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## SCIENTIFIC COUNCIL MEETING – JUNE 2009

**Integrated Science Data Management  
NAFO Report 2008**

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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, surface thermosalinographs, drifting buoys, currents, waves, tides and water level measurements for the calendar year 2008 are included. This report will also provide an update on other ISDM activities during 2008 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 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 2009 required the submission to ISDM of a completed oceanographic inventory form for data collected in 2008, and oceanographic data pertinent to the NAFO area, for all stations occupied in the year prior to 2008. 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-gdsi@dfo-mpo.gc.ca](mailto:isdm-gdsi@dfo-mpo.gc.ca), by completing an on-line order form on the ISDM web site at [www.meds-sdmm.dfo-mpo.gc.ca/meds>Contact\\_US/Request\\_e.asp](http://www.meds-sdmm.dfo-mpo.gc.ca/meds>Contact_US/Request_e.asp) or by writing to Services, Integrated Science Data Management (ISDM), Dept. of Fisheries and Oceans, 12<sup>th</sup> Floor, 200 Kent St., Ottawa, Ont. Canada K1A 0E6.

## **Data Summaries for 2008**

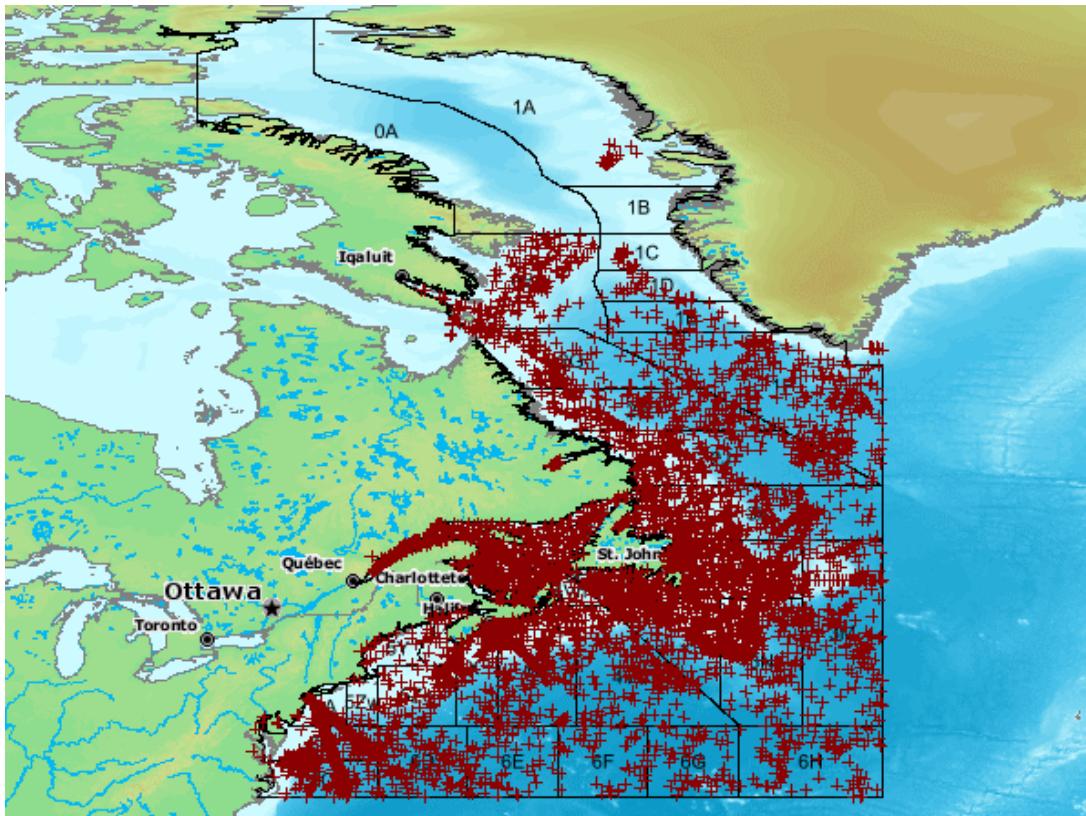
### **Subsurface profile data**

For the NAFO area, subsurface vertical profiles as well as surface observations, sample a variety of parameters such as temperature, salinity, oxygen, nutrients and other chemical and biological variables. ISDM receives these data either in real-time (within one month of observation) via the Global Telecommunications System (GTS) or in delayed-mode directly from responsible institutions. Notification of data collected come from national Cruise Summary Reports and other reports of marine activities.

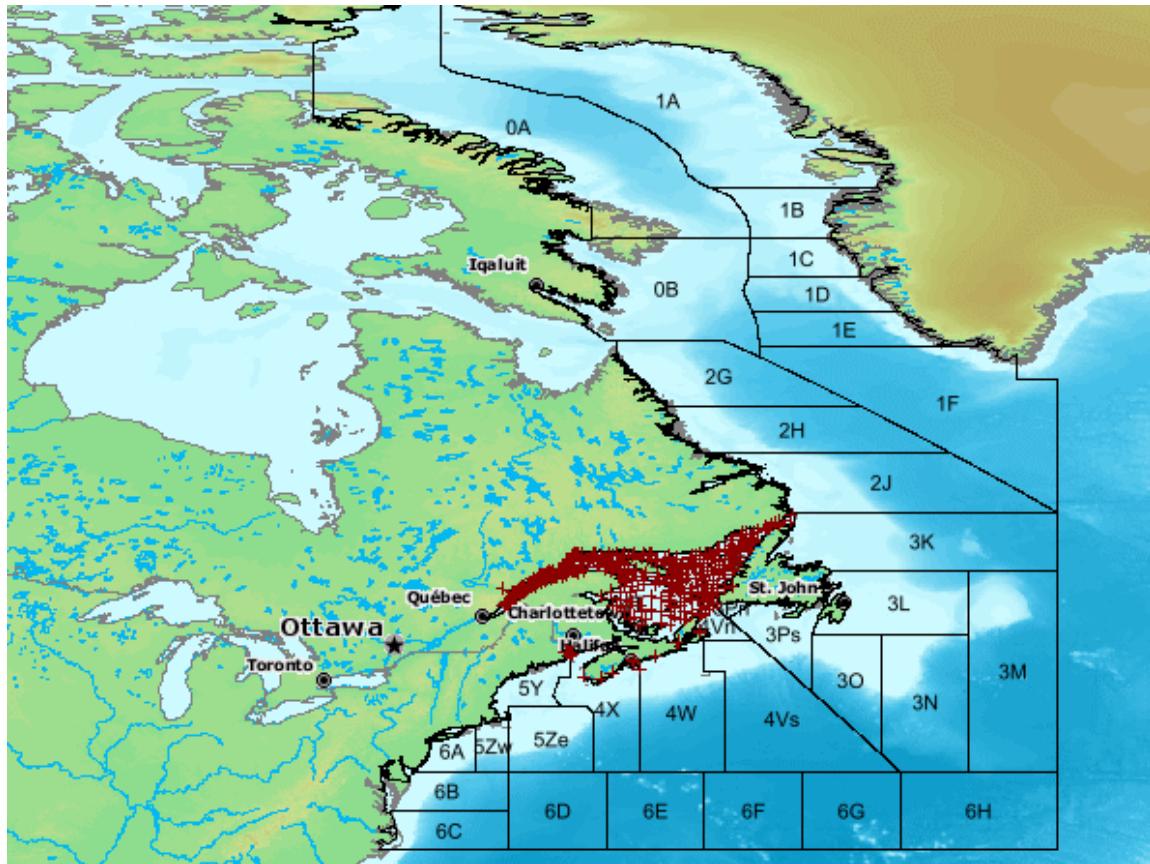
The following inventories and corresponding maps summarize the ocean subsurface and surface data processing activities in 2008 for the NAFO area:

- **Table 1, Figure 1:** **Real-time temperature-salinity profile data collected and processed in 2008**  
TOTAL: 252,863 profiles
- **Table 2, Figure 2:** **Delayed-mode profile data collected and processed in 2008**  
TOTAL: 1,082 profiles
- **Table 3, Figure 3:** **Profile data collected prior to 2007 and processed in 2008**  
TOTAL: 7,371 profiles
- **Table 4, Figure 4:** **Surface Thermosalinograph data collected and processed in 2008**  
TOTAL: 37,377 stations

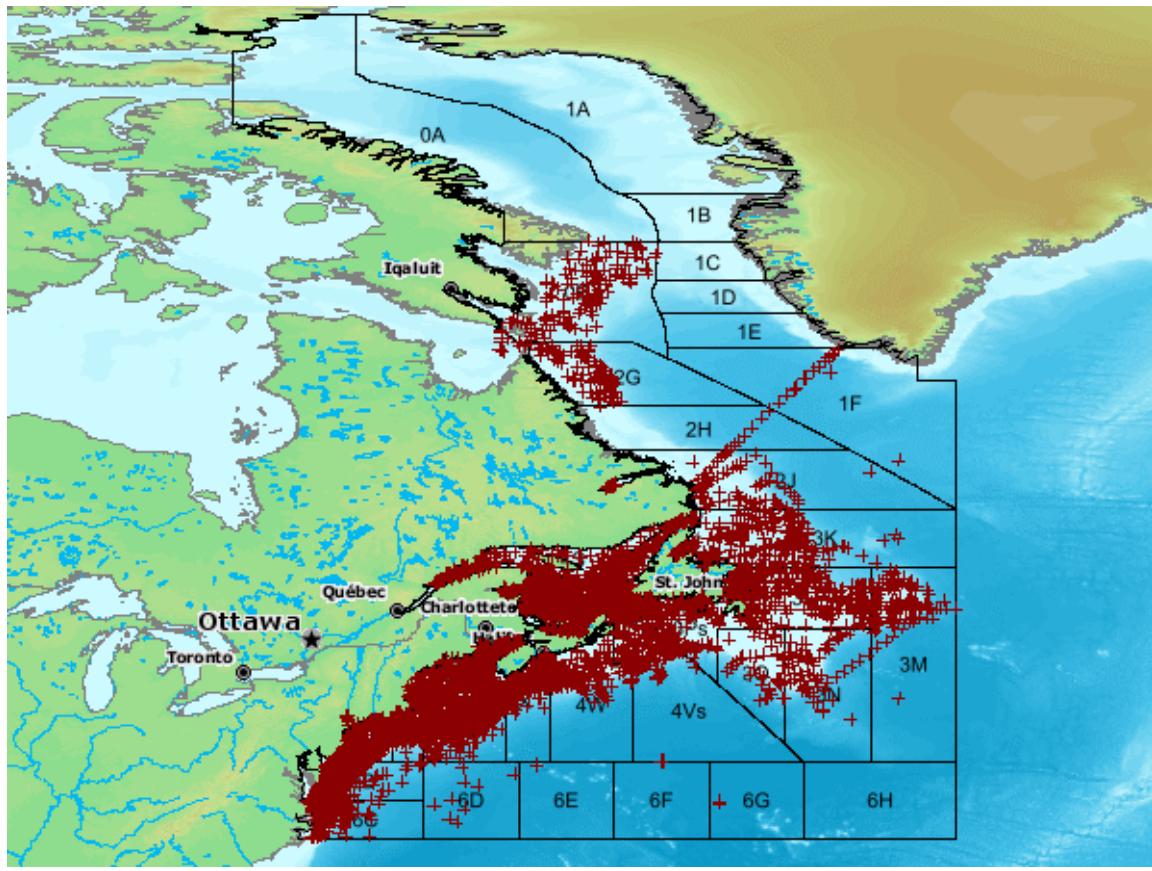
Ocean subsurface data are processed at ISDM in much the same way for each of the data sets described above. Electronic files are converted from a wide range of formats, into a common format. Quality control is carried out by a combination of specially designed software and trained personnel. The quality 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, are also visually inspected using software to plot the data and allow a technician to set quality flags to individual points on a profile. [http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/OCEAN/QC\\_e.htm](http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Databases/OCEAN/QC_e.htm)



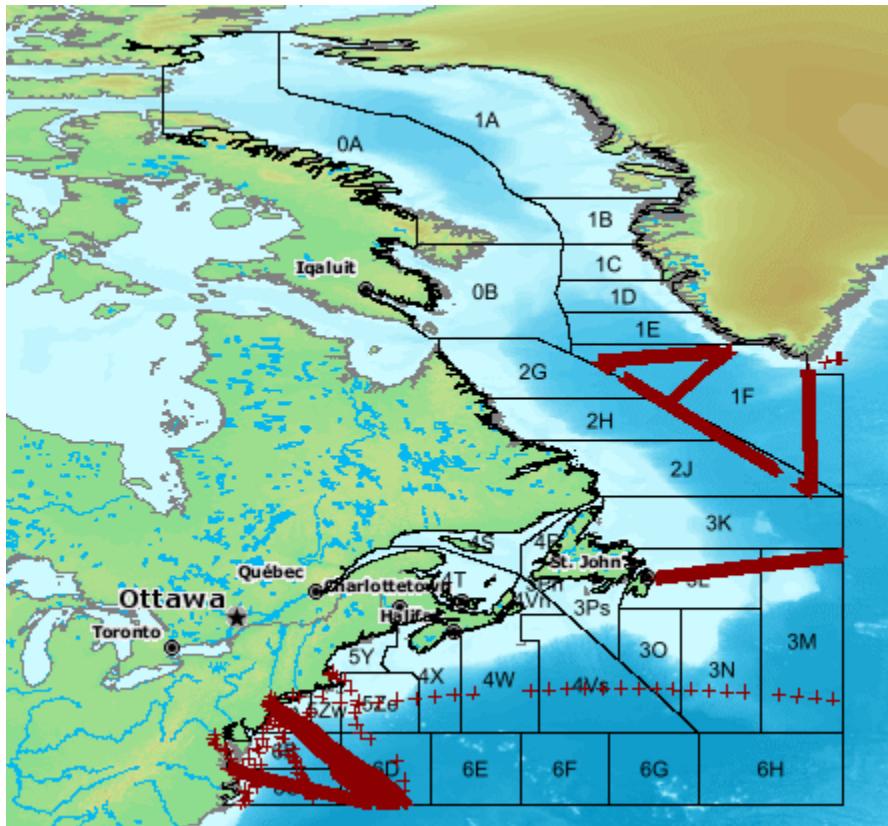
**Figure 1: Real Time Temperature-Salinity Stations 2008**  
Total = 252,863 stations



