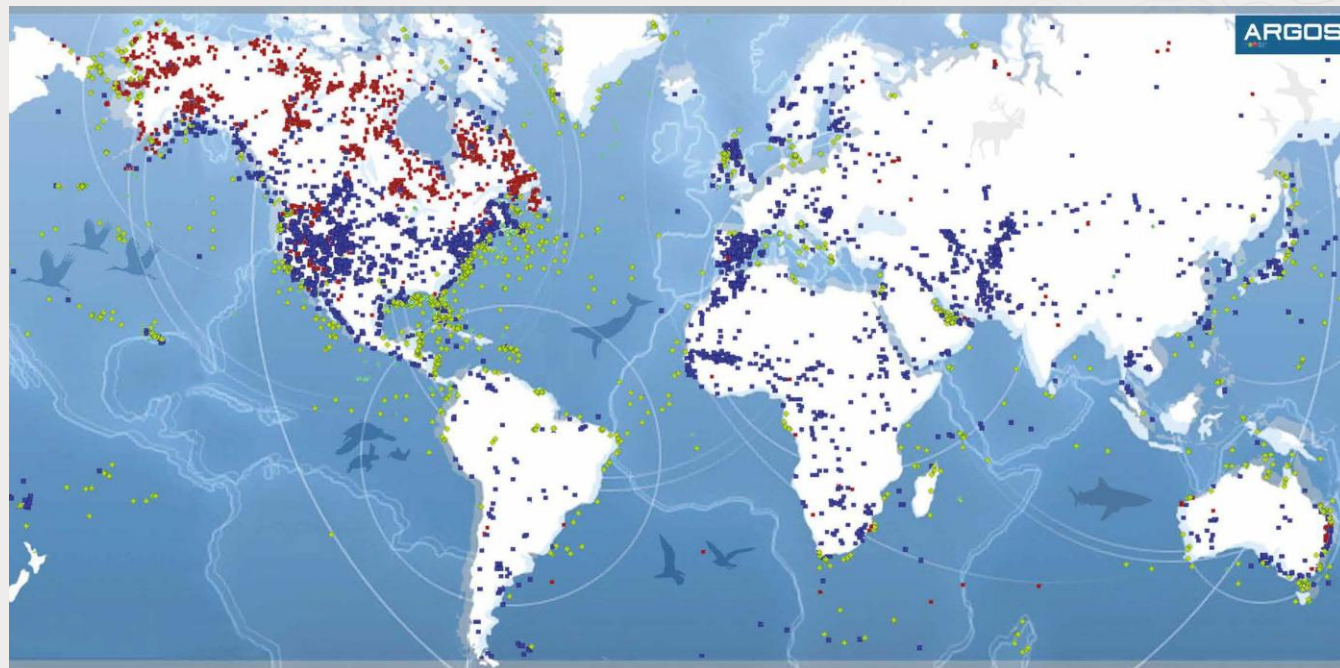




2016 ARGOS JTA context

Yann Bernard

Wildlife tracking



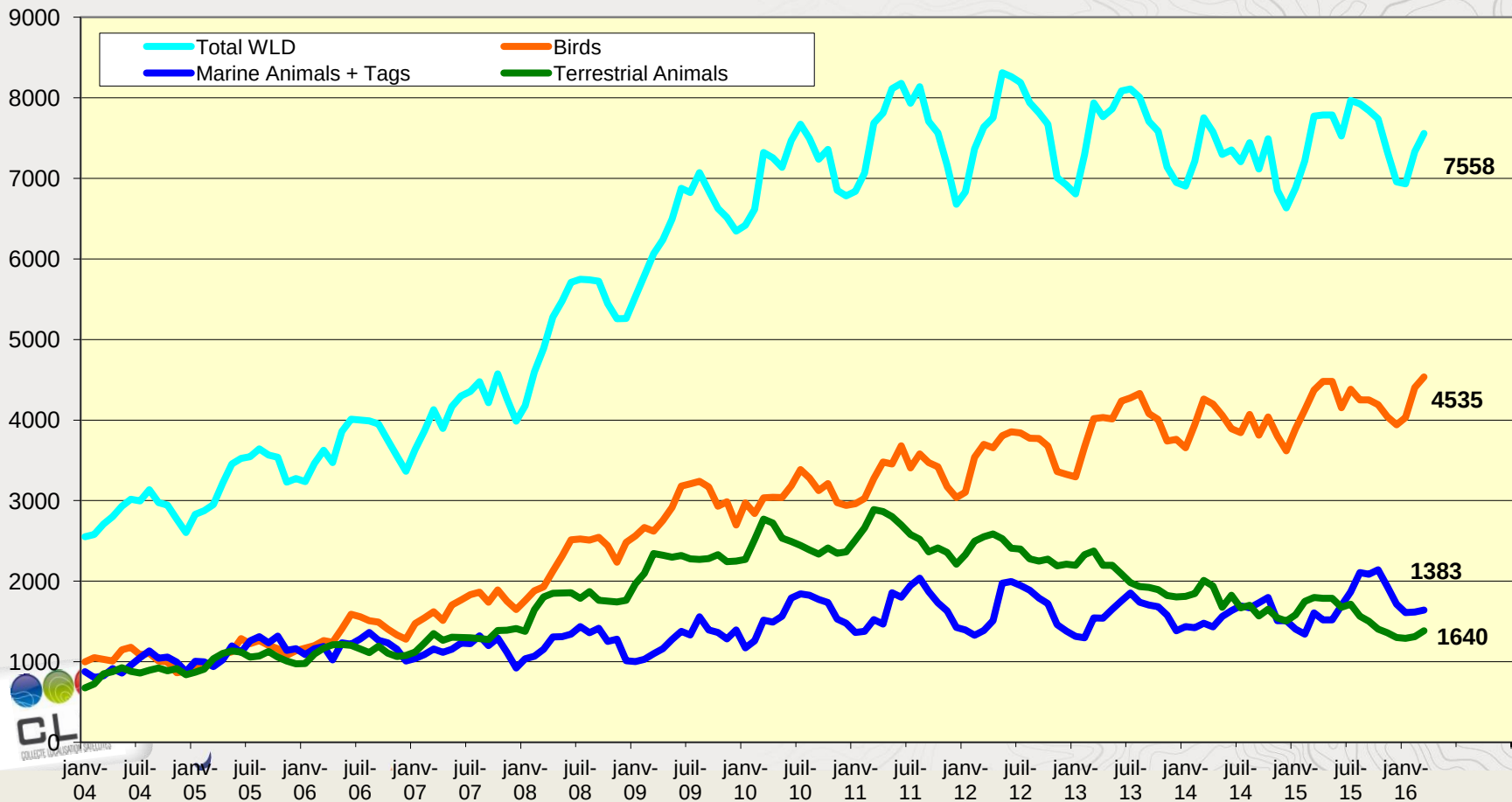
BIRD	55 %
LAND_ANI	20 %
MARIN_ANI	20 %
FISH	5 %



*Nearly 8,000 animals tracked each month
with Argos*



ACTIVE ANIMAL PLATFORMS



Wildlife tracking

- ~5% growth yearly
- For now, main future application for the Argos system
- Yesterday : alone
- Today : challenged (GSM, Iridium, VHF)
- Tomorrow ?

Wildlife tracking

→ Organize Argos workshops

- ✓ March 2016: South America (Lima) and Asia (Tokyo)
- ✓ May 2016: Emirates (Abu Dhabi)
- ✓ June 2016: France (Toulouse)
- ✓ September 2016: Australia (Hobart)



Wildlife tracking

→ Federate Argos users = the Argos community

- ✓ improve information exchanges
- ✓ create new cooperation



Wildlife tracking

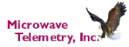
→ Promote the Argos manufacturers network



