

Argo Information Centre

AIC

M. Belbeoch, Argo TC

May 2005

Cape Town, South Africa



AIC Background

- Established in feb. 2001, Toulouse (France), within JCOMMOPS
- Became part of the Argo Project Office in 2003
- Staffed with 1 Technical Coordinator (IOC employee)
- Funded by Australia, Canada, France, UK and US

- Guidance by AST chair and APO Director
- Close collaboration with IOC and WMO secretariats

- IOC Res. XX-6 implementation
- International Coordination

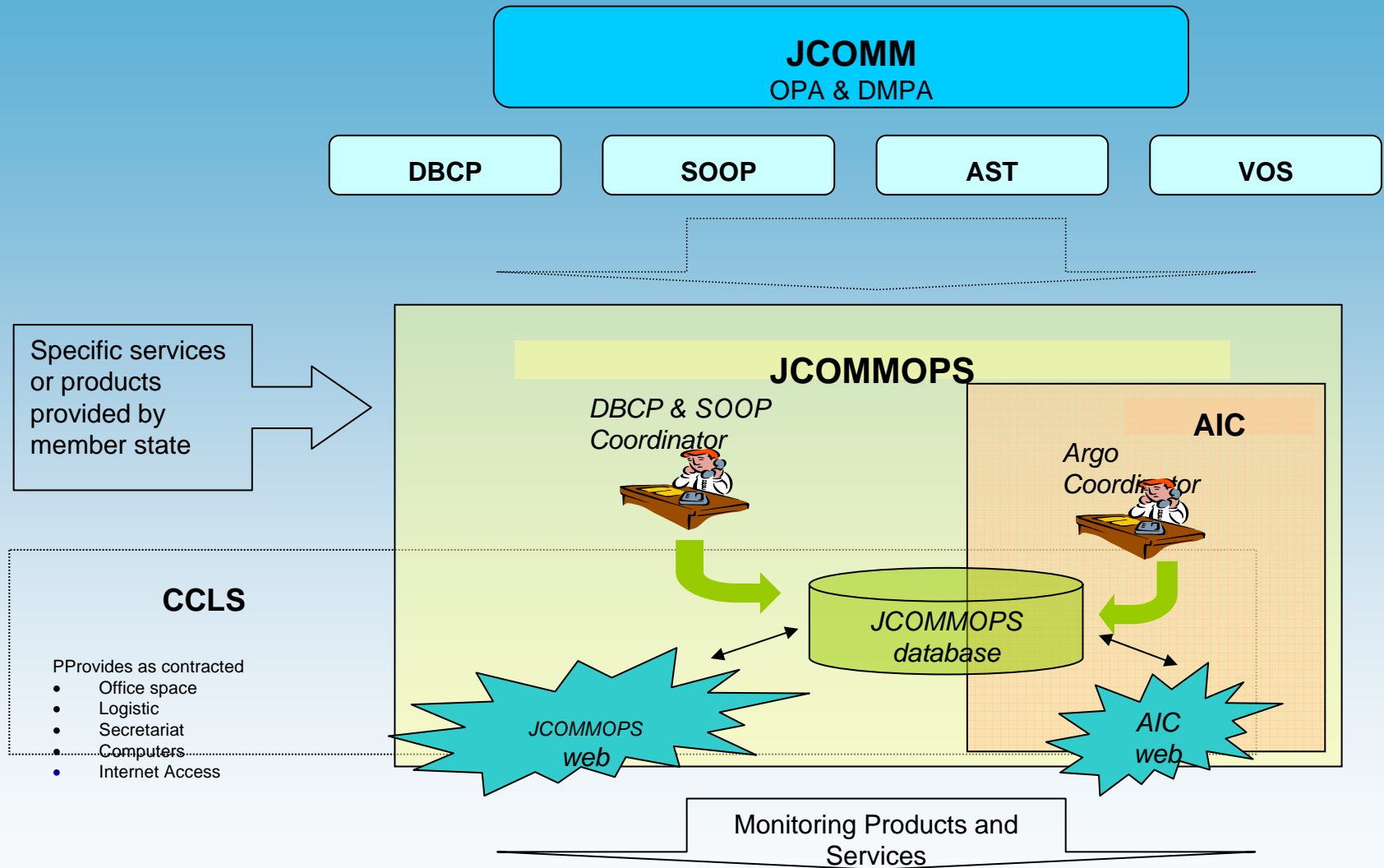


JCOMMOPS

- JCOMM in-situ Observing Platforms Support centre (June 2001)
- Argo, DBCP, SOOP coordination
- Logistic contract with CLS-Argos
- 10 000 \$ / year extra funding for the information system
- 1 student / year
- Argo TC benefits experience from 15 years of international coo.
- Synergies are developed
- Integrated services available (programme status, deployment opportunities, assistance for data distribution, etc)
- JCOMMOPS facilitates: decision making proces, implementation, monitoring



JCOMMOPS ...



Coordination

- Facilitate Argo implementation
 - Assist all actors as appropriate
 - Monitor the global network
 - Facilitate data management
 - Promote the programme
 - Encourage new participants
-
- Act as a clearing house regarding all aspects of Argo
 - Act as a focal point regarding communications
-
- Efficient Information System & reactivity needed



The Information System

- Time consuming to develop (on going effort: < 30% working time)
 - Time saving to use
 - Implemented and maintained by TC
 - TC = main user
-
- Coordination and Monitoring facilitated
 - Information spreading facilitated
 - Services provided on-line / on demand
-
- 3 Servers (Data Base, web applications, GIS/charts)
 - Mailing Lists
 - FTP



The Information System

AIC web site: “visible part of the iceberg”

2001: Interim static website (E.Charpentier)

2002: Backbone of the I.S operational (Database, GIS, dynamic web app.)

