROFILE FLOAT | GERMANY | Q6900552 | Apr-10 - Dec-21 | 0 | 17 6B,6C,6D |
| PROFILE FLOAT | GERMANY | Q6900555 | Jan-10 - Dec-21 | 0 | 22 1F,2H,2J |
| PROFILE FLOAT | GERMANY | Q6900556 | Apr-08 - Dec-04 | 0 | 16 1E,1F |
| PROFILE FLOAT | GERMANY | Q6900557 | Jan-08 - Dec-19 | 0 | 19 2J,3K,3L,3M |
| PROFILE FLOAT | GERMANY | Q6900561 | Jan-03 - Dec-29 | 0 | 23 1F |
| PROFILE FLOAT | GERMANY | Q6900562 | Jan-04 - Dec-30 | 0 | 24 2H,2J,3K |
| PROFILE FLOAT | GERMANY | Q6900564 | Feb-28 - May-14 | 0 | 6 1F |
| PROFILE FLOAT | GERMANY | Q6900566 | May-24 - Jun-08 | 0 | 2 1F |
| PROFILE FLOAT | GERMANY | Q6900567 | Jan-10 - Feb-24 | 0 | 4 1F |
| PROFILE FLOAT | GERMANY | Q6900579 | Jan-11 - Jan-11 | 0 | 1 1F |
| PROFILE FLOAT | UK | Q6900602 | May-02 - Jul-31 | 0 | 10 1F,2J |
| PROFILE FLOAT | UK | Q6900603 | Nov-21 - Dec-31 | 0 | 5 1E,1F |
| PROFILE FLOAT | UK | Q6900604 | Apr-21 - Oct-08 | 0 | 5 1F |
| PROFILE FLOAT | UK | Q6900606 | Jan-17 - Mar-08 | 0 | 6 1B |
| PROFILE FLOAT | UK | Q6900616 | Nov-07 - Dec-27 | 0 | 7 1D,1E,1F |
| PROFILE FLOAT | FRANCE | Q6900638 | Jan-04 - Oct-21 | 0 | 30 1E,1F,2G,2H,2J,3K |
| PROFILE FLOAT | FRANCE | Q6900643 | Jan-08 - Oct-25 | 0 | 30 2J,3K,3L |
| PROFILE FLOAT | NETHERLAND | Q6900754 | Nov-16 - Dec-16 | 0 | 2 1F |
| PROFILE FLOAT | NETHERLAND | Q6900759 | Dec-28 - Dec-28 | 0 | 1 1F |
| PROFILE FLOAT | GERMANY | Q6900867 | Apr-22 - Dec-28 | 0 | 24 6G,6H |
| PROFILE FLOAT | GERMANY | Q6901047 | Jul-23 - Dec-30 | 0 | 14 3M |
| PROFILE FLOAT | GERMANY | Q6901063 | Aug-11 - Aug-11 | 0 | 1 3M |
| PROFILE FLOAT | GERMANY | Q6901064 | Aug-09 - Dec-27 | 0 | 11 3K |
| PROFILE FLOAT | GERMANY | Q6901065 | Aug-09 - Oct-28 | 0 | 9 2J,3K,3M |
| PROFILE FLOAT | GERMANY | Q6901066 | Oct-03 - Oct-03 | 0 | 1 3K |
| SEA ANIMAL | UNKNOWN/IN | Q9900337 | Jan-07 - Feb-16 | 0 | 5 1F |
| SEA ANIMAL | UNKNOWN/IN | Q9900435 | Sep-06 - Dec-31 | 0 | 367 1A |
| SEA ANIMAL | UNKNOWN/IN | Q9900436 | Sep-07 - Dec-31 | 0 | 441 1A |
| UNKNOWN/INCONNU | UNKNOWN/IN | SHIP | Jan-05 - Dec-21 | 352 | 217 0A,0B,1B,1C,1E,1F,2G,2H,2J,3K,3L,3M,3O,3PS,4R,4S,4T,4VN,4VS,4W,4X,5Y,5ZE,5ZW,6A,6B,6C,6E,6G,6H |
| REYKJAFOSS | ANTIGUA AN | V2FB6 | Oct-01 - Dec-21 | 22 | 0 1F,2J,3K,3L,4X,5Y,5ZE,5ZW |
| RICKERS GENOA | MARSHALL I | V7FS3 | Apr-27 - Oct-29 | 39 | 0 3M,3N,3O,3PS,4VS,4W,4X,5ZE,5ZW |
| OLEANDER | MARSHALL I | V7SX3 | Jul-15 - Dec-08 | 149 | 0 6A,6B,6D |
| CAPE BALLARD | CANADA | VCXB | Jul-20 - Aug-24 | 0 | 250 0B,1C,2G,3PS |
| OOCL MONTREAL | CHINA | VRYO3 | Feb-27 - Oct-09 | 33 | 0 1F,2J,3L,3M |
| SEALAND NAVIGATOR | USA | WPGK | Mar-05 - Dec-10 | 138 | 0 6A,6B,6C |
| ROME EXPRESS | BERMUDA | ZCDJ3 | Sep-24 - Sep-26 | 24 | 0 6G,6H |

