

Drifting data buoys

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Drifting data buoys (Figure 1) are buoys deployed to drift over the ocean, automatically measure and transmit meteorological and/or oceanographic data in real time via satellite telecommunication systems.



Figure 1. A drifting buoy.

Data buoy observations are useful for weather monitoring, forecasts and research, and additionally complement or validate data from other platforms, such as Voluntary Observing Ships or weather satellites. Drifting buoys are easy to deploy (Figure 2), relatively inexpensive to operate and reliably measure the atmosphere and ocean surface conditions for an average of 18 months.



Figure 2. A drifting buoy deployed from a ship.

Data buoys are normally operated under the Data Buoy Cooperation Panel (DBCP), an official joint body of the World Meteorological Organization (WMO) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO. The primary objective of DBCP is to maintain and coordinate all components of the network of over a thousand data buoys operated by national weather services around the world (Figure 3). It aims to increase the quantity, quality, global coverage and timeliness of atmospheric and oceanographic data. These observations are used immediately to improve forecasts and therefore enhance marine safety.

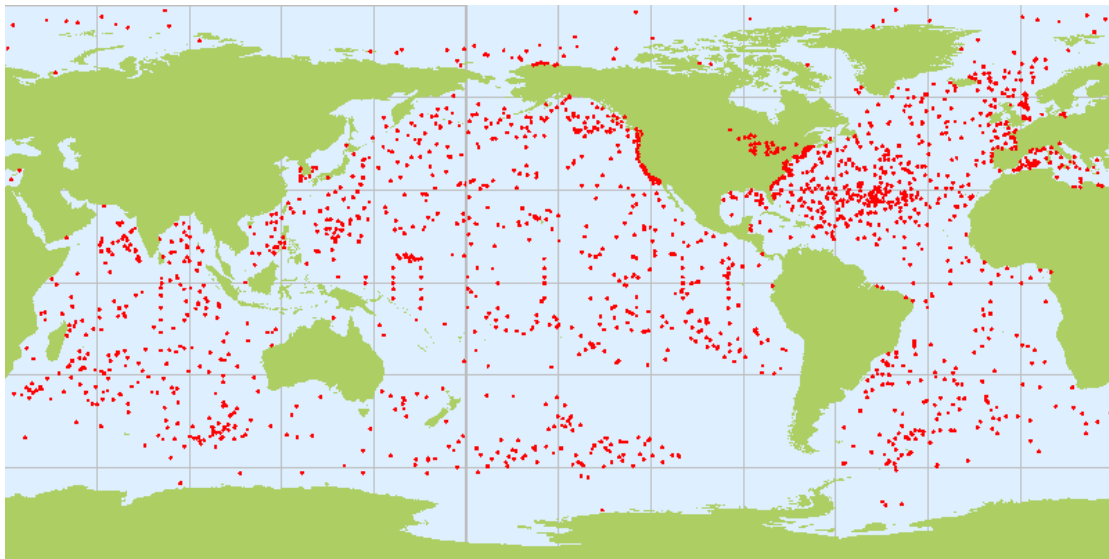


Figure 3. A map showing the locations of DBCP data buoys on 21 July 2014 (<http://www.jcommops.org/dbcp>).