WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

DATA BUOY COOPERATION PANEL

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TWENTY-THIRD SESSION

ITEM: 2.1

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ENGLISH ONLY

REPORT BY THE TECHNICAL COORDINATOR

(Submitted by Hester Viola, DBCP Technical Coordinator)

Summary and purpose of document

This document contains the report of the Technical Coordinator for the DBCP, covering her activities on behalf of the panel during the period 1 September 2006 to 31 August 2007 respectively.

ACTION PROPOSED

The panel will be invited to comment, and particularly make decisions or recommendations, as appropriate on the following topics:

(a) Note and comment on the information contained in this document;

(b) Take into account the contents of the report when discussing relevant agenda items;

(c) Provide further instruction to the Technical Coordinator when discussing the future work plan under agenda item 12.

Appendix: A. GTS bulletin headers used for GTS distribution of data in BUOY code

DISCUSSION

1 Introduction

This report covers the activities of the Technical Coordinator of the DBCP (TC) for the period 1 September 2006 to 31 August 2007.
Recent DBCP activities are highlighted, and then the TC tasks undertaken each month are given. Following that, the regular or normal tasks undertaken by the Technical Coordinator(s) are listed.
On average, the TC spends about one third of the time on SOOPIP matters, about 5% on JCOMM & JCOMMOPS issues and about 5% working with the Argo TC. The remainder is spent on DBCP matters.

Period 1 September 2006 to 31 August 2007
During this period Ms Hester Viola was the Technical Coordinator of the Data Buoy Cooperation Panel (DBCP). She was based in Toulouse at CLS and was employed by the United Nations Educational, Scientific, and Cultural Organisation (UNESCO).

In these months, her time (relating to DBCP) was spent in the follow ways:

1. User assistance
   - Looked into problems identified with data flow onto or throughout the GTS for meteorological agencies
   - CLS has permanently employed a staff member (Yann Bernard, in Toulouse) to look after the running of the GTS sub-system of the Argos System and to manage the migration to the new system, which is of great benefit to panel members.
   - Replied to issues and sought a solution or followed problems as they were solved.

2. Producing reports and maps as required

3. JCOMMOPS - information system operations & maintenance (database, new web server, metadata uploads and reporting)

4. Participated in DBCP Executive board decision making

5. Produced monthly maps
   - Developed templates for new monthly maps to be trialled in beginning of 2007
   - Created new monthly polar view map template for 'Map of all Floats, Drifting Buoys and Moored Buoys Polar Views' http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=BUOYS_POLES
   - Produced monthly maps in new standardized (across JCOMMOPS) format, following positive feedback from panel members, including new monthly polar view of all platforms

6. Loaded monthly Buoy Monitoring statistics into the JCOMMOPS database

7. Preparing for DBCP 23
   - Status report and preparatory documents. Reviewed Action lists and work plans from 2006, and followed up about status of actions
   - Sought information from selected DBCP panel members about Anti-Vandalism measures and documentation, provided the results to the WMO Secretariat.
   - Sought and compiled information from panel members on their contribution to the Southern Ocean Buoy Programme (SOBP) for the period 1 September 2007 to 31 August 2008
   - Reviewed document prepared by the Chair and the secretariat about working arrangements for DBCP in future, (DBCP 23 document 4.1)
   - Made predictions of TC travel requirements for 2008, and provided to IOC, in order to assess travel budget requirements.

- Created Document records in the JCOMMOPS database for upload of finalized DBCP23 documents.

8. Maintained mailing lists
   - updating erroneous addresses and added new recipients
   - in particular, updated and reported subscribers to the Data Evaluation Group Chair.
   - Checked bouncing email addresses
   - Added the addresses of several of the delegates visiting CLS from Indonesia to the DBCP mailing list.
   - Updated DBCP mailing lists and contact details in the JCOMMOPS database for attendees at DBCP22.
   - Set up mailing list dbcp-focalpoints@jcommops.org
   - Resolved issues with mailing lists due to new spam filter being installed at CLS
   - Created a mailing list for JTA – jta@cls.fr and explained to the JTA chair how it could be used

9. Maintained and updated websites (DBCP, JCOMMOPS & SOT/SOOP sites)
   - to remove all references on page to Etienne Charpentier as TC and his email address
   - update sections (e.g. updated and added to map list to reflect new products and modifications, copyright extended to 2007,
   - removed all references to http://www.dbcp.noaa.gov and http://www.wmo.ch
   - changed appearance and ordering of menu on the DCBP web page, created link on the DBCP homepage to the latest panel session meeting record etc)
   - Re-established the FTP connection to NOAA server to maintain the mirror of the DBCP website. Updated content on the DBCP mirror website at www.dbcp.noaa.gov for updates made at JCOMMOPS
   - Maintained contact details for buoy operators and manufacturers
   - Created shortcut URLs for JTA and DBCP meetings and documents on the JCOMMOPS website.
   - Maintained Deployment opportunity information - http://www.jcommops.org/depl_opport/depl_opport.html
     - In particular, Cape Verde vessel 2007, South Atlantic, IPY information, IABP information, Australian BOM and South African plans uploaded.
     - Added the Argo Deployment planning map to the web page (this is updated as soon as the JCOMMOPS system is notified of a new Argo Deployment plan)
     - Corresponded with AOML/GDP logistics manager, Shaun Dolk about management of Deployment opportunities in JCOMMOPS
     - Pursued deployment opportunities with Oil and Gas Producers from the SIMORC meeting in London, BP and Total, to investigate new options for utilizing boats used in their activities to deploy buoys. Based on information from GDC, created a map to demonstrate where deployments are required and described the process.
   - Updates and additions to the Web Map applications for http://w4.jcommops.org/WebSite/DBCP and http://w4.jcommops.org/WebSite/SOOPM
   - Created a new interactive map at http://w4.jcommops.org/WebSite/SOTM
   - Created an ASAP web page: http://www.jcommops.org/sot/asapp using some content from the existing brochure. This is an initial draft.
   - Updated the JCOMMOPS and SOT web pages to include the SOT Flyer, VOS Brochure and Certificate of Appreciation on www.jcommops.org go to Implementation->Platforms->Ship Based Observations.
   - Included a live map of 'Observing Platforms reporting in the last two days' on the JCOMM network monitoring page of the JCOMMOPS website, also added the JCOMM Web map service from JCOMMOPS with Floats, Buoys, XBTs and GLOSS stations. http://www.jcommops.org/network_status/

10. Worked on Metadata within JCOMMOPS database

- Sought information from Buoy operators
- Adding or modifying the data in the JCOMMOPS database based on information from various sources.
- Requested and began receiving monthly metadata reports from NDBC
- utilized information provided by CLS and on Buoy operator websites
- Particularly creating correct allocations for collaborations between USA/Indonesia and USA/India for TIP in the Indian Ocean.
- Modified some records incorrectly allocated to ESURFMAR back to the Norwegian Programme.
- Sourced Metadata from France (Pierre Blouch) and Canada (Yvonne Cook and Bruce Lohnes) about Moored Buoys.
- Improved buoy metadata for EU and Irish Moored buoys based on feedback from UK Met Office.
- Discussed Canadian Buoy deployments in the North Atlantic with Yvonne Cook.
- Indian metadata entered manually for each deployment

11. DBCP Iridium Pilot Project Technical Coordination
    - Created and maintained the Iridium Pilot project website and maintained Iridium pilot project mailing list
    - Updated deployment information and project progress details, and including deployment log and status of platforms
    - Reviewed the Iridium pilot project upgrade letter for the Chairman
    - Referenced documents published by WMO, Météo France and DBCP Chair's Upgrade proposal
    - Reminded buoy operators to provide notification of deployments for tracking on the website and in order to enter metadata in the JCOMMOPS website.
    - Email sent to the email list to update project participants on the progress of the project to announce the Iridium Upgrade Scheme, that Iridium Locations were good enough (without GPS) to use for meteorology and that Météo France had developed a new version of the transmission format for Iridium buoys.

12. SOOP Annual report - SOOP 2006 Report (draft) and Final SOOP 2005 Report
    - Finalized 2005 SOOP Survey, including new map of sampling success on lines. ftp://ftp.jcommops.org/SOOP/Survey/2005-First-Draft or http://wo.jcommops.org/cgi-bin/WebObjects/SOOPIndicators including updating the yearly SOOP maps at http://w4.jcommops.org/WebSite/SOOP
    - Compiled a draft of the report. Prepared the maps and tables for the Draft of the 2006 SOOP Report http://www.jcommops.org/FTPRoot/SOOP/Survey/2006-First-Draft/. Some feedback was received, so continued to update metadata and analysis of lines based on feedback and reminded others to provide feedback. Continued loading SOOP Metadata and verifying the contents, in order to assess the sampling success along each SOOP Line. Followed up with operators who still had not provided all metadata.
    - Discussed file formats for SOOP Metadata submission with SEAS/AOML and F Reseghetti (MOON project). Sent examples of reporting format for SOOP XBTs to the Indian Institute Of Oceanography and explained requirements, also highlighting some errors in the metadata. Reminded SOOP operators to send metadata for 2006 as soon as possible.

13. Updated GLOSS network status and Yearly maps for 2006
    - http://w4.jcommops.org/WebSite/GLOSS/
    - http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=GLOSS_Y

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14. Loaded the latest Publication 47 Ship metadata file into the JCOMMOPS database

15. Attended monthly meetings with CLS
    - raised the issue of Brazilian Navy contact point and usernames for the Argos Web
    - Identified many issues with data in the GTS sub system which was affecting the metadata in the JCOMMOPS database and therefore the metadata needed for Map products produced. Problem was resolved and CLS agreed to check this problem regularly.
    - Demonstration of Argos Web by CLS staff http://www.argos-system.org

2 Specific, non-routine tasks undertaken during the intersessional period by the TC DBCP

September 2006

1. Preparation for DBCP 22 and Action Group meetings, documents, and presentations. Produced figures for and reviewed documents 8.3 and 8.6.2 for CLS (Philippe Gros). Prepared a PowerPoint template for all JCOMMOPS presentations.
2. Organised travel for DBCP22 including writing a special report for UNESCO due to the length of the planned trip. Prepared paperwork for visits to secure sites. Organised appointments for meetings following DBCP throughout the USA.
3. Generated reports for WMO (Etienne Charpentier) on the number of VOS ships recruited by African countries (RA-I) and the amount of GTS data produced
4. Produced some introductory text for the JCOMM newsletter for IOC (Candyce Clarke)
5. Familiarisation with the Quality Control Email Relay utility and modified some Ship metadata to ensure it worked for two ships which had changed from VOS-Netherlands to VOS-USA based on a request from Météo France (Pierre Blouch).
6. Investigated why a buoy was reporting on the GTS with an Australian WMO number, though Australia (Graeme Ball) was not using that number. Number was not in use by any other nation but something was erroneously shown as transmitting from Canada (presumably unintentionally) then Australia.
7. Modified a presentation about JCOMMOPS for use by Johannes Guddal to present to representatives of the offshore resources industry ftp://ftp.jcommops.org/jcommops/Presentations/JCOMMOPS-2006.zip .
8. Began reviewing Metadata in the JCOMMOPS database to improve the maps, regarding identifying Countries and Agencies for all Buoy Platforms.
9. Discussed the metadata provision from AOML for SEAS XBT SOOP data (Gustavo Goni), providing templates for preferable data formats, beginning 2006.
10. Familiarisation with the planned process for SOT-IV in 2007 (from information provided by the Chair). Reviewed draft agenda.
11. Drafted some work assignments for UNESCO Performance Monitoring process.