Table 2: Delayed mode profile data collected in 2011

Total: 1179 stations

| Country | Cruise Num | Cruise Period | BT | CTD | BOTTLE | NAFO Subarea |
|----------------|-------------------|----------------------|-----------|------------|---------------|---------------------|
| CANADA | 18AU10013 | Jan-17 - Jan-17 | 0 | 2 | 0 | 4X |
| CANADA | 18AU10014 | Jan-18 - Jan-20 | 0 | 5 | 0 | 4X |
| CANADA | 18AU10015 | Feb-16 - Feb-16 | 0 | 2 | 0 | 4X |
| CANADA | 18AU10016 | Feb-17 - Feb-17 | 0 | 5 | 0 | 4X |
| CANADA | 18AU11005 | Mar-14 - Mar-14 | 0 | 2 | 0 | 4X |
| CANADA | 18AU11006 | Mar-15 - Mar-15 | 0 | 5 | 0 | 4X |
| CANADA | 18AU11007 | Apr-14 - Apr-15 | 0 | 2 | 0 | 4X |
| CANADA | 18AU11008 | Apr-06 - Apr-19 | 0 | 16 | 0 | 4X |
| | | Apr-26 - Apr-27 | 0 | 5 | 0 | 4X |
| CANADA | 18AU11009 | May-16 - May-16 | 0 | 2 | 0 | 4X |
| CANADA | 18AU11010 | Jun-15 - Jun-16 | 0 | 2 | 0 | 4X |
| | | Jul-12 - Jul-13 | 0 | 2 | 0 | 4X |
| CANADA | 18AU11011 | May-03 - May-03 | 0 | 7 | 0 | 4X |
| | | May-10 - May-10 | 0 | 1 | 0 | 4X |
| | | May-17 - May-17 | 0 | 7 | 0 | 4X |
| | | May-24 - May-24 | 0 | 2 | 0 | 4X |
| | | May-31 - May-31 | 0 | 7 | 0 | 4X |
| CANADA | 18AU11012 | Jun-07 - Jun-07 | 0 | 7 | 0 | 4X |
| | | Jun-13 - Jun-21 | 0 | 14 | 0 | 4X |
| | | Jun-28 - Jun-28 | 0 | 7 | 0 | 4X |
| CANADA | 18AU11669 | Jan-17 - Jan-17 | 0 | 1 | 0 | 4X |
| | | Feb-16 - Feb-16 | 0 | 1 | 0 | 4X |
| | | Mar-14 - Mar-14 | 0 | 1 | 0 | 4X |
| | | May-18 - May-18 | 0 | 1 | 0 | 4X |
| | | Jun-16 - Jun-16 | 0 | 1 | 0 | 4X |
| | | Jul-12 - Jul-12 | 0 | 1 | 0 | 4X |
| | | Aug-15 - Aug-15 | 0 | 1 | 0 | 4X |
| | | Sep-12 - Sep-12 | 0 | 1 | 0 | 4X |
| | | Oct-11 - Oct-11 | 0 | 1 | 0 | 4X |
| | | Nov-18 - Nov-18 | 0 | 1 | 0 | 4X |
| | | Dec 12 - Dec 12 | 0 | 1 | 0 | 4X |
| | | Nov-02 - Nov-02 | 0 | 1 | 0 | 4T |
| CANADA | 18BO11668 | Nov-29 - Nov-29 | 0 | 1 | 0 | 4T |
| | | May-13 - May-19 | 0 | 27 | 0 | 4S |
| CANADA | 18CN11010 | May-26 - Jun-01 | 0 | 23 | 0 | 4T |
| CANADA | 18CN11011 | Sep-24 - Oct-04 | 0 | 22 | 0 | 4T |
| CANADA | 18CN11012 | Oct-13 - Oct-19 | 0 | 21 | 0 | 4T |
| CANADA | 18FC11052 | Aug-09 - Aug-25 | 0 | 15 | 0 | 4S,4T |
| CANADA | 18HE11003 | Mar-08 - Mar-17 | 0 | 87 | 81 | 4R,4S,4T,4VN |
| CANADA | 18HU11004 | Apr-08 - Apr-08 | 0 | 3 | 0 | 4W |
| | | Apr-14 - Apr-14 | 0 | 3 | 0 | 4W,4X |
| | | Apr-23 - Apr-23 | 0 | 1 | 0 | 4W |
| CANADA | 18HU11009 | May-06 - May-06 | 0 | 1 | 0 | 4X |
| | | May-28 - May-28 | 0 | 1 | 0 | 4W |
| CANADA | 18MF11001 | Feb-06 - Feb-07 | 0 | 6 | 0 | 4S,4T |
| | | Feb-25 - Feb-25 | 0 | 2 | 0 | 4S,4T |

| | | | | | | |
|--------|-----------|-----------------|---|-----|-----|-----------------|
| CANADA | 18NE11002 | Feb-05 - Feb-05 | 0 | 1 | 0 | 4W |
| | | Feb-18 - Mar-14 | 0 | 47 | 0 | 4W,5ZE |
| CANADA | 18OP11668 | May-26 - May-26 | 0 | 1 | 0 | 4T |
| | | Jun-15 - Jun-15 | 0 | 1 | 0 | 4T |
| CANADA | 18OP11669 | Jul-21 - Jul-27 | 0 | 10 | 0 | 4T |
| | | Aug-10 - Aug-19 | 0 | 24 | 0 | 4T |
| CANADA | 18SG11666 | Jan-17 - Jan-17 | 0 | 2 | 0 | 4W |
| | | Mar-31 - Mar-31 | 0 | 1 | 0 | 4W |
| | | Jun-16 - Jun-16 | 0 | 1 | 0 | 4W |
| | | Sep-01 - Sep-01 | 0 | 1 | 0 | 4W |
| | | Nov-07 - Nov-07 | 0 | 2 | 0 | 4W,5Y |
| | | Dec 06 - Dec 06 | 0 | 1 | 0 | 4W |
| CANADA | 18TL11032 | Jun-03 - Jun-20 | 0 | 122 | 90 | 4R,4S,4T,4VN |
| CANADA | 18TL11050 | Aug-02 - Aug-28 | 0 | 100 | 100 | 3K,4R,4S,4T,4VN |
| CANADA | 18TL11094 | Sep-13 - Oct-02 | 0 | 137 | 77 | 4T,4VN |
| CANADA | 18VA10666 | Jan-17 - Jan-17 | 0 | 1 | 0 | 4W |
| CANADA | 18VA11666 | Nov-22 - Nov-22 | 0 | 2 | 0 | 4W,5Y |
| | | Dec 06 - Dec 06 | 0 | 1 | 0 | 5Y |
| CANADA | 18VA11669 | Apr-15 - Apr-15 | 0 | 1 | 0 | 4X |
| CANADA | 18VA11700 | Jun-08 - Jun-08 | 0 | 1 | 0 | 4T |
| | | Jun-14 - Jun-15 | 0 | 3 | 0 | 4T |
| | | Jun-21 - Jun-22 | 0 | 3 | 0 | 4T |
| | | Jun-28 - Jun-30 | 0 | 3 | 0 | 4T |
| | | Jul-06 - Jul-07 | 0 | 2 | 0 | 4T |
| | | Jul-12 - Jul-19 | 0 | 7 | 0 | 4T |
| | | Jul-26 - Jul-27 | 0 | 3 | 0 | 4T |
| | | Aug-02 - Aug-04 | 0 | 5 | 0 | 4T |
| | | Aug-17 - Aug-17 | 0 | 1 | 0 | 4T |
| | | Aug-23 - Aug-25 | 0 | 3 | 0 | 4T |
| | | Aug-30 - Aug-31 | 0 | 2 | 0 | 4T |
| | | Sep-13 - Sep-14 | 0 | 3 | 0 | 4T |
| | | Sep-20 - Sep-28 | 0 | 8 | 0 | 4T |
| | | Oct-11 - Oct-12 | 0 | 3 | 0 | 4T |
| | | Oct-18 - Oct-19 | 0 | 2 | 0 | 4T |