2003: Main products upgraded – Site fully dynamic

2004: Integration – Design – www.argo.net

2005: Final website being rewied



1371 Active Floats
 15.7%
 Sep 09, 2004 15:05, Europe/Paris
 Target: 3000 floats by 2006

Argo Steering Team (AST)
 Argo Information Centre (AIC)

username ?
 password ?
 OK

ARGO
 MAP ROOM
 IMPLEMENTATION
 DATA SYSTEM
 INSTRUMENTATION
 DOCUMENTS
 NEWS
 CONTACTS
 MEETINGS
 WWW
 HELP

Search


jcommops.org
 WWW
 JCOMMOPS DB

ARGO
 part of the integrated global observation strategy

Welcome to the International Argo Information Centre
 A source of information on the progress of the Argo project and a component of JCOMMOPS,
 JCOMM in-situ Observing Platform Support Centre

Deployment Notification Interactive Map Project Status National Programs Find Floats Data Access

--- Latest Maps ---



● AUSTRALIA ● GERMANY ● NEW ZEALAND
 ● CANADA ● INDIA ● NORWAY
 ● CHINA ● IRELAND ● RUSSIAN FEDERATION
 ● DENMARK ● JAPAN ● SPAIN
 ● EUROPEAN UNION ● KOREA (Rep. of) ● UNITED KINGDOM
 ● FRANCE ● MAURITIUS ● UNITED STATES

Latest News:

First Dutch Argo Deployments, September 02, 2004
 Argentina: Deployment opportunities in the Southern Ocean, Aug 12, 2004
 Arctic Observing Based on Ice-Tethered Platforms - Workshop, Aug 12, 2004
 First Delayed Mode Data available at GDACs, July 30, 2004
 German Argo project funded for next 3 years, July 30, 2004
 University of Hawaii: A new US Argo contributor, July 15, 2004
 Assessment of APEX float tests in the Catalan Sea, July 07, 2004
 Float Recovery in Sri Lanka, Jun 29, 2004
 New AST website, Jun 16, 2004
 Southern Ocean: 1st NEMO Floats launched by AWI, Jun 03, 2004

Next Argo Meetings:

Argo Steering Team #7, Hyderabad, India 01/02/2005 - 04/02/2005
 Argo Data Management Team #5, SOC, United Kingdom 29/09/2004 - 01/10/2004

ARGO.NET

WELCOME TO THE INTERNATIONAL ARGO PROJECT HOME PAGE

Argo takes the pulse of the oceans, collecting and distributing temperature and salinity observations from a fleet of 3000 underwater robots.

ARGENT, RECORDING SALINITY AND TEMPERATURE - 10 HOURS

Argo Project Office
 Argo Information Centre
 Argo Data

FLASH version
 HTML version
 credits

<http://www.argo.net>

<http://argo.jcommops.org>

Argo Information Centre
 jcommops

1913 Active Floats, May 10, 2005
 Target: 3°x3° Array (~3000 floats)
 60%

IMPLEMENTATION MONITORING MAP ROOM INSTRUMENTATION DATA

Search OK

username ?
 password ?
 OK

Latest Maps Interactive Maps (GIS) Misc.

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NEWS

Development of Marine Data Exchange Systems using XML, Apr 04
 Argo General Presentation, Mar 21
 NODC Releases new version of the Argo Data Explorer, Feb 21
 Float Bibliography Updated by the Argo Project Office, Feb 02
 New Price List for Argos Telecommunications, Jan 17
 German Deployment Opportunity in the Atlantic, Jan 11
 Japanese floats deployed by fisheries high school students, Jan 04
 Next Argo meetings: Argo Exec 2005 - AST#7 2006, Dec 20
 Floats, Iridium communications & Hurricane Frances, Dec 20
 50% of the network achieved: 1500 floats operational, Nov 30

MEETINGS

South Atlantic Argo Regional Data Centre #1, SOUTH AFRICA 12/05-14/05/05
 Argo Data Management Team #6, JAPAN 08/11-11/11/05
 Argo Steering Team #7, INDIA 16/01-18/01/06

The Argo project is supported by:

ARGENTINA- AUSTRALIA- CANADA- CHILE- CHINA- COOK ISLANDS- COSTA RICA- DENMARK- EUROPEAN UNION- FIJI- FRANCE- GERMANY- ICELAND- INDIA- INDONESIA- IRELAND- JAPAN- KIRIBATI- KOREA (REPUBLIC OF)- MARSHALL ISLANDS- MAURITIUS- MEXICO- MICRONESIA, FEDERATED STATES OF- MOZAMBIQUE- NETHERLANDS- NEW CALEDONIA- NEW ZEALAND- NIUE- NORWAY- PAPUA NEW GUINEA- RUSSIAN FEDERATION- SAMOA- SOLOMON ISLANDS- SOUTH AFRICA- SPAIN- TOKELAU- TONGA- TUVALU- UNITED KINGDOM- UNITED STATES- VANUATU

