IMOS
Integrated **Marine Observing** System

How IMOS supports Australia's marine sovereignty, safety and security

Understanding and predicting ocean conditions is essential for those working in the marine environment as the variable nature of the ocean brings uncertainty and risk to marine operators.

IMOS plays a fundamental role in supporting the Royal Australian Navy through providing oceanographic information to make operational decisions and maintain national security. Data on water column characteristics, wave height and direction and current speeds are all important to naval operations, manoeuvres and safety.

IMOS is delivering marine observations in partnership with the Department of Defence

There are several IMOS Facilities that have received co-investment from the Royal Australian Navy including:

Argo Floats

Animal Tagging
Turtle tagging in Northern Australia

Ocean Gliders

Ships of Opportunity
Expendable Bathythermographs

IMOS observations underpin modelling and forecasting

The Royal Australian Navy rely on IMOS observations to underpin modelling and forecasting, create warnings and support operational decisions related to maritime safety.

The Australian Bluelink partnership between CSIRO, the Department of Defence and the Bureau of Meteorology has developed and maintained world-leading global, regional and littoral ocean forecast systems to support Defence applications.

Bluelink combines ocean observations, including data contributed from IMOS profiling Argo Floats, Ocean Gliders, Moorings, sensors on Ships of Opportunity, remotely sensed products derived from Satellite data, Ocean Radars, and tagged animals, with the latest modelling and data assimilation technology to estimate three-dimensional ocean circulation.

The resulting highly accurate and comprehensive ocean forecasts are used to predict marine scenarios ranging from local beach conditions to regional currents and waves, and ocean circulation on a global scale.

imos.org.au

NCRIS National Research Infrastructure for Australia
An Australian Government Initiative

Australia's Integrated Marine Observing System (IMOS) is enabled by the National Collaborative Research Infrastructure Strategy (NCRIS). It is operated by a consortium of institutions as an unincorporated joint venture, with the University of Tasmania as Lead Agent.

IMOS acknowledge the Traditional Custodians and Elders of the land and sea on which we work and observe as Australia's first marine scientists and carers of Sea Country. We pay our respects to Aboriginal and Torres Strait Islander peoples past and present.