

Status Report Release Date: 25 July 2017

The Project achieved a major milestone this Spring with the successful convening of the Resources Forum. The second TPOS 2020 Resource Forum (TRF-2) was held at the East-West Centre, at the University of Hawaii, Honolulu 16-17 May 2017. The meeting was led by TRF Chairman Craig McLean, Assistant Administrator of NOAA's Oceanic and Atmospheric Research (OAR) Program.

The meeting produced a Declaration and TRF-2 Report which are posted on the TPOS 2020 website. These items along with the agenda and links to select presentations can be found at the following URL: <http://tpos2020.org/project-reports/resource-forum-reports/resource-forum-meeting-2/>

TRF-2 Highlights:

- TRF members participating included PMEL/NOAA, OAR/NOAA, NASA, IRD (for all French research agencies interested in the Pacific), CIIFEN (remotely), SOA, Qingdao NML (for IOCAS and others), JAMSTEC, Australian Bureau of Met., NWS/NOAA, BMKG Indonesia, CSIRO Oceans and Atmosphere, CPPS (Comisión Permanente del Pacífico Sur/Permanent Commission for the South Pacific), SPREP and KIOST (remotely for agency presentations).
- The involvement of Bernard Pelletier (IRD, on behalf of French agencies), SPREP/PIGOOS (Tommy Moore) and Julian Reyna (CPPS) was a real bonus since it added diversity and gave proper representation to all interests.
- The TRF respect for the 1st Report was tangible and the meeting explicitly recognized all authors and the members of the Steering Committee and thanked them for their work.
- Billy Kessler's scene-setting presentation was well received and made available on the website.
- The modeling discussion led by Andreas Schiller (CSIRO) included an evaluation of climate models for subseasonal-to-interannual prediction. The Forum did highlight modelling as an issue in their statement and were keen to ensure better representation at future TRF meetings, but otherwise left it the SC to decide appropriate actions.
- The future of the TRF itself was discussed and two Co-Chairs will take over from Craig McLean.

TRF-2 Outcomes:

- Sue Barrell from BoM and a leader of the Intersessional Coordination Group for WIGOS, informed the meeting that WMO Executive Council had passed a Decision supporting TPOS 2020 (WMO EC-69 Decision). This important milestone for TPOS 2020, was in support of a side-event presentation given by Sophie Cravatte (supported by Katy Hill).
- All recommendations of the Response and Roadmap Document were endorsed. This document was used to guide much of the TRF-2 discussion and has been modified and is now the TRF-2 Report.

- All Actions from the First Report were agreed to or acknowledged, while the interpretation of the Actions required significant explanation from TPOS 2020 SC representatives. The TRF-2 rightly needed to understand what was being done, when, and by whom.
 - The Steering Committee and the newly formed Transition and Implementation Task Team will need to coordinate and generate a schedule of activities and milestones.
- Western Pacific: The TRF agreed to support a workshop to discuss TMA implementation in the western Pacific (First Report Actions 1 through 5), with the topics to include (a) technical issues around the sites and likely deployment schedule for moorings in the western Pacific; (b) the technical specifications of the moorings, recognizing the need for consistency across the TMA, and (c) issues around data management, data quality and real-time data exchange. (The TRF-2 thanked FIO/SOA for their offer to host the workshop, tentatively in August-early September – see upcoming activities listed below.)
 - Additional workshop agenda items may include (a) a 1 day session developing advice on what the flux moorings (including BGC) should be in the western Pacific, (b) a BGC-focused day where the implementation of mooring, BGC-Argo and sip measurements would be discussed, (c) a 1 day discussion of the LLWBC pilot and/or the warm pool pilots, (d) a discussion of possible modelling and other experiments in support of the western Pacific implementation.
 - Confirmation of surface backbone requirements.
 - The reconfiguration of the Tropical Pacific Moored Array (TMA) was discussed at length. The 1S/1N enhancements, starting at 140W, generated many questions. While the strategy is explained in the First Report, an in-depth discussion beyond the Executive Summary content was required.
 - There was strong support for biogeochemistry/ecosystem capability and development. JAMSTEC, SOA, QNML and KIOST expressed interest in the W Pacific. PMEL were supportive of BGC-Argo, and the opportunities in the E Pacific were also discussed. There was a good deal of support for bringing the BGC and physical aspects together wherever possible; this will be a focus of the 2nd Report.
- During the discussion led by JAMSTEC there was strong support for new technology development; the TRF is eager for TPOS 2020 SC to do more. The TRF-2 recommended the TPOS 2020 SC provide an evaluation of new technology options as part of its 2nd Report and that the TPOS 2020 SC, in conjunction with the TPOS2020/JCOMM T&I TT, develop guidance (e.g. principles) for EO/ECV data continuity through technology changes, building as appropriate on GCOS and WIGOS observing Principles.
- The TRF recommended that the Recommendation on the importance of microwave SST be strengthened to include the impact on forecasts without this capability.
- There was strong support for the Project to develop the Pilots as quickly as possible. Where possible, the TRF would like to see them concluded by 2020. The prospects for the Clipperton Island Pilot now seem stronger. Several TRF members emphasized that research agencies could support TPOS Pilots and Process Studies, which was a key strategy of the SC and the 1st Report.
- The SC Terms of Reference were reviewed and reaffirmed. The SC is however, encouraged to look more deeply at subseasonal and severe weather/coupling (including waves). They advised the SC to not make deep observations a particular focus given that this is covered by another GOOS Project, the Deep Ocean Observing Strategy (DOOS). Finally, coastal observations were flagged as a possible focus for the 3rd Report.
- The T&I Task Team Terms of Reference were endorsed, buoyed by the decision of EC-69 decision (see above). A consideration is required for Actions that are not in scope of JCOMM, including satellites and BGC/ecosystem observations.

Upcoming Activities:

- Western Pacific Workshop: 4-6 September 2017. Will be hosted by the First Institute of Oceanography, SOA in Qingdao China. Agenda items will include potential additions to the backbone, process and pilot studies in the region, development of a regional sampling strategy, technical and deployment issues related to the TMA and next steps, data management issues, and an LLWBC strategic implementation plan.
- Fourth Steering Committee Meeting (SC-4): The SC-4 will be hosted by NOAA's Pacific Marine Environmental Laboratory (PMEL) on 17-19 October 2017. The meeting will focus on Project needs as it proceeds in to the Transition and Implementation Phase, follow up from the TRF-2 meeting, the Pilots and Process Studies presented in the First Report, and preparations for the Second Report.