Argos Equipment Providers for Animal Tracking Applications

Updated on March, 2016



MANUFACTURER	APPLICATION	ADDRESS & WEBSITE
	  	The Old Courts, Wongret Road, Wareham, BH20 4PL, UNITED KINGDOM http://www.biobtrack.co.uk
		8-2-25, Nankou-Higashi, Suminoe-ku, Osaka 559-0031 JAPAN http://www.core.co.jp
	  	3261 Imjin Road Marina, CA 93933 USA http://www.desertstar.com
	 	15-73 Leningradskoe Shosse 125171 Moscow RUSSIA Email: a.salman@es-pas.com
	 	2521 Scheffelin Road Suite 138 Apex, NC 27502 USA http://www.geotrakinc.com
	 	PO Box 698 Essen, MT 59916 USA http://www.HawkOwl.com
	   	115 Pony Drive Newmarket ON L3Y 7B5 CANADA http://www.lotek.com
	 	8835 Columbia 100 Parkway Suites K & L Columbia MD 21045 USA http://www.microwavetelemetry.com

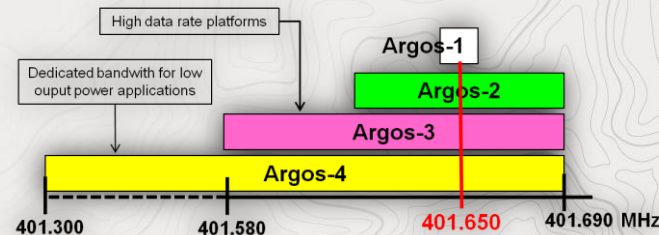
	  	R&D Center 754-1 Koyurugi Samukawa-machi Kanagawa 253-0102 JAPAN http://www.nomadsci.com
	 	PO Box 438 King George VA 22485 USA http://www.northstar1.com
	  	Private Bag 1403 Havelock North 4230 NEW ZEALAND http://www.sirtrack.com
		Gatty Marine Laboratory University of St Andrews KY16 8LB St Andrews, Fife SCOTLAND http://www.smr.u-st-and.ac.uk
	  	932 East Impala Avenue Mesa AZ 85204 USA http://www.telonics.com
		Carl-Scheele-Str. 12 12489 Berlin GERMANY http://www.vectronic-aerospace.com
	 	8345 154th Avenue NE Redmond WA 98052 USA http://www.wildlifecomputers.com
		ZA Le Cassé II 4, rue Jean Monnet 31240 ST JEAN FRANCE http://www.xerius.fr

Wildlife tracking

→ Improve the technology



- ✓ Argos chipset / facilitate the integration
- ✓ Argos-4 with new bandwidth for low output power applications (200 mW)