October 2006

1. Travelled to USA for DBCP22, JTA26 and other appointments
    a. Attended meeting of the IBPIO to attain a greater understanding of Data Buoy requirements and experiences specific to the Indian Ocean.
    b. The annual meeting of the North Pacific Data Advisory Panel allowed for familiarity with the DBCP activities relating to the North Pacific.
    c. The 22nd session of the DBCP, which was held in La Jolla, CA from 16 – 20 October 2006. Reported on activities as Technical Coordinator of the DBCP. Reported on several topics (implementation, information exchange, quality control, deployment opportunities, satellite data telecommunications, JCOMMOPS etc) and participated in additional discussions during and after meetings.
    d. Attended discussions about Pilot projects such as the Iridium Pilot project.
    e. Meeting with Ship Observations Team chair and others to discuss the proposed agenda for the SOT meeting in 2007

f. Meeting with Steve Cook, Chair of SOT Ship of Opportunity Implementation Panel to discuss some background and future plans for the panel.
g. Attended the 26th Argos Joint Tariff Agreement (JTA) session allowing for a greater understanding of the challenges facing Argos users and more familiarity with how Argos usage is managed.
h. Visited Pacific Marine Environmental Laboratory
i. Visited Applied physics Laboratory, University of Washington included an informal discussion with Ignatius Rigor about the aims and future plans of the Arctic Buoy Programme (IABP). Visited the School of Ocean Sciences focused on Instrumentation relating to Argo and prototype instruments such as Gliders

November 2006

1. Continued travel in the USA and other appointments
   a. Washington DC, the first visit was to the NOAA Office of Climate Observation for a discussion about requirements and the role of JCOMMOPS with Mike Johnson. Also visited Office of Oceanic and Atmospheric Research, AOML office, for a more practical understanding of the logistics involved in the XBT program run by the USA. Gary Soneira provided a lot of information about work completed in the past and how data was managed currently. Visited CLS America to meet the team representing North American Argos users.
   b. Atlantic Oceanographic and Meteorological Laboratory and Global Drifter Centre I discussed the logistics and practicalities of Drifter Deployment, Data quality and the SOOP Programme.
   c. Visited NDBC, which was very informative in the areas of Quality Control of data, logistics, and practicalities of Moored Buoy maintenance, the US VOS, and the overall role of NDBC within the US Programme. Visited Navoceano and discussed future requirements with the colleagues of Elizabeth Horton.
2. Met (along with Mathieu Belbeoch) with CNES Education Officer to discuss data for educational programme called Argonautica. The program will track data from Buoys and Floats and potentially deploy floats, for school children to study.
3. Reviewed Iridium Pilot Project whitepaper. Began putting together a Wiki site (this was moved to a static webpage eventually) see Draft Web page at http://www.jcommops.org/DBCP/iridium-pp/index.html
4. Arranged for a new email list for the Iridium Pilot Project iridium-pp@jcommops.org and added initial addresses.
5. Attempted to resolve issues with Wikipedia web page for Meta-T pilot project (without success). Fortunately the site could be moved to http://marinemetadata.org/examples/external/meta-t
6. Provided information to the future chair of the DBCP Evaluation group (Bill Burnett) about the groups participants and email list
7. Distributed International Arctic Buoy Programme (IABP) deployment plans for the International Polar year to interested parties. Updated the deployment plans web page. http://www.jcommops.org/depl_opport/depl_opport.html
8. Reviewed the functionality and aims of the NOAA Observing System Monitoring Centre. http://osmc.noaa.gov/OSMC/
9. Prepared DBCP Work plan for 2007 Intersessional Period including incorporating tasks from the previous year and the workshops in Reading, UK in 2006. Distributed the plan to all attendees at the DBCP.

December 2006

1. JCOMMOPS Metadata for active Moored and Drifting Buoys is far better than it has been since Etienne Charpentier at the start of the year vacated the TC role. Requested the CLS (Fernand

Cid) delete incorrect data in the Argos GTS Subsystem.
2. Assisted JTA Chair (Yves Treglos) with ways to manage documentation for JTA in the future.
3. Visited Météo France, IFREMER and IRD in Brest, France.
4. Responded to an email from a participant in the "Windwalker II" cruise (Pablo Mejia) who was offering to collect SOOP data on the cruise. Suggestion from Australia (Graeme Ball) was that they should mount a drifter on the boat to collect some data during the cruise. Could also be used for deployments. Referred Pablo to AOML for sourcing a buoy and to discuss deployments.
5. Reviewed proposals from DBCP Chair and Training workshop plans for 2007.
6. Contacted Turkish Met Office regarding the Moored buoy program.
7. Updated information about South African Deployment opportunities.

January 2007

1. Reviewed notes about Drifting Buoy and SOOP metadata for the Meta-T project. Feedback provided to Elanor Gowland.
2. Made minor changes to SOOP website for a more consistent look and feel.
3. Along with Mathieu Belbeoch worked on enabling Web Map Services from ArcIMS mapping applications on JCOMMOPS website. EG. Dynamic Map of DBCP monthly status: http://w4.jcommops.org/wmsconnector/com.esri.wms.Esrimap?request=getMap&ServiceName=DBCP&Service=wms&Version=1.1.1&Layers=0,12,13,1,By%20country&SRS=EPSG:AUTO&bbox=-180,-90,180,90&width=800&height=400&Format=image/png
4. Described the Quality Control relay process to Bruce Lohnes and Bill Burnett based on a request about GTS data errors going to NDBC
5. Responded to a query from Japan about data from their XBT samples on line PX40, which do not appear to be on the GTS. Problem was found to be at the source, as data was erroneous.
6. Discussed ways to manage JTA contacts and national reports with CLS (Philippe Gros) potentially using JCOMMOPS web page and applications.
7. Began reviewing the DBCP Brochure (from 2001) to implement updates.
8. Began testing and reviewing the functionality and aims of the latest beta version of the NOAA Observing System Monitoring Centre. http://osmc.noaa.gov/OSMC/ to be fed back to NDBC and PMEL. Reviewing documentation provided by NDBC.
9. Met with Loic Petit La Villeon about SOOP metadata requirements.
10. Discussed and saw a demonstration of the Argos User Office system with CLS (Philippe Gros) and requested a list of programmes with contacts and countries to try to resolve metadata issues with "Programs" in the JCOMMOPS database.

February 2007

1. Completed Performance management for UNESCO. Prepared TO-Do list. Compiled list of High, Medium and Low priority tasks, including estimates of Priority, due dates and duration of the task
2. Reviewed Iridium project plan and reviewed proposal by Marlin Yug for participation in Iridium Pilot Project
3. Discussed sources of Ocean Platform Metadata with project coordinator (NDBC) of the NOAA Observing System Monitoring Centre
4. Resolved a GTS data routing issue with 5 Moored Buoys in Korea as Météo France was not receiving the data, with assistance from NOAA and Météo France. Contacted Offenbach GTS coordinator to request routing of SSWB19 RKSL and SSWB41 RKSL to close the loop.
5. Wrote content for and reviewed Argos Flash publication featuring ocean observations.
6. Reviewed documents for the DBCP Training Course
7. Reviewed Meta-T documents and provided feedback, requesting the requirements or suggestions to changes to BUFR templates be put forward before April 2007.
   o Categorization of metadata and requirements, v2
   o Requirements matrix, v2

8. Assisted Kenyan Meteorological Service with accessing GTS data from buoys recently deployed by them. Updated contacts (JCOMMOPS database and mailing lists) for Kenya due to the departure of Ali Mafimbo.
9. Created a news item on the JCOMMOPS website about Drifter 1250 being recovered.
10. Developed a script for the Argo TC to calculate density of the Argo Network over the globe, based on existing platforms.
11. Prepared content for JCOMM OCG meeting document on JCOMMOPS
12. Completed SOOP Monthly Bathy reports up to February 2007
13. Addressed outstanding action items from SOT III
14. Corresponded with Justin Dunning concerning FerryBox project, advising him to work with Franciscus Colijn who was to present at SOTIV
15. Prepared documents for SOT-IV meeting
16. Prepared presentations of SOT-IV meeting
17. Assisted SOT chair with preparation of documents for SOT-IV meeting – particularly in defining the scope of the Technical Coordinator position description.
18. Updated the VOS monthly map content and presentation, based on feedback from WMO and the VOS chair
19. Worked with SOT chair on proposal for hosting SHIP Masking lookup table in the JCOMMOPS database
20. Worked on proposal for WMO on hosting of Publication 47 at JCOMMOPS
21. Discussed JCOMM with Co-chair, Peter Dexter

March 2007

1. Began updating the DBCP Brochure
2. Enhanced the script for the Argo TC to calculate density and average float age of the Argo Network over the globe, based on existing platforms and also using the data for planned deployments (as notified by operators).
3. Communications with SOOP Operators about the 2006 data – to clarify errors and seek data sets
4. Reviewed foreword for the DBCP Annual report 2006
5. Assisted CLS in obtaining Drifting Buoy from IOC for display in the foyer
6. Worked on documents for the meeting of the Expert Team on Data Representation and Codes
7. Followed up on a problem with serious delays in Buoy (Argos) data identified by Canada – CLS was aware of it and working on the issue
8. Prepared presentation for the SIMORC meeting in London, a workshop marking the official launch of the SIMORC service on the exchange and availability of ocean data and products to Oil and Gas Producers. Held on 28th March 2007 at the OGP offices in London. Presented JCOMMOPS - international coordination of data from ocean platforms for marine meteorology and oceanography. The focus was on deployment opportunities. http://info.ogp.org.uk/metocean/JIPweek/Agendas/SIMORC%20workshop.htm
9. Provided content for the JCOMM newsletter concerning the recovery of Buoy 1250 near Brest, creating a map of the buoys track since September 2005.
10. Assisted Mathieu Belbeoch with the content of reports for the Argo Steering Team meeting.

