



**Data Buoy Cooperation Panel Workshop
on Ocean Observations for Weather Forecast and Climate Prediction**

6-8 August 2024

Citeko, Bogor, West Java, Indonesia

Hosted by:

Indonesia Regional Training Center of WMO

Indonesia Agency for Meteorology, Climatology, and Geophysics (BMKG)

Co-sponsored by:

DBCP Task Team on Capacity Building

Indonesia Agency for Meteorology, Climatology, and Geophysics (BMKG)

National Center of Ocean Standards and Metrology (NCOSM)

of Ministry of Natural Resources (MNR)

1. Goals of the Workshop

- 1) Continue to build capacity to apply ocean observing data for enhanced forecast and prediction capability in the region;
- 2) Demonstrate the role of ocean observations for understanding and predicting regional weather, ocean state and climatology;
- 3) Learn practical implementation aspects of ocean observing systems;
- 4) Enhance the capacity of quality control of buoy observation, data processing;
- 5) Evaluate observations and data gaps within the region and how they can be addressed;
- 6) Advance the design and regional coordination of ocean observing system.

2. Modules and Topics of Workshop

Session 1: Needs and Requirements of Ocean Data

Session 2: Data Management and Access

Session 3: Data Application in Forecasting

Session 4: Data Application in Climate Prediction

Session 5: Regional Requirements and Cooperation

3. Provisional Agenda and Timetable

Day 1: 6th August

| Local Time (UTC+7) | Subject | Lead |
|------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------|
| Registration | | |
| 0900-0930 | Opening DBCP Chair DBCP-TT-CB Chair | PR with WMO Nelly Riama JIANG Qiu- Rachel |
| 0930-0940 | Group Photo | |
| 0940-1000 | Coffee break and Ice break | |
| 1000-1005 | Objectives and Agenda | JIANG Qiu |
| 1005-1010 | Logistic Information | Anni Arumsari Fitriany |
| Session 1: Requirements for Data (Moderator: Nelly) | | |
| 1010-1040 | BMKG presentation | Eko Prasetyo/ Riris Adriyanto |
| 1040-1110 | GBON Ocean Integration | Champika Gallage |
| 1110-1140 | GTS to WIS2.0 and results of the Pilot | Lance Braasch (remote) |
| 1140-1200 | GOOS Update incl. Data Strategy | IOC (TBC) |
| 1200-1300 | Lunch break | |
| Session 2: Data Management and Access (Moderator: Rachel) | | |

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|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1300-1330 | OceanOPS and DBCP Metadata | JIANG Long |
| 1330-1430 | Drifter Data | Uday Bhaskar |
| 1430-1500 | Updates of Solomon Island Wave Drifter Pilot | Max Satai |
| 1500-1530 | Coffee Break | |
| 1530-1630 | Application of the moored buoy data to monitor and predict the extreme disasters associated with cyclone/typhoon and Madden-Julian Oscillation crossing over the maritime continent | YU Weidong |
| 1630-1700 | Synthesized Dataset of International Comprehensive Ocean-Atmosphere Data Set (ICOADS) | Huaiming Zhang |

Day 2: 7th August

| Local Time (UTC+7) | Subject | Lead |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Session 3: Data Application in Forecasting (Moderator: Dr. Furqon Alfahmi) | | |
| 0830-0900 | Wave Data Sources along the US Coastline | Candice Hall (remote) |
| 0900-1000 | Global ocean circulation, how to monitor and implication to weather conditions | Janet Sprintall |
| 1000-1030 | Reconstruction and Assimilation of global sea surface temperature based on ocean observation, drifter, buoy, satellite | Arnold Gordon |
| 1030-1100 | Coffee break | |
| 1100-1130 | Detection of internal wave and the impact for vessel or submarine safety | Nining Sari Ningsih (ITB-Indonesia) |
| 1130-1200 | Rip current observations, modeling, and implementation warning for society | Wahyudi Citrosiswoyo (ITS-Indonesia) |
| 1200-1230 | Oil spill and drifting modeling for marine emergency response applications | XU Jiangling |
| 1230-1330 | Lunch Break | |
| Session 3: Data Application in Forecasting (continued) (Moderator: Fan) | | |
| 1330-1400 | Co-design exemplar tropical cyclone | Scott Glenn |
| 1400-1430 | Tropical Cyclone/Hurricane and Storm surge predictions methods | Nado Kohno |
| 1430-1500 | Real-time nearshore wave observation | Jeff Hansen |
| 1500-1530 | Global ocean carbon and acidification monitoring and its impact for tropical ocean | Yosuke Iida |

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| 1530-1600 | Coffee Break | |
| 1600-1630 | Satellite oceanography for ocean operational predictions | Johnson Lumban Gaol |
| (move to Jakarta, BMKG HQs) | | |

Day 3: 8th August

| Local Time (UTC+7) | Subject | Lead |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------|
| Session 4: Data Application in Climate Prediction (Moderator:) | | |
| 0830-0930 | Indonesian marine services from ocean observation to couple modeling -InaCAWO | Dr. Andri Ramdhani / Dr. Furqon Alfahmi |
| 0930-1030 | Global, Seasonal ocean predictions for tropical area | Pattabhi Rao |
| 1030-1100 | Coffee Break | |
| 1100-1130 | Regional, Role of Indonesian throughflows (ITF) for climate conditions | Prof Ishak Iskandar |
| 1130-1200 | Marine Climate Data System | <i>Tim Boyer or Axel Andersson</i> |
| 1200-1300 | Lunch Break | |
| Technical Visit to BMKG Operation Centre | | |
| Session 5: Regional Requirements and Cooperation (Moderator: Rachel) | | |
| 1330-1430 | National Reports (incl. services) | Dr. Nelly Florida Riama |
| 1430-1500 | BMKG-RTC Report | Ratih Prasetya |
| 1500-1530 | Coffee break | |
| 1530-1600 | Preliminary results of TT-CB review | JIANG Fan |
| 1600-1700 | Roundtable Discussion for Future Plans | Rachel/Nelly |
| 1700 | Closure | |

4. Organizing Committee

| Name | Email | Affiliation |
|------------------|--------------------------------------------------------------------------|---------------------|
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5. Acronyms

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| BMKG | Indonesia Agency for Meteorology Climatology and Geophysics |
| NCOSM | National Center of Ocean Standards and Metrology |
| MNR | Ministry of Natural Resources, China |
| RTC | Regional Training Centre |
| NCS | North China Sea Branch, MNR, China |
| INCOIS | Indian National Centre for Ocean Information Services |
| LDL | Lagrangian Drifter Laboratory |
| SIO | Scripps Institution of Oceanography |
| UCSD | University of California, San Diego, USA |
| WMO | World Meteorological Organization |
| IOC | Intergovernmental Oceanographic Commission |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| OceanOPS | WMO-IOC Joint Centre for Oceanography and Marine Meteorology in situ Observations Programmes Support |