



**DIRECTORATE OF HYDROGRAPHY AND NAVIGATION
NAVY HYDROGRAPHIC CENTER**



DBCP-29

**BRAZIL NATIONAL
REPORT**



Paris - SEP 2013

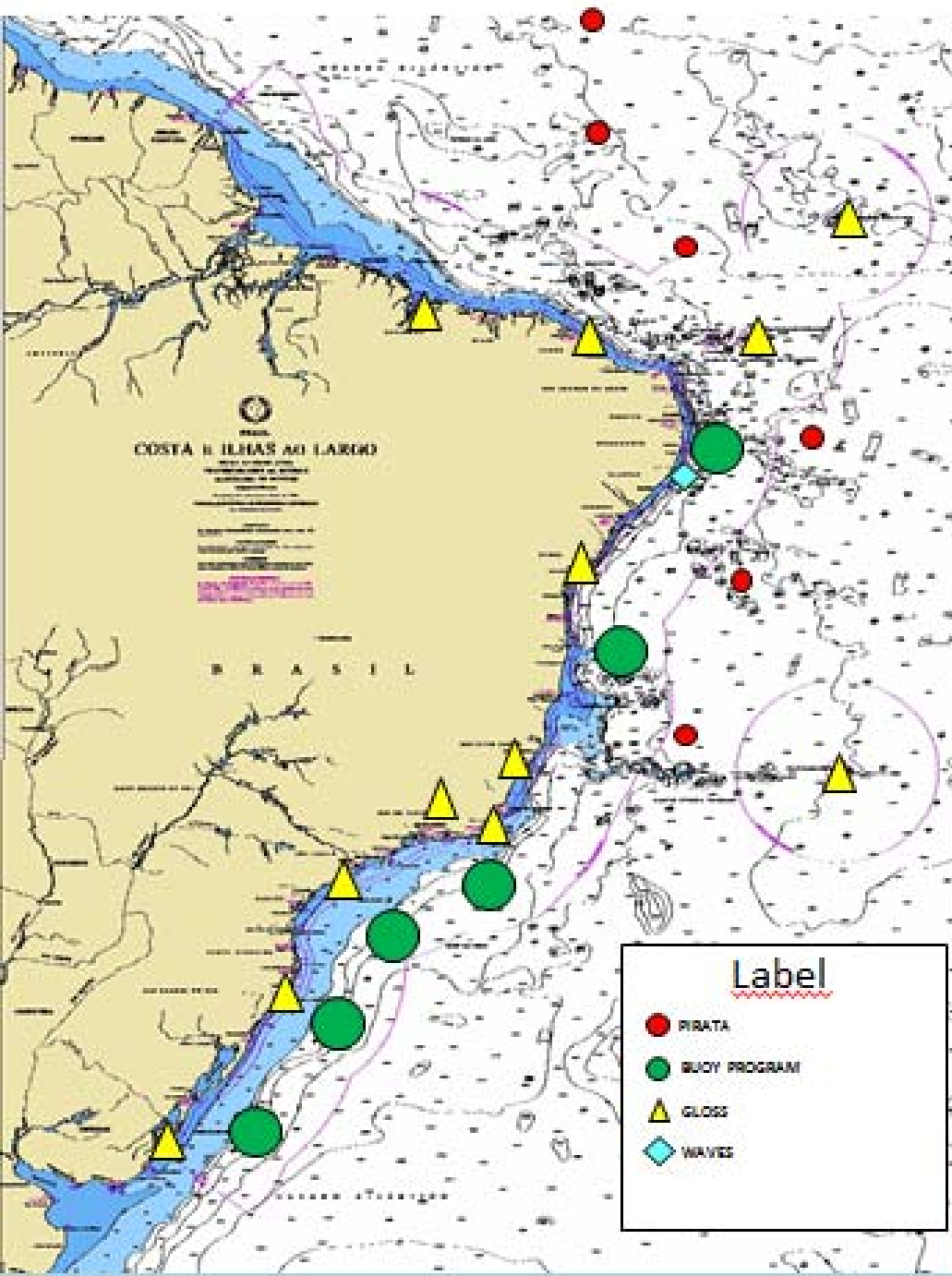
Historical Review

The Brazilian National Buoy Program was approved, together with the GOOS/Brazil Pilot Program, during the Meeting of the Interministerial Commission for the Sea Resources (CIRM), held in April, 1997.