Table 3: Delayed-mode profile data collected prior to 2011 and processed in 2011

Total: 5 260 stations

| Unique ID | Year | CTD | CTD | BOT | BT | NAFO Subarea |
|------------------|-------------|------------|------------|------------|-----------|-------------------------|
| 181C86003 | 1986 | 0 | 47 | 0 | 0 | 3L,3K |
| 181C87005 | 1987 | 0 | 63 | 0 | 0 | 3L,3K,4R |
| 18AU10009 | 2010 | 0 | 1 | 0 | 0 | 4X |
| 18AU10010 | 2010 | 0 | 3 | 0 | 0 | 4X |
| 18AU10669 | 2010 | 0 | 8 | 0 | 0 | 4X |
| 18BA87003 | 1987 | 0 | 50 | 0 | 0 | 4VS,3L,3K,4R |
| 18BG10033 | 2010 | 0 | 29 | 29 | 0 | 4T |
| 18CN06014 | 2006 | 0 | 30 | 0 | 0 | 4T |
| 18CN07011 | 2007 | 0 | 34 | 0 | 0 | 4T |
| 18CN08021 | 2008 | 0 | 11 | 0 | 0 | 4T |
| 18CN10013 | 2010 | 0 | 22 | 0 | 0 | 4T |
| 18DA82006 | 1982 | 0 | 137 | 0 | 0 | 3PS,4VN |
| 18DA83007 | 1983 | 0 | 183 | 0 | 0 | 3PS |
| 18DA84002 | 1984 | 0 | 114 | 0 | 0 | 3PS |
| 18DA84011 | 1984 | 0 | 40 | 0 | 0 | 3PS |
| 18DA85012 | 1985 | 0 | 31 | 0 | 0 | 3PS |
| 18DA86002 | 1986 | 0 | 56 | 0 | 0 | 3K,3L |
| 18DA87004 | 1987 | 0 | 77 | 0 | 0 | 3L,3K,4R |
| 18FC10029 | 2010 | 0 | 6 | 0 | 0 | 4S,4R |
| 18FL91063 | 1991 | 0 | 4 | 0 | 0 | 4T |
| 18HU08037 | 2008 | 0 | 65 | 0 | 0 | 4W,4X,5ZE,4VN,4T,4R,4VS |
| 18HU09929 | 2009 | 0 | 0 | 58 | 0 | 3L,2J,3K,3M,3N,3O |
| 18HU10070 | 2010 | 0 | 64 | 64 | 0 | 4W,4R,4VN,4T,4S |
| 18HU10983 | 2010 | 0 | 0 | 49 | 0 | 3L,2J,3K,3M,3O,3N |
| 18HU83010 | 1983 | 0 | 57 | 0 | 0 | 3PS |
| 18MF10031 | 2010 | 0 | 7 | 7 | 0 | 4T,4S |
| 18MN82006 | 1982 | 0 | 30 | 0 | 0 | 3PS |
| 18MN83008 | 1983 | 0 | 84 | 0 | 0 | 3PS |
| 18MN87026 | 1987 | 0 | 19 | 0 | 0 | 3L |
| 18MN88028 | 1988 | 0 | 14 | 0 | 0 | 3L |
| 18NE09905 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18NE09912 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18NE09914 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18NE09915 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18NE09918 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18NE10001 | 2010 | 0 | 35 | 0 | 0 | 4W,5ZE |
| 18NE10027 | 2010 | 0 | 195 | 0 | 0 | 4W,4X,5Y,5ZE,4VN,4VS |
| 18NE10934 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18NE10935 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18NE10942 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18NE10944 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18OK09863 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18OK09901 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18OK09923 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18OK09924 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18OK10959 | 2010 | 0 | 0 | 1 | 0 | 3L |

| | | | | | | |
|-----------|------|---|-----|----|---|------------------------|
| 18OK81003 | 1981 | 0 | 18 | 0 | 0 | 3PS |
| 18OK82004 | 1982 | 0 | 7 | 0 | 0 | 3PS |
| 18OK82005 | 1982 | 0 | 81 | 0 | 0 | 3L,3PS |
| 18OK84003 | 1984 | 0 | 53 | 0 | 0 | 3PS |
| 18OK84010 | 1984 | 0 | 56 | 0 | 0 | 3PS |
| 18PT86090 | 1986 | 0 | 58 | 0 | 0 | 4S |
| 18SG10666 | 2010 | 0 | 1 | 0 | 0 | 4W |
| 18TL09886 | 2009 | 0 | 0 | 73 | 0 | 3L,3M,3N,3O,3PS,3K |
| 18TL09890 | 2009 | 0 | 0 | 66 | 0 | 3L,3M,3K,2J,2H,2G |
| 18TL09894 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18TL09895 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18TL09899 | 2009 | 0 | 0 | 1 | 0 | 3L |
| 18TL10900 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18TL10970 | 2010 | 0 | 0 | 2 | 0 | 3L |
| 18TL10971 | 2010 | 0 | 0 | 81 | 0 | 3L,3PS,3O,3N,3M,3K |
| 18TL10972 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18TL10973 | 2010 | 0 | 0 | 62 | 0 | 3L,3M,3K,2J,2H,2G |
| 18TL10974 | 2010 | 0 | 145 | 81 | 0 | 4T,4VN |
| 18TL10979 | 2010 | 0 | 0 | 1 | 0 | 3L |
| 18VA07066 | 2007 | 0 | 65 | 0 | 0 | 4T |
| 18VA08001 | 2008 | 0 | 54 | 0 | 0 | 4T |
| 18VA08002 | 2008 | 0 | 32 | 0 | 0 | 4T |
| 18VA09002 | 2009 | 0 | 119 | 0 | 0 | 4T |
| 18VA09006 | 2009 | 0 | 37 | 0 | 0 | 4T,4VN |
| 18VA09009 | 2009 | 0 | 343 | 0 | 0 | 4T,4VN |
| 18VA09055 | 2009 | 0 | 48 | 0 | 0 | 4T |
| 18VA09056 | 2009 | 0 | 64 | 0 | 0 | 4T |
| 18VA09099 | 2009 | 0 | 1 | 0 | 0 | 4T |
| 18VA10001 | 2010 | 0 | 67 | 0 | 0 | 4T |
| 18VA10009 | 2010 | 0 | 339 | 0 | 0 | 4T,4VN |
| 18VA10099 | 2010 | 0 | 45 | 0 | 0 | 4T |
| 18VA10666 | 2010 | 0 | 1 | 0 | 0 | 4W |
| 18VA10668 | 2010 | 0 | 4 | 0 | 0 | 4T |
| 18VA81001 | 1981 | 0 | 50 | 0 | 0 | 3N,3PS,3L |
| 29VE10001 | 2010 | 0 | 88 | 0 | 0 | 3N,3O |
| 29VE10002 | 2010 | 0 | 62 | 0 | 0 | 3M,3L |
| 29VE10003 | 2010 | 0 | 100 | 0 | 0 | 3L,3M,3N |
| 316G10001 | 2010 | 0 | 131 | 0 | 0 | 5ZW,6A,6B,6C,5ZE,4X,5Y |
| 316G10002 | 2010 | 0 | 12 | 0 | 0 | 6A,6C,5ZW |
| 316G10004 | 2010 | 0 | 196 | 0 | 0 | 5ZW,6A,6B,6C,5ZE,4X,5Y |
| 316G10011 | 2010 | 0 | 73 | 0 | 0 | 5ZE |
| 316G10012 | 2010 | 0 | 253 | 0 | 0 | 6A,5ZW,6B,6C,5ZE,4X,5Y |
| 31EV81002 | 1981 | 0 | 30 | 0 | 0 | 1A |
| 33H510001 | 2010 | 0 | 141 | 0 | 0 | 6B,6C,6A,5ZE |
| 33HH10002 | 2010 | 0 | 378 | 0 | 0 | 6A,6B,6C,5ZW,5ZE,4X,5Y |

