IMOS Bulletin

Issue #59 October 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.

From the IMOS Office

There is a lot of activity and engagement done through the IMOS Office that is not currently communicated to the whole community. In this new section of the Bulletin we’ll provide a brief roundup for the current month. Feedback welcome.

- An Asia-Pacific Economic Cooperation (APEC) Workshop on “Building Regional Earth and Marine Observation Systems to Safeguard APEC Resources and Communities” was held at the Australian Academy of Science on 27-30 September. The Workshop website can be found [here](http://imos.org.au/bulletin.html), and a Workshop Report is under preparation.
- The WA [Blueprint for Marine Science Initiative](http://imos.org.au/bulletin.html) is moving into implementation, with Project Steering Groups being formed. IMOS is involved in the project on Shared Observing Effort (E5) with the first meeting held on 5 October.
- A Reef 2050 Integrated Monitoring and Reporting (RIMRep) Program Steering Group meeting was held on 7 October. IMOS is co-chairing the Data Management & Systems Working Group (with GBRMPA and Queensland Department of Science, Information Technology and Information).
- The third biennial Australian Coastal and Oceans Modelling and Observations Workshop (ACOMO 2016) was held on the 11-12 October, at the Shine Dome, Australian Academy of Sciences, Canberra. The Workshop Report is now available on the IMOS website [here](http://imos.org.au/bulletin.html), and abstracts and talks (where available) can be accessed via links embedded in the Agenda. ACOMO has become a highly valued part of the national marine science landscape, and we are committed to holding ACOMO-IV in the second half of 2018. Oh, the anticipation!
- Dr Glenn Nolan, Secretary General of the European Global Ocean Observing System (EuroGOOS) visited the IMOS Office on 13-14 October and gave a seminar at CSIRO.
- NeCTAR is another NCRIS capability that works with IMOS. NeCTAR is building three new [Australian Science Clouds](http://imos.org.au/bulletin.html) including an Australian Marine Sciences Cloud. The first Science Clouds Steering Committee meeting was held on 21 October. Roger Proctor and Nathan Bindoff are the science coordinators for the Australian Marine Sciences Cloud, with Brendan Davey (TPAC) the project contact.
- IMOS was invited to attend a High Value Data Research Roundtable in Canberra on 25 October. The event was organised by the Department of Prime Minister and Cabinet under Data.gov.au.
- Bioplatforms Australia is another NCRIS Capability that works with IMOS, and it has established a [Marine Microbes](http://imos.org.au/bulletin.html) project. A project meeting was held in Hobart on 26-27 October.
- Following some very interesting discussion at ACOMO, Julia Blanchard (IMAS) and the IMOS Zooplankton Ocean Observations and Modelling (ZOOM) Task Team (Jason Everett, Anthony Richardson, Mark Baird et al) pulled IMOS is a national collaborative research infrastructure, supported by Australian Government. It is led by University of Tasmania in partnership with the Australian marine & climate science community.
together a meeting on “Linking Plankton to Fisheries: Synergies in Size-Spectrum Research”, in Hobart on 27-28 October.

**IMOS Data Reports**

Quality controlled bio-acoustics data from three transects in the central and southwest Indian Ocean collected onboard the FV Will Watch have been published on the AODN portal: Will-Watch_20151028-20151031, Will-Watch_20150717-20150720, Will-Watch_20150523-20150526.

The IMOS data holdings are detailed in a suite of reports generated by the AODN on a monthly basis. The summary reports for September 2016 can be downloaded directly via the IMOS website [http://imos.org.au/datereports.html](http://imos.org.au/datereports.html).

**IMOS Activity Planning**

Deployment and maintenance activities next month include:

- The East Australian Current deep water mooring array is being recovered and deployed from the *RV Investigator* off Brisbane.
- Ocean glider deployments in Storm Bay, Tasmania and Yamba, NSW.
- The Autonomous Underwater Vehicle will be deployed in Southeast Queensland.

Future activity planning for the IMOS Facilities is provided via the IMOS website [http://imos.org.au/imosactivityplanning.html](http://imos.org.au/imosactivityplanning.html). The activity plans contain details for all the planned deployment/recovery/servicing/sampling etc. activities for the 2016-17 period.

**Paper of the month**

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


A cacophony of underwater noise in the Perth Canyon, detected each evening with acoustic receivers, is most likely produced by small fishes. In the Perth Canyon each evening, timed around sunset, lantern fish (family Myctophidae) rise from their daytime resting places at depths between 200 to 500 metres, to forage in the top 160 metres of the water column. Once the fish reach their foraging depth there is a massive increase in noise throughout the Perth Canyon which lasts until about five hours after sunset but may continue until sunrise at a lower level. The researchers argue this noise – a chorus – is produced by these small lantern fish.

The large spatial extent of the chorus and its apparent correlation with regions of high productivity suggest it may act as an acoustic beacon to marine fauna indicating regions of high biomass.

The paper is available at AIP [Scitation](http://aip.scitation.org).
Sea noise recording mooring ready to be deployed. Image: Robert McCauley

**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.

CHORUS software is now available from the [Curtin University website](http://www.curtin.edu.au). CHORUS is a set of Matlab routines and a stand-alone executable program to process, review and analyse large datasets of sea noise recordings made by autonomous recorders, such as SM2 from Wildlife Acoustics, Sound Traps from Ocean Instruments, etc. CHORUS is the main software tool to analyse data from the Passive Acoustic Observatories of the [Integrated Marine Observing System](http://imos.org.au/).

**Upcoming Events**

- **7-10 February 2017** Australian Meteorological and Oceanographic Society (AMOS) and Meteorological Society of New Zealand (MSNZ) joint conference in conjunction with the Australian/New Zealand Climate Forum (ANZCF), Canberra, Australia [http://www.amos.org.au/Main/Upcoming_Events/amos2017.aspx](http://www.amos.org.au/Main/Upcoming_Events/amos2017.aspx)
- **31 May-2 June 2017** Blue Planet Symposium: Oceans and Society, Maryland USA. [http://symposium.geoblueplanet.com](http://symposium.geoblueplanet.com).

For a full list of upcoming conferences please visit the Calendar page at [http://imos.org.au/calendar.html](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).

---

IMOS is a national collaborative research infrastructure, supported by Australian Government. It is led by University of Tasmania in partnership with the Australian marine & climate science community.