



jcommops



jcomm IN-SITU OBSERVING PLATFORM SUPPORT CENTRE



JCOMMOPS

SOT-V Geneva, May 2009

Mathieu Belbeoch
&
Hester Viola



Aims of JCOMMOPS

The JCOMM In-situ Observing Platform Support Centre is a component of the international coordination mechanism, which aims on behalf of JCOMM to:

- assist in the **planning, implementation** and **operations** of the observing systems
- **monitor** and **evaluate** the performance of the networks
- encourage **cooperation** between communities and member states
- encourage **data sharing**
- assist in **data distribution** on the Internet and GTS
- relay user **feedback on data quality** to platform operators
- provide **technical assistance** and **user support worldwide**
- act as a **clearing house** and **focal point** on all program aspects
- develop **synergies** between observing systems



Technical Coordination

- JCOMMOPS comprises two Technical Coordinators, a ½ time IT person, plus occasionally students on work experience.

The Argo Profiling Float Program (70% M. Belbeoch)

The Data Buoy Cooperation Panel (70% H. Viola)

The OceanSITES reference station network (30% H. Viola)

The Ship Observations Team (30% M. Belbeoch)

- Other programs are supported to a basic level ... no resources to sustain this support (Ice tethered profilers, marine mammals, GLOSS)



Infrastructure: funding sources

JCOMMOPS is funded through national voluntary contributions
2 trust funds managed by IOC and WMO

- **Argo:** ~\$200 k
 - Australia, Canada, China, France, Germany, India, Korea, United Kingdom, USA.
- **DBCP:** ~\$170k
 - Australia, Canada, Europe (E-SURFMAR), France, Japan, New Zealand, South Africa, India, United Kingdom, USA.
- **OceanSITES:** ~\$65k
 - USA and DBCP, *Australia, France*
- **SOT:** ~\$30k
 - Australia, Canada, Germany, New Zealand, USA



Infrastructure: Office

TCs are IOC employees with dedicated mission budget

JCOMMOPS is hosted by CLS/Toulouse, France

- Dedicated logistic contract
- Independent Information System (contract 10k\$ / year)
- Benefits from CLS operational services
- Privileged access to Argos I.S.



Infrastructure: Information System

- System built gradually since 2001
- Based on 3 servers (physical or clusters)
- Operational

- Regular upgrade hardware and software:
 - Web (front), GIS.
 - Oracle database to be replaced for 2010. (to be tested in 2009)

- New Developments: new metadata, new stats, new GIS based products, new loading/exports scripts.

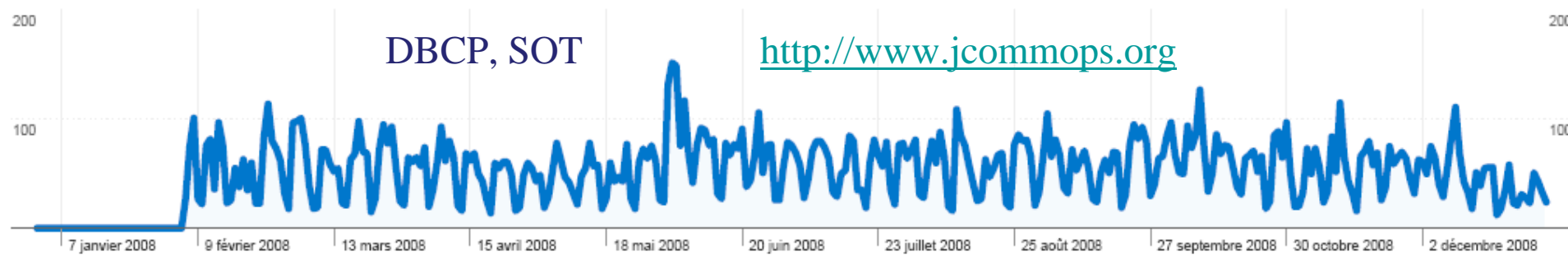
- Analysis of audience for main web services
 - Usage tracking system (Google Analytics)



Web Services



visits: ~100 times/day, ~500/week, ~2000/month.
26126 total, from 135 countries
118748 page viewed



visits: ~80/day, ~400/week, ~1500/month
18862 total, from 138 countries
74748 page viewed

