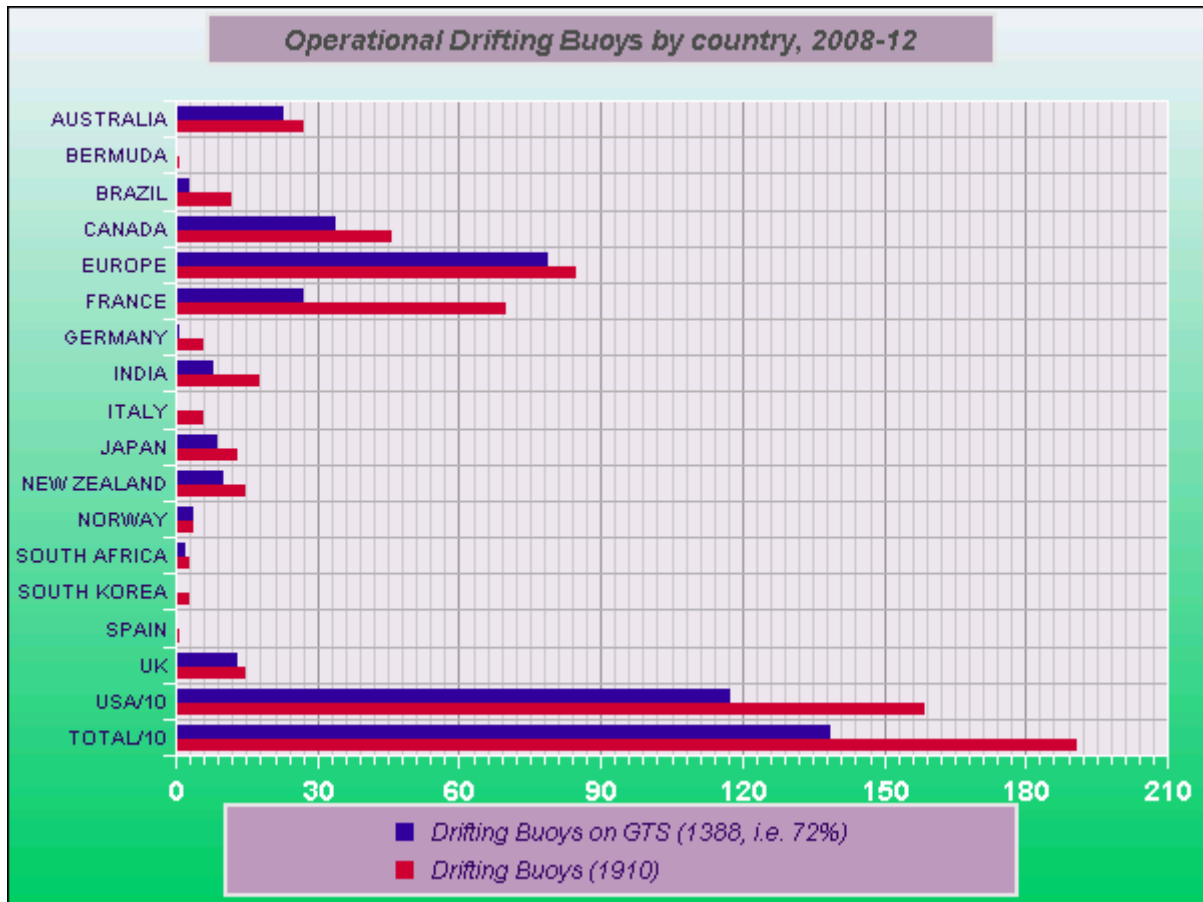
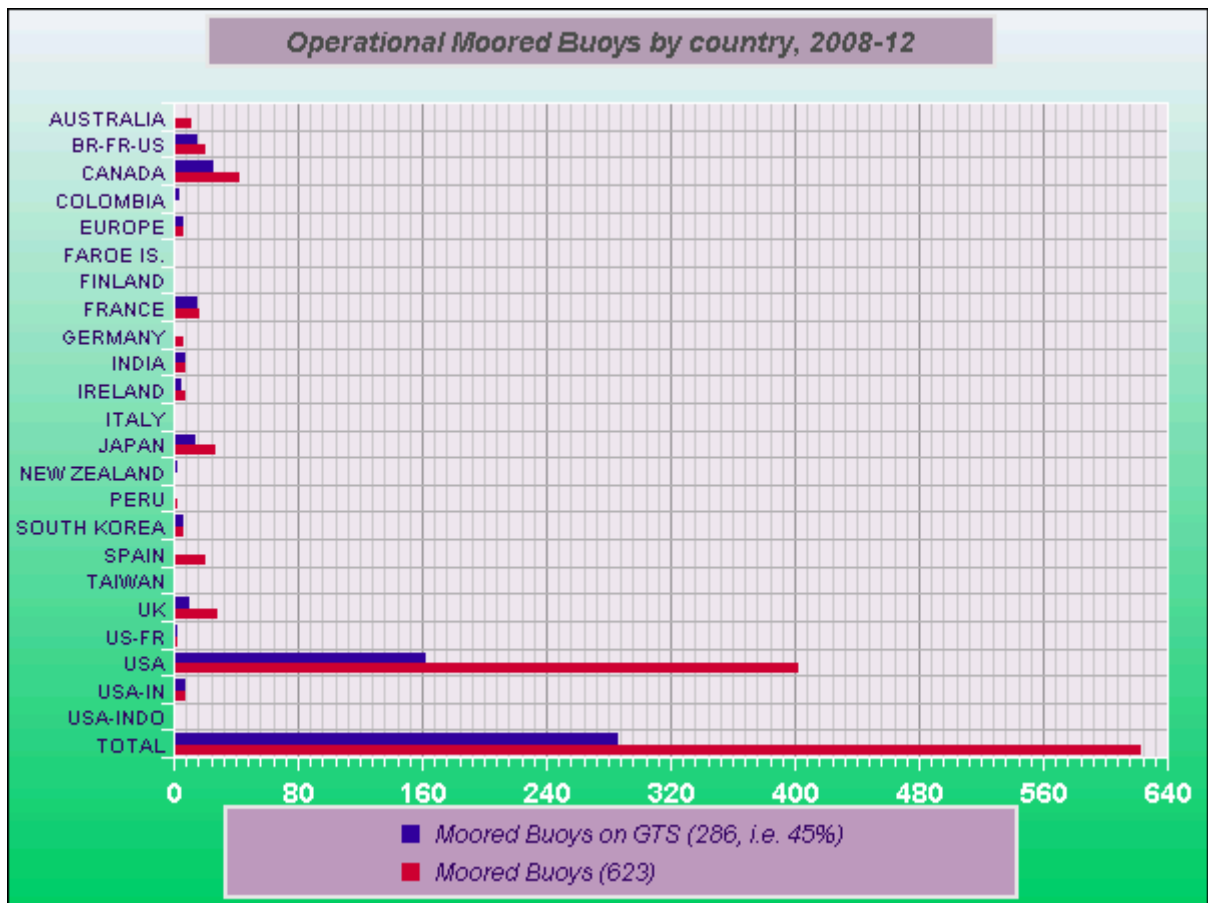