April 2007

1. Reviewed documents for the DBCP Training Course
2. Worked with the Argo TC on document preparations for Observations Coordination Group meeting.
3. Provided input to Future of JCOMMOPS paper for OCG.
4. Consulted with Meta-T and DMCG about documents for the meeting of the Expert Team on Data Representation and Codes and BUFR templates. Finalised a single document for the meeting.

5. Finalised documents and presentations for SOT
6. Attended ESURFMAR VOS Technical Action group meeting, Geneva, April 2007
7. Attended SOT IV meeting Geneva, April 2007
8. Provided a demonstration of the interactive map at http://w4.jcommops.org/WebSite/SOTM to the VOS Chair.
9. Attended OCG meeting Geneva, April 2007
10. Attended the Expert Team on Data Representation and Codes on behalf of JCOMM, Darmstadt, April 2007.
11. Sat in on the GTSPP meeting Geneva, April 2007
12. Completed updates to http://www.jcommops.org/DBCP/gts which was to be provided by CLS to all new Ocean Users on commencement of new programmes.
13. Advised Kenyan Meteorological Department about data dissemination of buoys deployed recently
14. Prepared a presentation for Al Wallace to present at the IABP-17 meeting
15. Prepared a presentation for the E-SURFMAR DB-TAG meeting
16. Contributed to and reviewed the document for the Observations Coordination group about developments by JCOMMOPS. Reviewed the presentation.
17. Provided information about SOOP line sampling for the last 6 years to AOML (B Molinari)
18. Provided links to Shawn Smith for ESRI shapefiles of DBCP Status files

May 2007

1. Updates to Buoy Manufacturers list for DBCP
2. Preparations for the DBCP Training Course on Buoy Programme Implementation and Data Management.
3. Explained the process for the QC Relay mechanism to Germany (DWD) and created a user for them in the system, discussed some buoys in the Mediterranean.
4. Contacted Italy (P-M Poulain) about DBCP Google earth files and the Mediterranean buoys identified by Germany as in error.
5. Prepared charts for WMO for the DBCP Annual report 2006
6. New server installed at JCOMMOPS
7. Familiarisation with the Argos Web application and satellite prediction software.
8. Provided information to DBCP Training course trainers about the new Argos Web applications for modelling satellite coverage and tracks.

June 2007

1. Continued to install new software and make required changes to scripts for metadata processing and loading and mapping tools (both monthly static map configuration and dynamic web maps) on the new server
   WMO Rolling Requirements Review - Completed WMO Rolling Requirements Review on behalf of JCOMM
2. Updated the export processes for DBCP Google earth files
3. Continued work on the DBCP Brochure update.
4. Answered a query about mapping of Moored buoys from a Marine Surveyor (Mr Nicos Economides) in Cyprus with assistance from Météo France and WMO.
5. Changed links to WMO websites due to the development of the WMO website changing all URLs.
6. DBCP Training Course on Buoy Programme Implementation and Data Management Ostend, Belgium 11-15 June 2007. Prepared for and attended the course, presenting content on Quality Control and the Argos Web. Resolved some user issues raised by trainees (Brazil - CC Marcelo Fricks Cavalcante, Italy – Stefano Gallino, Pakistan - Tariq Ali Khan, Kenya – Paul Oloo and Tunisia – Sana Ben Ismail).
7. Replaced SOOP logo with new one provided by the Chair of SOT, changed ASAPP webpage to be ASAP instead

8. Set up a generic email address for Iridium Pilot Project data for all participants to view data flowing – address is dbcpiridium@gmail.com (username/password are available on request from the TC)
9. Checked on the status of Ice Mass Balance buoys in the JCOMMOPS database and the Argos System.
10. Attended IOC Assembly meeting, meeting with member state representatives and IOC colleagues

July 2007

1. Buoy Manufacturer Contact Details Update on «List of Buoy Manufacturers" http://www.jcommops.org/dbcp/1lobm.html –
2. Provided information to Rachael Foggit from FIO Marine about buoy manufacturers in Australia.
3. Provided buoy metadata information to CLS, J.M Zigna about buoys in the Gulf of Guinea and off Somalia.
4. CLS Presentation by Michel Guige about CLS' approach to incorporating Iridium in its business.
5. Updated DBCP action groups map to adjust the Indian Ocean action group and change presentation colours and fonts for greater clarity. See http://www.jcommops.org/dbcp/dbcp_ag.html
6. Produced a custom map for Australian BOM, Peter Dexter of observing platforms in the North and South Poles.
7. Looked at WMO numbering for moored buoys e.g. OceanSITES and TAO array to see if WMO rules are being followed.
8. Reviewed the checklist for Buoy Programme development coming out of the DBCP Training workshop.
9. Provided information to JMA, Takashi Yoshida about SOOP lines in the pacific as part of the Annual SOOP Survey
10. Provided ship metadata (for June) of ships moving between Buenos Aires and Cape Town for AOML, Derek Snowden to identify a ship to contribute to the high Density SOOP sampling in that area. Also explained how to use the interactive map at http://w4.jcommops.org/WebSite/SOTM
11. Uploaded SOT IV report onto the SOT webpage and into the JCOMMOPS database
12. Provided information to Kenyan Meteorological Service about data from buoys on the GTS

August 2007

1. DBCP Brochure update.
2. Assisted Kenyan Meteorological Service with accessing data from buoys deployed recently and accessing Argos Web with GDC's username and password
3. Uploaded GDP Drifter deployment instructions onto DBCP website.
4. Reviewed JCOMM document on 'Call for LETTERS OF INTENT to host an international Observing Programme Support Centre (OPSC)' and provided input as required.

3 DBCP Status and highlights (as of August 2007)

3.1 DBCP 22nd session, La Jolla USA 16-20 October 2006

The twenty-second session of the DBCP itself was held in La Jolla, USA from 16-20 October 2006, in the conference room of the Sea Lodge Hotel, at the invitation of both NOAA and Scripps Institution of Oceanography. More than 50 people from 12 countries attended the meeting, including representatives from National meteorological and oceanographic agencies, buoy manufacturers, satellite telecommunications providers and IOC and WMO. This was the first session for Hester Viola,

the new technical coordinator of the DBCP. With the help of the outgoing TC, she presented status and activity of all elements of her work as well as the work of JCOMMOPS.
The Technical and Scientific workshop took place in the first one and a half days of the main session addressing a large number of issues such as technical developments, instrument evaluation, network performance, operational enhancements, data telecommunication and assimilation, best practices, research and operational applications. Ken Jarrott (K.Jarrott@bom.gov.au) will continue to act as workshop Chair in 2007.
The Panel acted very positively to set aside funds to support these new activities, and instructed its chair to convene an Executive Board to make decisions on the Panel's behalf during the intersessional period and approved the use of DBCP funds to finance new initiatives.
The ad-hoc task team on the future strategy of the DBCP finalised its decisions and encouraged. further workshops, training programmes and capacity building, for instance, to engage new countries in the work of the Panel, both by increasing awareness and competence in the use of buoy data, and by fostering collaborative activities and deployment opportunities in critical and data-sparse areas and pilot projects to test new technologies. After discussion, the Panel approved a proposal to proceed with the DBCP Iridium Pilot Project, and tasked the DBCP Chairperson and Executive Board to establish a steering team and to finalize the terms of reference for the Pilot Project

3.2 The DBCP Iridium Pilot Project

The Pilot Project is evaluating and demonstrating the operational use of Iridium Satellite data telecommunication technology for the real-time collection of drifter data under various conditions. The project is offering an Iridium Upgrade scheme to encourage participation which will cover part of the up-front cost for approximately 50 platforms. A project website contains further information http://www.jcommops.org/DBCP/iridium-pp

3.3 DBCP Brochure update

- Sent requests to panel members for input and new photos for the brochure.
- Some replies were forthcoming and information was incorporated.
- Draft will be presented before or during the panel session

3.4 New server installed – for web mapping, web pages and FTP serving

- Installed new software and made required changes to scripts for metadata processing and loading and mapping tools (both monthly static map configuration and dynamic web maps)
- Familiarisation with the scripts to be re-configured on the new server for DBCP and SOT.

3.5 New server installed – for web mapping, web pages and FTP serving

- Standardised monthly map templates across JCOMMOPS for consistent look and feel.
- Modified the templates used and the reconfigured processes to make use of the new web server to increase efficiency
- Web Map Services now available for all maps

3.6 Buoy manufacturer Contact Details

- Updated the "List of Buoy Manufacturers" web page http://www.jcommops.org/dbcp/1lobm.html
- Emailed all Buoy Manufacturers who had not updated their contact details in the last year to see if they wanted to update or remove details from "List of Buoy Manufacturers" page
- Based on information received from individuals, the webpage was updated. Many emails bounced or no reply received, so entries were made invisible.
- Email sent to panel members to seek feedback on this (if there were errors or omissions – no feedback received).
- Thanks are given to those manufacturers who responded and to Bruce Sumner of HMEI for his assistance in this.

