

# Report of the DBCP Capacity Building Task Team (TT-CB Doc 6.4)



**DBCP-28  
Fremantle Australia  
4 October 2012**

**Presented by Dr. Sidney Thurston**  
Lead, DBCP Capacity Building Task Team  
NOAA Climate Program Office

# Your Capacity Building Task Team Working Hard Around The World In 2012



# DBCP Capacity Building Task Team Members

- DBCP Chairperson,
- DBCP Executive Board members,
- DBCP Vice-chairpersons (or their respective deputies),
- DBCP Technical Coordinator,
- Ali Mafimbo (Kenya),
- G. Latha (India),
- Johan Stander (South Africa),
- Lucy Scott (South Africa),
- Hamad Mohammed Al Gheilani (Oman),
- Mathieu Belbeoch (Argo Technical Coordinator),
- Richard Crout (USA),
- Walter Flores Servat (Peru),
- Djoko Hartoyo (Indonesia),
- Byung-Gul Lee (Korea),
- Kwan-Chang Lim (Korea),
- Rick Lumpkin (USA),
- David Meldrum (UK),
- Jean Rolland (France),
- R. Venkatesan (India),
- Representative of the IOC & WMO Secretariats, Etienne Charpentier
- Sidney Thurston (USA).

# Recent DBCP Capacity Building for the Indian Ocean



Capetown April 2010



Jeju July 2012



Mauritius May 2011



Mombasa Kenya May 2012

# Capacity Building Task Team Plans for 2012



Convene WIO-3 in Mombasa Kenya April 2012  
Ali Mafimbo Lead



Convene Northeast Asian Ocean Capacity Building  
(NEO-CB) Professor Byung-Gil Lee, Lead



Explore Information & Communications Technology (ICT)  
Advances for future TT-CB In-Region Capacity Building and  
Training Workshops to a broader audience around the world



Convene DBCP Asia Capacity Building Workshop  
Dr.R.Venkatesan, Lead

# Indian Ocean Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction RAMA

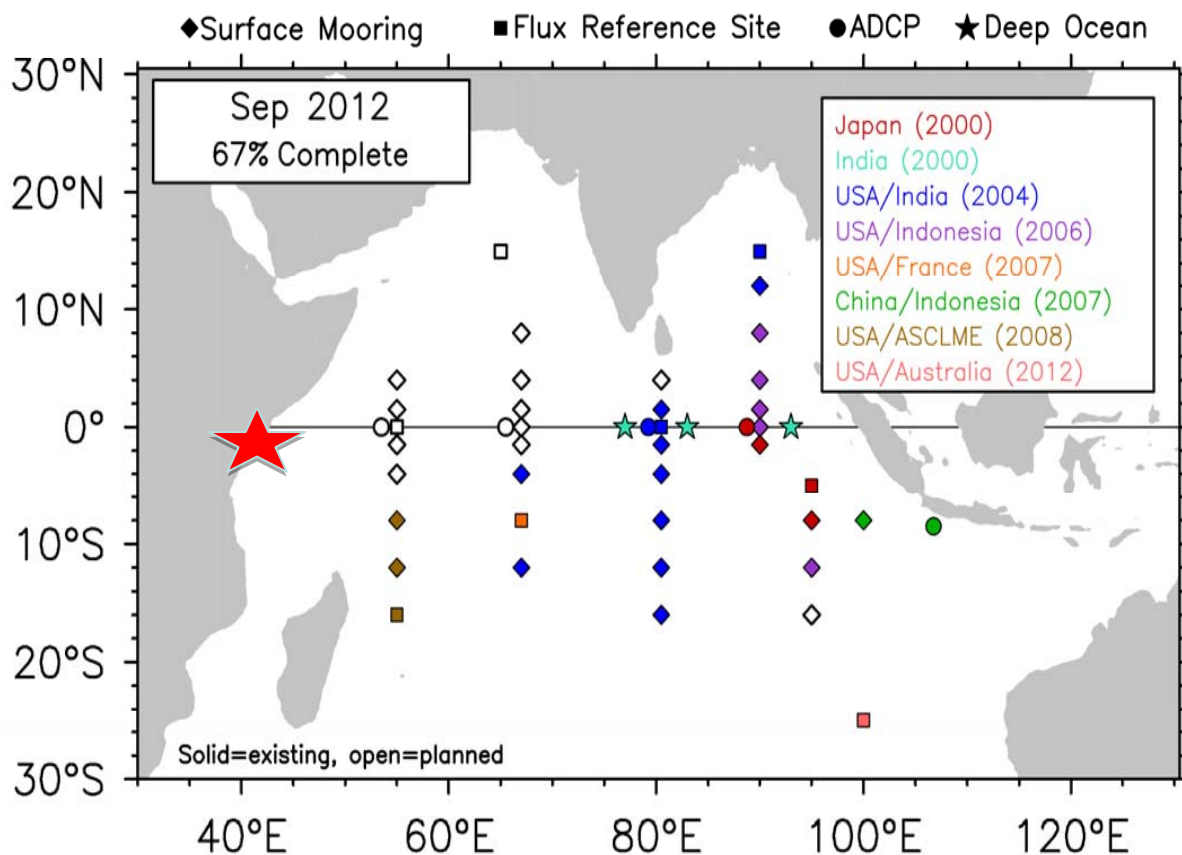
Two-Thirds Of Array Design Has Been Quickly Implemented

