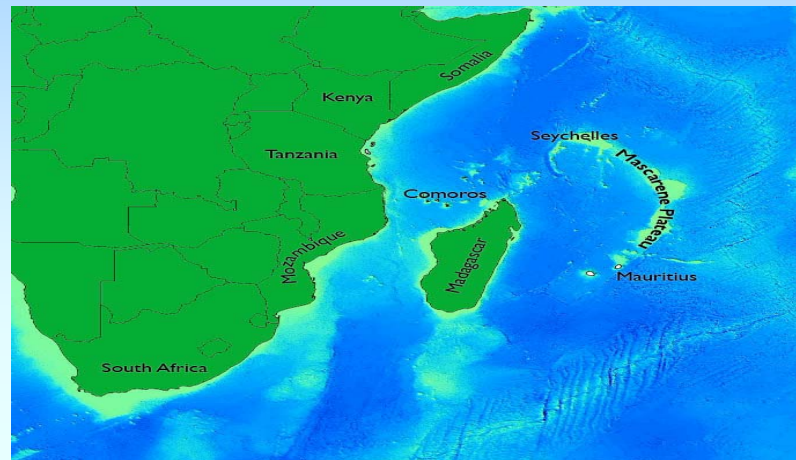


The First DBCP In-Region Western Indian Ocean Capacity Building Workshop Capetown, South Africa 19-23 April 2010



DBCP XXVI 2010
Report of Task Team on Capacity Building (TT-CB)
Oban, Scotland
28 September 2010

Dr. Sidney Thurston

Lead, DBCP Capacity Building Task Team
NOAA Climate Program Office

The DBCP Task Team on Capacity-Building shall:

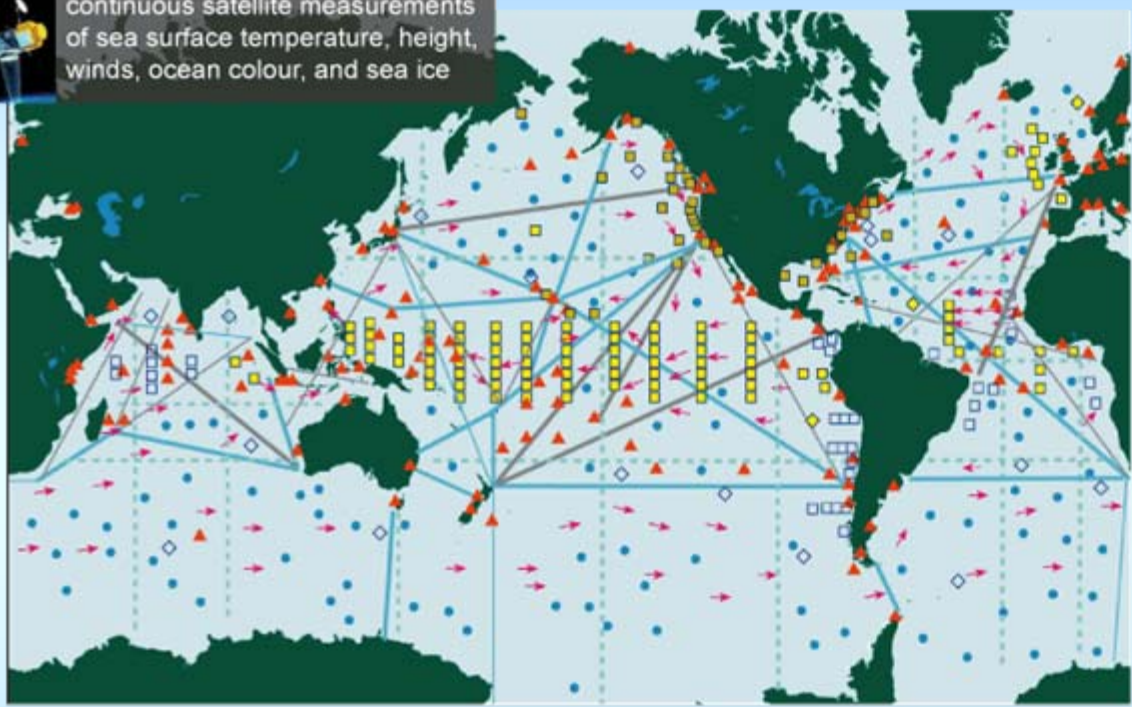
- Initiate, plan and coordinate the implementation of the Training and Capacity-Building work programme including, in particular, the regular Training Course on Buoy Programme Implementation and Data Management;
- Review and assess national, regional, and global requirements for capacity-building and develop / improve programmes as appropriate;
- Liaise with other capacity-building programmes in relevant areas to develop and implement integrated activities, to explore potential synergies and opportunities for efficiently using resources available; liaise in particular with the JCOMM cross-cutting Team on Capacity-Building;
- Endeavour to mobilize the resources required for DBCP capacity-building, including those needed for the implementation of the Training Courses;
- Make recommendations to the DBCP Executive Board and / or the DBCP for addressing the issues above;