GOOS/Brazil Program

- **NATIONAL BUOY PROGRAM**
- **GLOSS**
- **PIRATA**
- **WAVES Network**
- **MOVAR**

GOOS Brazil

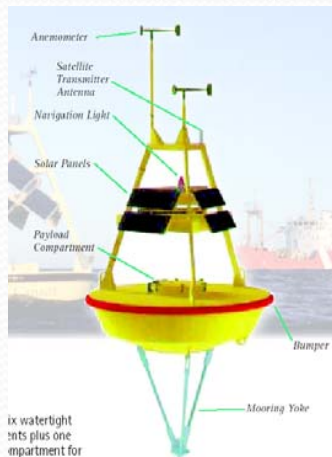


Participating Institutions



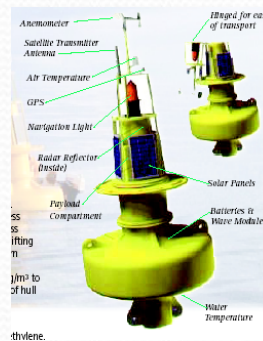
Brazilian National Buoy Program

The National Buoy Program has the goal of collecting oceanographic and meteorological data in the South Atlantic Ocean, by a buoy network in support to meteorological and oceanographic activities in Brazil.



ix watertight
nts plus one
partment for

3M



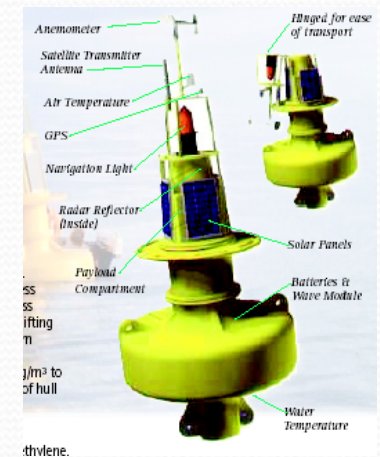
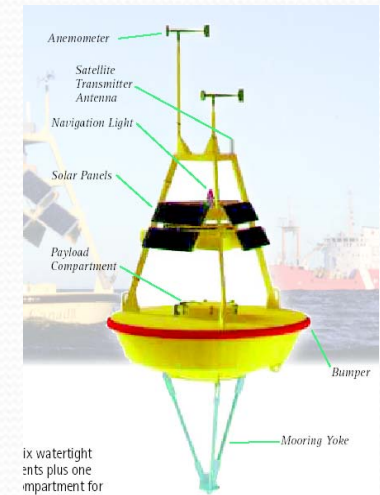
Watchkeeper



