

Report of the RNODC for Drifting Buoys

DBCP-XXVII
Geneva, Switzerland
26 – 30 September 2011

Integrated Science Data Management

Joe Linguanti
for Bruce Bradshaw



GTS Message Bulletins, Processing & Archival

Archive Record Counts by Bulletin Header *

SACN74	CWAO	1
SACN95	CWAO	1
SSVX01	CWAO	26
SSVX01	DEMS	397
SSVX01	KARS	81
SSVX01	LFVW	5192
SSVX01	RJTD	4255
SSVX02	CWAO	81164
SSVX02	CWEG	3184
SSVX02	KARS	9459582
SSVX02	LFVW	845158
SSVX03	KARS	171
SSVX03	LFVW	5840
SSVX04	CWEG	70748
SSVX05	CWAO	972
SSVX06	KARS	93176
SSVX06	LFVW	6123
SSVX07	KARS	58534
SSVX07	LFVW	83042
SSVX08	KARS	374313
SSVX08	LFVW	25219
SSVX11	KARS	1581
SSVX11	LFVW	126638
SSVX12	KARS	70813
SSVX12	LFVW	5088
SSVX13	KARS	100297
SSVX13	LFVW	639919
SSVX13	LFVW	410600
SXPA01	KWNB	4147
Total		12476262

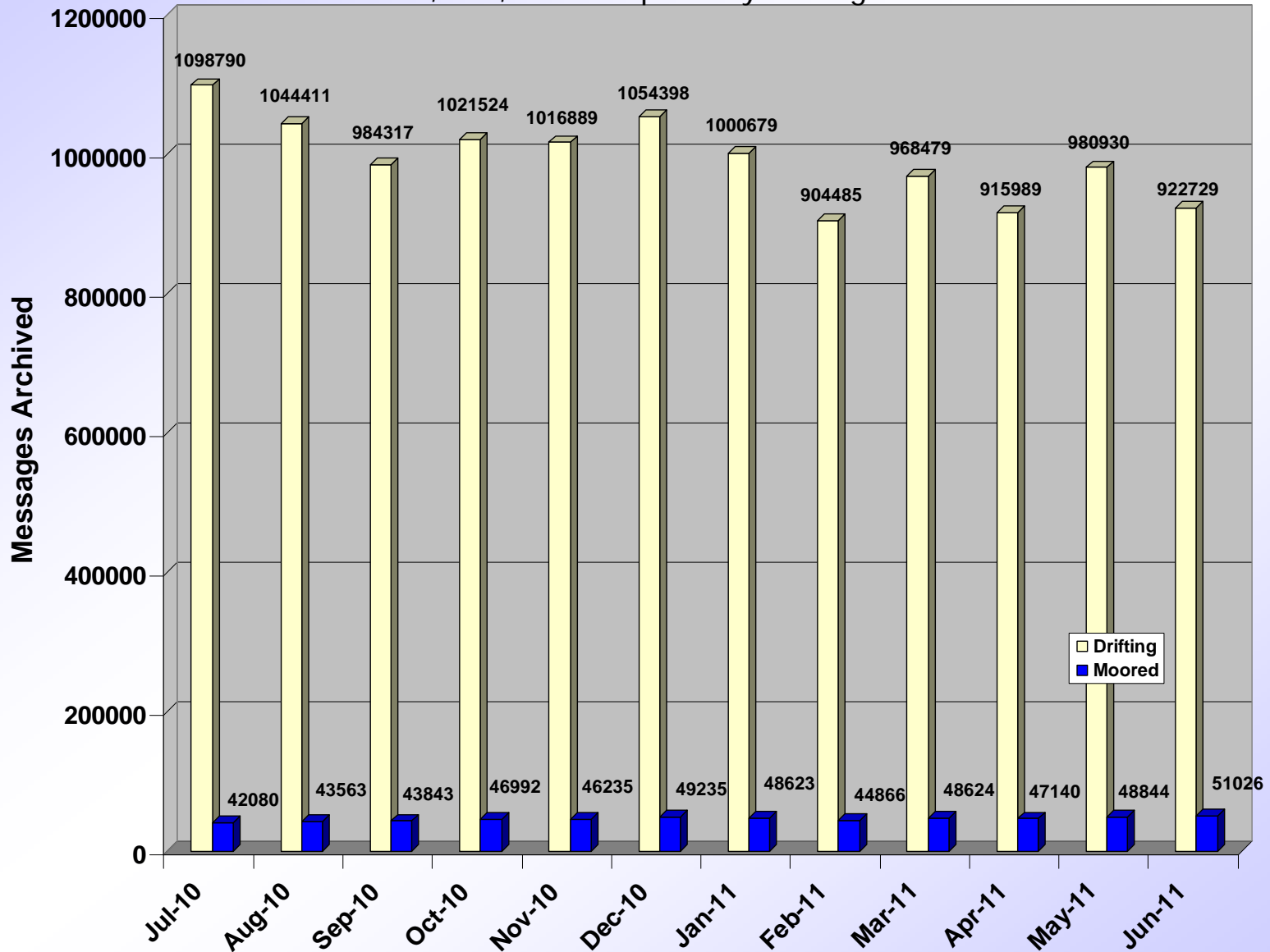
- Several times per day individual FM-18 Buoy Code messages are decoded to a monthly assembly archive. Messages that fail the automatic decode are sent to an interactive message recovery/repair procedure.
- Each month all decoded messages from the previous calendar month are processed to remove duplicates and identify the 'best version' of each.
- A system of automatic and interactive QC procedures assigns IGOSS quality flags to the position, time and measured parameters of each unique buoy report.
- The main archive is normally updated at the end of the second week of the following month.
- At this time our primary source of archive messages remains BUOY Code.
- BUFR message reports are decoded and archived as is until such time as we switch to BUFR as the primary data source.