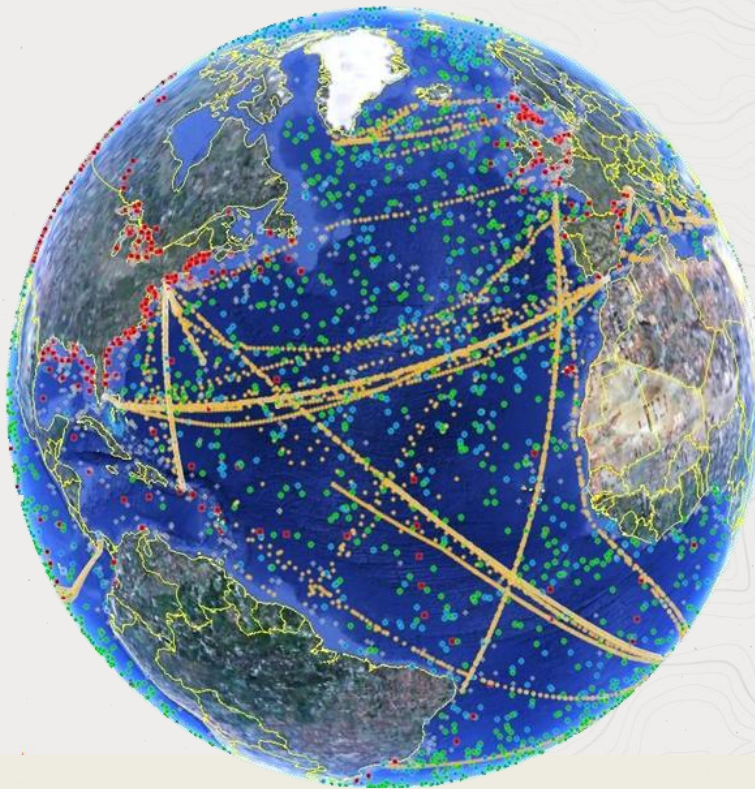
Ocean in-situ data collection

4 500 Ocean Platforms

2 200
Profiling
Floats



1 300
Drifting
Buoys



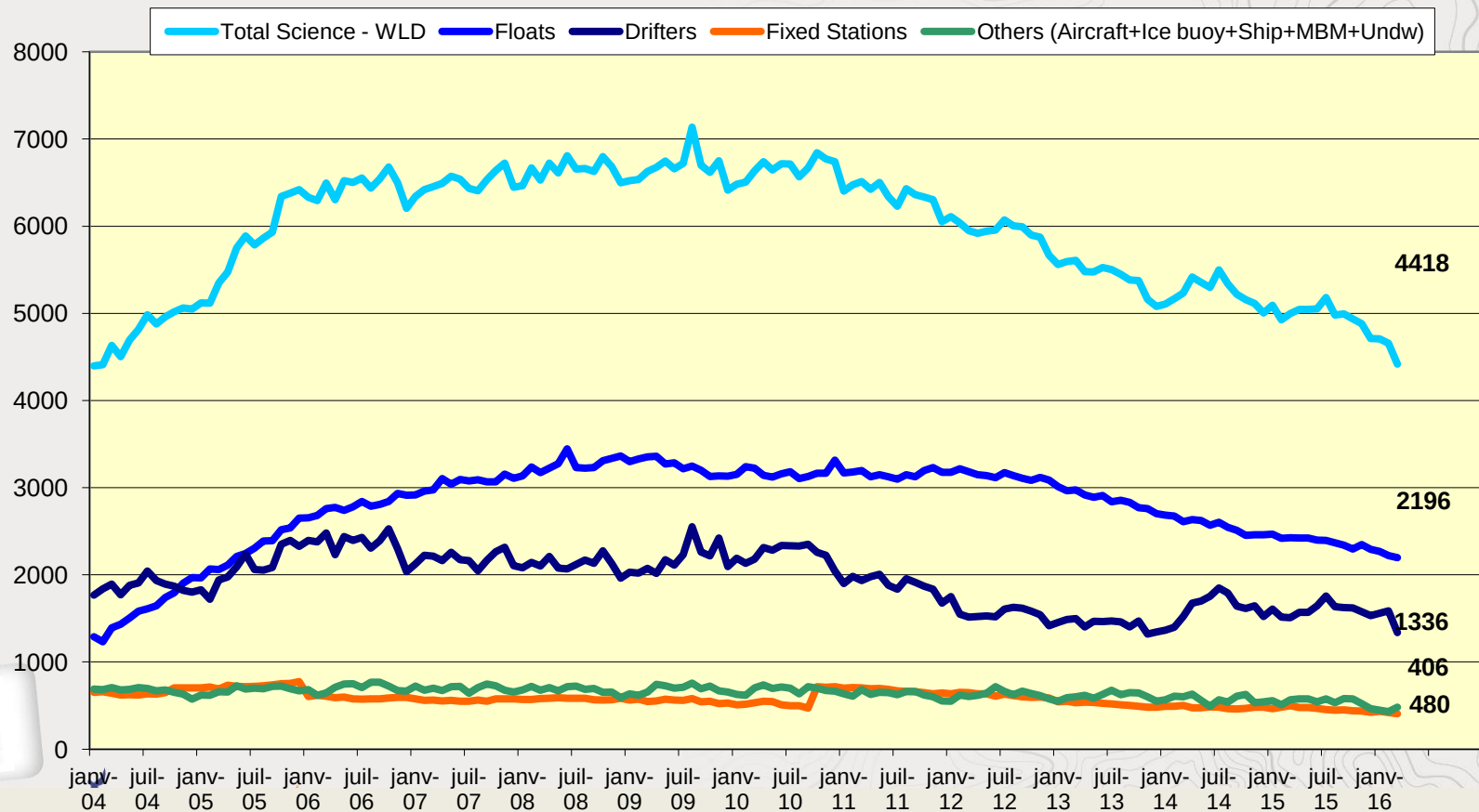
400
Automatic Weather