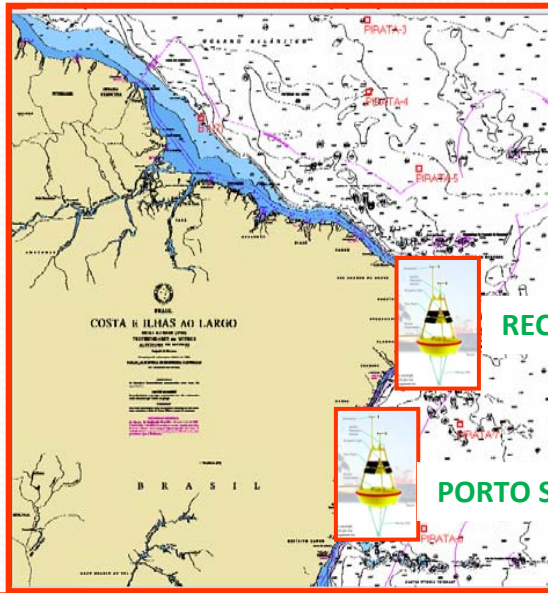
Drifters

COLLECTED DATA

http://www.axystechnologies.com/products/index	3M BUOY (PLATAFORM)	WATCHKEEPER (COASTAL BUOY)
MANUFACTURER	AXYS TECHNOLOGIES, CANADÁ	
WEIGHT	1.500 KG	800 KG
SENSORS		
ATMOSPHERIC PRESSURE	1	1
WIND (DIRECTION AND SPEED)	2	1
RELATIVE HUMIDITY	1	1
AIR TEMPERATURE	1	1
SEAWATER TEMPERATURE	1	1
SOLAR RADIATION	1	--
WAVE HEIGHT, PERIO AND DIRECTION	1	1
CURRENT PROFILE, UP TO 90M (ADCP)	1	1
FLUOROMETER	1	1
THERMISTOR CHAIN (6 LEVELS)	--	1
DATA TELEMETRY AND SAFETY		
GPS + OUT-OF-SITE ALARM	1	1
DATA TRANSMISSION INMARSAT-C	1	1
DATA TRANSMISSION ARGOS-CLS	1	1
AIS (VIA VHF)	1	--

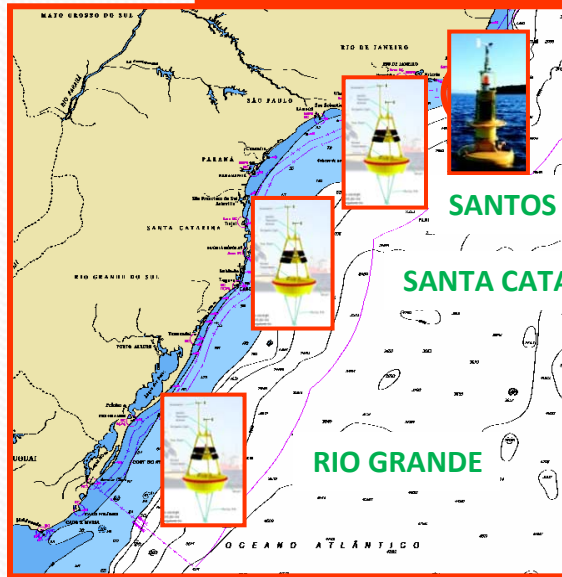


Present Situation of the Network



RECIFE

PORTO SEGURO



CABO FRIO

SANTOS

SANTA CATARINA

RIO GRANDE

05 buoys operating
01 buoy vandalized
02 spare buoys

SUPPORTING SHIPS AVAILABLE

NHo Amorim do Valle (H-35)



NF Alte Graça Aranha (H-34)



NOc Antares (H-40)



NB Comte. Varella (H-18)