3.7 WMO rolling requirements

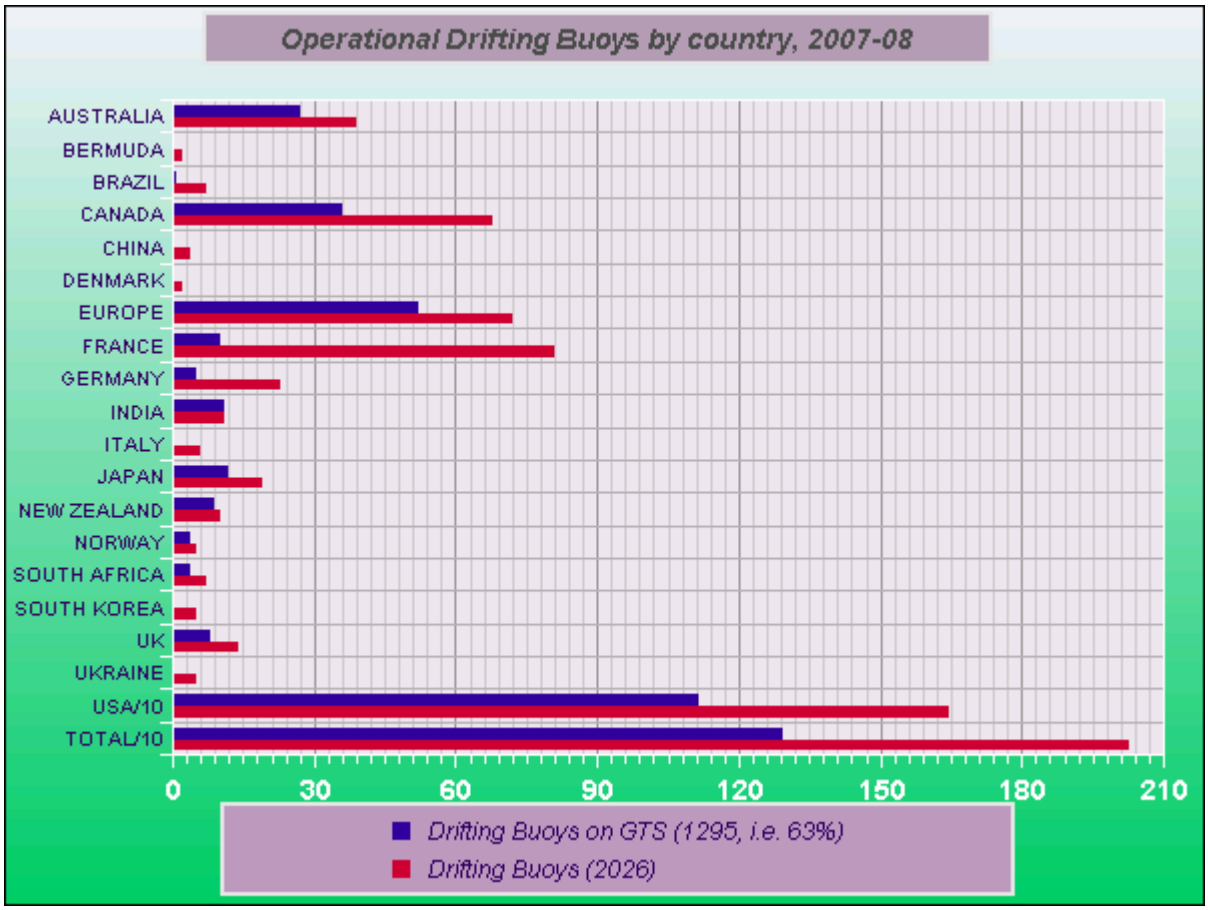
As previously completed in 1999, this was an updated assessment for each ocean area, variable, and instrument within the Global Ocean Observing System of sampling capabilities and sampling success

(or at least coverage). It included an assessment for all Ocean areas of

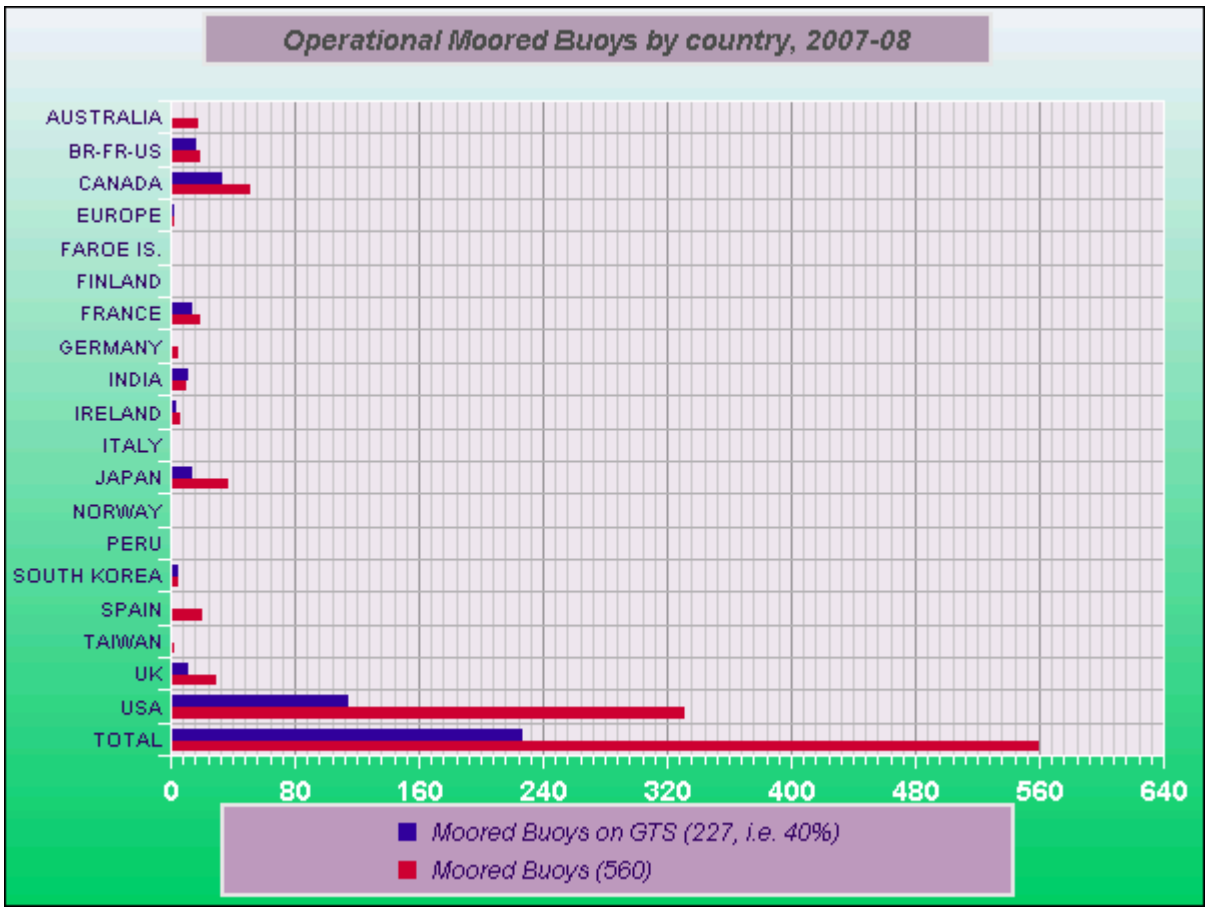
- Horizontal Resolution,
- Vertical Resolution,
- Accuracy,
- Typical Observing Cycle (calculated by computing the average observing cycle for all platforms of the same type and reporting from the same area),
- GTS/Data Delays and complementary information for the current status of the observing system.

This was a very lengthy process completed for all platform types i.e. drifting buoys(including surface currents), moored buoys (separately for TAO moorings), VOS Ship data, ASAP Radiosondes, SOOP XBTs, Argo Floats, TSG, OceanSITES, GLOSS Tide Gauges using different sources of information e.g. GTS data for previous month, SOOP survey for 2005, OceanSITES metadata listings for estimates.

3.8 Present status of buoy platforms



Graph 1. Drifting Buoys reporting via Argos and those on the GTS by country for August 2007:



Graph 2. Moored Buoys reporting via Argos and those on the GTS by Country for August 2007.

Amongst the drifting and moored buoys reporting on the GTS in BUOY (and SHIP) message formats; the following variables were measured in August 2007. There has been a significant growth in the number of buoys reporting Air Pressure in the last year, owing mainly to the US programme (110 added - some of which are barometer upgrades by other programmes, which show as US buoys), but also to Canada (29 added) and in part to Australia (7 added) and South Africa (5 added). For Moorings, however, a big drop was experienced between September and October 2006 in the number of US buoys sending data onto the GTS.

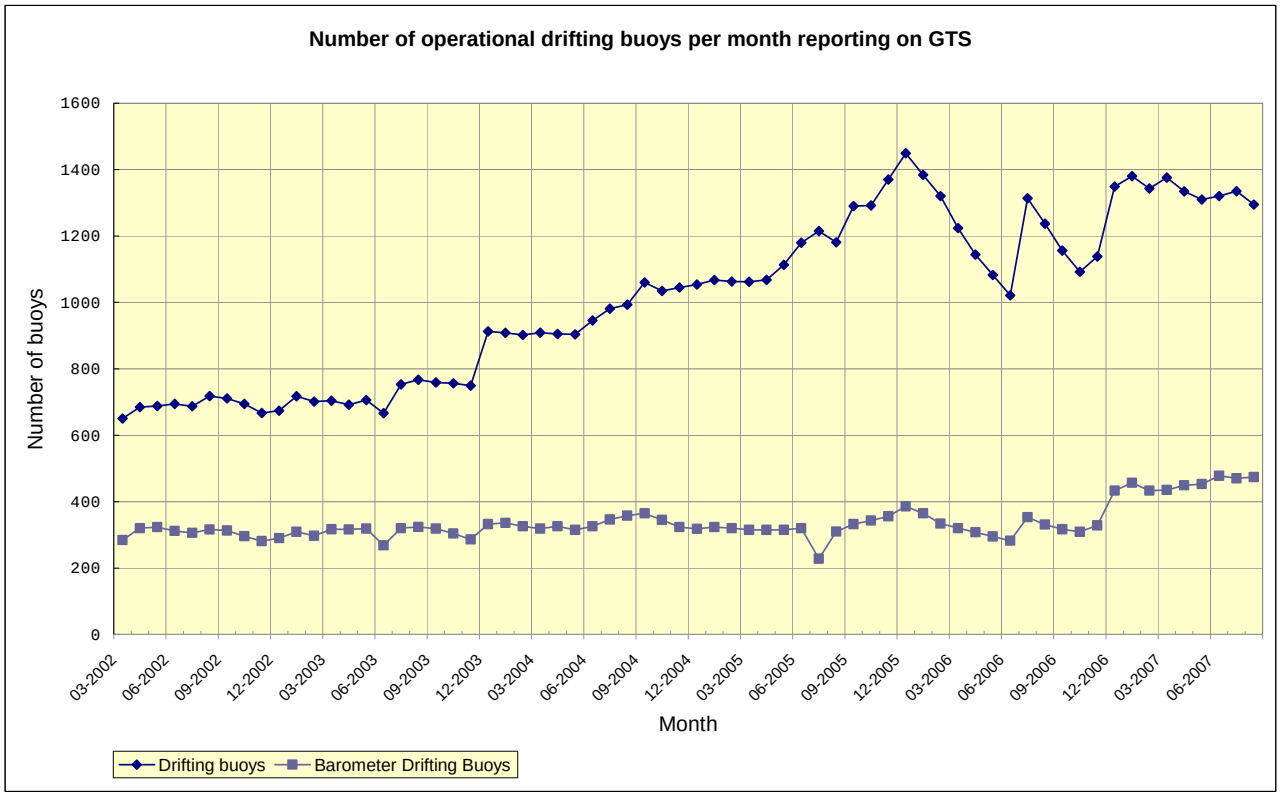
Variable	Any	Air P	Tend.	SST	Air T	Hum.	Wind	Waves	Sub/T
Drifting Buoys	1295	474	424	1139	46	1	11	9	12
Moorings	227	73	45	127	120	73	111	64	65
Remarks									TAO, PIRATA, TRITON.

