Integrated Science Data Management
NAFO Report 2006

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Abstract

During the year, the Marine Environmental Data Service (MEDS) and the Engineering and Geomatics Services section of the Canadian Hydrographic Service (CHS) were combined together and renamed Integrated Science Data Management (ISDM).

ISDM (formerly MEDS), 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 2006 are included. This report will also provide an update on other ISDM activities during 2006.

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

MEDS, now 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 2007 required the submission to ISDM of a completed oceanographic inventory form for data collected in 2006, and oceanographic data pertinent to the NAFO area, for all stations occupied in the year prior to 2006. 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, 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 or by writing to Services, Integrated Science Data Management (ISDM), Dept. of Fisheries and Oceans, 12th Floor, 200 Kent St., Ottawa, Ont. Canada K1A 0E6.

Data Summaries for 2006

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) reporting system or in delayed-mode directly from responsible institutions, and indirectly from national Cruise Summary Reports and other reports of marine activities.

The following inventories and corresponding maps summarize the ocean subsurface and surface data processing activities in 2006 for the NAFO area:

- **Table 1, Figure 1: Real-time temperature-salinity profile data collected and processed in 2006**
  TOTAL: 86295 profiles
- **Table 2, Figure 2: Delayed-mode profile data collected and processed in 2006**
  TOTAL: 3014 profiles
- **Table 3, Figure 3: Profile data collected prior to 2006 and processed in 2006**
  TOTAL: 23536 profiles
- **Surface Thermosalinograph data collected and processed in 2006**
  TOTAL: 0 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

Figure 1: Real Time Temperature-Salinity Stations 2006
Total = 86295 Stations

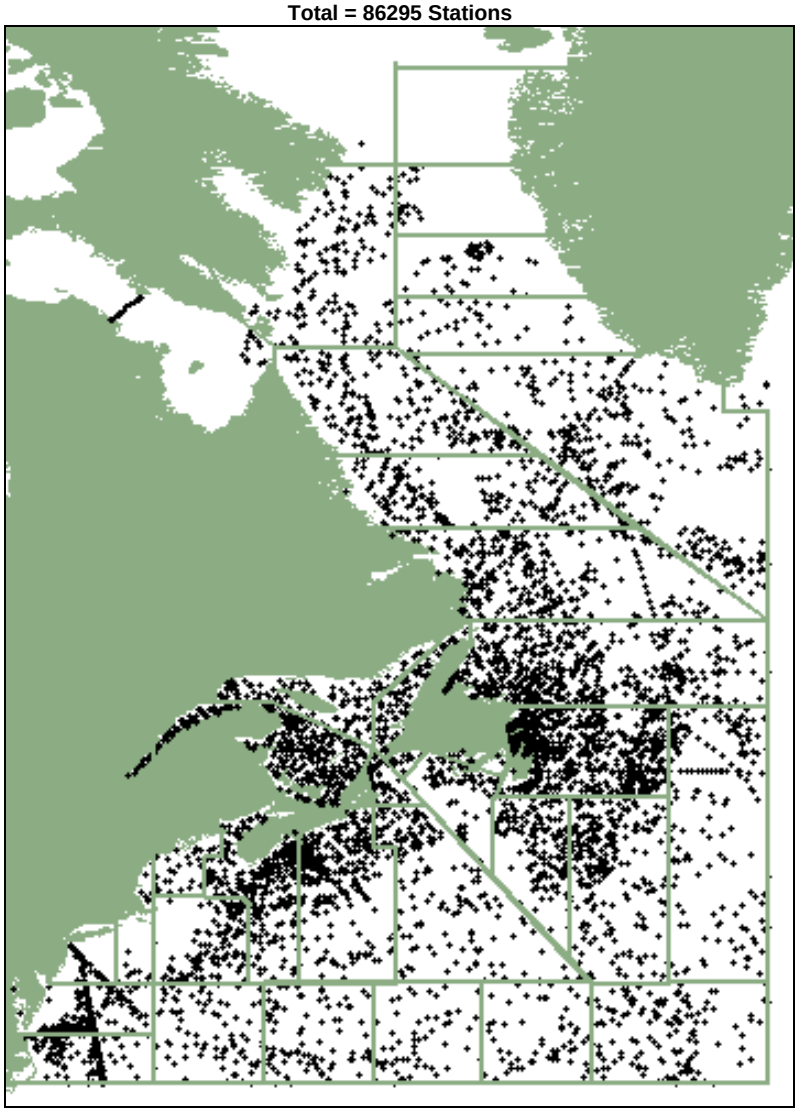


Figure 2: Delayed-mode profile data collected and processed in 2006
Total = 3014 Stations

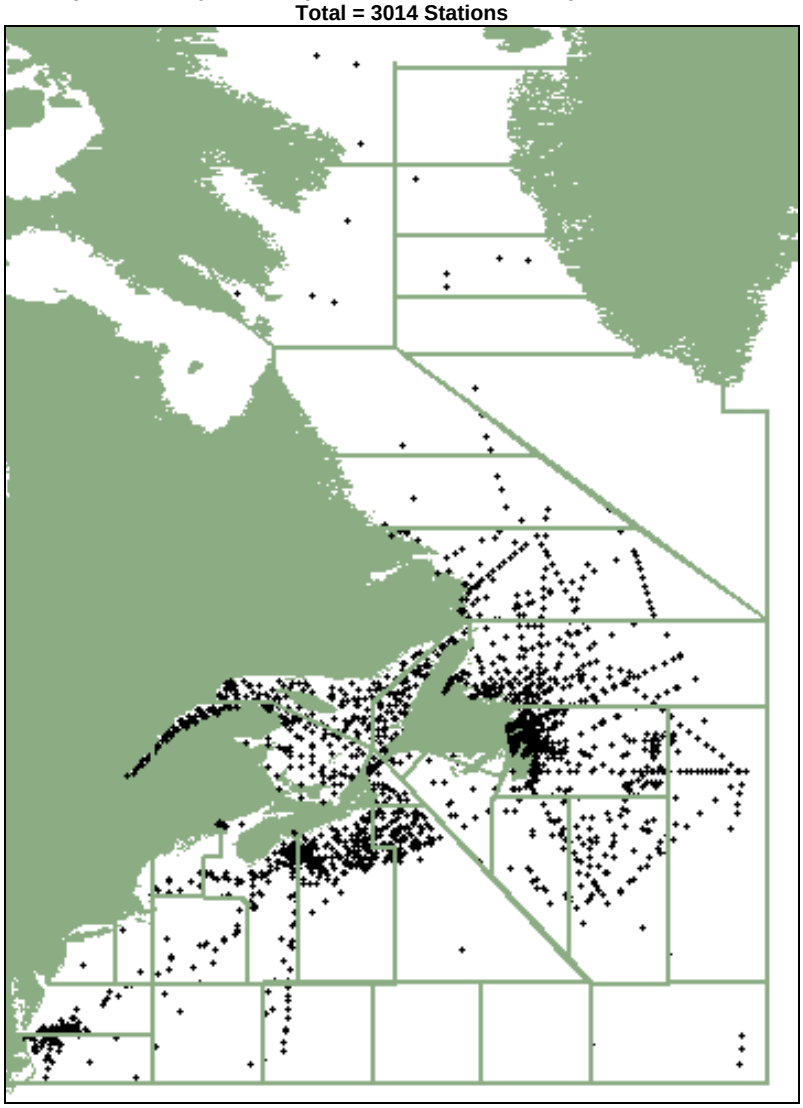
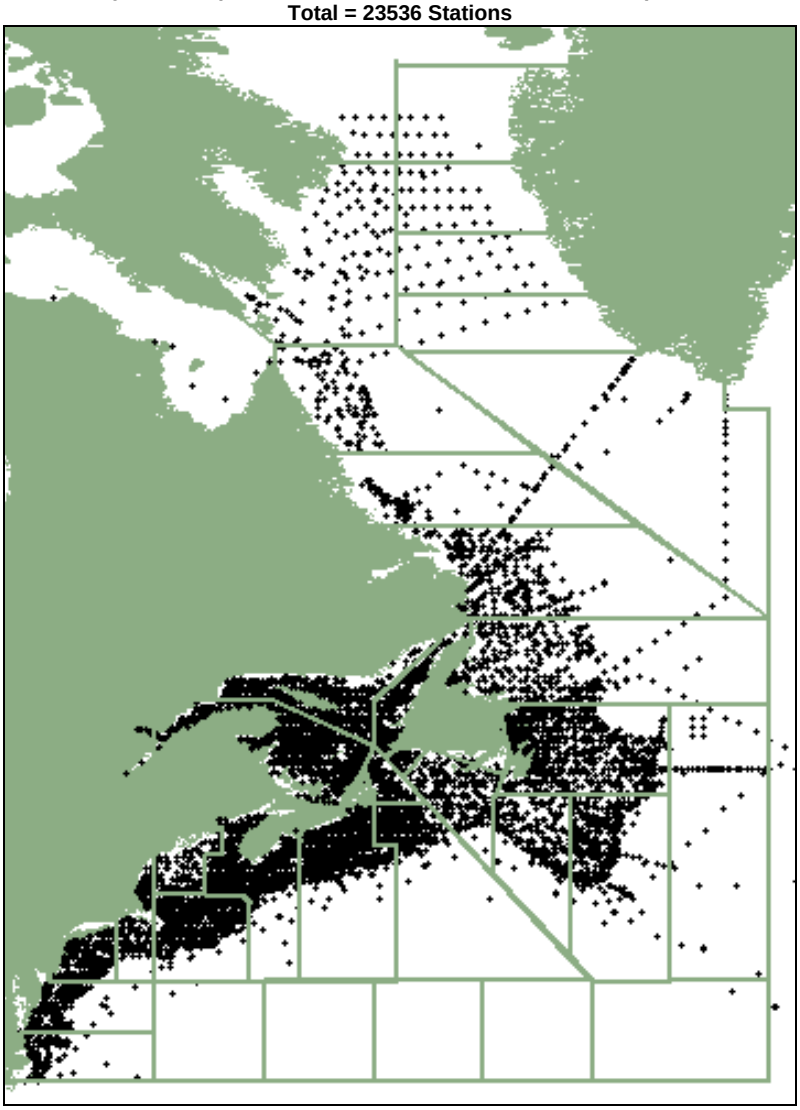


Figure 3: Delayed mode profile stations collected before 2006 and processed in 2006.
Total = 23536 Stations



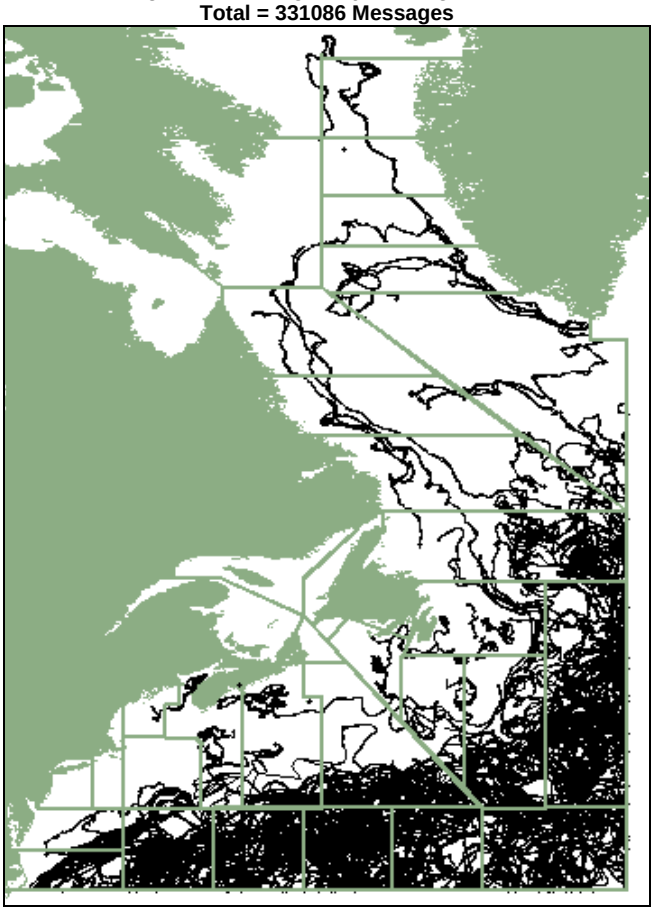
Drifting Buoy Data
The following inventory and map summarize ISDM drifting buoy data collected and processed in 2006 for the NAFO area:

- **Table 4, Figure 4: Drifting Buoys in the NAFO Area in 2006 TOTAL = 331086 messages**

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 53 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 4: Drifting Buoy messages 2006
Total = 331086 Messages

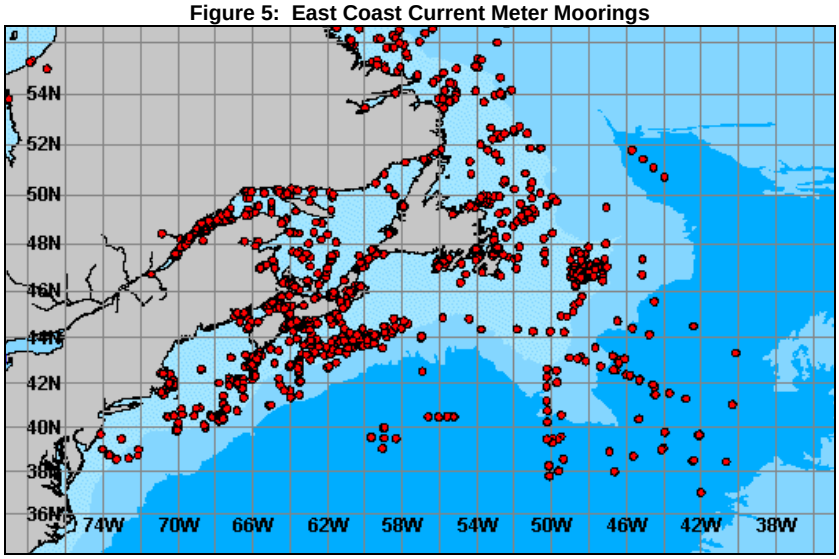


Current Meter Data
The following inventory summarizes current meter data collections in 2006 in the NAFO area:

- **Table 5a: Current meter data recovered in 2006**
- **Table 5b: Current meter data recovered in 2006 and not yet processed**
- **Table 5c: Current meters deployed in 2006 and not yet recovered**

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.