Initial Global Ocean Observing System for Climate

Status against the GCOS Implementation Plan and JCOMM targets

Total *in situ* networks **61%** May 2010

continuous satellite measurements of sea surface temperature, height, winds, ocean colour, and sea ice



- 
87% Surface measurements from volunteer ships (VOSclim)
 200 ships in pilot project
- 
100% Global drifting surface buoy array
 5° resolution array: 1250 floats
- 
62% Tide gauge network (GCOS subset of GLOSS core network)
 170 real-time reporting gauges
- 
81% XBT sub-surface temperature section network
 51 lines occupied
- 
100% Argo profiling float network
 3° resolution array: 3000 floats
- 
43% Repeat hydrography and carbon inventory
 Full ocean survey in 10 years

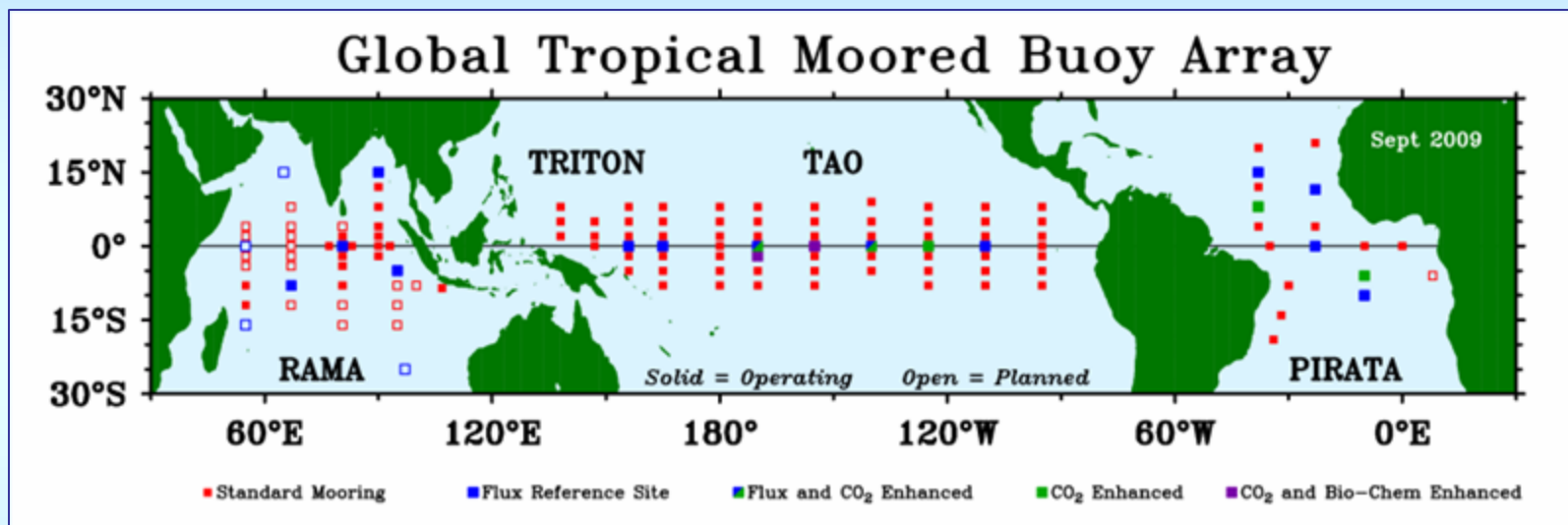
Reference time series **24%** 58 sites

48% Global reference mooring network
 29 moorings planned

79% Global tropical moored buoy network
 119 moorings planned



Global Tropical Moored Buoy Array



Capetown Workshop Goals

- Implementation and Operations Of Indian Ocean Data Buoy Networks and their Applications for Enhancing Regional Predictive Capability
- Begin to Build Capacity Within Regional Institutes to Apply New Indian Ocean Observing System (IndOOS) Data, such as from RAMA and others, for Enhanced Predictive Capability for the Region,
- Demonstrate the Crucial Role of Ocean Observations for Understanding and Predicting Regional Weather, Ocean and climate,
- Build In-Region Modelling Development Teams (MDT) and Observation Development Teams (ODT), including for the implementation of buoy programmes,
- Demonstrate the Societal and Economic Benefits of Delivering Enhanced Ocean Observing System Data for Better Informed Decisions,

