

## IMOS Bulletin

### Issue #27 April 2013

Welcome to the 27<sup>th</sup> issue of the IMOS Bulletin - please feel free to share it with others. This Bulletin covers March news and data. It 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 the IMOS Communications Manager, Frances Hutchinson via email [Frances.Hutchinson@utas.edu.au](mailto:Frances.Hutchinson@utas.edu.au)

## IMOS Business Plan

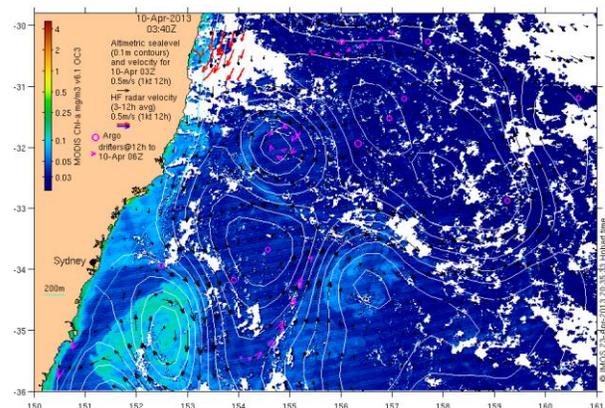
The IMOS 2013-14 Business Plan was submitted to the Department on 30 April 2013. It is available for download at <http://imos.org.au/plans.html> - c1096. The plan covers the period July 2013 to September 2014, and the NCRIS, EIF and CRIS funding. Thanks to everyone who provided input into the plan.

## IMOS *OceanCurrent*

This section highlights news from the IMOS *OceanCurrent* website in the past month <http://oceancurrent.imos.org.au/>

### Fourteen loops and counting: why do cyclonic eddies trap drifters?

There is presently a satellite-tracked drifter apparently trapped in a cold-core eddy off NSW. On [2 May 2013](#) it was at 33S 155.5E, doing ~30km-diameter clockwise loops in a 120km-diameter cyclonic eddy. The 'parent' cold-core eddy of the present, smaller eddy has existed for a long time but between [13 March](#) and [16 March](#) it became elongated to the NNW. The drifter did its first cyclonic loop at the northern limit of this feature (32S 155E) on [20 March](#), then proceeded to do many more as the eddy meandered about (the images around [24](#)



[April](#) are the clearest). The MODIS image for [10 April](#) shows that the eddy had low (near-surface) chlorophyll-a, in contrast to the other cyclonic eddy positioned a similar distance offshore, off Jervis Bay at 35S. Stepping back through time reveals that the difference between the eddies' chlorophyll concentrations is explained by their different origins; the southern one having been formed over the continental shelf near Sydney-Newcastle around [13 March](#).

The tendency of drifters to remain in eddies has been noted before but we cannot recall an instance of a drifter doing so many loops in a cyclonic eddy in this region. Does it matter? Yes, because it tells us something about the exchange of water between the eddy and its surroundings. It also suggests there may be some convergence at the surface and therefore down-welling at the centre of the eddy. It also tells us that the eddy is certainly not a wavelike feature, with a sea level anomaly essentially un-coupled from any particular mass of water.

### **MODIS Chlorophyll-a processing has been updated to SeaDAS6.4**

The Satellite Remote Sensing facility has now processed the archive of MODIS imagery using SeaDAS v6.4. The resulting chlorophyll-a estimates are significantly different to the v6.1 processing so the latter will remain on the website for Aug 2011-present.

The v6.4 chlorophyll-a imagery is plotted for Jan 2008 - Aug 2012 and is reached via the [DATE INDEX] page for each sub-region, and for the [large-area composite](#). Data for 2013 will be available soon, and the real-time production will be switched over to v6.4. The imagery shown here is all based on the daily-composite files available at [the SRS Thredds server at NCI](#). We have treated these as synoptic images taken at 0400UTC. (In truth, the data for the eastern regions is 2h earlier, and for the west it is 2h later.)

## **New Data Streams**

This section lists any new data streams that are publicly available via the IMOS Ocean Portal <http://imos.aodn.org.au/webportal/> since the previous Bulletin.

**Gliders:** QC data for three deployments are now available through OPeNDAP and IMOS portal. These are Coffs 20111112, Perth Canyon 20121206 and Kimberly 20120914. One new slocum glider deployment (Yamba 20121114) has been published on the IMOS portal.

### **National mooring network:**

NRS Biogeochemical sampling: suspended matter data for all stations have been aggregated into the new Excel template and made public.

Passive Acoustics: The Acoustic Data Viewer application is now functional. Two data sets can be viewed. The viewer is available to the public and linked from the portal via the sub-facility metadata record.

**Animal tagging and monitoring:** All Sea Mammal Research Unit CTD tags associated with the 'IMOS Kerguelen' (ct96) program have been deployed.

## Upcoming Events

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 Frances Hutchinson via email [frances.hutchinson@utas.edu.au](mailto:frances.hutchinson@utas.edu.au)

**13-17 May 2013** The 45<sup>th</sup> International Liege Colloquium: Primary production in the ocean: from the synoptic to the global scale, Liege, Belgium. For more information, <http://modb.oce.ulg.ac.be/colloquium/>

**10-13 June 2013** Oceans'13 MTS/IEEE Bergen Conference, Bergen Norway. For more information, [www.oceans13mtsieeebergen.org](http://www.oceans13mtsieeebergen.org)

**23-27 June 2013** IMBER Open Science Conference: Future Oceans, Bergen Norway. For more information, <http://www.imber.info/index.php/News/IMBER-future-events/IMBER-Open-Science-Conference-23-27-June-2014-Bergen-Norway>

**24-28 June 2013** Asia Oceania Geosciences Society (AOGS) Annual Meeting, Brisbane. For more information, <http://asiaoceania.org/aogs2013>

**24-28 June 2013** 7th International Conference on Coastal Dynamics, Arcachon Convention Centre France. For more information, [www.coastaldynamics2013.fr/index.php](http://www.coastaldynamics2013.fr/index.php)

**7-11 July 2013** AMSA 2013 Conference, Gold Coast. For more information, <http://www.cvent.com/events/amsa2013/event-summary-e61ab77a7ca84cc98647bf08eb6e8e50.aspx>

**8-9 July 2013** Second International Symposium on Boundary Current Dynamics, Lijiang, Yunnan, China. For more information, <http://coadc.ouc.edu.cn/isbcd/>

**11-13 September 2013** Coasts & Ports, Sydney. For more information, <http://www.coastsandports2013.com.au/>

**23-25 September 2013** International Conference on Marine Data and Information Systems (IMDIS 2013), Lucca Italy. For more information, <http://imdis2013.seadatanet.org/>

**8-11 October 2013** Greenhouse 2013: A Joint Australian-New Zealand Event, Adelaide. For more information, <http://www.greenhouse2013.com/>

**7-10 March 2014** International Glaciological Society Symposium: Sea Ice in a Changing Environment, Hobart. For more information, <http://www.soos.aq/index.php/calendar?view=event&cid=57>

**23-27 June 2014** IMBER Open Science Conference: Future Oceans – Research for Marine Sustainability, Bergen Norway. For more information, [www.imber.info](http://www.imber.info)