DBCP GTS DATA DELIVERY STATUS AND HIGHLIGHTS (2008)

1. Present status of buoy platforms:



Graph 1: Drifting Buoys (mostly reporting via Argos) and those on the GTS by country for December 2008.



Graph 2: Moored Buoys reporting via Argos and those on the GTS by Country for December 2008. N.B New Zealand 'Mooring' is a stationary drifting buoy.

1.1 Amongst the drifting and moored buoys reporting on the GTS in BUOY (and SHIP) message formats; the following variables were measured in July 2008. There has been a steady growth in the number of buoys reporting Air Pressure in the last year.

Variable	Any	Air P	P Tend.	SST	Air T	Hum.	Wind	Waves	Sub/T
Drifting Buoys	1388	628	541	1232	34	1	31	8	22
Moorings	286	175	139	236	230	140	217	169	81

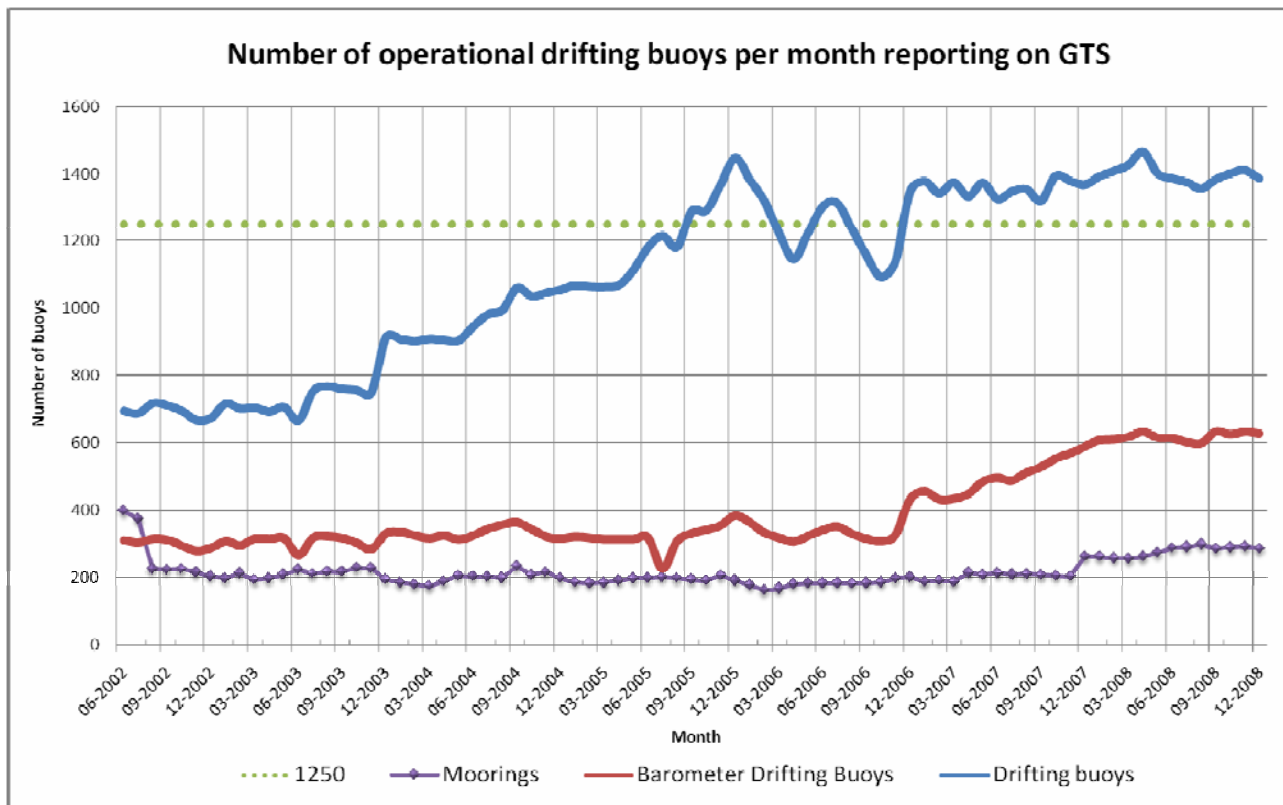
Table 1: Drifting and Moored buoys – variables being reported on the GTS

Year	Operational drifting buoys at JCOMMOPS	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 2007	2026	1295	64%
July 2008	2069	1377	66%

Table 2: Evolution of GTS Buoy data percentage

1.2 Météo-France provided the Data Availability Index Maps on a monthly basis. The maps were 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.