Table 4: Near-surface thermosalinograph data collected in 2011

TOTAL: 1270 stations

| Ship Name | Country | Call Sign | Cruise Period | TRACKOB | NAFO Subarea |
|------------------|----------------|------------------|----------------------|----------------|---|
| | | KS076 11 | Mar-29 - Mar-31 | 20 | 6F,6G,6H |
| UNKNOWN/INCONNUE | UNKNOWN/IN | KS077 11 | May-07 - May-27 | 437 | 3L,3M,3PS,4VS,4W,4X,5Y,5ZE,5ZW,6A,6B,6C |
| UNKNOWN/INCONNUE | UNKNOWN/IN | KS085 11 | Apr-27 - May-06 | 48 | 3M,3N,4VS,4W,4X,5ZE,5ZW,6A,6B,6C |
| | | KS086 11 | Jun-29 - Aug-25 | 452 | 3M,3N,3O,4VS,4W,4X,5Y,5ZE,5ZW,6A,6B,6C |
| | | KS094 11 | May-28 - Jun-02 | 120 | 3M,3N,3O,4VS,4W,6D,6E,6F |
| | | KS097 11 | Jun-17 - Jun-17 | 1 | 6B |
| | | | Jun-24 - Jun-26 | 6 | 6B |
| | | | Jul-01 - Jul-17 | 48 | 6B |
| | | | Jul-27 - Sep-11 | 105 | 6B |
| | | | Sep-17 - Sep-18 | 5 | 6B |
| | | | Sep-24 - Sep-25 | 4 | 6B |
| UNKNOWN/INCONNUE | UNKNOWN/IN | SHIP 11 | Apr-07 - Apr-07 | 24 | 6H |

Table 5: DRIBU data received during 2011

TOTAL = 364 648 messages from 162 buoys

| BUOY | DATE RANGE | DAYS | SST | AP | AT | WS | WD | TC | NAFO Subarea |
|-------|-----------------|------|-----|----|----|----|----|----|---------------------------------------|
| 21609 | Aug-12 - Aug-12 | 1 | X | - | - | - | - | - | 6F |
| 25595 | Jul-07 - Aug-24 | 48 | X | X | X | - | - | - | 1F,1E,1D |
| 25622 | Jan-01 - Feb-14 | 45 | X | X | X | - | - | - | 3K,3L,3M |
| 31527 | Sep-30 - Dec-26 | 88 | X | X | - | - | - | - | 6C,6B,6D,5ZE,4X,4W,4VS,6F |
| 41554 | Oct-26 - Nov-02 | 8 | X | X | X | - | - | - | 6C,6B,6D |
| 41557 | Oct-27 - Dec-31 | 66 | X | X | X | - | - | - | 6C,6B,6D,4X,6E,6F |
| 41563 | Dec-05 - Dec-31 | 27 | X | X | - | - | - | - | 6C,6B,6D,6E,6F |
| 41575 | Dec-28 - Dec-31 | 4 | X | X | X | - | - | - | 6H |
| 41578 | May-17 - Jul-07 | 51 | X | X | - | - | - | - | 6C,6D,6E,6F |
| 41590 | Jan-28 - Jul-05 | 159 | X | X | X | - | - | - | 6C,6D,6E,4X,4W,6F,4VS,6G,6H,3M |
| 41591 | Jul-19 - Sep-01 | 45 | X | X | X | - | - | - | 6H |
| 41592 | Jan-20 - Dec-31 | 346 | X | X | - | - | - | - | 6C,6B,6D,6E,6F |
| 41594 | Jan-21 - Feb-26 | 37 | X | X | X | - | - | - | 6C,6B,6D |
| 41595 | Jan-20 - Aug-30 | 222 | X | X | X | - | - | - | 6C,6B,6D,6E,6F,4W,4X,5ZE,5ZW,6A |
| 41606 | Jan-09 - Apr-20 | 102 | X | X | - | - | - | - | 6F,6G,4VS,3N,6H,3M |
| 41608 | Feb-07 - Jul-28 | 172 | X | X | X | - | - | - | 6C,6D,6B,6E,4W,6F,4VS,6G,3N,3O,6H,3M |
| 41609 | May-29 - Oct-25 | 149 | X | X | - | - | - | - | 6C,6B,6D |
| 41610 | Feb-02 - Apr-07 | 64 | X | X | - | - | - | - | 6C,6B,6D,6E,6F |
| 41612 | Feb-06 - Feb-10 | 4 | X | X | X | - | - | - | 6C |
| 41613 | Jan-20 - Jul-25 | 186 | X | X | X | - | - | - | 6C,6B,6D,6E,6F,6G,4VS,3PS,3O,3N,3M,3K |
| 41664 | Oct-28 - Nov-15 | 19 | X | X | - | - | - | - | 6C,6B,6D |
| 41665 | Oct-28 - Dec-09 | 43 | X | X | - | - | - | - | 6C,6D,6E |
| 41716 | Jan-20 - Feb-15 | 26 | X | X | X | - | - | - | 6C,6D |
| 41718 | Jan-29 - Jul-17 | 170 | X | X | - | - | - | - | 6C,6B,6D,6E,6F,4W,4VS,6G,3O,3N,6H,3M |
| 41719 | Oct-03 - Dec-20 | 79 | X | X | X | - | - | - | 6F,6G,4VS,3N,6H,3M |
| 41731 | May-07 - Sep-07 | 123 | X | X | X | - | - | - | 6H |
| 41903 | Jan-01 - Nov-07 | 311 | X | X | - | - | - | - | 6E,6D,6C,4W,4VS,6F,6G,3O,3N,6H,3M |
| 41907 | May-09 - Jul-13 | 65 | X | X | - | - | - | - | 6F,6G |
| 41909 | May-16 - Oct-01 | 138 | X | X | X | - | - | - | 6E,6D |
| 41910 | Oct-12 - Dec-31 | 81 | X | X | - | - | - | - | 6D,6E,4X,6F |
| 41911 | May-16 - Jun-11 | 26 | X | X | X | - | - | - | 6G,6F |
| 41912 | Aug-21 - Dec-31 | 133 | X | X | X | - | - | - | 6F,6G,6E |
| 41913 | Oct-28 - Dec-31 | 65 | X | X | X | - | - | - | 6C,6B,6D,5ZE,4X,6E,4W,6F |
| 41915 | Sep-16 - Sep-17 | 2 | X | X | X | - | - | - | 6F |
| 41916 | Dec-08 - Dec-31 | 24 | X | X | X | - | - | - | 6C |
| 41924 | Sep-27 - Dec-31 | 96 | X | X | X | - | - | - | 6C,6D,6E,4X,4W |
| 41926 | Sep-29 - Dec-03 | 66 | X | X | X | - | - | - | 6C |
| 41927 | Nov-16 - Dec-31 | 46 | X | X | - | - | - | - | 6C,6B,6D |
| 41930 | Oct-16 - Dec-31 | 77 | X | X | X | - | - | - | 6C,6D,6E,6F,4W |
| 41933 | Jul-19 - Oct-06 | 79 | X | X | X | - | - | - | 6C,6D,6E,6F |
| 41936 | Oct-28 - Dec-31 | 65 | X | X | - | - | - | - | 6C,6B,6D,5ZE,4X,4W,4VS,6F,6G |
| 41937 | Dec-30 - Dec-31 | 2 | X | X | X | - | - | - | 6C |
| 41938 | Jul-19 - Aug-04 | 17 | X | X | X | - | - | - | 6H |
| 41939 | Nov-09 - Dec-31 | 53 | X | X | X | - | - | - | 6C,6B,6D |
| 41940 | Oct-25 - Dec-11 | 48 | X | X | - | - | - | - | 6C,6B,6D,5ZE,4X,6E |
| 41942 | Jul-16 - Oct-08 | 84 | X | X | - | - | - | - | 6C,6B,6D,6E,4X,4W,6F,4VS,6G,3N,3M,6H |

