



TPOS 2020 Monthly Status Report March 2015

Monthly Status Report (MSR) Release Date:
April 3, 2015

Summary:

The Integrated Marine Observing System (IMOS) office has generously provided in-kind support for the Distributed Project Office (DPO) node in Hobart, Australia. Dr. Ana Lara-Lopez has agreed to serve as Associate Project Manager and work with the Backbone and Biogeochemistry Task Teams. Dr. Lara-Lopes will also draw on IMOS administrative and other services as required to support the Task Teams and the SC-2 meeting on 14-17 October, 2015.

And while otherwise a quiet month as seen from the surface; it was a busy month for Task Team (TT) Chairs and co-Chairs, as well as the SC co-Chairs. They were engaged in the job of discussing and agreeing on TT membership. Over the next few months letters of invitation will be sent and inaugural meeting plans made.

Highlights:

Steering Committee/Co-chairs:

- The Integrated Marine Observing System (IMOS) in Hobart, Australia agreed to host a TPOS 2020 Distributed Project Office node.
- Co-Chair Billy Kessler provided a TPOS 2020 overview presentation and was hosted by NDBC in Stennis Space Center, Mississippi
- Published article in WMO Bulletin: "Progress in Observing and Predicting ENSO", (Vol 64 (1) – 2015)

Distributed Project Office:

- Supported details leading up to TPOS 2020 Resource Forum (TRF) Report review

(Monthly Status Reports can be found at: www.tpos2020.org/monthly-status-report)

Additional Information:

Please visit the website at: www.tpos2020.org
Send comments and questions to: info@tpos2020.org
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Monthly Status Report (MSR)

Release Date: April 3, 2015

The TPOS 2020 Project will evaluate, and where necessary advocate change in all elements that contribute to the Tropical Pacific Observing System (TPOS), based on a current understanding and technical capability. The project aims for enhanced effectiveness for all TPOS stakeholders, and informed by the development and on-going requirements of the operational prediction models that are primary users of TPOS data. TPOS 2020 embraces the integration of diverse sampling technologies, with a deliberate focus on robustness and sustainability, and will deliver a legacy of improved governance, coordination and supporting arrangements.

The Project will work within the Framework for Ocean Observing developed by the Global Ocean Observing System (GOOS) and use GOOS as a reporting mechanism to other relevant intergovernmental coordination mechanisms. A sustainable TPOS will be the principle outcome and legacy for GOOS. As such, TPOS 2020 will operate primarily as an independent Project and work through its sponsors to ensure all dependencies and links are appropriately managed. Four primary elements are included in the governance of the Project:

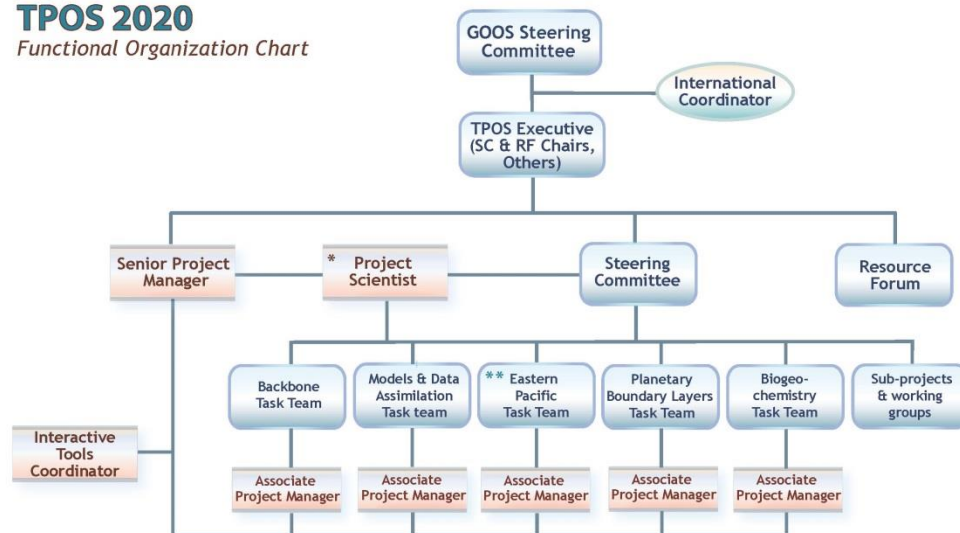
- A TPOS 2020 Steering Committee responsible for oversight, coordination, and guidance to the Task Teams, Sub-projects and Working Groups.
- A Resources Forum drawn from sponsors and responsible for coordinating resources.
- An Executive populated from the leadership of the above and responsible for reporting.
- A Distributed Project Office focused on coordination activities, supported and resourced by the sponsors.

