ARP Telecon Notes

Time: Mar.19, 2020, 23:00 – 0:30 +1 (GMT+8)

Participants: Sabrina Speich (co-chair), Paquita Zuidema (Co-chair), Walter Robinson (former co-chair), Susan Bates, Eric Chasignet, Maria Paz Chidichimo, Gregory Foltz, Kemgang Ghomsi Franck Eitel, Jeff Knight, Tarron Lamont, Regina Rodrigues, Ingo Richter, Brad de Young, Jing Li (ICPO). Not present: Eleanor Frakja-Williams

1. Update of the CLIVAR-FIO Summer School

Walter Robinson, former ARP co-chair briefly introduced the preparation of the CLIVAR-FIOSummer School on Ocean Macroturbulence and Its Role in Earth's Climate, which is scheduled on 6 to 11 July 2020 in Qingdao, China. 10 lecturers have been invited by Walter and have confirmed their participation. The basic structure and plan of the course has been drafted. However, due the current COVID-19 pandemic worldwide, it is not clear whether the summer school can be organised on schedule. According to Jing, ICPO is scheduling a telecon with FIO colleagues to discuss the plan for the CLIVAR-FIO summer school, and hopefully it can be done before the application deadline, 27 March 2020. Meanwhile, a decision needs to be made in late April or early May on whether to organise the summer school according to the original plan, or postpone it to a later stage.

Action 1: Jing will update the panel after the ICPO meeting with FIO colleagues.

Action 2: Walter will contact the lecturers again in late April/early May to make sure people remain interested in participating in the summer school.

2. Update on the EUREC⁴A-OA and ATOMIC

Paguita and Sabrina briefly updated the progress for ATOMIC and EUREC⁴A-OA, which were conducted from mid-January to the end of February 2020. The ATOMIC cruise report is finished and available from any of the ATOMIC investigators. An open ATOMIC-focused meeting/data hackathon is currently planned for 3 days within August 17-21 in Boulder, CO. ATOMIC leadership will have a better idea by June which datasets will be ready for the August data hackathon/meeting. While, according to Sabrina, the EUREC⁴A-OA campaign successfully sampled large areas within the EEZ and international waters with multiple observation platforms and instruments working together, e.g. ships, airplanes, satellites, saildrones, and etc. The USA R/V Ron Brown and the German R/V Meteor undertook observations east of Barbados. The French R/V Atalante and the German R/V Maria S Merian worked together to cover the "North Brazil Rings (eddy) corridor" south of Barbados down to the French Guyana. In particular, the two ships, ocean gliders and Saildrones sailed for some periods very close to sample ocean and atmosphere processes at the ocean submesoscale. Good satellite data have been used during the cruise to better resolve and sample the structure of meso and sub-mesoscale eddies. The EUREC⁴A-OA report from France and Germany will be ready soon. Papers on the overall EUREC4A-OA/ATOMIC strategies are underway as well as data calibration and verification.

3. Update on the Tropical Atlantic Observing System (TAOS) Review

The second draft of the TAOS Review Report is now being reviewed by the TAOS Review Committee, with over 200 comments received so far. The combined list for Essential Ocean and Climate Variables (EOVs/ECVs) has been prepared and ready for comments. After incorporating the Review Committee's comments, the report will be shared to the whole

writing team and relevant partners including ARP and OOPC for final public comments. The TAOS Review is already much behind its schedule. New timelines need to be set.

Action 3: Sabrina will share the TAOS Review Report with ARP members for comments by 15 of April at latest.

Action 4: Maria Paz Chidichimo will represent OOPC to join the TAOS Review Committee.

4. Update on the ARP coordination with US CLIVAR AMOC Science Team

Eric briefed the meeting that the US AMOC Science Team will organise its last meeting in September and sunset in 2020 and will be transitioning, as a coordinating activity, to the CLIVAR Atlantic Region Panel. Led by Eric and Eleanor, with participation from Brad, Greg, Tarron and Sabrina, an AMOC Working Group is proposed within ARP to facilitate the transition of major (cannot be all) initiatives of the US CLIVAR AMOC Science Team into CLIVAR ARP. A telecon with US CLIVAR AMOC Science Team is scheduled within one month after this telecon, all ARP members are welcome to join.

Action 5: Eric to provide the names from US CLIVAR AMOC Science Team to be invited to join the telecon.

Action 6: Jing to set up a doodle poll to check the availability for an AMOC-focused telecon within the week of April 20.

