



Monitoring and management of ship logistics opportunities

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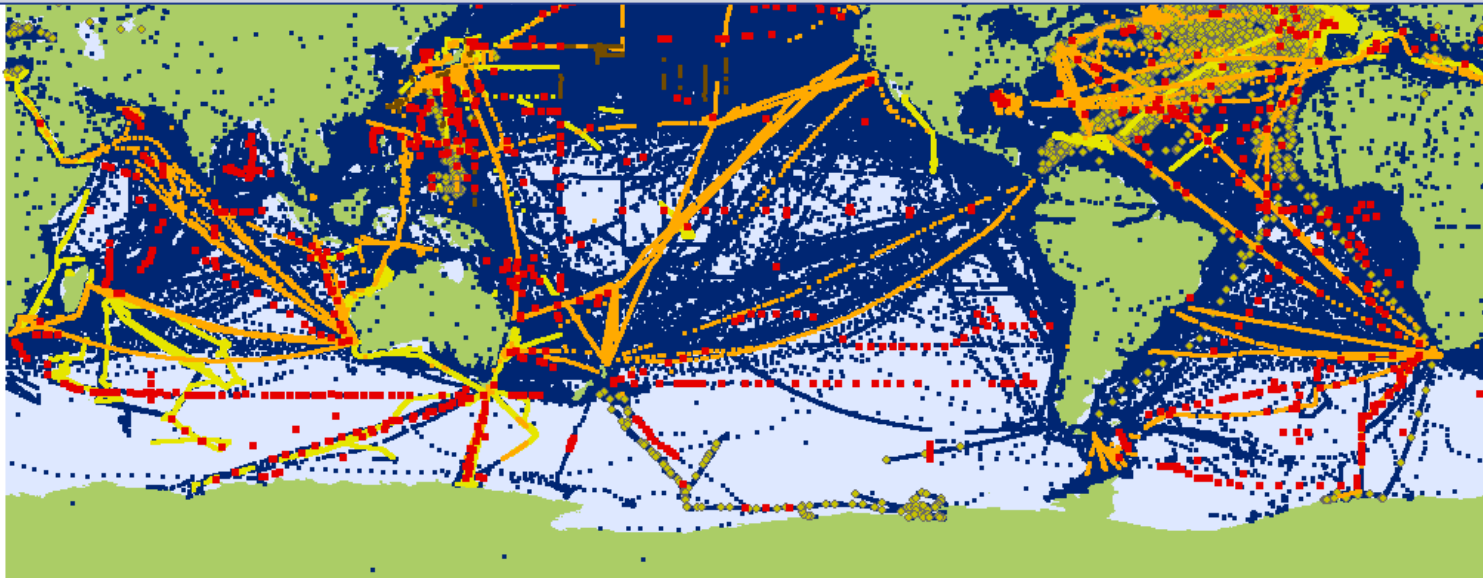
PMO IV
December 2010
Orlando, USA



Monitoring ships ...

Ships are the common denominator of all observing systems.

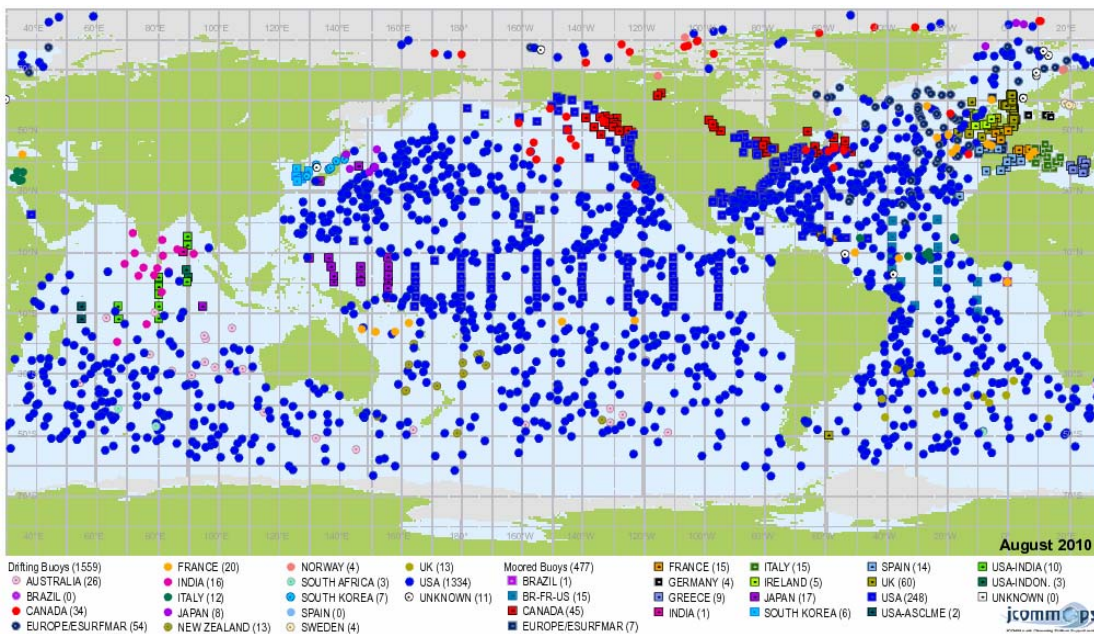
We need to **optimize** use of **existing opportunities** (below 40S)
But we need also to **identify new opportunities** (global/regional)



