Deployment Opportunities

Update for AST 16

M. Kramp

nformation gathered by JCOMMOPS

rgeted cruise and ship information:

- Research
  - GO-SHIP
  - Others
- Commercial shipping
  - Freight
  - Others
- Charter vessels
  - Fuel
  - Sail
- Sailing ships
  - Races/Rallies
  - Expeditions

Research

International (e.g. IRSO)

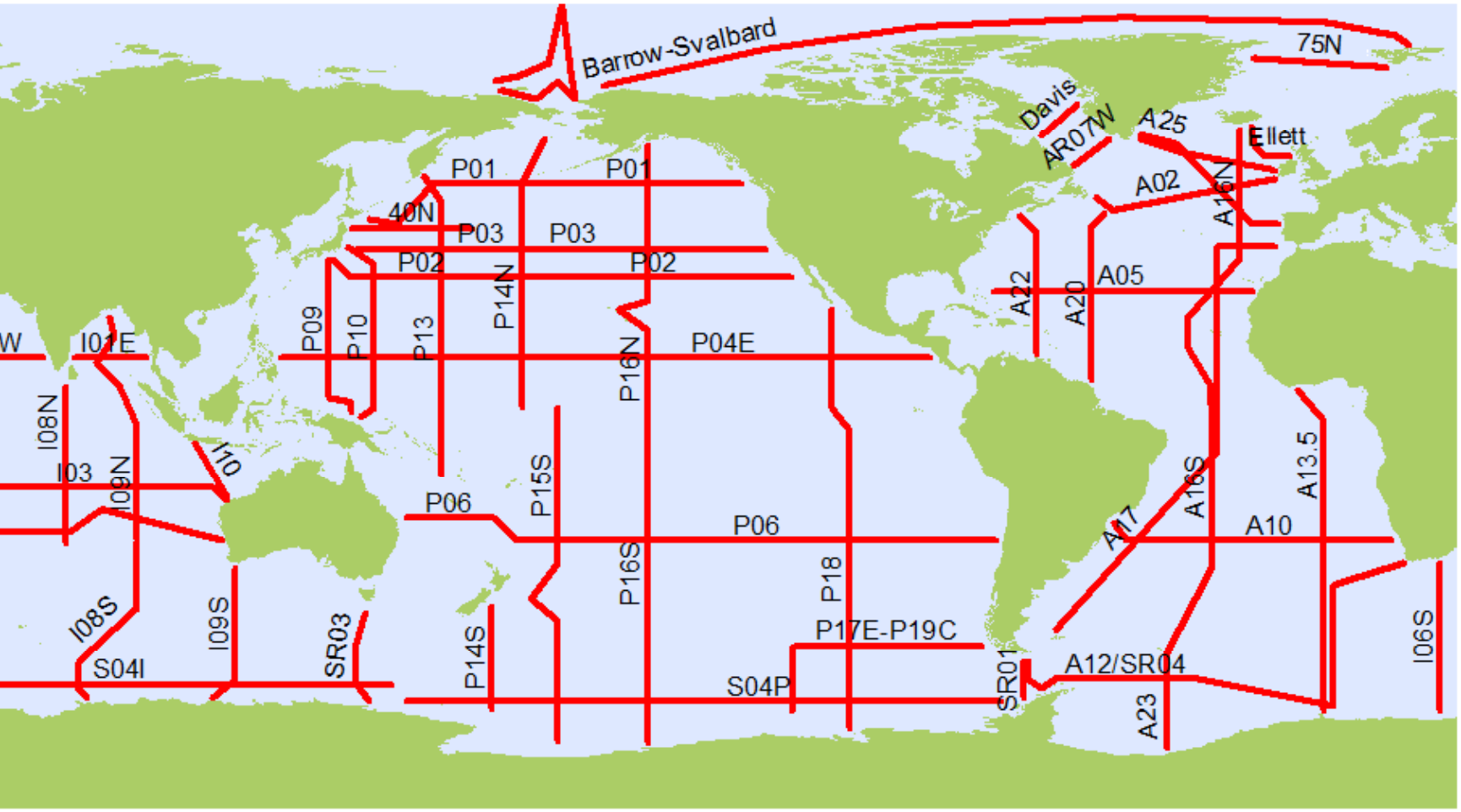
Multinational (e.g. OFEG)