**Figure 2: Delayed-mode profile data collected and processed in 2008**  
Total = 1082 stations



**Figure 3: Delayed mode profile stations collected before 2007 and processed in 2008**  
Total = 7,371 Stations



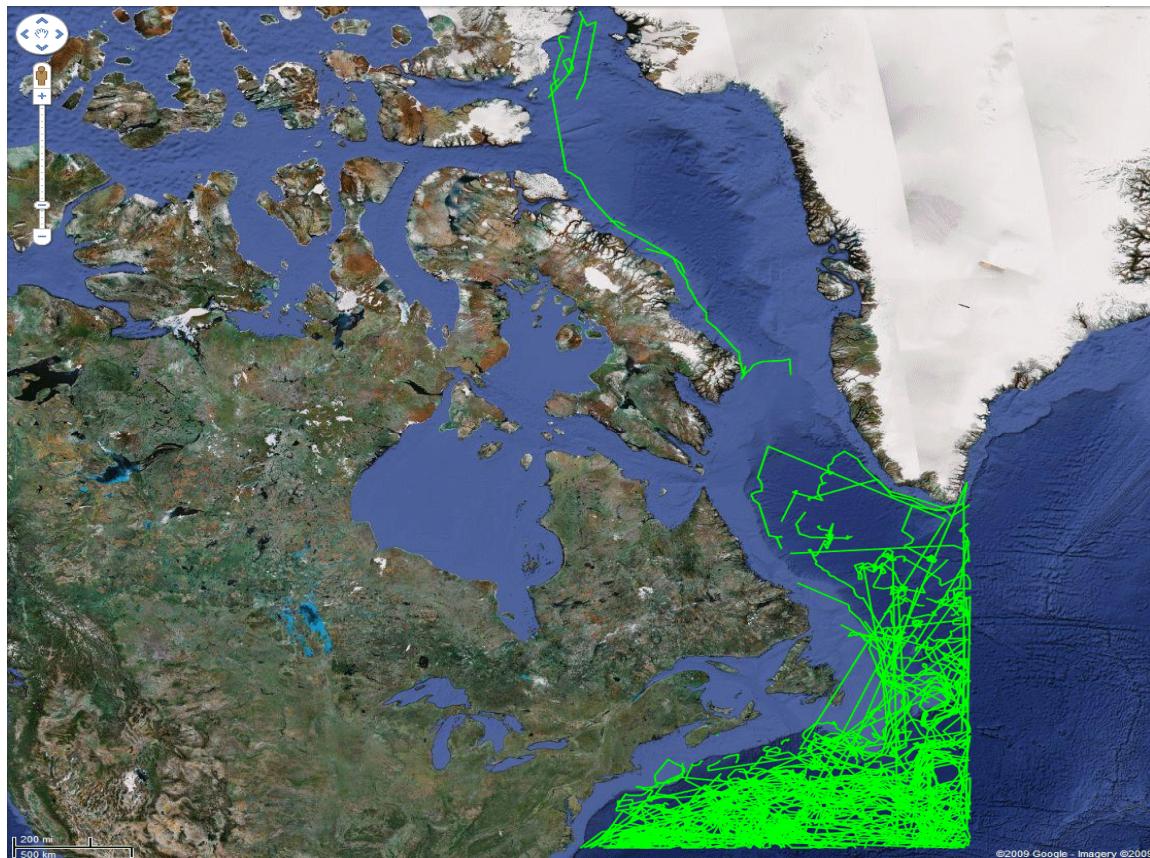
## Drifting Buoy Data

The following inventory and map summarize ISDM drifting buoy data collected and processed in 2008 for the NAFO area:

- **Table 5, Figure 5:** **Drifting Buoys in the NAFO Area in 2008**  
TOTAL = 283,721 messages from 367 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 70 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 2008**

Total = 283,721 messages

## Current Meter Data

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: [www.mar.dfo-mpo.gc.ca/science/ocean/home.html](http://www.mar.dfo-mpo.gc.ca/science/ocean/home.html).

For the year of 2008, there were no current meters processed.

[http://www.mar.dfo-mpo.gc.ca/science/database/data\\_query.html](http://www.mar.dfo-mpo.gc.ca/science/database/data_query.html)

## Wave Data

The following map displays where ISDM wave data were collected in 2008:

- **Figure 7: Wave Buoys in the NAFO Area in 2008**

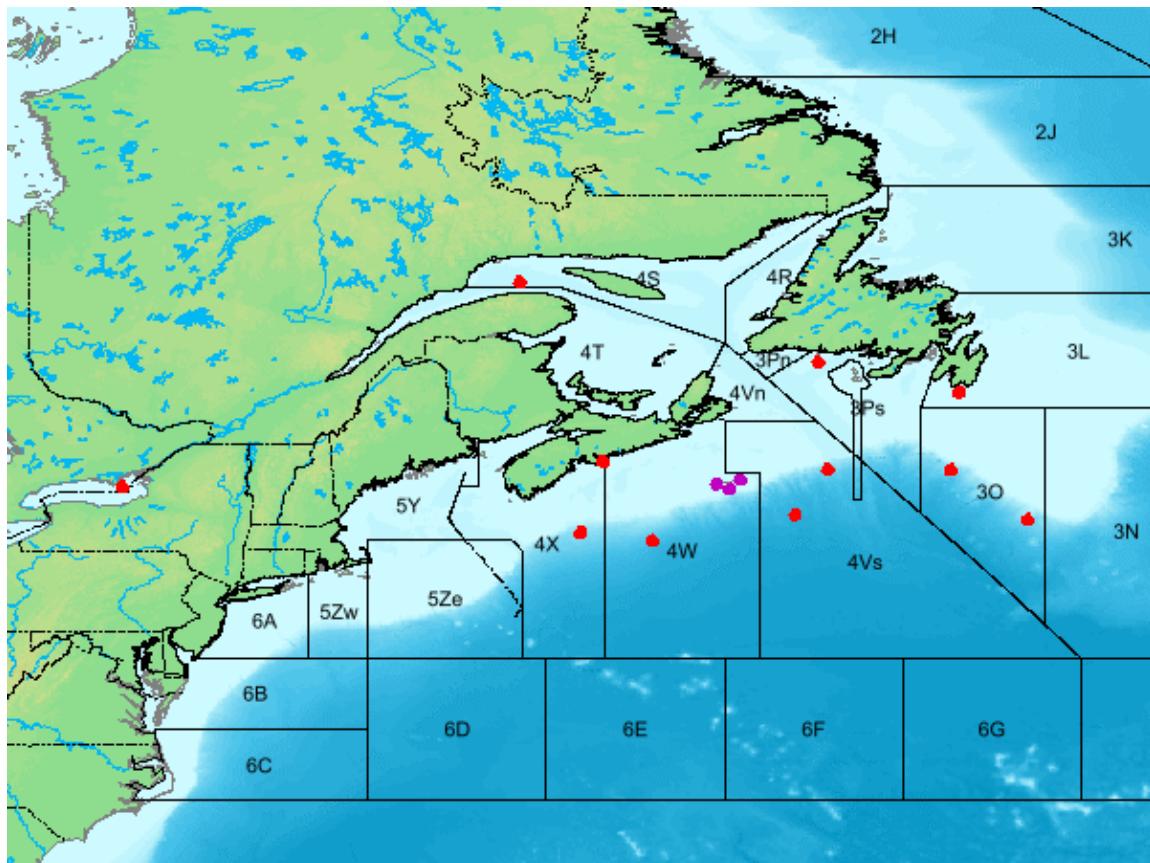
TOTAL = 14 Buoys

Red ● indicate Environment Canada weather buoys

Purple ● indicate offshore oil and gas environmental monitoring site data

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 2008, data was collected from 14 buoys in the NAFO area. All real-time and historical wave data are made available on-line from ISDM web site:

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



**Figure 7: Wave Buoys in the NAFO Area in 2008**  
Total = 14 buoys

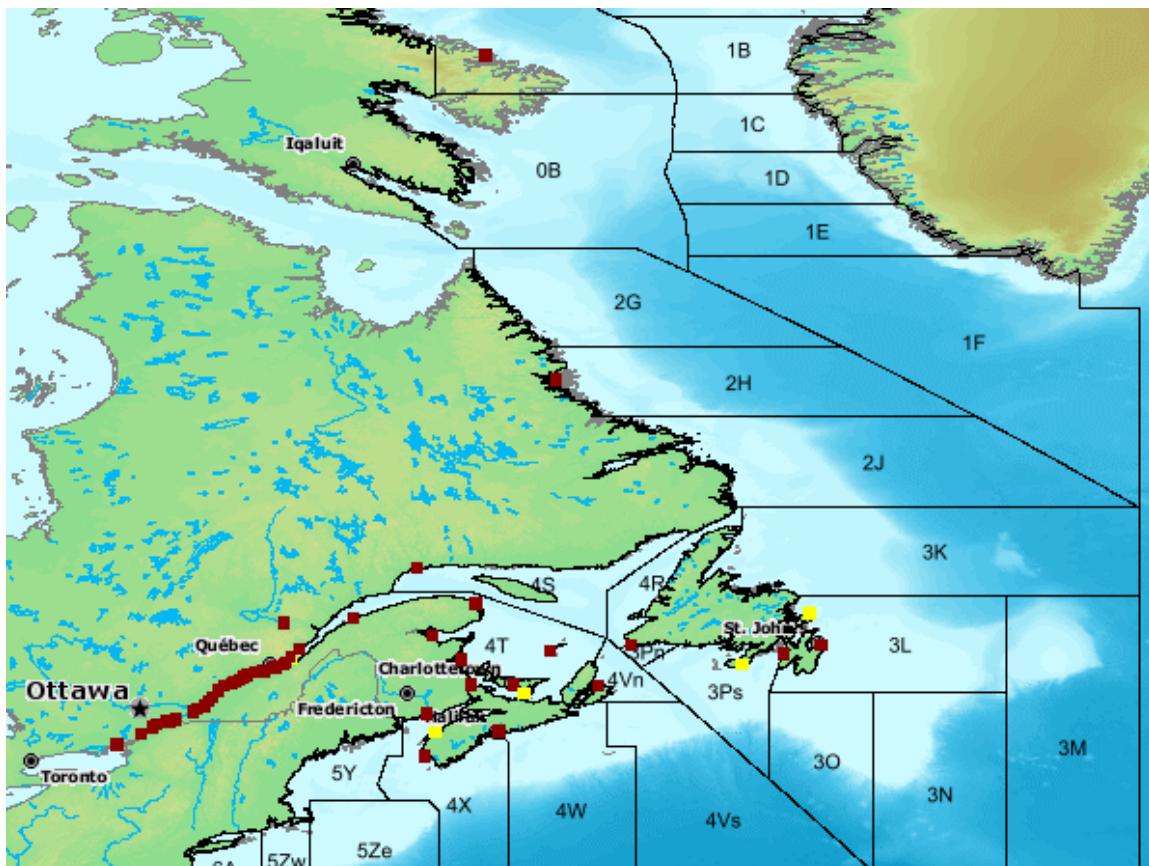
### Tide and Water level Data

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

- **Figure 8: Tide and water level data in the NAFO Area in 2008**  
TOTAL = 52 Gauges

Yellow blocks ■ indicate temporary operating gauges (5) ; Red ■ indicate permanent gauges (47).

ISDM continued to process and archive operational tides and water level data that were reported on a daily to monthly basis from the Canadian water level network. ISDM archived observed heights with up to a 1-minute sampling interval, hourly heights and monthly instantaneous extremes collected around Canada. Approximately 1.8 million new readings were updated every month from the Canadian permanent gauge network. The historical tides and water level data archives presently holds over 578 million digital records with the earliest dating back before the turn of the century. Data from 93 tide and water level gauges were processed during 2008 with 56 in the NAFO region. The data is quality controlled using ISDM software and is available for download from ISDM web site:  
[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).



**Figure 9: Tide and water level data in the NAFO Area in 2008**  
Total = 52 gauges

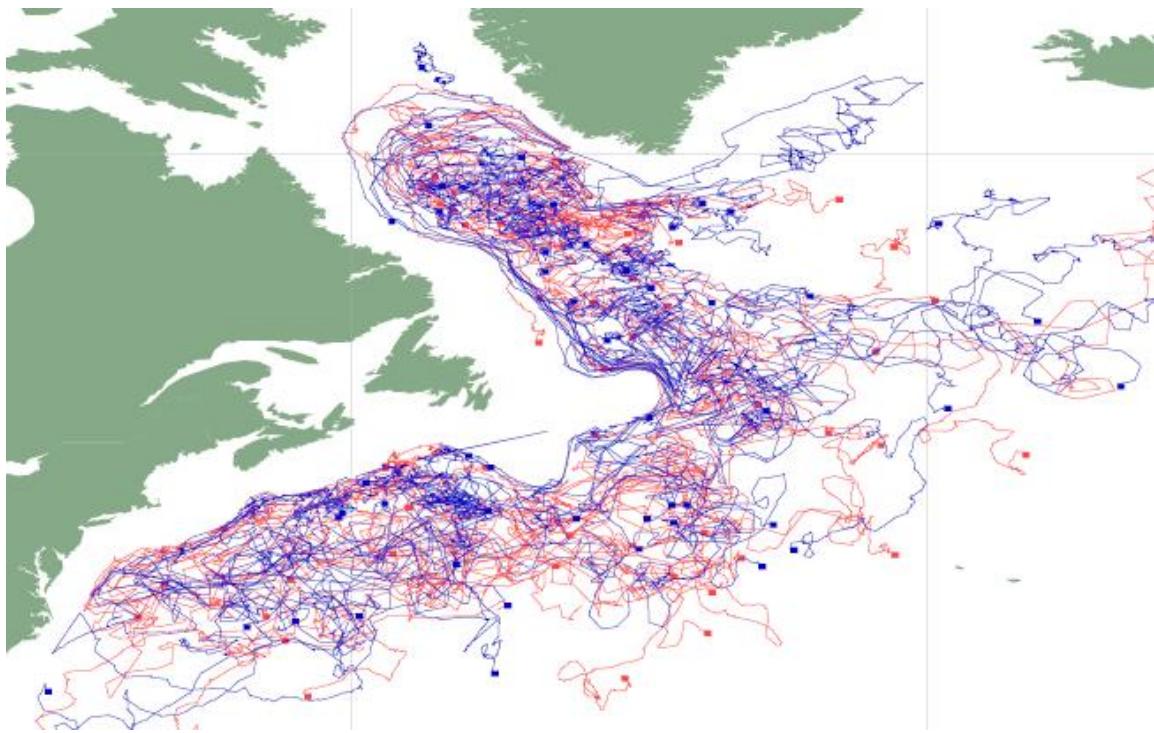
### Activity Updates

#### **The Argo data system**

Argo is an international program 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 2000m to the surface every 10 days. Some of the newer floats now 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. ISDM role is to carry out the processing of the data received from Canadian floats, to distribute the data on the GTS and the global servers within 24 hours and to handle the delayed mode processing.

ISDM developed a Canadian web site [www.meds-sdmm.dfo-mpo.gc.ca/meds/Prog\\_Int/argo/ArgoHome\\_e.html](http://www.meds-sdmm.dfo-mpo.gc.ca/meds/Prog_Int/argo/ArgoHome_e.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](http://argo.jcommops.org).

During 2008, the Canadian Argo program deployed 29 Argo floats in the NAFO region, including 5 floats measuring oxygen and produced 718 temperature and salinity profiles and 134 oxygen profiles. Currently, there are 37 active floats and 39 inactive floats in the NAFO region. Figure 9 shows the Canadian Argo floats deployed in the North Atlantic as of May 2008. The tracks in red indicate floats that are inactive and no longer reporting.



**Figure 9: Canadian Argo profiling floats May 2008**

### Atlantic Zone Monitoring Programme (AZMP)

The DFO Atlantic Zone Monitoring Programme activities include regular sampling for 7 fixed stations and 13 standard sections, and research cruises in the AZMP area to collect other physical, chemical and biological data. As part of its activities in data management, ISDM continues to build and maintain the AZMP web site: [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).