| | | | | | | | | | |
|-------|-----------------|-----|---|---|---|---|---|---|--|
| 41943 | Jun-03 - Nov-29 | 180 | X | X | - | - | - | - | 6C,6D,6E |
| 41944 | Jul-07 - Sep-14 | 70 | X | X | - | - | - | - | 6C,6D |
| 41954 | Nov-03 - Dec-30 | 58 | X | X | - | - | - | - | 6C,6D |
| 41960 | Aug-25 - Dec-31 | 129 | X | X | - | - | - | - | 6C,6B,6D,5ZE,5ZW,6A,4X,4W,6E,6F |
| 41969 | Nov-14 - Dec-31 | 48 | X | X | X | - | - | - | 6C,6D,6E,6F |
| 41972 | Jun-14 - Oct-27 | 136 | X | X | X | - | - | - | 6C,6B,6D,6E,6F |
| 41981 | Oct-19 - Dec-14 | 56 | X | X | X | - | - | - | 6C,6B,6D,5ZE,4X,6E |
| 41983 | Jan-01 - Apr-24 | 114 | X | X | - | - | - | - | 4VS,3N,6H,3M |
| 41984 | Jan-20 - May-10 | 110 | X | X | - | - | - | - | 6C,6B,6D,6E,6F |
| 41987 | Jan-01 - Jan-17 | 17 | X | X | - | - | - | - | 3M,3N |
| 41989 | Nov-16 - Dec-31 | 46 | X | X | - | - | - | - | 6E,6D,6F |
| 41991 | Oct-12 - Dec-31 | 81 | X | X | - | - | - | - | 6D,5ZE,4X,4W,6E,4VS,6F,6G |
| 41992 | Mar-10 - Aug-25 | 169 | X | X | - | - | - | - | 6G,4VS,6H,3N |
| 41995 | Oct-16 - Dec-31 | 77 | X | X | X | - | - | - | 6C,6B,6D,6E,6F,4W |
| 41997 | Jan-20 - Aug-09 | 202 | X | X | - | - | - | - | 6C,6B,6A,5ZW,6D,5ZE,4X,6E,4W,4VS,6F,6G,3N,3M |
| 41998 | Jan-20 - Oct-28 | 281 | X | X | - | - | - | - | 6C,6B,6D,6E,4X,4W,4VS,3O,3N,3M |
| 42503 | Jan-01 - Jul-22 | 203 | X | X | - | - | - | - | 6F,6G,6H,4VS,3N,3M |
| 42508 | Feb-11 - Dec-31 | 324 | - | X | - | - | - | - | 6C,6B,6D,6E,6F,6G,4VS,3N,6H |
| 42513 | Nov-06 - Nov-29 | 24 | X | X | - | - | - | - | 6C,6B,6D,5ZE,4X,4W,6E,4VS |
| 42536 | Jan-03 - Oct-08 | 279 | X | X | - | - | - | - | 6C,6D,5ZE,6E,6F,6G |
| 42538 | Jan-03 - Jun-08 | 156 | X | X | - | - | - | - | 6C,6B,6D,6E,6F |
| 42547 | Jan-01 - Dec-15 | 349 | X | X | - | - | - | - | 6E,6D,6F,6G,4VS,3N,6H,3M |
| 42549 | Jan-01 - Mar-24 | 83 | X | X | - | - | - | - | 4VS,3O,3N,3M |
| 42552 | Jan-01 - May-22 | 141 | X | X | - | - | - | - | 6C,6B,6D,6E,6F,4W,4VS,6G,3N,6H,3M |
| 42555 | Jan-01 - Feb-24 | 55 | X | X | - | - | - | - | 6G,6H,3N,3M |
| 42558 | Jan-01 - Mar-28 | 87 | X | X | - | - | - | - | 6E,6F |
| 42559 | Jan-01 - Mar-04 | 63 | - | - | - | - | - | - | 6G,6H |
| 43537 | Jun-01 - Dec-04 | 187 | X | X | - | - | - | - | 6C,6D,5ZE,4X,4W,6E,6F,4VS,6G,3N,6H,3M |
| 44504 | Mar-30 - Aug-02 | 126 | - | X | - | - | - | - | 3K,3L |
| 44505 | Apr-17 - Nov-12 | 209 | X | X | - | - | - | - | 3K,3L,3N,3M |
| 44506 | Apr-26 - Jul-20 | 85 | X | X | - | - | - | - | 3L,3N,3M,3K |
| 44507 | Apr-26 - Aug-01 | 97 | X | X | - | - | - | - | 3L,3N,3M |
| 44509 | Jun-07 - Sep-14 | 99 | X | X | - | - | - | - | 2J,3K,3L,3N,3M |
| 44510 | Jun-07 - Jun-20 | 13 | X | X | - | - | - | - | 3L |
| 44513 | Apr-27 - Jul-06 | 70 | X | X | - | - | - | - | 3K |
| 44515 | May-03 - May-23 | 21 | X | X | - | - | - | - | 3K |
| 44516 | Mar-07 - May-20 | 74 | - | X | - | - | - | - | 3K |
| 44517 | Apr-30 - May-02 | 2 | X | X | - | - | - | - | 3K |
| 44518 | Mar-06 - Mar-10 | 5 | X | X | - | - | - | - | 3K |
| 44519 | Mar-06 - Mar-07 | 2 | X | X | - | - | - | - | 3K |
| 44520 | Mar-05 - Mar-06 | 2 | X | X | - | - | - | - | 3K |
| 44522 | May-16 - Dec-31 | 230 | X | X | - | - | - | - | 4W,4VS,6F,6G,3O,3N,6H,3M |
| 44548 | Jan-01 - Mar-09 | 68 | X | X | X | - | - | - | 3L,3M,3K |
| 44549 | Jan-05 - Jan-10 | 5 | - | X | X | - | - | - | 2H |
| 44554 | Jan-01 - Jul-21 | 202 | - | - | - | - | - | - | 4VS,6G,6H,3N,3M |
| 44556 | Jan-01 - Feb-13 | 44 | X | X | - | - | - | - | 4VS,3O |
| 44561 | Jan-01 - Feb-09 | 40 | X | X | - | - | - | - | 3N,3M |
| 44562 | Jan-01 - Mar-02 | 61 | X | X | - | - | - | - | 2H,2J,1F |
| 44601 | Jan-01 - Mar-28 | 87 | X | X | X | - | - | - | 3M,3K,2J |
| 44604 | Oct-22 - Nov-21 | 31 | X | X | X | - | - | - | 3M,3N |