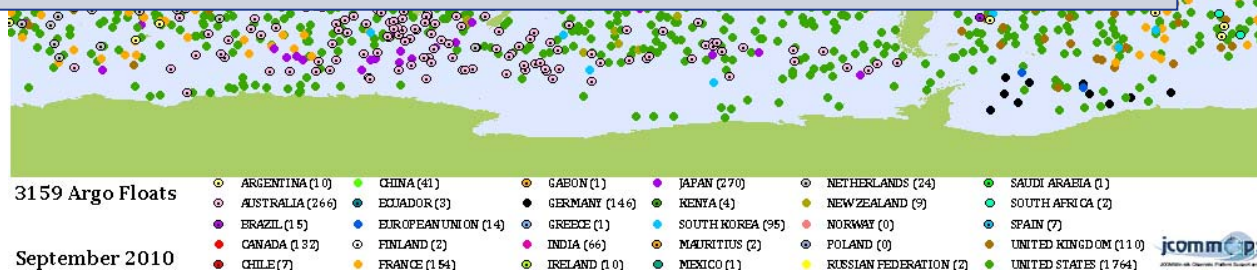
2010 ships ...



Monitoring ships ...



Impossible to deploy ~2000 units per year (Argo+DBCP) without a strong international cooperative effort





Monitoring ships ...

- **We know how to monitor ship activities**
 - in delayed-mode
 - in real-time

There is still progress to be made (data, metadata sharing)

- **How to anticipate ship activities ?**
 - 2 months for the deployment of few units (in practice)
 - 6-12 months for a batch deployment of 50 units

While there are good national resources, there is no central node to gather cruise plans ...



Monitoring ships ...

- <http://www.researchvessels.org/>

Research Ship Schedules & Information

[Home]---[Cruise Schedule Search]---[Ship Specifications]---[Update Ship Data]---[About Ships]

Research Ship Schedules

We have schedule entries for the following ships.

Shipname:

- (All Ships Selected)
- A. Von Humboldt
- Albatross IV
- Alkor
- Alpha Helix
- Anyo Maru No.7
- Aomori Maru

196 Records

Year:

- (All years)
- 2009
- 2008
- 2007
- 2006
- 2005

Display Calendar?
(Must select Year)

Sort By:

Departure Date Country, Shipname, Departure Date

[\[Back to Ships Home Page\]](#)

Advanced Search Items Below

Caution: Unless the data was entered into the schedule submitted to us, including additional search parameters below may incorrectly eliminate scheduled cruises from the result set. (Example: some schedules do not have the Navy Grid field populated with a value, so including one in your search parameters would skip cruises that would actually occur within that region)

Agency:

- (None selected)
- 3rd RCGH, JCG
- A&T
- A.D. Little
- Abo FSHS
- ACF

Project:

- (None selected)
- 4007-1B
- ACES-FOCAS
- AFF/1
- AFF/2

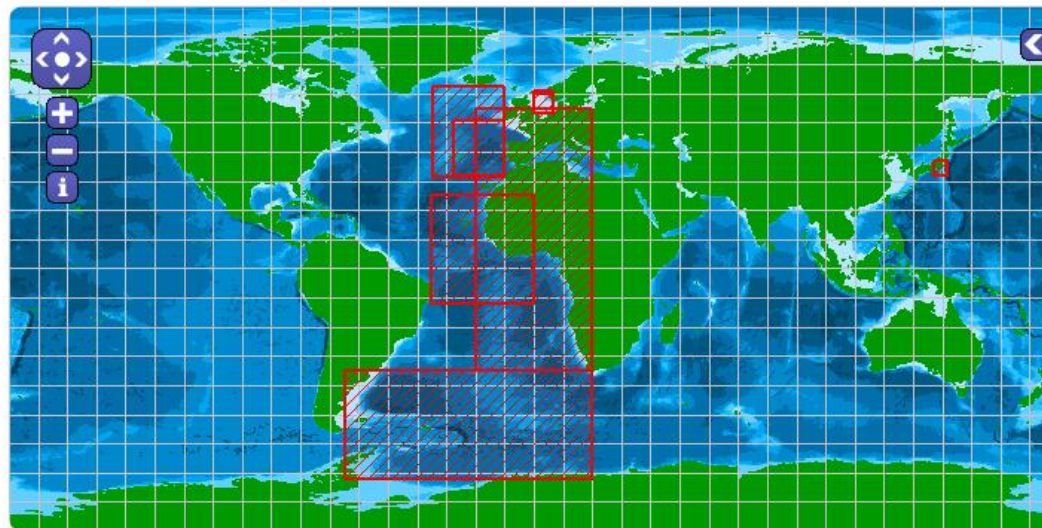


Monitoring ships ...

- <http://www.pogo-oceancruises.org>

Welcome to the Cruise Programmes

Start » Date from: 20110101 to: 20111231



Zoom in to selected 20 50 100 records

| Found 12 | Current | Previous | Next

Cruise name	Vessel name	Country operator	Departure	Arrival	Berths	Status	Show
64PE329	RV Pelagia	Netherlands	2011-02-07	2011-02-16	Unknown		
64PE330	RV Pelagia	Netherlands	2011-02-18	2011-02-25	Unknown		
64PE332	RV Pelagia	Netherlands	2011-03-10	2011-03-31	Unknown		
64PE334	RV Pelagia	Netherlands	2011-04-07	2011-05-04	Unknown		
64PE337	RV Pelagia	Netherlands	2011-05-25	2011-06-01	Unknown		
ANT-XXVII/4	FS Polarstern	Germany	2011-04-20	2011-05-20	No		
ANT-XXVII/3	FS Polarstern	Germany	2011-02-08	2011-04-18	No		
ANT-XXVII/2	FS Polarstern	Germany	2011-11-20	2011-02-05	No		