National (e.g. UNOLS)

Institutional (e.g. AWI)

Network (e.g. Argo)

GO-SHIP Coordination @JCOMMOPS

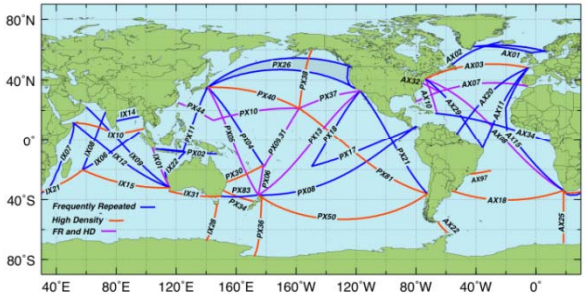


GO-SHIP Design Map
2012-2023 Survey

Status September 2014

Commercial Shipping

Synergies with other panels, in particular SOOP: JCOMMOPS needs metadata on SOOP cruises, prior and after the cruise



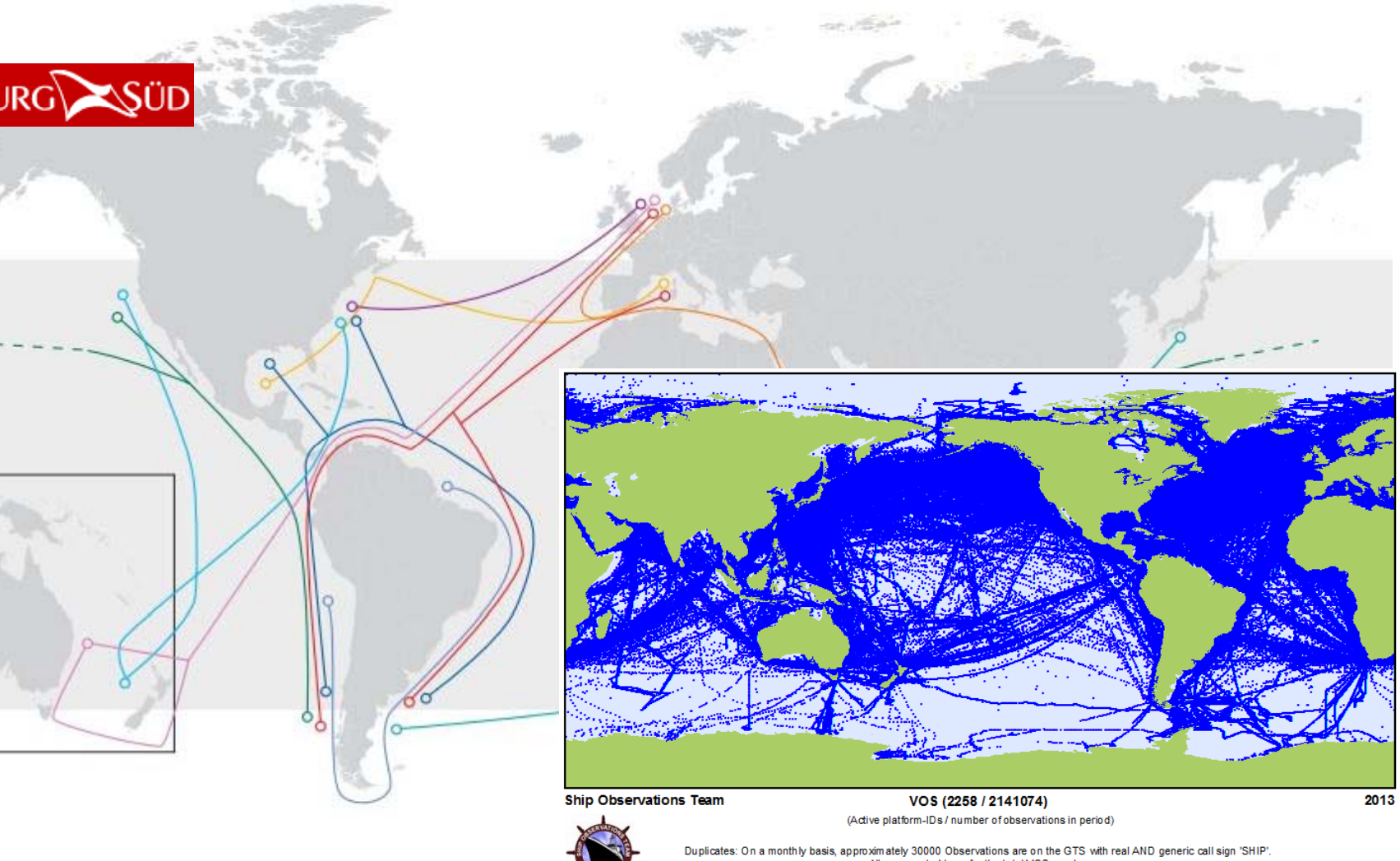
Pilot project with STX, in order to plan volunteer contributions to ocean observing already during the construction of the vessel:

→Get around issues with in particular sea valves
→Get quality ship-owned instruments (ancillary)
→Motivate other companies

Pilot project (top-down) with Hamburg Süd, in order to get a whole fleet of container ships under the WMO-IOC umbrella:

→Get around issues with lower levels in the company
→Motivate other companies
→Get around logistic and multi-panel issues (ship suppliers, PMOs)

Commercial Shipping



Why more Sailing Initiatives?

- SOT - DBCP

Contributions from OceanoScientific (formerly MerOceans)

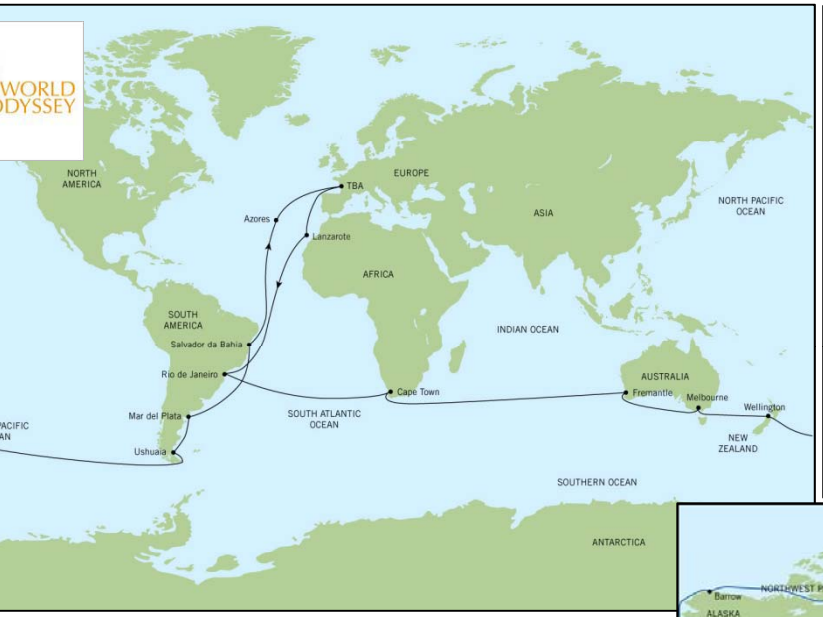
2013

- in-situ data from Bark Europa
- in-situ data from NAVOSE Boogaloo
- in-situ data from non-MEROCEANS Ships