| | | | | | | | | | |
|-------|-----------------|-----|---|---|---|---|---|---|------------------------|
| 44605 | Oct-22 - Dec-18 | 58 | X | X | X | - | - | - | 3N,3M |
| 44606 | Nov-03 - Nov-06 | 4 | X | X | X | - | - | - | 3M,3K |
| 44607 | Nov-04 - Dec-31 | 58 | X | X | X | - | - | - | 3M,3K |
| 44608 | Jan-01 - Dec-31 | 365 | X | X | X | - | - | - | 1F,3L,3N,3O |
| 44611 | Jul-08 - Jul-08 | 1 | X | X | X | - | - | - | 3K |
| 44612 | Jan-01 - Feb-16 | 47 | X | X | X | - | - | - | 4VS,3O,3N,3M |
| 44613 | Jul-11 - Nov-13 | 125 | X | X | X | - | - | - | 3L,3N,3M |
| 44621 | Aug-22 - Dec-31 | 132 | X | X | X | - | - | - | 2J,3K,3M,3L |
| 44624 | Aug-22 - Nov-29 | 99 | X | X | X | - | - | - | 1F,2J |
| 44651 | Mar-27 - Mar-31 | 4 | - | - | - | - | - | - | 4X |
| 44652 | Mar-27 - Mar-31 | 4 | - | - | - | - | - | - | 4X |
| 44653 | Mar-27 - Oct-21 | 208 | - | - | - | - | - | - | 4X,0A |
| 44654 | Mar-19 - Mar-24 | 5 | - | - | - | - | - | - | 2H,2J |
| 44655 | Mar-19 - Mar-24 | 5 | - | - | - | - | - | - | 2H,2J |
| 44656 | Mar-19 - Mar-24 | 5 | - | - | - | - | - | - | 2H,2J |
| 44657 | Mar-19 - Mar-24 | 5 | - | - | - | - | - | - | 2H,2J |
| 44665 | Jan-01 - Jul-04 | 185 | X | X | X | - | - | - | 4W,4VS,6F,6G,3N,3M |
| 44668 | Aug-18 - Dec-28 | 133 | X | X | X | - | - | - | 3O,3N,3M,6H |
| 44669 | Aug-19 - Oct-30 | 73 | X | X | X | - | - | - | 3O,3N,3M |
| 44673 | May-30 - Nov-06 | 160 | X | X | X | - | - | - | 4VS,4W,3PS,3O,3N,3M,3K |
| 44674 | May-30 - Dec-26 | 210 | X | X | X | - | - | - | 4VS,4W,6G,3N,3M,6H |
| 44675 | May-30 - Oct-29 | 152 | X | X | X | - | - | - | 4X,5ZE,4W,4VS,3N |
| 44676 | Jun-09 - Jun-09 | 1 | X | X | X | - | - | - | 4X |
| 44744 | Dec-09 - Dec-31 | 23 | X | X | X | - | - | - | 3L,3N |
| 44745 | Dec-09 - Dec-31 | 23 | X | X | X | - | - | - | 3K,3L |
| 44746 | Dec-09 - Dec-31 | 22 | X | X | X | - | - | - | 3K,2J,1F |
| 44751 | Jan-01 - Feb-10 | 41 | X | X | - | - | - | - | 4VS,3O,3N,3M |
| 44754 | Jan-01 - Feb-16 | 47 | X | X | X | - | - | - | 3N,3M,6H |
| 44755 | Jan-01 - Jan-02 | 2 | X | X | X | X | X | - | 6G |
| 44760 | Apr-14 - May-02 | 19 | X | X | X | - | - | - | 3K |
| 44762 | Apr-15 - Sep-11 | 150 | X | X | X | - | - | - | 3K,3L,3M,2J,1F |
| 44763 | Apr-18 - Sep-08 | 143 | X | X | X | - | - | - | 3L,3N,3M |
| 44764 | Jan-01 - Dec-31 | 365 | X | X | X | - | - | - | 1F,1E,2J |
| 44765 | Oct-31 - Dec-14 | 45 | X | X | X | - | - | - | 1F |
| 44766 | Jun-02 - Jul-14 | 42 | X | X | X | - | - | - | 3M |
| 44768 | Jan-01 - Feb-27 | 58 | X | X | X | - | - | - | 3K,2J |
| 44769 | Jun-03 - Dec-05 | 185 | X | X | X | - | - | - | 3O,3N,3M |
| 44771 | Jun-04 - Sep-19 | 107 | X | X | X | - | - | - | 3N,3M |
| 44772 | Jun-04 - Aug-24 | 82 | X | X | X | - | - | - | 3M |
| 44775 | Jun-11 - Dec-30 | 202 | X | X | X | - | - | - | 3M,3K,3L |
| 44778 | Jun-19 - Sep-30 | 103 | X | X | X | - | - | - | 3N,3M |
| 44780 | Jun-18 - Jun-28 | 11 | X | X | X | - | - | - | 3M |
| 44831 | Jan-01 - Feb-25 | 56 | X | X | X | - | - | - | 2J,3K |
| 44835 | Jan-11 - Jan-19 | 8 | X | X | X | - | - | - | 1F |
| 44838 | May-03 - Aug-09 | 98 | X | X | X | - | - | - | 3M,6H,6G,6F |
| 44843 | May-03 - Jun-17 | 45 | X | X | X | - | - | - | 3N,6H,3M |
| 44844 | May-03 - Jul-11 | 70 | X | X | X | - | - | - | 3N,3M |
| 44845 | Jan-01 - Feb-20 | 51 | X | X | - | - | - | - | 2J,3K |
| 44849 | Mar-05 - Mar-06 | 2 | - | X | X | - | - | - | 3K |
| 44850 | Sep-26 - Dec-31 | 97 | X | X | X | - | - | - | 6H,6G,6F |