Sponsors and Contributors

- WMO/IOC JCOMM Data Buoy Cooperation Panel (DBCP)
- South African Weather Service (SAWS)
- Intergovernmental Oceanographic Commission (IOC)
- National Oceanic and Atmospheric Administration (NOAA), USA
- UNDP/GEF Agulhas-Somali Current Large Marine Ecosystems Project (ASCLME)
- Ministry of Earth Sciences (MoES), India
- Global Learning and Observations to Benefit the Environment (GLOBE)

Sixty One Participants Represented

- South Africa
- India
- Kenya
- Tanzania
- Sri Lanka
- Madagascar
- Mauritius
- Seychelles
- Uganda
- Ethiopia
- Pakistan
- Namibia
- United States

Some of The Presentations

- The Influence of Indian Ocean on East African Climate – The Need for Observation
- An Operational Ocean Prediction System for the Western North Atlantic: A Model to Develop similar Capacity for the South Western Indian Ocean
- African Monitoring of the Environment for Sustainable Development (AMSED)
- Regional Applications of the NCEP Coupled Forecast System (CFS)
- Ocean observing systems: Australia (IMOS) and Indian Ocean (IOGOOS).

Some of The Presentations

- National Perspective on Buoy Programme Implementation (Mauritius) – All Nations Made National Reports
- Developing An In-Situ (Real-Time) Regional Measurement System Around Southern Africa
- The SimOcean initiative A strategy for building ocean modelling capacity in South Africa
- Scientific Justification for Western Indian Ocean observing Network: Reports by Regional Experts



IOC



WMO



DBCP Capacity Building workshop for the
Western Indian Ocean region
Cape town, South Africa, 13-23 April 2010

Scientific Justification for Western Indian Ocean observing Network

Reports by Regional Experts





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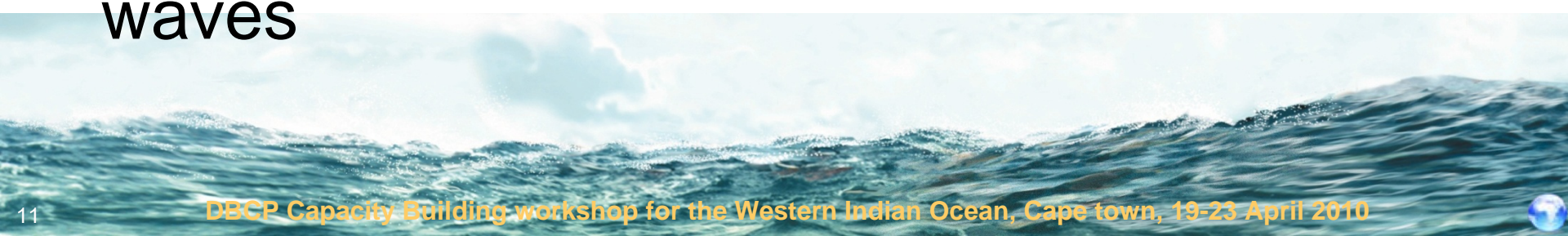


WMO



Scientific drivers

- East Africa Low Level jet
- Convergence zone of the EACC and SC
- Wind derivatives over the upwelling region of the East African Coast
- MJOs
- Indian Ocean Dipole (IOD)
- Equatorial trapped Kelvin Waves and Rossby waves