It is through its partnerships and governance structure that TPOS 2020 will design a modern, sustained tropical Pacific observing system that meets both science and societal needs.

The project prospectus can be located online at: www.tpos2020.org/prospectus

TPOS 2020

Functional Organization Chart



* This role is currently being explored and developed

** This Task Team and its role are still under consideration

KEY ACCOMPLISHMENTS AND NEAR-TERM PROJECT MILESTONES

Steering Committee

- Co-Chairs: Dr. Neville Smith, Retired / Dr. William “Billy” Kessler, NOAA PMEL

Current Month Activities:

- The Integrated Marine Observing System (IMOS) in Hobart, Australia agreed to host a TPOS 2020 Distributed Project Office node.
- Co-Chair Billy Kessler provided a TPOS 2020 overview presentation and was hosted by NDBC in Stennis Space Center, Mississippi
 - Several follow up actions have been recorded and will be tracked by the Project
- Published article in WMO Bulletin: “Progress in Observing and Predicting ENSO”, (Vol 64 (1) – 2015)
- TPOS 2020 provided a support letter to the French Sea Surface Salinity Observation Service, part of the Voluntary Observing Ship Sea Surface Salinity Program
- Scheduled and drafted an agenda for a SC Interim Teleconference on April 1, 2015
- Submitted an abstract to the ICSHMO-2015 Conference in Santiago, Chile 5-9 October
- Conducted ongoing dialog focused on the creation of Task Teams, Sub-projects, and Working Groups (see individual listings on pages 5-8).

Upcoming Activities:

- Finalise the Modelling and Data Assimilation TT to address questions and concerns and formalize chairmanship and scope
- Work with Sub-groups and Working groups to establish leadership and scope (eg Eastern Pacific TT; proposed upwelling project)
- Support DPO node formation, through the articulation of SC member and DPO needs, as well as meeting sponsor requirements
- Support formation of TT, Sub-groups, and Working Group membership formation and approval
- Work with TRF leadership, SC and TRF members to articulate a strategy and initial plans for engagement
- Provide a TPOS 2020 update to OOPC, OCG
- Report to the GOOS SC-4 (May 24-26, 2015)

Last Month's Activities:

- Arranged for second Steering Committee meeting in Hobart, Australia, October 14-17, 2015
- Billy Kessler presented TPOS 2020 Update to CLIVAR Interagency Group
- Billy Kessler presented TPOS 2020 Update to NOAA's National Weather Service
- Coordinated Task Team (TT) Terms of Reference finalization and publication on the website
- Coordinated initial Planetary Boundary Layer (PBL) and Biogeochemistry (BGC) TT videoconferences
- Continued negotiations with potential DPO node sponsors in China and Australia
- Provided feedback to Ken Ando on the western Pacific audit of activities
- Provided feedback to Ken Takahashi on scope of Eastern Pacific TT
- Interaction with OceanSites on Time Series/Climate Record activity
- Interaction with WCRP Modelling Council Co-Chair

Published/Posted Materials:

- Mar. 2015: Published article in WMO Bulletin: “Progress in Observing and Predicting ENSO”, (Vol 64 (1) – 2015)
- Feb. 2015: US CLIVAR Variations: “ENSO observing system: Past, present, and future”
- Dec. 2014: TPOS 2020 Project Prospectus
- Dec. 2014 TPOS 2020 SC-1 Report
- Mar. 2014: Terms of Reference for TTs

Project Function:

The SC will provide scientific and technical oversight for the planning, system design, and implementation of the TPOS. This group will assess the evolving set of requirements through dialogue with relevant users and stakeholders, and coordinate a set of (pilot) projects designed to test and evaluate options. The SC will assess potential technology options for delivering a more effective and efficient TPOS including relevant scientific/expert panels and bodies. Together with the Resources Forum, the SC will manage communication and reporting.

Point of Contact:

Sr. Project Manager, Andrea McCurdy-> amccurdy@oceanleadership.org

Resources Forum

- Chair: Craig McLean, NOAA Oceanic and Atmospheric Research

March Activities:

- TRF-1 Report Consultative Draft prepared for member distribution and review

Upcoming Activities:

- TRF-1 Report distributed for Member and Participant comment
- Formal Membership confirmed
- 2015 Milestones reviewed by members

Last Month's Activities:

- TRF-1 Report Consultative Draft prepared for member distribution and review

Published/Posted Materials:

- Mar. 2014: Terms of Reference (available on the TPOS 2020 website)

Project Function:

The TPOS 2020 TRF will facilitate and coordinate the provision of resources by member institutions required to advance TPOS 2020 activities based on recommendations from, and in consultation with, the TPOS SC. It will promote and encourage contributions from institutions, Official Development Assistance agencies, participating and non-participating countries, and expand membership of the TRF as necessary; including the exploration of bilateral and multi-lateral partnerships. The TRF will coordinate resources that may be applied to the TPOS, including necessary observing research, technology development/testing, modelling, scientific analysis, infrastructure (e.g., ship resources and/or deployment of observing assets), along with Project Management and travel support.

Point of Contact:

Sr. Project Manager, Andrea McCurdy-> amccurdy@oceanleadership.org

Executive

This Month's Activities:

- No reported outcomes this month

Upcoming Activities:

- Formal responsibilities and ToR to be drafted in March and April

Published/Posted Materials:

- There are no published materials at this time.

Project Function:

Under development by the SC Co-chairs and TRF Chair.

Point of Contact:

Sr. Project Manager, Andrea McCurdy-> amccurdy@oceanleadership.org

Backbone Task Team

- Co-Chairs: Susan Wijffels, CSIRO / Sophie Cravatte (SC Member), Centre IRD de Noumea

This Month's Activities:

- Initial introduction to Dr. Lara-Lopez
- Ongoing discussion of membership and associated invitation activities

Upcoming Activities:

- Membership agreed and formed
- High-level schedule agreed to

Last Month's Activities:

- Terms of Reference agreed (posted on TPOS 2020 website)

Published/Posted Materials:

- Dec. 2014: Terms of Reference (available on the TPOS 2020 website, see: Groups and Outcomes))

Project Function:

Through an integrated approach the Backbone TPOS will achieve its objectives through a combination of in situ and remote sensing approaches, augmented as appropriate with advice from models and data assimilation. Sampling for the Backbone has as its goal to:

- (a) Observe and quantify the state of the ocean, on time scales from weekly to interannual/decadal;
- (b) Provide data in support of, and to validate and improve, forecasting systems;
- (c) Support calibration and validation of satellite measurements;
- (d) Advance understanding of the climate system in the tropical Pacific, including through the provision of observing system infrastructure for process studies; and
- (e) Maintenance and, as appropriate, extension of the tropical Pacific climate record.

