

2024 Report of Physical Oceanography and Climate (POC) Committee

DAY 1 October 9th, 9:00am - 10:30am, Beijing time (UTC+8)

Zoom link: <https://us02web.zoom.us/j/5130095105?omn=81353679171>

Agenda Item 1

Welcome and Introductions

Agenda Item 2

AP-CREAMS Report (SungHyun Nam)

The current term ends October 2024 and needs an extension. There is currently no member from Canada and only one from USA. There is one member from ECOP and would like more. There were three meetings this year (two in-person, one online), two workshops (CREAMS 30th anniversary, PICES), and one scientific session. AP-CREAMS is actively cooperating with other organizations (e.g., IMBeR, UNDOs). There are several action items following up from the 30th anniversary meeting that are related to PICES: topic session in PICES 2025; extend the term in PICES to 2029; expand geographic area to include more of NW Pacific (most of coastal NW Pacific to Bering Sea). Accordingly, the ToR and Action Plan will need to be changed and these requests were endorsed by POC.

Agenda Item 3

S-CC Report (Alexander Kozyr)

The following were identified as scientific achievements: started re-submission of metadata of coastal/domestic OA/deoxygenation monitoring to GOA-ON; promoted PICES 2024 session; and attended global ONCE online forum.

Agenda Item 4

WG46 Final Report (Yanli Lei)

The final report is endorsed by POC and identifies two key achievements. One is the identification of knowledge gaps and the other is the technical implementation of current knowledge. There is a proposal to have one day workshop during PICES 2025.

Agenda Item 5

WG50 Report (Yisen Zhong)

A review article is in progress. A request will be made for a one-year extension WG50 started about half a year late. A proposal will be made for a special session in PICES 2025.

Agenda Item 6

Proposal of New WG

No new WG proposal this year.

Agenda Item 7

Requests from and to Existing ExGs

No requests.

Agenda Item 8

New process on PICES-2025 Session/Workshop Proposal Ranking

This year, the online submission deadline is November 15 (see the website for information). Committees and SB will review and select the proposals submitted online. This is a SB and GC decision to allow the proposal ideas coming up during the Annual Meeting to be submitted for next year's Annual Meeting.

Agenda Item 9

Heads-up: Election of New Committee Vice-Chairs

The decision will be made during the in-person meeting in Honolulu.

Agenda Item 10

Comments on External Review

The following is a list of comments from the discussion:

Fangli—The committee tried their best, but know the final report isn't perfect and hoping to get some feedback from PICES members.

Steven—great report with a lot of great ideas; one of key decision points is the recommendation that PICES pivots to solution-based science that is responsive to member countries and specifics come out of that philosophy—will make organization more like ICES. Steven is very supportive of this idea; some aspects very relevant to POC (predictions, forecasts, etc.) but need to be careful as an organization to not overcommit.

Jerome—thinks it's a very big ask to host/serve data, especially climate projections. Will PICES then be a gateway to the data? Fangli says that change needs to happen slowly, but data are needed.

Jim—agrees with Jerome that this is potentially a very large undertaking. It is acknowledged in the report that this is a substantial new undertaking that will require substantial new resources from member countries.

Alex—data should be protected against natural disasters (e.g., Hurricane Helene cut off power to cooling system for server).

Request that everyone answer poll that was sent by the PICES Secretariat.

DAY 2 Business Meeting (Sunday – 2.5 hours)
October 27th, 18:00pm - 20:30pm, Hawaii Time
In person: Hawaii Convention Center, Room 305B
Zoom link: <https://us02web.zoom.us/j/3545911241>

Agenda Item 1

Welcome and Introductions, Remarks, and Agenda Updates

Agenda Item 2

Membership Updates

No updates.

Agenda Item 3

ESSAS Open Science Meeting 2025 (Sei-Ichi Saitoh)

A brief overview of the planned meeting was provided. PICES members are encouraged to join.

Agenda Item 4

Publications Updates

No updates.

Agenda Item 5

POC Sessions at PICES 2024 (10 min)

Three sessions in total this year, no specific discussion. See Appendix for more information.

Agenda Item 6

More Discussion on the Proposal for a New WG (Nianzhi Jiao or Yanli Lei)

Yui asked how this working group will work with other groups who are doing similar studies; will methods be comparable? The answer was that the WG will focus on biological CDR. Tsuneo asked if they are planning to create a new standard that is different than ISO and the answer was that it is possible. Tsuneo is concerned that there may not be enough time in WG to publish a new ISO standard. The group believes that they can create this faster.

Agenda Item 7

Argo Report (Yui Takeshita)

A question about quality control for BGC data was asked regarding real time data and the answer was there is a delay mode control twice per year and then applied to real time data. There is resource limitation in the data assembly centre, which slows down the process. Another question was asked about making code available for radial interpolation and it will be investigated. There is an appetite for working groups that focus on Argo data assimilation in models. Jim explained

that, in Canada, both short-term and seasonal predictions (up to 1 year) are made operationally; in both of these systems, Argo is the most important source of initialization data.

Agenda Item 8

SOLAS Report (Bill Miller and/or Christa Marandino)

Fangli suggested that PICES will pay more attention to prediction and will have more space for cooperation with SOLAS. Perhaps a joint working group or session between SOLAS and POC would be useful. Fangli asked whether air-sea interaction, surface waves are important and a possible avenue of collaboration? The answer was that SOLAS is for leveraging and doesn't want to be directly involved with industrial solutions—mCDR is crowded already and SOLAS has been doing this since 2004 so has a lot to offer in this space.