Figure 5: East Coast Current Meter Moorings



Wave Data

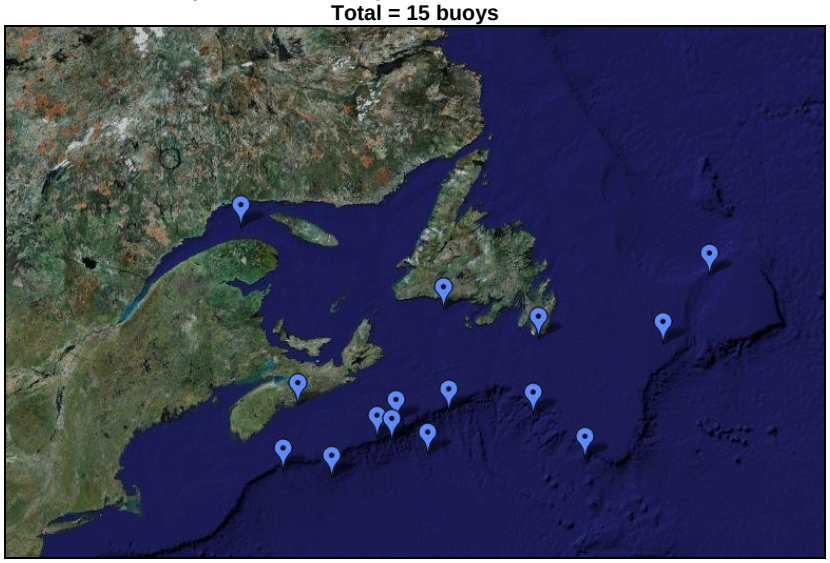
The following map displays where ISDM wave data were collected in 2006:

- **Table 6, Figure 6: Wave Buoys in the NAFO Area in 2006 TOTAL = 15 Buoys**

ISDM continued to process and archive operational surface wave data on a daily basis around Canada. One-dimensional and directional wave spectra, calculated variables such as the significant wave height and peak period, concurrent wind observations if reported, and the raw digital time series of water surface elevations are stored. The data are quality controlled with a visual inspection and with ISDM software to set flags on data showing instrument failures. During 2006, data was collected from 15 buoys in the NAFO area.
http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=114931811061257326218.00000112e8a8366615fab&ll=47.040182,-57.524414&spn=21.038802,40.869141&t=k&z=5&om=1

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

Figure 6: Wave Buoys in the NAFO Area in 2006
Total = 15 buoys



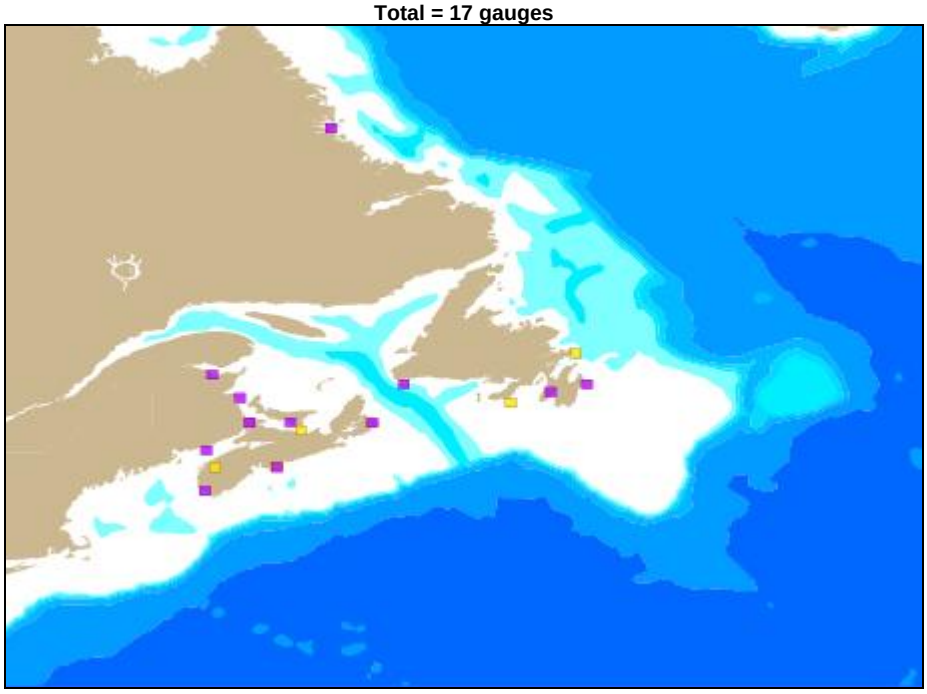
Tide and Water level Data
The following map displays where ISDM tide and water level data were collected from:

- **Figure 7: Tide and water level data in the NAFO Area in 2006 TOTAL = 17 Gauges**

Yellow blocks indicate temporary gauges, purple indicates permanent.

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 1.3 million new readings were updated every month from the network with the increase in sampling interval. The historical tides and water level data archives presently hold over 422 million records with the earliest dating back before the turn of the century. Data from 92 tide and water level gauges were processed during 2006 with 17 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.

Figure 7: Tide and water level data in the NAFO Area in 2006
Total = 17 gauges



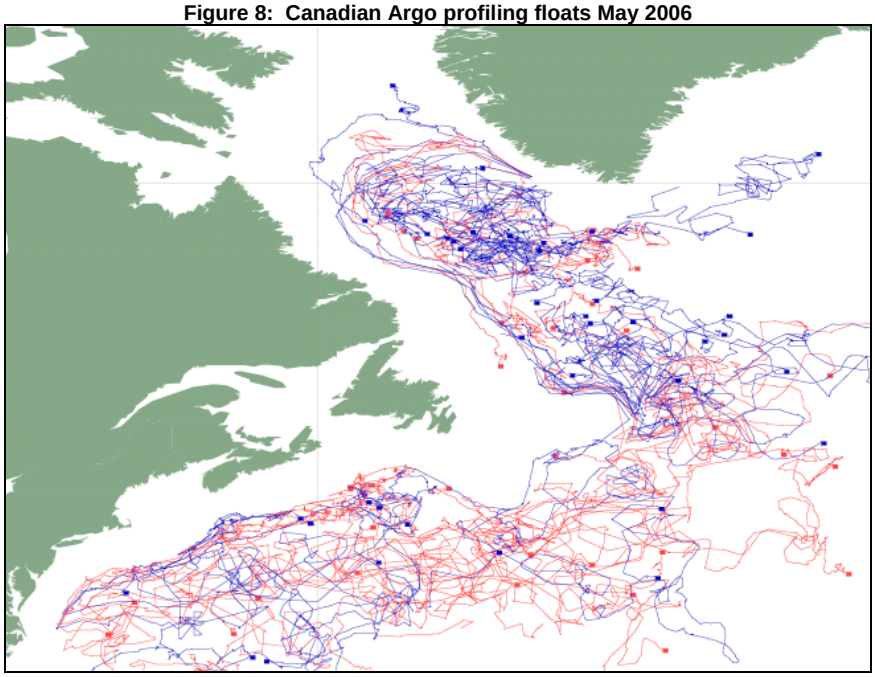
Activity Updates

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 that contains data and information about Canadian floats as well as general information and statistics about the global array. Global information is also available from the Argo Information Centre in Toulouse at argo.jcommops.org.

During 2006, the Canadian Argo program deployed 15 Argo floats in the NAFO region, including 4 oxygen floats and produced 888 temperature and salinity profiles and 144 oxygen profiles. 3 floats were programmed to return a temperature and salinity profile within 24 hours of its deployment before continuing on its regular 10 day cycle. This was done to check the calibration of the Argo instruments by comparing the data to a conventional CTD cast also taken at deployment. The 4 oxygen floats were also new in that they did not carry an Optode sensor as the previous oxygen floats did in an effort to save energy and improve the floats' lifetime. Currently, there are 37 active floats and 39 inactive floats in the NAFO region. Figure 1 shows the Canadian Argo floats deployed in the North Atlantic as of May 2006. The tracks in red indicate floats that are inactive and no longer reporting.

Figure 8: Canadian Argo profiling floats May 2006

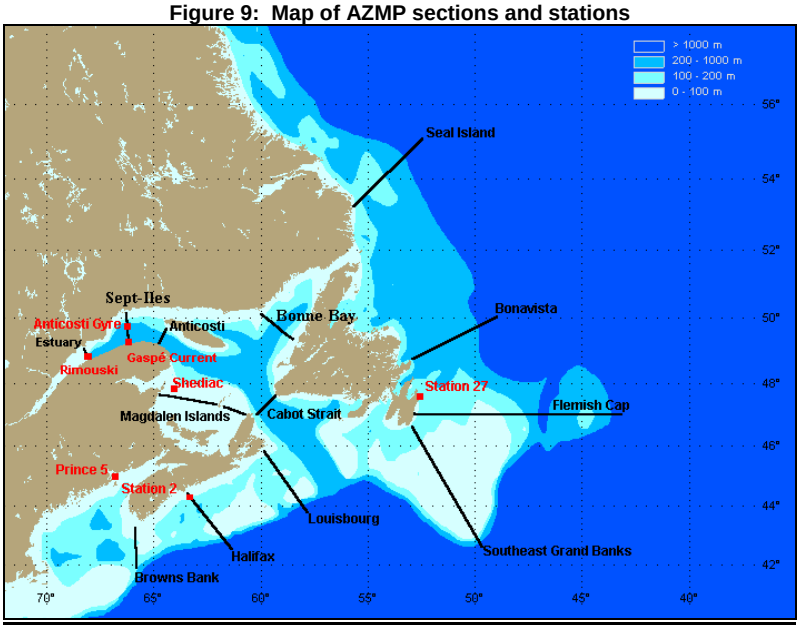


Atlantic Zone Monitoring Programme (AZMP)

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 ISDM' 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.

The wealth of data and information on the site includes:
-Physical and chemical data from 1999 to the present such as CTD, bottle and bathythermograph measurements
-Climate indices showing long term trends of physical variables in the 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 9: 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 current and waves influences on the seabed surrounding Canada. Other projects are listed here: http://www.mar.dfo-mpo.gc.ca/science/ocean/comda/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.

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).

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

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

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

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

National Science Data Management Committee (NSDMC)
Two years ago the Science Sector of DFO completed a review of its activities and settled on 5 themes around which to organize its activities in the future. One of these was data management. The data collected by Science is used both by researchers and stock assessment staff to estimate the state of various stocks. To improve management of the data, a national committee was formed called the National Science Data Management Committee, NSDMC. The NSDMC is chaired by Bob Keeley of ISDM and has representatives from each administrative region in DFO. The committee is charged with developing a strategy, completed last year, and an implementation plan, currently under review. These documents will first guide the development of a national data system and document the work required to realize the objectives of the strategy.

The committee has been in place for 2 years and has received significant funding to undertake a number of projects including a modernization of the handling of trawl survey data, standardization of data handling procedures, acquiring historical data not currently maintained in formal archive systems, and improving access to the data.

