



IMOS Bulletin

Issue #46 August 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.

IMOS Data Reports

The IMOS Ships of Opportunity (SOOP) Sea Surface Temperature (SST) sub-facility is providing a new near real-time data stream.

The Vessel RTM *Wakmatha* is a bulk carrier carrying minerals from Gladstone (Queensland) to China. The vessel supplies near real-time underway bulk SST approximately monthly from its transects between Gladstone and Weipa in Queensland.

A hull temperature sensor measures water at a depth of 8-9 m when the vessel is laden (Gladstone to Weipa) and 3-4 m when unloaded (Weipa to Gladstone). Sea surface temperatures are collected by the on-board system every 2 seconds and time averaged to 1 minute records. The 1-min data are quality controlled by the Bureau of Meteorology and provided to [eMII](#).

Data are accessed via the [IMOS Ocean Data Portal](#). In the 'Vessel Name' menu, select 'WAKMATHA' to view records from along the data collection path.

CO₂ data collected by the vessel will be made available via the Portal in the near future.

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

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Bulk carrier RTM *Wakmatha*

IMOS Activity Planning

In September, the Deepwater moorings facility will be recovering Indonesian Throughflow moorings from the Timor Passage and Ombai Strait. New gear, to continue measuring the Indonesian Throughflow current at these two strategic deep ocean channels ('chokepoints' in the global system of ocean currents), will be deployed during this voyage.

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 which references IMOS data:

Kelly, P., Clementson, L. & Lyne, V. (2015), 'Decadal and seasonal changes in temperature, salinity, nitrate, and chlorophyll in inshore and offshore waters along southeast Australia', *Journal of Geophysical Research Oceans*, Volume 120, Issue 6, pp 4226–4244.

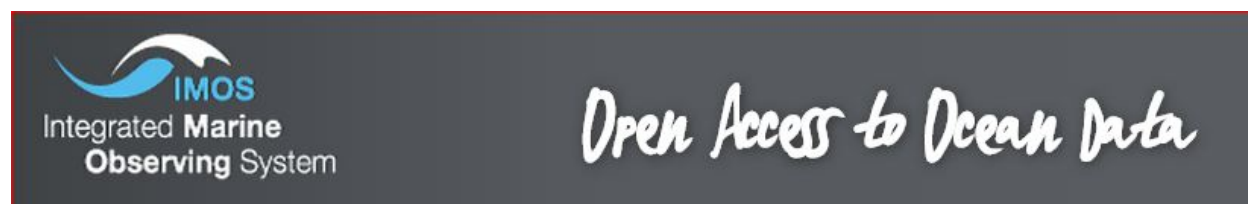
Paige Kelly (CSIRO/IMAS), Lesley Clementson (CSIRO), Vincent Lyne (CSIRO/ Scimatrix Consulting Group) examined sixty years of oceanographic in situ data at Port Hacking (34°S) and Maria Island (42°S) and 15 years of satellite-derived chlorophyll a (chl a) in inshore and offshore waters of southeast Australia to 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.

find changes in the seasonality and trend of water properties consistent with long-term intensification and southerly extensions of East Australian Current (EAC) water.

The paper is available in the [Wiley Online Library](#).

Did you know?

Ocean Data Portal now allows free-text search



The [IMOS Ocean Data portal](#) is being updated and improved all the time. Most of the changes are to the back-end and may not be visible to the user.

This week there will be a visible difference though. New data search functionality will be implemented that enables free-text searching for data collections.

Users can type in keywords to help find the data collections they are after. This is an evolutionary process and further improvements to this new functionality are already in the pipeline. [eMII](#) staff will monitor use of the search functionality using Google Analytics which will help guide future improvements.

If you have any feedback on the Ocean Data Portal you can send it to info@emii.org.au

Advertised Position - Autonomous Underwater Vehicle (AUV) Researcher

This postdoctoral researcher is responsible for research aspects of the development of a new Autonomous Underwater Vehicle (AUV) within the Antarctic Gateway Partnership at the Australian Maritime College (AMC), a specialist institute of the University of Tasmania, with specific focus on application development. Applications close Monday, 14 September 2015

See Reference Number :15304 at <http://www.utas.edu.au/jobs/current-vacancies>

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Invitation to participate in 2016 Ocean Sciences Meeting, New Orleans

At the upcoming AGU Ocean Sciences meeting in New Orleans (21-26 February, 2016) there will be a session related to shelf-sea/open-ocean exchange processes. You're invited to attend, and consider submitting an oral or poster presentation to the session.

Session Title: Connecting Coastal Seas and Deep Oceans: Processes, Observing Systems, and Modeling
Session ID: 9241

Session description: Shelf-sea/open-ocean exchange processes are key controllers of coastal ocean water properties, including heat, freshwater, nutrients, and pollutants, and are important to marine ecosystem functioning. Along many continental margins, circulation is affected by the proximity of energetic, deep-ocean boundary current systems. These boundary currents are of leading importance in basin-scale budgets, but the small-scale, high-frequency variability that results where coastal seas and boundary current regimes interact is challenging to observe and model. Evolving coastal observing systems and advances in data-assimilative modeling are improving our ability to provide well-resolved ocean circulation estimates.

This session invites presentations on processes that drive exchange across the continental shelf and slope in any geographical setting and across the spectrum of time scales encompassing extreme events to mesoscale, seasonal, and interannual variability.

Relevant topics include, but are not limited to: flow-bathymetry interaction; boundary and coastal current instabilities; the relative influence of local and large-scale remotely driven variability on coastal dynamics; impacts on regional air-sea interaction and teleconnections to atmosphere and ocean variability at large scales; and the design of observing systems that integrate coastal and deep observing technologies to span the continental margin. Observational, numerical, and theoretical results from all geographic regions are welcome.

Submissions: <http://osm.agu.org/2016/abstract-submissions>

Enquiries to session chairs:

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Submission deadline: 23 September 2015, 11:59 P.M. EDT.

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Recent & Upcoming Events

14-18 September 2015 GO-SHIP/Argo/ IOCCP conference on physical and biogeochemical measurements of the water column, Galway, Ireland. <http://www.gaic2015.org>.

5-9 October 2015 11th meeting of the International Conference on Southern Hemisphere Meteorology and Oceanography (ICSHMO), Santiago, Chile. <http://www.icshmo-2015.com/>

11-14 October Australian Society for Fish Biology (ASFB) Conference, Sydney, Australia
<http://www.asfb.org.au/events/>

19-23 October eResearch Australasia, Brisbane, Australia <http://conference.eresearch.edu.au/>

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 9th 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

3-6 May 2016 4th International Symposium on the Ocean in a High-CO₂ World, Hobart Tasmania.
<http://www.highco2-iv.org/>. 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.

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