Agenda Item 9

IAPSO Report (Jae Hun Park)

Not available due to absence of the reporter.

Agenda Item 10

S-CCME Report (Kirstin Holsman or Xiujuan Shan)

Video update given by Kirstin.

Agenda Item 11

WG-50 Update

In the process of writing a review paper, which will also be the final report on the working group. Session proposals coming for PICES 2025.

Agenda Item 12

Upcoming Meetings Relevant to POC

None currently.

Agenda Item 13

Requests from and to Existing ExGs

S-CC has a workshop proposal for next year's PICES annual meeting. This will be submitted to POC and BIO by the end of the month.

Agenda Item 14

POC Best Presentation and Poster Awards, ECOP judges

The following is the list of judges: S1 (poster) Jen, Steve; S1 (oral) Jen; S2 (poster) Jerome; S2 (oral) Jerome; S8 (oral) Sachi; S8 (poster) Sachi; POC (poster) Hiro, SungHyun, Jen.

Agenda Item 15

Discussion on the Fact Sheet that AP-SciCom requested (Jennifer)

Agenda Item 16

Election of New Committee Vice-Chairs

Jennifer's first 3-year term will end at PICES-2024 and she can take the second term up to PICES-2027. Jen was elected Vice-Chair for the next three years.

Agenda Item 17

More Comments on ERC and Other Business

POC participation list

Day 1 Virtual

Members

Lei Zhou (China, Chair)
Jennifer Jackson (Canada, Vice-Chair)
Jim Christian (Canada)
Charles Hannah (Canada)
Fangli Qiao (China)
Sachihiko Itoh (Japan)
Taira Naigai (Japan)
Hiromichi Ueno (Japan)
Joon-Soo Lee (Korea)
SungHyun Nam (Korea)
Vyacheslav Lobanov (Russia)
Elena Ustinova (Russia)

Steve Bograd (USA)
Jerome Fiechter (USA)

Observers

Mignon Evans
Alex Kozyr
Yanli Lei
Bill Miller
Elaine Wilson
Jing Zhang
Yisen Zhong

PICES

Sanae Chiba

Day 2 Hybrid

Members

Lei Zhou (China, Chair)
Jennifer Jackson (Canada, Vice-Chair)
Jim Christian (Canada)
Fangli Qiao (China)
Sachihiko Itoh (Japan)
Taira Naigai (Japan)
Hiromichi Ueno (Japan)
Joon-Soo Lee (Korea)
Elena Ustinova (Russia)
Yury Zuenko (Russia)
Steve Bograd (USA)
Jerome Fiechter (USA)

Observers

Gwang Ho Seo
Saranya JS
Kwang-Young Jeong
Changsin Kim
Joon-Soo Lee
Yanli Lei
Bill Miller
Tsuneo Ono
Sei-Ichi Seito
Yui Takashitu
Yisen Zhong

Appendices

1. POC Sessions and Workshops at PICES 2024

S1: FUTURE/HD/POC Topic Session

Climate Extremes and Coastal Impacts in the Pacific

Convenors:

Antionietta Capotondi, *Corresponding* (USA)

Chan Joo Jang, *Corresponding* (Korea)

Charles Hannah (Canada)

Helen Killeen (USA)

Invited Speakers:

Neil Holbrook (University of Tasmania, Australia)

Ce Bian (Ocean University of China, China)

S2: FUTURE/BIO/FIS/HD/POC Topic Session

S-CCME/SICCME session on innovation in using integrated approaches to detect and manage for the effects of climate change tipping points and critical thresholds in marine ecosystems

Convenors:

Kirstin Holsman (USA), *corresponding*

Elliott Hazen (USA)

Kathy Mills (USA)

Xiujuan Shan (China)

Invited Speakers:

Mary Hunsicker (NOAA NWFSC, USA)

Camilla Sguotti (Department of Biology, University of Padova, Italy)

S8: BIO/POC Topic Session

Changing ocean carbon cycle and its consequences for the ocean environment:

Detection, prediction and mitigation

Convenors:

Tsuneo Ono (Japan), *corresponding*

Alex Kozyr (USA)

Invited Speaker:

TBD

2. ECOP Presentations and POC Judges

- Each Committee will select one best oral and one best poster presentation among all Topic/Paper Sessions/WS that the Committee sponsors. Please include Workshop Presenters if possible, but you can exclude them if it's difficult.
- Please find 2-3 volunteers to judge ECOP presentations. The judging sheet has been emailed to all members.
- ECOP posters are marked as such.
- No need to select one if there are no qualified presentations.
- Chairs will email the awardees and runners-up to the Secretariat. The award ceremony will take place immediately after Paper Sessions.

3. Active POC Experts Groups

S-CCME: Joint PICES/ICES Section on *Climate Change Effects on Marine Ecosystems*

(PICES-2011 - PICES-2025), (also reports to BIO and FIS)

AP-CREAMS: *Advisory Panel for a CREAMS/PICES Program in East Asian Marginal Seas*

(PICES-2005 – PICES-2024), (also reports to MONITOR)

S-CC: Section on *Carbon and Climate*

(PICES-2005 – PICES-2027), (also reports to BIO)

WG 46: Joint PICES/ICES Working Group on *Ocean Negative Carbon Emissions (ONCE)*

(PICES-2020 – PICES-2023), (also reports to BIO)

WG 50: Working Group on *Sub-mesoscale Processes and Marine Ecosystems*

(PICES-2021 - PICES-2024)