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DBCP 25

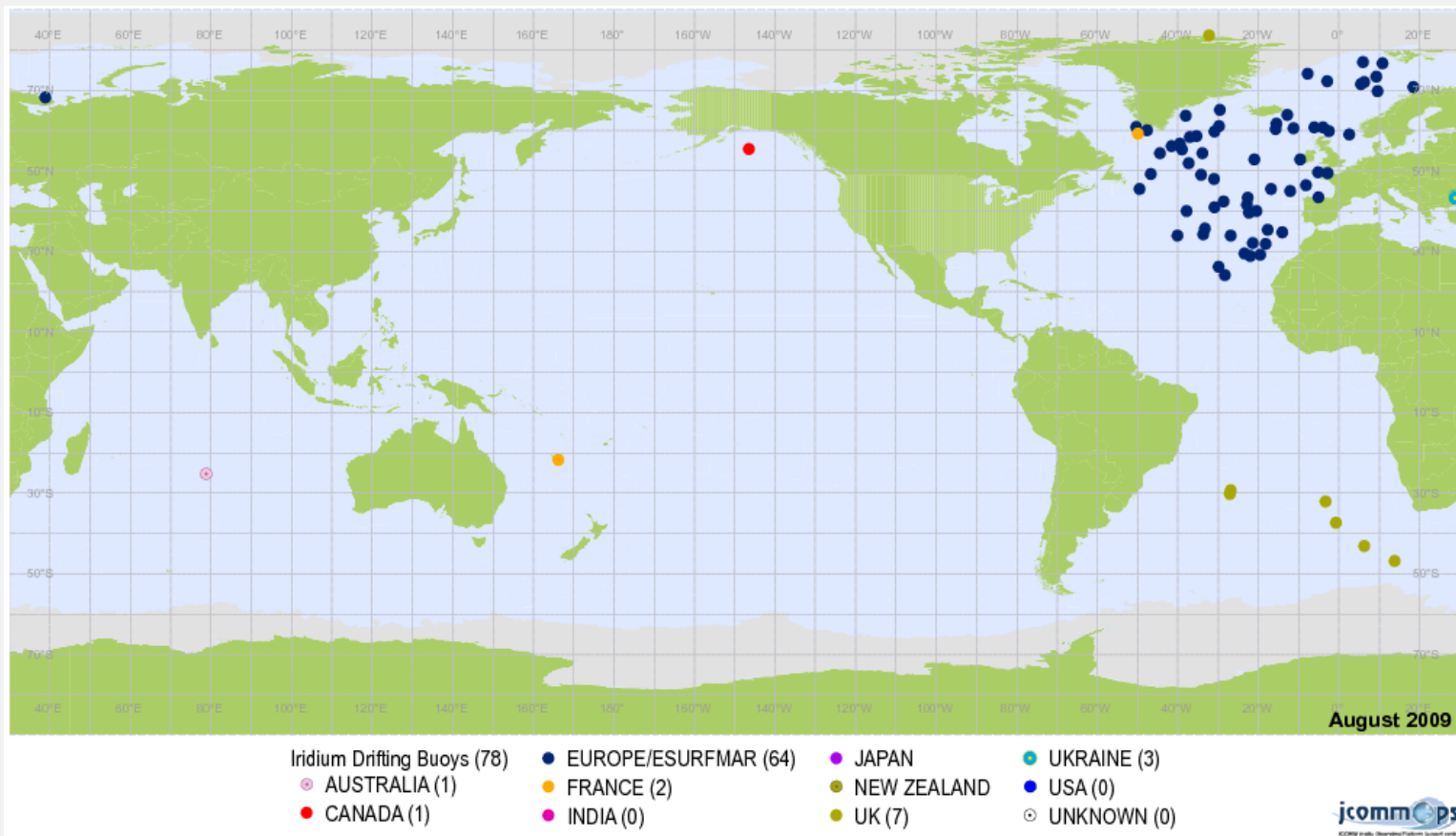
8.1 Iridium Pilot Project

Hester Viola


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Network status

- Project status - 78 Active buoys, out of ~150 deployed so far.



