



Under the VOS Scheme, ships are recruited by National Meteorological Services (NMSs) to record and transmit meteorological observations to shore stations in real-time to assist in the provision of more accurate marine forecasts and warnings. The VOS and other ocean observing programmes described in this brochure represent a highly cost-effective approach to marine data collection.

Contact your national weather service for more information

Or reach out to OceanOPS for assistance via email:

ship-tc@ocean-ops.org

See the website for more information:

ocean-ops.org/sot/programmes.html#VOS





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The Global Ocean Observing System GET
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What Is VOS?

The VOS Scheme is a core observing programme of the Global Ocean Observing System (GOOS). Weather observations are shared globally for use by meteorologists, numerical weather prediction models, ship routing services, and for other climatological and research activities.

Meteorological observations made by officers onboard vessels participating in the programme are compiled in an electronic logbook software. The officer enters data read from instruments and observed visually, and the software codes this information into a standardised format for immediate transmission to shore.

The VOS Scheme operates at no direct cost to participating vessels. Calibrated instruments are often provided by the recruiting country and Port Meteorological Officers (PMOs) provide free training both in weather observing practices and the use of electronic logbook software.

Who Can Participate?

Worldwide nearly 3000 participating ships contribute around 4 million weather observations each year. Participating ships are supported by a network of 60 Port Meteorological Officers from 15 countries as well as centralised technical support from the GOOS OceanOPS team.

The global VOS fleet is made up of a wide variety of vessel types including container ships, passenger cruise ships, fishing boats, research vessels and racing yachts.

Why Are Weather Observations Important?

Meteorological observations from VOS ships continue to make a vital contribution to marine safety and efficiency, providing critical information needed for weather forecasting, and historical data needed for planning and design. They contribute substantially to increasing our understanding atmosphere/ocean linkages, essential in addressing the issue of global warming and for the development of accurate long-range weather forecasts. They also provide vital truth measurements for around calibration and validation satellite observations.

Associated Observing Programmes

In addition to VOS, ships are sought for a range of other ocean observing applications, including:

- Data Buoy Cooperation Panel (DBCP)
 - Voluntary ships often deploy drifting buoys during routine voyages
- Automated Shipboard Aerological Programme (ASAP)
 - Vessels are recruited to release weather balloons whilst at sea
- Ship of Opportunity Programme (SOOP)
 - Vessels collect ocean observations at or below the sea surface whilst underway
- Argo
 - Vessels assist with deployment of autonomous underwater profiling floats

