



NSW IMOS Dec08/Jan09 Update SAC Meeting Wednesday 28th January 2009

1. SEA-MOS community Node meeting (#2 for 2008)

- a. A meeting of ~40 members of SEA-MOS met on Monday 10 November for a brief overview of SEA-MOS and the current mid-term review. A discussion followed for preparation of a special issue on the East Australian Current, in Deep Sea Research II Abstracts by Jan 09, manuscripts by Aug 09, and publication in early 2010. So far 17 possible manuscripts have been listed.
- b. Ian Goodwin and Peter Cowell then led a discussion on the Eastern Seaboard Climate Change Initiative, ESCCI, based at SIMS. A workshop will be held 28-30 April 2009, to prepare for the NCCAR grants. SIMS's application with SARDI to lead an adaptation network under Griffith U was not successful, but the successful bid from UTAS is meeting with SIMS through Ian Goodwin.
- c. Funding for Moninya Roughan should be known before Christmas. We have tentative support from IMOS, SIMS and BEES-UNSW.
- d. The midterm review of IMOS was completed in mid December and there will be a few changes. A full report will be released next week.
- e. Iain has been told that the review does not support the new name of SEA-MOS and wishes it to revert to NSW-IMOS.
- f. Gary Meyers will be stepping down as Director of IMOS and Tim Moltmann will take his position.
- g. The Annual Planning Meeting will be held at SIMS in 17-19 February 2009, where the implementation of the midterm review and planning for IMOS-2 will be discussed.

2. NSW Moorings

- a. The NSW-IMOS moorings SYD100 and SYD140 are now entering their sixth month in operation, with the thermistor strings delivering continuous high quality data at both sites.
- b. The three faulty ADCPs were returned to RDI in August for repair, while an ECB that flooded in October was replaced locally under warranty by UVS. To help keep the program on track, DEC provided SIMS with a replacement ADCP, which was deployment at SYD100 in late September. This provided good results until early December, when it was replaced by a new replacement unit from RDI. The Australian Defence Force also loaned SIMS two ADCP Sentinels in November, although neither of these has been used to date.
- c. The two SYD moorings were serviced last week and include two new ADCPs from RDI. Both thermistor strings and the DEC ADCP returned complete data sets.
- d. A mooring and data technician position was advertised. Candidates were interviewed for the data tech position and an offer has been made. NSW Moorings are awaiting outcome of the offer.
- e. The Coffs Harbour moorings tender is presently under negotiation between SIMS and MHL with moorings to be deployed by end of March at the latest.

3. AATAMS Facility

- a. AATAMS has put a proposal to IMOS to increase AATAMS coverage with further IMOS funding. The new receivers would be deployed in Queensland and Tasmania with the in-kind support of JCU and AIMS for QLD and CSIRO and UTAS for Tasmania.
- b. Wobbegong surveys were still undertaking weekly to look at the seasonal fluctuation of wobbegong population within the Cabbage Tree Bay Aquatic Reserve. In total 17 wobbegongs have been acoustically tagged of which 7 were reared by Sydney Aquarium.
- c. All the equipment is ready to deploy half the Sydney line and for the Ningaloo Reef redeployment.
- d. 15 VR2 receivers for the Sydney were deployed line up to 160m isobath on the 3rd December.
- e. AATAMS has obtained new sentinel reference tags and sync tags to allow small-scale positioning (new acoustic telemetry technology) and deployed them within the Cabbage Tree Bay Aquatic Reserve. They will also be deployed across the Sydney VR2 mooring line on the 16th December.
- f. Tagged dusky whaler sharks have been recorded on mulloway receivers in the Georges River, while tagged mulloway have been recorded on grey nurse shark receivers (in Bateman's Bay). The benefits of a national collaborative program are now being realised.
- g. A replacement for the AATAMS Technical Officer Charlie Huveneers has been hired. Andrew Boomer will be taking over the role from Charlie over January/February 2009. Charlie's last day will be the 19th of February.
- h. The Ningaloo Reef arrays were serviced over the New Year's period by the Andrew Boomer and Mark Scognamiglio with over 90% of the data being recovered.