The 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 areas of Seawater, Freshwater, Ice, Atmosphere
- 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

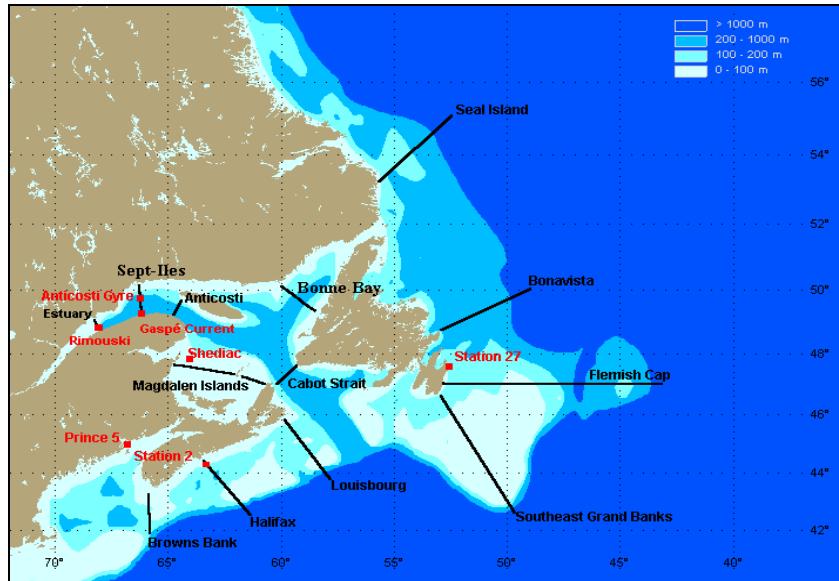


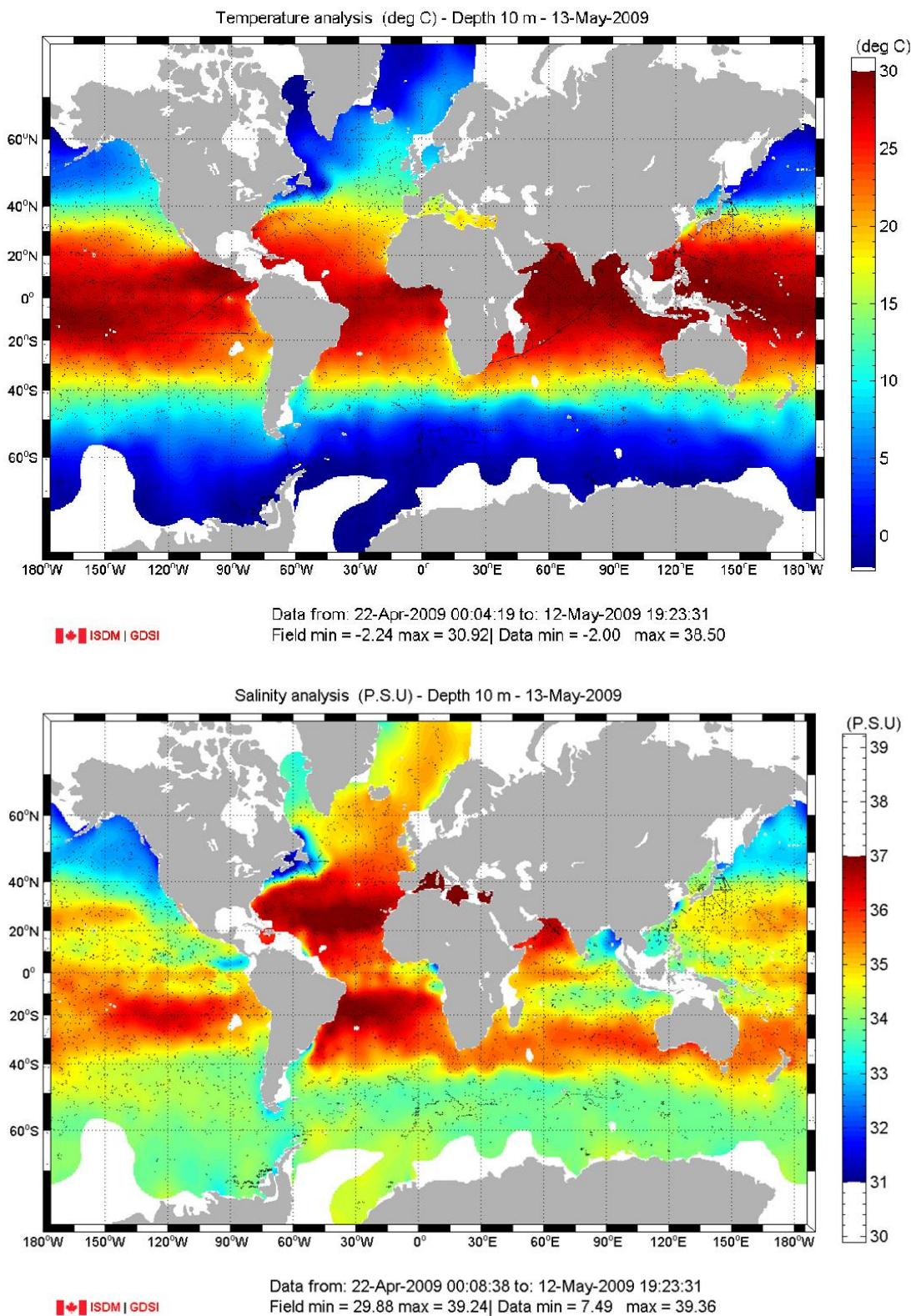
Figure 10: Map of AZMP sections and stations

### Centre for Ocean Model Development and Application (COMDA)

DFO has created a virtual Centre for Ocean Model Development and Application (COMDA) with a mandate to provide national leadership, coordination and advice in areas of ocean model development and application that are departmental priorities. COMDA will be leading and assisting in the development and execution of different scientific projects. One of the initial and major projects includes "Ocean Modelling for Benthic Habitat Mapping" in collaboration with NRCan to provide a quantitative representation of ocean currents and waves influences on the seabed surrounding Canada. Other projects are listed here: <http://www.mar.dfo-mpo.gc.ca/science/ocean/comda-e.html>

ISDM's involvement with COMDA will be to provide data streams of temperature and salinity for model initialization and data assimilation. This step involves creation of three-dimensional fields of temperature and salinity that represent the real-time state of the ocean. This is done by integrating all real-time data sources that are received, controlled or processed at ISDM. The scientific method behind this integration is called objective analysis. The depth levels can be targeted according to the needs of scientists and other clients. Figure 11 illustrates the current daily analysis of temperature and salinity at 10 and 300 metres depth.

One by-product of this operation is the capability of generating very accurate fields of temperature and salinity for periods from the recent past, using all data that was available at the time and that has been coming to ISDM since (delayed mode, calibrated data).



**Figure 11: COMDA/OI Climatology analysis for May 12, 2009 at 10m depth**

### **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 the AIS archive contains 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.

### **National Science Data Management Committee (NSDMC)**

In 2008, 33 projects were funded with about 35% targeted at improved access to data and information, 50% to upgrading archives or inserting unarchived data, and the rest at addressing standards, and some funding for meetings. Types of data included bathymetry, various fisheries data, zooplankton, marine mammals and nutrients. Access projects addressed creation of inventory records and software, support to OBIS, a general access system to fisheries data and continuing development of a services oriented architecture.

### **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 data received during 2008**

Total: 252,863 stations

| SHIP NAME                       | COUNTRY | CALL SIGN | CRUISE PERIOD   | BATHY | TESAC | NAFO Subarea |
|---------------------------------|---------|-----------|-----------------|-------|-------|--------------|
| 150 NM EAST OF<br>CAPE HATTE    | USA     | 41001 08  | Jul-29 - Jul-29 | 0     | 9     | 6D           |
| PORLTAND<br>12NM SE OF<br>PORTL | USA     | 44007 08  | Jan-01 - Apr-30 | 0     | 2839  | 5ZW          |
|                                 |         |           | May-06 - Nov-06 | 0     | 4052  | 5ZW          |
|                                 |         |           | Nov-24 - Nov-24 | 0     | 1     | 5ZW          |
| MOORED BUOY                     | USA     | 44008 08  | Jan-01 - Apr-27 | 0     | 2790  | 5ZE          |
| GEORGES BANK                    | USA     | 44011 08  | Jan-01 - Apr-30 | 0     | 1383  | 5ZE          |
|                                 |         |           | May-07 - May-22 | 0     | 188   | 5ZE          |
|                                 |         |           | May-27 - Jun-14 | 0     | 32    | 5ZE          |
|                                 |         |           | Jun-23 - Jul-26 | 0     | 102   | 5ZE          |
|                                 |         |           | Aug-01 - Dec-31 | 0     | 2042  | 5ZE          |
| VIRGINIA<br>BEACH 64NM,<br>VA   | USA     | 44014 08  | Jan-01 - Apr-30 | 0     | 2862  | 6C           |
|                                 |         |           | May-06 - Dec-31 | 0     | 5512  | 6C           |
| SE CAPE COD<br>30NM             | USA     | 44018 08  | Jan-01 - Apr-30 | 0     | 2710  | 5ZE          |
|                                 |         |           | May-06 - Sep-22 | 0     | 3063  | 5ZE          |
| NEW MEADOWS<br>RIVER            | USA     | 44021 08  | Jan-01 - Apr-30 | 0     | 2870  | 5Y           |
|                                 |         |           | May-06 - May-16 | 0     | 238   | 5Y           |
| BUOY N<br>NORTHEAST<br>CHANNEL  | USA     | 44024 08  | Jan-01 - Apr-30 | 0     | 2419  | 4X           |
|                                 |         |           | May-06 - Dec-31 | 0     | 5057  | 4X           |
| LONG ISLAND                     | USA     | 44025 08  | Jan-11 - Apr-30 | 0     | 2630  | 6A           |
|                                 |         |           | May-06 - Dec-31 | 0     | 5683  | 6A           |
| BUOY                            | USA     | 44029 08  | Jan-01 - Feb-09 | 0     | 717   | 5ZW          |
|                                 |         |           | Feb-15 - Mar-28 | 0     | 29    | 5ZW          |
|                                 |         |           | Apr-03 - Apr-30 | 0     | 346   | 5ZW          |
|                                 |         |           | May-06 - Dec-27 | 0     | 3632  | 5ZW          |
|                                 |         |           | Jan-01 - Apr-30 | 0     | 1168  | 5ZW          |
|                                 |         |           | May-06 - Dec-13 | 0     | 5070  | 5ZW          |
|                                 |         |           | Dec-22 - Dec-29 | 0     | 94    | 5ZW          |
|                                 |         |           | Jan-01 - Apr-30 | 0     | 2828  | 5ZW          |
|                                 |         |           | May-06 - Dec-31 | 0     | 4780  | 5ZW          |
|                                 |         |           | Jan-03 - Apr-25 | 0     | 678   | 5Y           |
|                                 |         |           | May-11 - Dec-31 | 0     | 2493  | 5Y           |
|                                 |         |           | Jan-01 - Apr-30 | 0     | 2795  | 5Y           |
|                                 |         |           | May-06 - Sep-25 | 0     | 3226  | 5Y           |
|                                 |         |           | Oct-06 - Dec-31 | 0     | 1941  | 5Y           |
|                                 |         |           | Jan-01 - Apr-30 | 0     | 2461  | 5Y           |
|                                 |         |           | May-06 - Nov-26 | 0     | 4599  | 5Y           |
|                                 |         |           | Dec-22 - Dec-23 | 0     | 12    | 5Y           |
|                                 |         |           | Jan-01 - Apr-30 | 0     | 2231  | 4X           |
|                                 |         |           | May-06 - Nov-04 | 0     | 3922  | 4X           |

|                                 |         |            |                 |   |      |       |
|---------------------------------|---------|------------|-----------------|---|------|-------|
|                                 |         |            | Nov-12 - Nov-12 | 0 | 1    | 4X    |
|                                 |         |            | Nov-23 - Dec-07 | 0 | 39   | 4X    |
|                                 |         |            | Dec-13 - Dec-13 | 0 | 3    | 4X    |
|                                 |         |            | Dec-26 - Dec-26 | 0 | 2    | 4X    |
|                                 |         |            | Jan-01 - Apr-30 | 0 | 797  | 5Y    |
|                                 |         |            | May-06 - Dec-31 | 0 | 2098 | 5Y    |
|                                 |         |            | Feb-04 - Apr-30 | 0 | 1934 | 4X    |
|                                 |         |            | May-06 - Nov-17 | 0 | 4255 | 4X    |
| PATAPSCO                        | USA     | 44043 08   | Nov-18 - Dec-31 | 0 | 948  | 6B    |
| BUZZARDS BAY                    | USA     | 44070 08   | Jan-08 - Mar-17 | 0 | 1637 | 5ZW   |
| SAFMARINE<br>ZAMBEZI            | LIBERIA | A8CE9 08   | Mar-15 - Mar-15 | 1 | 0    | 6D    |
|                                 |         |            | Aug-28 - Aug-29 | 3 | 0    | 6D,6E |
|                                 |         |            | Oct-27 - Oct-28 | 4 | 0    | 6D,6E |
| RAILROAD,<br>CHESAPEAKE<br>RESE | USA     | BRIM2 08   | Jan-01 - Apr-30 | 0 | 4941 | 6B    |
|                                 |         |            | May-07 - Aug-28 | 0 | 5055 | 6B    |
|                                 |         |            | BRIM2 A08       | 0 | 7284 | 6B    |
| PANDALUS                        | CANADA  | CFD4703 08 | Jan-14 - Jan-14 | 0 | 1    | 4X    |
|                                 |         |            | Feb-26 - Feb-26 | 0 | 1    | 4X    |
|                                 |         |            | Mar-14 - Mar-14 | 0 | 1    | 4X    |
|                                 |         |            | Apr-23 - Apr-23 | 0 | 1    | 4X    |
|                                 |         |            | May-14 - May-14 | 0 | 1    | 4X    |
|                                 |         |            | Aug-13 - Aug-13 | 0 | 1    | 4X    |
|                                 |         |            | Sep-16 - Sep-16 | 0 | 1    | 4X    |
|                                 |         |            | Oct-14 - Oct-14 | 0 | 1    | 4X    |
|                                 |         |            | Nov-18 - Nov-18 | 0 | 1    | 4X    |
|                                 |         |            | Dec-15 - Dec-15 | 0 | 1    | 4X    |
| SHAMOOK                         | CANADA  | CG2676 08  | Jan-19 - Jan-28 | 0 | 37   | 3L    |
|                                 |         |            | Feb-04 - Feb-09 | 0 | 13   | 3L    |
|                                 |         |            | Feb-16 - Feb-16 | 0 | 1    | 3L    |
|                                 |         |            | Jun-26 - Jun-26 | 0 | 1    | 3L    |
|                                 |         |            | Jul-04 - Jul-05 | 0 | 2    | 3L    |
|                                 |         |            | Aug-01 - Aug-09 | 0 | 21   | 3L    |
|                                 |         |            | Aug-21 - Aug-25 | 0 | 7    | 3L    |
|                                 |         |            | Aug-30 - Sep-14 | 0 | 42   | 3K    |
|                                 |         |            | Sep-20 - Oct-19 | 0 | 89   | 3L    |
|                                 |         |            | Nov-05 - Nov-05 | 0 | 1    | 3L    |
|                                 |         |            | Nov-12 - Nov-12 | 0 | 1    | 3L    |
|                                 |         |            | Nov-19 - Nov-24 | 0 | 15   | 3L    |
|                                 |         |            | Dec-01 - Dec-05 | 0 | 17   | 3L    |
| ALFRED<br>NEEDLER               | CANADA  | CG2683 08  | Oct-28 - Nov-14 | 8 | 53   | 3K,3L |
|                                 |         |            | Nov-25 - Nov-27 | 0 | 6    | 3K,3L |
|                                 |         |            | Dec-03 - Dec-07 | 0 | 32   | 3K    |
| BELUGA                          | CANADA  | CG3161 08  | Apr-18 - Apr-18 | 0 | 1    | 4T    |
|                                 |         |            | Apr-24 - Apr-24 | 0 | 1    | 4T    |
|                                 |         |            | May-01 - May-01 | 0 | 1    | 4T    |
|                                 |         |            | May-07 - May-07 | 0 | 1    | 4T    |
|                                 |         |            | May-13 - May-13 | 0 | 1    | 4T    |
|                                 |         |            | May-21 - May-22 | 0 | 2    | 4T    |