Built By Mutually Fruitful PANGEA Partnerships

Most Remaining Sites are Within the Piracy Exclusion Zone

Initial Plan Called for 2012 Completion, Piracy and Global Economic Slump

## Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (RAMA)



# Workshop Goals of the Third DBCP Western Indian Ocean Capacity Building Workshop (WIO-3) April 2012 Mombasa Kenya

- Implementation and Operations Of Indian Ocean Data Buoy Networks and their Applications for Enhancing Regional Predictive Capability
- 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,
- 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,

# Third DBCP In-Region Capacity Building Workshop for the Western Indian Ocean (WIO-3)

Mombasa Kenya 16-20 April 2012

[www.jcomm.info/wio-dbc3](http://www.jcomm.info/wio-dbc3)



- 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,
- Provide Training in Deployments and Management of In-situ Ocean Observations,
- Continue to Build In-Region Modelling Development Teams (MDT) and Observation Development Teams (ODT), including for the implementation of buoy programmes



# WIO-3 Mombasa Kenya April 16-20, 2012



# Workshop Sessions

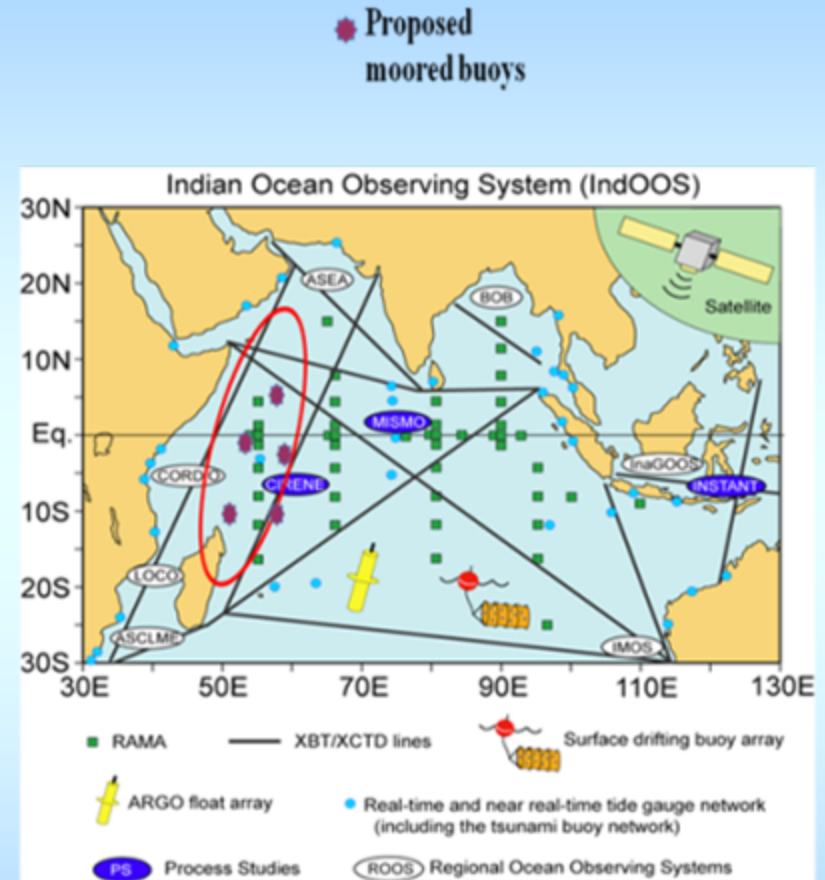


# Representatives

- Agulhas-Somali Current Large Marine Ecosystem (ASCLME)
- African Monitoring of the Environment for Sustainable Development (AMESD)
- Angola
- Australia
- China - First Institute of Oceanography (FIO)
- Democratic Republic of the Congo
- Egypt
- Ethiopia
- France - Institute of Research & Development (IRD)
- India - Ministry of Earth Sciences (MoES)
- IOC/WMO Data Buoy Cooperation Panel
- Kenya (HOST)
- Morocco
- Mozambique
- South Africa
- Sri Lanka
- South West Indian Ocean Fisheries Project (SWIOFP)
- Sudan
- Tanzania
- Togo
- United Kingdom - Scottish Association of Marine Sciences (SAMS)
- USA - National Oceanic and Atmospheric Administration (NOAA)

# WIO-3 Resolutions

- Establish A WIO Science Alliance
- VOS/SOOP/DBCP Pilot Project
- In-region Glider Capability
- Kenya PR Dr. Mukabana Requested workshop issues be brought to the attention of the upcoming African Ministers Conference on Meteorology (AMCOMET)