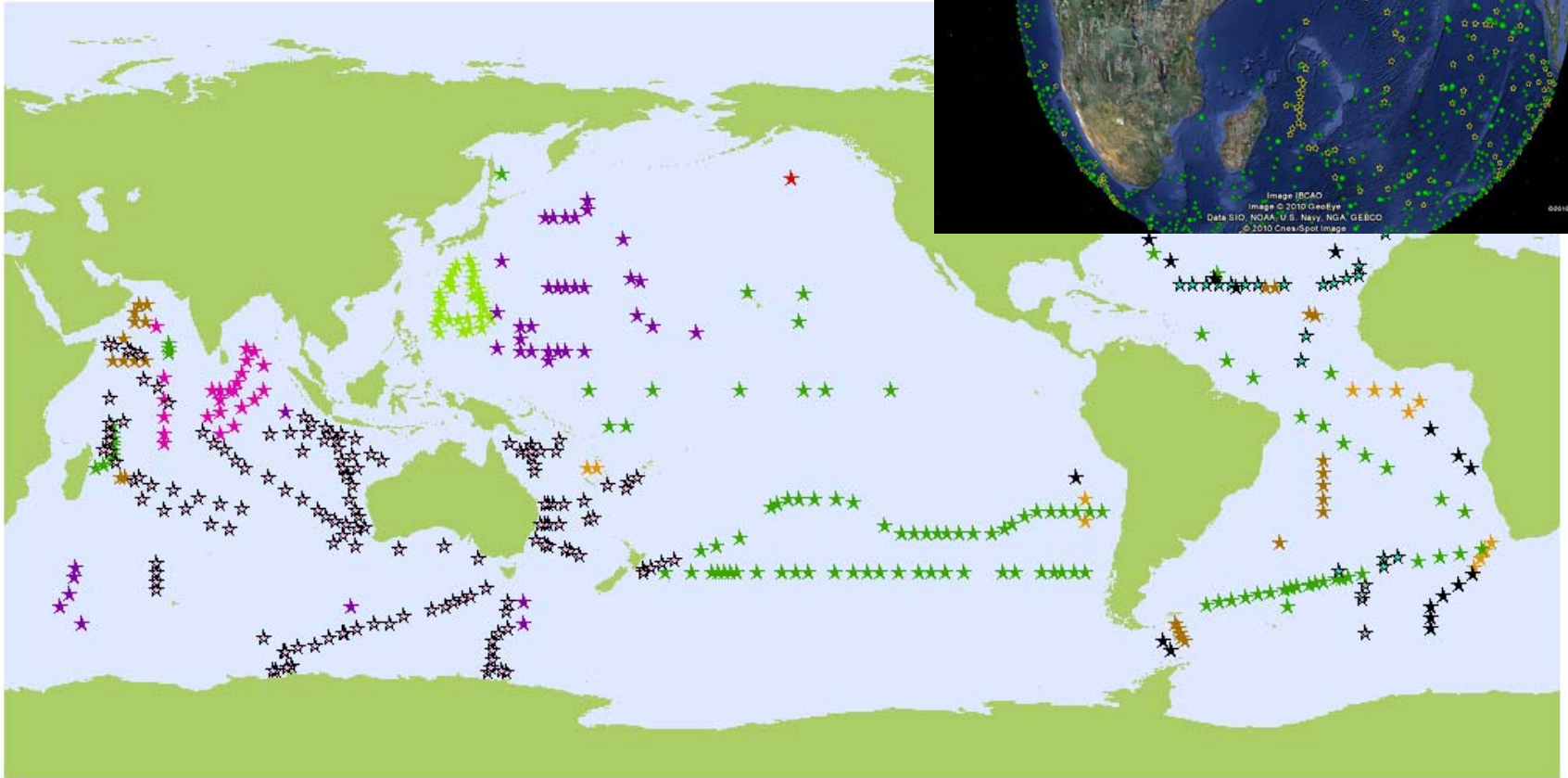
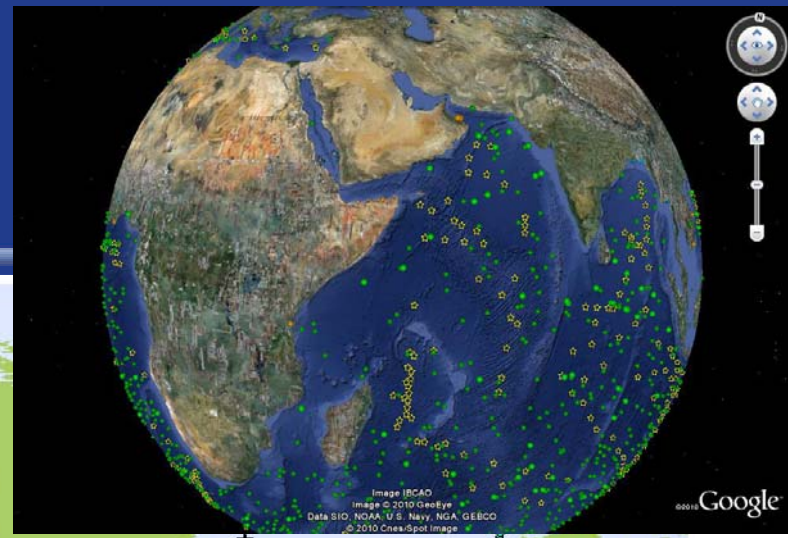


Solutions ...

- Those 2 global repositories are great tools but they need some help regarding the content.
- ships@jcommops.org
 - Share any new ship recruited (and going below 40S)
 - **Communicate** regularly amongst PMOs and deployment managers
- Set up DBCP planning tools (JCOMMOPS task)
- Improve SOT ships monitoring (JCOMMOPS task)
 - Including plans for SOOP
 - Regular synch. with Pub 47.



