

Forum for Operational Oceanography Surface Waves Working Group.

Friday 16-Mar-2018, 1pm-2pm East Australia

Attended by: Mark Hemer (MH), Emma Sommerville (ES), Diana Greenslade (DG), Tim Moltmann (TM), Daryl Metters (DM), Alex Babanin (AB), Greg Williams (GW), Ryan Lowe (RL), Roger Proctor (RP), Craig Steinberg (CS), Paul Boswood (PB), Matthew Zed (MZ 1:50), Mitch Harley (M-Harley), John Ryan (JR, Qld), Alisha Andrews (AA, Qld)?

Apologies: Barbra Parker, Tom Durrant

Minutes

1. Welcome [MH]

Confirmed agreement to meet quarterly ahead of each FOO Steering Committee meeting (next one scheduled 27th March).

Welcome to new member, Mitch Harley from UNSW, who expressed interest in joining the group after the Wave symposium. Mitch brings a coastal component to the group and also represents NSW geographically.

2. Review of minutes from last meeting [all]

Previous actions completed:

- ToR feedback received and now finalised
- FOO SC meetings set and MH has put these dates in the dropbox folder and will schedule a SWWG meeting ahead of each of these.

No other review of minutes.

3. Update on recent FOO SWWG activities:

i. Presentation at IMOS APM [MH]

Overall feedback from the IMOS APM was positive with respect to waves. The presentation was reasonably received, and it was noted the meeting was useful, and it is good to have close interaction with IMOS group. One particular take-away from the meeting was that IMOS is good for recognising that there is a research need with respect to wave data collection, as well as an operational need.

Waves came up in a few aspects: the new Satellite Remote Sensing Surface Waves Sub-Facility, being served up through other platforms (e.g. radar), wave data being served up in near-real time through AODN Portal (Qld to come in next next couple of weeks), and MARVL work (MH highlighted that waves is an omission – could be benefit in combining them).

TM noted that May budget will give the IMOS groups line of sight for next 3 years and outcome of funding scenario from this will guide whether there are opportunities to invest in new things (feedback from this community will be taken into account).

ii. Presentation at VIC Department of Environment, Land, Water and Planning workshop [MH]

Wave climate data workshop – \$700K over next two years in Victorian Government budget to support coastal climate impact studies and recognise gaps in waves for coastal areas. Purpose was to identify a useful data stream for collection. Consensus from those in the group that attended was that the finish was left a bit open ended and they are still not sure what the priorities should be. AB noted it is the first workshop of this kind and it was great that they could get that many experts together and this is possibly one of a few workshops they will run. The SWWG group could help with this process and provide guidance (MH to provide feedback to organisers). It is believed that they are looking to leverage state government funds and get co-investment from other bodies (industry and government) to expand the network. They are also interested in different applications (research and operational).

Actions:

MH: provide feedback to organisers that the SWWG could help guide this process.

iii. Submission of paper on gaps in network [Diana]

This paper is based on BoM intern work, and was submitted to *Journal of Southern Hemisphere and Earth System Science*, where it is currently in review. It identifies five main gaps: NT, Gulf of Carpentaria, Shark Bay and South Australian Gulfs, Eastern Tasmania, and an area off Torres Strait. Article should be published soon so watch this space.

iv. Update on priority setting process [Diana]

- Have completed several rounds of ranking the research priorities, including sessions at the wave symposium (Perth, Oct 2017) and two rounds of online voting
- 80 people have contributed to the ranking process
- Ratio of participants is about 60:40 researchers to stakeholders
- Next step is to analyse the data and decide which priorities to highlight
- Aim to provide a summary of the results to all participants by mid-April and have a draft white paper and/or manuscript complete by end of June

TM noted FOO SC co-chair Jan Flynn was impressed with way process has been run. FOO needs to evolve from nice meeting every two years, to something that catalyses new initiatives and moves priorities forward. FOO SC are looking forward to seeing outcomes from this process and helping to implement them.

One way to go about ranking priorities is to think about 'everyone's' priorities and those weighted highly across board which will have a bigger impact.