Deployments

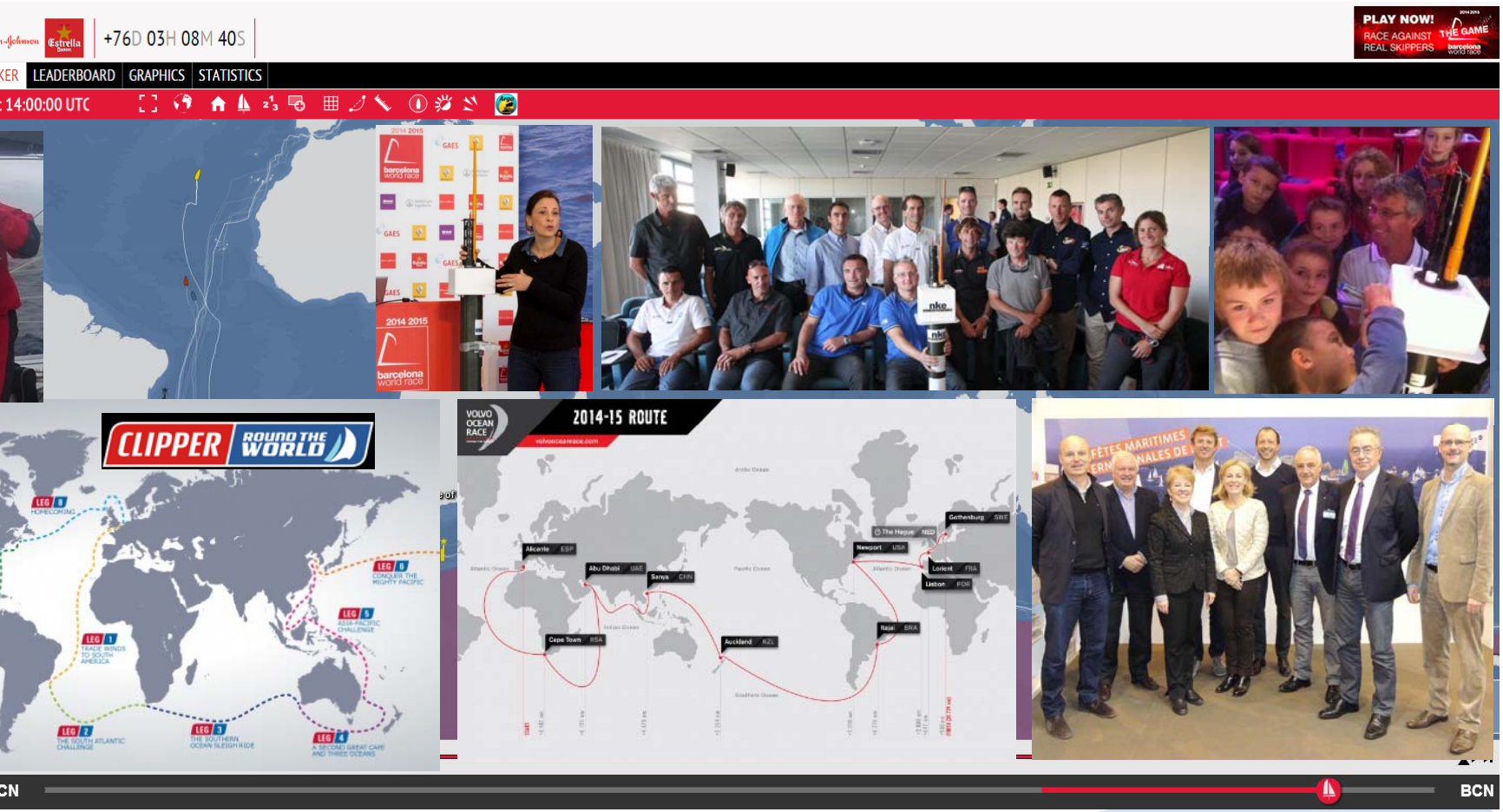
- Argo
- DBCP

Volunteers: Cornell Rallies



Volunteers: Barcelona World Race

Volunteers: Barcelona World Race



Volunteer Sailing Ships

garding spatial distribution, communication and educational outreach, and even funding issues, we have a lot of potential to exploit.

