



IMOS, an Integrated Marine Observing System for Australia

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IMOS 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 Time Series, 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 are made available to researchers through the electronic Marine Information Infrastructure (eMII). Specifically, IMOS also incorporates a National Reference Station infrastructure (NRS) based on 9 stations in the coastal ocean around Australia. The NRS is (i) multi-disciplinary and integrated with the collection of over 60 marine parameters, (ii) modular, which allows for deployment with or without a surface signature, and (iii) versatilely based on regionally scaled logistics. After introducing the philosophy of IMOS and its implementation, the first results obtained through a suite of facilities will be illustrated across different nodes.