



## NSW IMOS (SEA-MOS) Update SAC Meeting Thursday 7<sup>th</sup> August 2008

### NSW IMOS Node

- The revised NSW-IMOS Science and Implementation Plan is ready for comment. It has an expanded Socio-Economic section and a regional and local background.
  - NSW IMOS held its bi annual community meeting on Tuesday 5<sup>th</sup> August at SIMS attended by members of the SAC, IMOS head office (4 members attending), NSW DPI, DSTO, DECC, CSIRO, MHL, RAN, EPA VIC & BlueLink (unfortunately 4 ADFA members were faced with a blocked highway). Very successful day with talks given by all NSW facilities (AUV, AATAMS, and NSW Moorings, plus gliders and Coffs radar) and all reporting a large amount of recent progress. 24 two minute talks were also given by members and students from UTS, SydU, UNSW, RAN, MHL, DECC, DSTO, on the current and upcoming use of IMOS data. In all about 41 people attended, with and e-mail listing amounting to nearly 100.
  - Andreas Schiller from CMAR gave a keynote address on BlueLink and ties to NSW IMOS;
  - Roger Procter, the new Director of the eMII facility gave a short talk on his background (coastal oceanographer from UK) and his goals.
  - Gary Meyers director of IMOS was very impressed with the progress and community collaboration of the NSW IMOS Node;
  - In Iain's introduction he suggested a renaming of NSW IMOS to **SEAMOS** (South East Australian Marine Observing System), in view of the new SIMS initiatives that were inspired by IMOS (e.g. MCCAN, ESCCI).
  - The assessment criteria of nodes for the upcoming midterm review were discussed and re-stated below:
    - **Scope and feasibility** of Science & Implementation plans
    - **Level of researcher participation/demonstrated user community;**
    - **Scope for growth** in science community engagement
- Outcomes:
- **Broader acceptance** of IMOS by the research community;
  - **New nodes?**





## NSW Moorings

- NSW Moorings has now deployed two moorings off Sydney. OFS deployed the moorings in June and conducted the first service late last week.
- There was an issue with both bottom mounted ADCP with one failing after two weeks and the second failing after three. OFS is currently discussing the failures with the instrument manufacture. Two replacement ADCP's were deployed early this week after intensive testing over the weekend.
- There are still issues with the WQM's, with the units failing CSIRO diagnostics and testing. They will be order and deployed off Sydney when CSIRO is happy the faults have been fixed.
- Jervis Bay Mooring deployed by ADFA in May. Moninya has started to receive data early this week.

## NSW AATAMS Facility

- All equipment has been packed up and shipped to Exmouth for the upcoming recovery and deployment of the Ningaloo Reef receivers.
- Paul Hallam will don his technical cap when he flies into Exmouth to help Charlie Huveneers with the Ningaloo deployment during the last two weeks of August
- A further five Wobbegongs have been tagged in Cabbage Tree Bay.

## AUV Facility

- The AUV facility is still awaiting DECC to engage them for deployments in the Jervis Bay area.
- The AUV has had 11 submissions via the IMOS call for proposals, some of which are:
  - Surveys of MPAs in NSW, Tas and SA (DECC, DEH SA, TAFI)
  - Documenting ship wrecks in deep waters (SARDI and NSW Heritage Office)
  - Population census of sea cucumbers at OTI (USyd)
  - Modelling wake dynamics in the lee of islands (UNSW)



## Coffs Harbour WERA Radar Facility

- The NSW government (Science Leveraging Fund) have decided they are unable to support the second tranche of IMOS infrastructure (\$1.2 m in coastal radar and glider). The reasons were: the unusual approach by IMOS and NSW-IMOS; that the radar was not in SIMS' interests; that support was lacking within NSW government.
- The leader of the radar Moninya Roughan wishes to go ahead with the deployment - it will take longer and without building local capacity, nor the capacity to seek further radar deployments;
- There is no nett cost to SIMS for the radar, although it would be strategic to assist with funding a radar engineer to improve our public outreach, our training of students and links to bio- and geo- projects. We have approached DECC and NMSC (via the northern rivers CMA) to fund the other half of a salary.
- Moninya met with the Radar facility leader, Prof Mal Heron (JCU) in late July at Coffs Harbour to meet with NMSC and with Coffs Council and inspect potential sites.
- The sites are Red Rock (northern) and North Nambucca (southern), and already a site is rented at the latter organised for the next 5 years. Unfortunately the coverage will not include North Solitary Island as we have to cover the 2 oceanographic moorings, the wave rider, and the AATAMS transect. Mal Heron estimates the radar could be operational in 12 months. It will use 13 MHz frequency (frequency approvals from ACMA can take 12-18 months), providing waves and surface currents out to 100 km, with a pixel size of 3.5 km.
- DSTO will deploy a short range (X-band) radar (WAMOS) off Jervis Bay. This instrument would complement the very nearshore <2 km that the WERA cannot provide.



## Ocean Gliders

- A Slocum glider has been offered to Iain Suthers for October, after his successful written application late 2007. The Slocum is the shallower (to 200 m) and 3 week version, measuring temperature, salinity and 3 bio-optical properties. Its maintenance and delivery are fully funded by IMOS, but not the deployment and recovery.
- The deployment will overlap his voyage on the Southern Surveyor
- A letter is attached outlining the methods and financial responsibility of the primary investigator (in this case Suthers) to retrieve a normally functioning glider.
- The letter also states the joint responsibility of the primary investigator and SIMS for the retrieval of a disabled glider, including the Sea Glider (which can be up to 6 months in the Tasman Sea, and 300 km from land). In the letter he stated a threshold rescue cost of \$2,000.
- Gary Meyers stated publicly at the NSW-IMOS community meeting that the general threshold is \$5,000 (when IMOS will financially assist in any rescue): he would reduce this to \$2,000 for NSW-IMOS and SIMS (a glider costs ~\$120,000).
- Dr Stefan Williams has offered his AUV technical support in the retrieval of gliders.
- Discussions with DMS on vessels are continuing.