|                 |        |           |                 |    |     |                          |
|-----------------|--------|-----------|-----------------|----|-----|--------------------------|
|                 |        |           | Jun-02 - Jun-02 | 0  | 1   | 4T                       |
|                 |        |           | Jun-09 - Jun-09 | 0  | 1   | 4T                       |
|                 |        |           | Jun-20 - Jun-20 | 0  | 1   | 4T                       |
|                 |        |           | Jun-26 - Jun-26 | 0  | 1   | 4T                       |
|                 |        |           | Jul-08 - Jul-08 | 0  | 1   | 4T                       |
|                 |        |           | Jul-17 - Jul-17 | 0  | 1   | 4T                       |
|                 |        |           | Jul-23 - Jul-23 | 0  | 1   | 4T                       |
|                 |        |           | Jul-30 - Jul-30 | 0  | 1   | 4T                       |
|                 |        |           | Aug-06 - Aug-06 | 0  | 1   | 4T                       |
|                 |        |           | Aug-12 - Aug-13 | 0  | 13  | 4T                       |
|                 |        |           | Aug-20 - Aug-21 | 0  | 5   | 4T                       |
|                 |        |           | Aug-27 - Aug-27 | 0  | 1   | 4T                       |
|                 |        |           | Sep-02 - Sep-02 | 0  | 1   | 4T                       |
|                 |        |           | Sep-11 - Sep-16 | 0  | 3   | 4T                       |
|                 |        |           | Sep-22 - Sep-22 | 0  | 1   | 4T                       |
|                 |        |           | Sep-30 - Sep-30 | 0  | 1   | 4T                       |
|                 |        |           | Oct-09 - Oct-09 | 0  | 1   | 4T                       |
|                 |        |           | Oct-16 - Oct-16 | 0  | 1   | 4T                       |
|                 |        |           | Oct-27 - Oct-27 | 0  | 1   | 4T                       |
|                 |        |           | Nov-27 - Nov-27 | 0  | 1   | 4T                       |
| NSC CALANUS II  | CANADA | CG3187 08 | May-04 - May-11 | 0  | 18  | 4S                       |
|                 |        |           | Jun-15 - Jun-23 | 0  | 26  | 4T                       |
|                 |        |           | Jul-30 - Jul-30 | 0  | 2   | 4S,4T                    |
| F.G. CREED      | CANADA | CG3198 08 | May-03 - May-09 | 0  | 16  | 4S,4T                    |
|                 |        |           | May-16 - May-16 | 0  | 2   | 4S,4T                    |
|                 |        |           | May-24 - May-31 | 0  | 8   | 4S,4T                    |
|                 |        |           | Oct-18 - Oct-18 | 0  | 1   | 4S                       |
| TELEOST         | CANADA | CGCB 08   | Feb-22 - Mar-09 | 0  | 22  | 2J,3K,3L                 |
|                 |        |           | Mar-19 - Mar-28 | 0  | 64  | 4VS,4W                   |
|                 |        |           | Apr-11 - Jun-09 | 68 | 322 | 3K,3L,3M,3N,3O           |
|                 |        |           | Jun-15 - Jun-29 | 0  | 79  | 4R,4S,4T,4VN             |
|                 |        |           | Jul-07 - Jul-20 | 33 | 92  | 2J,3K,3L,3M              |
|                 |        |           | Jul-26 - Sep-22 | 0  | 316 | 4R,4S,4T,4VN             |
|                 |        |           | Oct-02 - Oct-18 | 2  | 65  | 2H,3L                    |
|                 |        |           | Nov-06 - Nov-10 | 0  | 18  | 2J,3L                    |
|                 |        |           | Nov-22 - Nov-24 | 2  | 8   | 3K,3L                    |
| MARTHA L. BLACK | CANADA | CGCC 08   | Jan-17 - Jan-17 | 0  | 2   | 4S,4T                    |
|                 |        |           | Feb-05 - Feb-05 | 0  | 2   | 4S,4T                    |
| HUDSON          | CANADA | CGDG 08   | Apr-11 - Apr-29 | 0  | 63  | 3PS,4R,4VN,4VS,4W,4X,5ZE |
|                 |        |           | May-08 - Jun-02 | 0  | 98  | 1F,2H,2J,3K,3L,4W,4X,ZE  |
|                 |        |           | Sep-28 - Oct-17 | 0  | 195 | 4R,4T,4VN,4VS,4W,4X,ZE   |
|                 |        |           | Oct-27 - Nov-13 | 0  | 127 | 4R,4S,4T,4VN             |
|                 |        |           | Nov-24 - Dec-10 | 79 | 183 | 2J,3K,3L,3M,3N,3O,3PS    |
| QUADRA          | CANADA | CGDN 08   | May-13 - May-17 | 0  | 36  | 4S,4T                    |

|                                 |         |           |                 |    |      |                  |
|---------------------------------|---------|-----------|-----------------|----|------|------------------|
| W. TEMPLEMAN                    | CANADA  | CGDV 08   | Mar-05 - Mar-21 | 0  | 60   | 4W,4X,5Y,5ZE     |
|                                 |         |           | Apr-06 - Apr-26 | 1  | 76   | 3L,3PS,3PN       |
|                                 |         |           | May-05 - Jun-06 | 6  | 194  | 3L,3N,3O,3PS,3PN |
|                                 |         |           | Jun-11 - Jul-01 | 3  | 130  | 3L,3N,3O         |
|                                 |         |           | Sep-19 - Oct-07 | 3  | 34   | 3L,3N,3O         |
|                                 |         |           | Oct-14 - Dec-11 | 16 | 312  | 2J,3K,3L,3N,3O   |
|                                 |         |           | Dec-19 - Dec-21 | 0  | 18   | 3K               |
| SWEET HALL,<br>CHESAPEAKE<br>BA | USA     | CVQV2 08  | Jan-01 - Jan-17 | 0  | 844  | 6B               |
|                                 |         |           | Jan-29 - Apr-28 | 0  | 4403 | 6B               |
|                                 |         |           | May-13 - Aug-12 | 0  | 4751 | 6B               |
|                                 |         | CVQV2 A08 | Aug-12 - Dec-31 | 0  | 8531 | 6B               |
| MARIA S.<br>MERIAN              | GERMANY | DBBT 08   | Aug-09 - Aug-15 | 0  | 42   | 3K,3M            |
| LEBANON<br>LANDING,<br>DELAWARE | USA     | DEQD1 08  | Jan-01 - Apr-16 | 0  | 3950 | 6B               |
|                                 |         |           | Apr-21 - Apr-30 | 0  | 461  | 6B               |
|                                 |         |           | May-07 - Sep-07 | 0  | 5586 | 6B               |
|                                 |         | DEQD1 A08 | Sep-07 - Oct-19 | 0  | 1965 | 6B               |
| SAFMARINE<br>GONUBIE            | GERMANY | DGVB 08   | Apr-14 - Apr-15 | 8  | 0    | 5ZW,6A,6D,6E     |
| DUCKPIER NC                     | USA     | DUCN7 08  | Jan-01 - Apr-30 | 0  | 2891 | 6C               |
|                                 |         |           | May-06 - Jul-31 | 0  | 2039 | 6C               |
| THALASSA                        | FRANCE  | FNFP 08   | Aug-25 - Sep-06 | 0  | 57   | 1F,2H,2J,3K      |
| OYSTER RIVER                    | USA     | GBQN3 08  | Apr-25 - Apr-30 | 0  | 347  | 5ZW              |
|                                 |         |           | May-07 - Sep-07 | 0  | 7526 | 5ZW              |
|                                 |         |           | Sep-25 - Oct-31 | 0  | 2123 | 5ZW              |
|                                 |         | GBQN3 A08 | Oct-31 - Nov-25 | 0  | 1504 | 5ZW              |
| GOODWIN<br>ISLAND               | USA     | GDWV2 08  | Jan-01 - Jan-17 | 0  | 800  | 6B               |
|                                 |         |           | Jan-28 - Apr-30 | 0  | 4408 | 6B               |
|                                 |         |           | May-07 - Sep-14 | 0  | 4780 | 6B               |
|                                 |         | GDWV2 A08 | Sep-11 - Sep-22 | 0  | 181  | 6B               |
|                                 |         |           | Sep-30 - Oct-03 | 0  | 58   | 6B               |
|                                 |         |           | Sep-22 - Dec-31 | 0  | 2122 | 6B               |
| CHESNUT NECK                    | USA     | JCQN4 08  | Jan-01 - Apr-30 | 0  | 5793 | 6A               |
|                                 |         |           | May-07 - May-08 | 0  | 78   | 6A               |
|                                 |         |           | Sep-08 - Sep-08 | 0  | 10   | 6A               |
|                                 |         |           | Oct-06 - Oct-06 | 0  | 9    | 6A               |
|                                 |         |           | Nov-05 - Nov-05 | 0  | 10   | 6A               |
|                                 |         |           | Nov-10 - Dec-31 | 0  | 4006 | 6A               |
| BUOY 126,<br>JACQUES<br>COUSTEA | USA     | JCTN4 08  | Jan-01 - Apr-09 | 0  | 4951 | 6A               |
|                                 |         |           | May-21 - May-21 | 0  | 6    | 6A               |
|                                 |         |           | May-29 - May-29 | 0  | 14   | 6A               |
|                                 |         |           | Jun-23 - Jun-23 | 0  | 12   | 6A               |
|                                 |         |           | Nov-11 - Dec-31 | 0  | 3708 | 6A               |

|                   |           |            |                 |     |      |   |
|-------------------|-----------|------------|-----------------|-----|------|---|
| OTTER POINT CREEK | USA       | LTQM2 08   | Jun-12 - Nov-18 | 0   | 7676 | 6B  |
| T - WHARF BOTTOM  | USA       | NAQR1 08   | Jan-01 - Jan-25 | 0   | 1329 | 5ZW   |
|                   |           |            | Jan-31 - Mar-25 | 0   | 2856 | 5ZW   |
|                   |           |            | Apr-01 - Apr-30 | 0   | 1602 | 5ZW   |
|                   |           |            | May-07 - Jul-14 | 0   | 4210 | 5ZW   |
|                   |           | NAQR1 A08  | Jul-14 - Jul-20 | 0   | 399  | 5ZW   |
|                   |           |            | Jul-25 - Dec-27 | 0   | 9592 | 5ZW   |
|                   |           |            | Dec-27 - Dec-31 | 0   | 415  | 5ZW   |
| SAFMARINE NGAMI   | BELGIUM   | ONFC 08    | Sep-12 - Sep-13 | 7   | 0    | 5ZW,6A,6D,6E  |
|                   |           |            | Nov-06 - Nov-07 | 5   | 0    | 5ZW,6D,6E   |
| NUKA ARCTICA      | DENMARK   | OXYH2 08   | Jul-15 - Jul-15 | 0   | 4    | 1F  |
| OLEANDER          | NETHERLAN | PJUJ 08    | Jan-04 - Jan-10 | 17  | 0    | 6A,6B,6D  |
|                   |           |            | Feb-01 - Feb-05 | 19  | 0    | 6A,6B,6D  |
|                   |           |            | Mar-08 - Mar-12 | 24  | 0    | 6A,6B,6D  |
|                   |           |            | Apr-04 - Apr-09 | 21  | 0    | 6A,6B,6D  |
|                   |           |            | May-09 - May-16 | 28  | 0    | 6A,6B,6D  |
|                   |           |            | Jun-06 - Jun-08 | 12  | 0    | 6A,6B,6D  |
|                   |           |            | Aug-02 - Aug-06 | 16  | 0    | 6A,6B,6D  |
|                   |           |            | Sep-06 - Sep-07 | 19  | 0    | 6A,6B,6D  |
|                   |           |            | Oct-10 - Oct-12 | 19  | 0    | 6A,6B,6D  |
|                   |           |            | Nov-07 - Nov-08 | 17  | 0    | 6A,6B,6D  |
|                   |           |            | Dec-07 - Dec-08 | 15  | 0    | 6A,6B,6D  |
| PROFILE FLOAT     | USA       | Q390058008 | Jan-03 - Jan-03 | 0   | 1    | 4VS   |
|                   |           |            | Apr-02 - Apr-02 | 0   | 1    | 4W  |
| SCOTTON LANDING   | USA       | SCLD1 08   | Jan-01 - Feb-05 | 0   | 958  | 6B  |
|                   |           |            | Feb-29 - Mar-12 | 0   | 297  | 6B  |
|                   |           |            | Mar-18 - Mar-19 | 0   | 8    | 6B  |
|                   |           |            | Mar-26 - Apr-30 | 0   | 1394 | 6B  |
|                   |           | SCLD1 A08  | May-07 - Dec-01 | 0   | 7302 | 6B  |
|                   |           |            | Dec-01 - Dec-31 | 0   | 1107 | 6B  |
| UNKNOWN/INC ONNU  | UNKNOWN/I | SHIP 08    | Jan-08 - Jan-09 | 3   | 0    | 4X  |
|                   |           |            | Jan-14 - Jan-24 | 13  | 0    | 4W,4X   |
|                   |           |            | Feb-04 - Feb-06 | 8   | 0    | 4W,4X   |
|                   |           |            | Feb-11 - Mar-25 | 145 | 86   | 2J,3K,3L,3O,3PS,4R,4S,4T,4VN,4VS,4W,4X,5ZE,5ZW,6B,6C,6D |
|                   |           |            | Mar-31 - May-14 | 188 | 12   | 3L,3M,3N,3O,3PS,3PN,4S,4T,4VS,4W,4X,5ZE,5ZW,6B,6C,6D    |
|                   |           |            | May-22 - May-28 | 14  | 1    | 4T,4VN,4W,4X,5Z<br>W                                    |

|                      |          |           |                 |     |      |  |
|----------------------|----------|-----------|-----------------|-----|------|--|
|                      |          |           | Jun-02 - Jul-22 | 96  | 51   | 3L,3M,3N,3O,3PS,<br>3PN,4S,4T,4VN,4<br>VS,4W,4X  |
|                      |          |           | Jul-28 - Sep-11 | 224 | 228  | 0B,1C,1F,2G,2H,2J<br>,3K,3L,3M,3O,3PS,<br>3PN,4R,4S,4T,4VN<br>,4VS,4W,4X,5ZE,5<br>ZW,6B,6C,6D,6E |
|                      |          |           | Sep-22 - Dec-04 | 227 | 39   | 2J,3L,3N,3O,3PS,4<br>T,4VS,4W,4X,5Y,5<br>ZE,5ZW,6B,6C,6D<br>,6H                                  |
|                      |          |           | Dec-16 - Dec-18 | 22  | 0    | 4VS,4W,4X,6F,6G,<br>6H   |
| RICKERS<br>GENOA     | MARSHALL | V7FS3 08  | Mar-24 - Mar-25 | 8   | 0    | 6D,6E  |
|                      |          |           | Jul-28 - Jul-31 | 7   | 0    | 3M,3O,5ZE  |
| C6-4828              | CANADA   | VO3180 08 | Jan-04 - Jan-04 | 0   | 1    | 4W   |
|                      |          |           | Feb-05 - Feb-05 | 0   | 1    | 4W   |
|                      |          |           | Jun-19 - Jun-19 | 0   | 1    | 4W   |
| SKINNER MILL         | USA      | WEQM1 08  | Apr-25 - Apr-30 | 0   | 260  | 5ZW  |
|                      |          |           | May-07 - Nov-06 | 0   | 9739 | 5ZW  |
|                      |          | WEQM1 A08 | Nov-06 - Nov-29 | 0   | 597  | 5ZW  |
| SEALAND<br>NAVIGATOR | USA      | WPGK 08   | Apr-26 - Apr-26 | 50  | 0    | 6A,6B,6C   |
|                      |          |           | Jul-04 - Jul-05 | 49  | 0    | 6A,6B,6C   |
|                      |          |           | Aug-02 - Aug-02 | 1   | 0    | 6C   |
|                      |          |           | Aug-14 - Aug-17 | 7   | 0    | 6A,6B,6C   |
|                      |          |           | Sep-04 - Sep-06 | 4   | 0    | 6B,6C  |
|                      |          |           | Sep-11 - Sep-13 | 7   | 0    | 6A,6B,6C   |
|                      |          |           | Sep-25 - Sep-28 | 4   | 0    | 6B,6C  |
|                      |          |           | Oct-09 - Oct-12 | 31  | 0    | 6A,6B,6C   |
|                      |          |           | Oct-23 - Oct-26 | 5   | 0    | 6B,6C  |
|                      |          |           | Nov-06 - Nov-09 | 7   | 0    | 6B,6C  |
|                      |          |           | Nov-20 - Nov-23 | 7   | 0    | 6A,6B,6C   |
|                      |          |           | Dec-04 - Dec-07 | 34  | 0    | 6A,6B,6C   |
|                      |          |           | Dec-18 - Dec-21 | 9   | 0    | 6A,6B,6C   |
| TMM SINALOA          | BERMUDA  | ZCDJ6 08  | Aug-05 - Aug-05 | 1   | 0    | 6H   |

