

## IMOS Bulletin

Issue #54 May 2016

Welcome to the IMOS Bulletin. Please feel free to distribute this email bulletin to others. The Bulletin is also available for download from the website at <http://imos.org.au/bulletin.html>.

If you have any comments or questions regarding the IMOS Bulletin please contact IMOS Communications, [communication@imos.org.au](mailto:communication@imos.org.au).

## IMOS Data

### A single portal to access marine data

The new-look Australian Ocean Data Network (AODN) Portal has been launched this week. This signifies the official merger of the IMOS eMarine Information Infrastructure (eMII) Facility and the Australian Ocean Data Network (AODN) into a single entity. The marine information Facility of IMOS is now the AODN.

Enabling open access to marine data is core business for IMOS. The IMOS data will continue to be discoverable alongside a wider collection of Australian marine and climate data via the new-look AODN Portal. IMOS is a multi-institutional collaboration with a focus on open data access and is therefore ideally placed to manage the AODN on behalf of the Australian marine and climate community.

We've had responsibility for AODN for some years, but for historical reasons there were two portals. Recent improvements to the IMOS information infrastructure mean it's now time to consolidate. The aim now is to grow the AODN data holdings in collaboration with current partners and with new partners.

Visit the AODN Portal at <http://portal.aodn.org.au/>.



### The AODN Portal consolidates Australian marine and climate data

The IMOS data holdings are detailed in a suite of reports generated by the AODN on a monthly basis. The summary reports for March 2016 can be downloaded directly via the IMOS website <http://imos.org.au/datareports.html>.

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## IMOS Activity Planning

### Deployment and maintenance activities this month include:

- Ships of Opportunity, Continuous Plankton Recorder, Great Australian Bight Deployment and Air-Sea Flux Operation from the *RV Investigator* Voyage
- Ocean Glider Deployments – Sea glider at Lizard Island, Great Barrier Reef, and Slocum glider Deployment at Palm Passage, GBR, with eReefs
- National Mooring Network – mooring turnarounds at ORS065 and SYD100 (NSW), Perth Canyon and Two Rocks (WA), Forster Passive Acoustic (NSW), and Kangaroo Island CO<sub>2</sub> (SA)
- Autonomous Underwater Vehicle deployments in Temperate WA and East Coast of Tasmania
- Routine station visits to Ocean Radar sites at SA Gulf and Coffs Harbour

Future activity planning for the IMOS Facilities is provided via the IMOS website (<http://imos.org.au/imosactivityplanning.html>). The plans contain details for all the planned deployment/recovery/servicing/sampling etc. activities for the NCRIS 2015 funding period.

### Paper of the month

This month we'd like to highlight the following paper that references IMOS data:

Andrew Lenton, Bronte Tilbrook, Richard J. Matear, Tristan P. Sasse and Yukihiro Nojiri, **Historical reconstruction of ocean acidification in the Australian region**, *Biogeosciences*, 13, 1753–1765, 2016 (doi:10.5194/bg-13-1753-2016)

Present-day ocean carbon observations from IMOS National Reference Station sites located on the shelf around Australia, combined with neural network mapping of CO<sub>2</sub>, sea surface temperature, and salinity are used to estimate the current seasonal and regional distributions of carbonate chemistry (pH and aragonite saturation state).

A reconstruction of pH and aragonite saturation state changes over the last 140 years (1870–2013) predicts that since 1870 decrease in aragonite saturation state of 0.48 and of 0.09 in pH has occurred in response to increasing oceanic uptake of atmospheric CO<sub>2</sub>.

The paper is available to download at: <http://www.biogeosciences.net/13/1753/2016/>

### Calling for kit

Occasionally the IMOS office is visited by government and other stakeholders who are interested in the work of IMOS. For example, the [visit by Australia's Chief Scientists](#) a few weeks ago.

We explain the breadth of our observing capability and talk about national collaborations. What would be nice is if we had some objects for 'show and tell'. If you have any out-of-service instrumentation or other equipment please [let us know](#). It would be great to be able to use such visual aids when talking about your particular contribution to IMOS.

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## Did you know?

This section features news from the marine science community and highlights various ways in which you can discover, access and use IMOS data.

**Slocum gliders** have been tracking sub-surface warming in the Great Barrier Reef. Since October 2015, IMOS Slocum gliders have traversed this region, tracking the seasonal evolution of coastal waters. By sampling the water in see-saw manner, the gliders can reveal how deep the warming extends. By April 2016, glider observations indicated water throughout the water column on the inner shelf was still warmer than historical observations.

[> Read the full story on the IMOS website](#)



**Bleached coral. Image credit: AIMS.**

**Dr Ian Poiner**, Chair of the IMOS Advisory Board and Chair of the Marine National Facility Steering Committee, features in a new video about the *RV Investigator* and explains how to apply for sea time on the vessel.

[> Watch the video on YouTube](#)

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## Where are they now?

Over the past ten years many students have passed through IMOS operating institutions and have gained their qualifications through research based on IMOS data. We'd love to find out what has become of them and what impact they are now having as more experienced researchers out there in the world.

Please [send us](#) a brief note about students whose current situations you're aware of and we'll publish a selection of stories in the special ten-year anniversary edition of IMOS highlights. We're happy to contact ex-students directly if you pass their details on to us.

## Recent & Upcoming Events

- **19–24 June 2016** The 13th international coral reef symposium (ICRS), Honolulu, Hawaii  
<https://www.sgmeet.com/icrs2016/default.asp>
- **4–7 July 2016** New Zealand Marine Science Society and Australian Marine Sciences Association: Sharing Ocean Resources – Now and in the future, Wellington, New Zealand  
<https://innovators.eventsair.com/QuickEventWebsitePortal/nzmss-amsa-2016/home>
- **5–7 July 2016** Climate Adaptation 2016: Change, Challenge, Opportunity, Adelaide, South Australia  
<http://climate-adaptation.org.au/>
- **31 July –5 August 2016** 13<sup>th</sup> Annual Meeting of the Asia Oceania Geosciences Society, Beijing, China  
<http://www.asiaoceania.org/aogs2016/public.asp?page=sessionProposal.htm>
- **4–7 September 2016** ECSA 56 Coastal systems in transition: From a 'natural' to an 'anthropogenically-modified' state, Bremen, Germany  
<http://www.estuarinecoastalconference.com/>
- **4–7 September 2016** Australian Society for Fish Biology (ASFB) and Oceania Chondrichthyan Society (OCS) 2016 Joint Conference, Hobart, Australia  
<http://asfbconference2016.org/>
- **18–25 September 2016** CLIVAR Open Science Conference 'Charting the course for climate and ocean research', Qingdao, China  
<http://www.clivar2016.org/>
- **11–13 October 2016** International Conference on Marine Data and Information Systems (IMDIS) 2016, Gdansk, Poland  
<http://imdis2016.seadatanet.org/>
- **14–16 November 2016** International Conference on the Marine Environment of the Red Sea (ICMERS 2016), Thuwal, Saudi Arabia  
<https://icmers2016.kaust.edu.sa/home>

For a full list of upcoming conferences please visit the Calendar page at <http://imos.org.au/calendar.html>. If you would like an event or conference featured on our website calendar please contact [communication@imos.org.au](mailto:communication@imos.org.au).

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