Integrated Marine Observing System

The IMOS monitors the open oceans and coastal marine environments around Australia and delivers data that is openly available.

IMOS helps scientists and researchers to better understand ocean change, climate variability and extreme weather, ocean processes, and the sustainability of marine ecosystems in Australia.

It is at the forefront of international collaboration and cooperation in ocean observing in the southern hemisphere.

Key facts

- State: Australia wide
- Lead institute: University of Tasmania
- Project status: In progress
- Australian Government contribution:
    - $50.6 million from the National Collaborative Research Infrastructure Strategy program
    - $52 million under the Super Science Initiative
    - $7.2 million under the Collaborative Research Infrastructure Scheme (CRIS)
    - $18.372 million under the National Collaborative Research Infrastructure Strategy 2013 program.

Project deliverables

The IMOS facilities, operated by ten different institutions within the National Innovation System, are funded to deploy equipment and deliver data streams for use by the entire Australian marine and climate science community and its international collaborators.
The observations being undertaken by IMOS facilities are guided by science plans developed within the marine and climate science community. These plans address five major research themes:

- Multi-decadal ocean change
- Climate variability
- Major boundary currents
- Continental shelf processes
- Biological responses

Access

IMOS has observational equipment located in oceans all around Australia and off the Antarctic coast. There are circa 1,600 observing platforms collecting a wide range of data. Approximately 50% of these are supported by co-investing partners.

IMOS data is openly available to everyone through the IMOS Ocean Portal for the benefit of Australian marine and climate science as a whole.

All IMOS facilities are connected to relevant international programs and IMOS is regarded internationally as a leading national component within the Global Ocean Observing System.

For more information, go to the IMOS website.

Participating organisations

The following research organisations have been sub-contracted to operate components of IMOS and have provided cash or in-kind resources:

- Australian Institute of Marine Science
- Bureau of Meteorology
- CSIRO Marine and Atmospheric Research
- Curtin University
- Geoscience Australia
- James Cook University
- South Australian Research and Development Institute
- Sydney Institute for Marine Science, including University of New South Wales, University of Sydney, Macquarie University and University of Technology Sydney
- University of Tasmania
- University of Western Australia

The Tasmanian, Queensland, Western Australian, South Australian and New South Wales governments have all provided cash resources to support IMOS activities in their state.

The Antarctic Climate and Ecosystems Cooperative Research Centre is a significant co-investor in IMOS. It is a multidisciplinary partnership of over 20 national and international organisations and provides science, knowledge and understanding to help Australia meet the challenges of climate change.