Action: DG to circulate proposed timeline

v. Summary of wave symposium [Ryan]

Held in Oct 2017 with attendance by 60-70 people (previous one in Melbourne in 2014). Community has changed quite rapidly since then and the Perth location meant more offshore research was represented than previously. 2 days symposium, half day for priority setting activities. Agreement next meeting will be 10-15th Nov

2019 (tentative dates) in conjunction with JCOMM 2nd International workshop on waves, storm surges and coastal hazards (Melbourne).

Published document in AMOS bulletin.

vi. Summary of wave buoy user group meeting [Daryl/Paul/John]

Operational focus with main discussions concerning:

- datawell buoy mk3 vs mk4 (different outputs?),
- NSW presented EC low 2015, gps satellite tracking added to buoys
- new and emerging technologies
- moorings, deploying buoys and reducing operational costs
- types of wave measurement devices that each group uses.

Since then the QLD group has started project to try 9 different devices (deployment next week) alongside current Gold Coast waverider buoy.

Next WBUG meeting in May 2020.

Issues on national standards raised. This usually falls to state governments and their operations. SWWG group could have input into this in advising State Govts. RP – could a preferred specification standards/recommended guidelines be written by this group? TM encourage this group to see if it can play a role there and that they could be enforced through IMOS, NESP etc. and then hopefully regulators.

Issues - Have to support end users and their needs too, different applications will require different measurements, and new technology being implemented will have different standards.

In order to invest in filling gaps, if we can see and work with all data we currently have, then investing in filling gaps is much more enticing.

A clear summary of what each group currently does is needed - see next item.

Actions:

DM: send around summary of talks from WBUG meeting

4. IMOS update on wave data availability on the AODN [Rog]

Plan for rest of the 2018 year is to archive wave observations from around the country. QLD data is with AODN now, as well as WA Department of Transport and Manly Hydraulics (NSW) too. Hope is to publish what is available, but also present in a more uniform fashion (work on this yet to start).

IMOS will still support this through succession planning (AODN Director retiring December 2018).

5. Any other business - Communication channels [FOO Surface Current WG has discussion forum. Is it needed?, Website content] next steps, next meeting. [all]

Communication - agreement from group that the SWWG is more task oriented (than SCWG) and it works in current format with quarterly meetings. The FOO Website is available for communications and group suggested adding; Membership list, Priorities (once completed),

SWWG 'Review of National Marine Science Plan White Papers for wave observation requirements...' document, presentation from IMOS APM.

AOB:

- teleconference for priorities setting SC in next two weeks (DG to arrange)
- DM is keen to commence email discussion on developing recommended national standards for wave measurements.
- DM reported that AMSA operate two wave riders in Torres Strait (previously reported by Diana as a gap in network). Some discussion QLD anticipate receiving data-feed from AMSA, and this could carry through to the Bureau. Diana added the AODN may be more appropriate.
- MH reported on an email sent from Tom Durrant detailing some of their wave buoy deployments:
 - o We deployed another moored buoy off Cambel Island last week <http://www.metocean.co.nz/news/2018/3/13/southern-ocean-wave-buoy-update>
 - o We also deployed 5 spotters of the Tangaroa a few weeks back <http://www.metocean.co.nz/news/2018/2/12/aitana-forcn-vzquez-heading-to-antarctica>
 - o The original deployment from Feb last year that is drifting is still sending good data back as well.
 - o All our buoys can be seen here <http://www.metocean.co.nz/southern-ocean>
 - o The data is all available - the plan is to put at least the moored buoys into AODN as some stage.
- Ryan Lowe mentioned they have a Spoodrift spotter giving a real-time feed off Perth.
- Next FOO SC meeting scheduled for June 26. A doodle poll will be circulated in month prior to find a suitable time for a SWWG in weeks preceding the SC meeting.

Actions:

ES: update website with suggested material.

All: email suggestions of other material for website to Mark or Emma

DM: setup email to tackle data standards

Meeting Close 2pm

SUMMARY OF ACTIONS:

MH: provide feedback to organisers that the SWWG could help guide the Victorian Government wave priority process.

DG: circulate proposed timeline for priority setting process

DM: send around summary of talks from WBUG meeting

ES: update website with suggested SWWG material.

All: email suggestions of other material for website to Mark or Emma

DM: setup email to tackle data standards