* BUOY Code, July 2010 to June 2011

Drifting and Moored Buoy Reports

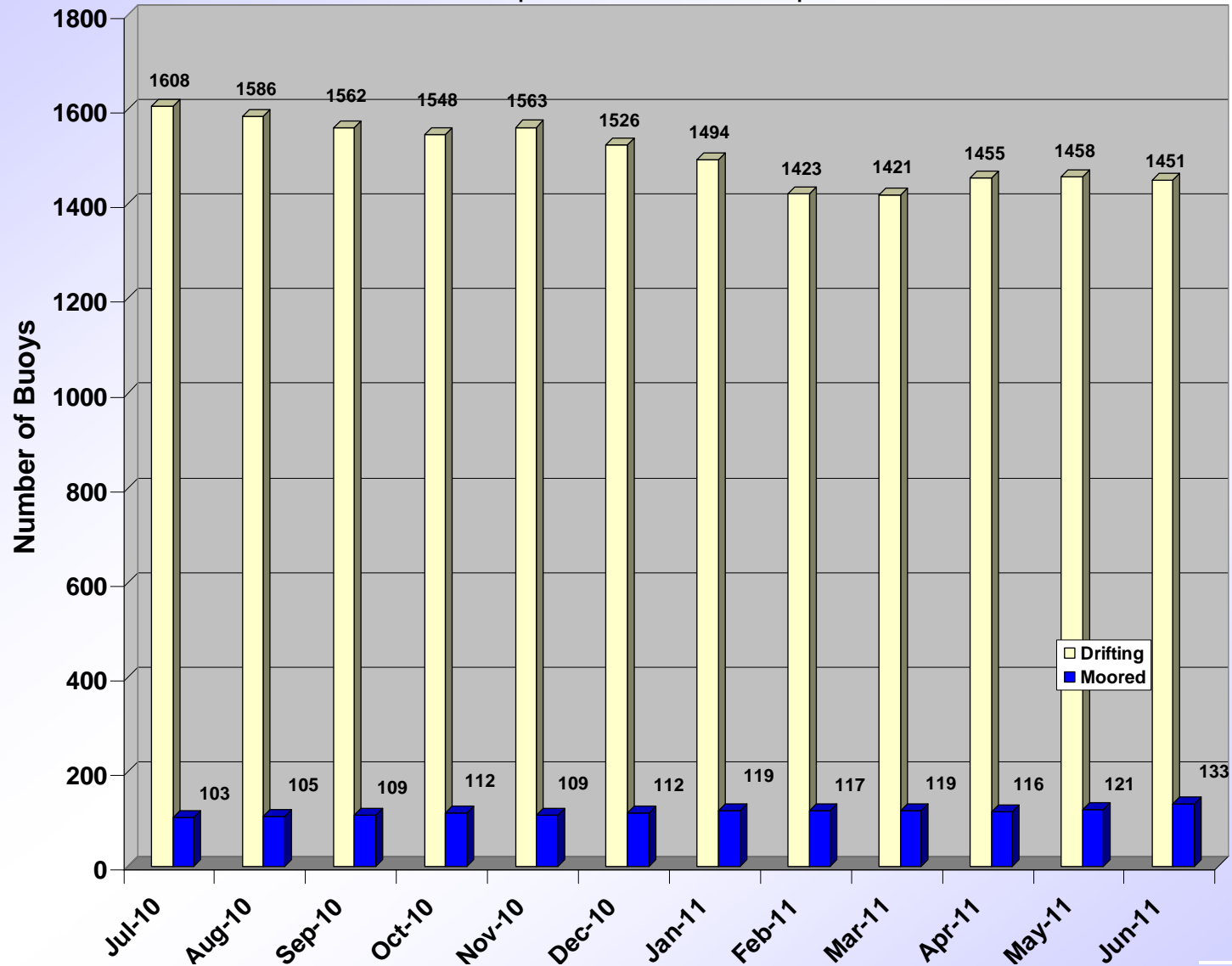
July 2010 to June 2011

12, 476, 262 Unique Buoy Messages Archived

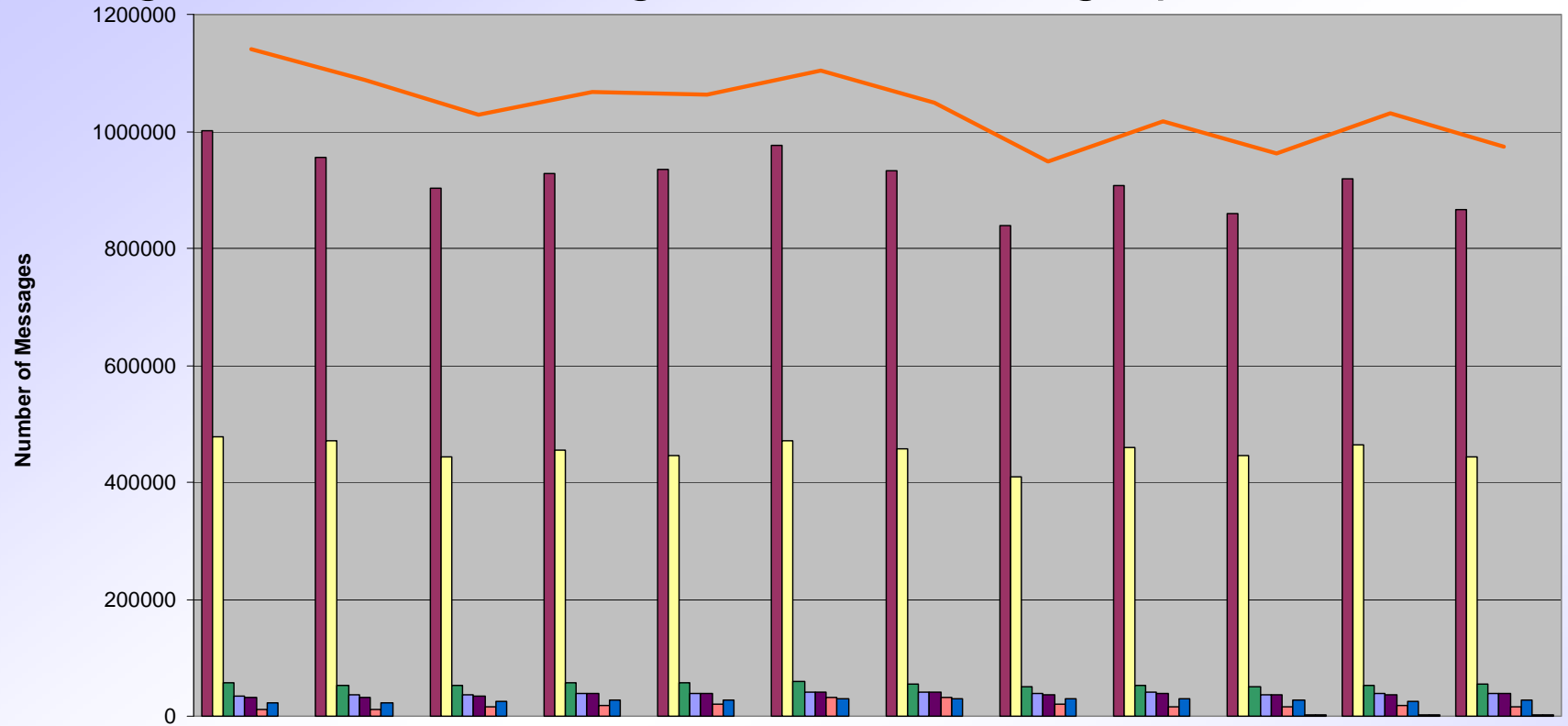


Numbers of Drifting and Moored Buoys

July 2010 to June 2011
2773 Unique Platform ID's Reported Data

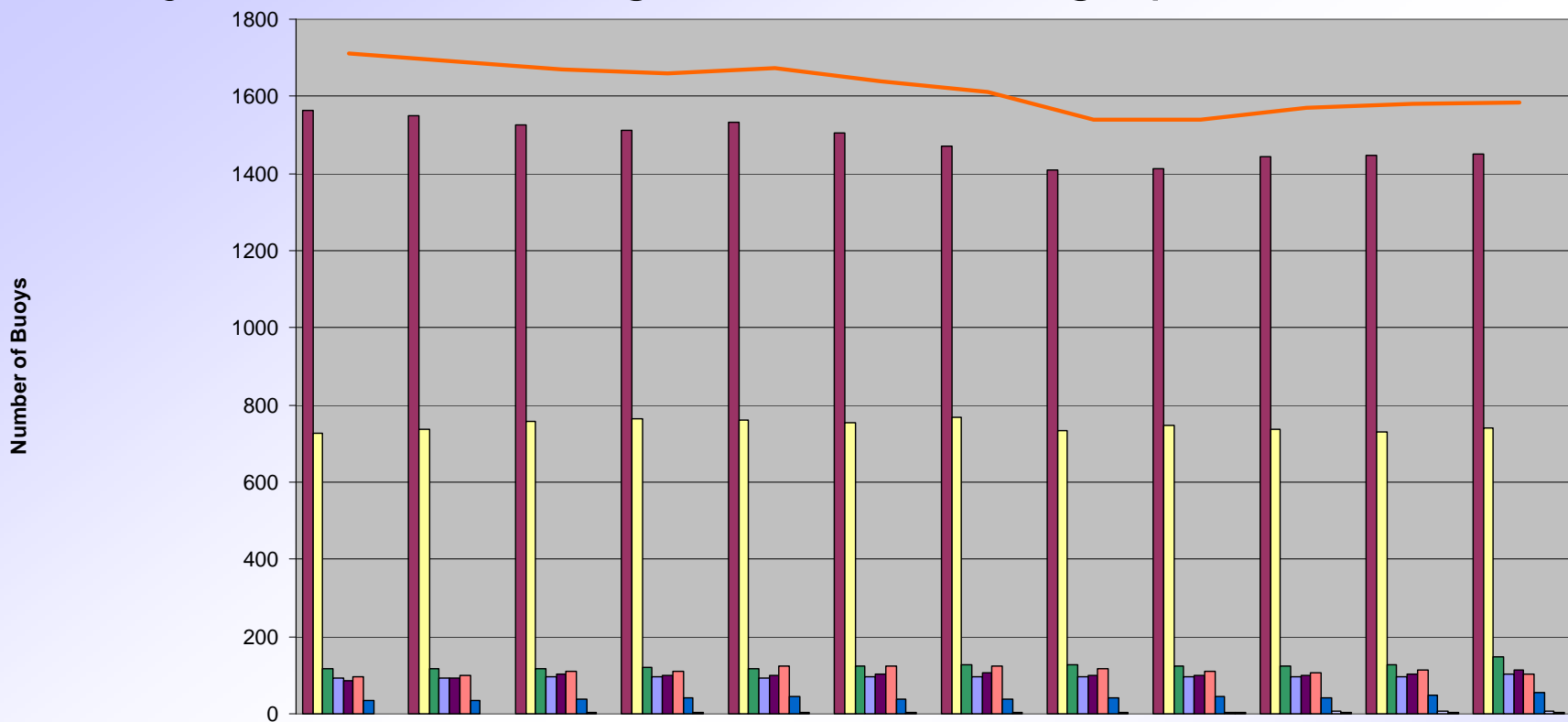