Table 1. Drifting and Moored buoys – variables being reported on the GTS

3.9 Global Implementation

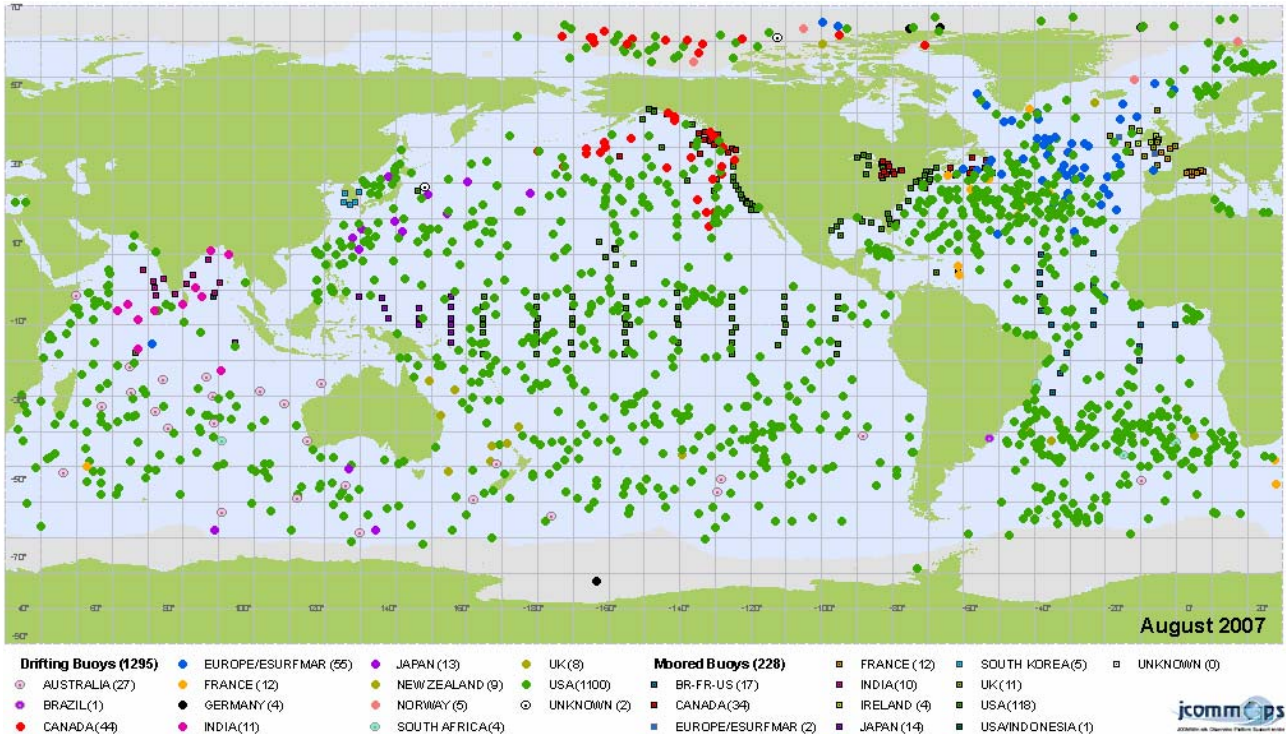
3.9.1 Status of operational buoys on the GTS

The graph below shows the number of operational drifting buoys over the last 5 years.

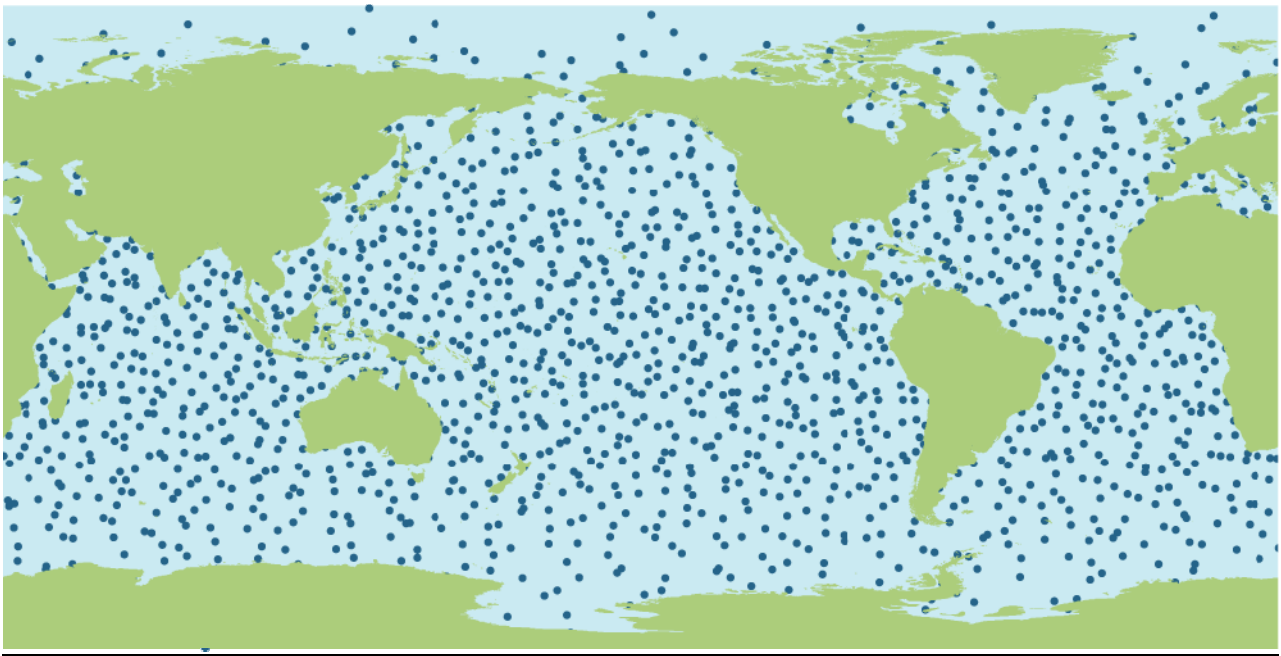


Graph 3: Monthly evolution of the number of operational drifting buoys reporting on GTS from March 2002 to August 2007 and those reporting air pressures.
Data derived by statistics computed from GTS *in situ* marine data provided by Météo France.
N.B. data for this chart was derived differently to the charts prior to 2006

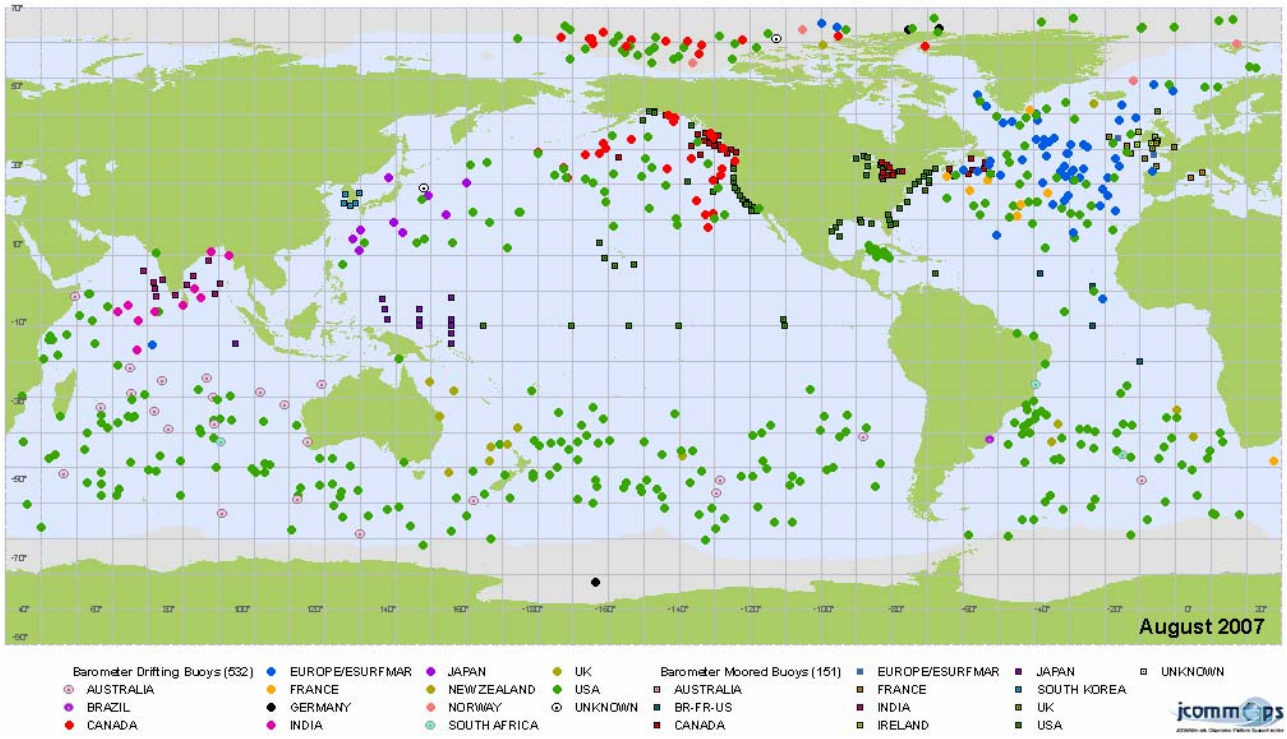
This graph shows the significant growth in the number operationally reporting air pressure measurements in the last year. The number of operational buoys has fluctuated a lot in the last 2 years, but the increase in the number of barometers on those buoys is a very positive sign for the panel. It shows that the barometer upgrade scheme offered by the USA is working and that the recommendation by the JCOMM Observations Programme Area to equip all buoys with barometers is being well supported. The graph does seem to show that the number of buoys has become more stable in the last few months though, presumably as buoy operators become more used to how many buoys need to be deployed to stay in 'maintenance mode' for the network. It appears that it will be a challenge for the panel to maintain its network above 1250 buoys, so efforts must be made in optimizing deployment opportunities (within DBCP and with other programmes), buoy lifetimes and also assessing where buoys need to be placed, to ensure an even coverage across the globe. International cooperation and good planning are the only way to ensure the maintenance of the network.