| | | | | | | | | | |
|-------|-----------------|-----|---|---|---|---|---|---|--------------------------------|
| 44878 | Sep-27 - Dec-31 | 96 | X | X | X | - | - | - | 6H |
| 44884 | Jan-01 - Oct-28 | 301 | X | X | X | - | - | - | 3M,1F |
| 44885 | May-03 - Jun-13 | 42 | X | X | X | - | - | - | 3M |
| 44888 | Mar-31 - Aug-18 | 141 | X | X | - | - | - | - | 6H |
| 44892 | Jan-29 - Feb-19 | 21 | X | X | - | - | - | - | 6G |
| 44894 | Jan-01 - Feb-13 | 44 | X | X | - | - | - | - | 6H,3N,3M |
| 44897 | Oct-18 - Nov-20 | 33 | X | X | - | - | - | - | 1F,2J |
| 44899 | May-17 - Jul-06 | 50 | X | X | - | - | - | - | 6H,6G |
| 44900 | Jun-02 - Jun-28 | 27 | X | X | X | - | - | - | 6H,3M |
| 44903 | Sep-12 - Dec-30 | 110 | X | X | X | - | - | - | 6E,6D,4X,4W,6F,4VS,3N,3O,3M,6H |
| 44904 | Apr-27 - Jul-16 | 81 | - | X | X | - | - | - | 3K,3M |
| 44905 | Aug-29 - Dec-24 | 117 | X | X | X | - | - | - | 6F,6G,6H |
| 44906 | May-12 - Jun-24 | 43 | X | X | X | - | - | - | 6F,6G,4VS,3N,3M,6H |
| 44907 | Jan-01 - Aug-07 | 219 | X | X | - | - | - | - | 3N,3M,6H |
| 44911 | Mar-06 - Mar-07 | 2 | - | X | X | - | - | - | 3K |
| 44912 | Jan-01 - Mar-17 | 76 | X | X | X | - | - | - | 3L,3N,3M,3K |
| 44913 | Jan-01 - Feb-11 | 42 | X | X | X | - | - | - | 1F,2J |
| 44914 | Apr-08 - Sep-22 | 167 | X | X | - | - | - | - | 6H |
| 44915 | May-19 - Dec-31 | 227 | X | X | - | - | - | - | 6H,6G,6F,6E |
| 44917 | Jan-01 - Mar-12 | 71 | X | X | X | - | - | - | 3N,3M |
| 44918 | May-13 - Jun-02 | 21 | X | X | X | - | - | - | 6G,4VS,3N |
| 44919 | May-17 - Sep-16 | 123 | X | X | - | - | - | - | 6G,4VS,6H,6F |
| 44921 | Jan-01 - Feb-04 | 35 | X | X | - | - | - | - | 6H,3M |
| 44922 | May-16 - Jul-21 | 66 | X | X | - | - | - | - | 6F,6G,4VS,6H |
| 44923 | Mar-07 - Jun-30 | 115 | - | X | X | - | - | - | 3K,2J,1F |
| 44924 | Jan-01 - Aug-22 | 234 | X | X | - | - | - | - | 0B,2G,2H,2J,3K,3L,3M |
| 44925 | Apr-27 - May-01 | 5 | - | X | X | - | - | - | 3K |
| 44926 | Apr-30 - May-02 | 2 | - | X | X | - | - | - | 3K |
| 44927 | May-09 - Oct-14 | 159 | X | X | X | - | - | - | 3K,2J,3M |
| 44931 | May-03 - May-19 | 17 | - | X | X | - | - | - | 3K |
| 44932 | Apr-27 - May-01 | 5 | X | X | - | - | - | - | 3K |
| 44939 | Jan-01 - Mar-27 | 86 | X | X | - | - | - | - | 6H,3M |
| 44941 | Jan-04 - Jan-06 | 3 | X | X | - | - | - | - | 3M |
| 44942 | Jan-01 - Feb-27 | 58 | X | X | X | - | - | - | 2H,2J,3K,3L,3M |
| 44943 | Jan-01 - Nov-08 | 312 | X | X | X | - | - | - | 5ZE,4X,4W,6E,6F,6G,6H,4VS,3N |
| 47532 | Nov-28 - Dec-31 | 34 | - | - | - | - | - | - | 0A |
| 47533 | Nov-28 - Dec-31 | 34 | - | - | - | - | - | - | 0A |
| 47544 | Oct-17 - Oct-25 | 9 | X | X | - | - | - | - | 0A,1A,0B |
| 47551 | Aug-04 - Sep-09 | 37 | X | X | - | - | - | - | 0A |
| 47555 | Aug-04 - Dec-31 | 150 | X | X | - | - | - | - | 0A,1B,1C,0B,1E,1D |
| 47556 | Aug-04 - Sep-09 | 37 | X | X | - | - | - | - | 0A |
| 47557 | Jan-01 - Jun-03 | 154 | - | - | - | - | - | - | 0A,0B,2G,2H |
| 47559 | Oct-21 - Dec-31 | 72 | - | X | - | - | - | - | 0A |
| 48533 | Jun-20 - Jun-21 | 1 | - | - | - | - | - | - | 4X |
| 48577 | Feb-23 - May-10 | 77 | - | X | - | - | - | - | 6C,6D,6E,4W |
| 48621 | Jan-29 - Feb-03 | 5 | - | - | - | - | - | - | 0B,2G |
| 62519 | Jan-20 - Apr-05 | 76 | X | X | X | - | - | - | 1C,1F |
| 62721 | Jan-05 - Feb-18 | 44 | X | X | X | - | - | - | 6H |
| 62905 | Aug-29 - Dec-06 | 100 | - | X | X | - | - | - | 6G,6F |
| 62910 | Jan-01 - Feb-12 | 43 | X | X | X | - | - | - | 2J,3K |

| | | | | | | | |
|-----------------------|-------|---|---|---|---|---|----------------|
| 62926 Jan-01 - Feb-26 | 57 X | X | - | - | - | - | 1F |
| 64607 Aug-08 - Dec-01 | 116 X | X | X | - | - | - | 1F,1E,1D,2G,2H |
| 64615 Sep-19 - Oct-31 | 43 X | X | X | - | - | - | 3L,3N,3M |