<http://argo.jcommops.org/argo.kml>



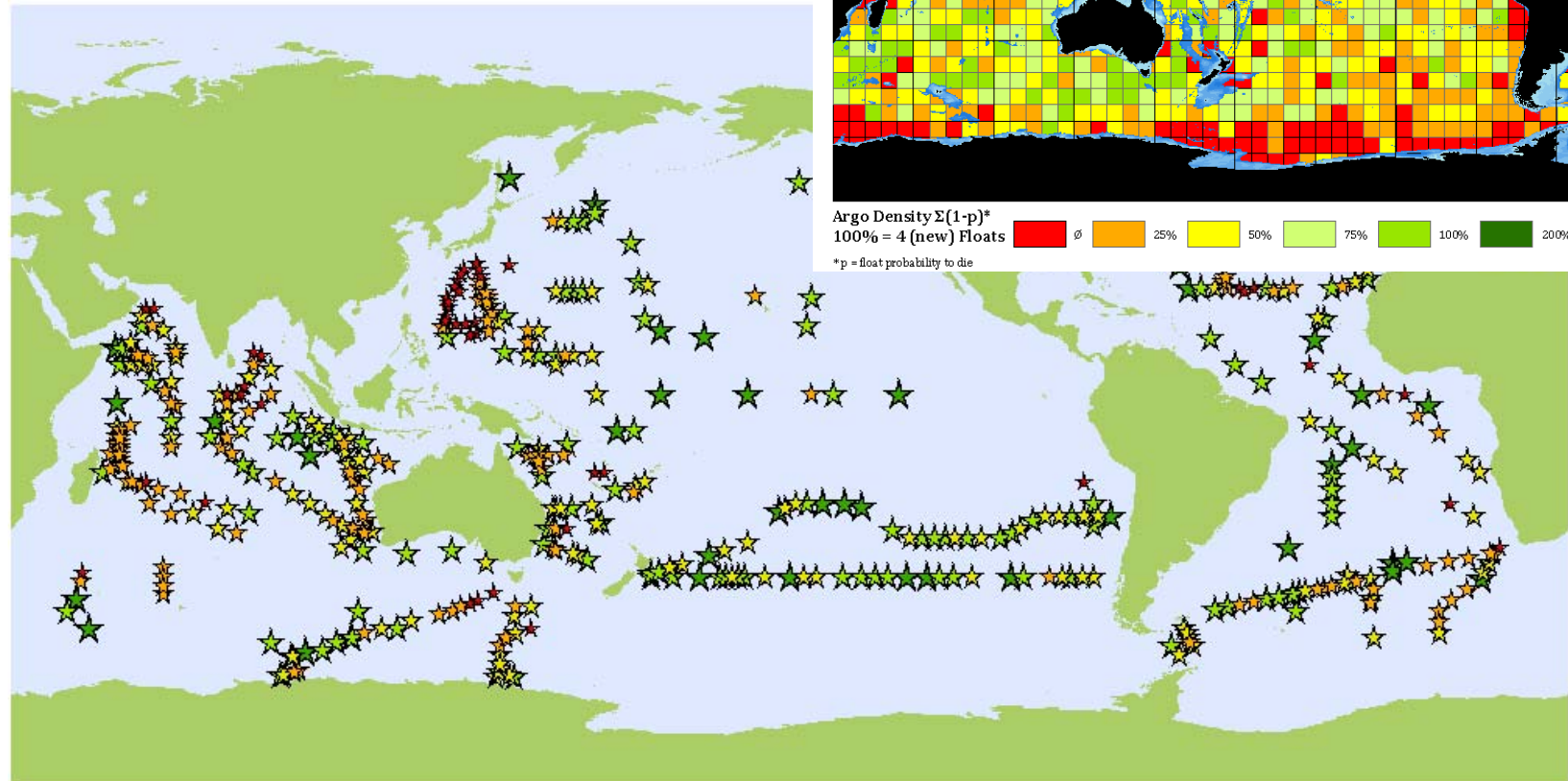
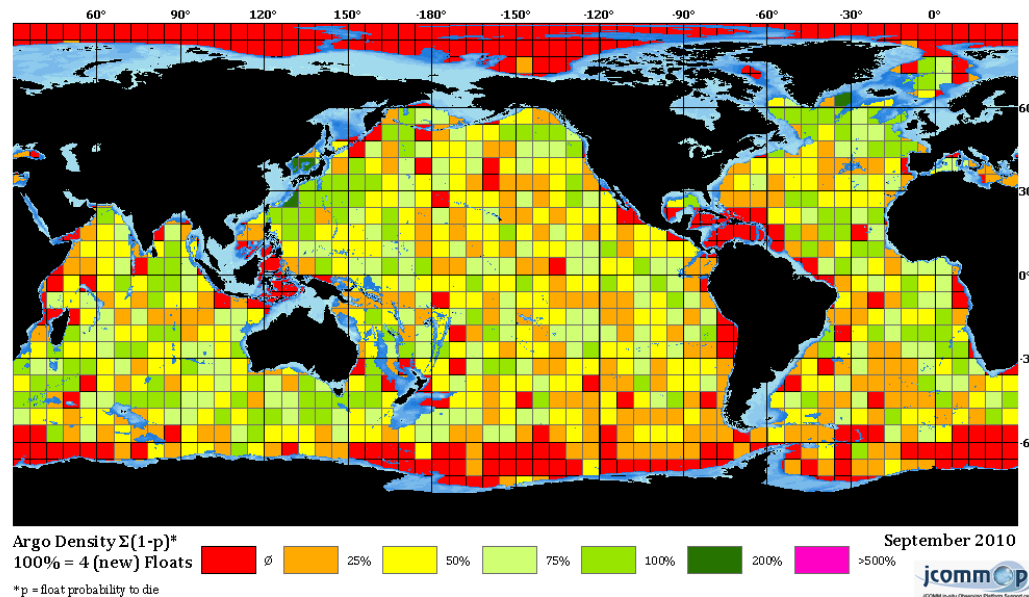
Planning (475)