Messages with Meteorological and Oceanographic Parameters



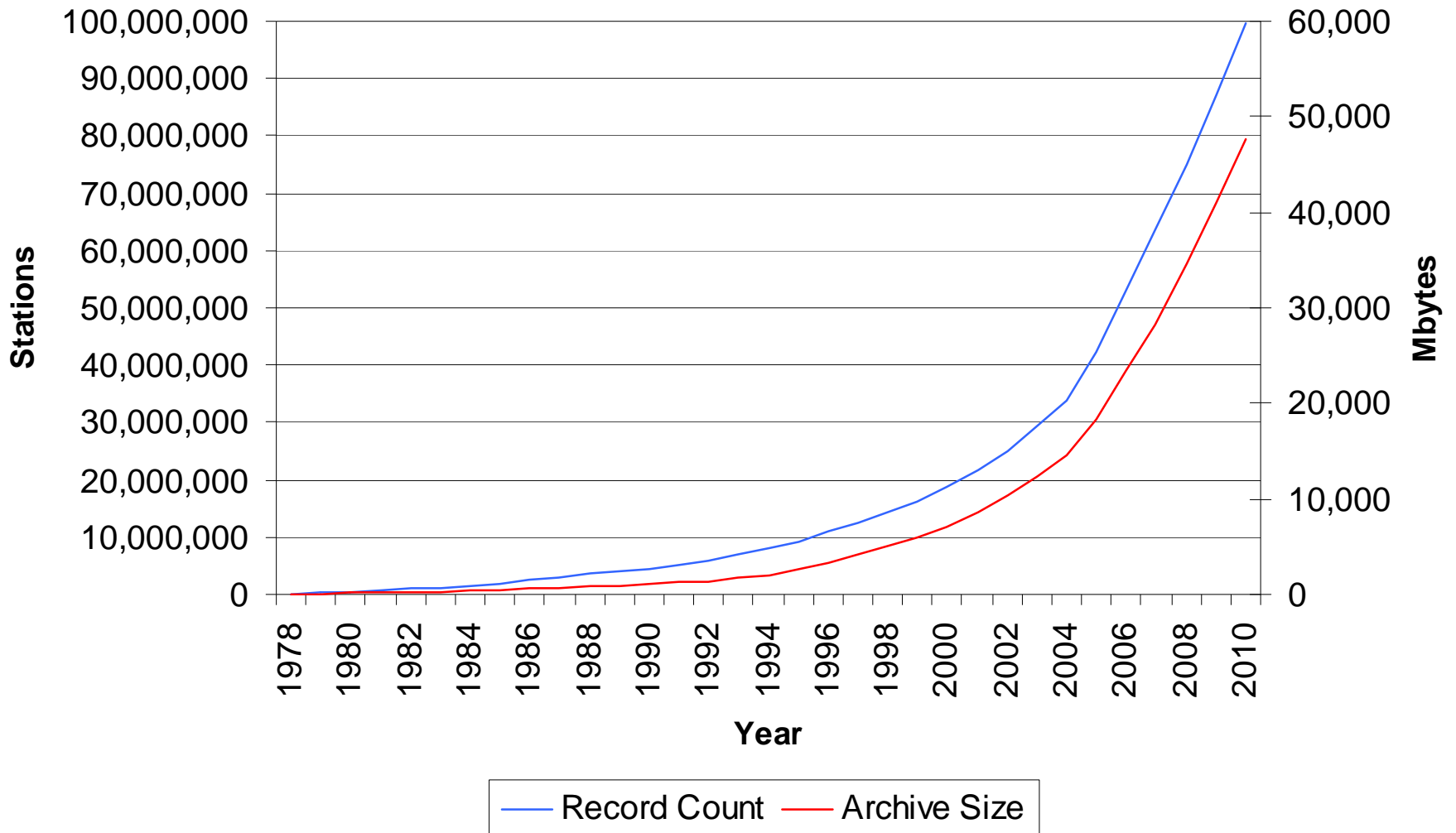
	2010-07	2010-08	2010-09	2010-10	2010-11	2010-12	2011-01	2011-02	2011-03	2011-04	2011-05	2011-06
Surface Temp	1002059	955680	901936	928376	934676	975275	932163	839342	906463	858905	918873	867314
Air Pressure	478444	470089	442613	455447	445952	471114	457509	409110	459266	445605	464165	443295
Air Temp	58193	53281	52536	57559	57170	58986	55980	50815	51967	50736	52869	55184
Rel Humidity	34496	35608	36477	39313	38055	41277	41668	38977	41061	37572	37982	38841
Wind Spd & Dir	32827	32725	34737	39103	38948	41722	40375	35939	38290	35446	36134	38849
Profiles	11680	12105	15850	19337	20725	31753	31753	21348	16716	15465	19113	15465
Surface Salinity	21920	23323	24939	27320	27246	28973	28973	29807	28794	27148	24535	27892
Wave Swell	335	364	343	379	367	388	388	349	742	2317	2169	2591
Dew Temp	5	3	2	7	7	1	1	5	314	1391	1923	1842
Total # of Msgs	1140870	1087974	1028160	1068516	1063124	1103633	1049302	949351	1017103	963129	1029774	973755