1.3 The graph below shows the number of operational drifting buoys over the last 6 years.



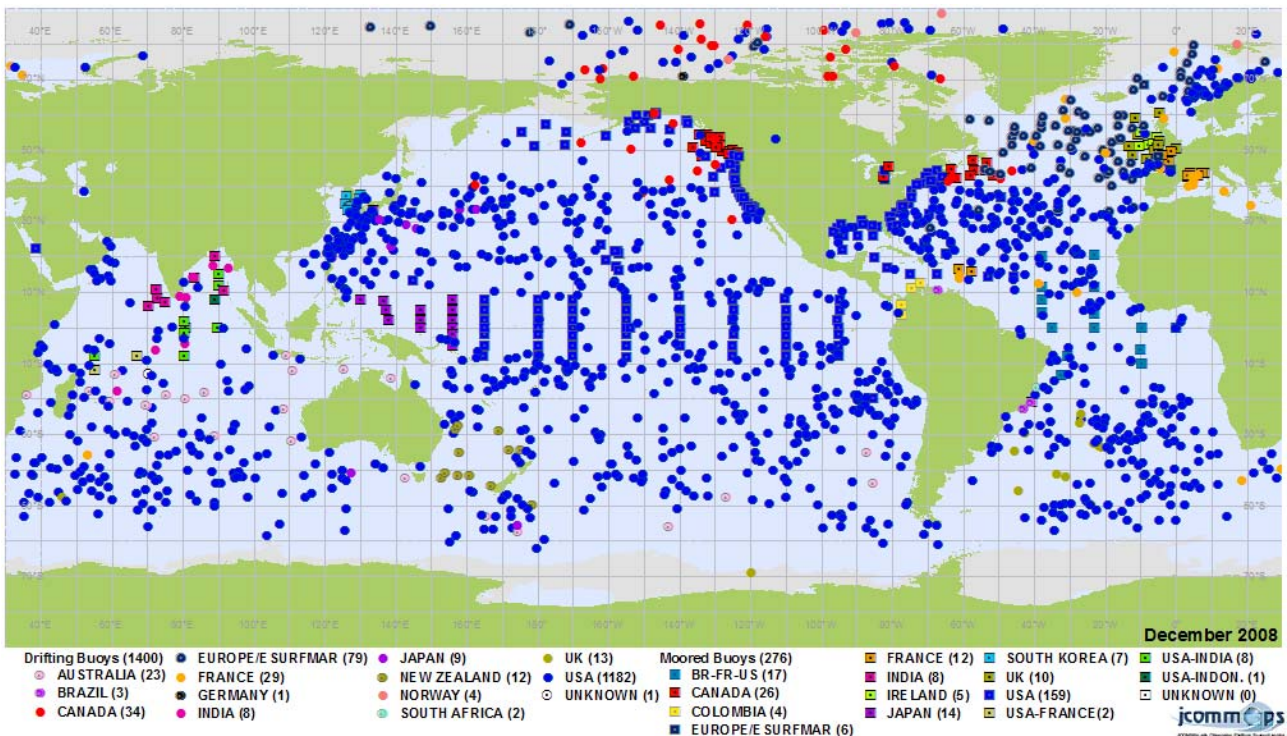
Graph 3: Monthly evolution of the number of operational drifting buoys reporting on GTS from March 2002 to December 2008 and those reporting air pressures. Operational Moored buoys are also included. (Data derived by statistics computed from GTS in situ marine data provided by Météo-France).

1.4 This graph shows the continued growth in the number operationally reporting air pressure measurements, though in the last three months that has levelled off a little. A significant growth occurred in the first half of the intersessional