**Table 2: Delayed mode data received during 2008**

Total: 1065 stations

| <b>Country</b> | <b>Cruise Num</b> | <b>Cruise Period</b> | <b>BT</b> | <b>CTD</b> | <b>BOTTLE</b> | <b>NAFO Subarea</b> |
|----------------|-------------------|----------------------|-----------|------------|---------------|---------------------|
| CANADA         | 189008001         | Jan-17 - Jan-17      | 0         | 2          | 2             | 4S,4T               |
|                |                   | Feb-05 - Feb-05      | 0         | 2          | 2             | 4S,4T               |
|                |                   | May-03 - May-03      | 0         | 2          | 2             | 4S,4T               |
|                |                   | May-16 - May-17      | 0         | 4          | 4             | 4S,4T               |
|                |                   | May-31 - May-31      | 0         | 2          | 2             | 4S,4T               |
|                |                   | Jul-30 - Jul-30      | 0         | 2          | 2             | 4S,4T               |
|                |                   | Oct-18 - Oct-18      | 0         | 1          | 1             | 4S                  |
|                |                   | Apr-18 - Apr-18      | 0         | 1          | 1             | 4T                  |
|                |                   | Apr-24 - Apr-24      | 0         | 1          | 1             | 4T                  |
|                |                   | May-01 - May-01      | 0         | 1          | 1             | 4T                  |
| CANADA         | 18BG08005         | May-07 - May-07      | 0         | 1          | 1             | 4T                  |
|                |                   | May-13 - May-13      | 0         | 1          | 1             | 4T                  |
|                |                   | May-21 - May-22      | 0         | 2          | 2             | 4T                  |
|                |                   | Jun-02 - Jun-02      | 0         | 1          | 1             | 4T                  |
|                |                   | Jun-09 - Jun-09      | 0         | 1          | 1             | 4T                  |
|                |                   | Jun-20 - Jun-20      | 0         | 1          | 1             | 4T                  |
|                |                   | Jun-26 - Jun-26      | 0         | 1          | 1             | 4T                  |
|                |                   | Jul-08 - Jul-08      | 0         | 1          | 1             | 4T                  |
|                |                   | Jul-17 - Jul-17      | 0         | 1          | 1             | 4T                  |
|                |                   | Jul-23 - Jul-23      | 0         | 1          | 1             | 4T                  |
|                |                   | Jul-30 - Jul-30      | 0         | 1          | 1             | 4T                  |
|                |                   | Aug-06 - Aug-06      | 0         | 1          | 1             | 4T                  |
|                |                   | Aug-27 - Aug-27      | 0         | 1          | 1             | 4T                  |
|                |                   | Sep-02 - Sep-02      | 0         | 1          | 1             | 4T                  |
|                |                   | Sep-11 - Sep-16      | 0         | 3          | 3             | 4T                  |
|                |                   | Sep-22 - Sep-22      | 0         | 1          | 1             | 4T                  |
|                |                   | Sep-30 - Sep-30      | 0         | 1          | 1             | 4T                  |
|                |                   | Oct-09 - Oct-09      | 0         | 1          | 1             | 4T                  |
|                |                   | Oct-16 - Oct-16      | 0         | 1          | 1             | 4T                  |
|                |                   | Oct-27 - Oct-27      | 0         | 1          | 1             | 4T                  |
|                |                   | Nov-27 - Nov-27      | 0         | 1          | 1             | 4T                  |
| CANADA         | 18BG08099         | Aug-12 - Aug-13      | 0         | 13         | 7             | 4T                  |
|                |                   | Aug-20 - Aug-21      | 0         | 5          | 0             | 4T                  |
| CANADA         | 18CN08017         | May-04 - May-11      | 0         | 18         | 0             | 4S                  |
| CANADA         | 18CN08020         | Jun-15 - Jun-23      | 0         | 26         | 0             | 4T                  |
| CANADA         | 18FC08027         | May-06 - May-09      | 0         | 15         | 6             | 4T                  |
| CANADA         | 18FC08035         | May-24 - May-27      | 0         | 6          | 0             | 4S,4T               |
| CANADA         | 18FC08051         | Aug-10 - Aug-14      | 0         | 7          | 0             | 4S,4T               |
| CANADA         | 18HE08002         | Mar-03 - Mar-13      | 0         | 87         | 84            | 4R,4S,4T,4VN        |
| CANADA         | 18HU08057         | Oct-25 - Nov-13      | 0         | 129        | 0             | 4R,4S,4T,4VN,4X     |
| CANADA         | 18OL08010         | May-13 - May-17      | 0         | 34         | 17            | 4S                  |
| CANADA         | 18PA08001         | Jan-14 - Jan-14      | 0         | 2          | 0             | 4X                  |
| CANADA         | 18PA08002         | Feb-26 - Feb-26      | 0         | 2          | 0             | 4X                  |
| CANADA         | 18PA08003         | Jan-08 - Jan-08      | 0         | 5          | 0             | 4X                  |
| CANADA         | 18PA08004         | Feb-05 - Feb-05      | 0         | 5          | 0             | 4X                  |
| CANADA         | 18PA08005         | Mar-07 - Mar-07      | 0         | 5          | 0             | 4X                  |
| CANADA         | 18PA08006         | Mar-14 - Mar-14      | 0         | 2          | 0             | 4X                  |

|        |           |                 |   |     |    |              |
|--------|-----------|-----------------|---|-----|----|--------------|
| CANADA | 18PA08007 | Apr-23 - Apr-23 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08008 | May-14 - May-14 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08009 | May-06 - May-06 | 0 | 5   | 0  | 4X           |
|        |           | May-13 - May-13 | 0 | 5   | 0  | 4X           |
|        |           | May-20 - May-20 | 0 | 5   | 0  | 4X           |
|        |           | May-27 - May-27 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08010 | Jun-16 - Jun-16 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08011 | Apr-24 - Apr-24 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08012 | Jun-03 - Jun-03 | 0 | 5   | 0  | 4X           |
|        |           | Jun-09 - Jun-09 | 0 | 5   | 0  | 4X           |
|        |           | Jun-17 - Jun-17 | 0 | 5   | 0  | 4X           |
|        |           | Jun-24 - Jun-24 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08013 | Jul-14 - Jul-15 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08014 | Jul-02 - Jul-02 | 0 | 5   | 0  | 4X           |
|        |           | Jul-08 - Jul-08 | 0 | 5   | 0  | 4X           |
|        |           | Jul-14 - Jul-14 | 0 | 5   | 0  | 4X           |
|        |           | Jul-22 - Jul-22 | 0 | 5   | 0  | 4X           |
|        |           | Jul-29 - Jul-29 | 0 | 4   | 0  | 4X           |
| CANADA | 18PA08015 | Aug-13 - Aug-13 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08016 | Aug-13 - Aug-13 | 0 | 1   | 0  | 4X           |
| CANADA | 18PA08017 | Aug-05 - Aug-05 | 0 | 5   | 0  | 4X           |
|        |           | Aug-12 - Aug-12 | 0 | 5   | 0  | 4X           |
|        |           | Aug-19 - Aug-19 | 0 | 5   | 0  | 4X           |
|        |           | Aug-26 - Aug-26 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08018 | Sep-16 - Sep-17 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08019 | Sep-02 - Sep-02 | 0 | 5   | 0  | 4X           |
|        |           | Sep-09 - Sep-09 | 0 | 5   | 0  | 4X           |
|        |           | Sep-16 - Sep-16 | 0 | 5   | 0  | 4X           |
|        |           | Sep-22 - Sep-22 | 0 | 5   | 0  | 4X           |
|        |           | Sep-30 - Sep-30 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08020 | Oct-14 - Oct-15 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08021 | Nov-18 - Nov-18 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08022 | Nov-18 - Nov-19 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08023 | Dec 15 - Dec 16 | 0 | 2   | 0  | 4X           |
| CANADA | 18PA08024 | Dec 15 - Dec 15 | 0 | 5   | 0  | 4X           |
| CANADA | 18PA08669 | Jan-14 - Jan-14 | 0 | 1   | 0  | 4X           |
|        |           | Feb-26 - Feb-26 | 0 | 1   | 0  | 4X           |
|        |           | Apr-23 - Apr-23 | 0 | 1   | 0  | 4X           |
|        |           | May-14 - May-14 | 0 | 1   | 0  | 4X           |
|        |           | Jun-16 - Jun-16 | 0 | 1   | 0  | 4X           |
|        |           | Jul-14 - Jul-14 | 0 | 1   | 0  | 4X           |
|        |           | Sep-16 - Sep-16 | 0 | 1   | 0  | 4X           |
|        |           | Oct-14 - Oct-14 | 0 | 1   | 0  | 4X           |
|        |           | Nov-18 - Nov-18 | 0 | 1   | 0  | 4X           |
|        |           | Dec 15 - Dec 15 | 0 | 1   | 0  | 4X           |
| CANADA | 18TL08036 | Jun-15 - Jun-29 | 0 | 79  | 74 | 4R,4S,4T,4VN |
| CANADA | 18TL08041 | Jul-26 - Aug-24 | 0 | 126 | 0  | 4R,4S,4T,4VN |
| CANADA | 18VA08011 | Jun-11 - Jun-15 | 0 | 24  | 0  | 4S           |
| CANADA | 18VA08012 | Apr-29 - May-03 | 0 | 11  | 0  | 4S           |
| CANADA | 18VA08045 | Jul-11 - Jul-22 | 0 | 28  | 0  | 4VN,4W,4X    |

|        |           |                 |   |   |   |    |
|--------|-----------|-----------------|---|---|---|----|
| CANADA | 18VA08666 | Jan-04 - Jan-04 | 0 | 1 | 0 | 4W |
|        |           | Feb-05 - Feb-05 | 0 | 1 | 0 | 4W |
| CANADA | 18VA08668 | May-06 - May-06 | 0 | 1 | 0 | 4T |
|        |           | May-22 - May-22 | 0 | 1 | 0 | 4T |
|        |           | Jun-12 - Jun-12 | 0 | 1 | 0 | 4T |
|        |           | Aug-07 - Aug-07 | 0 | 1 | 0 | 4T |
|        |           | Oct-16 - Oct-16 | 0 | 1 | 0 | 4T |
|        |           | Nov-13 - Nov-13 | 0 | 1 | 0 | 4T |
|        |           | Dec 03 - Dec 03 | 0 | 1 | 0 | 4T |
| CANADA | 18VA08866 | Jun-19 - Jun-19 | 0 | 1 | 0 | 4W |
|        |           | Nov-13 - Nov-13 | 0 | 2 | 0 | 4W |

**Table 3: Profile data collected prior to 2007 and processed during the past year**

Total: 7348 stations

| <b>Unique ID</b> | <b>Year</b> | <b>CTD</b> | <b>TowedCTD</b> | <b>BOT</b> | <b>BT</b> | <b>NAFO Subarea</b>   |
|------------------|-------------|------------|-----------------|------------|-----------|-----------------------|
| 181C06660        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C06675        | 2006        | 0          | 0               | 76         | 0         | 3L 3M 3K 2J           |
| 181C06679        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C06688        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06692        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C06693        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06695        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06697        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06703        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C06704        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C06705        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06706        | 2006        | 0          | 0               | 3          | 0         | 3L                    |
| 181C06707        | 2006        | 0          | 0               | 2          | 0         | 3L                    |
| 181C06708        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 181C07685        | 2007        | 0          | 40              | 0          | 0         | 4W 5ZE                |
| 181C07686        | 2007        | 0          | 43              | 0          | 0         | 4W 4VS 4VN 4X         |
| 181C07757        | 2007        | 40         | 0               | 0          | 1         | 3PS                   |
| 181C07758        | 2007        | 0          | 1               | 1          | 4         | 3PS 3PN 3L            |
| 181C07759        | 2007        | 0          | 2               | 2          | 2         | 3L 3O                 |
| 181C07760        | 2007        | 0          | 2               | 2          | 1         | 3L 3O                 |
| 181C07761        | 2007        | 0          | 2               | 2          | 5         | 3L 3N                 |
| 181C07762        | 2007        | 0          | 2               | 2          | 1         | 3L 3N                 |
| 181C07763        | 2007        | 0          | 3               | 1          | 0         | 3PS 3L                |
| 181C07764        | 2007        | 0          | 1               | 0          | 0         | 3L                    |
| 181C07765        | 2007        | 0          | 3               | 2          | 1         | 3L 3N                 |
| 181C07766        | 2007        | 0          | 81              | 81         | 36        | 3L 3K 2J              |
| 181C07767        | 2007        | 0          | 26              | 1          | 0         | 4R 3L                 |
| 181C07768        | 2007        | 0          | 24              | 0          | 0         | 4VS 4W                |
| 181C07770        | 2007        | 0          | 2               | 2          | 0         | 3L                    |
| 181C07771        | 2007        | 0          | 2               | 2          | 2         | 3L 3O 3N              |
| 181C07772        | 2007        | 0          | 1               | 1          | 5         | 3L 3N                 |
| 181C07773        | 2007        | 66         | 0               | 0          | 3         | 3L                    |
| 181C07774        | 2007        | 0          | 1               | 1          | 4         | 3L 3K                 |
| 181C07800        | 2007        | 0          | 2               | 2          | 0         | 3L                    |
| 181C07804        | 2007        | 2          | 0               | 0          | 2         | 3L                    |
| 189906101        | 2006        | 0          | 0               | 1          | 0         | 3L                    |
| 189907102        | 2007        | 234        | 0               | 0          | 1         | 3L 2G 2H 0B 1C 0A     |
| 189907200        | 2007        | 143        | 0               | 0          | 0         | 3PS 4VS 3PN 4VN 4R    |
| 18AH06003        | 2006        | 0          | 0               | 0          | 11        | 4X 4W                 |
| 18AH06004        | 2006        | 0          | 0               | 0          | 26        | 4X 5ZE 6D 6E 6C 6B 4W |
| 18AH07001        | 2007        | 0          | 0               | 0          | 18        | 4X 4W                 |
| 18BG07026        | 2007        | 0          | 27              | 0          | 0         | 4T                    |
| 18BG0726         | 2007        | 0          | 0               | 27         | 0         | 4T                    |
| 18BW07021        | 2007        | 0          | 19              | 0          | 0         | 2J                    |
| 18C806002        | 2006        | 0          | 0               | 0          | 2         | 4W                    |
| 18C806003        | 2006        | 0          | 0               | 0          | 10        | 4X 4W                 |
| 18C806004        | 2006        | 0          | 0               | 0          | 10        | 4X 4W                 |