Buoys with Meteorological and Oceanographic Parameters



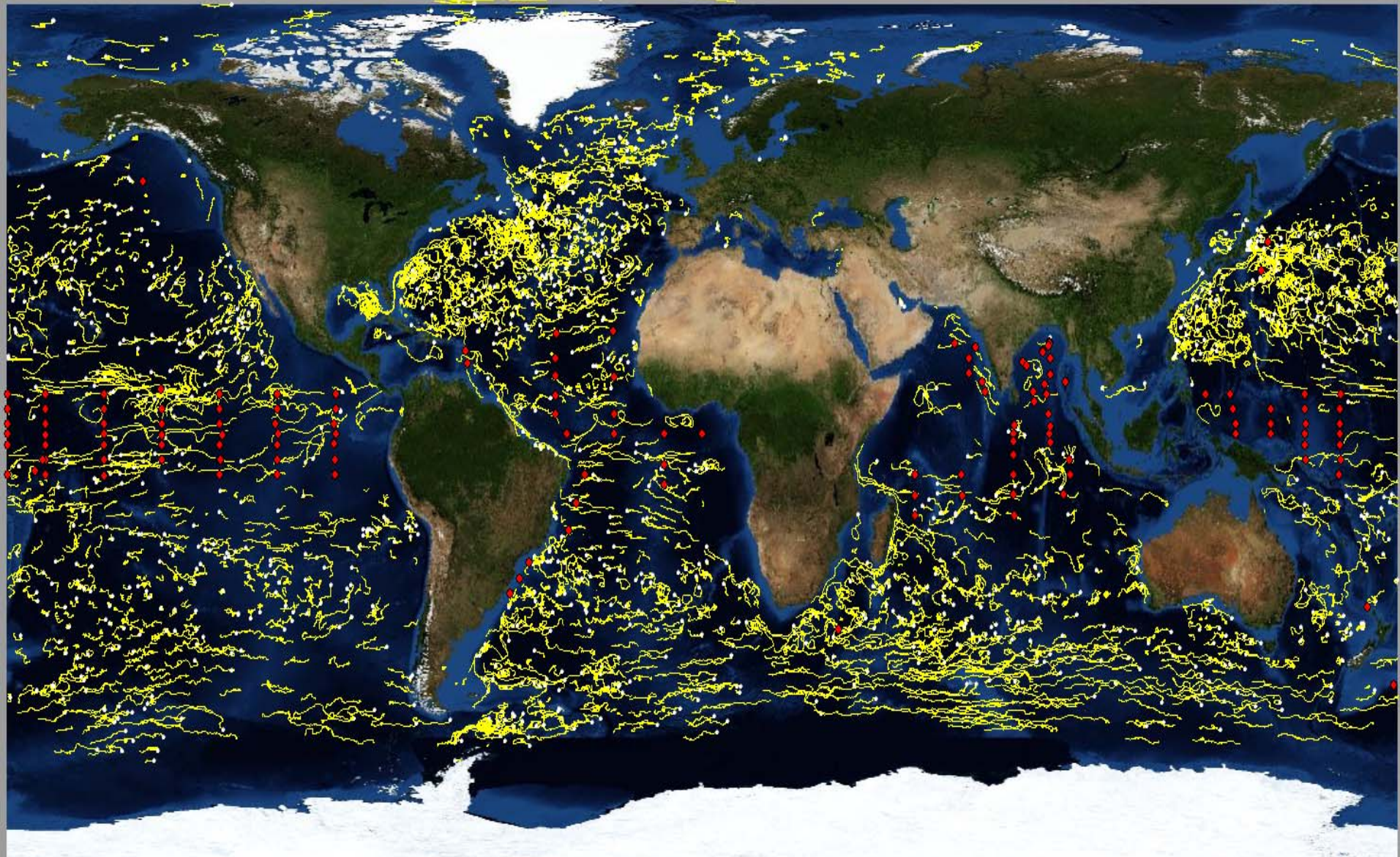
	2010-07	2010-08	2010-09	2010-10	2010-11	2010-12	2011-01	2011-02	2011-03	2011-04	2011-05	2011-06
Surface Temp	1565	1549	1525	1512	1534	1506	1472	1408	1414	1443	1448	1449
Air Pressure	726	736	757	765	762	756	767	733	748	738	731	741
Air Temp	117	116	115	120	118	123	127	126	122	122	128	149
Rel Humidity	92	93	95	97	93	96	97	96	96	95	95	102
Wind Speed & Dir	87	92	102	101	100	103	106	101	100	99	102	113
SubSurface Profiles	95	98	108	109	123	123	123	117	109	106	114	103
Surface Salinity	33	35	37	41	43	39	39	40	44	42	48	54
Wave Swell	1	1	2	2	2	2	2	2	4	6	7	6
Dew Temp	1	1	1	1	1	1	1	1	2	3	3	3
Total # of Buoys	1711	1691	1671	1660	1672	1638	1613	1540	1540	1571	1579	1584

Archive Growth



Buoys Tracks and Locations

July 2010 to June 2011



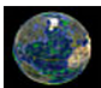
Monthly Buoy Data Now Available Online

<http://isdm.gc.ca/isdm-gdsi/drib-bder/kml/monthlykml.htm>

GTS Drifting Buoy Data Online

August 2010 GTS Buoy Data

The most recent month of Drifting Buoy data collected from the GTS and archived at ISDM is now available online for graphical viewing and download in ASCII CSV format.



[August 2010 Google Earth file after position QC \(1mb\)](#)
[August 2010 Google Earth file before position QC \(1mb\)](#)



[August 2010 buoy inventory \(.4mb\)](#)