September 2010

- ★ AUSTRALIA (155)
- ★ CHINA (31)
- ★ GERMANY (24)
- ★ JAPAN (43)
- ★ NORWAY (4)
- ★ UNITED KINGDOM (28)
- ★ CANADA (1)
- ★ FRANCE (17)
- ★ INDIA (25)
- ★ NETHERLANDS (7)
- ★ SPAIN (24)
- ★ UNITED STATES (116)



all Argo groups plan their deployments via the central JCOMMOPS interface with TC backup ... almost all.



... and optimize them gradually according to network density/age, colleagues plans, via a specific scoring system (avoid overlap, share opportunities, etc)



Develop Cooperation

To countries new in the GOOS/JCOMM implementation:

- We have drifters, floats, experts, etc.
- We need your help to deploy our instruments
- you may have ships

⇒ **Check global array status (proactively)**

⇒ **propose us solutions at regional level (cruise plans)**

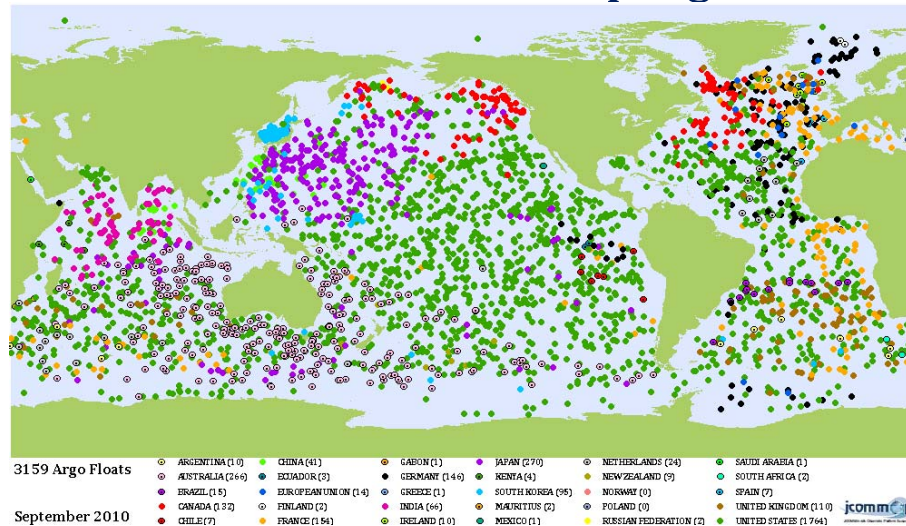
⇒ **We will send you instruments and trainers**

support@jcommops.org



Cooperation

Argentina, Brazil, Chile, Ecuador, Gabon, Kenya, Mauritius, Mexico, Morocco, started via donor programmes.