period, then a drop in April – May 2008. The inclusion of barometers on buoys has been well supported. The total number of buoys globally has become more stable in the last year than previously, presumably as buoy operators become more used to how many buoys need to be deployed to stay in ‘maintenance mode’ for the network.

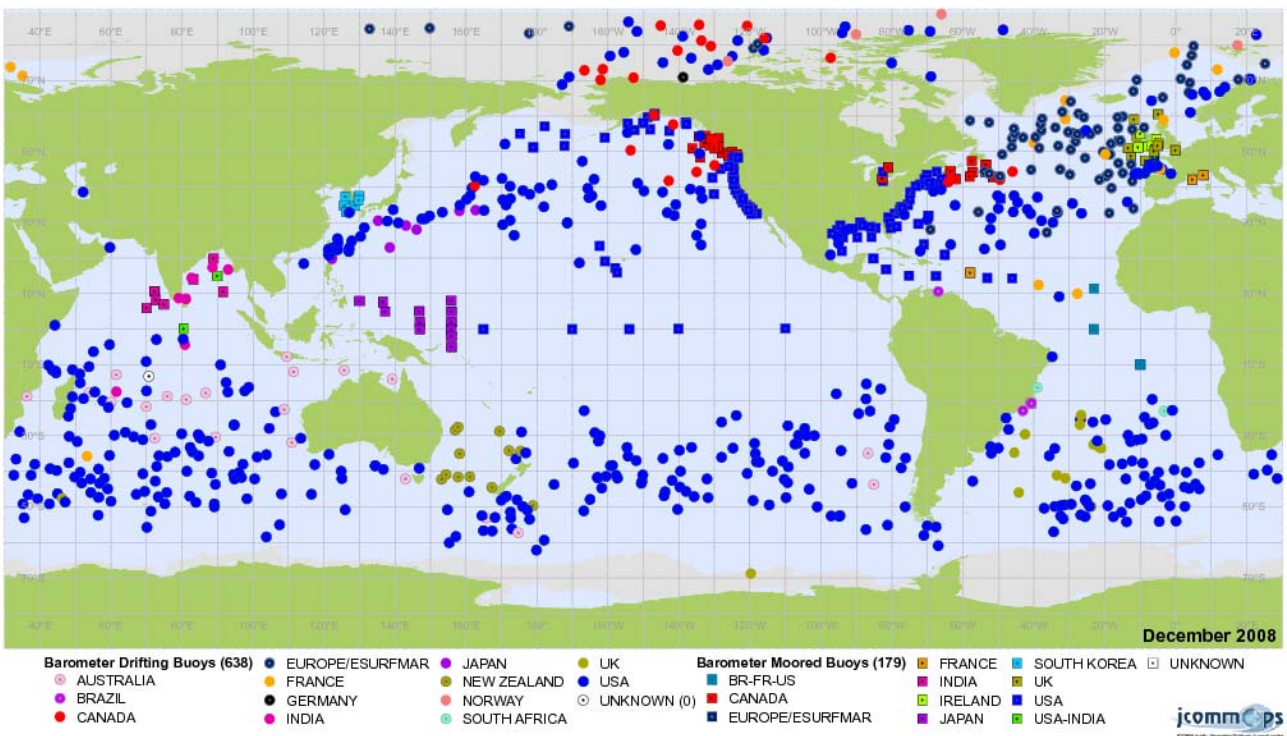
1.5 The Panel seems to be well prepared to maintain its network above 1250 buoys, but still, efforts are needed in sharing deployment opportunities (within DBCP and with other programmes), as well as assessment of buoy lifetimes and where buoys need to be placed, to ensure an even coverage across the globe.