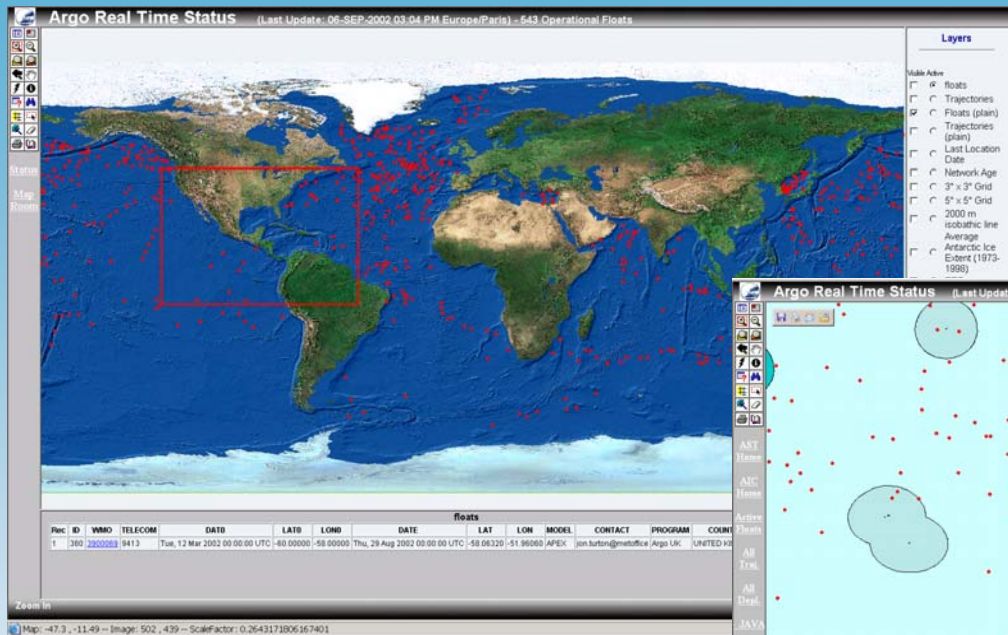
NEWS
 CONTACTS
 DOCUMENTS
 MEETINGS
 LINKS
 HELP

The Information System ... AIC website

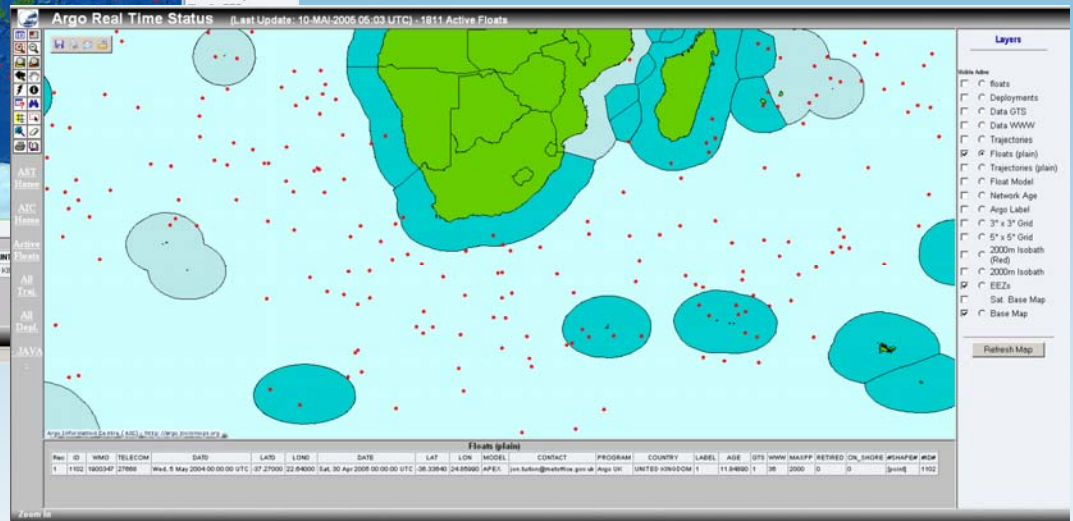
- Design for the Argo community
(TC, Float operators, Prog. Managers, Data Managers, Modelers, Argonauts, etc...)
- ... not for large public
- Audience >>> Target
- Includes basic www sections (“news”, “contacts”, “meetings”, “documents”, “help”, etc)
- ... and operations/ monitoring oriented products



The Information System ... available products



Interactive Map



<http://w3.jcommops.org/website/ArgoMap>

*zoom in/out, query, display maps
many layers available (trajectories, EEZs,
etc)*



Intergovernmental
Oceanographic Commission

JCOMMOPS

ARGO
INFORMATION CENTRE



World Meteorological
Organization

Notifications

The **IOC Resolution XX-6** requires that:

"Every concerned coastal states must be informed, in advance, through appropriate channels, of all float deployment which might drift into waters under their jurisdiction, indicating their exact deployment date and location..."

This deployment notification will be sent to every Argo National Focal Point. A joint WMO-IOC Circular Letter have been sent to all members in order to designate NFPs.

If your country doesn't have yet designated a NFP please contact the **AIC**.

Please **Login** or **Enter** as a simple user: **Enter**

Username:

Password:

Ok

New Load Status Opportunities

WMO ID

Telecom ID

Telecom Type

My ID

Serial No

Notification Date Format: DD/MM/YYYY

Deployment Date Format: DD/MM/YYYY

Latitude

Longitude

Country

Program

Platform Model

Deploying Country

Deployment Type

Ship Call Sign

Deployment Method

Deployment Height (m)

Ship Speed (knots)

Wind Speed (Beaufort)

Sea State

Please enter here any additional information

Comments

CTD ☐

Label ☐

Notification ☐



Save

Save & Notify

Deployment Notification Interface:

<http://w3.jcommops.org/cgi-bin/WebObjects/Notification>

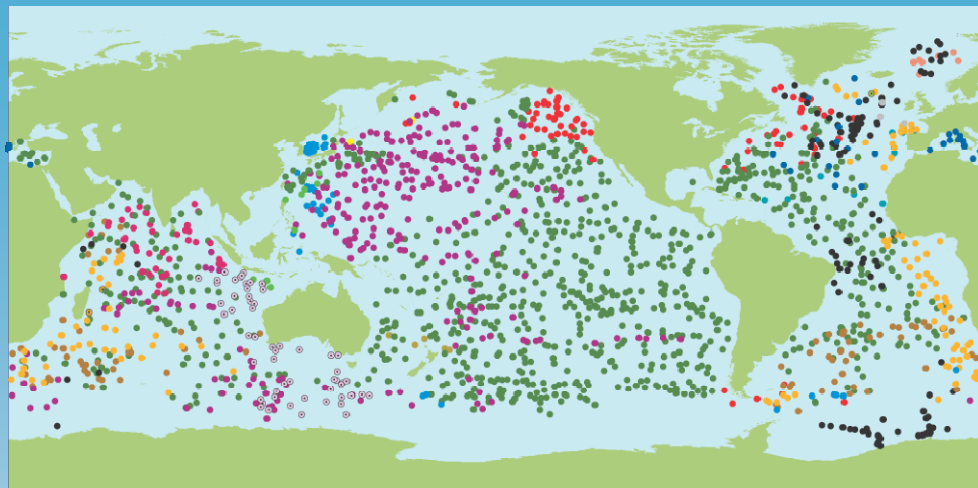
Official Argo Active Float list with latest locations and basic metadata (updated bi-daily)
<ftp://ftp.jcommops.org/Argo/Status/status.txt>

All Argo Deployments (bi-daily)
<ftp://ftp.jcommops.org/Argo/Status/deployment.txt>

All float trajectories (weekly)
<ftp://ftp.jcommops.org/Argo/Status/loc.txt>

⇒ Use it when you want to display current program status
(Metadata have been QCed by TC)

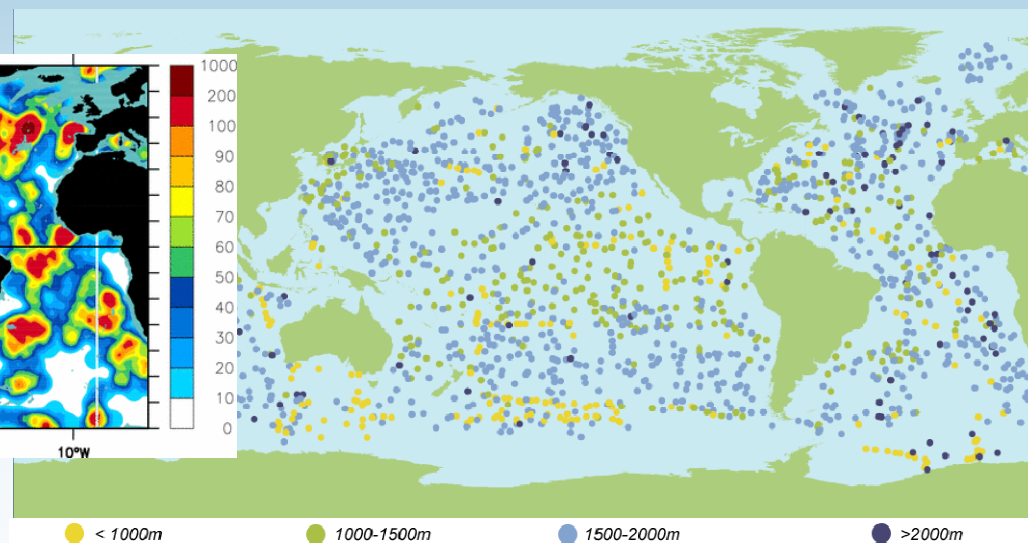
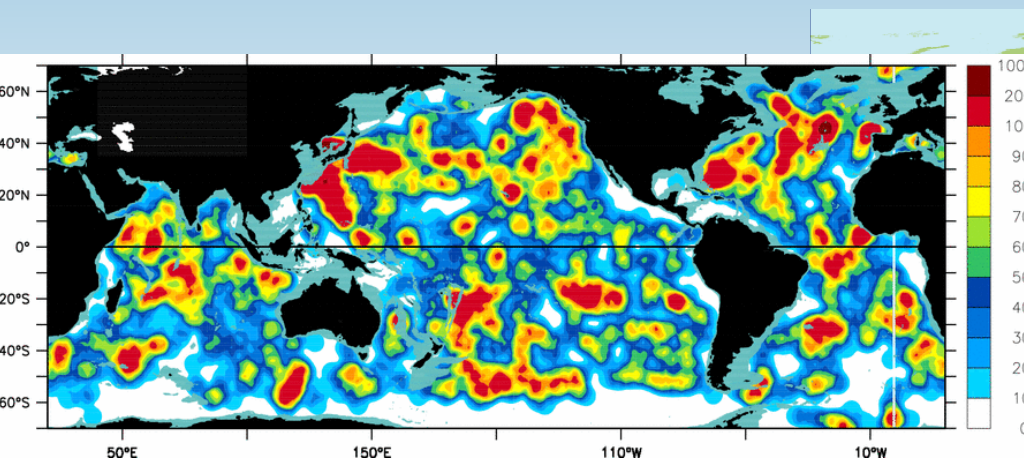
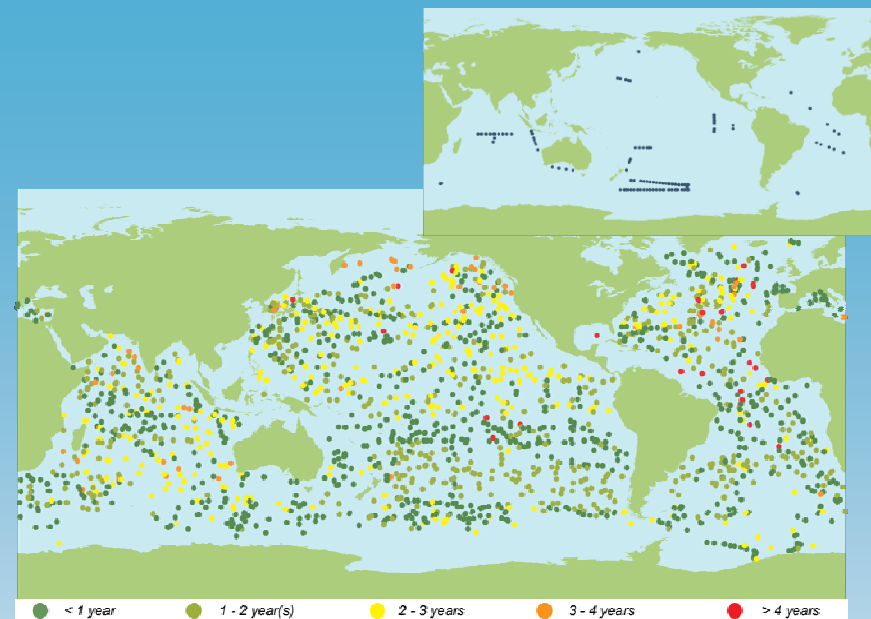