# Your Capacity Building Task Team Working Hard Around The World In 2012



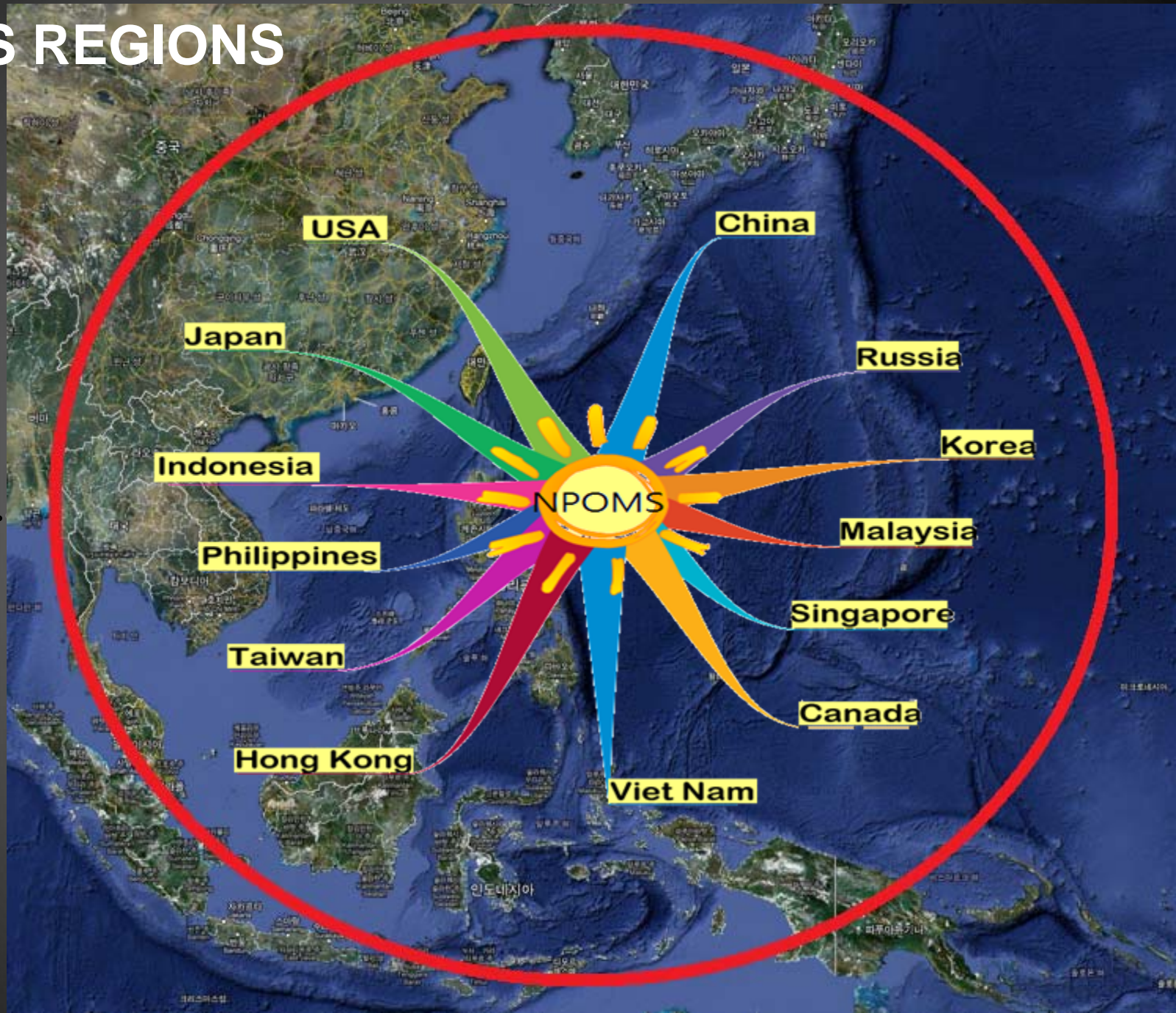
Jeju South Korea

# The 1<sup>st</sup> Data Buoy Cooperation Panel (DBCP) Workshop of Capacity Building for the North Pacific Ocean and Marginal Seas(NPOMS-1) and The 2nd Asia-Pacific Network of Global Change Research Joint Workshop



**9-13 July 2012, Jeju National University, Republic of Korea**  
**Organized by: Byung-Gul Lee(JNU), Boram Lee(WMO),**  
**Sidney Thurston(NOAA)**

# NPOMS REGIONS



# Participating Countries/Organizations in NPOMS-1 (39 participants)

- China
  - First Institute of Oceanography (FIO)
  - Harbin Engineering University
  - Zhejiang University
- Japan
  - Nagoya University
- Indonesia
  - Agency for the Assessment and Application of Technology Korea
- Russia
  - TINRO center, Russia
- USA
  - National Oceanic and Atmospheric Administration(NOAA)
- World Meteorological Organization (WMO)
- Korea
  - Geosystem Research Co.
  - Global Research Laboratory (GRL)
  - Hanyang University
  - Jeju Sea Grant Center
  - Jeju National University
  - Korea Environmental Science & Technology Institute (KESTI)
  - Korea Meteorological Administration (KMA)
  - Korea Hydrographic and Oceanographic Administration (KHOA)
  - Korea Ocean Research & Development Institute (KORDI)
  - Kyungwon IND, Co. Ltd
  - OCEANTECH Co., LTD.
  - Pukyong National University
  - Society of leodo Research(SIR)