1.6 The Global Drifter Center, supported by NOAA, continues to offer the Barometer upgrade opportunity for standard SVP drifters for ~\$1000 per unit (see the following URL for details: http://www.icommops.org/dbcp/svpb_upgrade.html). The goal of having a barometer on all buoys should be critically assessed by the Panel to see if that is achievable.

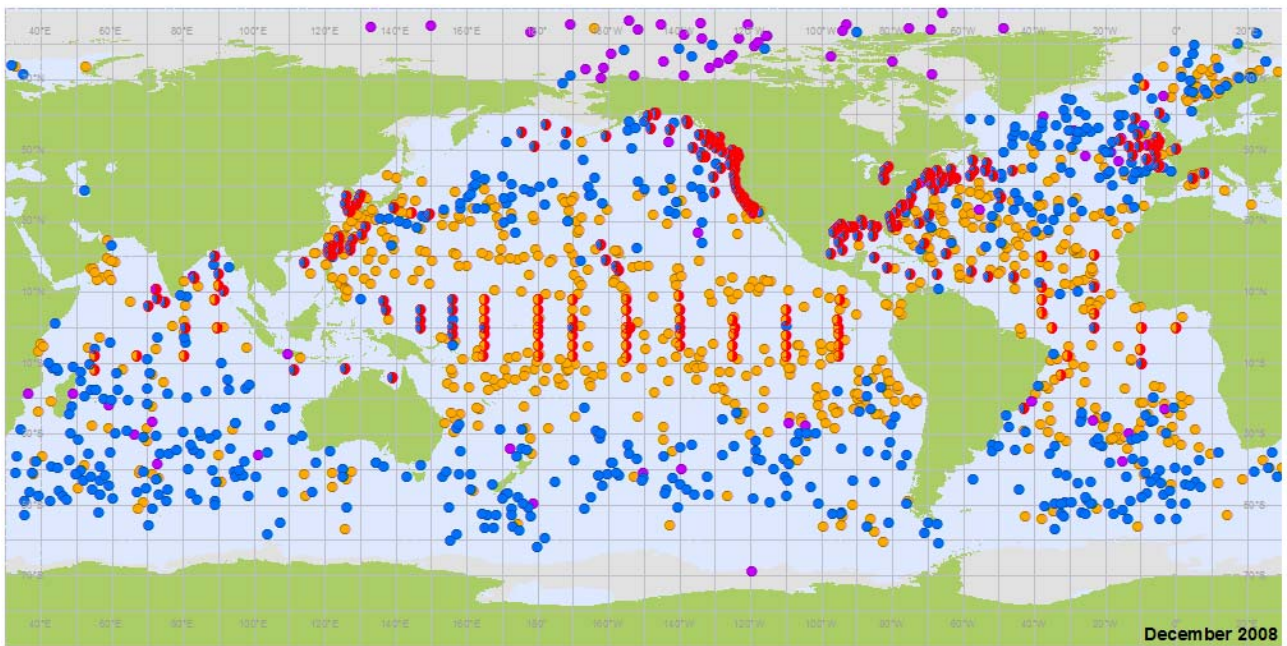
1.7 The map below shows that now the spread across the globe is fairly even and that the efforts of the Panel (the Global Drifter Program in particular) have paid off.