Stations



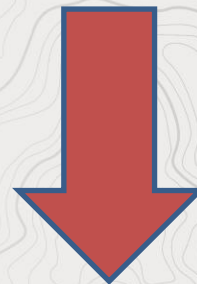
500
Others



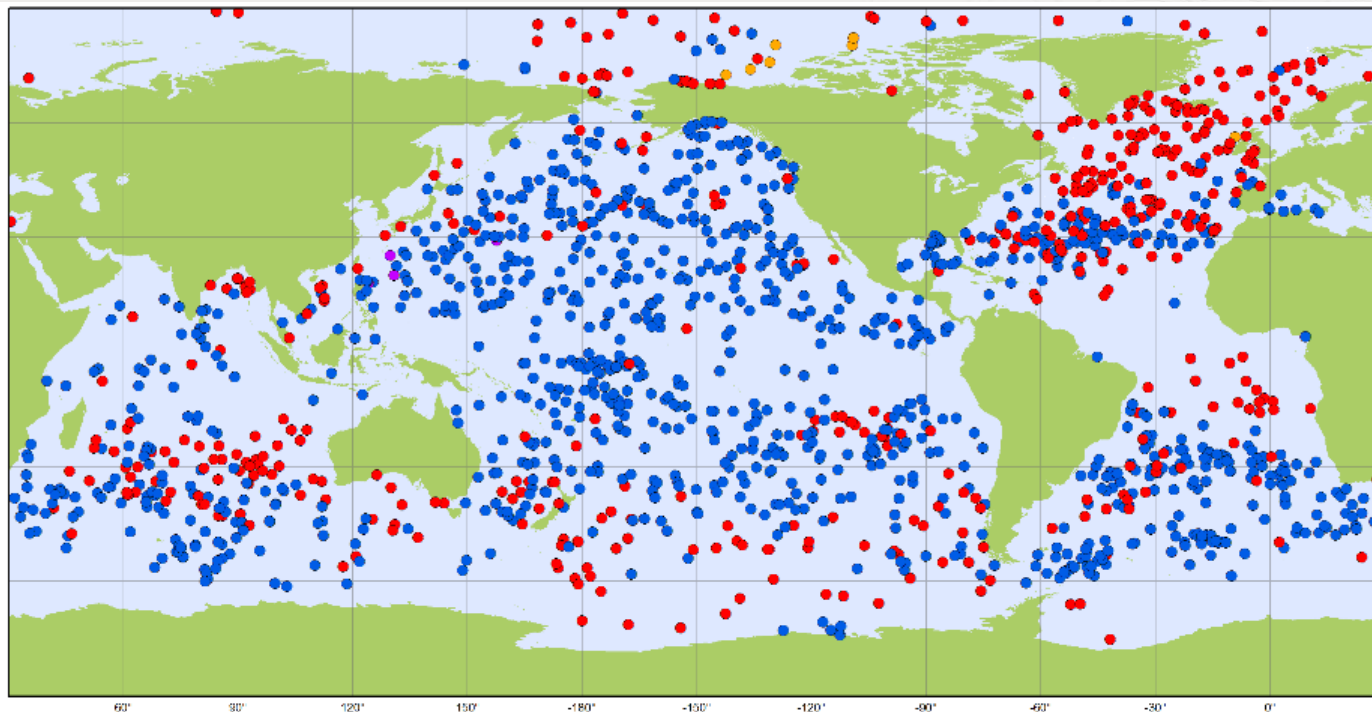
OCEAN & MET PLATFORMS



Ocean in-situ data collection



DBCP – Global Drifters Prg



Today:

