

## FOREWORD

It is my pleasure to present the twenty-eighth Annual Report of the Data Buoy Co-operation Panel. The Panel was established in 1984 to address the drifting buoy network in the global oceans. In 1993 its Terms of Reference were updated to also address the moored buoys in the high seas. It was re-constituted in 1999 under the auspices of JCOMM. In 2012, per decision from JCOMM, the terms of reference of the Panel were again updated to include coordination for rigs and platforms in the ocean. Membership in the DBCP is voluntary, and its activities are supported by contributions from member countries. The drifting and moored buoy arrays support many international programs such as the GOOS<sup>1</sup>, the GCOS<sup>2</sup>, the WCRP<sup>3</sup>, the WIGOS<sup>4</sup>, and the GFCS<sup>5</sup>. At its twenty-eighth Session (Fremantle, Australia, 2-6 October 2012), the Panel recognized the considerable importance of the developing GFCS to WMO and UNESCO/IOC, and to their Members/Member States, as well as the potential role of JCOMM in climate services. It updated its implementation strategy accordingly.

While the Panel is striving to maintain the drifting buoy array at the level of 1250 operational units in the world oceans, efforts remain to be made to address data gaps in certain oceans. DBCP seeks to improve quantity, quality, timeliness and coverage of data, including barometric pressure, for use in prediction and research programs. Other activities include the analysis of requirements and the provision of international liaison and a forum for discussion. The DBCP supports an excellent working relationship with manufacturers, who are attendees at annual meetings, and who work with network operators throughout the year to address issues.

Some of the successes of the DBCP include: (i) the development of data quality control guidelines; (ii) the establishment of actions groups for the world's oceans, e.g. International Buoy Programme for the Indian Ocean (IBPIO); (iii) the creation of task teams to address technical issues, e.g. Capacity Building; (iv) the setting up pilot projects e.g. Argos/Iridium telecommunications; wave measurements; sea level pressure; (v) the coordination of reporting on common issues such as the DBCP Report on Vandalism, technical manuals and guides, standards, and best practices; and (vi) the sponsoring of capacity building workshops.

For example, the Panel has been fostering collaborative activities and deployment opportunities in critical and data-sparse areas. The Panel organized series of Capacity Building workshop, the first of these, directed at key personnel from the African region, was held at Ostend in June 2007; and successive ones in Cape Town, South Africa (2010), Mauritius (2011), and Mombasa, Kenya (2012) targeting implementation of buoy programmes in the Western Indian Ocean region. In addition, The Panel organized a first "North Pacific Ocean and Marginal Seas" (NPOMS-1) Workshop in the Republic of Korea in July 2012, and a "Regional

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1 IOC-WMO-UNEP-ICSU Global Ocean Observing System  
2 WMO-IOC-UNEP-ICSU Global Climate Observing System  
3 WMO-IOC-ICSU World Climate Research Program  
4 WMO Integrated Global Observing System  
5 Global Framework for Climate Services

Workshop on Best Practices for Instruments and Methods of Ocean Observation” in Chennai, India in November 2012.

Noting the successful outcome of the third "DBCP In-Region Western Indian Ocean Capacity Building Workshop", held in Kenya, May 2012, the Panel agreed to organize and convene a fourth workshop (in Tanzania, in May 2013). The Panel also endorsed plans to organize the Second “North Pacific Ocean and Marginal Seas” (NPOMS-2) Workshop in Tianjin, China.

The number of operational drifters on the GTS for July, 2012 was 1186, with about ½ of those reporting atmospheric pressure. During the year, the majority of drifting buoys (over 80% each month) are reporting on the GTS in less than 120 minutes. Efforts remain to be made to improve timeliness through actions such as the increased use of Iridium, and improvements in the Argos network of regional receiving stations. In October 2012, the number of drifting buoys reporting onto the GTS has shown a decrease of over 20% compared to the previous year. While the number of operational drifters went up in late 2012, this statistic is of great concern to the community. The cause for the decrease was due to a number of factors that were discussed during DBCP-28. The Panel recommended putting in place a concerted set of measures in order to re-establish confidence in the buoy supply chain and to avoid episodes of network degradation in the future.

As we look forward to the future the DBCP sees opportunities while it will also face some challenges. The Panel welcomes new participants and partners to support the observing arrays and maintain the drifting network at 1250, while addressing gaps and timeliness issues and increasing the number of buoys reporting barometric pressure. The DBCP must remain relevant by meeting client needs (such as high resolution sea surface temperature), integrating emerging technologies (such as gliders), and addressing regional and/or technological requirements through establishment of appropriate task teams or pilot projects. And, of course, we must accomplish this during a time of global fiscal constraint. I invite the readers of this annual report to consider joining the DBCP to advance programs of mutual interest.

A number of actions have been undertaken in 2012 to address the issue of vandalism on data buoys. In particular, the DBCP working group on Vandalism has been addressing issues such as (i) sharing lessons learned in counter vandalism efforts among buoy network operators; (ii) facilitating a conversation among buoy operators on counter vandalism approaches; including technical, educational, operational, and enforcement approaches; (iii) facilitating a conversation on the development of best practices to mature the various methodologies used to quantify the impacts of buoy vandalism; and (iv) serving as a communication channel within the DBCP for further information requests on the subject of vandalism following the release of the WMO vandalism report.

JCOMMOPS will soon welcome a new technical coordinator dedicated to ship coordination. This third coordinator at JCOMMOPS will act as a focal point and will work essentially on the SOT program coordination, GO-SHIP program coordination, metadata management of ship based information (cruise plans in advance), and “JCOMMOPS ship time

service” development. JCOMMOPS thanked the panel for its participation in the funding of the position.

At DBCP-28, the Panel noted with regret Ms Kelly Stroker’s decision to return to the USA by January 2013. The Panel was indeed satisfied with the services provided by Ms Stroker for the last 13 months according to the TC’s Terms of Reference. The Panel noted with appreciation Ms Stroker’s offer of service to smoothen the transition to the new Technical Coordinator, and thanked her for her work on behalf of the Panel so far. The Panel agreed to give authority to the Executive Board to act and decide on behalf of the Panel regarding options concerning the recruitment of the Technical Coordinator in consultation with the Secretariat.

Overall, I am confident that the Panel is both well placed and enthusiastic to continue its pivotal role in ensuring the smooth flow of observations and other data from the oceans to a wide user community, and in addressing new observational and organizational challenges. We look forward to welcoming participants at DBCP-29 in Paris in September 2013.

Al Wallace  
*(DBCP Chair)*