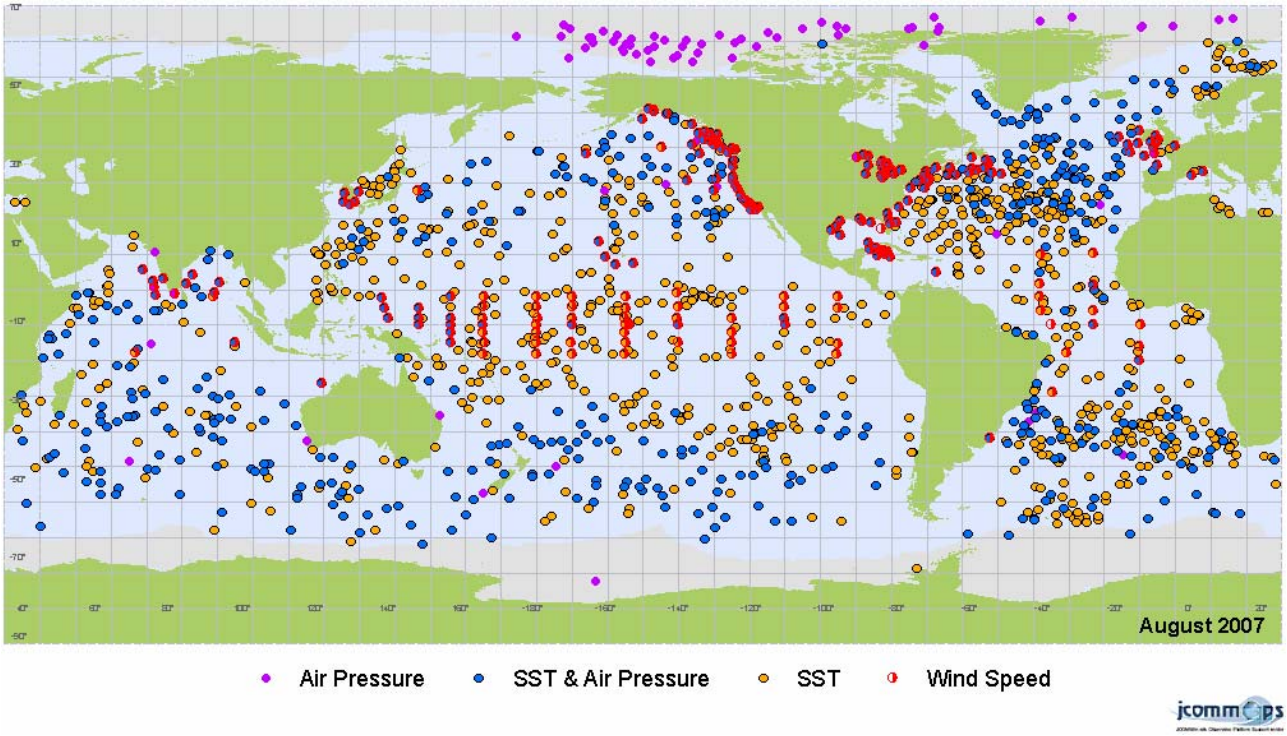
Map 1. DBCP monthly status by country for August 2007. (Data Buoys reporting on the GTS via Météo France)



Map 2. A theoretical network of drifting buoys randomly distributed at a resolution of 500km x 500km



Map 3. DBCP Barometer Buoy monthly status by country for August 2007. (Data Buoys reporting Pressure measurements on the GTS via Météo France)



Map 4. Drifting and moored buoys reporting SST, Air Pressure and Wind in August 2007. (Data Buoys reporting on the GTS via Météo France)

3.9.2 Evolution of drifting buoys reporting onto the GTS:

Year	Operational drifting buoys	On GTS	% on GTS
July 1991	718	264	36.8%
July 1992	1162	474	40.8%
August 1993	1269	548	43.2%
September 1994	1246	587	47.1%
September 1995	1429	631	44.2 %
September 1996	1180	638	54.1%
September 1997	1159	581	50.1%
August 1998	1230	543	44.1%
July 1999	1270	728	57.3%
July 2000	1385	807	58.3%
July 2001	1338	763	57%
July 2002	919	459	49.9%
August 2003	1436	752	52.3%
July 2004	1727	950	55%
June 2005	2396	1157	48%
August 2006	2218	1237	55%
August 2006	2026	1295	64%

Table 2. Evolution of GTS Buoy data percentage

Météo-France provided the Data Availability Index Maps on a monthly basis. The maps are useful to identify the data sparse ocean area for each kind of geo-physical variable and therefore to assist the various data buoy programmes in adjusting deployment strategies. The maps show clearly the impact of the TAO array ATLAS moored buoys (wind), of DBCP regional action groups such as the ISABP (air pressure), or of specific national programmes such as MSNZ (air pressure).

3.9.3 GTS bulletin headers:

All Local User Terminal sources comply with WMO regulations regarding GTS bulletin headers. See Annex A for a complete list of GTS bulletin headers used to date.

3.9.4 Platforms in the Southern Ocean – Air Pressure

The Southern Ocean Buoy Programme, as part of the DBCP Implementation Strategy, aims to have 80 operational drifting buoys with barometers distributed across the Seas south of 40°S. Currently the number of operational buoys is around 100 out of 168 (with an all-time high of 118 buoys in March 2007) which means this target is achieved and is successfully continuing in 'maintenance mode'. The broader plan as part of the JCOMM Observations Coordination Group's phased-in implementation plan is to eventually equip at least 700 drifting buoys with barometers outside of the tropics – meaning about 300 for the Southern Ocean. The panel is invited to discuss how this can be best achieved. The main participants were:

- NOAA/AOML, USA
- Alfred Wegener Institute, Germany,
- Bureau of Meteorology, Australia
- Dunstaffnage Marine Laboratory, UK
- Met Office, UK
- Météo France
- New Zealand Meteorological Service
- South African Weather Service

It is note that this year, being part of the International Polar Year, a lot more buoys were deployed around Antarctica (the Global Drifter Centre deployed 124 in the Southern Atlantic), however many of

these were not equipped with barometers and have subsequently moved out of the Southern Ocean region into the Atlantic.

Country	Buoys purchased	Additional upgrades	Total
Australia	5	5	5
France	0	14	14
Germany	4	-	4
New Zealand	0	10	10
South Africa	0	40	40
UK	6	-	6
USA*	?	-	?
Total		**64**	

Table 3. SOBP Proposed Commitments for the period September 2007 to August 2008
The Global Drifter Centre commented on the fact that deployment opportunities are very unpredictable in this region, so whilst commitments are made, the actual implementation is not assured.

The Global Drifter Centre, supported by NOAA, continues to offer the Barometer upgrade opportunity for standard SVP drifters for ~$1000 per unit (see: http://www.jcommops.org/dbcp/svpb_upgrade.html)

3.9.5 JCOMM

The TC attended the Observations Coordination Group meeting in April and contributed to the preparation of the initial paper about the Future of JCOMMOPS.
A map of the 1250 buoys track was prepared for JCOMM presentations showing its progress across the Atlantic Ocean between September 2005 and February 2007.
See the DBCP 23 document 8.5.1 for details about JCOMMOPS activities.

3.9.6 DBCP Action Groups

The DBCP has nine action groups - ESURFMAR, IABP, WCRP/SCAR IPAB, DBCP/PICES NPDBAP, TIP, GDP, ISABP, IBPIO and OceanSITES

This year the DBCP action groups map was updated to adjust the Indian Ocean action group and change presentation colours and fonts for greater clarity. See http://www.jcommops.org/dbcp/dbcp_ag.html

The TC liaised with DBCP Action Group coordinators and replied to questions from them, prepared DBCP reports for AG meetings (to be presented by the DBCP representative at the meeting) and attended meetings on behalf of the DBCP.

3.9.6.1 E-SURFMAR

EUCOS Surface Marine Programme (E-SURFMAR)

Area of interest: Ocean areas potentially impacting NWP over European countries. This basically covers the North Atlantic Ocean and the Mediterranean Sea.

Manager, E-SURFMAR: Pierre Blouch, Météo France

Chairman, Data Buoy Technical Advisory Group (DB-TAG): Jon Turton, UK MetOffice
Data Buoy Manager: Jean Rolland, Météo France
Web site: http://esurfmar.meteo.fr (username/password required, ask Jean Rolland for details)
Status: Network of 95 drifting buoys in August 2007 (plus 11 drifters not belonging to E-SURFMAR). 17 moorings (UK, France, Spain, Ireland) & 16 Wave Moorings (plus another 14 in the area not operated by E-SURFMAR). 4 active Iridium buoys are operating in the Atlantic and Arctic oceans. Météo France and the E-SURFMAR program are leading the way in testing Iridium satellite data telecommunications.
Meetings: The E-SURFMAR DB-TAG met in May 2006 in Larnaca, Cyprus.

Financial recompense will be received by the countries deploying drifting buoys and maintaining moorings on behalf of E-SURFMAR.

Small non E-SURFMAR contributions by European countries are made which slightly increases the overall level of drifting buoys deployed by these countries compared to what it was with EGOS.

3.9.6.2 IABP

International Arctic Buoy Programme (IABP)

Chairperson: Timothy Goos, Environment Canada
Coordinator: Ignatius Rigor, University of Washington
Web site: http://iabp.apl.washington.edu/
Area of Interest: Central Arctic Ocean and its marginal seas, excepting Exclusive Economic Zones where agreements of the Coastal States have not been obtained.
Status: 93 IABP buoys were operational in the Arctic basin in August 2007, 64 of those were reporting pressure. The Eurasian Arctic sector continues to be data sparse.
Meetings: 17th IABP meeting was held at the National Ice Centre in Washington, 24-25 May 2007. DBCP was represented by Al Wallace, Canada & as Nth American Vice-Chair.

- The IPY deployments have been highly successful in increasing the numbers of buoys, but also in testing new platforms and message formats. Plans are visible at: http://iabp.apl.washington.edu/Deploy2007/

3.9.6.3 ISABP

International South Atlantic Buoy Programme (ISABP)

Chairperson: Alaor Moacyr Dall'Antonia Jr., MHS, Brazil
Vice-Chairman: Ariel Troisi, Argentina
Coordinator: Johan Van der Merwe, SAWB, South Africa
Web site: http://www.dbcp.noaa.gov/dbcp/isabp/
Area of Interest: South Atlantic Ocean north of 55S plus Tropical Atlantic Ocean.
Status: 178 buoys reporting on GTS in August 2007, of these, 59 were reporting air pressure.
Meetings: The last meeting was held in Buenos Aires, 30 May – 2 June 2006. This meeting

stressed the importance of filling data sparse areas, including in the Gulf of Guinea, Drake Passage and Angola Basin. Next meeting planned early May 2008 tentatively in Cape Town.

