Mooring network BGC Steering Committee Terms of reference

Background

The IMOS National Mooring Network (ANMN) facility includes a backbone network of National Reference Stations (NRS) and a series of regional shelf moorings arrays in WA, SA, QLD and NSW. This is the largest, most complex and most multi-institutional facility in IMOS, with four different institutions; CSIRO, AIMS, SIMS and SARDI, having day-to-day responsibilities for its operation and maintenance.

Within this facility, the National Reference Stations (NRS) form a network that includes both continuous moored-sensor sampling, and monthly/quasi-monthly vessel-based sampling, measuring a wide range of physical, biogeochemical and biological variables. It consists of three established, long term sites (Maria Island, Port Hacking and Rottnest Island), three additional sites to adequately cover the distinct regions of Australia's coastal oceans (Darwin, Yongala and Kangaroo Island), and enhanced regional coverage in the EAC (North Stradbroke Island).

The foundations of the NRS Network lie in vessel-based sampling. This is what provides the very long running time series at Port Hacking, Maria Island, and Rottnest Island. It plays a fundamentally important role in enabling scientists and technicians to get onto the water, deploy additional equipment to provide distinctive datasets of high scientific value, and take water samples for use and reuse by a variety of marine science communities. The rich environmental context provided by the NRS network has also attracted the collaboration of research communities that has resulted in new initiatives; such as marine microbes and ichthyoplankton, among others.

In mid-2015, governance of the National Mooring Network (ANMN) was changed to better reflect the multi-institutional nature and complexity of the facility and a Steering Committee (ANMN SC) was formed consisting of the sub-facility leaders and IMOS Office. The ANMN SC has the expertise to provide scientific oversight of the physical data streams, but not so the BGC/biological components. A related committee to oversee this component, including CTD and BGC moored components of the network, and that links with the ANMN SC is therefore necessary.

Terms of reference

- In line with IMOS Science and Implementation Planning, to provide scientific oversight of the implementation of vessel based BGC and biological sampling in coordination with the ANMN SC and ANMN facility
- To provide advice on the state of the instrumentation and sampling capabilities
- To provide uniform or harmonious measurements across the NRS network's vessel based sampling regime
- Coordinate and foster a national approach for better integration of the physical-BGC-biological datasets
- To work on adopting and improving QA & QC procedures and standards for the BGC/biological variables in collaboration with ANMN SC
- To provide advice to the IMOS Office and the ANMN Facility on potential new activities for the NRS vessel-based sampling (e.g. eDNA)

- To liaise with the ANMN SC and provide feedback on needs for bio-physical data and products
- To serve as a link between BGC/biological community and the physical oceanography community
- To facilitate awareness and uptake of oceanographic data through communication and user friendly data display and access portals in collaboration with AODN
- Foster discussions across the facility and the wider IMOS community

Meetings
Quarterly or as needed

Activities

- Implement the QA/QC review recommendations regarding NRS vessel-based activities
- Participate in activities of the ANMN Facility as required (i.e. QC Summit, product development)
- Addressing the need to engage more with other facilities such as SOTS
- Help in the development of value added products for BGC and biological variables

Members

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