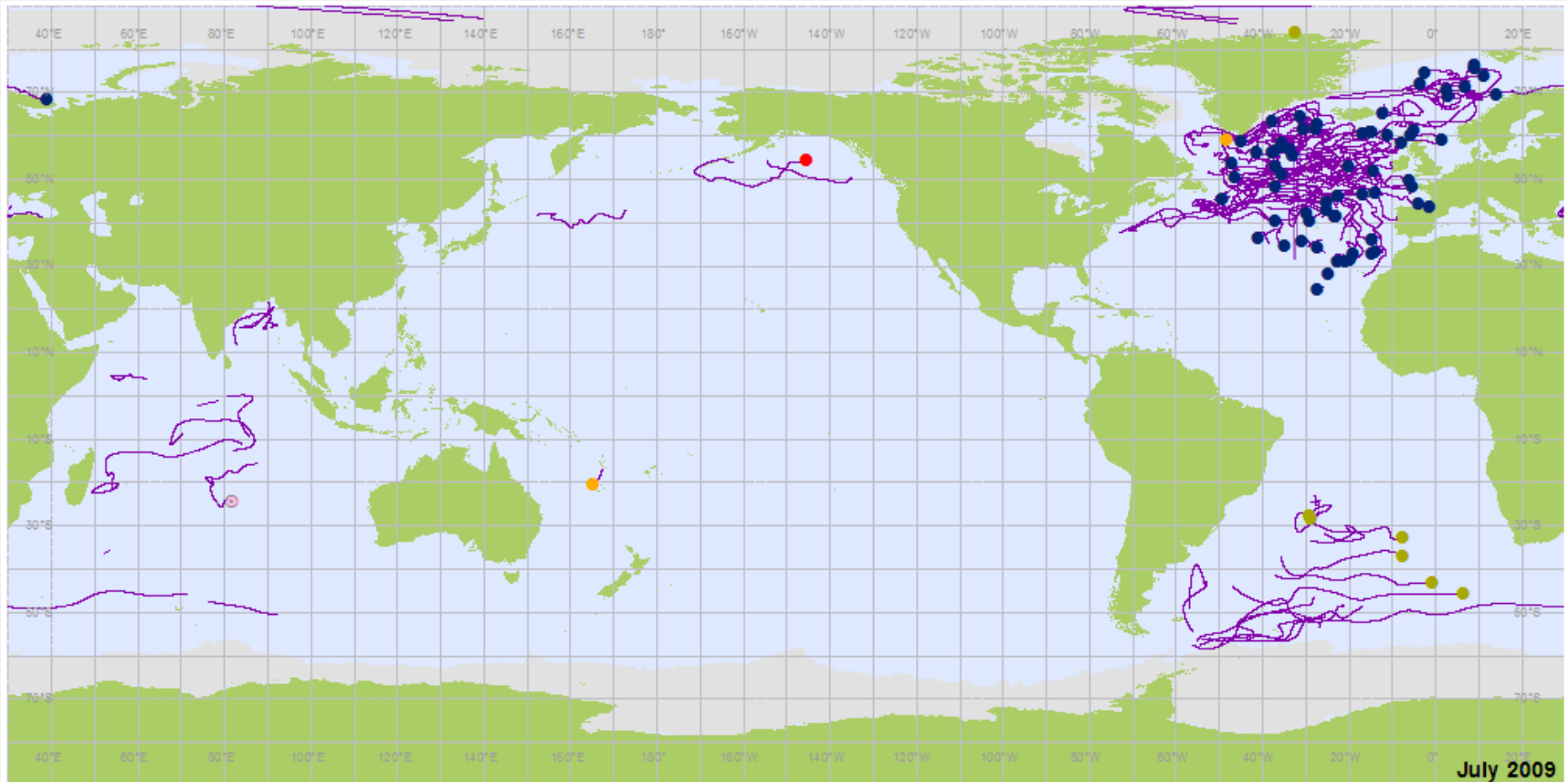
Network Status



	All models	SVPB	SVPBS	SVPB-TC	ICEBUOY
METOCEAN	116	115	1		
MARLIN-YUG	13	10		3	
CLEARWATER	10	10			
PACIFIC GYRE	5	5			
SAMS	1				1
TECHNOCEAN *					
UDELAWARE	1				1
Total	146	137	1	3	2

