



## IMOS Bulletin

Issue #48 October 2015

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 Reports

Over the past month an additional 10 million acoustic detections have been made publicly available via the IMOS data portal and AATAMS website. This takes the total number up to 25 million. No longer embargoed, these additional detections are available for researchers working with acoustic telemetry data.

The IMOS data portal shows the location of receiving stations around Australia, representing detections of about 100 marine species.

The following page in the IMOS data portal enables discovery of data sets from each receiver location. Selecting the desired location shows a link to the AATAMS web app where the data can be downloaded: <https://imos.aodn.org.au/imos123/home?uid=4a97bd11-e821-4682-8b20-cb69201f3223>

The IMOS data portal also houses collections from other organisations who are helping us to build the Australian Ocean Data Network (AODN). Examples are the Royal Australian Navy CTD profiles and DSTO glider deployments. To find these collections you can use the keyword search to type in 'Navy' or 'DSTO'. More collections will be added to the Portal over the coming months.

The IMOS data holdings are detailed in a suite of reports generated by the eMII Office on a monthly basis. The summary reports for August 2015 can be downloaded directly via the IMOS website <http://imos.org.au/datareports.html>.

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## IMOS Activity Planning

Among the many activities planned for November, here are just a few:

- The Southern Ocean Continuous Plankton Recorder will be deployed from the *Aurora Australis* during its Hobart to Antarctica cruise.
- The Ocean Gliders facility will deploy Slocum gliders as part of the eReefs program at Heron Island in the Southern Great Barrier Reef
- The Satellite Remote Sensing Facility will deploy GPS buoys in Bass Strait and Storm Bay, Tasmania

Future activity planning for the IMOS Facilities is now 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 2013 funding period.

## Paper of the month

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

M. Grenier, A. Della Penna and T. W. Trull (2015), 'Autonomous profiling float observations of the high-biomass plume downstream of the Kerguelen Plateau in the Southern Ocean', *Biogeosciences*, 12, 2707–2735, 2015. [DOI:10.5194/bg-12-2707-2015]

The paper is available at the Biogeosciences website: [www.biogeosciences.net/12/2707/2015/](http://www.biogeosciences.net/12/2707/2015/)

This is possibly the first paper published by an Australian group using biogeochemical and bio-optical sensor results from profiling floats deployed by Australia. The data were processed by the IMOS Argo and SOTS facilities.

The paper shows that satellite remote sensing observes the general spatial patterns of phytoplankton blooms well, but makes errors of up to two-fold in their total biomass because the satellites do not see below the surface. Importantly, this problem cannot be fixed by using standard ARGO float mixed layer depths to approximate the vertical biomass extent, because summer shoaling of mixed layer depth leaves significant biomass below the mixed layer.

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## Did you know?

This section features various ways in which you can discover, access and use IMOS data.



Now you can meet the people behind the variety of marine observations that make up the IMOS data collection. IMOS has just introduced a brand new series of videos called 'IMOS in MOcean'. The series will be presented via the [IMOS website](#) and through our [YouTube channel](#) and [Facebook page](#).

In our first episode, Dr Michelle Heupel from the Australian Institute of Marine Science (AIMS) talks about her research tracking sharks. Michelle describes the surprising results that demonstrated the long-range migration of bull sharks from Sydney Harbour to the Great Barrier Reef.

A number of other videos are in various stages of planning or production so that the collection will eventually represent the diversity of data collections and collectors, partners and end-users.

Keep an eye out for future episodes and do [let us know](#) if you have an idea for a new video.

IMOS in MOcean: <http://imos.org.au/imosinmocean.html>

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## Call for abstracts for Asia-Oceania Geosciences Society (AOGS)

The next meeting of AOGS is in Beijing next July/August. The presentations are of high quality and it is a good way to connect with China, Korea, Japan, India, and other Asian countries. There is also participation from USA and Europe.

The call for special sessions is now open. Please consider submitting an abstract. The website is open, but will close 25 November. The website is:

<http://www.asiaoceania.org/aogs2016/public.asp?page=sessionProposal.htm>

You are invited to convene Sessions in one of the following Sections:

- Atmospheric Sciences (AS)
- Biogeosciences (BG)
- Hydrological Sciences (HS)
- Interdisciplinary Geosciences (IG)
- Ocean Sciences (OS)
- Planetary Sciences (PS)
- Solar & Terrestrial Sciences (ST)
- Solid Earth Sciences (SE)

Feel free to call for a joint session with the Atmospheric Sciences Section, the Biogeosciences Section, or the Interdisciplinary Section. Typically, there are two or more convenors and they hail from different countries.

Contact [Robin Robertson](mailto:R.Robertson@adfa.edu.au) for more information: [R.Robertson@adfa.edu.au](mailto:R.Robertson@adfa.edu.au)

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## Recent & Upcoming Events

**27-30 October** Greenhouse 2015, Hobart, Tasmania. <http://greenhouse2015.com/home>

**30 November – 4 December** Goa IO Symposium 'Dynamics of the Indian Ocean: Perspective and Retrospective' <http://www.io50.incois.gov.in>

**14-18 December 2015** American Geophysical Union (AGU) Fall Meeting, San Francisco, USA  
<http://fallmeeting.agu.org/2015/>

**19-21 January, 2016** 9<sup>th</sup> International Conference on Marine Bioinvasions (ICMB), Sydney, Australia.  
<http://www.marinebioinvasions.info/>

**9-12 February 2016** Species on the Move International Conference, Hobart, Australia  
<http://www.speciesonthemove.com/>

**February 21-26 2016** 2016 Ocean Sciences Meeting, New Orleans, USA  
<http://osm.agu.org/2016/>

**12-15 April 2016** IX International Congress on the History of Oceanography, Adelaide, Australia  
[http://www.flinders.edu.au/science\\_engineering/environment/activities/icho-2016.cfm](http://www.flinders.edu.au/science_engineering/environment/activities/icho-2016.cfm)

**3-6 May 2016** 4th International Symposium on the Ocean in a High-CO<sub>2</sub> World, Hobart Tasmania.  
<http://www.highco2-iv.org/>. Abstract submission now open.

**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> Abstract submission now open

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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