

DATA BUOY COOPERATION PANEL

» Increasing the quantity, quality and timeliness of atmospheric and oceanographic data in ocean areas where few other measurements are taken.

IMPROVING GLOBAL FORECASTS OF WEATHER & OCEAN CONDITIONS

» Data buoys measure air pressure, temperature (sea-surface & air), ocean current velocity and wind velocity across all oceans. These observations are relayed by satellite and used immediately to improve forecasts and increase marine safety.



SHIPS AHOY!

» Most drifting buoys are deployed by commercial ships and research vessels. Without such cooperation the global buoy network of over 1250 **drifting buoys** and 400 **moored buoys** could not exist today and would be hard to sustain in future.



HOW CAN MARINERS HELP?

 The DBCP is looking for ships to be part of this global effort.
We have an ongoing need to deploy buoys in order to maintain the network. Buoys are pre-packaged for easy deployment, from the lowest deck or ramp, whilst underway.





Contact: support@jcommops.org http://www.jcommops.org/dbcp

The DBCP is an **international** program coordinating the use of autonomous **data buoys** to observe the **atmosphere** and ocean for forecasting and research.

The DBCP was formed in 1985, as a joint body of the World Meteorological Organization (WMO) and Intergovernmental Oceanographic Commission (IOC) of UNESCO. It makes up the data buoy component of the Joint WMO-IOC Technical



Commission for Oceanography and Marine Meteorology (JCOMM) . The DBCP was the first component of the Global Ocean Observing system (GOOS) to achieve its initial goal, when in 2005, it deployed its 1250th drifter, meaning at least one buoy in every 500 x 500 km square.

S Α B U D

» Data Buoys, whether drifting or moored, measure and transmit automatically, in a predictable and controlled way, communicating in real time via satellite systems such as Argos and Iridium. Data buoy observations make significant contributions to our ability to model,



A Drifting Buoy at sea

generally

understand and describe global weather and climate on all time and space scales. The data collected complements or validates data from other platforms (such as from Voluntary

sensed data.

Drifting

Observing Ships) and remotely-

attached to some form of drogue or

sea-anchor, are easy to deploy and

reliably measure the atmosphere and

ocean surface conditions for an

average of 18 months. They track

Buoys,



NULL VILLING

Drifting Buoys during manufacture



Much of the work achieved by the DBCP is through Action Groups. Each group maintains an observational buoy program that supplies data for operational and research purposes.

The DBCP has the following action groups:

Global

»

- The Global Drifter Program (GDP)
- OceanSITES (long-term, deepwater reference stations) »
- **Tropical Moored Buoy Implementation Panel** » (TAO, TRITON, PIRATA, RAMA)

Regional

- European EUCOS Surface Marine Programme (E-SURFMAR) »
- International Arctic Buoy Programme (IABP) »
- International South Atlantic Buoy Programme (ISABP) »
- North Pacific Data Buoy Advisory Panel (NPDBAP) »
- International Buoy Program for the Indian Ocean (IBPIO) »
- International Programme for Antarctic Buoys (IPAB) » http://www.jcommops.org/dbcp/dbcp_ag.html



G Ε E Т 0 D

Membership

All IOC and WMO member states are invited to participate in the DBCP. Panel membership is also open to any other interested parties, such as buoy manufacturers, data users, researchers and ship operators.

Contact Ms Hester Viola

> **DBCP Technical Coordinator JCOMMOPS** 8-10 Rue Hermes Parc Technologique du Canal Ramonville Saint Agne 31520 FRANCE Tel: +33 5 61 39 47 82 Email: support@jcommops.org



their drogue and are relatively inexpensive to operate. The DBCP has been working for decades to design standardised drifting buoys to suit observational requirements for meteorological and oceanographic applications.

ocean currents at the depth corresponding to the length of

Moored Buoys are anchored at fixed locations and regularly collect observations from many different atmospheric and oceanographic sensors. Moored buoys are usually deployed to serve national forecasting needs, maritime safety needs or to observe regional climate patterns. They are generally upgraded or serviced yearly.

A Moored Buoy being serviced



www.jcommops.org/dbcp

WMO

www.wmo.int



JCOMM in-situ Observing Platform support centre

www.jcommops.org