|           |      |   |     |     |    |                         |
|-----------|------|---|-----|-----|----|-------------------------|
| 18C807001 | 2007 | 0 | 0   | 0   | 50 | 4X 4W                   |
| 18C807002 | 2007 | 0 | 0   | 0   | 20 | 4X 5ZE 6C               |
| 18C807003 | 2007 | 0 | 0   | 0   | 18 | 4X 4W 5Y                |
| 18FN06004 | 2006 | 0 | 0   | 0   | 58 | 4W 3PS 3L 3O 3N 4VS     |
| 18FN06005 | 2006 | 0 | 0   | 0   | 12 | 4X 4W                   |
| 18FN07002 | 2007 | 0 | 0   | 0   | 28 | 5ZE 4X 6B 6C            |
| 18GA90001 | 1990 | 0 | 78  | 0   | 0  | 3PN 4VN 4S 4R           |
| 18GA91001 | 1991 | 0 | 73  | 0   | 0  | 3PN 4R 4VN 4S           |
| 18GA91002 | 1991 | 0 | 30  | 0   | 0  | 4S 4T 4VN 3PN 4R        |
| 18GO07001 | 2007 | 0 | 4   | 4   | 0  | 4S 4T                   |
| 18HL06003 | 2006 | 0 | 0   | 0   | 3  | 4W                      |
| 18HL06004 | 2006 | 0 | 0   | 0   | 27 | 4X 5ZE 6D 6C 6B 4W      |
| 18HL07001 | 2007 | 0 | 0   | 0   | 11 | 4W 4VS 3L 3M            |
| 18HL07002 | 2007 | 0 | 0   | 0   | 6  | 4W 4X 4VS 4VN 4S 4T     |
| 18HS07736 | 2007 | 0 | 0   | 0   | 37 | 3K 4R                   |
| 18HU02073 | 2002 | 0 | 21  | 0   | 0  | 3L 3M                   |
| 18HU03005 | 2003 | 0 | 8   | 0   | 0  | 4W                      |
| 18HU03010 | 2003 | 0 | 41  | 0   | 0  | 4VS 6F 6G 3M 3K 1F 4W   |
| 18HU04016 | 2004 | 0 | 46  | 0   | 0  | 4X 4W 4R 2J 2H 1F 3K    |
| 18HU05016 | 2005 | 0 | 40  | 0   | 0  | 1F 2H 2J                |
| 18HU05021 | 2005 | 0 | 8   | 0   | 0  | 4X 5ZE 4W               |
| 18HU05028 | 2005 | 0 | 18  | 0   | 0  | 3L                      |
| 18HU05055 | 2005 | 0 | 41  | 0   | 0  | 4X 4W 4VN 4R 4VS        |
| 18HU06008 | 2006 | 0 | 59  | 0   | 0  | 4X 4W 4VS 4VN 4R        |
| 18HU06052 | 2006 | 0 | 47  | 0   | 0  | 4W 4X 4VS 3PS 4VN 4R    |
| 18HU06731 | 2006 | 0 | 0   | 72  | 0  | 3L 2J 3K 3O 3N 3M       |
| 18HU07001 | 2007 | 0 | 81  | 0   | 0  | 4W 4X 4VS 4R 4VN 3PS 3O |
| 18HU07033 | 2007 | 0 | 60  | 0   | 0  | 4W 4VS                  |
| 18HU07045 | 2007 | 0 | 51  | 0   | 0  | 4X 4W 4VS 4VN 4R        |
| 18HU07049 | 2007 | 0 | 106 | 103 | 0  | 4S 4T 4VN 4R            |
| 18HU07754 | 2007 | 0 | 66  | 46  | 33 | 3L 3K 3M 3N 3O          |
| 18IS07001 | 2007 | 0 | 0   | 0   | 33 | 4X 5ZE 6B 6C            |
| 18MP06006 | 2006 | 0 | 0   | 0   | 31 | 4X 5ZE 5ZW 5Y 4W        |
| 18NA02049 | 2002 | 0 | 5   | 0   | 0  | 4X                      |
| 18NE05027 | 2005 | 0 | 21  | 0   | 0  | 4W                      |
| 18NE06003 | 2006 | 0 | 2   | 0   | 0  | 4X                      |
| 18NE06030 | 2006 | 0 | 107 | 0   | 0  | 4X 4W 5Y                |
| 18NE06729 | 2006 | 0 | 0   | 1   | 0  | 3L                      |
| 18OK06714 | 2006 | 0 | 0   | 1   | 0  | 3L                      |
| 18OK06719 | 2006 | 0 | 0   | 1   | 0  | 3L                      |
| 18OK06723 | 2006 | 0 | 0   | 1   | 0  | 3L                      |
| 18OK07727 | 2007 | 0 | 31  | 0   | 0  | 3L 3PS                  |
| 18OK07734 | 2007 | 0 | 4   | 1   | 13 | 3L                      |
| 18OK07735 | 2007 | 0 | 1   | 1   | 0  | 3L                      |
| 18OK07779 | 2007 | 0 | 37  | 0   | 0  | 3L 3PS                  |
| 18OK07780 | 2007 | 0 | 2   | 0   | 0  | 3L                      |
| 18OK07781 | 2007 | 0 | 60  | 0   | 0  | 3L                      |
| 18OK07782 | 2007 | 0 | 11  | 0   | 11 | 3PS                     |
| 18OK07783 | 2007 | 0 | 4   | 0   | 8  | 3PS                     |
| 18OK07786 | 2007 | 0 | 16  | 0   | 0  | 3L                      |

|           |      |    |     |     |    |                        |
|-----------|------|----|-----|-----|----|------------------------|
| 18OK07787 | 2007 | 0  | 35  | 0   | 0  | 3K                     |
| 18OK07791 | 2007 | 0  | 24  | 0   | 5  | 3L                     |
| 18OK07792 | 2007 | 0  | 1   | 1   | 0  | 3L                     |
| 18OK07793 | 2007 | 0  | 17  | 0   | 3  | 3L                     |
| 18OK07796 | 2007 | 0  | 7   | 0   | 0  | 3L                     |
| 18PA07023 | 2007 | 0  | 2   | 0   | 0  | 4X                     |
| 18PA07024 | 2007 | 0  | 5   | 0   | 0  | 4X                     |
| 18PA07669 | 2007 | 0  | 1   | 0   | 0  | 4X                     |
| 18S606005 | 2006 | 0  | 0   | 0   | 40 | 4X 5ZE 6B 6C 5ZW 5Y    |
| 18S606006 | 2006 | 0  | 0   | 0   | 9  | 4X 5ZE 6B 6C           |
| 18TL05605 | 2005 | 0  | 79  | 0   | 0  | 4X 4W 5ZE 5Y           |
| 18TL05607 | 2005 | 0  | 139 | 0   | 0  | 4T 4VN                 |
| 18TL06614 | 2006 | 0  | 30  | 0   | 0  | 4W 5ZE                 |
| 18TL06662 | 2006 | 0  | 0   | 2   | 0  | 3L                     |
| 18TL06663 | 2006 | 0  | 0   | 1   | 0  | 3L                     |
| 18TL06670 | 2006 | 0  | 0   | 72  | 0  | 3L 3O 3N 3M 3K         |
| 18TL06671 | 2006 | 0  | 0   | 1   | 0  | 3L                     |
| 18TL06673 | 2006 | 0  | 0   | 2   | 0  | 3L                     |
| 18TL06674 | 2006 | 0  | 0   | 1   | 0  | 3L                     |
| 18TL06678 | 2006 | 0  | 193 | 0   | 0  | 4T 4VN 4S              |
| 18TL06683 | 2006 | 0  | 0   | 2   | 0  | 3L                     |
| 18TL06684 | 2006 | 0  | 0   | 1   | 0  | 3L                     |
| 18TL07031 | 2007 | 0  | 0   | 89  | 0  | 4T 4S 4R 4VN           |
| 18TL07040 | 2007 | 0  | 0   | 114 | 0  | 4VN 4R 4T 4S           |
| 18TL07732 | 2007 | 0  | 2   | 2   | 0  | 3L                     |
| 18TL07740 | 2007 | 0  | 26  | 2   | 0  | 3L 3PS                 |
| 18TL07741 | 2007 | 0  | 132 | 119 | 38 | 3L 3O 3N 3M 3K         |
| 18TL07742 | 2007 | 0  | 7   | 2   | 36 | 3L 3K                  |
| 18TL07743 | 2007 | 0  | 16  | 2   | 0  | 3L 3N                  |
| 18TL07745 | 2007 | 0  | 531 | 0   | 0  | 4T 4VN 4S 4W 4X 4VS    |
| 18TL07749 | 2007 | 0  | 352 | 0   | 0  | 4T 4VN                 |
| 18TL07750 | 2007 | 0  | 2   | 2   | 4  | 3L 3O 3N               |
| 18TL07751 | 2007 | 37 | 0   | 2   | 2  | 3L 3N 3M               |
| 18TL07752 | 2007 | 57 | 0   | 0   | 2  | 3L 3M 2J               |
| 18TL07753 | 2007 | 0  | 1   | 1   | 1  | 2J 3L                  |
| 18TL07755 | 2007 | 68 | 0   | 0   | 3  | 3K 3L                  |
| 18TL07799 | 2007 | 0  | 2   | 2   | 1  | 3L                     |
| 18TL07802 | 2007 | 0  | 1   | 1   | 1  | 3L 2J                  |
| 18TL07803 | 2007 | 0  | 1   | 1   | 0  | 3L                     |
| 18TR06002 | 2006 | 0  | 0   | 0   | 15 | 4W 5ZE 5ZW 6B 4X       |
| 18TR07003 | 2007 | 0  | 0   | 0   | 10 | 4W                     |
| 18TR07004 | 2007 | 0  | 0   | 0   | 31 | 4X 5ZE 6B 6C           |
| 29VE07001 | 2007 | 0  | 74  | 0   | 0  | 3M                     |
| 316G07001 | 2007 | 0  | 49  | 0   | 0  | 5ZE 5Y 5ZW 4X          |
| 316G07002 | 2007 | 0  | 18  | 0   | 0  | 6A                     |
| 316G07005 | 2007 | 0  | 3   | 0   | 0  | 6C 6B                  |
| 316G07006 | 2007 | 0  | 161 | 0   | 0  | 5ZW 6A 6B 6C 5ZE 4X 5Y |
| 316G07007 | 2007 | 0  | 57  | 0   | 0  | 5ZE                    |
| 316G07008 | 2007 | 0  | 4   | 0   | 0  | 5ZE 4X                 |
| 316G07009 | 2007 | 0  | 139 | 0   | 0  | 5ZE 5ZW 6A 6B 6C 4X 5Y |

|           |      |   |     |   |   |                        |
|-----------|------|---|-----|---|---|------------------------|
| 316G07011 | 2007 | 0 | 120 | 0 | 0 | 5ZW 6A 6B 6C 5Y 4X 5ZE |
| 319904001 | 2004 | 0 | 4   | 0 | 0 | 6A                     |
| 319904002 | 2004 | 0 | 41  | 0 | 0 | 6A                     |
| 319904003 | 2004 | 0 | 59  | 0 | 0 | 6A                     |
| 31A407001 | 2007 | 0 | 29  | 0 | 0 | 6A 6B 6C               |
| 31A407002 | 2007 | 0 | 136 | 0 | 0 | 6A 6B 6C 5ZW 5ZE       |
| 31A407003 | 2007 | 0 | 361 | 0 | 0 | 6B 6C 6A 5ZW 5ZE 4X 5Y |
| 31A407005 | 2007 | 0 | 167 | 0 | 0 | 6A 6B 6C 5ZE           |
| 31A407007 | 2007 | 0 | 328 | 0 | 0 | 6B 6C 6A 5ZW 5ZE 4X 5Y |
| 31A407008 | 2007 | 0 | 57  | 0 | 0 | 5ZW 5Y 5ZE             |
| 31RU04001 | 2004 | 0 | 37  | 0 | 0 | 5ZW                    |
| 31RU04002 | 2004 | 0 | 26  | 0 | 0 | 5ZW                    |
| 31RU04003 | 2004 | 0 | 43  | 0 | 0 | 6A 5ZW                 |
| 31RU04004 | 2004 | 0 | 5   | 0 | 0 | 5ZW 6A                 |
| 31RU04005 | 2004 | 0 | 2   | 0 | 0 | 6A                     |
| 31UN07001 | 2007 | 0 | 10  | 0 | 0 | 5Y                     |
| 33HH07009 | 2007 | 0 | 42  | 0 | 0 | 5Y 4X                  |
| 33HH07010 | 2007 | 0 | 13  | 0 | 0 | 6C                     |
| 33RO07001 | 2007 | 0 | 22  | 0 | 0 | 6A 5ZW 5Y 5ZE          |

