

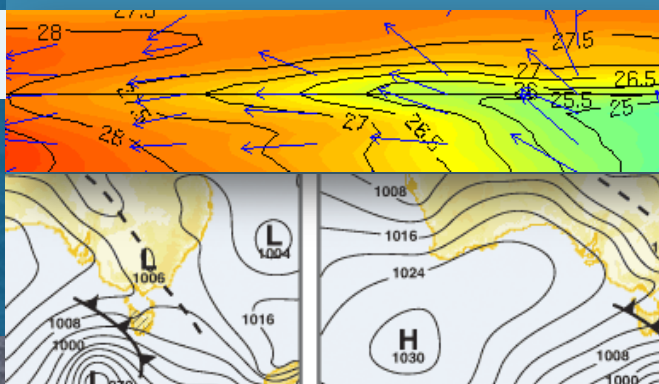


DATA BUOY COOPERATION PANEL

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

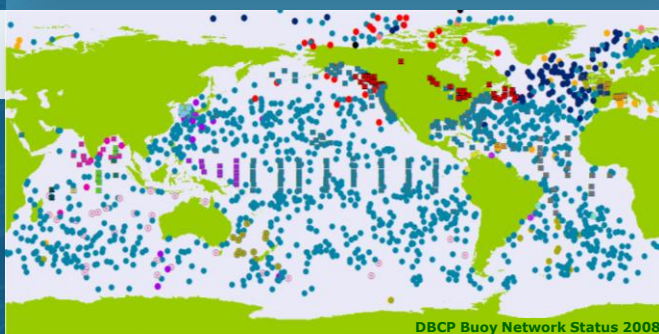
IMPROVING GLOBAL FORECASTS OF WEATHER & OCEAN CONDITIONS

» 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.



- AUSTRALIA ● CANADA ● FRANCE ● IRELAND ● NORWAY ● UNITED KINGDOM ● USA-FRANCE
- BRAZIL ● COLOMBIA ● GERMANY ● JAPAN ● SOUTH AFRICA ● USA
- BRAZIL-FRANCE-USA ● EUROPE-E-SURFIMAR ● INDIA ● NEW ZEALAND ● SOUTH KOREA ● USA-ASCLME ● USA-INDIA
- USA-INDONESIA

HOW CAN MARINERS HELP?

» The DBCP is looking for ships to be part of this global effort, because it continually needs more buoys deployed 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 **atmosphere** and **ocean** conditions, 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.

Global Drifter 1250



D A T A B U O Y S

» **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

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 Observing Ships) and remotely-sensed data.

⊖ **Drifting Buoys**, generally 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

ocean currents at the depth corresponding to the length of 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.

⊕ **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



W H E R E T H E A C T I O N I S

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

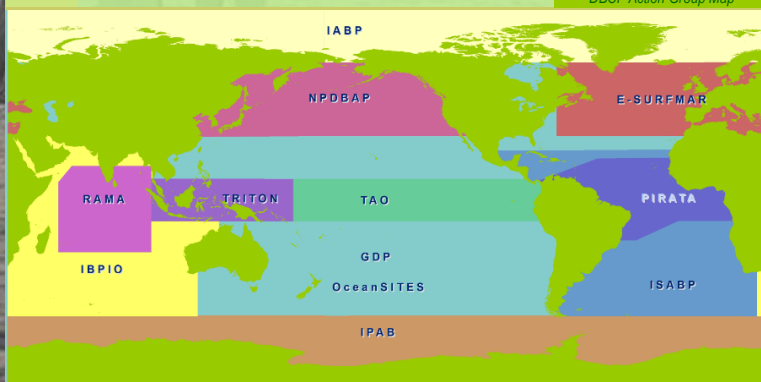
- » The Global Drifter Program (GDP)
- » OceanSITES (long-term, deepwater reference stations)

Regional

- » Tropical Moored Buoy Implementation Panel (TAO, TRITON, PIRATA, RAMA)
- » 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

DBCP Action Group Map



G E T I N V O L V E 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

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