Point of Contact:

Associate Project Manager, Ana Lara-Lopez-> Ana.Lara@utas.edu.au

Planetary Boundary Layers Task Team

- Co-Chairs: Meghan Cronin, NOAA PMEL / Tom Farrar (SC Member), WHOI

This Month's Activities:

- Ongoing discussion of membership and associated invitation activities

Upcoming Activities:

- Membership formed
- High-level schedule agreed to

Last Month's Activities:

- Conducted initial videoconference among SC Co-chairs and TT Co-chairs

Published/Posted Materials:

- Dec. 2014: Terms of Reference (available on the TPOS 2020 website, see: Groups and Outcomes)

Project Function:

The observational needs regarding improved monitoring and modelling of ocean surface and near-surface processes are likely to have two components: sustained detailed observations and process studies. It is the role of this Task Team to identify which requirements are best met via a sustained observing effort (> 5 years-11), and which can be addressed with specific short-term process campaigns.

Point of Contact:

Deputy Project Manager, Lucia Upchurch-> lucia.upchurch@noaa.gov

Modelling and Data Assimilation Task Team

This Month's Activities:

- Multiple invitations were made to potential co-Chairs, but due to other commitments invitees declined
- SC and co-Chairs are considering alternative approaches to this TT (This is a topic on the agenda of the SC Interim Teleconference.)

Upcoming Activities:

- Co-chairs formally announced
- High-level schedule agreed to

Last Month's Activities:

- No reported outcomes

Published/Posted Materials:

- Dec. 2014: Terms of Reference (available on the TPOS 2020 website, see: Groups and Outcomes)

Introduction:

A significant fraction of the observational effort will need to be directed towards improved understanding of processes and mechanisms, which in turn should be coordinated with a program of improved model parameterisations and reduced systematic error; an additional benefit is that such data/model studies also contribute to improved design and reduced inefficiencies of the observing system.

Point of Contact:

Associate Project Manager, Hannah Dean-> hdean@oceanleadership.org

Biogeochemistry Task Team

- Co-Chairs: Adrienne Stutton, NOAA PMEL / Pete Strutton (SC Member), Univ. of Tasmania

This Month's Activities:

- Initial introduction to Dr. Lara-Lopez
- Ongoing discussion of membership and associated invitation activities

Upcoming Activities:

- Membership formed
- High-level schedule agreed to

Last Month's Activities:

- Finalized Terms of Reference (TPOS 2020 website, see: Groups and Outcomes)
- Conducted initial videoconference among SC co-Chairs and TT co-Chairs

Published/Posted Materials:

- Dec. 2014: Terms of Reference (available on the TPOS 2020 website, see: Groups and Outcomes)

Project Function:

The role of the Biogeochemistry Task Team (BGCTT) is to evaluate and recommend the most promising focii, and to provide advice on possible solutions. The Biogeochemistry Task Team will begin with carbon biogeochemistry as its core scientific concern. Here will be the consideration of the term biogeochemistry to include primary productivity (noting that the Backbone Observing System likely includes ocean color satellites) but not higher trophic levels (zooplankton to fish).

Point of Contact:

Associate Project Manager, Ana Lara-Lopez-> Ana.Lara@utas.edu.au

Eastern Boundary Task Team

This Month's Activities:

- Terms of Reference have been drafted and under ongoing review with SC co-Chairs and proposed project lead

Upcoming Activities:

- Lead formally announced
- Continue negotiations leading to a draft ToR
- High-level schedule agreed to

Last Month's Activities:

- No reported outcomes

Published/Posted Materials:

- No publications to date

Project Function:

Task Team to focus on the eastern Tropical Pacific boundary region; giving priority to engaging regional experts and institutions. In addition to defining needed observations, goals of the TT could include: (a) Capacity building for improved sustained observing capability; and (b) Facilitation of the development of a regional research project, which may contribute guidance toward a sustained observing system.

Point of Contact:

Associate Project Manager, TBD-> info@tpos2020.org

Sub-projects and Working Groups

Western Boundary

This Month's Activities:

- The creation of a Task Team, or other mechanism to oversee development of a project in the Western Pacific is ongoing with early thoughts under review

Upcoming Activities:

- Lead announced
- Draft of regional activities
- Next steps determined

Last Month's Activities:

- No reported outcomes

Published/Posted Materials:

- No publications to date

Project Function:

This group will take advice on a project to be conducted in the Western Pacific. Once underway they will advise on mechanism for the project's development and oversight.

