



A data delivery system for IMOS, the Australian Integrated Marine Observing System

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The Integrated Marine Observing System (IMOS, www.imos.org.au), an AU\$100m 5-year project, is a distributed set of equipment and data-information services which collectively contribute to meeting the needs of marine climate research in Australia. The observing system provides data in the open oceans around Australia out to a few thousand kilometres as well as the coastal oceans through 11 facilities (Argo Australia, Ships of Opportunity, Southern Ocean Automated Time Series Observations, Australian National Facility for Ocean Gliders, Autonomous Underwater Vehicle Facility, Australian National Mooring Network, Australian Coastal Ocean Radar Network, Australian Acoustic Tagging and Monitoring System, Facility for Automated Intelligent Monitoring of Marine Systems, eMarine Information Infrastructure and Satellite Remote Sensing) and 5 nodes (Blue Water, Great Barrier Reef Ocean Observing System, New South Wales IMOS, Southern Australia IMOS and Western Australia IMOS).

The data, a combination of near real-time and delayed mode, are made available to researchers through the electronic Marine Information Infrastructure (eMII). eMII utilises Australia's Academic and Research Network (AARNET) to support a distributed database on OpenDAP servers hosted by regional computing centres. IMOS instruments are described through the OGC Specification SensorML and most data is in CF compliant netcdf format. Metadata, conforming to standard ISO 19115, is automatically harvested from the netcdf files and the metadata records catalogued in the OGC GeoNetwork Metadata Entry and Search Tool (MEST). Data discovery, access and download occur via web services through a web portal and tools for the display and integration of near real-time data are in development.