**Table 4: TRACKOB data received during 2008**

TOTAL: 37,377 stations

| <b>Ship Name</b> | <b>Country</b> | <b>Call Sign</b> | <b>Cruise Period</b> | <b>TRACKOB</b> | <b>NAFO Subarea</b>            |
|------------------|----------------|------------------|----------------------|----------------|--------------------------------|
| THALASSA         | FRANCE         | C6TN4 B08        | Aug-21 - Aug-22      | 314            | 6B,6C,6D                       |
|                  |                | FNFP 08          | Aug-20 - Aug-22      | 544            | 3L,3M                          |
|                  |                |                  | Aug-28 - Sep-06      | 2865           | 1F,2H,2J                       |
| UNKNOWN/INCON NU | UNKNOWN/I N    | KS008 08         | Sep-29 - Nov-20      | 317            | 6A,6B,6C                       |
| UNKNOWN/INCON NU | UNKNOWN/I N    | KS049 08         | Sep-29 - Oct-01      | 11             | 6A,6B,6C                       |
|                  |                |                  | Oct-07 - Oct-09      | 10             | 6A,6B,6C                       |
|                  |                |                  | Oct-15 - Oct-19      | 13             | 6A,6B,6C                       |
| UNKNOWN/INCON NU | UNKNOWN/I N    | KS059 08         | Oct-21 - Oct-23      | 12             | 5ZE,5ZW,6D                     |
| UNKNOWN/INCON NU | UNKNOWN/I N    | KS062 08         | Sep-29 - Sep-29      | 4              | 6B,6C                          |
|                  |                | KS064 08         | Sep-22 - Sep-24      | 2              | 5ZW                            |
|                  |                |                  | Oct-31 - Oct-31      | 1              | 5ZW                            |
| UNKNOWN/INCON NU | UNKNOWN/I N    | KS077 08         | Oct-04 - Oct-07      | 26             | 3M,3N,3O,4VS,4W,<br>4X,5ZE,5ZW |
|                  |                |                  | Oct-19 - Oct-21      | 3              | 6A                             |
|                  |                |                  | Nov-01 - Nov-04      | 9              | 6A,6B,6C                       |
| OLEANDER         | NETHERLAND     | PJJU 08          | Jan-02 - Jan-09      | 533            | 6A,6B,6D                       |
|                  |                |                  | Feb-23 - Feb-23      | 212            | 6A,6B,6D                       |
|                  |                |                  | Feb-29 - Mar-30      | 3377           | 5ZW,6A,6B,6D                   |
|                  |                |                  | Apr-04 - Apr-05      | 249            | 6A,6B,6D                       |
|                  |                |                  | Apr-12 - May-04      | 2649           | 6A,6B,6C,6D                    |
|                  |                | PJJU B07         | Jan-01 - Jan-01      | 56             | 6D                             |
|                  |                | PJJU B08         | May-07 - May-18      | 1723           | 6A,6B,6D                       |
|                  |                |                  | May-28 - Jul-02      | 5032           | 5ZW,6A,6B,6D                   |
|                  |                | PJJU C08         | Jul-02 - Jul-17      | 2870           | 6A,6B,6D                       |
|                  |                |                  | Jul-23 - Jul-31      | 1876           | 6A,6B,6D                       |
|                  |                |                  | Aug-22 - Aug-30      | 1394           | 6A,6B,6D                       |
|                  |                |                  | Sep-05 - Sep-07      | 686            | 6A,6B,6D                       |
|                  |                | PJJU D08         | Sep-11 - Sep-21      | 1688           | 6A,6B,6D                       |
|                  |                |                  | Oct-10 - Nov-19      | 4669           | 6A,6B,6D                       |
|                  |                | PJJU E08         | Nov-19 - Dec-21      | 5568           | 5ZW,6A,6B,6D                   |
|                  |                |                  | Dec-29 - Dec-30      | 664            | 6A,6B,6D                       |

**Table 5: DRIBU data received during 2008**

TOTAL = 283,721 messages from 367 buoys

| BUOY  | DATE RANGE      | DAYS | SST | A<br>P | AT | WS | W<br>D | TC | NAFO SUBAREAS                      |
|-------|-----------------|------|-----|--------|----|----|--------|----|------------------------------------|
| 13534 | Aug-29 - Oct-24 | 57   | -   | X      | X  | -  | -      | -  | 6E,6D,6B                           |
| 13597 | Oct-02 - Nov-29 | 59   | -   | X      | -  | -  | -      | -  | 6C,6B,6D,6E                        |
| 13606 | Jan-01 - Aug-07 | 220  | X   | X      | -  | -  | -      | -  | 6F,6G,4VS,3N,6H,3M                 |
| 13613 | Sep-20 - Nov-05 | 47   | X   | X      | -  | -  | -      | -  | 6F                                 |
| 13618 | Sep-26 - Dec-07 | 72   | X   | X      | -  | -  | -      | -  | 6E,6D,4X,4W,4VS                    |
| 13905 | Oct-06 - Dec-26 | 82   | X   | X      | -  | -  | -      | -  | 6C,6D                              |
| 13923 | Nov-30 - Dec-31 | 32   | X   | X      | -  | -  | -      | -  | 6C,6B,6D                           |
| 15663 | Jan-01 - Jan-04 | 4    | X   | X      | -  | -  | -      | -  | 6G                                 |
| 25529 | Jul-26 - Sep-19 | 56   | -   | X      | -  | -  | -      | -  | 0A,1B                              |
| 25585 | Jul-12 - Jul-12 | 1    | -   | X      | -  | -  | -      | -  | 1A                                 |
| 32545 | Oct-28 - Dec-31 | 65   | X   | X      | -  | -  | -      | -  | 6H,3M,3N,6G                        |
| 41561 | Jan-01 - Jan-13 | 13   | X   | X      | -  | -  | -      | -  | 3M,6H                              |
| 41563 | Jan-01 - Mar-12 | 72   | X   | X      | -  | -  | -      | -  | 6D,6E                              |
| 41565 | Jan-01 - May-24 | 145  | -   | -      | -  | -  | -      | -  | 4W,6F,4VS,3O,3N,3M                 |
| 41567 | Jan-01 - Jun-04 | 156  | X   | X      | -  | -  | -      | -  | 5ZE,6D,4X,6E,4W,4VS,3O,3N,3M       |
| 41568 | Jan-01 - Jun-12 | 164  | X   | X      | -  | -  | -      | -  | 6H,6G,6F,4VS,3N                    |
| 41570 | Jan-01 - Mar-09 | 69   | X   | X      | -  | -  | -      | -  | 4VS,3O,3N,3M                       |
| 41572 | Jan-01 - Sep-16 | 260  | X   | X      | -  | -  | -      | -  | 6F,6E,4W,4VS,6G,3N,6H,3M           |
| 41593 | Jan-01 - Sep-04 | 248  | X   | X      | -  | -  | -      | -  | 6H,6G                              |
| 41609 | Jul-15 - Dec-21 | 159  | X   | X      | -  | -  | -      | -  | 6D,5ZE,4X,6E,4W,6F,4VS,6G,3N,6H,3M |
| 41614 | Apr-23 - May-02 | 10   | X   | X      | -  | -  | -      | -  | 6E                                 |
| 41622 | Mar-12 - May-01 | 50   | X   | X      | -  | -  | -      | -  | 6C,6B,6D,6E                        |
| 41668 | Mar-13 - Jun-04 | 84   | X   | X      | -  | -  | -      | -  | 6C,6B,6D,6E,4W,4VS,6F,6G,3N,6H     |
| 41689 | Jan-01 - Mar-27 | 87   | X   | X      | -  | -  | -      | -  | 6C,6D,6B                           |
| 41690 | Jan-01 - Oct-07 | 281  | X   | X      | -  | -  | -      | -  | 6G,6F,6E                           |
| 41696 | Aug-23 - Nov-06 | 76   | X   | X      | -  | -  | -      | -  | 6C,6B,6D,6E,6F                     |
| 41697 | Oct-09 - Nov-16 | 39   | X   | X      | X  | -  | -      | -  | 6C,6D                              |
| 41699 | Sep-22 - Dec-31 | 101  | X   | X      | X  | -  | -      | -  | 6D,6E,4X,4W,6F,4VS,6G              |
| 41700 | Sep-22 - Dec-31 | 101  | X   | X      | X  | -  | -      | -  | 6E,4W,4VS,6G,3O,3N,6H,3M           |
| 41703 | Nov-18 - Dec-31 | 44   | X   | X      | -  | -  | -      | -  | 6F,6E                              |
| 41704 | Nov-18 - Dec-15 | 28   | X   | X      | -  | -  | -      | -  | 6E,6F                              |
| 41712 | Nov-19 - Dec-31 | 43   | X   | X      | -  | -  | -      | -  | 6F,4W,4VS                          |
| 41713 | Nov-19 - Dec-31 | 43   | X   | X      | -  | -  | -      | -  | 6F                                 |
| 41852 | Sep-12 - Dec-31 | 111  | X   | X      | -  | -  | -      | -  | 6G,6F,6E,4W,4VS,6H                 |
| 41855 | Jan-01 - Feb-16 | 47   | X   | X      | -  | -  | -      | -  | 6D,6E,4W                           |
| 41856 | Jan-01 - Jun-24 | 176  | X   | X      | -  | -  | -      | -  | 6G,6F,6E,4W,4VS,3N,6H              |
| 41914 | Feb-21 - Jul-19 | 149  | X   | X      | -  | -  | -      | -  | 6D,6E,6F                           |
| 41915 | Jan-01 - Jul-22 | 204  | X   | X      | -  | -  | -      | -  | 6G,6F,4VS,3N,6H                    |
| 41936 | Dec-17 - Dec-31 | 15   | X   | X      | -  | X  | X      | -  | 6C,6B,6D                           |
| 41954 | Mar-12 - Apr-15 | 34   | X   | X      | -  | -  | -      | -  | 6C,6B,6D,6E                        |
| 41956 | Mar-12 - Sep-30 | 202  | X   | X      | -  | -  | -      | -  | 6C,6B,6D,6E,4W,6F                  |

|       |                 |     |   |   |   |   |   |   |   |
|-------|-----------------|-----|---|---|---|---|---|---|---|
| 41957 | Sep-13 - Dec-31 | 110 | X | X | - | - | - | - | 6C,6D,6E,4X,4W,4VS,6F                     |
| 41958 | Nov-15 - Dec-31 | 47  | X | X | X | - | - | - | 6H  |
| 41960 | Jan-01 - Feb-03 | 33  | X | X | X | - | - | - | 6C,6D                                     |
| 41966 | Mar-01 - Dec-31 | 306 | X | X | - | - | - | - | 6C,6D,6E,4W                               |
| 41973 | Jan-25 - Apr-02 | 68  | X | X | - | - | - | - | 6C,6D,6E,4W,6F,4VS,6G,3N,3M               |
| 41976 | May-15 - Dec-31 | 231 | X | X | - | - | - | - | 6C,6D,4X,5ZE,4W,6E,6F,4VS,3O,3N,3M,6H,6G  |
| 41982 | Jan-01 - Feb-07 | 37  | X | X | - | - | - | - | 4VS,6G,3O,3N,3M,6H                        |
| 41983 | Jan-01 - Mar-22 | 82  | X | X | - | - | - | - | 6D,6E,6F                                  |
| 41987 | Sep-30 - Dec-31 | 93  | - | X | - | - | - | - | 6F,6E,4X,4W,4VS,3O,3N,3M                  |
| 41990 | Jan-01 - Feb-15 | 46  | X | X | - | - | - | - | 3M,6H                                     |
| 41994 | Jan-01 - Mar-21 | 81  | X | X | - | - | - | - | 6G,6H                                     |
| 42538 | Mar-18 - Dec-05 | 262 | X | X | - | - | - | - | 6H,3M,3N                                  |
| 43523 | Feb-05 - Oct-08 | 246 | X | X | - | - | - | - | 6C,6D,6E,4W,4X,5ZE                        |
| 43524 | Feb-11 - Apr-04 | 53  | X | X | - | - | - | - | 6C,6B,6D,6E,4X,4W,4VS,3O,3N,3M            |
| 44501 | Apr-03 - Sep-19 | 170 | X | X | - | - | - | - | 3L,3N,3O,3M                               |
| 44502 | May-09 - Dec-27 | 232 | X | X | - | - | - | - | 3K,3L,3M                                  |
| 44503 | Jan-01 - Jun-27 | 179 | X | X | - | - | - | - | 3M,3K,3L,3N                               |
| 44504 | Jun-10 - Sep-21 | 104 | X | X | - | - | - | - | 3L,3M                                     |
| 44510 | Jan-01 - Jan-01 | 1   | X | X | - | - | - | - | 3M  |
| 44549 | Jan-01 - May-17 | 138 | X | X | X | - | - | - | 3N,3O,3PS,4VS                             |
| 44551 | Jun-01 - Oct-06 | 127 | X | X | X | - | - | - | 1F,1E,1D,0B,2G,2H                         |
| 44603 | Jan-01 - Nov-06 | 311 | X | X | X | - | - | - | 1F,2J                                     |
| 44608 | Jan-01 - Feb-20 | 51  | X | X | X | - | - | - | 4X,5ZE,4W,6E,4VS                          |
| 44616 | Jan-01 - Jul-07 | 189 | X | X | - | - | - | - | 2J,1F,2H                                  |
| 44621 | Apr-21 - Dec-24 | 248 | X | X | X | - | - | - | 3N,3O,3PS,4VS,3M                          |
| 44627 | Jan-01 - Feb-04 | 35  | X | X | X | - | - | - | 2J  |
| 44629 | Jan-01 - Jan-22 | 22  | X | X | X | - | - | - | 3K  |
| 44638 | Dec-15 - Dec-31 | 17  | X | X | X | X | X | - | 4W  |
| 44639 | Dec-14 - Dec-31 | 18  | - | X | X | X | X | - | 4X  |
| 44704 | Jan-08 - Jan-15 | 8   | X | X | X | X | X | - | 3M  |
| 44705 | Jan-01 - Jan-23 | 23  | X | X | X | X | X | - | 2J,1F,3K                                  |
| 44706 | Jan-01 - Mar-26 | 86  | X | X | X | X | X | - | 3PS,3O,4VS,3N,3M                          |
| 44721 | Jan-15 - Jan-30 | 16  | X | X | X | - | - | - | 3M,3N                                     |
| 44722 | Jan-15 - Mar-29 | 75  | X | X | X | - | - | - | 3N,3M,6H                                  |
| 44724 | Jul-24 - Dec-31 | 161 | X | X | X | - | - | - | 1F,1E,2G,2H                               |
| 44725 | Jan-24 - May-02 | 100 | X | X | X | - | - | - | 3L,3M                                     |
| 44726 | Mar-14 - Apr-09 | 27  | X | X | X | - | - | - | 3K,3M                                     |
| 44728 | Mar-10 - Dec-31 | 297 | X | X | X | - | - | - | 3L,3N,3O,3PS                              |
| 44729 | Mar-10 - Apr-08 | 30  | X | X | X | - | - | - | 3M,3K                                     |
| 44730 | Mar-13 - Jul-04 | 114 | X | X | X | - | - | - | 3L,3M,3K                                  |
| 44744 | Oct-28 - Nov-25 | 28  | X | X | X | - | - | - | 3K  |
| 44745 | Oct-28 - Dec-18 | 51  | X | X | X | - | - | - | 3K,2J,1F                                  |
| 44747 | Jan-01 - Apr-22 | 113 | X | X | X | - | - | - | 6B,6D,5ZE,5ZW,4X,6E,4W,6F,4VS,3O,3N,6H,3M |
| 44751 | Sep-10 - Sep-14 | 5   | - | - | - | - | - | - | 3M  |
| 44752 | Sep-03 - Oct-03 | 31  | X | X | X | X | X | - | 4X  |