Point of Contact:

TBD-> info@tpos2020.org

Time Series/Climate Record

This Month's Activities:

- The SC co-Chairs have drafted a plan for a small working group based on discussions to date

Upcoming Activities:

- Lead formally announced
- Scope finalised

Last Month's Activities:

- Revision of the ToR/tasking statement
- Discussion with BB TT about how an audit of exiting sites should be accomplished

Published/Posted Materials:

- No publications to date

Project Function:

This small group consisting SC member and non-member experts will determine criteria for evaluating fixed-point time series, to elaborate on the purpose and utility of time series within TPOS and to identify the highest ranking sites and perhaps any further locations that should be investigated.

Point of Contact:

TBD-> info@tpos2020.org

Distributed Project Office

This Month's Activities:

- Welcomed Dr. Ana Lara-Lopez as Associate Project Manager hosted at IMOS in Hobart, Australia
- Supported activities leading to the review and release of TRF-1 Report
- Produced Version 1 of TPOS 2020 Organization Chart (see page 2)
- Developed early Draft of the Engagement Action Plan

Upcoming Activities:

- Support coordination of DPO node establishment

- Complete Engagement Action Plan
- Support release of TRF-1 Report

Last Month's Activities:

- Presented briefing to NOAA sponsors on DPO Project Management Plans and Execution
- Researched and executed several additions to the project website

Published/Posted Materials:

- Released: Project Management Plan V1
- Consultative Draft: Project Execution Plan V1

Project Function:

The DPO will develop communications, and coordination tools that will facilitate integrated decision making, and provide access to relevant deployment and observing asset decision making tools. The DPO will support the suite of tools and activities required to track the commitments to all aspects of TPOS 2020 and to facilitate integrated decision making across networks, groups, agencies, and nations; during the project and throughout the lifecycle of the observing system beyond TPOS 2020.

CROSS-PROJECT DEPENDENCIES AND STATUS

This section of the MSR is currently under construction. During the next two to five months as TT, Sub-project, and Working group plans and schedules are drafted this section will list arenas and events where project dependencies and opportunities for coordination will be focused. Examples may include:

- Ship Availability and Status
- TPOS 2020 Related Funding and Grants
- Technology Development and Deployment Updates
- Integration and Testing
- Risk Mitigation and Change Control
 - Risk Table and Status

PROJECT SCHEDULE

This section of the MSR will provide select glimpses of the Integrated Master Schedule once it is produced. This tool will be brought together in the next several months as Project Management resources are put in place and the TTs, sub-projects, and working groups formulate their plans and deliverables.

Very briefly, during the next two months the project will be focused on the confirmation of TT, sub-project, and working group membership and plans. Along with development of concerted plans to work with the TRF members to understand and provide support for their activities and needs. As we reach the end of this two month period the plans and agenda for the SC-2 will begin in earnest.

SPONSOR CONTRIBUTIONS

In addition to the in-kind self-support agreed to during the January TPOS Workshop, the following explicit sponsorships have been recorded thus far:

- Mar. 2015: Integrated Marine Observing System (IMOS), DPO Node (Associate Project Manager and SC-2 Support)
- Dec. 2014: NOAA Climate Office, DPO Support (0.5 FTE DPO Project Manager)
- October 2014: KIOST, SC-1 Hosting
- October 2014: GOOS support for SC-1; GCOS for WMO and IOC briefings
- Aug. 2014: NOAA PMEL – Project Management Support (0.2FTE DPO Deputy Project Manager)
- Aug. 2014: NASA - Interim Project Management Support (0.30 FTE in 2014)
- Jul. 2013: OOPC Project Management and Coordination (Secretariat)