Argo Network, as of April 2005

1811 Active Floats

● AUSTRALIA (56)	● GERMANY (112)	● MAURITIUS (2)
● CANADA (75)	● INDIA (40)	● NETHERLANDS (3)
● CHINA (11)	● IRELAND (1)	● NEW ZEALAND (5)
● EUROPEAN UNION (30)	● JAPAN (284)	● NORWAY (8)
● FRANCE (112)	● KOREA (53)	● RUSSIAN FED. (4)
	● SPAIN (10)	● UNITED KINGDOM (84)
		● UNITED STATES (923)



Map Room: 10 monthly maps

<http://w3.jcommops.org/cgi-bin/WebObjects/Argo.wda/wa/main>



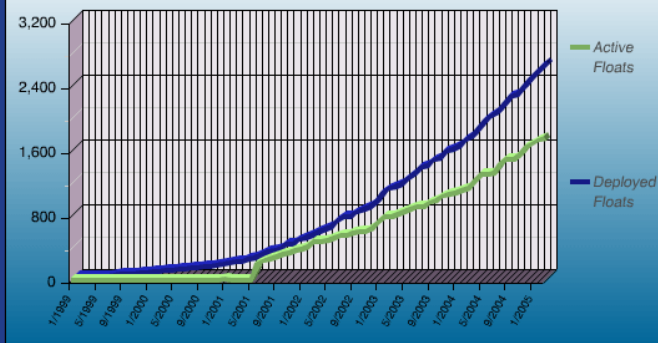
Argo Global Program Status

<http://w3.jcommops.org/cgi->

[/Argo.woa/wa/status](http://Argo.woa/wa/status)

How has the project developed ?

Argo Network Growth



Choose another image type in case of problem

Draw Chart

- Roll over your mouse along the curve to display values
- AIC was established in February 2001 and so rigorous network monitoring starts mid 2001

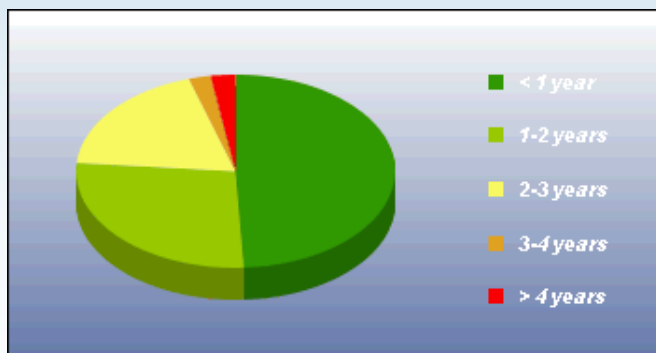
Yearly Deployments:

	1998	1999	2000	2001	2002	2003	2004	2005	Total
Atlantic Ocean	12	9	64	90	136	165	193	50	719
Indian Ocean	0	3	17	27	99	116	134	29	425
Pacific Ocean	13	49	35	166	182	314	384	116	1259
Southern Ocean	0	0	0	11	36	73	135	168	423