Map 1: DBCP monthly status by country for December 2008. (Data Buoys reporting on the GTS via Météo-France)



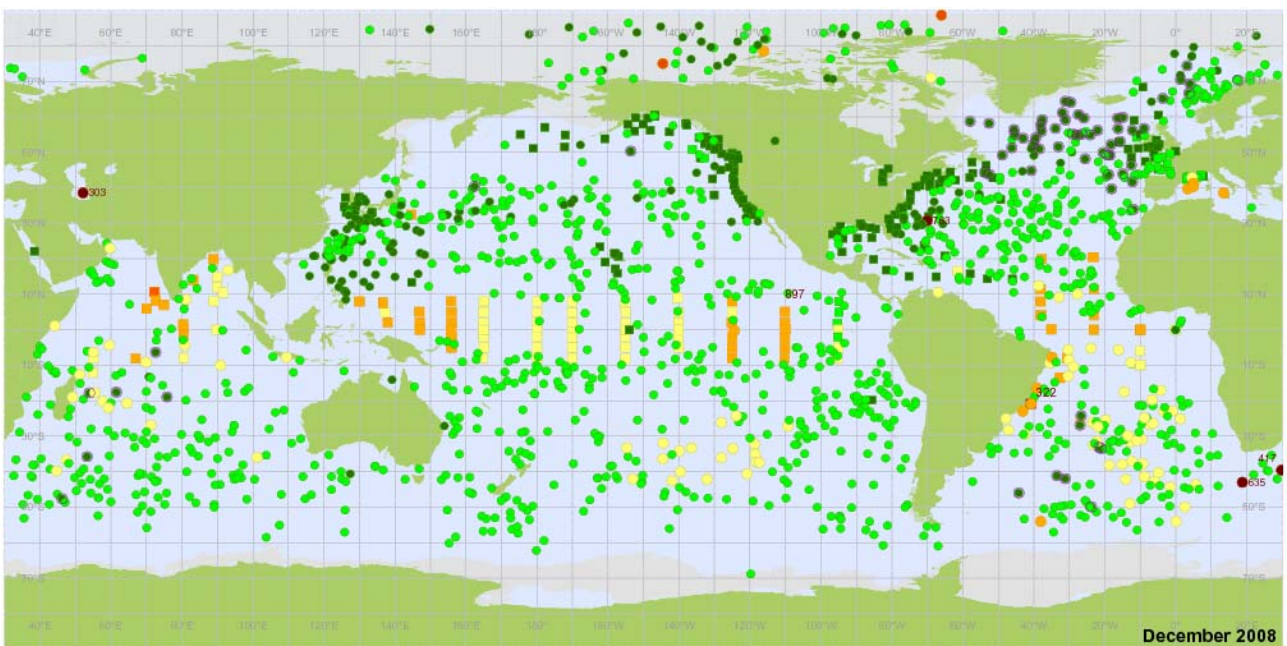
Map 2: DBCP Barometer Buoy monthly status by country for December 2008. (Data Buoys reporting Pressure measurements on the GTS via Météo-France)