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 2006
Total = 86295 stations

SHIP NAME	COUNTRY	CALL SIGN	CRUISE PERIOD	BATHY	TESAC	NAFO Subarea
		3NI 06	Jul-23 - Jul-23	1	0	6C
GEORGES BANK	USA	44011 06	Aug-17 - Dec-31	0	3199	5ZE
NEW MEADOWS RIVER	USA	44021 06	Dec-09 - Dec-31	0	527	5Y
BUOY N NORTHEAST CHANNEL	USA	44024 06	Jan-03 - Dec-31	0	8389	4X
BUOY	USA	44029 06	Jan-04 - Dec-31	0	8579	5ZW
		44030 06	Jan-04 - Dec-31	0	8565	5ZW
		44031 06	Jan-04 - Dec-31	0	8501	5ZW
		44032 06	Jan-03 - Dec-31	0	8575	5Y
		44033 06	Dec-12 - Dec-31	0	464	5Y
		44034 06	Jan-04 - Dec-31	0	8477	5Y
		44035 06	Jan-04 - Dec-31	0	8512	4X
		44037 06	Jan-04 - Dec-31	0	7950	5Y
		44038 06	Jan-04 - Dec-31	0	8397	4X
PROFILE FLOAT	GERMANY	69024 06	Apr-06 - Dec-17	0	18	6H,6G
		69025 06	Aug-18 - Dec-31	0	8	6H
		69027 06	Mar-05 - Dec-15	0	12	3M,3N
OPILIO	CANADA	CFD2576 06	May-24 - May-24	0	1	4T
			Nov-08 - Nov-08	0	1	4T
PANDALUS	CANADA	CFD4703 06	Jan-13 - Jan-13	0	1	4X
			Feb-16 - Feb-16	0	1	4X
			Mar-21 - Mar-21	0	1	4X
			Apr-25 - Apr-25	0	1	4X
			May-17 - May-17	0	1	4X
			Jun-15 - Jun-15	0	1	4X
			Dec-14 - Dec-14	0	1	4X
SHAMOOK	CANADA	CG2676 06	Jan-09 - Jan-25	0	37	3L
			Jan-30 - Feb-03	0	8	3L
			Apr-27 - May-31	0	85	3L
			Jun-06 - Jun-10	0	4	3L
			Jun-27 - Jul-07	0	8	3K
			Jul-13 - Jul-25	0	11	2J
			Jul-31 - Aug-10	11	12	3L
			Aug-17 - Aug-17	0	1	3L
			Aug-31 - Sep-13	0	32	3K
			Sep-21 - Oct-18	10	50	3L
			Nov-25 - Nov-28	0	6	3L
ALFRED NEEDLER	CANADA	CG2683 06	Mar-14 - Mar-22	0	13	4VS,4W,4X
			Jun-25 - Jun-29	2	48	3L,3N,3O
			Jul-06 - Aug-03	0	212	4VN,4VS,4W,4X,5Y
BELUGA	CANADA	CG3161 06	Apr-06 - Apr-06	0	1	4T
			Apr-12 - Apr-12	0	1	4T
			Apr-19 - Apr-19	0	1	4T
			May-02 - May-02	0	1	4T
			May-09 - May-09	0	1	4T
			May-15 - May-15	0	1	4T
			May-24 - May-24	0	1	4T
			May-31 - May-31	0	1	4T
			Jun-12 - Jun-12	0	1	4T
			Jun-29 - Jun-29	0	1	4T
			Jul-05 - Jul-05	0	1	4T
			Jul-11 - Jul-11	0	1	4T
			Jul-19 - Jul-19	0	1	4T
			Jul-26 - Jul-26	0	1	4T
			Aug-01 - Aug-01	0	1	4T
			Aug-09 - Aug-09	0	1	4T
			Aug-17 - Aug-17	0	1	4T
			Aug-29 - Aug-29	0	1	4T

			Sep-07 - Sep-12	0	2	4T
			Sep-27 - Sep-27	0	1	4T
			Oct-16 - Oct-16	0	1	4T
NSC CALANUSII	CANADA	CG3187 06	Apr-29 - May-12	0	29	4S
			Jul-17 - Jul-17	0	6	4T
			Sep-26 - Sep-26	0	3	4T
FREDERICTON	CANADA	CGAN 06	Oct-10 - Oct-10	1	0	3L
TELEOST	CANADA	CGCB 06	Jan-20 - Jan-30	1	27	3K,3L
			Feb-07 - Feb-07	0	1	3L
			Feb-18 - Mar-09	0	64	4VS,4W,5ZE
			Jun-05 - Jul-09	24	81	1F,2J,3K,3L,3N,3O
			Aug-03 - Aug-28	0	130	4R,4S,4T,4VN
			Sep-04 - Oct-22	0	291	2H,2J,3L,4T,4VN
			Oct-28 - Dec-21	16	250	2J,3K,3L,3M
HUDSON	CANADA	CGDG 06	Apr-20 - May-07	0	51	4R,4VN,4VS,4W,4X
			May-13 - Jun-08	0	106	1E,1F,2H,2J,3K,3L,3PS,4R,4VS,4W,4X
			Oct-05 - Oct-20	0	50	3PS,4R,4VN,4VS,4W,4X
			Oct-31 - Nov-11	0	97	4R,4S,4T,4VN
QUADRA	CANADA	CGDN 06	May-21 - May-21	0	1	4T
			May-29 - May-30	0	4	4T
			Jun-11 - Jun-16	0	17	4T
			Jun-21 - Jul-09	0	79	4R,4S,4T,4VN
			Aug-03 - Aug-21	0	36	4R,4S,4T
			Aug-28 - Aug-29	0	2	4S,4T
			Sep-05 - Sep-06	0	5	4S,4T
			Sep-20 - Sep-21	0	2	4S,4T
AMUNDSEN	CANADA	CGDT 06	Feb-03 - Feb-03	0	2	4S,4T
W. TEMPLEMAN	CANADA	CGDV 06	Jan-07 - Jan-20	5	60	3K,3L
			Apr-12 - Apr-23	2	62	3L,3PS,3PN,4VN
			Jun-10 - Jul-06	5	148	3L,3N,3O
			Jul-11 - Sep-08	114	263	2H,2J,3K,3L,3M
			Sep-27 - Dec-04	9	377	3K,3L,3N,3O
CCGS DES GROSEILLIERS	CANADA	CGDX 06	Mar-24 - Mar-24	0	2	4S,4T
SAFMARINE GONUBIE	GERMANY	DGVB 06	Aug-17 - Aug-18	3	0	5ZW,6D
			Nov-29 - Nov-30	4	0	5ZW,6D
CAP SAN ANTONIO	LIBERIA	ELZU6 06	Feb-10 - Feb-10	1	0	6D
			Mar-26 - Mar-26	3	0	6B,6C
			May-06 - May-06	2	0	6C,6D
		F5Z 06	Aug-25 - Aug-25	1	0	3N
DISCOVERY	UK	GLNE 06	Jul-25 - Aug-02	0	16	3O,4W
			Aug-09 - Aug-11	0	6	3O,4VS,4W
HORIZON HAWAII	USA	KIRF 06	Jan-01 - Jan-01	1	0	6C
			Jan-10 - Jan-12	2	0	6B,6C
			Feb-02 - Feb-04	3	0	6B,6C
			Feb-16 - Feb-17	2	0	6B
			Feb-25 - Feb-25	1	0	6B
			Mar-04 - Mar-04	2	0	6A,6B
			Mar-16 - Mar-17	2	0	6A,6C
			Apr-01 - Apr-02	35	0	6A,6B,6C
			Apr-13 - Apr-14	3	0	6B,6C
			May-11 - May-12	2	0	6B,6C
			May-18 - May-19	3	0	6B,6C
			Jun-01 - Jun-03	4	0	6B,6C
			Jun-12 - Jun-12	2	0	6A,6C
			Jun-29 - Jun-29	2	0	6B,6C
			Jul-13 - Jul-22	8	0	6B,6C
			Aug-05 - Aug-05	2	0	6B,6C
			Aug-16 - Aug-19	3	0	6B,6C
			Aug-31 - Aug-31	1	0	6C
			Sep-14 - Sep-16	20	0	6A,6B,6C
			Sep-29 - Sep-29	1	0	6C
			Oct-12 - Oct-14	3	0	6B,6C

			Oct-26 - Oct-26	1	0	6B
			Nov-02 - Nov-02	1	0	6B
			Nov-12 - Nov-12	1	0	6C
			Nov-23 - Nov-25	5	0	6B,6C
			Dec-07 - Dec-10	40	0	6A,6B,6C
			Dec-21 - Dec-23	5	0	6B,6C
USS NITZE	USA	NCWR 06	Feb-04 - Feb-04	1	0	6B
USS MITSCHER	USA	NMTR 06	Sep-15 - Sep-16	2	0	6C
NUKA ARCTICA	DENMARK	OXYH2 06	Oct-24 - Oct-24	1	0	1F
OLEANDER	NETHERLAND	PJJU 06	Jan-07 - Jan-07	18	0	6A,6B
			Mar-04 - Mar-04	9	0	6A,6B
			Nov-04 - Nov-08	19	0	6A,6B,6D
PROFILE FLOAT	USA	Q390058006	Jul-12 - Dec-29	0	18	5ZE,5ZW,6B,6C,6D,
		Q390059906	Nov-21 - Dec-11	0	3	6E
		Q490025006	Jan-02 - Jan-12	0	2	6C
		Q490032106	Jun-26 - Dec-28	0	34	4X,5ZE,6D,6E
		Q490034506	Jan-03 - Aug-21	0	47	3K,3L,3M
		Q490035006	Jan-15 - Dec-31	0	36	3M,3N
		Q490035206	Jan-01 - Sep-08	0	26	3N,4VS,6F,6G,6H
		Q490036206	Jan-10 - Dec-21	0	32	3N,3O,4VS,4W
		Q490042406	Jan-13 - Dec-24	0	29	4W,4X,6E,6F
		Q490043206	Jan-04 - Jul-13	0	19	0B,1D,1E,2G,2H
		Q490043506	Jan-03 - Sep-10	0	18	6G,6H
		Q490043906	Jan-13 - Apr-03	0	8	3M,3N,6H
		Q490044506	Jan-04 - May-04	0	13	6F,6G
		Q490046006	Jan-02 - Nov-28	0	19	3N,6H
		Q490046906	Jan-01 - Dec-27	0	21	3M,3N
		Q490047006	Jan-01 - Oct-18	0	30	3N,4VS,6D,6E,6F,6H
		Q490049406	Jan-05 - Dec-31	0	37	1F,2H,2J
		Q490049706	Jan-01 - Nov-07	0	18	6D,6E,6F
		Q490050006	Jan-01 - Dec-27	0	37	1F,2G
		Q490050106	Jan-10 - Dec-26	0	31	1D
		Q490050306	Aug-13 - Nov-01	0	9	3K,3M
		Q490050406	Jan-12 - Sep-09	0	25	3K,3M
		Q490050506	Jan-09 - Dec-25	0	36	3M,3N
		Q490050606	Jan-01 - Dec-27	0	37	4W,4X,5ZE,5ZW,6B
		Q490050706	Jan-08 - Nov-14	0	32	4W,4X,5ZE,6D,6E,6F
		Q490052506	Jan-01 - Dec-27	0	37	3M,3N,4VS,4W,6F,6G,6H
		Q490052606	Jan-02 - Apr-02	0	10	1E,2G
		Q490052806	Jan-01 - Dec-27	0	37	1F,2H
		Q490053106	Jan-07 - Dec-13	0	35	1F,2J
		Q490053406	Jan-05 - Dec-01	0	32	1F
		Q490053506	Jan-09 - Jan-09	0	1	6H
		Q490053606	Jan-06 - May-26	0	15	4W,4X,5ZE,6D,6E
		Q490053706	Jan-07 - Dec-23	0	36	1F,2G,2H
		Q490054506	Mar-24 - Dec-29	0	28	4VS,4W,5ZE,6C,6D,6E,6F
		Q490055106	May-08 - Jul-27	0	3	5ZW,6C
		Q490056706	Mar-18 - Jun-16	0	6	3M
		Q490059006	May-09 - Dec-25	0	22	5ZE,5ZW,6B,6C,6D
		Q490060406	Jan-01 - Jun-20	0	18	4VS,4W,4X,5ZE,6D,6E
		Q490061006	Jan-01 - May-21	0	20	1F,2G
		Q490061106	Jan-04 - Nov-22	0	46	1F,2G,2H,2J,3K,3L
		Q490061306	Feb-21 - Dec-28	0	32	4VS,6D,6E,6F
		Q490061406	Jan-03 - Dec-29	0	36	4VS,6G,6H
		Q490062106	Jan-05 - Dec-31	0	36	3N,4VS,4W,4X,6D,6E,6G,6H
		Q490062206	Jan-05 - Dec-31	0	37	3N,4VS,4W,6D,6E,6F,6G,6H
		Q490062706	Jan-09 - Oct-17	0	29	3PS,4VS,6F,6G
		Q490062806	Aug-07 - Dec-06	0	13	3K,3L,3M
		Q490063506	May-29 - Dec-25	0	20	1F,2J,3K
		Q490067606	Jan-08 - May-08	0	10	3K,3M
		Q490067706	May-30 - Dec-26	0	22	2J,3K
		Q490067806	May-30 - Dec-26	0	22	3K,3M
		Q490067906	May-31 - Dec-27	0	23	2J,3K,3M
		Q490068006	Jan-01 - Dec-27	0	37	1F,2H
		Q490068106	Jan-01 - Dec-27	0	37	1E,1F,2G