LB Póllux



SUPPORTING SHIPS AVAILABLE

NP Alpha Crucis

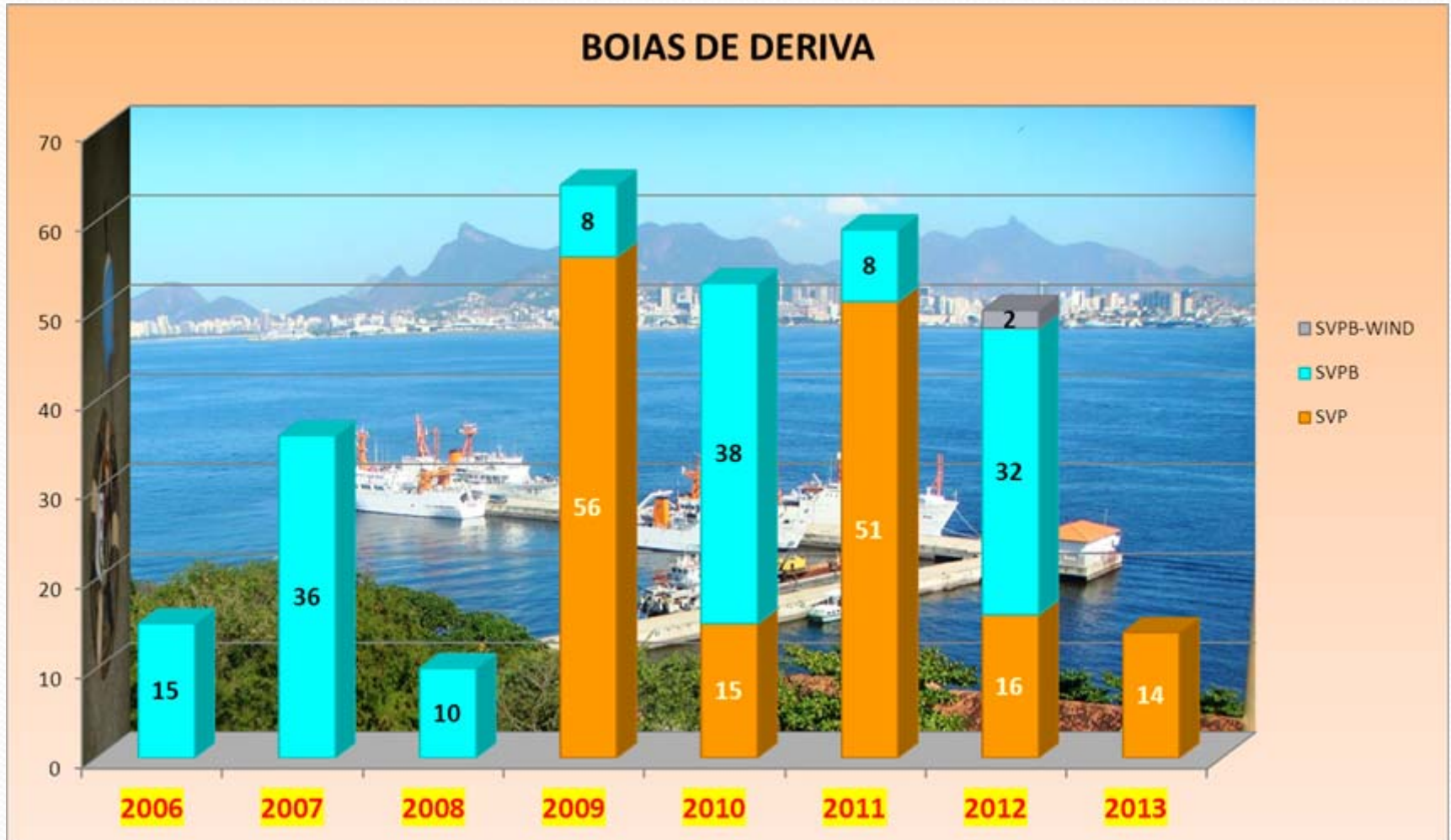


Drifting Buoys

- SVP
- SVP-B
- SVB-B Wind



Drifting Buoys Deployment



Internet Data Access

The screenshot shows the GOOS-BRASIL website with a blue header and navigation menu. The main content area features a grid of images related to oceanography and data collection. The left sidebar contains navigation links for projects and data. The right sidebar provides information about the organization and official pages. A central text box describes the GOOS-BRASIL system's role in ocean observation and data management.

GOOS-BRASIL Home News Instituições Contato English Stats

Projetos

- [PIRATA](#)
- [PNBOIA](#)
- [GLOSS-BRASIL](#)
- [Argo](#)
- [Antares](#)
- [MOVAR](#)

Dados

- [PIRATA](#)
- [PNBOIA](#)
- [GLOSS-BRASIL](#)
- [Argo](#)
- [Antares](#)

Página Oficial do GOOS-Brasil

Conheça o GOOS-Brasil

- [Projetos](#)
- [Relevância](#)
- [Módulos](#)
- [Links](#)
- [Mais Info](#)

Páginas Oficiais

- [OCEATLAN](#)
- [ISABP](#)
- [GOOS Rio](#)

GOOS-Brasil é a componente GOOS brasileira da Aliança Regional para a Oceanografia no Atlântico Sudoeste Superior e Tropical - [OCEATLAN](#).

O GOOS-BRASIL é um sistema nacional de observação dos oceanos visando a coleta, controle de qualidade, distribuição operacional de dados oceanográficos e monitoramento oceanográfico e climatológico no Atlântico Sul e tropical.