We need to follow up with an integrated approach (JCOMM) and a broader context (larger IOC/WMO capacity building efforts, WMO RMIC, etc)



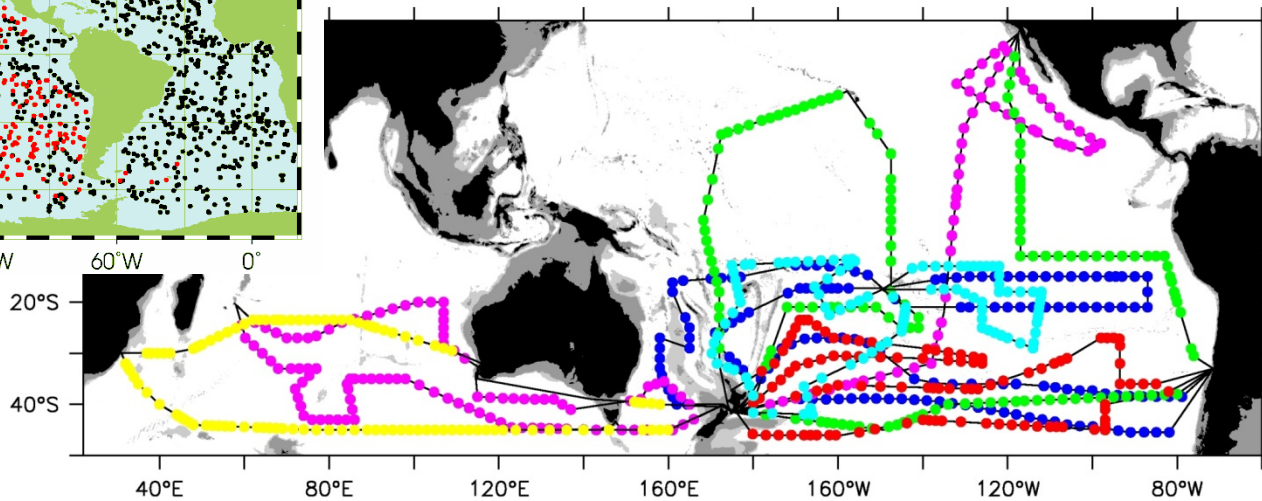
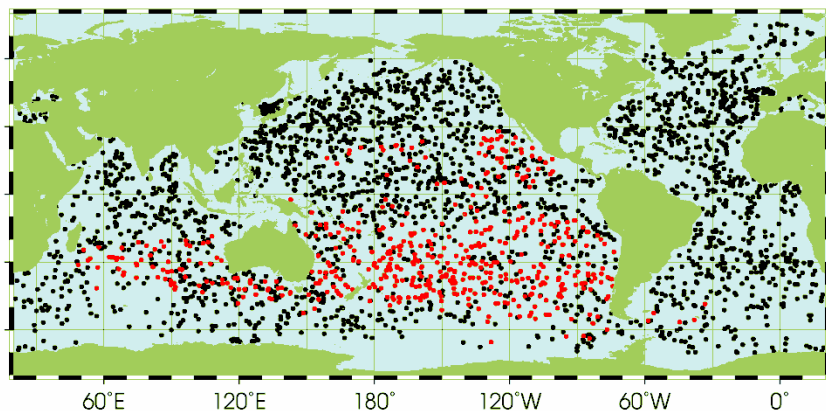
Dedicated opportunities

U.S./New Zealand collaboration has resulted in deployment of 750 floats (plus drifters) by RV Kaharoa (28 m length, 5 crew).



RV Kaharoa

Recent positions of Kaharoa floats (red)



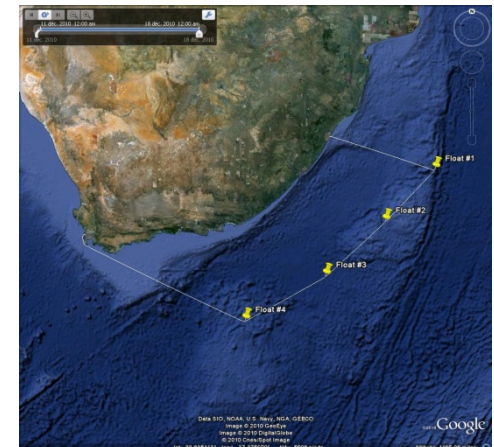
RV Kaharoa float deployments ... or how a single ship can make the difference



Dedicated opportunities

Cooperation JCOMMOPS & SAWS PMO (Thanks Gus !)