3.9.6.4 IBPIO

International Buoy Programme for the Indian Ocean (IBPIO)

Chairperson: Graeme Ball, BOM, Australia
Vice-Chairman: K. Premkumar, India
Coordinator: Pierre Blouch, Météo France
Web site: http://www.shom.fr/meteo/ibpio
Status: 195 buoys were reporting from the Indian Ocean in August 2007, 120 with Barometers. IBPIO maintains a network of about 100 drifting buoys in the Indian Ocean. NIOT moorings also provide valuable data as well as four TRITON and ATLAS buoys from the TAO Array.
Meetings: The 9th meeting was held in La Jolla, 13 October 2006.

3.9.6.5 IPAB

WCRP International Programme for Antarctic Buoys (IPAB)

Chairperson: Shuki Ushio
Coordinator: Christian Haas, AWI, Germany
Web site: http://www.ipab.aq/
Status: In August 2007, 29 drifting buoys were reporting on GTS in BUOY code from the Antarctic region (i.e. south of 55S). 15 of these buoys were reporting air pressure.
Meetings: The 6th meeting was held in Hobart, Tasmania, 11 July 2006 (IPAB IPY meeting).

3.9.6.6 GDP

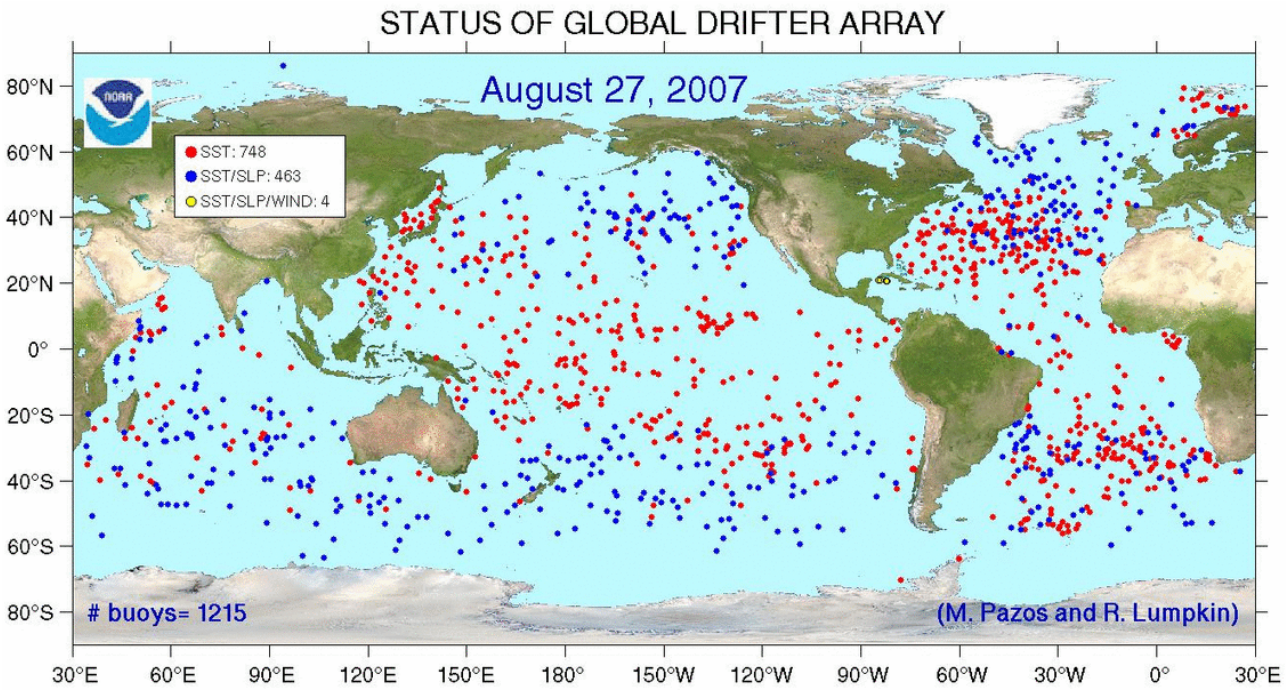
Global Drifter Programme (GDP)

Chairperson: Rick Lumpkin, NOAA/AOML, USA
Manager, GDC: Shaun Dolk, AOML, USA
Web site: http://www.aoml.noaa.gov/phod/dac/gdp.html
Status: The Global Drifter Centre (GDC, http://www.aoml.noaa.gov/phod/dac/gdc.html) is part of the NOAA's Global Ocean Observing System (GOOS) Centre in Miami, Florida. There were 1215 operational drifters in August 2007, 463 of those reporting air pressures.

The GDC supports the upgrading of SVPs to SVPBs by any country which desires to do so and it is working closely with those countries in coordinating the shipping and deployment of those upgraded drifters.

The GDC and its related Data Assembly Centre (DAC) provides products through the following web site: http://www.aoml.noaa.gov/phod/dac

The GDC encourages other drifter programs to contribute their data to the DAC if those data are collected by the SVP WOCE type drifter with drogues set between 10 and 15 meters.



Map 5. Global Drifter Centre buoys as of August 2007.

3.9.6.7 TIP

Tropical Moored Buoy Implementation Panel
This programme includes 70 Moored buoys in the Pacific, 4 in the Indian and 19 in the Atlantic.
As of 1 Jan 2006, NDBC maintains the official TAO web site for data display and distribution.
In 2006, extra resources became available allowing PMEL to:

- Accelerate development of Indian Ocean moored buoy array
- Add surface salinity sensors to all TAO moorings in the Pacific to improve definition of salinity variability, improve seasonal-interannual forecasting, and provide data for satellite validation (SMOS/Aquarius).
- Upgrade for 4 TAO and 3 PIRATA moorings to OceanSITES reference station standards for improved surface flux measurements.
- Provide 4 additional buoys for the PIRATA array in the hurricane-genesis region of the tropical North Atlantic Ocean for improved understanding of ocean-atmosphere interactions on hurricane development (NE Extension moorings).
- Support technological development of the next generation of moored buoys.

In 2007, NDBC became responsible for all fieldwork and maintenance programmes. There has been no break in continuity of the data stream and the process so far has been transparent to TAO data users.
Japan is also well supported financially to continue maintaining and expanding the TRITON array.

3.9.6.8 DBCP-PICES NPDBAP

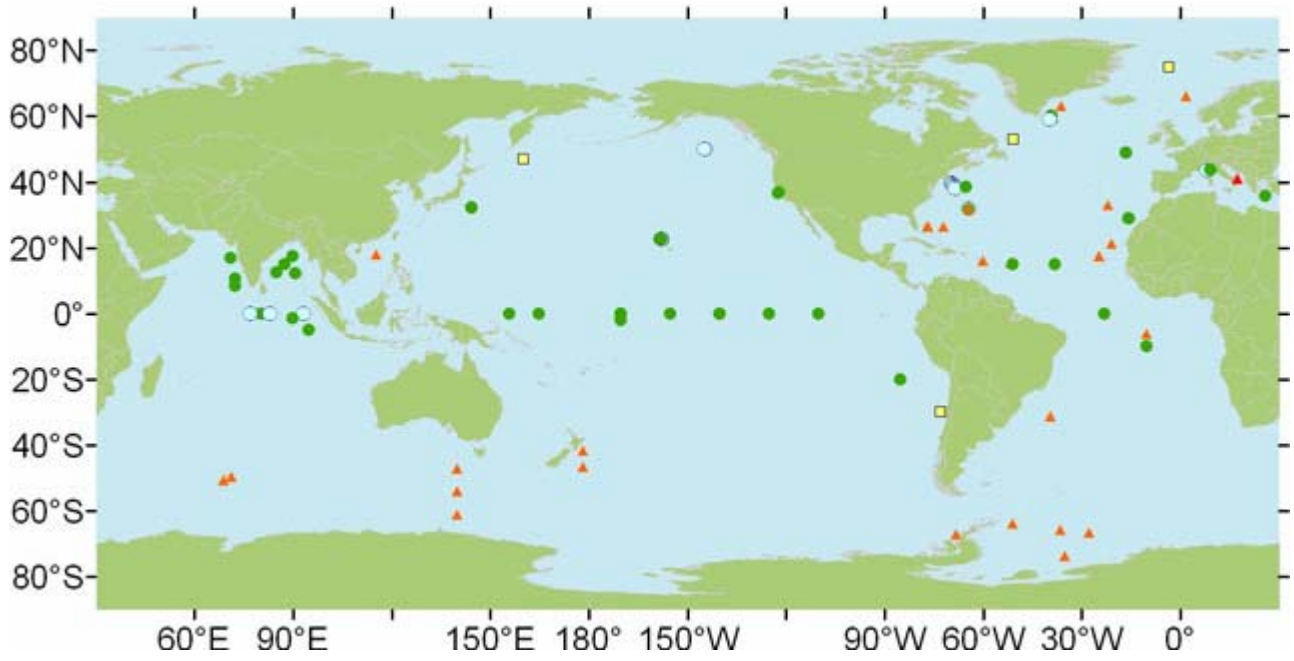
DBCP-PICES North Pacific Data Buoy Advisory Panel (NPDBAP)

Co-Chairmen: NE Pacific: Al Wallace, Environment Canada
NW Pacific: To be proposed by PICES
Coordinator: Shaun Dolk, NOAA/AOML

Area of Interest: North Pacific Ocean and marginal seas generally north of 30°N.
Status: The NPDBAP aims an operational network of about 120 buoys north of 30N in the Pacific Ocean. In August 2007 141 drifters were operational in the NPDBAP region. 62 have barometers.
Web site at: http://npdbap.noaa.gov/
Meetings: Last meeting was held in conjunction with DBCP-22 meeting in La Jolla, October 2006. This group would like to find a co-chair from an agency on the Western side of the Pacific

3.9.6.9 OceanSITES

OceanSITES is a global system of long-term, deepwater reference stations. The network now includes over 60 surface and subsurface arrays. The data from most sites are made available to the public in real-time or deferred mode. (See map below) Data are not public for a limited number of sites. OceanSITES data complement satellite imagery and ARGO float data by adding the dimensions of time and depth.
Co-Chairs: Bob Weller and Uwe Send
Web site: http://www.oceansites.org/



Map 7. OceanSITES Array as at August 2007

3.10 Quality Management

Refer to the related DBCP session agenda item (Quality Control of buoy data) for details.

3.10.1 Q.C. Guidelines

The TC monitored the list buoy-qir@vedur.is and forwarded messages appropriately, as well as and facilitated new subscriptions and maintaining contact details in the JCOMMOPS database to ensure that the correct people are contacted with this Quality Feedback. Created new users in the web application for entry of Quality feedback, at http://wo.jcommops.org/cgi-bin/WebObjects/QCRelay.