- Maximum lifetime is 521 days
- Average lifetime so far for all inactive buoys in the project is ~225 days
- Meteo France statistics more conclusive, though sample is still quite small (< 80 inactive buoys).₃

Global coverage so far



July 2009

- | | | | | |
|-----------------------------|------------------------|---------------|---------------|---------------------------------|
| Iridium Drifting Buoys (78) | ● EUROPE/ESURFMAR (67) | ● JAPAN | ● UKRAINE | ~ Iridium tracks June/July 2009 |
| ○ AUSTRALIA (1) | ● FRANCE (2) | ● NEW ZEALAND | ● USA (0) | ~ Iridium Tracks since 2007 |
| ● CANADA (1) | ● INDIA (0) | ● UK (7) | ○ UNKNOWN (0) | |



Highlights



DBCP - Iridium Pilot Project - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.jcommops.org/dbcp/iridium-pp/

Data Buoy Cooperation Panel

Iridium Pilot Project

<http://www.jcommops.org/dbcp/iridium-pp>

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Testing Iridium Satellite Telecommunications for Drifting Buoys

The Pilot Project will seek to evaluate the feasibility of Iridium technology for real-time telecommunication of drifter data under various conditions. It will form a pilot study for technology evaluation and assessment of satellite communication options with Iridium. [More...](#)

Deployment Progress :

All countries: [MS Excel Spreadsheets](#) [CSV file](#)

National Coordinators: [AUSTRIA](#) [CANADA](#) [EUROPE](#) [FINLAND](#) [INDIA](#)
[USA-AMC](#) [USA-COASTGUARD](#) [UK-BAAS](#) [UK-IHM/NOA](#)

Iridium Drifter Network status - 10/9/2009

[Go to interactive map >](#)

[View monthly maps >](#) (Click on the Iridium Buoy's Tab)

Done

Unloaded

http://www.jcommops.org/dbcp/iridium-pp/deployments/buoys_indium.csv

DBCP Iridium Pilot Project buoy list as of 2009-10-09 for deployed and untested buoys

BUOY_ID	NAME	ACTIVE	MANUFACTURER	STATUS	BOUYTYPE	DATACATEGORY	OSD ID	NO	DEPT	LAO	LONG	COORDINATE	PROGRAM	CONTACT	COORDINATOR	COMMENTS	FILE		
00127040	4742	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	94	11/01/2008	49	-05	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127040_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127040	
00127042	7154	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	142	10/10/2008	-1	-07	Bonhoven	Ocean	DR	NO	Ireland	PTB00A	00127042_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127042
00127043	4832	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	95	01/02/2009	49	-11	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127043_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127043	
00127045	4843	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	96	01/02/2009	70	-8	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127045_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127045	
00127046	4833	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	97	01/02/2009	62	-11	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127046_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127046	
00127048	4712	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	131	06/01/2008	47	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127048_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127048	
00127049	4713	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	132	06/01/2008	48	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127049_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127049	
00127050	4714	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	133	06/01/2008	49	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127050_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127050	
00127051	4715	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	134	06/01/2008	50	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127051_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127051	
00127052	4716	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	135	06/01/2008	51	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127052_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127052	
00127053	4717	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	136	06/01/2008	52	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127053_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127053	
00127054	4718	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	137	06/01/2008	53	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127054_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127054	
00127055	4719	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	138	06/01/2008	54	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127055_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127055	
00127056	4720	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	139	06/01/2008	55	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127056_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127056	
00127057	4721	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	140	06/01/2008	56	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127057_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127057	
00127058	4722	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	141	06/01/2008	57	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127058_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127058	
00127059	4723	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	142	06/01/2008	58	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127059_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127059	
00127060	4724	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	143	06/01/2008	59	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127060_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127060	
00127061	4725	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	144	06/01/2008	60	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127061_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127061	
00127062	4726	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	145	06/01/2008	61	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127062_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127062	
00127063	4727	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	146	06/01/2008	62	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127063_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127063	
00127064	4728	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	147	06/01/2008	63	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127064_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127064	
00127065	4729	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	148	06/01/2008	64	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127065_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127065	
00127066	4730	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	149	06/01/2008	65	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127066_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127066	
00127067	4731	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	150	06/01/2008	66	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127067_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127067	
00127068	4732	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	151	06/01/2008	67	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127068_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127068	
00127069	4733	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	152	06/01/2008	68	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127069_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127069	
00127070	4734	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	153	06/01/2008	69	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127070_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127070	
00127071	4735	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	154	06/01/2008	70	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127071_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127071	
00127072	4736	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	155	06/01/2008	71	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127072_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127072	
00127073	4737	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	156	06/01/2008	72	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127073_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127073	
00127074	4738	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	157	06/01/2008	73	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127074_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127074	
00127075	4739	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	158	06/01/2008	74	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127075_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127075	
00127076	4740	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	159	06/01/2008	75	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127076_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127076	
00127077	4741	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	160	06/01/2008	76	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127077_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127077	
00127078	4742	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	161	06/01/2008	77	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127078_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127078	
00127079	4743	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	162	06/01/2008	78	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127079_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127079	
00127080	4744	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	163	06/01/2008	79	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127080_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127080	
00127081	4745	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	164	06/01/2008	80	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127081_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127081	
00127082	4746	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	165	06/01/2008	81	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127082_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127082	
00127083	4747	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	166	06/01/2008	82	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127083_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127083	
00127084	4748	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	167	06/01/2008	83	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127084_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127084	
00127085	4749	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	168	06/01/2008	84	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127085_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127085	
00127086	4750	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	169	06/01/2008	85	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127086_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127086	
00127087	4751	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	170	06/01/2008	86	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127087_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127087	
00127088	4752	ACTIVE	METOCAL	01/12/2007	PTB	04/09/2008	1	171	06/01/2008	87	-20	Borsh	Islands	E-PTB00A	Iridium	BUOY	00127088_01	http://www.jcommops.org/cgi-bin/iridium-pp/iridium-pp.pl?buoy=00127088	
00127089	4753	ACTIVE	METOCAL																