- JCOMMOPS has chartered a sailing vessel “Lady Amber” for the community (loaded with floats and ... turboWin)
- Ship is sailing now for a two weeks cruise and a transect Cape-Town
Perth is being prepared (modest ... but promising opportunity)
- Promotional activities planned





Dedicated focal point Cruise Information Centre

- Websites and new technologies are ideal tools to find cruises
But they can't work without someone dedicated to the content.
- JCOMMOPS is documenting the terms of reference for a new technical coordinator position, that would be the international focal point on cruises (in particular research vessels, charters, etc).
- Some funding sources have been identified ...
- Suggestions welcome.



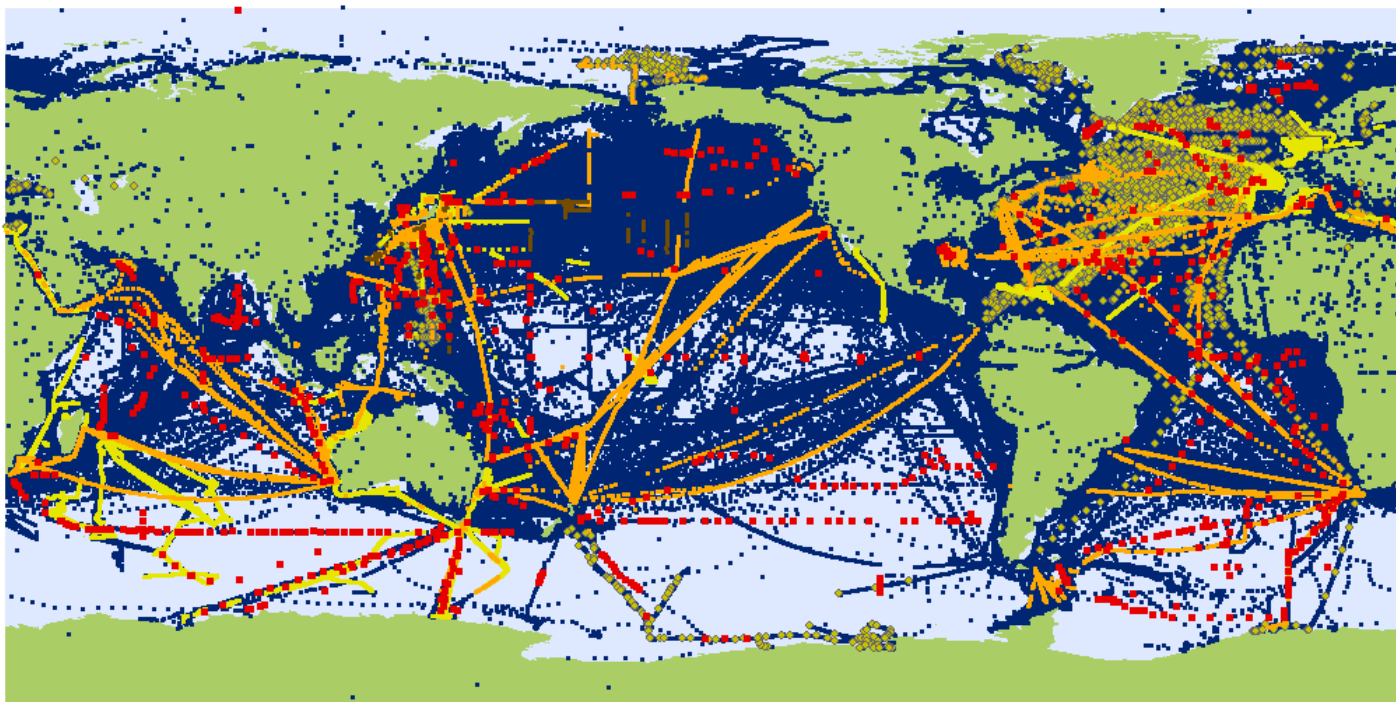
Conclusion

Ship monitoring is crucial for the global networks implementation

- **Anticipation** is the challenge
- **Communication** and **cooperation** will definitely help
- We will need to set **up dedicated opportunities** for specific areas
- JCOMMOPS must improve its monitoring of ship based activities and work closer with PMOs (key focal points).
- We will also need a **focal point**, tracking existing ships, one by one, identifying new ships, and channelling the information as appropriate within the community.



Thank you ...



2010 ships ...



Please help us fill those gaps !

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