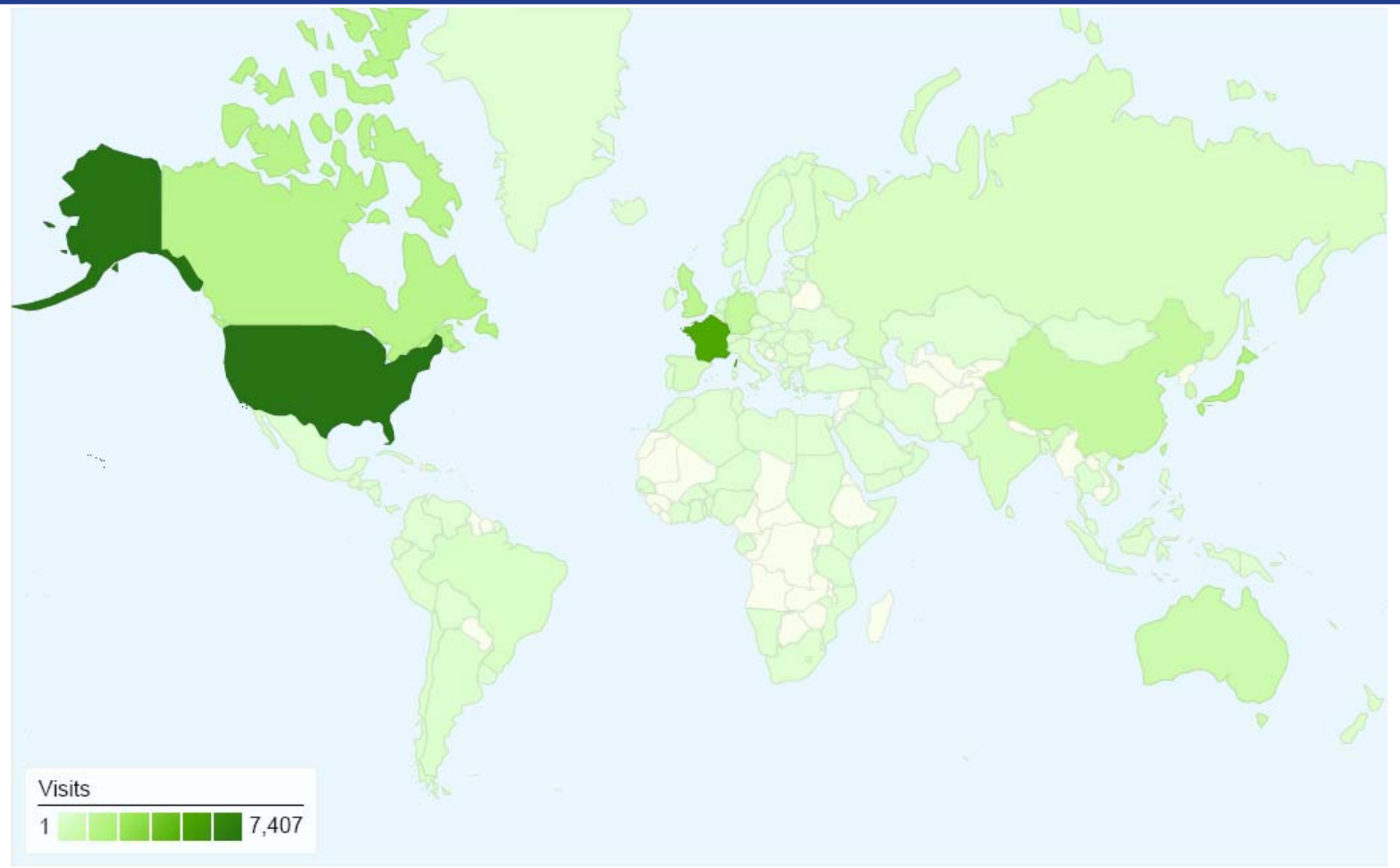


Website Audience

- Website usage, most visited pages:
 - the float/platform search engine
 - the Map Room and Interactive Maps
 - the monitoring tools (country, program, data flow)
 - the Argo deployment planning interface
 - the News section (the Argo float of the month has great success)
 - manufacturers pages
 - DBCP Iridium pilot project
 - the documents/meetings/contacts section
 - global search engine
- FTP logs:
 - status files (Text, csv, Google Earth files) are routinely used
 - documents are regularly downloaded.