- Individual large vessels sailing in remote areas
- Organized sailing rallies with family crews, following with many ships clear routes and schedules
- Sailing races which regularly transit the Southern Ocean, and have agreed to (co-) fund instruments
- Potential to recover, and reuse instruments (VOS-DP)?

Prolarge: Charter Vessels

formerly presented, JCOMMOPS is ready to set-up cross-program deployment missions and other operations, in cooperation with the operator Prolarge

- Cost-effective sailing vessels: Lady Amber is now also capable to deploy and recover larger instruments, such as wave gliders. Stand-by in Cape Town, probably involved in SPURS-2 (10°N 125°W, 2016-17)
- Innovative, economic, fast, and if necessary armed survey vessels (fuel): Test cruise in late 2015

Ocean Eagle 43 :

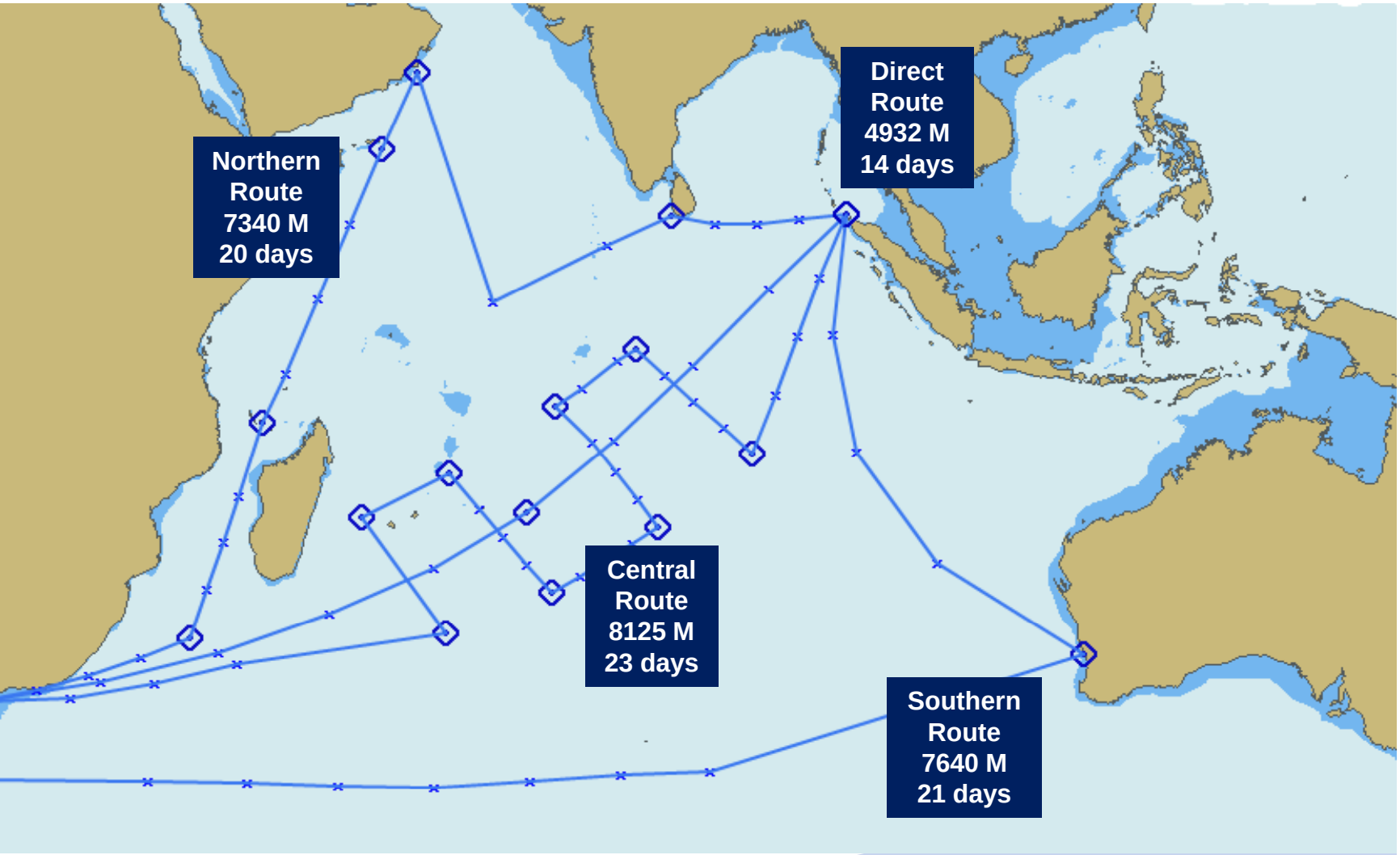
Range 5000 M @12 kts
Less than 2 tons of fuel / day
Available for support missions for JCOMMOPS from 2016 or 2017 on