● Wind Speed
 ● SST & Air Pressure
 ● Air Pressure
 ● SST



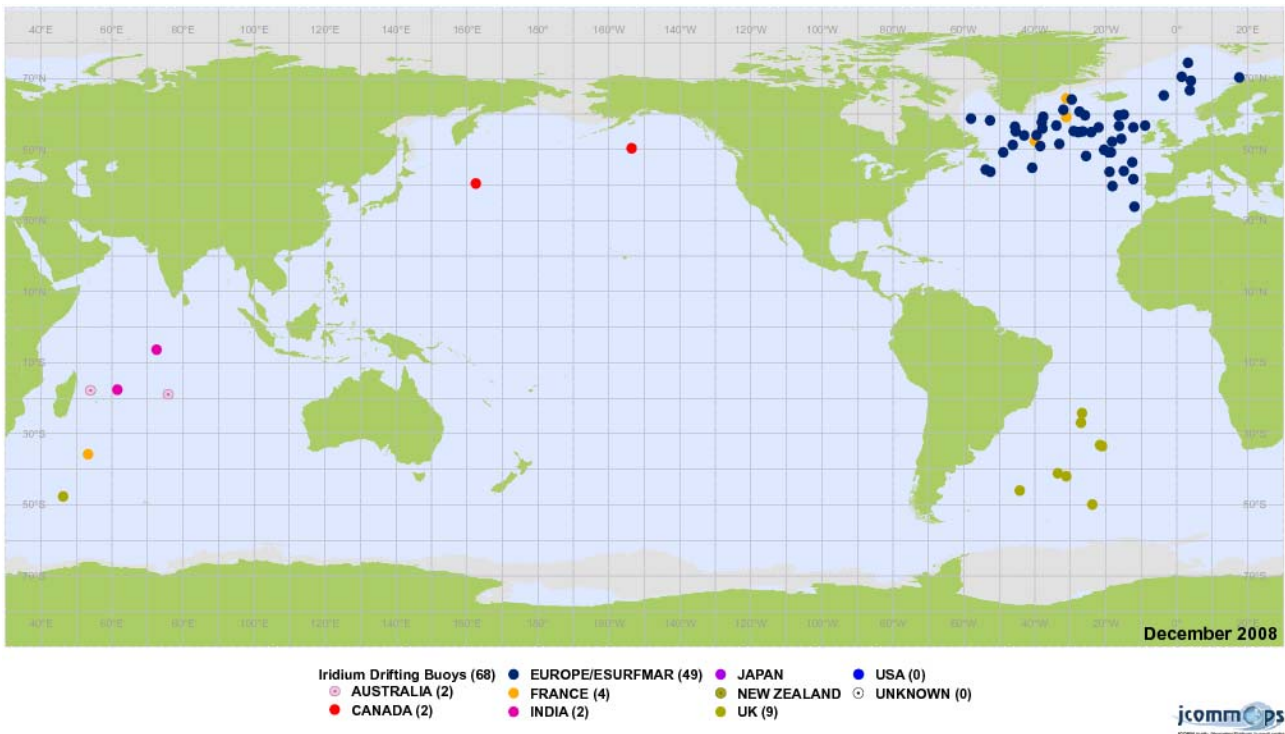
Map 3: Drifting and moored buoys reporting SST, Air Pressure and Wind in December 2008. (Data Buoys reporting on the GTS via Météo-France)



Average Delay (minutes)
 ● < 60
 ● 61 - 120
 ● 121 - 180
 ● 181 - 240
 ● 241 - 300
 ● > 300
 ○ DBCP Iridium Drifters



Map4: Average delays (reception time – observation time in minutes) for drifting and moored buoys reporting on GTS and received at Météo-France, December 2008.



Map5: Drifting buoys which data were collected via Iridium, December 2008.

2. Maps

The Technical Co-ordinator produced monthly maps, to include:

Dynamic maps:

- Maintained monthly dynamic map:
<http://w4.jcommops.org/WebSite/DBCP>
 or [Google Earth Version](#) (Updated Monthly);
- Maintained daily dynamic map (drifter trajectories):
http://w4.jcommops.org/WebSite/DBCP_RT
 or [Google Earth Version](#) (Daily Update for buoys reporting and 7 day tracks);
- Maintained dynamic map of all JCOMM observing systems
<http://w4.jcommops.org/WebSite/JCOMM> .

Static maps:

DBCP:

Files viewable at: <http://www.jcommops.org/DBCP/dbcpmaps>

- *Buoys by Country*
- *Barometer Buoys by Country*
- *SST, Barometer, Wind and Wave Buoys*
- *GTS Delays*
- *Iridium Buoys (68 Active Buoys at end 2008):* also see <http://www.jcommops.org/dbcp/iridium-pp/>.

JCOMM:

Files viewable can be located at <http://www.jcommops.org/FTPRoot/JCOMM/Maps/>.

- *All in situ marine observations:*
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=GTSM_FMT ;
 - *Sub-surface salinity and temperature profiles (now included in a single map):*
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=GTSM_SZ ;
 - *All Floats, Drifting and Moored Buoys:*
<http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=BUOYS> ; and
 - *All Floats, Drifting and Moored Buoys - Polar areas:*
http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/map?type=BUOYS_POLES .
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