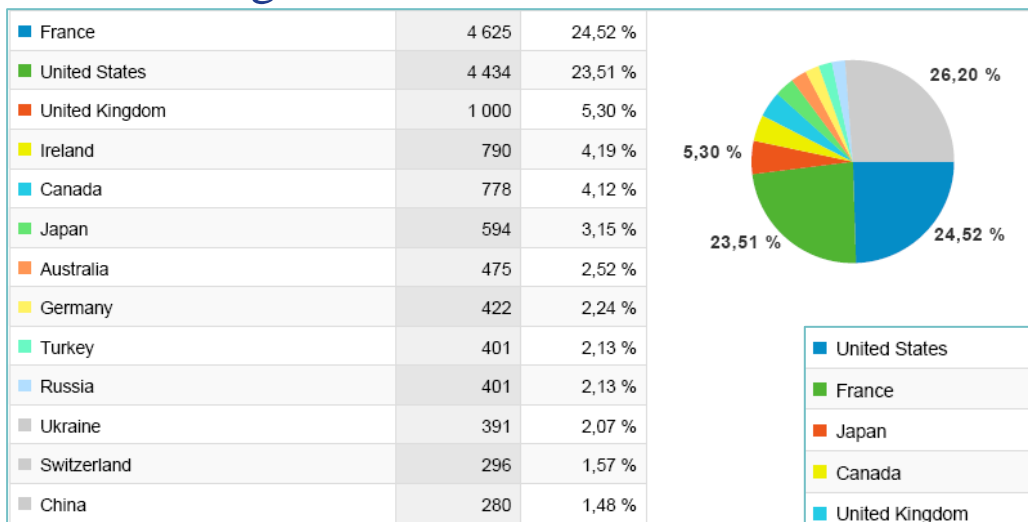
Websites audience



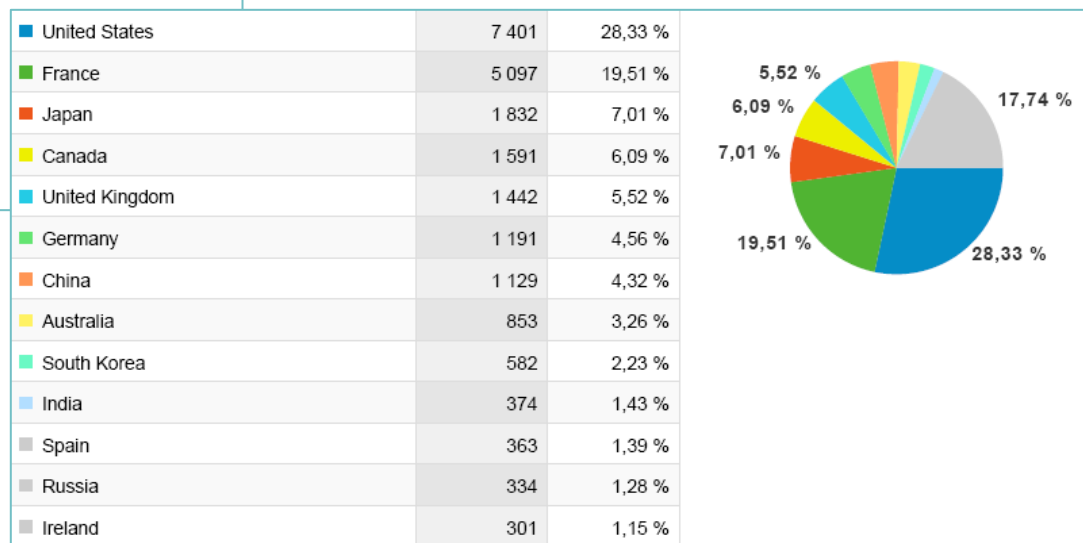


Website Audiences

- International audience including countries with no Ocean Observing Programs



JCOMMOPS Visits by country



AIC Visits by country



Key developments

- Important developments in the last two years are:
 - Drafting new structure/navigation of the JCOMMOPS website.
 - Improved (metadata) text file export/loading. Work with GDACs index files (Argo, OceanSITES)
 - Creation of an Argo Support/Feedback Centre including Altimetry QC analyses
 - Inputs to WMO for its annual review of Observing Network (RRR) success and plans
 - BUFR template reviews

