







Data Buoy Cooperation Panel (DBCP) Capacity Building Workshop on Ocean Observations for Operational Services in the Indian Ocean Region

05 - 07 August 2025 Hyderabad, India

Hosted by:

ESSO-Indian National Center for Ocean Information Services,

Government of India Ministry of Earth Sciences

Organized by:

Data Buoy Cooperation Panel
In collaboration with
World Meteorological Organization
Intergovernmental Oceanographic Commission of UNESCO

Provisional Timetable

Day 1: Tuesday, 5 August 2025

	Opening Ceremony		
Time (IST)	(Moderator: Ms. Anu Radha)	Lead	
UTC+5.30	(**************************************		
0830-0900	Registration		
		Madanatan	
0900-0925	Opening Remarks	Moderator:	
	Director, INCOIS	E Patabi Rama Rao	
	DGM, IMD and PR to WMO from India (In person / Remote)		
	DBCP Chair, Dr. Nelly Florida Riama		
	WMO, Ms. Champika Gallage		
	IOC, Dr. Joanna Post (Remote)		
0925-0935	The objective, expectations and agenda of the workshop	Fan Jiang	
		NCFDRC	
		(Remote/In person)	
0935-0950	An Introduction to the International Training Centre for	Udaya Bhaskar	
	Operational Oceanography (ITCOocean) and Logistics	INCOIS	
	Information		
0950-1030	Welcome words & Operational Oceanography and Ocean	Pattabhi Rama Rao	
	Information and Advisory Services	INCOIS	
1030-1045	Group Photo		
1045-1100	Tea/Coffee Break		
Session 1: Ocean Observation/Data Acquisition/Quality Control			
	(Moderator: Nelly Florida Riama)		
	Each presentation will be 30 mins and 10 mins for Q&A	A	
1100-1140	In-situ Ocean Observation Network in the Indian Ocean	Aneesh L	
		INCOIS	
1140-1220	Ocean Moored buoys in the Northern Indian Ocean (OMNI)	Arul Muthaiah	
	Programme, Data and Applications	NIOT	
1220-1300	Indian Argo Programme, Data and Applications	Udaya Bhaskar	
		INCOIS	

1300-1400	Lunch Break	
1400-1530	Visit to Synoptic Ocean Observations and Prediction System	E Patabi Rama Rao
	(SynOPS) Labortary	INCOIS
1530-1630	National Reports (5 minutes per country + 10 minutes	Nelly Florida Riama
	discussion): Bangladesh, Cameroon, Comoros, Guinea,	Champika Gallage
	Indonesia, Iran, Iraq, Kenya, and Malaysia	
1630-1710	Wave Drifters and Their Applications in Research and	Luca Centurioni
	Operations	SIO (Remote)
1710-1750	The RAMA array operations, maintenance and data use	Kenneth J. Connell
		PMEL (Remote)

Day 2: Wednesday, 6 August 2025

	Session 2: In-situ Ocean Observation in Forecasting/Ser	vices
	(Moderator: Pattabhi Rama Rao)	
Each presentation will be 30 mins and 10 mins for Q&A		
0900-0940	Global and Seasonal Ocean Predictions for Tropical Area	Francis
		INCOIS
0940-1020	Introduction to Wave Ride Buoys and its applications in	Remya
	operational oceanography	INCOIS
1020-1100	Generation and Operational Application of Gridded Data from	XU Jiangling
	HF Radar	NCFDRC of MNR
1100-1115	Tea/Coffee Break	
1115-1155	Modelling Storm Surges and Tsunamis and applications of	Siva Srinivas
	observations.	INCOIS
1155-1235	Ocean Data Management activities at the Indian & Hands-on	Dr. Udaya Bhaskar
	Session	INCOIS
1235-1310	Ocean remote sensing data and its applications	Srinivasa Rao
		INCOIS
1310-1410	Lunch Break	
	(Moderator : Aneesh Lotliker)	
1410-1450	Harnessing buoy data for operational storm surge forecasting	Dr. PLN Murty (IMD)
	during tropical cyclones.	
1450-1530	Hands-on Session (Wave Rider buoy data processing)	R Venkat Shesu
		INCOIS

1530-1615	The role of new autonomous ocean observing technologies in	Dr. Scott Glenn
	reliable predictions of tropical cyclone	Rutgers University
		(Remote)
1615-1630	Tea/Coffee Break	
1630-1730	Visit to National Glider Operations and Test Facility,	Aneesh Lotliker/Shiva
	Oceanographic Instruments and Ocean Remote Sensing	Kumar
	Ground Stations	

Day 3: Thursday, 7 August 2025

Session 3: Global and Regional Initiatives (GOOS/IO-GOOS)		
	(Moderator: Uday Bhaskar)	
	Each presentation will be 30 min and 10 min for Q&A	
0900-0940	GBON for ocean and WIS 2.0	Champika Gallage
		WMO
0940-1020	OceanOPS and DBCP Metadata	Martin Kramp
		OceanOPS (Record)
1020-1100	Indian Ocean Global Ocean Observing System	Nagaraj Kumar
		IOGOOS
1100-1115	Tea/Coffee Break	
1115-1155	National Reports (5 minutes per country + 10 minutes	
	discussion): Mauritius, Namibia, Seychelles, Somalia, South	
	Africa, Sri Lanka, Thailand, Tunisia, Tanzania, India, and others)	
1155-1235	Group Discussion (Part 1)	Nelly Florida Riama
	Q1: What are the key challenges you face in accessing	Aneesh L
	maintaining the quality and continuity of in-situ ocean	
	observations in your country?	
1235-1345	Lunch Break	
1345-1445	Group Discussion (Part 2)	Nelly Florida Riama
	Q2: What steps can be taken to strengthen coordination between	Aneesh L
	countries operating observation platforms in the Indian Ocean?	
	Q3: What are the skills gaps that still need to be addressed in your	
	country through capacity building?	
1445-1530	Summary and Recommendation	Nelly Florida Riama
		Champika Gallage

1530-1610	Closing Ceremony (Award of the Certificates)	Nelly Florida Riama
		Champika Gallage
1610-1630	High Tea	

Acronyms

DBCP Data Buoy Cooperation Panel

INCOIS ESSO-Indian National Center for Ocean Information Services, India

IMD India Meteorological Department

IOC Intergovernmental Oceanographic Commission of UNESCO, France

IOGOOS Indian Ocean Global Ocean Observing System

IITM Indian Institute of Tropical Meteorology

MNR Ministry of Natural Resources, China

NCFDRC North China Sea Forecast and Disaster Reduction Center, MNR

NIOT National Institute of Ocean Technology, India

NSMFC North China Sea Marine Forecasting Center of MNR

SIO Scripps Institution of Oceanography

PEML NOAA Pacific Marine Environmental Laboratory