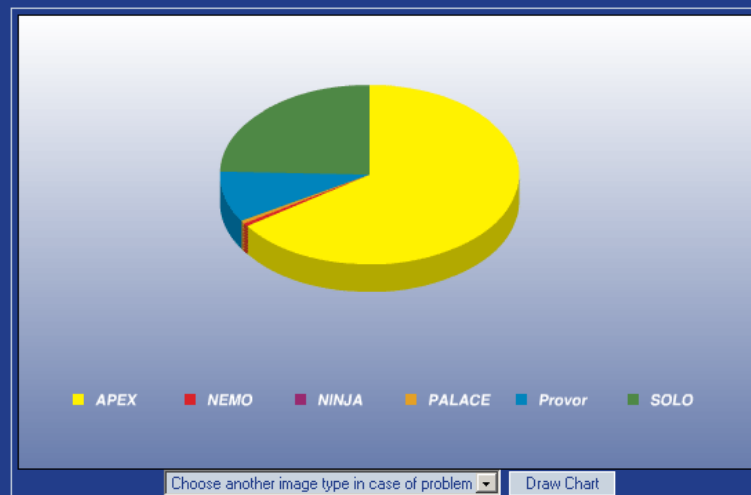
Yearly Deployments



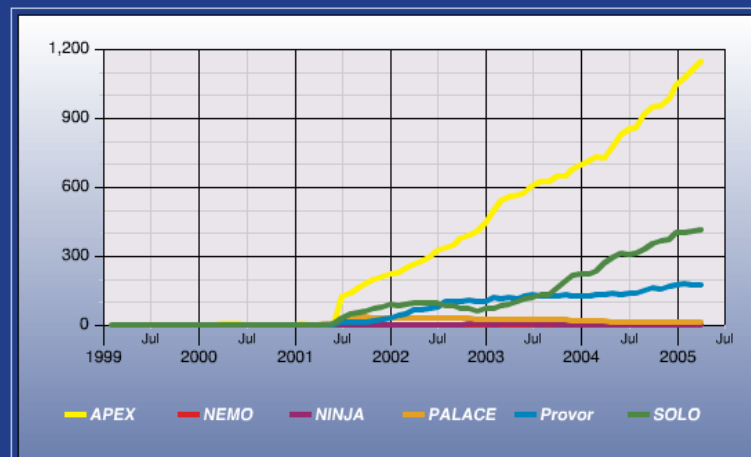
as of May 03, 2005



Active Argo Float Models Distribution, as of today



Active Argo Float Models, Growth

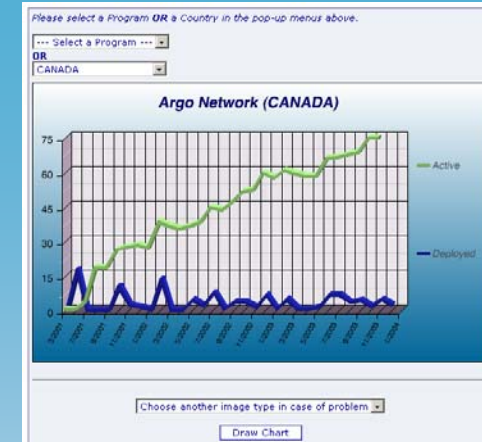


National/Regional program status

<http://w3.jcommops.org/cgi-bin/WebObjects/Argo.woa/wa/prog>

Float Search Engine

<http://w3.jcommops.org/cgi-bin/WebObjects/Argo.woa/ptfSearch>



Program / Country	- none -	
WMO ID		
Telecom ID		Telecom Type - none -
Platform Model	- none -	
Argo Equivalent	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Deployment Date		
Deployment Lat.		
Deployment Lon.		
Label	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Last Location Date		
Last Location Lat.		
Last Location Lon.		
Active	Dead	Retired
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
GTS **	Age (Days)	
<input type="checkbox"/> Yes <input type="checkbox"/> No		
WWW ***		
<input type="checkbox"/> Yes <input type="checkbox"/> No Available Profiles (Number)		
Cancel Search		

31 Platform(s) Display 10 items Page 2 of 4


Status	WMO ID	Telecom ID	Date	Lat	Lon	Model	Program	Data	# Profiles	Age	Depth	Label
	5900045	6449	20/05/2004	-12.2283	98.4502	APEX	Argo AUSTRALIA		30	10.2	1683	
	5900035	6332	24/05/2004	-15.4949	111.5493	APEX	Argo AUSTRALIA		53	17.7	1976	
	5900027	6301	21/05/2004	-11.9315	104.1329	APEX	Argo AUSTRALIA		60	20.1	1364	
	5900032	6302	23/05/2004	-10.2234	97.0393	APEX	Argo AUSTRALIA		59	19.7	1978	
	5900044	6437	23/05/2004	-16.8127	101.8768	APEX	Argo AUSTRALIA		43	14.5	1982	
	5900040	6488	18/05/2004	-35.4139	112.6941	APEX	Argo AUSTRALIA		47	15.8	1976	
	5900039	6448	17/05/2004	-32.0354	111.5600	APEX	Argo AUSTRALIA		47	15.8	2018	
	5900029	6333	19/05/2004	-25.2244	104.0039	APEX	Argo AUSTRALIA		59	19.7	1979	
	53554	21071	11/12/2001	-12.5829	106.1318	APEX	Argo AUSTRALIA		80	26	2119	
	56510	21074	19/05/2003	-15.5096	108.6880	APEX	Argo AUSTRALIA		104	33.8	2277	

export


Float Detail Page

<http://w3.jcommops.org/cgi-bin/WebObjects/Argo.woa/wa/ptf?wmo=A9nnnnn>

5900939



Age (days) 1.1

Argo UW 

Telecom: 55752 (ARGOS)


Deployment Date 02/05/2005

Notification Date 03/05/2005

Lat. -21.0000

Lon. -151.0000

Notes:



APEX

GET DATA

IFREMER (FR)

0 profiles available

FNMOC (US)

Float "Blacklisted" (pb on sensor(s)) ☐

Display Locations

GTS Monthly Statistics

GTSPP QC Feedback

DAC Monitoring Products

CSIRO

Coriolis

JMA

MEDS

- On-line reporting interface provided for DACs and GDACs (for Real Time and Delayed Mode)
- Used by DAC managers
- Used by ADMT chair to get a global view

Please select a related operational DAC:

[Coriolis](#)
 [CSIRO](#)
 [MEDS](#)
 [JMA](#)
 [AOML](#)
 [BODC](#)
 [METRI/KMA](#)

BODC (DAC)

Home http://www.bodc.ac.uk/projects/argo/Argo_info.htm

Access URL --- No URL with WMO Id to access a float detail page ---

Supported Programme(s)