Message Formats



- The data format updated in the inter-sessional period (Version 4.0)
 - to standardize the way that battery voltage information is recorded
- Some extra data formats created for new buoys types.
- The SVPB manual (DBCP Technical Document 4) was updated to include example Iridium Message formats.

GTS data processing



- Iridium Processing centers:
 - Argos System, CLS/CLS America
 - Meteo France
 - JouBeh.
 - National agencies developing Iridium Data processing capabilities
- New document (draft) for QC checks required by new centers putting data onto the GTS. (background document)

Future plans 2009-10



- Need to seek new participants to provide better global coverage, no real progress in 2009, more effort required.
- Planning and deployment notification:
 - Buoy operators are encouraged to communicate via email (iridium-pp@jcommops.org) with approximate deployment areas for all new IMEI numbers and ships to be used
 - notification of deployment should be sent, as soon as possible after the deployment.
- Update the Terms of Reference to include key success factors and the analysis required in 2010.
 - At DBCP-24 the panel suggested that the project participants document the success factors for the project.



Key Success factors

- Timeliness – this element has already been proven
- Lifetimes – whether the lifetime of the batteries and transmitters can be increased to meet or exceed the historical average (~18 months)
- Proper global tests – tests are needed in areas of the ocean like the Pacific ocean, and Southern Indian ocean
- Demonstration of value of money and overall costs -
 - Relates to communications cost, lifetime and unit cost and a nominal deployment cost which becomes more influential if lifetimes are not increased.
 - Is there potential to organize an international charging scheme, to gain a volume discount?
- Data availability – messages dropped or corrupted. Data not getting through. Quality checks.
- Positional Accuracy
- Ability to share Best Practices in Iridium buoy development

Approaches to managing Iridium information globally



- The Argos Database is also directly accessible by the JCOMMOPS information system
 - allowing JCOMMOPS to have appropriate metadata to create its reports but also to check any data issues
- Many different Iridium Processing centers and GTS uplink nodes means we need:
 - a robust and global system of daily location information and metadata sharing upon deployment,
- Otherwise
 - it will be difficult for JCOMMOPS (or other Monitoring systems) to recognize Iridium buoys adequately within the global network or to identify anomalies etc.