		Q490068206	Jun-06 - Dec-03	0	18	2J,3K,3L,3M
		Q490068306	Jul-22 - Dec-29	0	17	1F,2H,2J
		Q490077606	Sep-03 - Dec-22	0	12	1F,2J,3K
		Q490077706	Aug-25 - Dec-23	0	12	1F
		Q490077806	Aug-05 - Dec-23	0	15	2J,3K
		Q490078706	Nov-15 - Dec-25	0	5	6G,6H
		Q490080106	Nov-30 - Dec-30	0	4	6D
		Q490080206	Dec-21 - Dec-31	0	2	4X
		Q490080306	Nov-24 - Dec-04	0	2	6E
		Q490080406	Dec-02 - Dec-22	0	3	5ZE,6D
		Q490087606	May-29 - Dec-25	0	22	1F
		Q490087706	Jul-28 - Jul-28	0	1	3M
		Q490087806	Oct-09 - Dec-28	0	9	4X,5ZE,6D
		Q490087906	Jun-10 - Dec-27	0	1	1E,2G,2H,2J
		Q490088006	Jun-09 - Dec-26	0	21	0B,1D,1E
		Q490088106	Oct-21 - Dec-30	0	8	4W,4X
		Q490088206	Oct-25 - Dec-24	0	7	4VS
		Q490088306	Dec-08 - Dec-28	0	3	3O
		Q690018606	Jan-02 - Sep-29	0	27	0B,1D,1E,2G,2H
		Q690020706	Jun-11 - Jul-26	0	3	3M
		Q690023906	Feb-28 - Dec-25	0	31	1F
		Q690024106	Nov-08 - Dec-28	0	6	1F
		Q690038306	Jul-13 - Dec-30	0	18	1E,1F,2G
		Q690038506	Nov-07 - Dec-27	0	6	1F
		Q690038606	Dec-08 - Dec-28	0	3	1F
		Q690045106	Oct-25 - Dec-24	0	7	1E,1F,2G
UNKNOWN/ INCONNU	UNKNOWN/IN	SHIP 06	Jan-09 - Feb-09	117	0	3L,3M,3N,3O,3PS,3PN,4VN,4VS,4W,4X,5Y
			Feb-16 - Apr-14	204	81	3L,3N,3O,3PS,3PN,4R,4S,4T,4VN,4VS,4W,4X,5Y,5Z
			Apr-23 - Jun-07	141	8	2H,2J,3L,3PS,3PN,4T,4VN,4VS,4W,4X,5Y,5ZE,6B
			Jun-12 - Jun-14	6	1	4T,4X,6D,6E
			Jun-20 - Nov-30	412	249	0A,0B,1C,1D,1F,2G,2H,2J,3K,3L,3M,3N,3O,3PS,4R
			Dec-06 - Dec-08	6	1	4T,4W,4X
RICKERS GENOA	MARSHALL I	V7FS3 06	May-14 - May-17	31	0	3M,3N,3O,4VS,4W,4X,5ZE,6B
SEA-LAND LIBERATOR	MARSHALL I	V7IQ2 06	Feb-01 - Feb-01	1	0	6C
			Mar-25 - Mar-25	1	0	6D
C6-4828	CANADA	VO3180 06	Jan-25 - Jan-25	0	1	4W
			Mar-31 - Mar-31	0	1	4W
			Apr-12 - Apr-12	0	1	4W
			May-25 - May-25	0	1	4W
			May-30 - May-30	0	1	4W
			Aug-25 - Aug-25	0	1	4W
			Dec-13 - Dec-13	0	1	4W
MATTHEW	CANADA	VOSR 06	Nov-12 - Nov-12	0	1	4W
ENTERPRISE	USA	WAUY 06	Jan-30 - Feb-02	2	0	6D,6H
DELAWARE BAY	USA	WMLG 06	Jan-19 - Jan-20	4	0	6E,6F,6G
			Apr-02 - Apr-11	15	0	3M,3N,4VS,4X,5ZE,6E,6F,6H
	USA		May-10 - May-13	8	0	6D,6E,6F,6G,6H

Table 2: Delayed mode data received during 2006
Total = 3014stations

COUNTRY	CRUISE NUM	CRUISE PERIOD	BT	CTD	BOTTLE	NAFO Subarea
CANADA	181C06660	Jan-07 - Jan-14	5	1	0	3K,3L
		Jan-20 - Jan-20	1	0	0	3L
CANADA	181C06675	Jul-25 - Aug-07	48	77	0	2J,3K,3L,3M
CANADA	181C06688	Apr-12 - Apr-23	2	2	0	3L,3PS,3PN
CANADA	181C06692	Jun-11 - Jun-20	4	1	0	3L
CANADA	181C06693	Jun-21 - Jun-21	0	1	0	3L
		Jun-27 - Jun-30	1	1	0	3L
CANADA	181C06694	Jul-05 - Jul-06	0	3	0	3L
CANADA	181C06695	Jul-11 - Jul-21	10	2	0	3L
CANADA	181C06696	Aug-11 - Aug-23	0	86	0	3K,3L
CANADA	181C06697	Aug-25 - Sep-08	57	39	0	2H,2J,3K,3L
CANADA	181C06703	Sep-27 - Sep-28	1	2	0	3L
CANADA	181C06704	Sep-30 - Sep-30	1	0	0	3O
		Oct-09 - Oct-10	2	0	0	3L,3O
CANADA	181C06705	Oct-12 - Oct-12	0	1	0	3L
		Oct-17 - Oct-23	4	1	0	3L,3N
CANADA	181C06706	Oct-25 - Oct-25	0	1	0	3L
		Nov-01 - Nov-07	4	1	0	3L
CANADA	181C06707	Nov-08 - Nov-19	2	2	0	3L
CANADA	181C06708	Nov-24 - Nov-24	0	1	0	3L
		Dec 02 - Dec 02	1	0	0	3K
CANADA	189006001	Feb-03 - Feb-03	0	2	2	4S,4T
		Mar-24 - Mar-24	0	2	2	4S,4T
		May-21 - May-21	0	1	1	4T
		Aug-03 - Aug-03	0	2	2	4S,4T
		Aug-16 - Aug-16	0	2	2	4S,4T
		Aug-28 - Aug-29	0	2	2	4S,4T
		Sep-05 - Sep-06	0	5	4	4S,4T
		Sep-20 - Sep-21	0	2	2	4S,4T
CANADA	189906668	Nov-08 - Nov-08	0	1	0	4T
		Dec 06 - Dec 06	0	1	0	4T
CANADA	18AH06001	Jan-11 - Jan-13	8	0	0	3M,3N,3O,3PS,4VS
CANADA	18AH06002	Oct-17 - Oct-20	12	0	0	4W,4X
CANADA	18BG06005	Apr-06 - Apr-06	0	1	1	4T
		Apr-12 - Apr-12	0	1	1	4T
		Apr-19 - Apr-19	0	1	1	4T
		May-02 - May-02	0	1	1	4T
		May-09 - May-09	0	1	1	4T
		May-15 - May-15	0	1	1	4T
		May-24 - May-24	0	1	1	4T
		May-31 - May-31	0	1	1	4T
		Jun-12 - Jun-12	0	1	1	4T
		Jun-21 - Jun-21	0	0	1	4T
		Jun-29 - Jun-29	0	1	1	4T
		Jul-05 - Jul-05	0	1	1	4T
		Jul-11 - Jul-11	0	1	1	4T
		Jul-19 - Jul-19	0	1	1	4T
		Jul-26 - Jul-26	0	1	1	4T
		Aug-01 - Aug-01	0	1	1	4T
		Aug-09 - Aug-09	0	1	1	4T
		Aug-17 - Aug-17	0	1	1	4T
		Aug-29 - Aug-29	0	1	1	4T
		Sep-07 - Sep-12	0	2	2	4T
		Sep-27 - Sep-27	0	1	1	4T
		Oct-04 - Oct-04	0	0	1	4T
		Oct-16 - Oct-16	0	1	1	4T
CANADA	18BO06001	Apr-28 - Apr-28	0	1	0	4T
CANADA	18BO06002	May-09 - May-09	0	1	0	4T
CANADA	18BO06003	Jun-14 - Jun-14	0	1	0	4T
CANADA	18BO06004	Jul-07 - Jul-07	0	1	0	4T
CANADA	18BO06005	Oct-11 - Oct-11	0	1	0	4T
CANADA	18C806001	Sep-11 - Sep-20	9	0	0	4W,4X
CANADA	18CN06007	Apr-29 - May-12	0	30	0	4S

CANADA	18CN06013	Jul-17 - Jul-17	0	6	0	4T
		Sep-26 - Sep-26	0	3	0	4T
CANADA	18FN06001	Jan-09 - Feb-09	90	0	0	3L,3M,3N,3O,3PS,3PN, 4VN,4VS,4W,4X
CANADA	18FN06002	Mar-20 - Apr-14	62	0	0	3L,3N,3O,3PS,3PN,4R, 4VS,4W,6H
		May-21 - May-22	3	0	0	4VS,4W,6H
CANADA	18FN06003	Jun-12 - Jun-14	6	0	0	4X,6D,6E
		Jun-28 - Jun-29	6	0	0	5ZE,6C,6D
CANADA	18HE06002	Mar-15 - Mar-23	0	81	78	4R,4S,4T,4VN
CANADA	18HL06001	Apr-24 - Apr-26	7	0	0	4X,5ZE,6B
		May-23 - Jun-02	10	0	0	5ZE,6B,6C
CANADA	18HL06002	Sep-11 - Sep-14	12	0	0	4W
CANADA	18HU06008	Apr-20 - May-07	0	2	59	4R,4VN,4VS,4W,4X
CANADA	18HU06019	Jun-08 - Jun-08	0	1	0	4W
CANADA	18HU06052	Oct-05 - Oct-05	0	1	0	4W
		Oct-13 - Oct-13	0	1	0	4X
CANADA	18HU06060	Oct-31 - Nov-11	0	97	64	4R,4S,4T,4VN
CANADA	18HU06731	Nov-18 - Dec 05	49	72	0	2J,3K,3L,3M,3N,3O
CANADA	18IS06001	Feb-07 - Feb-08	5	0	0	4W,4X
CANADA	18IS06002	Feb-20 - Feb-24	15	0	0	4W,4X
CANADA	18IS06003	Feb-27 - Mar-02	12	0	0	4W,4X,5Y
CANADA	18IS06004	Apr-25 - Apr-28	8	0	0	4W,4X,5Y
CANADA	18IS06005	May-04 - May-05	4	0	0	4X
CANADA	18IS06006	May-09 - May-16	27	0	0	4X,5ZE,6B,6C
		May-21 - Jun-02	31	0	0	5ZE,6B,6C
CANADA	18IS06007	Jul-31 - Aug-02	7	0	0	4W,4X
CANADA	18MH06059	Nov-12 - Nov-12	0	1	0	4W
CANADA	18MP06001	Feb-16 - Feb-16	2	0	0	4X
CANADA	18MP06002	Feb-20 - Mar-09	53	0	0	4W,4X,5Y,5ZE,5ZW,6B,6C
CANADA	18MP06003	May-24 - May-24	2	0	0	4W
CANADA	18MP06004	May-31 - Jun-02	6	0	0	4X,6D,6E
		Jun-23 - Jun-25	7	0	0	4X,5ZE,6C,6D
CANADA	18MP06005	Aug-01 - Aug-16	19	0	0	0A,0B,1D,2G,2H,2J,3K, 3L,3PS,4VS
		Aug-22 - Aug-31	25	0	0	0A,1C,1D,1F,2G,2H,2J, 3K,3L,3O,3PS,4VS,4W
CANADA	18MQ06001	Aug-01 - Aug-09	5	0	0	0B,2J,3PS,4W
		Aug-18 - Aug-22	7	0	0	0A
CANADA	18NE06002	Mar-14 - Mar-16	0	11	0	4VS,4W
CANADA	18NE06030	Jul-06 - Jul-06	0	1	0	4W
CANADA	18NE06036	Jul-20 - Aug-03	0	105	0	4VN,4VS,4W
CANADA	18NE06729	Jun-25 - Jun-25	2	0	0	3L,3O
CANADA	18OK06653	Jan-09 - Jan-25	0	37	0	3L
CANADA	18OK06661	Jan-30 - Feb-03	0	9	0	3L
CANADA	18OK06711	Apr-27 - May-02	0	7	0	3L
CANADA	18OK06712	May-05 - May-20	0	20	0	3L
CANADA	18OK06713	May-23 - May-31	0	58	0	3L
CANADA	18OK06714	Jun-02 - Jun-02	0	1	0	3L
CANADA	18OK06717	Jul-13 - Jul-25	0	11	0	2J
CANADA	18OK06718	Jul-31 - Aug-10	12	12	0	3L
CANADA	18OK06719	Aug-17 - Aug-17	0	1	0	3L
CANADA	18OK06720	Aug-31 - Sep-13	0	32	0	3K
CANADA	18OK06722	Sep-21 - Sep-29	3	29	0	3L
CANADA	18OK06723	Oct-03 - Oct-18	9	21	0	3L
CANADA	18OK06726	Nov-25 - Nov-28	0	6	0	3L
CANADA	18OK06728	Jun-06 - Jun-10	0	4	0	3L
CANADA	18OK06730	Jun-27 - Jul-07	0	8	0	3K
CANADA	18OL06008	Jun-21 - Jul-09	0	86	85	4R,4S,4T,4VN
CANADA	18OL06096	Jun-11 - Jun-16	0	17	0	4T
CANADA	18OL06097	Aug-06 - Aug-10	0	16	0	4S,4T
CANADA	18OL06098	Aug-14 - Aug-21	0	23	0	4R,4S,4T
CANADA	18OL06099	May-29 - May-30	0	4	0	4T
CANADA	18OP06001	May-24 - May-24	0	1	0	4T
CANADA	18PA06001	Jan-13 - Jan-13	0	3	0	4X
CANADA	18PA06002	Feb-16 - Feb-16	0	3	0	4X