1 059 Argos

466 Iridium

End 2017:

300 Argos

1 200 Iridium



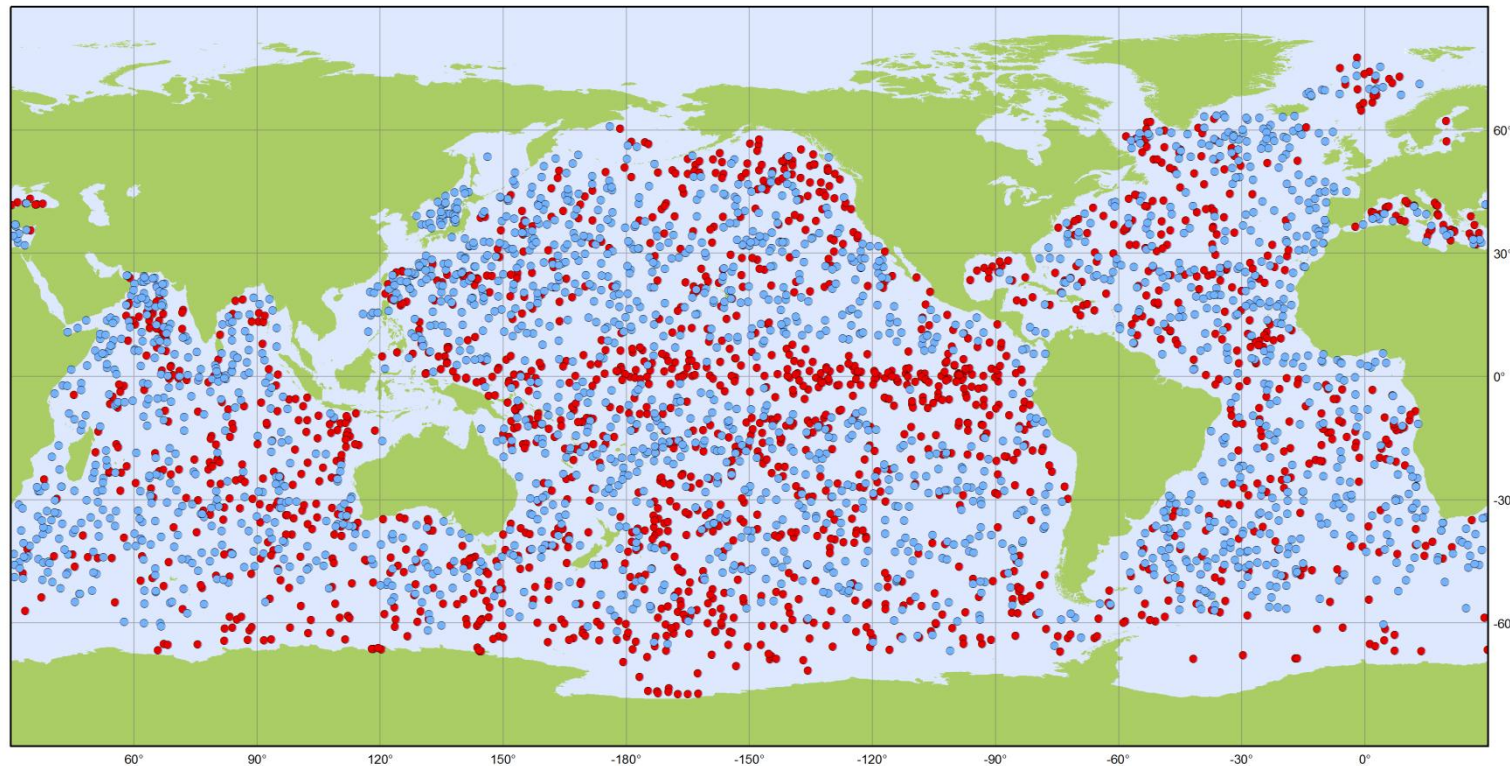
Data Buoy Cooperation Panel

Satellite Communications - Drifting Buoys

February 2016

COLLECTIVE ORGANISATION SATELLITES

Argo – Profiling floats



Today:

2 088 Argos

1 723 Iridium

New floats

30% Argos

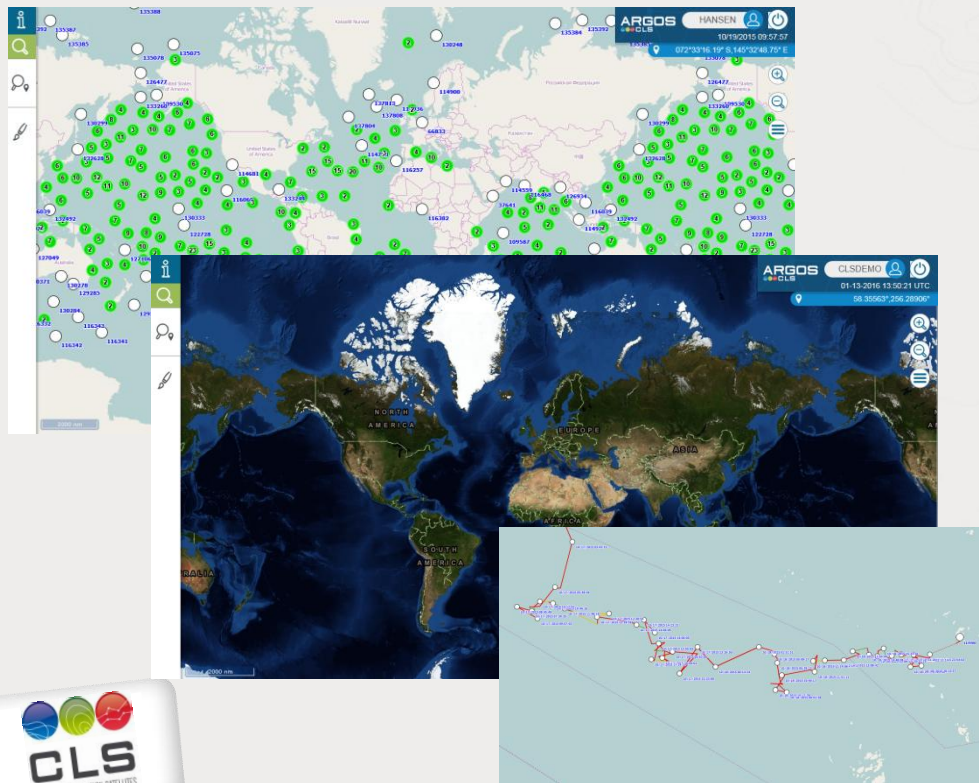
70% Iridium

Future of **ARGOS** in the Ocean market

- Backup recovery system for AUV, gliders, USV...
- Low power consumption platform



Develop Argos value added services

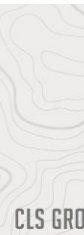
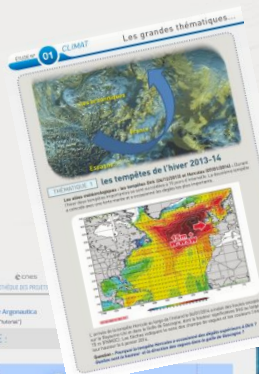


- ✓ ArgosWeb display
- ✓ Data decoding compatible with all manufacturers
- ✓ GTS processing & distribution
- ✓ Raw data archiving
- ✓ Position monitoring (MBM)
- ✓ Sensors value monitoring

→ Develop new services according to user needs

Argos for education

- Argos is a wonderful tool for education
- Educational kit Argonautica like:
 - Drifting buoys/Tags + Argos service
 - Training course material
 - Visualization software / website
- It's a domain to develop to ensure the future of Argos



CLS GROUP SEMINAR