

Meeting Minutes Pacific Region Panel



Date: 2024-10-25 **Start date:** 8 pm China ST (UTC+8)
Venue: GoTo Meeting **ICPO Staff Host** Agus Santoso

Attendees (14)

Andrea Taschetto, Sophie Cravatte, Anna-Lena Deppenmeier, Cristian Martinez-Villalobos, Dhrubajyoti Samanta, Jing-Jia Luo, Kristhoper Karnauskas, Sayaka Yasunaka, Sharmila Sur, Tsubasa Kohyama, Antonietta Capotondi, Shayne McGregor, Michael McPhaden, Agus Santoso (ICPO).

Co-Chairs: Sophie Cravatte



Andrea opened the meeting with the agenda

1. Update on AMS ENSO Collection.
2. Update on Working Groups (ENSO Metrics, PATAC, BGC).
3. Discussion on membership.
4. Plan for PRP meeting.

1. AMS ENSO Special Collection

The journal board meets every quarter, but hasn't given an update yet. Expected that 19 articles have been submitted so far. Deadline requested to be extended to 31 July 2025. Note that the special collection is not only for Journal of Climate, but also other AMS Journals. Andrea asked some AMS Editors to notice if there have been any papers submitted to them. Sophie: It seems as if collection organisers have no role in the editing - is this something common to other journals? Andrea: They contact organisers only to ask suggestions of reviewers, deadlines, whether topics are aligned, etc.



AMS editors who are organising members of the collection may not be assigned the submitted manuscripts – is this due to Conflict of Interest? In other journals it is not the case (Frontiers - Antonietta, GRL - Kris). Mike: Organising members can help determine whether the submission is topically relevant. Could send the board an email asking them to send us the title of the papers that have been submitted. Andrea will send an email; the person responsible has been on leave.

2. Updates

2.1 AGU session on this special issue

Tsubasa - The number of abstracts received is small, so has not been allocated a full session, but an e-lightning session. Could ask AGU to combine with other ENSO sessions, but the concern is that the session will be assigned as a poster session in other sessions. It would be better to keep the e-lightning to have a good discussion even if it's small. The AGU session will be on Monday morning at 8.30am. E-lightning consists of short presentations followed by a longer discussion.

Other sessions received a large number of abstracts but were only allocated one oral session.

Atmospheric teleconnection session gets sufficient submissions to have oral and poster sessions. The ENSO session is under the Ocean section, teleconnection in the global change, and the ENSO Decade in atmospheric science.

2.2 Update on PATAC Working Group

Met around the same time of 3 May, 31 July.

Jonathan Beverly gave a talk on teleconnections to the northern hemisphere in a warming climate. Had a group of 22 people. Everyone was happy to keep doing short talks and mini webinars. Next Meeting will be on 20th November with Sang-Wook Yeh as presenter.

Plan: the main outcome would be to get an updated picture of the original Ropelewski and Halpert teleconnection - revisit this teleconnection for the warmer climate, and assess what has changed in terms of ENSO diversity. Discussion in the next meeting

Agus: Any plan for collaboration with other WCRP projects such as APARC (Atmospheric Processes And their Role in Climate)?

Andrea: Currently not APARC, but EPESC led by Andrea Dittus and Analissa Cherchi. They are on trend in the tropical Pacific, which has some overlap with the TROPICS WG. They are interested in simulations. Sarah invited EPESC to attend the TROPICS workshop in Hamburg, and Andrea Dittus came. They are not specifically looking at teleconnection, but the trend which has implications on impact.



PATAC has 22 members which are members of other panels, and through our members the WG can keep the communications going with other panels.

2.3 ENSO Metrics Working Group

Cristian and Anna-Lena joined the group recently- development of maintenance of the ENSO metrics package. No formal meetings since last PRP, but has regular communication with Yann Planton.

Some issues with the ENSO metrics package - dependency issues: the version was from 5-6 years ago and the dependencies/libraries are outdated/not maintained anymore. Yann has been updating the libraries and having a few different versions as well. E.g., Cristian tried to install in a Mac Operating system but it was impossible because the dependencies on the library weren't updated. Still can install in Linux, but not in Mac.

CDAT was heavily used in this package, but unfortunately not maintained anymore. There is a plan to update with xCDAT and xCDAT free (lighter version of xCDAT with fewer dependencies). There is some work in order to integrate the ENSO metric package with ESMValTool (set of protocols for climate model evaluation). For this purpose, xCDAT free is better. Yann has been working on ESMValTool/PCMDI Metrics Package integration for deliverables hopefully by the end of the year. Cristian has been documenting errors and solutions; e.g., trying to install the package from scratch and getting issues and solving them.

GitHub ownership issue: was linked to the email of Jing Li that no longer exists. Yann and Agus are working to resolve this. Agus: Is it possible to restart the Github account since the package needs to be updated anyway? Jing Li's CLIVAR email account has been deleted a year after she left. Shayne: the main reason to keep the existing Github page is that the ENSO metrics paper has all the links to that page. Cristian will check with Yann. Agus will try to reach out to Github; ideally the ICPO should have the ownership.