CANADA	18PA06003	Mar-21 - Mar-21	0	3	0	4X
CANADA	18PA06004	Apr-25 - Apr-27	0	3	0	4X
CANADA	18PA06005	May-17 - May-17	0	3	0	4X
CANADA	18PA06006	Jun-15 - Jun-15	0	3	0	4X
CANADA	18PA06007	Jul-14 - Jul-14	0	3	0	4X
CANADA	18PA06013	Jan-10 - Jan-10	0	5	0	4X
CANADA	18PA06014	Feb-14 - Feb-14	0	4	0	4X
CANADA	18PA06015	Mar-14 - Mar-14	0	4	0	4X
		Mar-21 - Mar-21	0	1	0	4X
CANADA	18PA06016	Apr-25 - Apr-25	0	5	0	4X
CANADA	18PA06017	May-01 - May-01	0	5	0	4X
		May-09 - May-09	0	5	0	4X
		May-16 - May-16	0	5	0	4X
		May-23 - May-23	0	5	0	4X
		May-30 - May-30	0	5	0	4X
CANADA	18PA06018	Jun-06 - Jun-06	0	5	0	4X
		Jun-13 - Jun-13	0	5	0	4X
		Jun-20 - Jun-20	0	5	0	4X
		Jun-27 - Jun-27	0	5	0	4X
CANADA	18PA06019	Jul-04 - Jul-04	0	5	0	4X
		Jul-11 - Jul-11	0	5	0	4X
		Jul-19 - Jul-19	0	5	0	4X
		Jul-25 - Jul-25	0	5	0	4X
CANADA	18PA06020	Aug-01 - Aug-01	0	5	0	4X
		Aug-08 - Aug-08	0	5	0	4X
		Aug-15 - Aug-15	0	5	0	4X
		Aug-22 - Aug-22	0	5	0	4X
		Aug-29 - Aug-29	0	5	0	4X
CANADA	18PA06021	Oct-03 - Oct-03	0	5	0	4X
CANADA	18PA06022	Oct-03 - Oct-03	0	5	0	4X
		Oct-10 - Oct-10	0	5	0	4X
		Oct-17 - Oct-17	0	5	0	4X
		Oct-24 - Oct-24	0	5	0	4X
		Oct-31 - Oct-31	0	3	0	4X
CANADA	18PA06023	Nov-16 - Nov-16	0	5	0	4X
CANADA	18PA06024	Aug-14 - Aug-14	0	3	0	4X
CANADA	18PA06025	Sep-15 - Sep-15	0	3	0	4X
CANADA	18PA06026	Oct-13 - Oct-13	0	3	0	4X
CANADA	18PA06027	Nov-22 - Nov-22	0	3	0	4X
CANADA	18PA06028	Dec 14 - Dec 14	0	2	0	4X
		Dec 21 - Dec 21	0	1	0	4X
CANADA	18PA06029	Dec 12 - Dec 12	0	5	0	4X
CANADA	18PA06666	Jan-25 - Jan-25	0	1	0	4W
		Mar-31 - Mar-31	0	1	0	4W
		Apr-12 - Apr-12	0	1	0	4W
		May-30 - May-30	0	1	0	4W
		Aug-25 - Aug-25	0	1	0	4W
CANADA	18S106001	Jan-31 - Feb-09	8	0	0	4W,4X,5Y
CANADA	18S106002	Feb-20 - Feb-20	1	0	0	4X
		Mar-01 - Mar-02	5	0	0	4W,4X
CANADA	18S106003	Mar-14 - Mar-15	4	0	0	4X,5ZE
CANADA	18S106004	Apr-06 - Apr-11	6	0	0	4X,5Y,5ZW,6A,6C
		Apr-25 - Apr-25	1	0	0	4W
		May-02 - May-03	2	0	0	4W,4X
CANADA	18S606001	Apr-26 - Apr-28	9	0	0	4X,6E
		May-03 - May-04	13	0	0	4X,6E
CANADA	18S606002	May-15 - May-18	7	0	0	4X,5Y
CANADA	18S606003	Aug-31 - Aug-31	3	0	0	4X
CANADA	18S606004	Sep-06 - Sep-14	11	0	0	3L,4R,4VS,4W,4X
CANADA	18TL06043	Aug-03 - Aug-28	0	130	131	4R,4S,4T,4VN
CANADA	18TL06614	Feb-18 - Feb-18	0	1	0	4W
		Mar-03 - Mar-03	0	1	0	4W
CANADA	18TL06615	Mar-05 - Mar-15	0	83	0	4VS,4W
CANADA	18TL06616	Sep-20 - Sep-20	0	1	0	4T
CANADA	18TL06662	Jan-20 - Jan-26	1	2	0	3K,3L
CANADA	18TL06663	Feb-07 - Feb-07	0	1	0	3L

CANADA	18TL06670	Apr-22 - May-03	28	72	0	3K,3L,3M,3N,3O
CANADA	18TL06671	Jun-05 - Jun-08	0	10	0	3L
CANADA	18TL06673	Jun-10 - Jun-21	17	34	0	1F,2J,3K,3L
CANADA	18TL06674	Jun-25 - Jul-09	8	16	0	3L,3N,3O
CANADA	18TL06679	Oct-04 - Oct-09	1	1	0	2H,3L
CANADA	18TL06681	Oct-28 - Nov-02	4	0	0	2J
CANADA	18TL06682	Nov-16 - Nov-20	4	0	0	3K,3L
CANADA	18TL06683	Nov-21 - Dec 02	7	1	0	3L,3M
CANADA	18TL06684	Dec 08 - Dec 08	2	0	0	3L
		Dec 16 - Dec 19	1	1	0	3K,3L
CANADA	18TL06733	Dec 20 - Dec 20	1	0	0	3K
CANADA	18TR06001	Sep-26 - Sep-28	2	0	0	4W
CANADA	18VA06001	May-25 - May-25	0	1	0	4W
CANADA	18VA06002	Jan-25 - Jan-25	0	1	0	4W
CANADA	18VA06003	Mar-31 - Mar-31	0	1	0	4W
CANADA	18VA06004	Apr-12 - Apr-12	0	1	0	4W
CANADA	18VA06018	Jun-02 - Jun-05	0	6	0	2J
CANADA	18VA06101	Jul-17 - Jul-17	0	1	0	3L
CANADA	18VA06667	Jan-04 - Jan-04	0	1	0	4X
		Jan-11 - Jan-11	0	1	0	4X
		Jan-17 - Jan-17	0	1	0	4X
		Jan-26 - Jan-26	0	1	0	4X
		Jan-31 - Jan-31	0	1	0	4X
		Feb-08 - Feb-08	0	1	0	4X
		Feb-15 - Feb-15	0	1	0	4X
		Feb-22 - Feb-22	0	1	0	4X
		Mar-01 - Mar-01	0	1	0	4X
		Mar-08 - Mar-08	0	1	0	4X
		Mar-15 - Mar-15	0	1	0	4X
		Mar-22 - Mar-22	0	1	0	4X
		Mar-29 - Mar-29	0	1	0	4X
		Apr-04 - Apr-04	0	1	0	4X
		Apr-13 - Apr-13	0	1	0	4X
		Apr-19 - Apr-19	0	1	0	4X
		Apr-25 - Apr-25	0	1	0	4X
		May-03 - May-03	0	1	0	4X
		May-10 - May-10	0	1	0	4X
		May-17 - May-17	0	1	0	4X
		May-24 - May-24	0	1	0	4X
		May-31 - May-31	0	1	0	4X
		Jun-07 - Jun-07	0	1	0	4X
		Jun-14 - Jun-14	0	1	0	4X
		Jun-21 - Jun-21	0	1	0	4X
		Jun-28 - Jun-28	0	1	0	4X
		Jul-05 - Jul-05	0	1	0	4X
		Jul-12 - Jul-12	0	1	0	4X
		Jul-19 - Jul-19	0	1	0	4X
		Jul-26 - Jul-26	0	1	0	4X
		Aug-02 - Aug-02	0	1	0	4X
		Aug-09 - Aug-09	0	1	0	4X
		Aug-16 - Aug-16	0	1	0	4X
		Aug-23 - Aug-23	0	1	0	4X
		Aug-30 - Aug-30	0	1	0	4X
		Sep-06 - Sep-06	0	1	0	4X
		Sep-14 - Sep-14	0	1	0	4X
		Sep-20 - Sep-20	0	1	0	4X
		Sep-27 - Sep-27	0	1	0	4X
		Oct-04 - Oct-04	0	1	0	4X
		Oct-11 - Oct-11	0	1	0	4X
		Oct-18 - Oct-18	0	1	0	4X
		Oct-25 - Oct-25	0	1	0	4X
		Nov-02 - Nov-02	0	1	0	4X
		Nov-08 - Nov-08	0	1	0	4X
		Nov-15 - Nov-15	0	1	0	4X
		Nov-22 - Nov-22	0	1	0	4X
CANADA	18VQ06001	Feb-20 - Mar-10	48	0	0	4W,4X,5Y,5ZE,6B,6C

Table 3: Profile data collected prior to 2006 and processed during the past year
Total = 23536

Unique ID	Year	CTD	Towed CTD	BOT	BT	NAFO Subarea
180173054	1973	0	0	1	0	4X
180174050	1974	0	0	3	1	4X
181C05588	2005	17	3	0	2	3L 3K
181C05617	2005	116	1	1	6	3L 3PS 3O
181C05618	2005	74	1	1	0	3PS 3PN 4R 3O 3L
181C05619	2005	94	2	2	3	3L 3N 3O
181C05620	2005	23	2	2	4	3L 3N
181C05621	2005	150	2	2	6	3L 3N 3O
181C05622	2005	0	4	0	0	3PS
181C05623	2005	25	0	0	2	3L
181C05624	2005	0	117	92	30	3L 3M 3K 2J
181C05625	2005	0	71	2	0	3L 3K
181C05626	2005	0	0	0	1	3L
181C05627	2005	74	1	1	1	3L 3O 3N
181C05628	2005	68	2	3	3	3L 3O 3N
181C05629	2005	49	2	2	4	3L 3PS 3O
181C05630	2005	61	0	0	3	3L 3N
181C05631	2005	57	0	0	2	3K 2J
181C05632	2005	38	1	1	3	3L 3K 2J
181C05634	2005	0	2	1	0	3L 3PS
181C05654	2005	0	4	1	0	3PS 3L
181C05655	2005	0	2	1	11	3K 2J 1F 3L
187F00001	2000	0	0	260	0	4T 4S
187F01001	2001	0	0	258	0	4T 4S
187F02001	2002	0	0	261	0	4T 4S
187F03001	2003	0	0	260	0	4T 4S
187F04001	2004	0	0	263	0	4T 4S
187F05001	2005	0	0	292	0	4T 4S
187F95001	1995	0	0	257	0	4T 4S
187F96001	1996	0	0	278	0	4T 4S
187F97001	1997	0	0	259	0	4T 4S
187F98001	1998	0	0	259	0	4T 4S
187F99001	1999	0	0	266	0	4T 4S
189005001	2005	0	0	10	0	4S 4T
189092099	1992	0	12	0	0	4T
189902003	2002	0	0	0	5	4W
189902004	2002	0	0	0	14	4W
189902005	2002	0	0	0	5	4W
189902006	2002	0	0	0	5	4W
189902007	2002	0	0	0	10	4W
189902008	2002	0	0	0	10	4W
189902009	2002	0	0	0	4	4W
189902010	2002	0	0	0	5	4W
189902011	2002	0	0	0	15	4W
189902012	2002	0	0	0	14	4W
189902013	2002	0	0	0	15	4VS 4W
189902014	2002	0	0	0	15	4VS 4W
189902015	2002	0	0	0	4	4W
189902016	2002	0	0	0	6	4W 4VS
189902017	2002	0	0	0	4	4W
189902018	2002	0	0	0	7	4VS
189902019	2002	0	0	0	15	4VS
189902020	2002	0	0	0	14	4VS
189902021	2002	0	0	0	2	4W
189902022	2002	0	0	0	3	4W
189902023	2002	0	0	0	3	4W
189902024	2002	0	0	0	1	4W
189902025	2002	0	0	0	3	4W
189902026	2002	0	0	0	1	4W
189902027	2002	0	0	0	2	4W
189902028	2002	0	0	0	3	4W
189902029	2002	0	0	0	882	4VN 4T 4W 4VS 4X
189903001	2003	0	0	0	6	4W