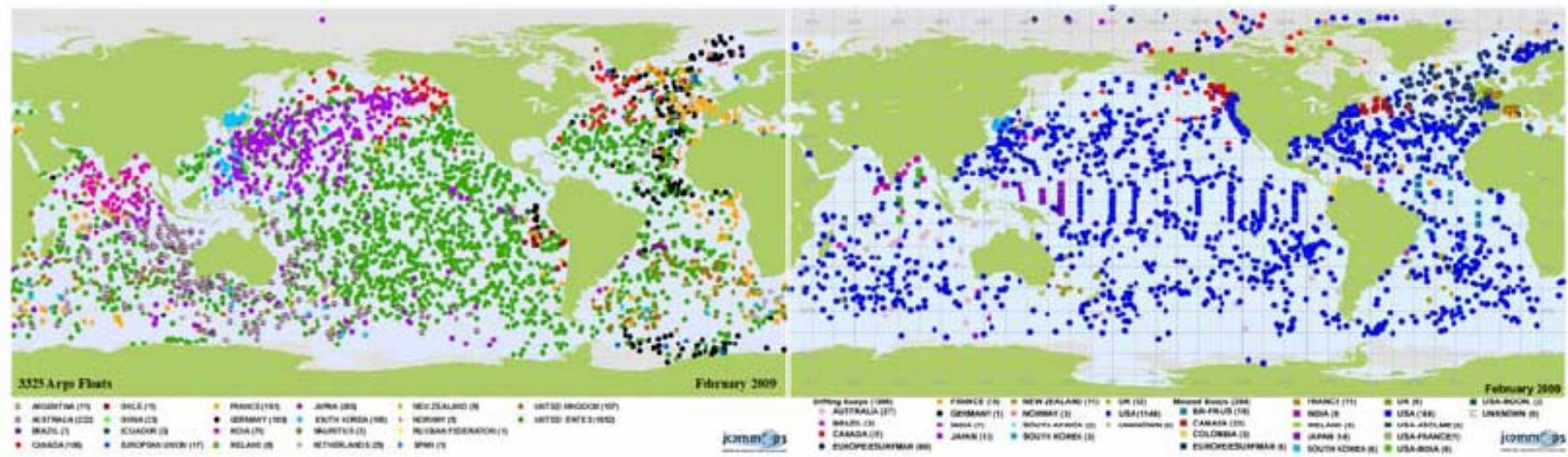


Key developments

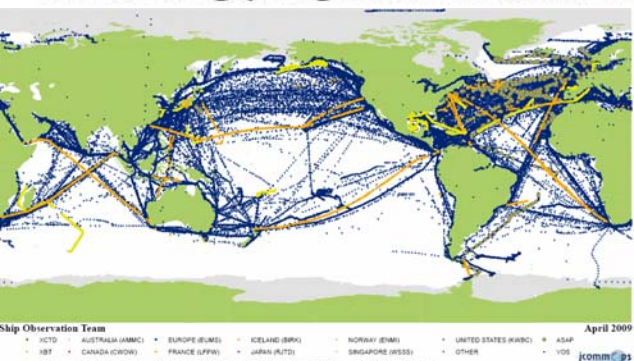
- Documents
 - New documents for Instrument best practices and Data Management.
 - CWP for OceanObs09.
 - DBCP, SOT technical documents updated
- Reporting
 - AIC Monthly Report, SOT and DBCP monthly maps/stats
 - New monthly maps produced for all programmes
 - New and improved Google Earth files layers
 - Use of pdf layer features for high resolution maps.



Developments and reporting tools



status maps by country. They provide an up to date and official status of the arrays but also encourage the community to share data. Countries with observing programs have to share data as appropriate in order to appear on these maps.