Work done on a voluntary basis: progress of the package has relied on Yann Planton and Jiwoo Lee. It would be good to identify sources of funding. Antonietta: DOE Lab may provide funding since they are interested in metrics. Ask Jiwoo who is associated with the DOE lab to check with DOE. DOE should be the agency that should fund this work.

2.4 Tropical Pacific BGC-Physical Interactions WG

(Yassir and Sayaka)

Motivation

The tropical Pacific is a main source of carbon with largest oxygen minimum zones, high productivity and biodiversity. The ocean BGC variability and long-term change are tied to physical processes but poorly observed, modelled, and understood. Since JGOFS (late 1990s)/TPOS (late 2020s), many updates and opportunities have occurred (e.g., BGC Argo, TPOS renovation, process studies, etc.).



Overarching Theme and Questions

How does the tropical Pacific climate and ocean dynamics modulate ocean BGC? E.g., how do ENSO and Marine heat waves influence carbon flux/export, nutrients/productivity, OMZ, etc.

How does the tropical Pacific Ocean BGC affect ocean physics/climate? E.g., via shortwave attenuation, aerosol modulation of clouds, N₂O production, carbon outgassing, etc.

Format and Structure

Monthly seminar of 6-12 talks on key topics at interface of tropical Pacific BGC and ocean dynamics

A workshop/townhall at OSM 2026/Pan-CLIVAR Meeting in September 2025 – invite community/panel to open discussion, continuation of observing network BGC discussion beyond TPOS 2020.

Submit a review or perspectives paper that extends the TPOS 2020 discussion on BGC gaps, modeling, etc.

Current status

Have created a small group with Pete Strutton (Utas) and Sophie with a good online discussion; discussion with Shoshiro Minobe - CLIVAR SSG member this week who provided advice, and his colleagues are working on ocean oxygen datasets.

Now gathering the WG members, focusing scope further, and gathering more input.

Antonietta: The WG does not seem too broad. Maybe start from the big picture. Consider predictions to inform which variables are more critical? Sayaka: At this stage I haven't thought about that, but can include prediction, but decided not to include paleo.

Agus: In terms of BGC feedback to ENSO, whether the scope includes quantifying the effect of BGC relative to other factors that lead to ENSO damping, and whether this process can explain discrepancy between modelled ENSO and observed ENSO.

Sayaka: there is discrepancy between model and observations in terms of carbon outgassing. BGC response related to chlorophyll concentration and shortwave attenuation is of interest.

3. Membership discussions

The panel discussed the membership nominations received so far (10 candidates), with three members departing (Jing-Jia, Ivonne, and Fan). Can choose 3-4 candidates to fill the position for a total number of 14 members. A member from Australia who was offered the position



responded too late for 2024, so the panel agreed to accept her this time. With this new member, the panel would have three members from Australia. The Panel needs to consider a balanced geographical distribution.

With Jingjia and Fan departing, there will be no members from China. So far there are four candidates from China to choose from.

Ivonne Montes is a new CLIVAR SSG member starting next year.

The panel discussed each of the 10 candidates (summarised in email after this meeting), and agreed on three first preference candidates, with one more spot to fill. With four spots, the panels need to come up with 8 names. It is possible to have 15 members in a panel, so potentially there could be 5 spots to fill.

Regarding limitation on geographical distribution, the panel may nominate members from the same country, strong justifications need to be provided for consideration by the SSG.

In terms of gender balance, the panel is doing well. Nominations can be recommended to other panels and WGs.

Further discussions via emails.

4. PRP Meeting March 2025

Some panel members who are attending the symposium can meet in person. The best date would be before the symposium. The location is TBC. Need to decide the mode of meeting: in person only or hybrid.

Agenda:

Morning for talks invited speakers from WG (TROPICS, PATAC, BGC, other invited speakers).

Followed by PRP business meetings (pending items, future activities, etc).

Afternoon: time to work on some manuscripts (ENSO observations led by Sophie, BAMS perspective piece led by Andrea).

Additional potential items for the agenda:

Update from MHW and on the interaction with PICES (Antonietta).

Update TPOS, NPOCE (Sophie).

By that time we would know about the TPEX field campaign (Anna). Anna is involved in TPEX as facilitator; the overall goal is to have a field campaign to have people proposing to have coherent sets of observations, with field campaigns for fall 2026, spring 2027, fall 2027 (140W) and another more in the warm pool area. Involving NOAA and NSF proposals. Helping influence of what good design observations should be, involved in the cruises, synthesis data and feedback to climate model development.



Jing-jia: topics on ENSO forecast. Not sure if able to go to Hawaii.

Some members missed the abstract deadline. Sophie will ask Malte if more submissions are possible, particularly as posters.

Agus: A heads up that the in-person panel meeting will likely not be funded, as panel meetings in 2025 should be held at the Pan-CLIVAR meeting. The Hawaii meeting would be better to be held as a hybrid.

Panel meetings are supposed to be held at Pan-CLIVAR meeting 2025 in Bali.

Andrea: Need to consider if there are any costs involved to run the panel meeting.

Antonietta: need to ask Malte about the venue as well.

End of Meeting