189903002	2003	0	0	0	10	4W
189903003	2003	0	0	0	10	4W
189903004	2003	0	0	0	4	4W
189903005	2003	0	0	0	5	4W
189903006	2003	0	0	0	14	4W
189903007	2003	0	0	0	14	4W
189903008	2003	0	0	0	10	4W
189903009	2003	0	0	0	11	4W
189903010	2003	0	0	0	26	4W 4VS
189903011	2003	0	0	0	12	4W 4VS
189903012	2003	0	0	0	7	4VS
189903013	2003	0	0	0	16	4VS
189903014	2003	0	0	0	4	4W
189903015	2003	0	0	0	15	4VS 4W
189903016	2003	0	0	0	21	4VS
189903017	2003	0	0	0	1	4W
189903018	2003	0	0	0	2	4W
189903019	2003	0	0	0	2	4W
189903020	2003	0	0	0	3	4W
189903021	2003	0	0	0	4	4W
189903022	2003	0	0	0	654	4VN 4VS 4W 4T 4X
189904001	2004	0	0	0	9	4W
189904002	2004	0	0	0	8	4W
189904003	2004	0	0	0	5	4W
189904004	2004	0	0	0	8	4W
189904005	2004	0	0	0	14	4W
189904006	2004	0	0	0	4	4W
189904007	2004	0	0	0	3	4W
189904008	2004	0	0	0	446	4T 4VN
189905001	2005	0	0	0	454	4T 4VN
189905003	2005	0	0	0	13	4W
189905004	2005	0	0	0	4	4W
189905007	2005	0	0	0	10	4W
189905008	2005	0	0	0	8	4W
189905011	2005	0	0	0	4	4W
189905012	2005	0	0	0	14	4W
189997006	1997	0	0	0	178	4T
189998015	1998	0	0	0	239	4T 4VN
189999018	1999	0	0	0	276	4T 4VN
18AH05007	2005	0	0	0	7	4X 6D 5ZE 6B 6C
18AT80298	1980	0	0	76	58	3L 3N
18AT80299	1980	0	0	1	0	3L
18AT80300	1980	0	0	1	0	3L
18AT80301	1980	0	0	1	0	3L
18AT80302	1980	0	0	2	0	3L
18AT80303	1980	0	0	2	0	3L
18AT80304	1980	0	0	1	0	3L
18AT80305	1980	0	0	76	0	3L 3N
18AT80309	1980	0	0	2	0	3L
18AT80310	1980	0	0	38	38	3L 3N
18AT80311	1980	0	0	4	26	3L
18AT80313	1980	0	0	16	16	3L 3K 2J
18AV05004	2005	0	0	0	15	3L 3K 4R
18BG05031	2005	0	0	21	0	4T
18BR80002	1980	0	0	90	87	4VN 4VS 4W 4X
18BS78251	1978	0	0	11	0	4T
18BS78252	1978	0	0	12	0	4T
18BS78253	1978	0	0	26	0	4T
18CC78002	1978	0	0	394	326	4X 4W 5ZE 5Y 4VS 4VN
18CF72002	1972	0	0	37	69	3L 3M 3K 2J
18CF72003	1972	0	0	50	79	3L 3N 3O 3PS
18CF73001	1973	0	0	32	58	3L 3M 3K 2J
18CF73002	1973	0	0	50	61	3L 3N 3M 3O 3PS
18CF74001	1974	0	0	49	87	3L 3M 3K 2J
18CF74002	1974	0	0	43	63	3L 3N 3O 3PS
18CF75001	1975	0	0	49	88	3L 3M 3K 2J

18CF75002	1975	0	0	1	57	3L 3N 3O 3PS
18CN91044	1991	0	3	0	0	4T
18CX77001	1977	0	0	159	0	4W 4X 4VS 4VN
18DA90073	1990	0	4	0	0	4T
18FN05006	2005	0	0	0	11	4X 5ZE 5Y
18FN05007	2005	0	0	0	47	4X 5Y 6A 6B 6C 5ZE 5ZW
18FN05008	2005	0	0	0	31	4W 4VS 3O 3N 3L 3PS 4VN 3PN
18GA80032	1980	0	0	1	0	3L
18GA80036	1980	0	0	123	120	3O 3N 3L
18GA80037	1980	0	1	0	21	3M 3L
18GA80039	1980	0	0	1	156	3L 2J 2H
18GA80041	1980	0	1	20	52	3L 2J 2H 2G 3K
18GA80042	1980	0	0	17	0	3L 3K
18GA80043	1980	0	0	16	64	3L 3K 2J 2H
18GA92001	1992	0	63	0	0	3PN 4R 4S
18GC05002	2005	0	0	0	4	6C 4X 4VN
18GE90010	1990	0	13	0	0	4S
18GE90068	1990	0	1	0	0	4T
18HE05002	2005	0	0	69	0	4T 4S 4R
18HL05004	2005	0	0	0	2	4X
18HL05005	2005	0	0	0	13	4VS 4W 3N 3PS 3O 3M 3L
18HU00009	2000	0	46	0	0	4X 4W 2J 2H 1F 4R
18HU01022	2001	0	62	0	0	4X 4W 4R 2J 2H 1F 3K
18HU01061	2001	0	0	62	0	4W 4X 4VS 4VN 4R 4S 4T 3PS
18HU02032	2002	0	126	0	0	4X 4W 4VS 3PS 3N 3L 3M 2J 2H 1F 3K
18HU03005	2003	0	0	25	0	4W 4X 4VS
18HU03038	2003	0	81	0	0	4W 4X 4VS 3PS 3L 2H 2J 1F 3K
18HU03072	2003	0	0	1	0	4W
18HU04005	2004	0	0	1	0	4W
18HU04016	2004	0	0	42	0	4X 4W 4R 2J 2H 1F 3K
18HU05016	2005	0	1	0	0	4W
18HU05021	2005	0	1	7	0	4X 5ZE 4W
18HU05055	2005	0	2	0	0	4W
18HU05071	2005	0	0	79	0	4T 4S 4VN 4R
18HU05656	2005	0	107	92	13	3L 3O 3N 3M 3K
18HU92037	1992	0	0	20	0	4VS 3N 3M 6H 3O
18HU99022	1999	0	52	0	0	4X 4W 4VS 4R 2J 2H 1F
18IS05001	2005	0	0	0	5	4W 4X
18IS05002	2005	0	0	0	13	4X 5Y 5ZE 4W
18LA65022	1965	0	0	147	0	2G 1E 1D 0B 1C 0A 1A 1B 2H 2J
18LH78005	1978	0	0	53	48	4X 5Y 5ZE
18LH78006	1978	0	0	95	91	4X 4W 4VS
18LH78007	1978	0	0	20	0	4VS 4W 4VN
18LH79011	1979	0	0	37	37	4X 4W
18LH79015	1979	0	0	124	112	4W 4VS 4VN 4X 5ZE
18LH79018	1979	0	0	106	86	4W 4VS 4VN 4X
18LH79025	1979	0	0	91	88	4W 4VS 4VN 4X
18LH79028	1979	0	0	118	104	4W 4VS 4VN 4X 5ZE
18LH80032	1980	0	0	92	81	4W 4VS 4VN 4X 5ZE
18LH80035	1980	0	0	138	110	4VN 4VS 4W 4X 5ZE
18LH80036	1980	0	0	153	102	4VN 4VS 4W 4X 5ZE
18LH80041	1980	0	0	229	121	4W
18LH80045	1980	0	0	100	91	4X 4W 4VS 4VN
18LH81047	1981	0	0	156	84	4VS 4VN 4W 4X 5ZE 5Y
18LH82069	1982	0	0	46	45	4X 5ZE 4W
18LH83091	1983	0	0	53	0	4X 5ZE
18LH83093	1983	0	0	50	0	4X 5ZE
18LH84121	1984	0	0	0	103	4VN 4R 4S 4T
18LH87020	1987	0	170	0	112	4T 4S 4R 3PN
18LH88025	1988	0	48	0	139	4VN 4T 4R 4S
18LH89047	1989	0	95	0	66	4T 4VN 4S 4R
18LL88027	1988	0	82	0	0	4T
18LL90012	1990	0	5	0	0	4S 4T
18LL90034	1990	0	5	0	0	4T

18LL90058	1990	0	2	0	0	4T
18LL91014	1991	0	3	0	0	4T
18MF01015	2001	0	0	43	0	4T 4S 4R 4VN
18MP05002	2005	0	0	0	32	4X 6C 4W
18MP05003	2005	0	0	0	26	4X 5ZE 5Y 6B 6C
18MP05004	2005	0	0	0	1	6C
18NE05004	2005	0	39	0	0	4W 4X 4VS 4R 4VN
18NE05027	2005	0	0	22	0	4W
18NE05050	2005	0	7	0	0	4W
18NE05656	2005	79	0	0	6	3PS 3O
18NE05657	2005	85	3	3	2	3L 3N
18NE05658	2005	12	0	0	3	3L
18NE84009	1984	0	0	0	82	4VN 4T 4S
18NE89020	1989	0	61	0	0	4T 4S
18NE96040	1996	0	113	0	0	3PN 4VN 4R 4S 4T
18NE99025	1999	0	0	96	0	4W 4X 5Y
18OK05580	2005	0	1	1	0	3L
18OK05581	2005	0	41	0	6	3L
18OK05589	2005	0	7	0	3	3L
18OK05635	2005	0	3	0	0	3L 3PS
18OK05637	2005	0	15	0	0	3L
18OK05639	2005	0	33	0	0	3L 3PS
18OK05640	2005	0	2	0	0	3L 3K
18OK05642	2005	0	41	0	0	3L
18OK05643	2005	0	26	0	0	3L
18OK05644	2005	0	2	2	0	3L
18OK05647	2005	0	22	0	0	3L 3PS
18OK05648	2005	0	29	0	0	3L
18OK05651	2005	0	47	0	0	3L
18OP05001	2005	0	1	1	0	4T
18OP05002	2005	0	1	1	0	4T
18PA00024	2000	0	5	0	0	4X
18PA00025	2000	0	5	0	0	4X
18PA00026	2000	0	5	0	0	4X
18PA00027	2000	0	5	0	0	4X
18PA00028	2000	0	20	0	0	4X
18PA00029	2000	0	20	0	0	4X
18PA00030	2000	0	25	0	0	4X
18PA00032	2000	0	19	0	0	4X
18PA00033	2000	0	15	0	0	4X
18PA00034	2000	0	5	0	0	4X
18PA00035	2000	0	5	0	0	4X
18PA02032	2002	0	15	0	0	4X
18PA02033	2002	0	10	0	0	4X
18PA02034	2002	0	18	0	0	4X
18PA02035	2002	0	8	0	0	4X
18PA02036	2002	0	8	0	0	4X
18PA02037	2002	0	5	0	0	4X
18PA03020	2003	0	5	0	0	4X
18PA03021	2003	0	4	0	0	4X
18PA03022	2003	0	5	0	0	4X
18PA03023	2003	0	10	0	0	4X
18PA03024	2003	0	15	0	0	4X
18PA03025	2003	0	20	0	0	4X
18PA03026	2003	0	24	0	0	4X
18PA03027	2003	0	20	0	0	4X
18PA03028	2003	0	25	0	0	4X
18PA03029	2003	0	19	0	0	4X
18PA03030	2003	0	1	0	0	4X
18PA03031	2003	0	5	0	0	4X
18PA04013	2004	0	4	0	0	4X
18PA04014	2004	0	5	0	0	4X
18PA04015	2004	0	5	0	0	4X
18PA04016	2004	0	5	0	0	4X
18PA04017	2004	0	19	0	0	4X
18PA04018	2004	0	16	0	0	4X

18PA04019	2004	0	25	0	0	4X
18PA04020	2004	0	25	0	0	4X
18PA04021	2004	0	20	0	0	4X
18PA04022	2004	0	15	0	0	4X
18PA04023	2004	0	5	0	0	4X
18PA04024	2004	0	5	0	0	4X
18PA05001	2005	0	0	1	0	4X
18PA05002	2005	0	0	1	0	4X
18PA05003	2005	0	0	1	0	4X
18PA05004	2005	0	0	1	0	4X
18PA05005	2005	0	0	1	0	4X
18PA05006	2005	0	0	1	0	4X
18PA05007	2005	0	0	1	0	4X
18PA05008	2005	0	0	1	0	4X
18PA05009	2005	0	0	1	0	4X
18PA05010	2005	0	0	1	0	4X
18PA05011	2005	0	0	1	0	4X
18PA05013	2005	0	5	0	0	4X
18PA05014	2005	0	5	0	0	4X
18PA05015	2005	0	5	0	0	4X
18PA05016	2005	0	20	0	0	4X
18PA05017	2005	0	21	0	0	4X
18PA05018	2005	0	20	0	0	4X
18PA05019	2005	0	21	0	0	4X
18PA05020	2005	0	15	0	0	4X
18PA05021	2005	0	20	0	0	4X
18PA05022	2005	0	5	0	0	4X
18PA05023	2005	0	5	0	0	4X
18PE76170	1976	0	0	0	74	4X 4W 4VS 4VN
18PE77182	1977	0	0	129	127	4X 4W 4VS 4VN
18PE82271	1982	0	0	35	35	4X 5Y 5ZE
18PE82276	1982	0	0	97	84	4X 5Y 5ZE 4W
18PE83292	1983	0	0	0	108	4VN 4S 4T
18PE83296	1983	0	0	36	0	4T 4VN
18PE85011	1985	0	0	0	84	4VN 4T 4S
18PE86014	1986	0	0	0	71	4VN 4T 4S
18PT87032	1987	0	52	0	0	4S
18RH67667	1967	0	0	46	0	4X
18S105002	2005	0	0	0	15	3PS 3L 3K 2J 2H 2G
18S105003	2005	0	0	0	1	4W
18S105004	2005	0	0	0	3	4X 4W
18S105005	2005	0	0	0	37	4X 5Y 5ZW 6A 6B 5ZE 4W 4VN 3PS 3L
18S905001	2005	0	0	1	0	4W
18S905002	2005	0	0	1	0	4W
18S905003	2005	0	1	1	0	4W
18S905004	2005	0	1	1	0	4W
18TL05035	2005	0	0	69	0	4T 4S 4R 4VN
18TL05045	2005	0	0	189	0	4VN 4T 4S 4R 3K
18TL05514	2005	0	0	0	1	3L
18TL05542	2005	20	0	0	1	3K 3L
18TL05545	2005	0	0	99	0	5ZE 4W
18TL05588	2005	0	0	2	0	3L
18TL05590	2005	0	1	1	0	3L
18TL05601	2005	0	53	53	25	3L 3O 3N 3K
18TL05602	2005	0	27	0	0	3PS
18TL05603	2005	31	7	1	55	3L 3K
18TL05605	2005	0	1	79	0	4X 4W 5ZE 5Y
18TL05607	2005	0	1	139	0	4T 4VN
18TL05608	2005	27	2	2	0	3L 3O 3N
18TL05609	2005	13	2	2	1	3L 3N
18TL05611	2005	55	0	0	1	3L 2J 3K
18TL05612	2005	60	0	0	1	2J
18TL05633	2005	0	0	116	0	4W 4VS 4VN
18TL97016	1997	0	66	0	0	3PN 4R 4S 4T
18TR05006	2005	0	0	0	3	4W