- Argo UK
- Argo eq. UK
- Argo MAURITIUS
- Argo eq. IRELAND

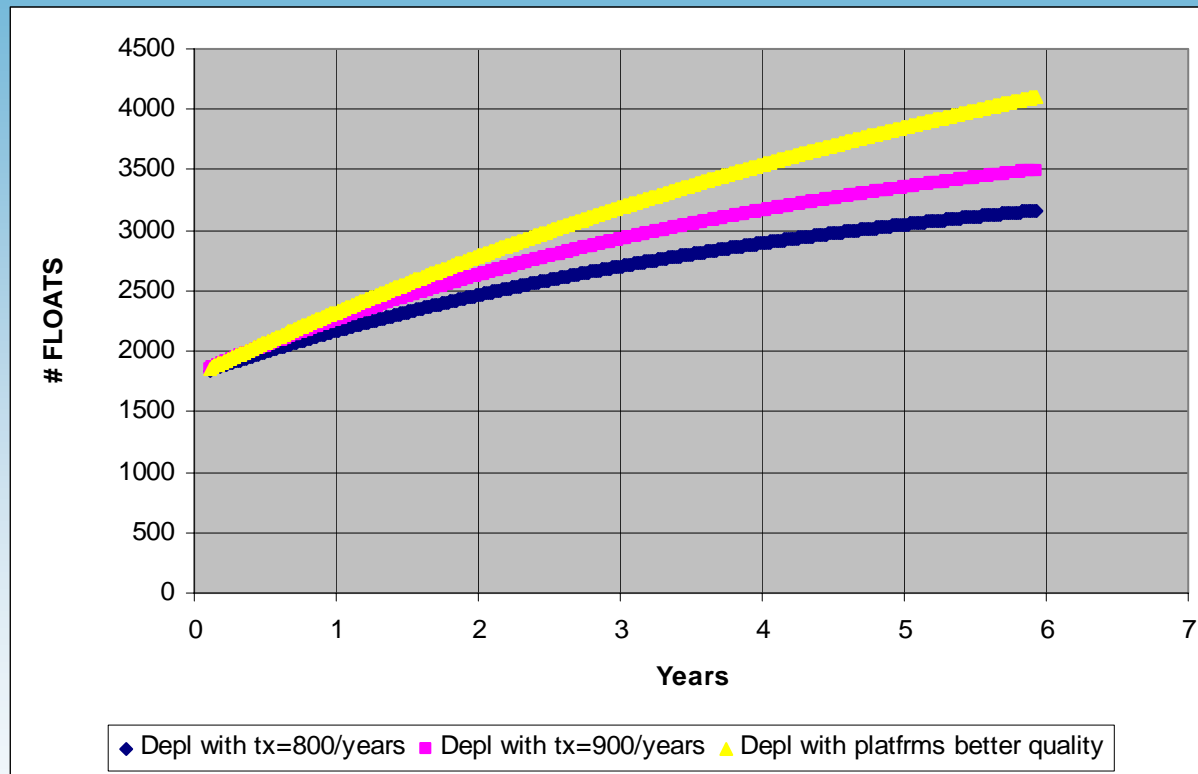
R/T Milestone	Start date	Target Date	Comments	Realized
1	Data acquired from floats		First UK Argo floats deployed in January 2001, with data being provided by ftp to Southampton Oceanography Centre.	100 %
2	Data issued to GTS - TESAC		Float data from Apex floats posted onto GTS via the CLS GTS pre-processing system, data from PROVOR floats posted on to GTS by Coriolis.	100 %
3	Data issued to GTS - BUFR			0 %
4	Data issued to GDACs - Metadata		Metadata files for all UK floats (active or inactive) are available at both GDACs. New floats are dealt with when they occur.	100 %
5	Data issued to GDACs - Profiles		Profile NetCDF files are sent to GDACs every 24 hours for any new data received.	100 %
6	Data issued to GDACs - Trajectories		Can write v2 netCDF for trajectories. Waiting for this to be accepted.	50 %
7	Data issued to GDACs - Technical			0 %
8	Data issued to PIs		Data is available from the GDACs and BODC within 24 hours of being received at BODC.	100 %
9	Web Pages available for data		UK Argo data site is hosted by BODC where links to BODC holdings and GDACs are available http://www.bodc.ac.uk/projects/argo/datapage.htm	100 %
10	Web Pages available for reporting on DAC activities		Interactive map showing all UK floats and access to all UK data is present at http://www.bodc.ac.uk/projects/argo/argo.html	100 %

New parameters monitored by the AIC, float per float:

- “are this float data published on the GTS ?”
- “are this float data published at the GDACs ?”
- Daily Data sources: Meteo-France, Coriolis
- Comparison with AIC official active float list
- Reports on-line: <http://w3.jcommops.org/cgi-bin/WebObjects/Argo.woa/wa/dataStats>
- Reports sent to operators (manual ... auto)



AIC next ...predict the network growth



International / Intergovernmental Issues

Float Retrieval Procedure

- 1% expected to be retrieved
- 50% of the fleet have labels
- Target is to label all
- Countries responsible for retrieval of floats when found (AIC assistance)



World Meteorological
Organization

Organisation
météorologique mondiale

Organización
Meteorológica Mundial

世界气象组织

Всемирная
метеорологическая
организация

المنظمة العالمية
للأرصاد الجوية

United Nations
World Climate Research
Programme

Nations Unies
Programme mondial de recherche
sur le climat

Programa Mundial
de Investigaciones Climáticas
de las Naciones Unidas

联合国
世界气候研究计划

Организация
Объединенных Наций
Всемирная программа
исследования климата

البرنامج العالمي لبحوث المناخ
التابع للأمم المتحدة

ARGO FLOAT
FLOTTEUR ARGO
FLOTADOR ARGO

ARGO - 浮标

Дрейфующий буй проекта «Арго»

الرقم المتسلسل



Intergovernmental
Oceanographic Commission
(of UNESCO)

Commission océanographique
intergouvernementale
(de l'UNESCO)

Comisión Oceanográfica
Intergubernamental
(de la UNESCO)

教科文组织
政府间海洋学委员会

اللجنة الدولية
الحكومية لعلوم المحيطات
(التابعة لليونسكو)

Межправительственная
океанографическая
комиссия (ЮНЕСКО)

This is scientific equipment, it is not military materiel and has no commercial value.

This float is used for ocean predictions and
provides valuable information to many communities, including fishermen.