# NPOMS-1 Summary/Results

**Key application areas of interest presented at the Workshop  
(in East and South China Sea, Yellow Sea, East/Japan Sea and  
neighbouring region)**

- Ocean observations/ data management design
  - New buoy design using acoustic buoys
- Applications/Use of ocean obs. Information: inter-disciplinary work/research
  - Disaster prevention (Typhoon, storm surges, mesoscale convection / Jangma, resonance impacting fisheries...), which is more related to coastal observations and mooring technologies
  - Climate and Fisheries (climatological studies, impact assessment)
  - Energy and industry support...
- Buoy deployment and operation
  - particularly taking into account that the regional interest is on both NWP “and” seasonal-to-interannual climate variations
  - Deployment strategies, including national / joint-international cruise planning

# Proposal for 2<sup>nd</sup> NPOMS WORKSHOP

- In 2<sup>nd</sup>/3<sup>rd</sup> quarter of 2013, hosted by a NPOMS country (e.g. China, Japan, or Korea)
- Encourage wider participation of institutions (operation and research) of the countries in and around NPOMS region
- Overarching theme:
  - Partnerships
  - Capacity Development
  - Knowledge sharing toward the extended application of ocean observing information

# Your Capacity Building Task Team Working Hard Around The World In 2012



DBCP/NIOT/BOBP-IGO  
Regional Workshop on Best Practices for  
Instruments and Methods of  
Ocean Observation

Chennai, India,

19-21 November 2012

[www.jcomm.info/dbcp-cb-asia1](http://www.jcomm.info/dbcp-cb-asia1)

**DBCP/NIOT/BOBP-IGO Regional Workshop on  
The Best Practices for Instruments and Methods of Ocean Observation  
19 - 21, November 2012  
Chennai, India**

- DBCP CB
- DBCP 27 session
- Aim of the Workshop is aimed at capacity building of scientist, researchers, engineers and managers on best of practices on calibration and testing instruments for ocean observation systems.
- Concept is to involve industry

## Action taken

- Invitations sent to PR by WMO and IOC – Asia
- Nomination received
- Selection Process - Committee
- Selection list sent on 10 Sept
- Final list sent to Indian government for clearance 30 Sept

# Good Response

## Participating countries

- Sri Lanka
- Bangladesh
- India
- Oman
- Malaysia
- Thailand
- Iran
- Kenya
- Pakistan
- China

## •Industry – 14

- Training Manual

## Spin off

- Sea Bird USA - 4 days National training on Ocean Data collection

# Partner

Bay of Bengal Large Marine Ecosystem Project  
(BOBLME)

: [www.boblme.org](http://www.boblme.org)



*Eight countries, connected by one ecosystem,  
working together to secure its future.*





# Action Items During 2013

- To coordinate WIO-4 preparations with the DBCP, Tanzania Meteorological Agency, the NOAA Office of Climate Observation (OCO), the Agulhas-Somali Current Large Marine Ecosystem (ASCLME), and Western Indian Ocean Marine Science Association (WIOMSA) (**action; S. Thurston & Secretariat; until WIO-4**);
- To Assemble a Team to explore recent advances in Information and Communication Technology (ICT) to help facilitate more effective DBCP TT-CB Outreach and Capacity Building Activities on a larger scale (**action; TT-CB; until DBCP-29**);
- To Enhance Coordination and Cooperation between TT-CB and WMO Regional Associations (**action; TT-CB; DBCP-29**);
- To explore organization of the Second “North Pacific Ocean and Marginal Seas” (NPOMS-2) Workshop likely in Qingdao China or Okinawa Japan, and the Second “Regional Workshop on Best Practices for Instruments and Methods of Ocean Observation” in Chennai India. (**action; TT-CB; continuous**).
- To Assist Other DBCP Groups With Issues They Experience Around the World

# Thank you!

## DBCP Capacity Building Task Team (TT-CB)



[www.jcomm.info/pangea-concept](http://www.jcomm.info/pangea-concept)