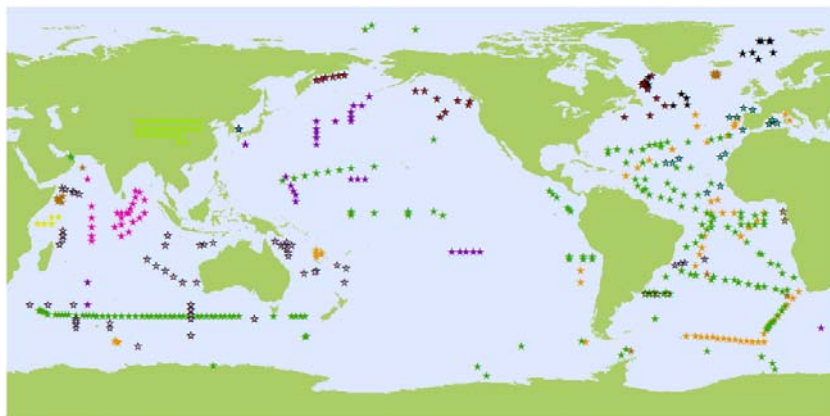
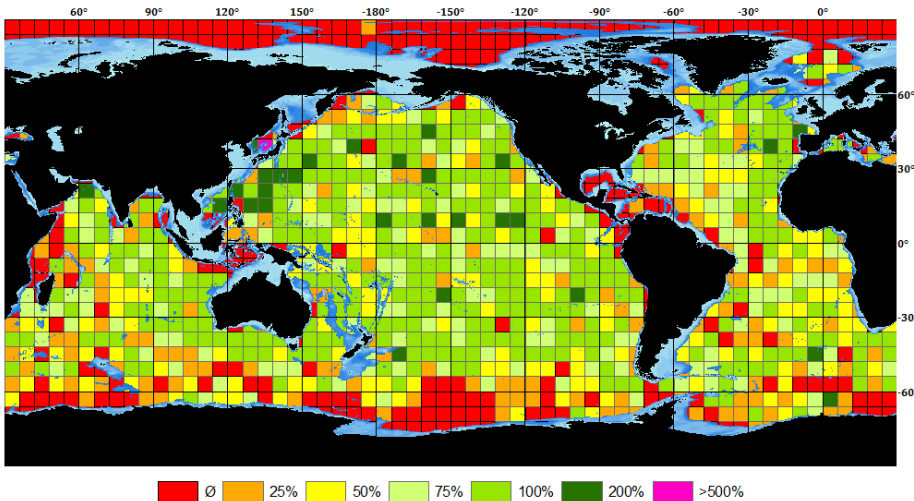


To be improved for SOT (need metadata !)



Developments and reporting tools

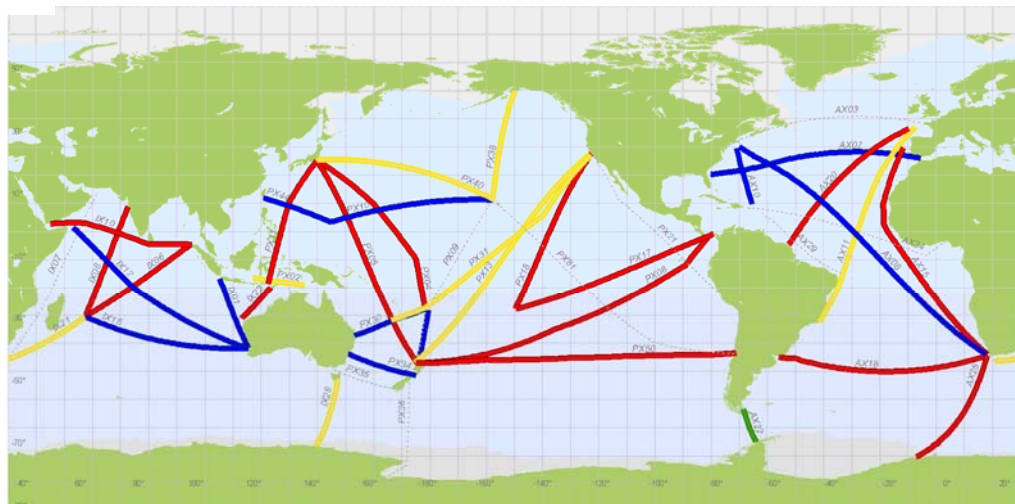
- Networks success, density, age, planning, ...