3.10.2 Buoy Monitoring Statistics

These statistics, provided by UKMO, NCEP, Meteo France, Australian BOM, ECMWF and Canada were uploaded when received into the JCOMMOPS database. These are queried using the tools provided on the website
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/statsSeries?prog=DBCP or
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/histogram?prog=DBCP

3.10.3 New buoys on GTS

The TC updated the web page describing the benefits of disseminating their data on the GTS and provided the update for CLS to use in its user office when creating a new programme or adding a new Argos User. See http://www.jcommops.org/DBCP/gts

All new Argos (Ocean) programmes are reported to the JCOMMOPS TCs monthly, by CLS user office, so that JCOMMOPS can be aware of potential new buoys which may not be on the GTS.

This should help to identify new buoy programme managers in order
(i) to convince them to authorise GTS distribution of their buoy data and
(ii) to offer assistance for that purpose.
The TC assists programme managers who authorise GTS distribution of their buoy data themselves.

3.11 Argos GTS Sub-System

The GTS sub-system permits the data to be processed, if adequate information is precisely implemented in the system. The TC is becoming more familiar with Argos' technical files for buoys and advanced forms of Argos messages.
The new Argos GTS system with be embedded in the application, so will be more integrated into CLS' business processes. The TC will undertake testing of this system when it is ready. There were serious delays in this system's processing experienced during March-June of 2007. It is a focus of the TC to ensure that the new system will not be subject to this sort of problem.

3.12 DBCP web server

For the DBCP web site, the Technical Coordinators' work concerned the following topics:

- Keeping regular files on the web server up-to-date (transfer files).
- Attempting to keep links to other servers up-to-date.

Refer to related DBCP session agenda item (Information exchange) for details.

3.13 Technical Coordination - statistics and graphs.

3.13.1 Maps

The technical Coordinators produced monthly maps (JCOMMOPS), including:

Dynamic maps:

- Maintained monthly dynamic map:
- http://w4.jcommops.org/WebSite/DBCP
- Maintained daily dynamic map (drifter trajectories):
- http://w4.jcommops.org/WebSite/DBCP_RT

- Maintained dynamic map of all JCOMM observing systems
  http://wo.jcommops.org/WebSite/JCOMM

Static maps:

DBCP
Buoys by Country:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=DBM_CNTRY
Barometer Drifting Buoys by Country with SST and Wind:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=DBPM_CNTRY
SST, Barometer and Wind Buoys:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=DBM_SPW

JCOMM
All in situ marine observations:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=GTSM_FMT
All Floats, Drifting and Moored Buoys:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=BUOYS
All Floats, Drifting and Moored Buoys - Polar areas:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=BUOYS_POLES
Sub-surface temperature profiles:
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=GTSM_TZ

3.14 Miscellaneous

3.14.1 Argos monthly status report.

The TC checked the Argos monthly status report which was prepared by CLS, Service Argos for WMO.

3.14.2 WMO/Argos number cross-reference list and PGC list.

Monthly list of active buoy WMO numbers is available via JCOMMOPS through
(i) a dynamic web page which permits to query the JCOMMOPS database (http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/wmo)
(ii) a file updated daily which can be downloaded from the JCOMMOPS ftp site. (ftp://ftp.jcommops.org/JCOMMOPS/GTS/wmo/wmo_list.txt).

The database includes WMO numbers for buoys transmitting on GTS via Argos and Local User Terminals (LUT). For each WMO number, one can obtain the Argos or platform number, the drifting buoy owner and the dates the WMO numbers have been introduced or removed from the system (Argos or LUT).
The creation of this file was migrated to the new server.

3.14.3 TC DBCP quarterly report.

The TC provided a quarterly report (up until April 2007) of work completed, the next report will be produced in December 2007 and regularly, every 3 months after that.

3.14.4 Documentation, Assistance.

The TC provided users with documentation or status reports concerning specific programs or experiments. She also answered specific questions regarding the Argos System.

3.14.5 TC DBCP missions.

The Technical Coordinators prepared for the various missions or meetings

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Appendix: 1

Appendix A

GTS bulletin headers used for GTS distribution of data in BUOY code

- Table A1: The headers for data distributed by the US Argos Global Processing Centre, Largo, USA

Bulletin header (BUOY)	Bulletin header (BUFR)	Deployment area	Remark
SSVX02 KARS	IOZX02 KARS	GDP	New
SSVX04 KARS	IOZX04 KARS	North Atlantic and EGOS	Same
SSVX06 KARS	IOZX06 KARS	Northern Hemisphere	Same
SSVX08 KARS	IOZX08 KARS	TAO, PIRATA	Was SSVX40 for TAO
SSVX10 KARS	IOZX10 KARS	Southern Hemisphere and ISABP	Same
SSVX12 KARS	IOZX12 KARS	Arctic, Antarctic, sea ice	Arctic, Antarctic merged
SSVX14 KARS	IOZX14 KARS	Indian Ocean and IBPIO	New
SSVX16 KARS	IOZX16 KARS	Navoceano	Same
SSVX18 KARS	IOZX18 KARS	Pacific Ocean	New
SSVX20 KARS	IOZX20 KARS	Navoceano	Same
SSVX22 KARS	IOZX22 KARS	Mediterranean sea	New
SSVX42 KARS	IOZX42 KARS	NOAA/NDBC, Southern Hemisphere	Was SSVX02
SSVX44 KARS	IOZX44 KARS	NE Pacific Ocean (USA and Canada)	Was SSVX18
SSVX48 KARS	IOZX48 KARS	NOAA/NDBC, Northern Hemisphere	Was SSVX08
SSVX96 KARS	IOZX96 KARS	NDBC	Same

- Table A2: Headers for data distributed by the French Argos Global Processing Centre, Toulouse, France

Bulletin header (BUOY)	Bulletin header (BUFR)	Deployment area	Remark
SSVX01 LFVW	IOZX01 LFVW	North Atlantic and EGOS	Same
SSVX03 LFVW	IOZX03 LFVW	Southern Hemisphere and ISABP	Same
SSVX05 LFVW	IOZX05 LFVW	Northern Hemisphere	Same
SSVX07 LFVW	IOZX07 LFVW	Arctic, Antarctic and sea ice	Arctic, Antarctic merged
SSVX09 LFVW	IOZX09 LFVW	Indian Ocean and IBPIO	New
SSVX11 LFVW	IOZX11 LFVW	TRITON	New
SSVX13 LFVW	IOZX13 LFVW	GDP	New
SSVX15 LFVW	IOZX15 LFVW	Pacific	New
SSVX21 LFVW	IOZX21 LFVW	Mediterranean Sea	New
SSVX39 LFVW	IOZX39 LFVW	French West Indies	Was SSVX19

Backup procedure:

The backup procedure in case one of the two Argos global processing centres fails has not changed. If one centre fails, the other centre processes all of the data, i.e. the data it normally processed plus the data the other centre normally processes. Hence, when an Argos centre is in “backup mode”, it will generate bulletins with even and odd numbers (in normal mode, only even numbers are used by Largo and odd numbers by Toulouse). For Example:

- In the case where the French Argos Global Processing Centre, in Toulouse, fails, the US Argos Processing Centre in Largo is switched to “backup mode”. In that case, GTS bulletins normally distributed from Toulouse (under TTAAii LFVW bulletin headers) are

distributed from Largo (under TTAAii KARS bulletin headers so, SSVX01 LFVW becomes SSVX01 KARS) and vice versa.

A remark concerning GDP:
Since all GDP drifters deployed worldwide may also participate in a DBCP regional action groups (e.g. ISABP, if deployed in the South Atlantic), the data users have to agree on a policy on which GTS bulletin header to choose. Considering that a GDP header was created for tracking Lagrangian drifters, it would be reasonable to recommend having all Lagrangian drifters participating in GDP report under the GDP bulletin header and not under the other DBCP Action Groups' headers. For example, a Lagrangian drifter participating in both GDP and ISABP (South Atlantic) and which data are distributed from the French Argos Global Processing Centre would report under SSVX13 LFVW (i.e. GDP) bulletin header and not under SSVX03 LFVW (i.e. Southern Hemisphere).

Table A3: Data routed from the National Data Buoy Centre (NDBC), Mississippi, USA, based on data received from Service Argos Inc. (SAI), Landover MD, USA

Bulletin header (BUOY)	Deployment area	Remark
SSVX42 KWBC	NOAA/NDBC, Southern Hemisphere	Was SSVX02 KWBC
SSVX48 KWBC	NOAA/NDBC, Northern Hemisphere	Was SSVX08 KWBC

Table A4: Data routed from NOAA, Washington DC, USA, based on data received from Service Argos Inc. (SAI), Landover MD, USA

Bulletin header (BUOY)	Deployment area	Remark
SSVX12 KWBC	Arctic Ocean	

Table A5: Data routed from Edmonton Local User Terminal (LUT)

Bulletin header (BUOY)	Deployment area	Remark
SSVX02 CWEG	Arctic Ocean	
SSVX03 CWEG	Hudson Bay	
SSVX04 CWEG	Northeast Pacific Ocean	

Table A6: Data routed from Halifax Local User Terminal (LUT)

Bulletin header (BUOY)	Deployment area	Remark
SSVX01 CWHX	North-West Atlantic Ocean	

Table A7: Data routed from the Centre de Meteorologie Marine, Brest

Bulletin header (BUOY)	Deployment area	Remark
SSVX07 LFPW	Arctic	
SSVX13 LFPW	EGOS	
SSVX51 LFPW	North Atlantic Ocean (Bodega-TOGA)	
SSVX55 LFPW	Equatorial Pacific Ocean (Bodega-TOGA)	

Table A8: Data routed from the Sondre Stromfjord Local User Terminal (LUT)

Bulletin header (BUOY)	Deployment area	Remark
SSVX01 BGSF	North Atlantic Ocean (EGOS)	

Table A9: Data routed from the Japan Meteorological Agency

Bulletin header (BUOY)	Deployment area	Remark
SSVX01 RJTD	Pacific Ocean (Japan, marine stations and buoys)	
SSVB01 - SSVB19 RJTD	Pacific Ocean (Japan, marine stations and buoys)	

Table A10: Data routed from the India

Bulletin header (BUOY)	Deployment area	Remark
SSVX01 DEMS	Indian Ocean (India, North Indian Ocean)	

Table A11: Data routed from the Korean Meteorological Administration

Bulletin header (BUOY)	Deployment area	Remark
SSWB19 RKSL	North Pacific	
SSWB41 RKSL	North Pacific	

Table A12: Data routed from Oslo, Norway

Bulletin header (BUOY)	Deployment area	Remark
SSVX01 ENMI	North Atlantic	