|       |                 |     |   |   |   |   |   |   |   |
|-------|-----------------|-----|---|---|---|---|---|---|---|
| 44753 | Sep-03 - Dec-31 | 120 | X | X | X | X | X | - | 4VS,4W,3PS,3O,3N,6H,3M                        |
| 44754 | Sep-03 - Dec-31 | 120 | X | X | X | X | X | - | 4VS,3PS,3O,3N                                 |
| 44755 | Sep-03 - Sep-18 | 15  | - | X | X | - | - | - | 3O  |
| 44760 | Aug-07 - Sep-19 | 44  | X | X | X | - | - | - | 1F  |
| 44761 | Jun-02 - Dec-15 | 196 | X | X | X | - | - | - | 3K,2J,3L,3M                                   |
| 44762 | Jun-02 - Dec-31 | 213 | X | X | X | - | - | - | 3L,3N,3O,3PS                                  |
| 44763 | Jun-02 - Sep-15 | 106 | X | X | X | - | - | - | 2J,1F   |
| 44764 | Sep-08 - Oct-13 | 35  | X | X | X | - | - | - | 3K,2J,1F                                      |
| 44765 | Sep-09 - Dec-31 | 114 | X | X | X | - | - | - | 3K,3L,3N                                      |
| 44766 | Sep-09 - Dec-31 | 114 | X | X | X | - | - | - | 3K,2J   |
| 44768 | Sep-17 - Dec-31 | 106 | X | X | X | - | - | - | 2J,3K   |
| 44770 | Sep-18 - Nov-29 | 72  | X | X | X | - | - | - | 3L,3N,3M                                      |
| 44772 | Dec-01 - Dec-31 | 31  | X | X | X | - | - | - | 2J,3K,3L                                      |
| 44774 | Dec-01 - Dec-31 | 31  | X | X | X | - | - | - | 1F  |
| 44777 | Dec-08 - Dec-31 | 24  | X | X | X | - | - | - | 1F  |
| 44832 | Jan-14 - May-19 | 127 | X | X | - | - | - | - | 6H  |
| 44833 | Jan-01 - Oct-02 | 276 | X | X | X | - | - | - | 1F  |
| 44834 | Sep-23 - Oct-07 | 15  | - | - | - | - | - | - | 6H  |
| 44846 | Jan-01 - Dec-31 | 366 | - | - | - | - | - | - | 5ZE,5ZW,6A,6B,6D,6E,4W,4VS<br>,6G,3O,3N,6H,3M |
| 44848 | Aug-19 - Nov-30 | 103 | X | X | X | - | - | - | 6G,4VS,3O,3N,6H                               |
| 44850 | Sep-29 - Dec-31 | 94  | X | X | X | - | - | - | 6E,6F   |
| 44877 | Jan-01 - Apr-05 | 96  | X | X | - | - | - | - | 6E,6F,4W,4VS,6G,3N,3M,6H                      |
| 44881 | Jan-11 - Apr-18 | 99  | X | X | - | - | - | - | 6H  |
| 44882 | Jan-01 - May-23 | 144 | X | X | - | - | - | - | 6G,6H,3M                                      |
| 44883 | Jan-01 - Oct-16 | 290 | X | X | - | - | - | - | 6F,6E   |
| 44887 | Jan-01 - Feb-21 | 52  | X | X | X | - | - | - | 2J,1F   |
| 44888 | Jan-13 - May-13 | 122 | X | X | - | - | - | - | 6F,6E,6D                                      |
| 44891 | Jan-01 - Jan-25 | 25  | X | X | - | - | - | - | 6G,4VS,3O,3N,3M                               |
| 44892 | Jan-01 - Jan-06 | 6   | X | X | - | - | - | - | 3M  |
| 44893 | Jan-01 - Jan-30 | 30  | X | X | - | - | - | - | 3M,6H   |
| 44894 | Jul-15 - Sep-10 | 58  | X | X | - | - | - | - | 6D,6B,5ZW,6A                                  |
| 44895 | Jul-15 - Oct-20 | 97  | X | X | - | - | - | - | 4X,4W,4VS                                     |
| 44896 | Jul-15 - Sep-18 | 66  | X | X | - | - | - | - | 4W,4VS,6G,3O,3N,6H                            |
| 44897 | Aug-08 - Sep-07 | 30  | X | X | - | - | - | - | 6D,6E,4W,4X,4VS                               |
| 44898 | Aug-08 - Aug-11 | 3   | X | X | - | - | - | - | 6D  |
| 44899 | Aug-08 - Dec-29 | 143 | X | X | - | - | - | - | 4W,4X,6E,4VS,3O,3N,3M,3K                      |
| 44900 | Aug-25 - Dec-31 | 129 | X | X | - | - | - | - | 5ZE,5Y,4X,6D,4W,6E,6F,4VS,6G                  |
| 44901 | Jul-06 - Dec-22 | 169 | X | X | X | - | - | - | 6H,3M   |
| 44908 | Jan-01 - Apr-27 | 118 | X | X | X | - | - | - | 1F,2J   |
| 44910 | Oct-10 - Dec-31 | 83  | X | X | X | - | - | - | 5ZE,5ZW,6D,6B                                 |
| 44912 | Jan-01 - Jan-14 | 14  | X | X | X | - | - | - | 3M  |
| 44914 | Dec-11 - Dec-28 | 17  | X | X | X | - | - | - | 6H  |
| 44915 | Jan-01 - Jan-17 | 17  | X | X | X | - | - | - | 3N,3L,3M                                      |
| 44916 | Jan-05 - Mar-31 | 86  | X | X | - | - | - | - | 3M  |
| 44917 | Jan-01 - Feb-21 | 52  | X | X | X | - | - | - | 2H,1F,2J                                      |

|       |                 |     |   |   |   |   |   |   |                      |
|-------|-----------------|-----|---|---|---|---|---|---|----------------------|
| 44918 | Jan-29 - Dec-22 | 328 | X | X | X | - | - | - | 6H                   |
| 44929 | Jan-01 - Apr-22 | 113 | - | X | - | - | - | - | 4W,4VS,3N,6H,3M      |
| 44939 | Jan-01 - Dec-31 | 366 | X | X | - | - | - | - | 4VS,3O,3N,3M,6H      |
| 44940 | Jan-01 - Nov-28 | 333 | X | X | - | - | - | - | 6F,4VS,6G,3N,6H      |
| 44944 | Mar-12 - Jun-03 | 84  | X | X | - | - | - | - | 6G,6F                |
| 44945 | Jan-01 - Feb-13 | 44  | X | X | - | - | - | - | 6H,3M                |
| 44978 | Aug-12 - Oct-13 | 63  | X | X | X | - | - | - | 3O,3PS               |
| 47503 | May-12 - May-12 | 1   | - | X | - | - | - | - | 4X                   |
| 47553 | Jan-01 - Jun-29 | 181 | - | - | - | - | - | - | 0A,0B,1B,1C          |
| 47555 | Mar-10 - Oct-28 | 233 | - | - | - | - | - | - | 4X                   |
| 47557 | Sep-15 - Dec-31 | 108 | - | - | - | - | - | - | 0A                   |
| 47558 | Sep-17 - Oct-25 | 38  | - | - | - | - | - | - | 0A                   |
| 48618 | Dec-04 - Dec-04 | 1   | - | X | - | - | - | - | 6D                   |
| 48637 | May-08 - May-12 | 4   | - | - | - | - | - | - | 4X                   |
| 48638 | May-08 - May-12 | 4   | - | - | - | - | - | - | 4X                   |
| 48639 | May-08 - May-12 | 4   | - | - | - | - | - | - | 4X                   |
| 52513 | Oct-10 - Oct-10 | 1   | - | - | - | - | - | - | 0B                   |
| 55620 | Feb-22 - Feb-22 | 1   | X | X | - | - | - | - | 6B                   |
| 55916 | Feb-22 - Feb-22 | 1   | X | X | - | - | - | - | 6B                   |
| 62510 | Nov-20 - Nov-26 | 7   | - | X | X | - | - | - | 6F                   |
| 62522 | May-26 - May-26 | 1   | X | X | X | - | - | - | 1F                   |
| 62697 | Aug-03 - Dec-31 | 151 | X | X | X | - | - | - | 1F,1E,1D,2G          |
| 62902 | Jan-15 - Jan-18 | 3   | X | X | X | - | - | - | 1F                   |
| 64516 | Aug-07 - Dec-31 | 147 | X | X | X | - | - | - | 1F                   |
| 64531 | Sep-30 - Dec-08 | 70  | - | X | X | - | - | - | 0A,1A                |
| 64619 | Jan-01 - Feb-09 | 40  | X | X | X | - | - | - | 2H,2J,3K             |
| 64620 | Jan-01 - Sep-11 | 255 | X | X | X | - | - | - | 2G,2H,1F,2J,3K,3L,3M |
| 64933 | Jan-01 - Feb-20 | 51  | X | X | X | - | - | - | 2J,3K                |

**Table 3a: Current data recovered in 2008 and not yet processed in 2008.**

| Latitude | Longitude | Sounding Depth (meters) | Instrument Depth (meters) | Start Date                       | End Date                            | Serial Number                     | Mooring Number |
|----------|-----------|-------------------------|---------------------------|----------------------------------|-------------------------------------|-----------------------------------|----------------|
| 44.2917  | 63.2519   | 164                     | 89                        | Sept. 28/07                      | April 15/08                         | ADCP RDI # 0512                   | 1662           |
| 44.2926  | 63.2500   | 160                     | 156                       | Sept. 28/07                      | April 15/08                         | ADCP RDI # 8599                   | 1663           |
| 44.0495  | 63.0830   | 199                     | 195                       | Oct. 5/07                        | April 15.08                         | ADCP RDI # 8680                   | 1664           |
| 43.6832  | 62.6658   | 139                     | 134                       | Oct. 6/07                        | April 15/08                         | ADCP RDI # 8956                   | 1665           |
| 48.2001  | 47.8831   | 1521                    | 1496                      | May 2/07                         | May 11/08                           | Aanderaa # 563                    | 1641           |
| 48.3294  | 47.8043   | 1922                    | 1900                      | May 2/07                         | May 11/08                           | Aanderaa # 566                    | 1642           |
| 48.8314  | 47.4538   | 2495                    | 2470                      | May 3/07                         | May 12/08                           | Aanderaa # 595                    | 1643           |
| 48.5460  | 47.6575   | 2263                    | 233                       | May 3/07                         | May 11/08                           | ADCP RDI # 1646                   | 1644           |
|          |           |                         | 363                       | May 3/07                         | May 11/08                           | Aanderaa # 3306                   |                |
|          |           |                         | 713                       | May 3/07                         | May 11/08                           | # 6402                            |                |
|          |           |                         | 1113                      | May 3/07                         | May 11/08                           | # 217                             |                |
|          |           |                         | 1513                      | May 3/07                         | May 11/08                           | # 598                             |                |
|          |           |                         | 1913                      | May 3/07                         | May 11/08                           | # 4603                            |                |
|          |           |                         | 2238                      | May 3/07                         | May 11/08                           | # 392                             |                |
|          |           |                         |                           |                                  |                                     |                                   |                |
|          |           |                         |                           |                                  |                                     |                                   |                |
| 49.1374  | 46.9210   | 2744                    | 2219<br>2469<br>2719      | May 4/07<br>May 4/07<br>May 4/07 | May 13/08<br>May 13/08<br>May 13/08 | Aanderaa # 5578<br># 602<br># 612 | 1645           |
| 49.5001  | 46.4991   | 3003                    | 2778                      | May 5/07                         | May 14/08                           | Aanderaa # 594                    | 1646           |
| 55.1190  | 54.0890   | 1019                    | 999                       | May 13/07                        | May 28/08                           | Aanderaa # 5569                   | 1640           |
| 44.2922  | 63.2674   | 157                     | 114                       | May 8/08                         | June 3/08                           | Aanderaa #                        | 1681           |
|          |           |                         | 76                        | May 8/08                         | June 3/08                           | 8599                              |                |
|          |           |                         | 65                        | May 8/08                         | June 3/08                           | # 5574                            |                |
|          |           |                         | 68                        | May 8/08                         | June 3/08                           | ADCP RDI # 33                     |                |
|          |           |                         | 74                        | May 8/08                         | June 3/08                           | # 8928                            |                |
|          |           |                         | 114                       | May 8/08                         | June 3/08                           | # 20                              |                |
|          |           |                         |                           |                                  |                                     | # 8599                            |                |
| 74.0830  | 91.0528   | 147                     | 75                        | Aug. 1/07                        | Aug. 2/08                           | ADCP RDI # 1266                   | 1650           |
| 74.1958  | 90.8486   | 270                     | 246                       | Aug. 2/07                        | Aug. 2/08                           | ADCP RDI # 8715                   | 1652           |
|          |           |                         |                           |                                  |                                     |                                   |                |

| Latitude | Longitude | Sounding Depth (meters) | Instrument Depth (meters) | Start Date               | End Date                 | Serial Number             | Mooring Number |
|----------|-----------|-------------------------|---------------------------|--------------------------|--------------------------|---------------------------|----------------|
| 74.1991  | 90.8459   | 269                     | 81                        | Aug. 2/07                | Aug. 2/08                | ADCP RDI # 0505           | 1653           |
| 42.8764  | 60.8200   | 2391                    | 2341                      | Oct. 7/07                | Oct. 1/08                | Aanderaa # 453            | 1666           |
| 42.5254  | 60.5931   | 3343                    | 3294                      | Oct. 7/07                | Oct. 1/08                | Aanderaa # 456            | 1667           |
| 44.3519  | 63.3047   | 96                      | 91                        | April 15/08              | Oct. 6/08                | ADCP RDI # 10487          | 1674           |
| 44.1998  | 63.1350   | 169                     | 166                       | April 15/08              | Oct. 5/08                | ADCP RDI # 10572          | 1675           |
| 44.1340  | 63.0331   | 181                     | 177                       | June 3/08                | Oct. 5/08                | ADCP RDI # 10220          | 1676           |
| 46.6655  | 64.5271   | 26.2                    | 23                        | July 5/08                | Nov. 4/08                | ADCP RDI # 9186           | 1692           |
| 46.6569  | 64.6198   | 17.1                    | 16                        | July 5/08                | Nov. 4/08                | ADCP RDI # 0512           | 1693           |
| 45.9476  | 62.5032   | 44.7                    | 41                        | July 4/08                | Nov. 6/08                | ADCP RDI # 8599           | 1694           |
| 45.8771  | 62.4973   | 25.3                    | 22                        | July 4/08                | Nov. 6.08                | ADCP RDI # 9184           | 1695           |
| 66.6687  | 60.7722   | 442                     | 250                       | Oct. 17/07               | Sept. 5/08               | Aanderaa # 6410           | C1             |
| 66.7630  | 60.0740   | 660                     | 200<br>500                | Oct. 17/07<br>Oct. 17/07 | Sept. 5/08<br>Sept. 5/08 | Aanderaa # 4355<br># 7131 | C2             |
| 66.8559  | 59.0626   | 1040                    | 200<br>500                | Oct. 16/07<br>Oct. 16/07 | Sept. 5/08<br>Sept. 5/08 | Aanderaa # 3196<br># 8695 | C3             |
| 66.9790  | 57.6883   | 876                     | 200<br>500                | Oct. 16/07<br>Oct. 16/07 | Sept. 3/09<br>Sept. 3/08 | Aanderaa # 7592<br># 5577 | C4             |
| 67.0341  | 57.0394   | 704                     | 200<br>500                | Oct. 15/07<br>Oct. 15/07 | Sept. 3/08<br>Sept. 3/09 | Aanderaa # 4350<br># 4154 | C5             |
| 67.0700  | 56.6823   | 394                     | 250                       | Oct. 15/07               | Sept. 3/08               | Aanderaa # 5032           | C6             |

**Table 3b: Current meters deployed 2008 and not yet recovered.**

| Deployment Date/Location       | Instrument Type                              | Number of Instruments | Projected Recovery Date |
|--------------------------------|--|-----------------------|-------------------------|
| May 2008<br>Barrow Strait      | WH ADCP                                      | 4                     | August 2009             |
| September 2008<br>Davis Strait | Aanderaa RCM8                                | 10                    | October 2009            |
| October 2008<br>Scotian Slope  | WH ADCP<br>Aanderaa RCM 11<br>Aanderaa RCM 8 | 6<br>1<br>1           | October 2009            |
| November 2008<br>Makkovik Bank | WH ADCP                                      | 2                     | June 2009               |