Planning (533) April 2009

★ ARGENTINA (4)	★ CANADA (26)	★ GABON (2)	★ JAPAN (33)	★ SPAIN (16)
★ AUSTRALIA (77)	★ CHINA (29)	★ GERMANY (17)	★ KENYA (5)	★ UNITED KINGDOM (17)
★ BRAZIL (4)	★ FRANCE (67)	★ INDIA (25)	★ KOREA (REPUBLIC OF) (5)	★ UNITED STATES (206)

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SOOP Annual Report. January - December 2007

UOT Review lines only — Well Sampled (11) — Oversampled (1) — 50% Sampled (8) — Undersampled (15) ···· Not Sampled (10)



Developments and reporting tools

- Interactive maps
 - Web Map Viewer (GIS)
 - Google Earth
 - Google Maps
 - PDF Layers

#5901660 Argo Profiling Float (AUSTRALIA)

About this float | Data | Oceanography - Stories | Links

Argo AUSTRALIA (301 Days, 30 cycles achieved)

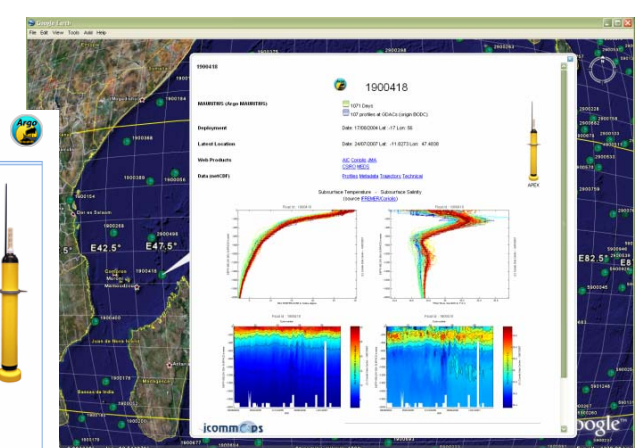
Location: 22/02/2009 at LAT=-24.9100 LON=164.9900 (#FlyTo Trajectory#)

Deployment: 27/04/2008 at LAT=-24.9100 LON=164.9900 (#FlyTo#)
by SHIP/CRUISE
CTD at launch: YES/NO

Model: APEX
Telecommunications: 33371 (ARGOS)
Internal ID: 3680
Serial No: 3680
Sensors: TEMP, PSAL, PRESS
Battery: Lithium

Configuration:
Park Pressure: 1000 dbar
Profile Pressure: 2000 dbar
Ice Detection Software: YES/NO

References, logos, etc of Institution/Agency operating the float



IMPORTANT NOTICE:

The depiction and use of boundaries, names, and other geographical information on this site are for reference only. They do not constitute an endorsement, approval, or warranty of any kind by NOAA or any of its agencies, nor do they constitute a commitment, or representation of the accuracy, completeness, or timeliness of the information.

Zoom In

Done



Future Plans

- Coordinate updates to (technical document) publications and creation of best practice documents
- Design new products to track deployment/cruise plans and assist with creating new deployment opportunities within JCOMM
- Integrate and improve all of JCOMMOPS QC feedback tools
- Implement “variable oriented” monitoring products across programmes.
 - E.g. density map of good quality Subsurface Temperature on a 6x6 grid
 - Work within JCOMM OCG
 - Especially for SOT (1 year of data is too big for a simple map)



Challenges

- Clarify access to information and develop a web based toolbox that will be useful in future
- These issues are being addressed by
 - integrating the technical elements of the Information System better
 - designing a new structure for the JCOMMOPS website
 - analysing, in depth, the results of the websites audience tracking set up a year ago
 - using more interactivity in navigation (thanks to new technologies)
 - developing a profile based service: “*My JCOMMOPS*”



Ships ... New position required at JCOMMOPS

- Ships are one of the common denominators of all obs. systems tracked by JCOMMOPS
- Information about ships provides the best opportunity to share resources across programmes
- Improve ship-related metadata
- Facilitate maintenance and operations of global arrays through logistics coordination when required.
- Further develop cooperation between programmes (e.g. shared cruises, ship time).
- Further develop Float/buoy donor programmes and identify new regional deployment opportunities.
- Arrange retrieval of beached instruments when necessary.
- Identify CTD cruises and data essential to Argo data quality control, in cooperation with the CCHDO and POGO initiatives.



Conclusion

- The “JCOMM OPSC” process demonstrated that JCOMMOPS is well supported internationally. (see next talk)
- There is a good opportunity for growth ... but how can we make it happen ?
- We have a window of opportunity to boost the capacity and services JCOMMOPS can offer to the JCOMM communities.
- Remark: OceanObs'09 JCOMMOPS paper (SOT inputs welcome)