For your safety **DO NOT OPEN** this instrument.

If found, please contact the International Argo Information Centre:

phone : +33 5 61 39 47 30 (free) - France

fax : +33 5 61 39 48 40

e-mail : aic@jcommops.org

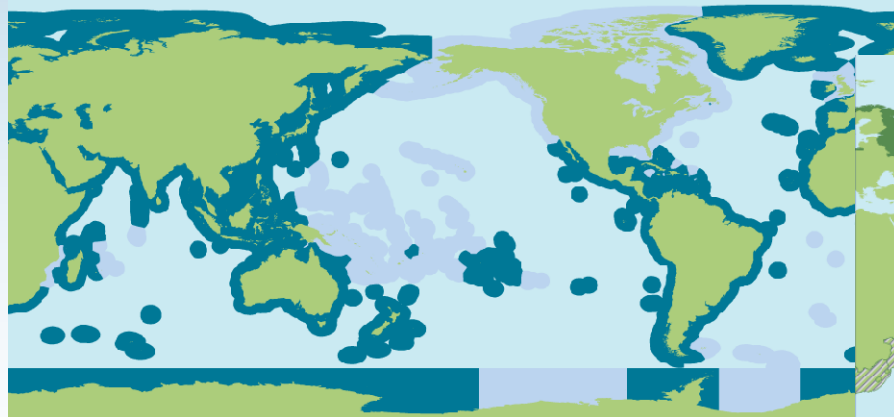
<http://argo.jcommops.org>

Or contact your local Coast Guard or Fisheries Agency.

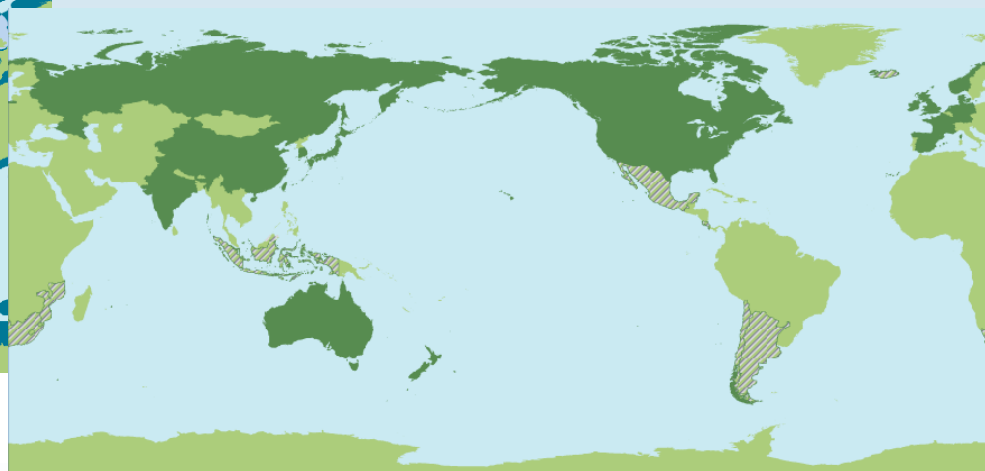


How to participate in Argo ?

- Designate NFP
- Fund floats / Fund the infrastructure (APO/AIC)
- Provide deployment opportunities
- Facilitate EEZ access



■ EEZs
■ EEZs: General concurrence for Argo float deployments
■ High Seas



■ Float Funding & Deployment
■ Deployment



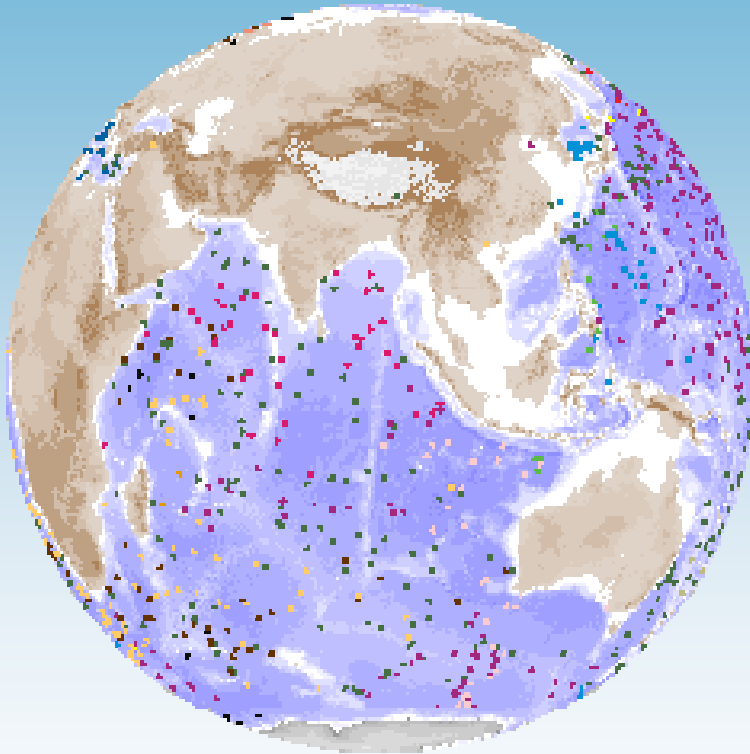
Bilateral Collaborations

- Float Donations: to Chile, Costa Rica and Mexico
value \$15,000 /unit + Communications :
 - Shipping paid by recipient
 - Deployment location chosen using regional expertise but adhering to Argo standards
- Invitation to support Argo sent by intergovernmental channels (IOC)
- Visit of TC (seminars, training on float technology)



Thank you ...

... Find more on-line <http://www.argo.net>



*Argo Globe,
Courtesy H. Freeland, IOS Canada*