5. Feedback from CLIVAR SSG on ARP annual report and membership

The panel welcomes three new members to join in 2020: *Gregory Foltz* (NOAA/AOML/PHOD, USA), *Tarron Lamont* (Oceans & Coasts Research, Department of Environmental Affairs, South Africa) and *Ingo Richter* (JAMSTEC, Japan). Meanwhile, *Susan Bates* moved to The Nature Conservancy to work since January 2020, but remains as a member of ARP. *Walter Robinson* stepped down from co-chair of ARP in 2020, but he will remain to be involved with the panel in particular for the summer school.

Feedback from CLIVAR SSG to the ARP annual report mainly includes: 1) strengthen the cooperation with other CLIVAR panels, e.g. SORP; 2) consider how to advocate and implement the TAOS Review outcomes; 3) improve linkages between observations to the operational centers. For better understanding of the work of other CLIVAR panels/RFs, annual reports for all CLIVAR groups are available at http://www.clivar.org/events/25th-session-clivar-scientific-steering-group.

6. Update from ARP Working Groups

Not much progress has been made for establishing the ARP Working Groups. Two Working Groups and four initial ideas of research foci have been discussed during the previous ARP meeting and telecons.

AMOC Working Group

This group is intended to work on the synthesis of AMOC across latitudes, including array design using extant model runs. Eric and Eleanor will take the lead of the AMOC WG, by coordinating the US AMOC Science Team. Details can be referred to in Session 4.

Working Group on North Atlantic Model Biases (Jeff)

This isn't really happening, and will also need input from Eleanor on discussing if/how to proceed on this. Jeff has checked with Noel after the telecon for this issue, and according to Noel, the idea of the workshop isn't completely moot, both Noel and Gokhan Danabasoglu

(former OMDP co-chair and current CLIVAR SSG member) expressed their interest in this topic. Last year Carsten Eden indicated that he could support the meeting in Hamburg. Jeff will follow up on this on behalf of ARP towards summer when hopefully the current situation will be stabilized.

Other possible activities to be carried out by the panel:

- 1) A new *CLIVAR Research Foci on Tropical basin interaction (TBI)*, co-chaired by Ingo Richter (current ARP member) and Noel (former ARP member). Their first telecom will be late March.
- 2) The RF proposal on the *Ocean Sub-mesoscale & Climate (OSMAC)* coordinated by Walter did not get approved by CLIVAR SSG in 2020. However, given the good data obtained by EUREC⁴A and ATOMIC on meso- and sub-mesoscale eddies, some of the activities proposed in the OSMAC proposal could be furthered by ARP.

3) Model biases shared among basins (Susan)

No longer feasible in Susan's new position.

4) Deep ocean circulation and carbon (Eleanor)

Need to wait to hear from Eleanor

5) Global effects of Atlantic variability (Noel)

This merged with the new Tropical Basin Interaction RF.

Action 7: Ingo will facilitate the cooperation between ARP and TBI RF (or simply update ARP during ARP telecons).

Action 8: Walter will share the OSMAC RF proposal with ARP.

7. Planning for ARP-18

The original plan is to organise the ARP-18 in July 2020 alongside the CLIVAR-FIO Summer School in Qingdao, China. However, due to COVID-19 pandemic, it is not sure if the summer school could be organised on schedule, simultaneously negating the ARP-18 meeting. A second option for the panel to meet is alongside the upcoming US CLIVAR AMOC Workshop, in September 2020 at WHOI, USA. Meanwhile, a CLIVAR workshop titled 'From global to local: Cultivating new solutions and partnerships for an enhanced Ocean Observing System in a decade of accelerating change' will be organised in Trieste, Italy, with the participation of all CLIVAR region panels and GSOP in May, 2021. Multi-panel meeting to be organised alongside the workshop has been approved by CLIVAR SSG and funds have been reserved from 2020 to 2021 in supporting the meetings and workshop.

Maria has shared the workshop proposal with ARP.

8. Any other updates from ARP members

- Next ARP telcon will be scheduled in the second week of June, 2020.
- <u>PIRATA-24 meeting</u>, which was originally scheduled in April 2020 is postponed. New
 date is yet to be determined but more likely to be in Oct/Nov in 2020 or early 2021 in
 Miami.
- WCRP Workshop on Flagship Questions for the Future was organised in Hamburg, Germany in February 2020.