Table 6a: Current Meter data recovered and processed in 2010 and 2011

| Latitude | Longitude | Sounding Depth (meters) | Instrument Depth (meters) | Start Date | End Date | Serial Number | Mooring Number |
|----------|-----------|-------------------------|---------------------------|------------|-----------|-----------------|----------------|
| 44.2495 | 63.1667 | 167 | 163 | 30-Oct-10 | 8-Apr-11 | ADCP RDI #8956 | 1784 |
| 44.1338 | 63.0314 | NA | 170 | 30-Oct-10 | 8-Apr-11 | ADCP RDI #14017 | 1785 |
| 43.0353 | 65.7680 | 128 | 126 | 19-Oct-10 | 13-Apr-11 | ADCP RDI #3745 | 1786 |
| 44.3506 | 63.3027 | 111 | 95 | 31-Oct-10 | 17-Apr-11 | ADCP RDI #104 | 1783 |
| 44.2494 | 63.1667 | 172 | 168 | 8-Apr-11 | 23-Sep-11 | ADCP RDI #15538 | 1795 |
| 44.1339 | 63.0314 | 176 | 172 | 8-Apr-11 | 23-Sep-11 | ADCP RDI #11217 | 1796 |
| 44.3476 | 63.3058 | 127 | 121 | 6-May-11 | 23-Sep-11 | ADCP RDI #9088 | 1794 |

Table 6b: Current Meter data recovered in 2010 and 2011 but not yet processed

| Latitude | Longitude | Sounding Depth (meters) | Instrument Depth (meters) | Start Date | End Date | Serial Number | Mooring Number |
|----------|-----------|-------------------------|---------------------------|------------|-----------|-----------------|----------------|
| 44.556 | 56.0656 | 2051 | 401 | 3-May-11 | 7-May-11 | Aanderaa #7650 | 1768 |
| 44.556 | 56.0656 | 2051 | 2271 | 3-May-10 | 7-May-11 | ADCP RDI #3367 | 1768 |
| 44.7465 | 56.0857 | 1175 | 579 | 3-May-10 | 8-May-11 | Aanderaa #655 | 1769 |
| 44.7465 | 56.0857 | 1175 | 309 | 3-May-10 | 8-May-11 | ADCP RDI #1646 | 1769 |
| 55.1202 | 57.0898 | 1031 | 1011 | 23-May-10 | 22-May-11 | Aanderaa #1039 | 1771 |
| 55.4085 | 58.0638 | 106 | 94 | 18-Nov-10 | 8-Jun-11 | ADCP RDI #14033 | 1789 |
| 45.2396 | 64.2594 | 30.4 | 27 | 11-Mar-11 | 13-Jul-11 | ADCP RDI #10487 | 1792A |
| 45.2396 | 64.2594 | 30.4 | 27 | 11-Mar-11 | 13-Jul-11 | ADCP RDI #3409 | 1792B |
| 74.0817 | 91.0327 | 147 | 146 | 10-Aug-10 | 7-Aug-11 | ADCP RDI #1269 | 1773 |
| 74.1958 | 90.8528 | 270 | 244 | 10-Aug-10 | 7-Aug-11 | ADCP RDI #10572 | 1774 |
| 74.2042 | 90.8279 | 264 | 78 | 10-Aug-10 | 7-Aug-11 | ADCP RDI #511 | 1775 |
| 74.0831 | 91.0425 | 149 | 80 | 5-Aug-10 | 11-Aug-11 | ADCP RDI #493 | 1772 |
| 42.8536 | 61.632 | 1094 | 1777 | 13-Dec-10 | 24-Sep-11 | Aanderaa #678 | 1777 |

Table 6b: Current Meter data recovered in 2010 and 2011 but not yet processed (continued)

| Latitude | Longitude | Sounding Depth (meters) | Instrument Depth (meters) | Start Date | End Date | Serial Number | Mooring Number |
|----------|-----------|-------------------------|---------------------------|------------|-----------|-----------------|----------------|
| 42.8536 | 61.632 | 1084 | 1050 | 13-Dec-10 | 24-Sep-11 | ADCP RDI #13592 | 1777 |
| 42.7401 | 61.5742 | 1672 | 1650 | 13-Dec-10 | 24-Sep-11 | ADCP RDI #13873 | 1778 |
| 42.6562 | 61.455 | 1485 | 2250 | 13-Dec-10 | 24-Sep-11 | ADCP RDI #13874 | 1779 |
| 42.5575 | 61.3704 | 2750 | 2750 | 13-Dec-10 | 24-Sep-11 | ADCP RDI #10941 | 1780 |
| 42.1661 | 61.0725 | 3842 | 998 | 13-Dec-10 | 25-Sep-11 | Aanderaa #679 | 1782 |
| 42.3927 | 61.2768 | 3319 | 3350 | 13-Dec-10 | 27-Sep-11 | ADCP RDI #13983 | 1781 |
| 66.9797 | 57.6888 | 866 | 509 | 19-Aug-10 | 4-Oct-11 | Aanderaa #8695 | C4 |
| 66.9797 | 57.6888 | 866 | 210 | 19-Aug-10 | 4-Oct-11 | Aanderaa #5574 | C4 |
| 67.0366 | 57.0334 | 685 | 490 | 19-Aug-10 | 4-Oct-11 | Aanderaa #5567 | C5 |
| 67.0366 | 57.0334 | 685 | 470 | 19-Aug-10 | 4-Oct-11 | Aanderaa #7525 | C5 |
| 67.0712 | 56.6808 | 385 | 250 | 19-Aug-10 | 4-Oct-11 | Aanderaa #4602 | C6 |
| 66.8526 | 59.056 | 1032 | 502 | 19-Aug-10 | 5-Oct-11 | Aanderaa #6402 | C3 |
| 66.8526 | 59.056 | 1032 | 208 | 19-Aug-10 | 5-Oct-11 | Aanderaa #4271 | C3 |
| 66.7632 | 60.0768 | 656 | 505 | 19-Aug-10 | 6-Oct-11 | Aanderaa #5578 | C2 |
| 66.6426 | 60.777 | 441 | 256 | 19-Aug-10 | 7-Oct-11 | Aanderaa #1607 | C1 |
| 66.7632 | 60.0768 | 656 | 210 | 19-Aug-10 | 7-Oct-11 | Aanderaa #3306 | C2 |