18TR05007	2005	0	0	0	18	4W 4VS 3PS 3L 3O 4X
18VA00667	2000	0	0	51	0	4X
18VA01667	2001	0	0	46	0	4X
18VA02009	2002	0	0	0	62	4X 4W
18VA02010	2002	0	0	0	44	4X
18VA02011	2002	0	0	0	63	4X 5Y
18VA02667	2002	0	0	51	0	4X
18VA03009	2003	0	0	0	60	4X
18VA03010	2003	0	0	0	61	4X 5Y
18VA03011	2003	0	0	0	15	4X
18VA03667	2003	0	0	47	0	4X
18VA04006	2004	0	0	0	59	4X 5Y
18VA04007	2004	0	0	0	60	4X
18VA04008	2004	0	0	0	60	4X 4W
18VA04667	2004	0	0	51	0	4X
18VA05001	2005	0	7	1	0	4T 4W
18VA05002	2005	0	1	1	0	4T
18VA05003	2005	0	0	0	60	4X 4W
18VA05004	2005	0	0	0	63	4X
18VA05005	2005	0	0	0	61	4X 5Y
18VA05018	2005	0	11	0	0	2J
18VA05100	2005	103	0	0	50	3L 2G 0B 1C
18VA05667	2005	0	0	51	0	4X
18VA69667	1969	0	0	5	0	4X
18VA71667	1971	0	0	1	0	4X
18VA73667	1973	0	0	20	0	4X
18VA74667	1974	0	0	50	0	4X
18VA80004	1980	0	0	1	0	3L
18VA86667	1986	0	0	94	0	4X
18VA87667	1987	0	0	34	0	4X
18VA88037	1988	0	18	0	0	4T
18VA88040	1988	0	14	0	0	4T
18VA88042	1988	0	79	0	0	4S 4R 4T
18VA89056	1989	0	82	0	0	4T 4S
18VA91667	1991	0	0	10	0	4X
18VA92667	1992	0	0	51	0	4X
18VA93667	1993	0	0	46	0	4X
18VA94667	1994	0	0	49	0	4X
18VA95667	1995	0	0	49	0	4X
18VA96667	1996	0	0	46	0	4X
18VA97667	1997	0	0	46	0	4X
18VA98667	1998	0	0	47	0	4X
18VQ05006	2005	0	0	0	17	4X 5ZE 6B 6C
18VQ05007	2005	0	0	0	14	6C 5ZE 6B
316G05001	2005	0	73	0	0	5Y 5ZE 5ZW 4X
316G05005	2005	0	22	0	0	6A 6B
316G05010	2005	0	136	0	0	5ZE 4X
316G05011	2005	0	14	0	0	5ZE
316G05012	2005	0	121	0	0	5ZE 5ZW 5Y 4X
316G05014	2005	0	22	0	0	6A
31A405001	2005	0	10	0	0	6A 6C
31A405002	2005	0	101	0	0	6A 6B 6C 5ZW 5ZE
31A405003	2005	0	341	0	0	6B 6C 5ZW 6A 5ZE 4X 5Y
31A405004	2005	0	212	0	0	5ZE
31A405005	2005	0	160	0	0	6B 6A 6C 5ZW 5ZE 4X 5Y
31A405006	2005	0	170	0	0	6A 6B 6C 5ZE 5ZW
31A405007	2005	0	130	0	0	5ZW 6A 5ZE 5Y 4X
31A405008	2005	0	326	0	0	6B 6C 6A 5ZW 5ZE 4X 5Y
31A405009	2005	0	154	0	0	6A 6B 6C 5ZW 5ZE 4X 5Y

Table 4: Drifting Buoy data received during 2006
Total Messages = 331086

BUOY	DATE RANGE	DAYS	SST	AP	AT	WS	WD	TC	NAFO Subarea
13959	Feb-18 - Oct-29	253	X	X	-	-	-	-	6D,6F,6G,6H
13963	Sep-04 - Dec-28	115	X	X	-	-	-	-	6F,6G
17564	Aug-11 - Aug-11	1	-	-	-	-	-	-	6B
17567	Aug-11 - Aug-11	1	X	X	-	-	-	-	6B
17568	Aug-11 - Aug-11	1	X	X	-	-	-	-	6B
21518	Jul-19 - Jul-31	12	X	X	-	-	-	-	4X
25522	Sep-22 - Sep-25	3	-	X	-	-	-	-	4X
25569	May-08 - May-12	4	-	X	-	-	-	-	4X
25572	Sep-22 - Sep-22	1	-	-	-	-	-	-	4X
25581	Oct-16 - Oct-18	3	-	X	-	-	-	-	1C
32546	Oct-03 - Nov-30	58	X	X	-	-	-	-	6C,6B,6D,5ZE,4X,4W,4VS,6G,3N,6H,3M
32548	Oct-05 - Dec-31	88	X	X	-	-	-	-	6C,6B,6D,5ZE
41520	Jul-06 - Jul-07	2	-	X	X	-	-	-	6C
41524	Aug-21 - Sep-28	39	X	X	X	-	-	-	6F,4VS,6G
41558	Jan-01 - Aug-15	227	X	X	-	-	-	-	3M,3N
41561	Jan-01 - May-14	134	X	X	-	-	-	-	3M,6H
41563	Jan-01 - Oct-12	284	X	X	-	-	-	-	6H,6G,6F
41566	Jul-06 - Dec-31	179	X	X	-	-	-	-	6E,6D,6F,4W,4VS,6G,6H
41568	Jan-01 - Oct-23	296	X	X	-	-	-	-	6F,4W,4VS,6G,6H
41571	Dec-04 - Dec-12	8	X	X	-	-	-	-	6F
41572	Jan-22 - Dec-22	334	X	X	-	-	-	-	6D,6E,4W,4VS,6F,6G,6H,3N,3M
41575	Jan-01 - Feb-25	56	X	X	-	-	-	-	6D,6E,6F
41576	Jan-01 - Jan-08	8	X	X	-	-	-	-	6H,3M
41577	Oct-12 - Oct-26	14	X	X	-	-	-	-	6E
41578	Jun-22 - Oct-01	101	X	X	-	-	-	-	6H,6G
41591	Jan-01 - Aug-01	213	X	X	-	-	-	-	6H
41592	Jan-01 - Sep-15	258	X	X	-	-	-	-	6D,6E
41593	Jul-19 - Nov-30	134	X	X	-	-	-	-	6D,6C
41594	Sep-24 - Dec-31	99	-	-	-	-	-	-	6E,6D
41613	Dec-30 - Dec-31	2	X	X	-	-	-	-	6C,6B
41614	Jan-01 - Apr-04	94	X	X	-	-	-	-	6H,6G
41616	Jan-01 - Feb-03	34	X	X	-	-	-	-	6E,6F,4W,4VS,3O,3N,3M
41617	Jan-01 - Jan-09	9	-	-	-	-	-	-	6E,6F
41620	Dec-26 - Dec-31	6	X	X	-	-	-	-	6C
41621	Jan-01 - May-16	136	X	X	-	-	-	-	4VS,3O,3N,3M,6H
41622	Jun-08 - Jun-21	14	X	X	-	-	-	-	6C,6D
41623	Apr-15 - Sep-30	169	X	X	-	-	-	-	6C,6D,6E,6F,6G
41624	Dec-04 - Dec-26	23	X	X	-	-	-	-	6F,6E
41626	Aug-21 - Sep-24	35	X	X	X	-	-	-	4VS,3O,3N,6H,3M
41627	Aug-21 - Sep-09	20	X	X	X	-	-	-	3N,6H
41641	Sep-07 - Oct-04	27	X	X	X	-	-	-	6C,6B,6D,6E,4X,4W
41643	Jun-07 - Dec-31	208	X	X	X	X	X	-	6C,6B,6D,5ZE,6E,4W,4VS,6F,6G,6H
41645	Aug-12 - Dec-07	117	X	X	X	X	X	-	6C
41652	Aug-21 - Oct-07	48	X	X	X	-	-	-	4W,4VS,6G,6F
41675	Aug-24 - Dec-31	130	X	X	-	-	-	-	6F,6E,4W,4VS,6G
41676	Aug-30 - Dec-31	124	X	X	-	-	-	-	6H
41677	Jan-01 - Jul-05	186	X	X	-	-	-	-	6E,6F,4W,4VS,6G,3N,3M,6H
41679	Jan-01 - Jan-03	2	X	X	-	-	-	-	6H
41681	Jan-23 - Dec-09	320	X	X	-	-	-	-	6D,6E,6F,6G,6H
41682	Jan-23 - Oct-12	262	X	X	-	-	-	-	6D,6E,6F,6G,4VS,3N,6H,3M
41683	Jan-23 - Sep-10	230	X	X	-	-	-	-	6D,6E,4W,4VS,3O,3N,6H,3M,3K
41684	Jan-23 - Dec-31	343	X	X	-	-	-	-	6D,6E,4W,4VS,3O,3N,6H,3M,6C
41685	Jan-26 - Dec-10	319	X	X	-	-	-	-	6E,4W,6F,6G
41686	Jan-26 - Jun-20	146	X	X	-	-	-	-	6E,4W,4VS,6F,6G,6H,3N
41687	Jan-29 - Jun-05	127	X	X	-	-	-	-	6E,4W,4VS,6F,6G,6H,3N,3O,3M
41688	Jan-29 - Jul-29	182	X	X	-	-	-	-	6E,4W,4VS,3N,6H,6G,6F
41854	Jan-01 - Jan-09	9	-	-	-	-	-	-	6H,3N,3M
41855	Jan-01 - Jan-31	30	-	-	-	-	-	-	3N,6H
41901	Sep-18 - Nov-06	49	X	X	-	-	-	-	6E,6D
41903	Nov-13 - Nov-27	14	X	X	-	-	-	-	6G,6F
41909	Jan-17 - Dec-06	323	X	X	-	-	-	-	6D,6E,4W,4VS,6F,6G,3N,3O,3M
41911	Dec-05 - Dec-31	27	X	X	-	-	-	-	6F
41912	Jul-14 - Sep-11	60	X	X	-	-	-	-	6E,6F,6G,4VS,3N,6H