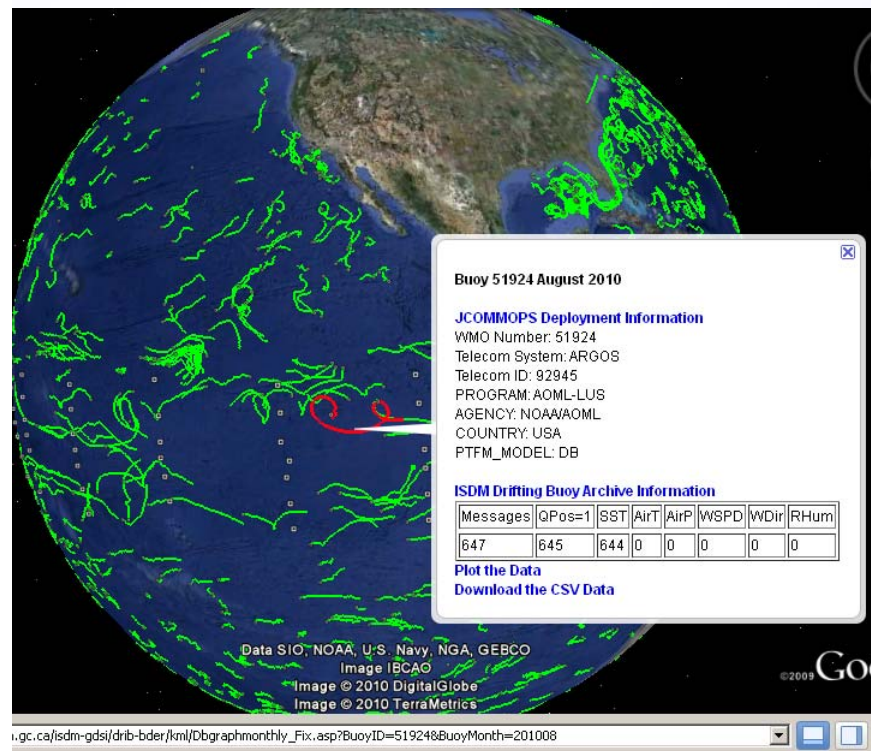
[Access to the CSV data through FTP](#)

After ISDM completes the monthly drifting buoy quality control process, a Google Earth KML file is prepared that shows buoy drift tracks for the previous calendar month. The KML provides some operational programme level meta-data with a link to JCOMMOPS as well as visual online displays of selected parameters archived at ISDM. These previous months data will normally be ready by the second week of the month.

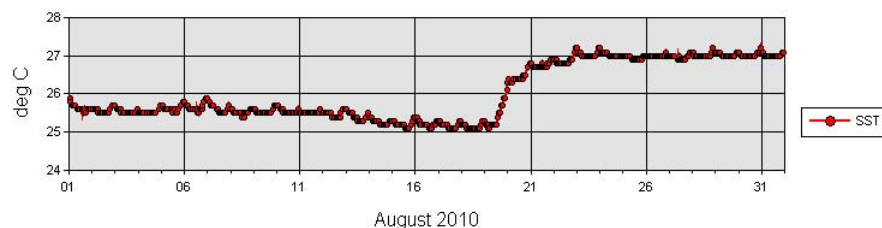
Alternatively the same data is available from our traditional text inventory report.

The data ISDM makes available online through this new application is in a modified CSV format with the same parameters as our traditional CSV format. All archived data is available by [request](#) going back to 1978.

Please direct any questions, problems, suggestions, or comments to [Bruce Bradshaw](#).



51924 - August 2010



- 75 data requests in the past 12 months
- Normal turn around time 3-5 days
- Requests by email, phone and online form
- New online products and services

<http://isdms.gc.ca/isdms-gdsi/request-commande/form-eng.asp>

- ISDM continues to monitor GTS data received in BUOY Code and BUFR formats. We are presently working to resolve what appears to be a GTS routing issue for some of the IOB BUFR messages. Mayra, Pierre, Yann, Bruce and Kelly are working on a new Bulletin Header tracking process to ensure we are receiving all of the message traffic.
- We have processed and merged the most recent AOML SVP submission into our archives. The KRIG, P&S and RAW web products by ocean basin will be available online in early October. Please note that AOML is the primary and authoritative source for the SVP data www.aoml.noaa.gov/phod/dac/dacdata.php
- We are looking forward to working with JCOMM, WMO, IOC, SOC, NDBC and others to develop an improved Buoy Data Management System to modernize data flow and delivery through a network of Marine Meteorological and Oceanographic Data Centers. Mr. Sylvain De Margerie the Director of ISDM will represent DFO and ISDM at the November MCDS workshop in Hamburg.



Thank-you!!



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Integrated Science Data Management Gestion des données scientifiques intégrées



English

Français

Canada

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<http://isdms.gc.ca>