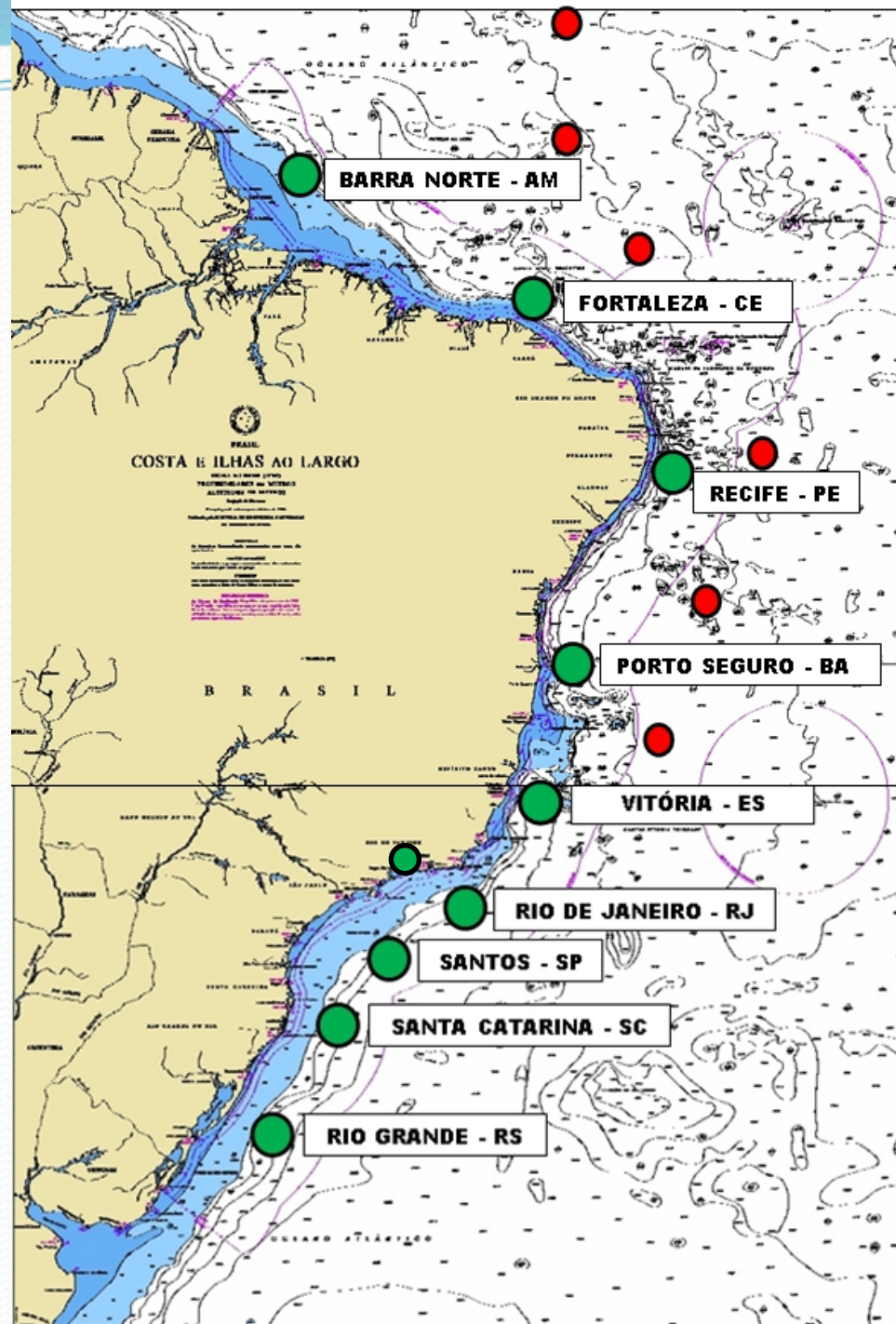
[News](#)

Internet 100%

www.goosbrasil.org

Future Plannig

- **Acquisition of four new buoys AXYS 3M**
- **Restructuring of the database**
- **Data transmission via INMARSAT**
- **Nationalization of the anchoring device**
- **Nationalization of buoys**



THANKS

LUÍS FELIPE SILVA SANTOS
Lieutenant Commander, MSc
Navy Hydrographic Center
Oceanographic Information Division
Fone: +55 (21) 2189-3025
felipe.santos@chm.mar.mil.br

DHN

Ponta da Armação – Niterói-RJ