Fast Research Vessel
ational Oceanography

RATA & Argo Programs in the Tropical & South
tical, Economic Way

1997 at the international level (Brazil, France and United States) under joint sponsoring of CLIVAR (http://www.clivar.org/) and GOOS. The initial PIRATA observing network consists of 12 moored ATLAS buoys, genuine met-oceanic weather stations which measure various parameters of the energy transfer between the atmosphere and the mixed layer in key points of the tropical Atlantic Ocean. The initial PIRATA network, now midway between the research mode and the operational mode, will be gradually completed by a series of extensions toward the African and American coasts. The PIRATA program as a whole is intended to become totally operational by the year 2005.

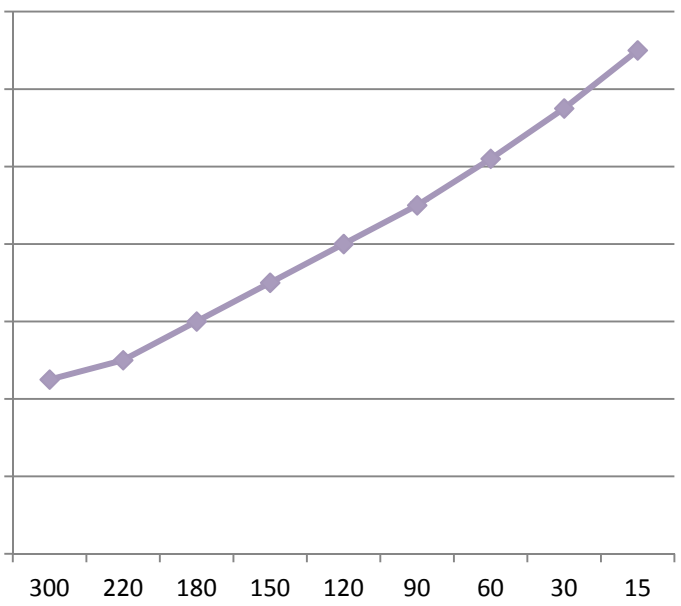
Prolarge: OE43 Simulations



ROM PRICE

me charter contract for dedicated mission : day rate depends
olume of charter mission per year and type of area.

w risk area :