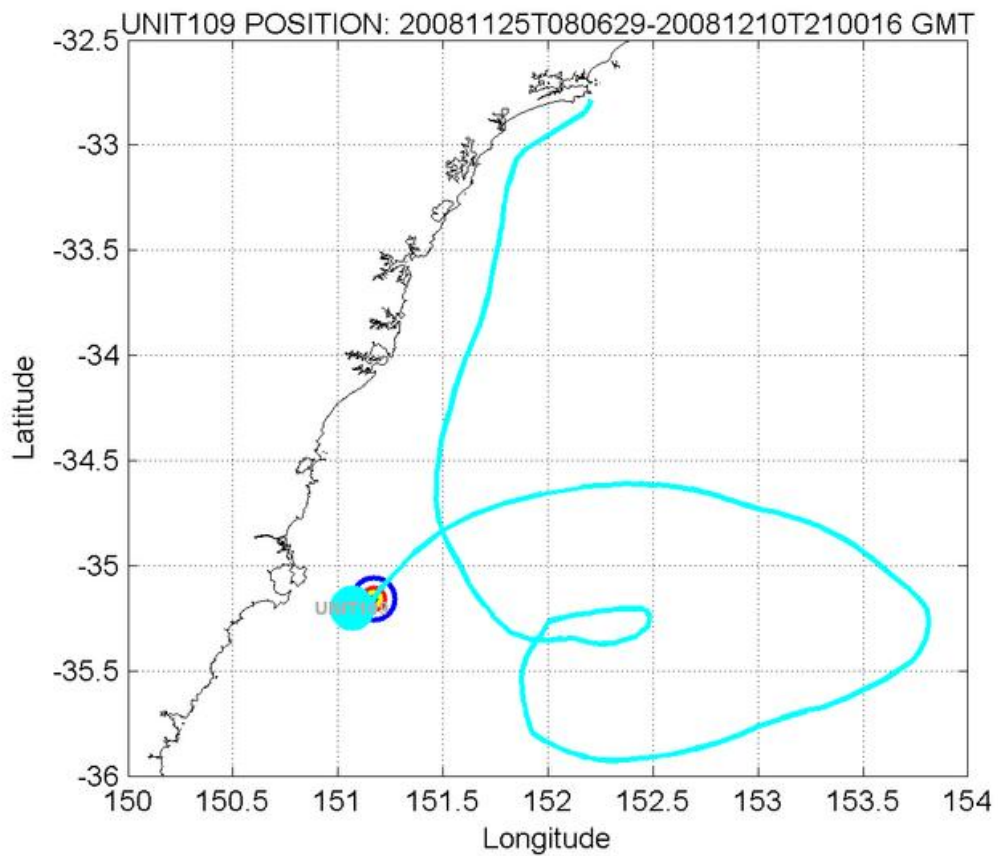
4. AUV Facility

- a. The AUV Facility has ordered a Novatel GPS/Inertial system. This will allow the tracking of position and attitude of the ship to facilitate geo-referencing of the acoustic tracking observations used to follow the AUV. One of these units has been borrowed from another project at the ACFR for evaluation purposes and Stefan is happy with its performance.
- b. With the agreement between SIMS and DMS finalised providing vessel support, the SAC can now look to finding a use for the AUV within NSW.

5. Ocean Gliders

- a. Our first Slocum glider Unit#109 "Nemo" was deployed off Port Stephens on Tues 24 Nov, to survey the Stockton Bight region, by Ben Hollings (ANFOG-IMOS), Duncan Mercer (AUV-USyd), Jason Everett and Iain Suthers (SIMS-UNSW). Unfortunately Nemo was soon swept south into a large, recently calved eddy centered off Jervis Bay.
- b. The counter-clockwise (warm core) currents had been 1-2 knots, and navigation by David Griffin at based on altimetry and SST was difficult due to persistent cloud cover. We aimed for the putative eddy centre, expecting to be swept around and aim back outwards and back to Newcastle. We ended up crossing the eddy's core and had to make a second loop and were swept back towards the NSW coast. After three days

stuck in the eddy, Nemo escaped. On December 10, having travelled 989 kilometres, it was plucked from the sea off Jervis Bay.



Nemo deployment link:

<http://www2.sese.uwa.edu.au/~hollings/anfog/index.php?page=deployments&action=display&project=nswimos>