41914	Jan-01 - Jan-10	10	-	-	-	-	-	-	3N,3M
41916	Jul-21 - Dec-21	154	X	X	-	-	-	-	6C,6B,6D,6E
41924	Aug-30 - Oct-26	58	X	X	-	-	-	-	4VS,3O,3N,3M
41931	Jan-01 - Jan-10	10	X	X	-	X	X	-	3N
41935	Sep-12 - Oct-02	20	X	X	-	-	-	-	6H
41939	Jan-01 - Feb-07	38	-	-	-	X	X	-	6G,6H,3M
41945	Nov-10 - Dec-31	52	X	X	-	-	-	-	6G,6F
41967	Jan-09 - Aug-12	216	X	X	-	-	-	-	6C,6B,6D,6E,6F,6G
41969	Dec-26 - Dec-31	6	X	X	-	-	-	-	6C,6B
41970	Jul-07 - Oct-02	87	X	X	-	-	-	-	6C,6B,6D,5ZE,4X,6E,4W,4VS,6G,6F
41976	Nov-28 - Dec-13	15	X	X	-	-	-	-	6E
41978	Nov-28 - Dec-31	34	X	X	-	-	-	-	6F,6E
41979	Nov-28 - Dec-31	34	X	X	-	-	-	-	6F,6E,4W
41981	Dec-05 - Dec-14	9	X	X	-	-	-	-	6E
42535	Jan-01 - Sep-24	267	X	X	-	-	-	-	6F,6G,6H
42538	May-24 - Dec-08	198	X	X	-	-	-	-	6C,6D,6B,5ZW
42539	Jan-01 - Mar-26	85	X	X	-	-	-	-	6F,6G,4VS,6H,3N,3M
42540	Jan-01 - Jul-08	189	-	-	-	-	-	-	4VS,6F,3O,3N,3M,3K,2J,1F
42541	Jan-01 - Feb-05	36	X	X	-	-	-	-	6H,6G
42545	Jul-19 - Sep-30	74	-	-	-	-	-	-	6C,6B,6D,5ZE,6E,4W,4VS,6G,3O,3N,6H
42546	Jul-20 - Sep-13	55	X	X	-	-	-	-	6C,6B,6D,5ZE,6E,4W,4VS,6F
42547	Jul-24 - Dec-31	161	X	X	-	-	-	-	6C,6B,6D,5ZE,6E,6F,4W,4VS,6G
42548	Jul-25 - Sep-08	46	X	X	-	-	-	-	6C,6B,6D,5ZE
43508	Dec-26 - Dec-31	6	X	X	-	-	-	-	6C,6B
43518	Nov-21 - Dec-31	40	X	X	-	-	-	-	6D,6E
43520	May-16 - Sep-12	119	X	X	-	-	-	-	6C,6B,6D
44501	Mar-15 - Aug-01	140	X	X	-	-	-	-	3K,3L,3M,3N
44502	Apr-17 - Dec-31	259	X	X	-	-	-	-	3K,3L,3M,3N
44503	Apr-17 - Dec-03	230	X	X	-	-	-	-	3N,3O,3PS,4VS,4W
44504	Apr-17 - Oct-28	194	X	X	-	-	-	-	3K,3L,3M
44505	Apr-17 - Dec-31	259	X	X	-	-	-	-	3L
44506	Apr-17 - Nov-24	222	X	X	-	-	-	-	3K,3L,3M,3N
44507	May-09 - Oct-03	148	X	X	-	-	-	-	3L,3PS
44508	Jun-07 - Jul-14	38	X	X	-	-	-	-	3L,3N
44514	Sep-20 - Nov-10	52	X	X	-	-	-	-	6E,6D
44613	May-18 - Aug-23	97	X	X	X	-	-	-	3M
44614	Mar-29 - Apr-02	4	X	X	X	-	-	-	3M
44617	Mar-28 - Jun-23	88	X	X	X	-	-	-	3N,3M,3K
44620	Mar-28 - Dec-05	253	X	X	X	-	-	-	3O,3N,3M,3K
44621	Oct-03 - Dec-31	90	X	X	X	-	-	-	2J,1F,3K
44622	Oct-03 - Dec-31	90	X	X	X	-	-	-	3K,3L,3N,3M
44623	Nov-13 - Dec-31	49	X	X	X	-	-	-	2G,2H,2J
44624	Nov-14 - Dec-31	48	X	X	X	-	-	-	2H,2J,3K,3L
44625	Nov-19 - Dec-31	43	X	X	X	-	-	-	3M
44626	Nov-21 - Dec-31	41	X	X	X	-	-	-	3N,3O
44635	Jan-01 - Jan-28	28	X	X	X	-	-	-	3O,3N,3M
44636	Jan-01 - Feb-20	51	X	X	X	-	-	-	4W
44637	Jan-01 - Jul-09	190	X	X	X	-	-	-	4X,5ZE,4W,6D,6E,4VS
44723	Aug-16 - Dec-31	138	X	X	X	-	-	-	1F,1E,1D,0B,2G,2H,2J,3K
44729	Jan-01 - Oct-16	289	X	X	X	-	-	-	4W,4X
44742	Jan-01 - Aug-11	223	X	X	X	-	-	-	2J,2H,1F
44746	Jan-01 - Mar-07	66	-	X	X	-	-	-	3N,6H,3M
44760	Jan-01 - Aug-08	220	X	X	X	-	-	-	3M,3K,2J
44761	Jan-01 - Feb-23	54	X	X	X	-	-	-	3K
44762	Apr-05 - Apr-10	5	X	X	X	-	-	-	1F
44763	Jan-11 - Dec-10	333	X	X	X	-	-	-	3K,2J,1F
44764	Jan-12 - Jun-12	151	X	X	X	-	-	-	3L,3M,3N
44766	Feb-08 - Dec-26	321	-	X	X	-	-	-	3M,3K,3N,6H
44767	Jun-11 - Jul-31	51	X	X	X	-	-	-	3M
44768	Jul-27 - Dec-15	142	X	X	X	-	-	-	1F,1E,1D,1C,1B,1A,0A,0B
44769	Feb-09 - Dec-31	326	-	X	X	-	-	-	3L,3N,3O,3PS
44771	Feb-13 - Dec-31	322	X	X	X	-	-	-	3K,3L,3M
44772	Apr-22 - Aug-02	103	X	X	X	-	-	-	3M,3N
44773	Feb-21 - Dec-28	310	X	X	X	-	-	-	3M,3N,6H
44774	Feb-28 - Aug-29	183	X	X	X	-	-	-	4X,5ZE,4W,4VS,3N,3O,3M
44777	Mar-08 - Mar-27	20	X	X	X	-	-	-	3K

44778	Mar-08 - Jul-08	123	X	X	X	-	-	-	3K,3L,3M,2J,1F
44780	Mar-25 - Jun-12	80	X	X	X	-	-	-	3M,3K,2J
44835	Sep-07 - Oct-05	29	X	X	-	-	-	-	6G,6H
44843	Aug-27 - Nov-21	87	X	X	-	-	-	-	4X,4W
44849	Jan-01 - Mar-02	61	X	X	-	-	-	-	3M,3N,6H
44901	Jan-01 - Feb-26	57	X	X	X	-	-	-	6H
44902	Jan-01 - Feb-26	57	-	-	-	-	-	-	4VS,6G,3O,3N,3M,6H
44903	Jan-01 - Sep-01	244	X	X	X	-	-	-	4VS,4W,3O,3N,3M
44904	Aug-31 - Sep-19	20	X	X	-	-	-	-	4VS,3N,6H,3M
44907	Jan-01 - Mar-13	72	-	-	-	-	-	-	6H
44908	Jan-01 - Jan-07	6	-	-	-	-	-	-	3M
44909	Sep-18 - Dec-31	105	X	X	X	-	-	-	3N,3M
44910	Jan-01 - Jan-23	23	X	X	-	-	-	-	3M
44911	Jan-01 - Mar-07	66	X	X	-	-	-	-	6H
44913	May-23 - Jun-21	30	X	X	X	-	-	-	3M
44914	May-23 - Aug-14	84	X	X	X	-	-	-	6F,4VS,3O,3N,3M,6H
44915	May-26 - Aug-30	97	X	X	-	-	-	-	5Y,4X
44918	Jul-11 - Dec-24	166	X	X	X	-	-	-	6F,6D,6C,6E
44919	Jul-11 - Aug-30	50	X	X	X	-	-	-	6G,4VS,3N,3O,3M,6H
44920	Jul-11 - Aug-13	33	X	X	X	-	-	-	3N,3M
44922	Sep-18 - Sep-27	9	X	X	X	-	-	-	3M
44923	Sep-18 - Dec-31	105	X	X	X	-	-	-	6F,6E,4W,4VS,6G,6H
44925	Oct-04 - Nov-17	44	X	X	-	-	-	-	3M,3N
44928	Nov-24 - Dec-03	9	X	X	X	-	-	-	1F
44929	Nov-08 - Nov-18	10	X	X	X	-	-	-	2J,3K
44930	Nov-08 - Dec-31	54	X	X	X	-	-	-	3L,3M,3K
44931	Nov-28 - Dec-31	34	X	X	-	-	-	-	4W,6F,6E
44932	Dec-05 - Dec-31	27	X	X	X	-	-	-	3L
44933	Dec-05 - Dec-29	25	X	X	X	-	-	-	3L,3K,3M
44935	Dec-05 - Dec-31	27	X	X	-	-	-	-	6F,4W,4VS,6G
44936	Dec-05 - Dec-31	27	X	X	-	-	-	-	4W,6E,4VS,6G
44937	Dec-13 - Dec-31	19	X	X	-	-	-	-	4VS,3O,3N
44939	Dec-13 - Dec-31	19	X	X	-	-	-	-	4W,6F,4VS,6G,6H
47505	Sep-17 - Sep-26	9	-	X	-	-	-	-	0A
47553	Feb-08 - Mar-21	41	-	-	-	-	-	-	4X
47555	Jan-01 - Aug-15	227	-	X	-	-	-	-	0A
47557	Sep-10 - Dec-31	113	-	-	-	-	-	-	0A
47558	Aug-21 - Dec-31	133	-	-	-	-	-	-	0A
47559	Sep-11 - Dec-31	112	-	X	-	-	-	-	0A,1A
48523	Aug-03 - Aug-04	1	-	X	-	-	-	-	6B
48524	Aug-03 - Aug-03	1	-	X	-	-	-	-	6B
48625	May-24 - May-24	1	-	X	-	-	-	-	1A
56532	Jun-14 - Jun-15	2	-	X	X	-	-	-	4X
62569	Oct-24 - Dec-31	69	X	X	X	-	-	-	1F,1E,2G
63529	Sep-25 - Nov-26	62	-	X	-	-	-	-	1F,2H
64615	Aug-14 - Dec-31	140	-	X	X	-	-	-	1F,1E,2G
65581	Oct-16 - Dec-31	77	X	X	X	-	-	-	0B,2G,2H,2J,3K

Table 5a: Current data recovered and processed in 2006

Latitude	Longitude	Sounding Depth (meters)	Instrument Depth (meters)	Start Date	End Date	Serial Number	Mooring Number
55.1196	54.0885	1010	980	June 2/05	May 27/06	Aanderaa # 4998	1555

Table 5b: Current data recovered 2006 and not yet processed

Latitude	Longitude	Sounding Depth (meters)	Instrument Depth (meters)	Start Date	End Date	Serial Number	Mooring Number
43.8735	60.2054	31	28.5	Feb. 26/06	April 29/06	RDI Adcp # 2935	1587
49.1368	46.9063	2758	220	May 24/05	May 17/06	RDI Adcp # 1646	1550
48.5373	47.6685	2239	100	May 23/05	May 17/07	RDI Adcp # 3376	1552
48.8304	47.4555	2504	2225 2475	May 24/05	May 17/06	Aanderaa # 6410 # 470	1549
49.1368	46.9063	2758	350 700 1500 2225 2475 2725	May 24/05	May 17/06	Aanderaa # 5359 # 8697 # 225 # 8695 # 7127 # 453	1550
49.4991	46.4998	3009	2225 2725 2975	May 25/05	May 19/06	Aanderaa # 5575 # 2664 # 376	1551
48.5373	47.6685	2239	180 180 700 1500 1900 2225	May 23/05	May 17/06	Aanderaa # 4342 # 5573 # 6411 # 464 # 7131 # 456	1552
48.3295	47.8088	1932	1900	May 23/05	May 17/06	Aanderaa # 476	1553
49.8998	46.0000	3299	3275	May 25/05	May 19/06	Aanderaa # 392	1554
74.0833	91.0471	148	76	Aug. 9/05	July 31/06	RDI Adcp # 0512	1570
74.0818	91.0330	149	145	“	“	RDI Adcp # 0499	1571
74.1959	90.8486	272	258	Aug. 10/05	July 31/06	RDI Adcp # 3380	1572
74.3198	90.7541	210	77	Aug. 10/05	July 29/06	RDI Adcp # 1266	1575
74.5359	90.4262	20	80	“	“	RDI Adcp # 0517	1576
44.3027	63.2185	148	73	May 13/06	June 28/06	RDI Adcp # 2935	1603
42.8814	60.8231	2389	2350	Oct. 23/05	Oct. 10/06	Aanderaa # 265	1585
42.5350	60.5755	3399	3261	Oct. 23/05	Oct. 20/06	Aanderaa # 4208	1586
66.6924	60.7801	463	254	Sept. 17/05	Oct. 4/06	Aanderaa #5578	C1
66.7616	60.0740	674	200 500	Sept. 17/56	Oct. 4/06	Aanderaa # 7592 # 5577	C2
66.8573	59.0606	1064	201 501	Sept. 17/05	Oct. 4/06	Aanderaa # 4350 # 2663	C3
66.9808	57.6860	889	201 501	Sept. 16/05	Oct. 5/06	Aanderaa # 5032 # 5569	C4
67.0358	57.0369	713	199 499	“	“	Aanderaa # 3306 # 6402	C5
67.1054	56.3288	146	142	Sept. 15/05	Oct. 5/06	RDI Adcp # 4019	WG-1
67.2306	54.8603	59	56	Sept. 14/05	Oct. 6/06	RDI Adcp # 3469	WG-3

66.6599	61.1683	156	152	Sept. 18/05	Oct. 3/06	RDI Adcp # 0505	BI-4
44.3319	64.2440	22	20	Sept. 6/06	Nove. 11/06	RDI Adcp # 2935	1619
44.2880	63.2366	196	80	Oct. 5/06	Nov. 12/06	RDI Adcp # 1266	Halifax Station # 2

Table 5c: Current Meters Deployed 2006 and not yet recovered

Deployment Date/Location	Instrument Type	Number of Instruments	Projected Recovery Date
May 2006 Orphan Basin	Aanderaa RCM8 Aanderaa RCM11 LR Adcp	2 7 1	May 2007
May 2006 Labrador Sea	Aanderaa RCM8	1	May 2007
May 2006 Laurentian Fan	Aanderaa RCM11	2	May 2007
August 2006 Barrow Strait	LR Adcp WH Adcp	1 2	August 2007
October 2006 Davis Strait	Aanderaa RCM8 WH Adcp LR Adcp	10 2 1	October 2007
October 2006 Scotian Slope	Aanderaa RCM8 Aanderaa RCM11	1 1	October 2007
November 2006 Makkovik Bankt	WH Adcp	1	June 2007

Table 6: Wave Buoys reporting in 2006

MEDSID	Src	Name	Lat	Long	Depth
C44137	AE	East Scotia Slope	42.28	-62.00	4000
C44138	AE	SW Grand Banks	44.25	-53.62	1500
C44139	AE	Banqureau Bank	44.27	-57.08	1500
C44140	AE	Tail of the Ban	42.87	-51.47	1300
C44141	AE	Laurentian Fan	43.00	-58.00	3000
C44150	AE	La Have Bank	42.51	-64.02	1300
C44251	AE	Nickerson Bank	46.44	-53.39	71
C44255	AE	NE Burgeo Bank	47.28	-57.35	185
C44258	AE	Halifax Harbour	44.50	-63.40	58
C45138	AE	Mount Louis	49.54	-65.77	335
WEL429	TA	Thebaud	43.52	-60.11	35
WEL430	TA	South Venture	44.00	-59.32	26
WEL438	TA	North Triumph	43.43	-59.51	68
WEL439	WR	Terra Nova	46.26	-48.24	95
WEL447	WR	Henry Goodrich	46.29	-48.23	95