IOC

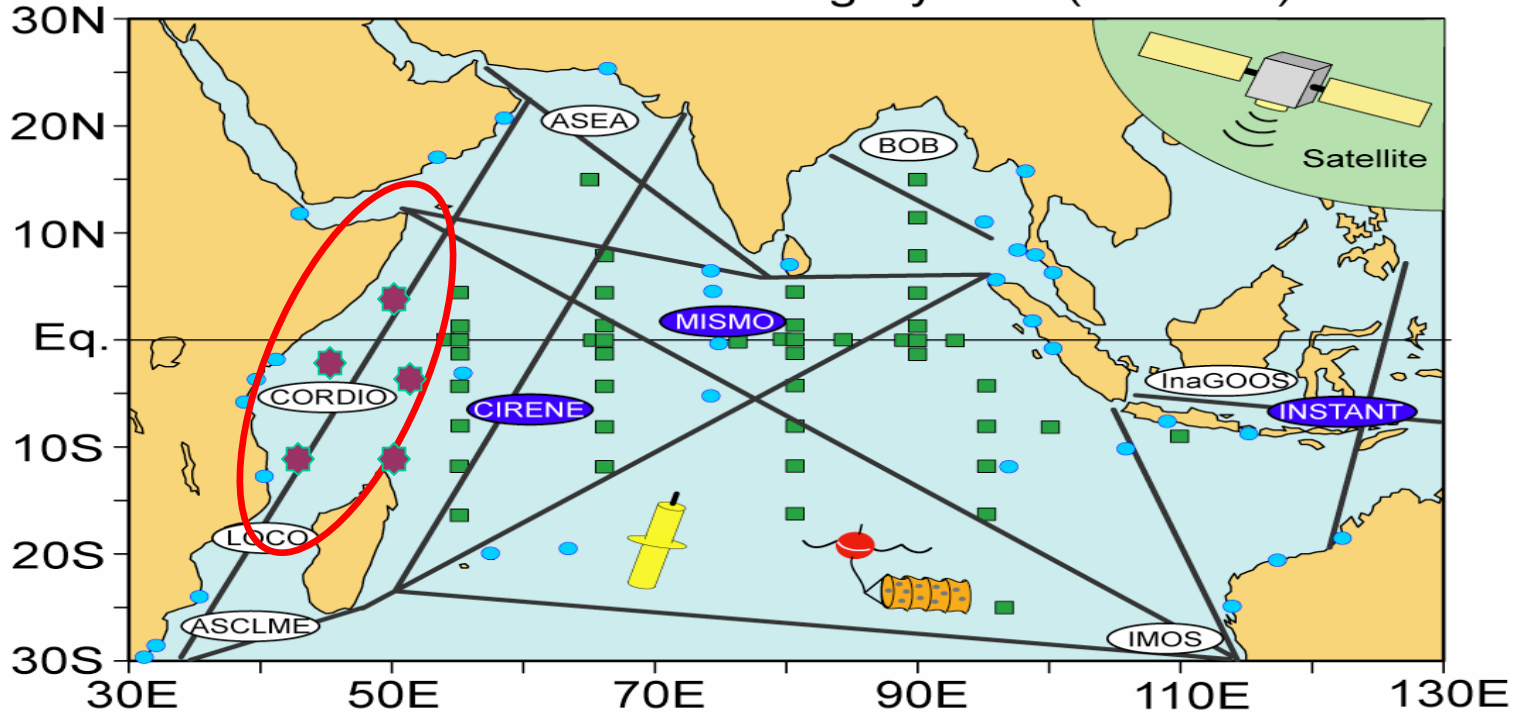


WMO



Proposed moored buoys

Indian Ocean Observing System (IndOOS)



■ RAMA

— XBT/XCTD lines

Surface drifting buoy array

ARGO float array

● Real-time and near real-time tide gauge network (including the tsunami buoy network)

Process Studies

Regional Ocean Observing Systems





IOC



WMO



Related issues

Human Capacity Building

- Capacity in ocean modeling
- Capacity in ocean platform deployment, Data access and application, like wave and swell data
- Capacity to plot buoy data available in GTS due to lack of software to do that.

There is therefore a need to build the capacity of local scientists in the region in those areas



Second DBCP In-Region Western Indian Ocean Capacity Building Workshop Mauritius, Spring 2011

- WMO/IOC JCOMM Data Buoy Cooperation Panel (DBCPC)
- South African Weather Service (SAWS)
- Mauritius Oceanography Institute (MOI)
- National Oceanic and Atmospheric Administration (NOAA), USA
- UNDP/GEF Agulhas-Somali Current Large Marine Ecosystems Project (ASCLME)
- African Monitoring of the Environment for Sustainable Development (AMESD)
- Global Learning and Observations to Benefit the Environment (GLOBE)

Goals for the Second DBCP Capacity Building Workshop

- Continue to Build Capacity Within Regional Institutes to Apply New Indian Ocean Observing System (IndOOS) Data, such as from RAMA and others, for Enhanced Predictive Capability for the Region,
- Coordinate with AMESD for In-situ Ocean Observations for the Western Indian Ocean
- Continue to Build In-Region Modelling Development Teams (MDT) and Observation Development Teams (ODT), including for the implementation of buoy programmes,
- Coordinate Regional Institutes for Increasing Western Indian Ocean Observations,

DBCP Capacity Building Task Team Meeting

Tomorrow During Lunch

All Are Most Welcome!





IOC



WMO



Thank You!

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DBCP Capacity Building Task Team