High Risk Area : +5 600€ /D
Difficult navigation Area : +2 500€ /D

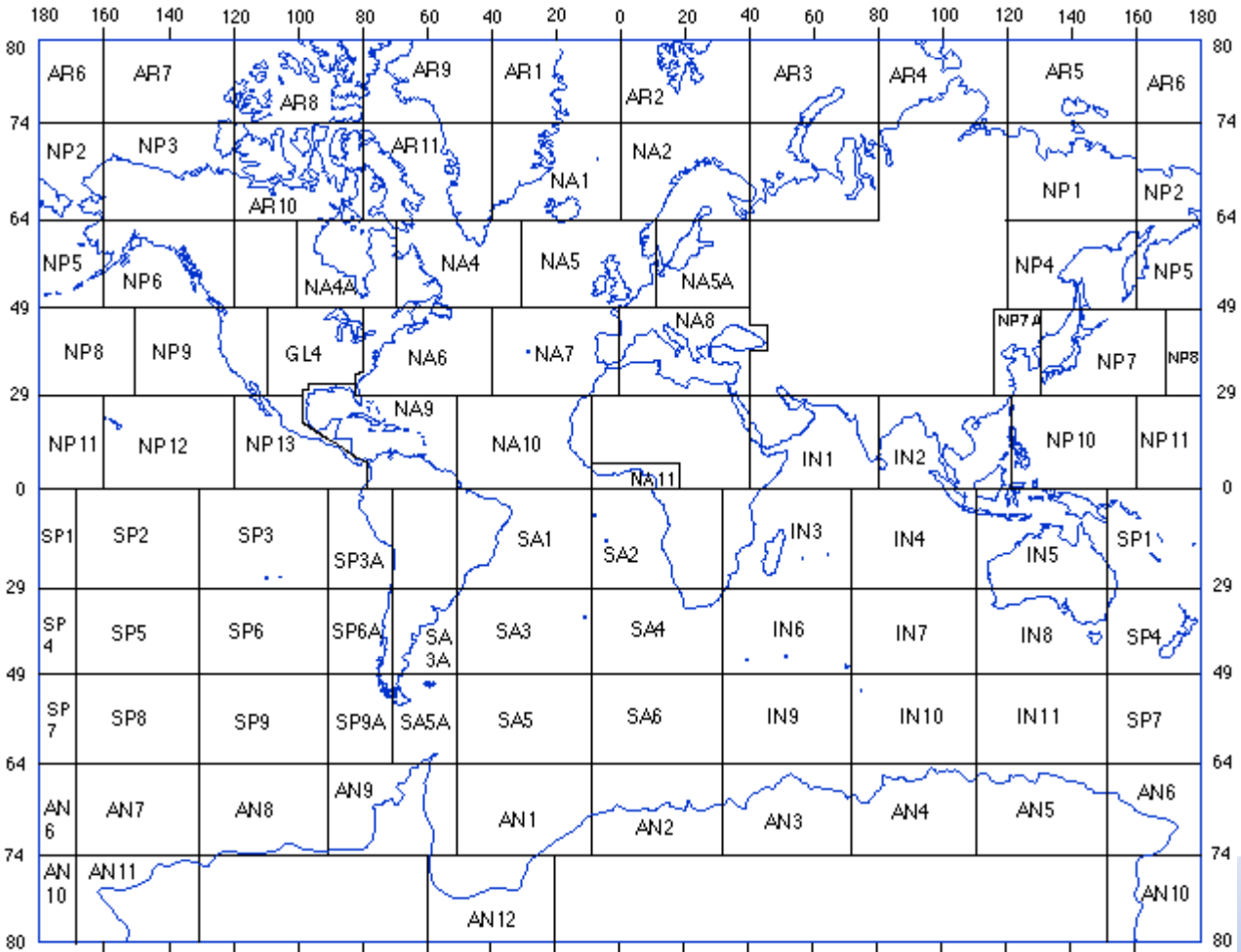
	Distance	Duration	Δt	HRA or DNA	ROM Price (€)
Direct Route	4932 M	13,7 days	0	0,0	0 €
North Route	7340 M	20,4 days	+7 days	12 days	152 800 €
South Route	7640 M	21,2 days	+7,5 days	9 days	111 600 €
Central Route	8125 M	22,6 days	+9 days	0	115 300 €

xamples of opportunity
sion:

ct Route is a transit between

Meta Data Management

equests and Opportunities are today still manually treated

- New JCOMMOPS database and website will comprise the Cruise and Ship Management
- Security issues will probably not allows us to make all information available « unmasked »
- Tracking of success is not easy (e.g. deployments realized through publication of GO-SHIP cruises)

What are your requirements?