Meeting Minutes Atlantic Region Panel

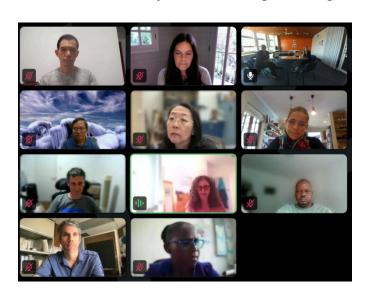


Date: 2024-09-10 **Start date:** 10 pm China ST (UTC+8) **Venue:** GoTo Meeting **ICPO Staff Host** Agus Santoso

Attendees (11)

Eleanor Frajka-Williams, Regina Rodrigues, Aixue Hu, Gregory Foltz, Hyacinth Nnamchi, Ingo Richter, Jennifer Veicht, Laura Jackson, Olga Sato, Tannecia Stephenson, Agus Santoso (ICPO).

Co-Chairs: Eleanor Frajka-Williams, Regina Rodrigues



Meeting Objective: Regular meeting

Minutes

Eleanor opened the meeting, introduced the panel, and gave an overview of the panel's Terms of Reference:

- 1. Identify major emerging scientific issues related to research in Atlantic climate variability, climate change and climate predictability and foster research initiatives in Atlantic climate studies.
- 2. Define the tools required to assess and understand climate variability, climate change and climate predictability of the ocean-atmosphere system within the Atlantic sector.
- 3. Design a strategy to implement these methods, spanning observations, models, experiments and process studies.
- 4. Provide scientific and technical input into the implementation in collaboration, if required and instrumental, with other CLIVAR panels and relevant programs
- 5. Monitor and evaluate progress of the implementation
- 6. Promote and enhance interactions among atmospheric sciences, oceanography, biogeochemistry and paleoclimate communities to further advance interdisciplinary Atlantic climate studies.



- 7. Serve as a forum for the discussion and communication of scientific advances in the understanding of climate variability, predictability and change in the Atlantic region.
- 8. Work with relevant agencies on the distribution and archiving of Atlantic Ocean observations.
- 9. Respond to needs from stakeholders and facilitate the transfer of knowledge of science and applications with respect to Atlantic climate variability and predictability issues.
- 10. Advise and report to the CLIVAR SSG on progress, achievements, new frontiers and impediments.

Eleanor noted that members are effectively volunteering their time and so the panel is not expected to make progress in all of the items listed above all at once. The panel has subgroups led by members to address the terms of reference, and members are encouraged to bring their interest to shape what the ARP does going forward.

Round table introduction

Eleanor (AMOC - observational aspect, RAPID mooring array), Regina (S. Atlantic, MHW, impact of ENSO on S. America), Aixue (AMOC, decadal variability, climate change, models), Penny Holiday (AMOC, circulation and variability, Atlantic modeling, observations technology), Olga (South Atlantic MOC, measurements), Jennifer (EBUS, Benguela, forecast models around coast of S. Africa), Ingo (tropical Atlantic, air-sea interactions, modes of variability, co-chair of TBI), Laura (AMOC, North Atlantic, climate modeling), Hyacinth (tropical Atlantic variability, tropical-extra tropical interactions, impact on surrounding continent), Greg (impact of ocean on climate and weather, observational programs Pirata, tropical cyclone-ocean interactions), Tannecia (sea level rise)

ARP has 3 Working Groups (focus topic areas within ARP) – AMOC, Ocean Extremes (liaise with MHW, MyClimate Risk WCRP Lighthouse Activity), tropical basin interaction (liaise with TBI RF)

Update on AMOC modeling workshop

Laura: 23-25 September at the UK Met Office. 5 Sections: What paleoclimate and observations could tell us; model development (resolution); processes; parameterisation, mixing; impacts of different formulations and models; discussion sections. Mode of attendance is in-person only (hybrid requires technical support).

Report on AAORIA/PAC meeting

Jennifer: some members were in Washington DC for All Atlantic Ocean Research and Innovation Alliance (AAORIA) and partnership for Atlantic cooperation observation and modeling workshop. AAORIA builds upon the success of Galway Statement and Belem Statement, is to enhance marine research and innovation cooperation along and across the Atlantic Ocean. The high-level board of AAORIA nominated 1-2 experts from different regions around the Atlantic, to create a list of gaps in both ocean observations and modeling for the Atlantic basin, and recommendations for how to close those gaps. These will be



shared with the AAORIA high level board and the partnership for Atlantic cooperation in October. Came up with three priority areas: Ocean productivity (inc. fisheries), AMOC, land-coast-ocean interactions. Additionally came up with cross cutting topics: capacity building, affordable technology and innovation, open-source tools, sustained and increased funding, social sciences, data management, fair data. On the last day, a smaller group was invited to draft a work plan in which three of the priority areas were given action items and assigned experts (CLIVAR ARP mentioned). Could ask if the document can be shared to ARP.

Penny: The document may not be allowed to be circulated around yet. US hosted workshop (NOAA hosts). The US proposed AAORIA, the EU proposed ocean resilience. Funding arrangement. Cross-cutting theme: Vulnerability of the S. Atlantic observing system (fewer observations in South Atlantic and are more at risk than other regions); tropical Atlantic. An updated version of the document may be made available at the AAORIA forum in October. It is good to be aware that there is this intergovernmental effort focussing on the AMOC and open ocean-coast-land interactions.

Eleanor: Jennifer is one of the selected group of writers.

Olga's idea: CLIVAR could lead in integrating all the databases for AMOC.

Update on Ocean Extremes and MHW

Regina on Ocean Climate Risk: WG has implemented two regional hubs — tropical meteorology (focal point: Roxy Koll), SAEON (focal point: Jennifer Veicht), and just agreed on the third one Caribbean (Tannecia), and still looking for another one for the Pacific. CLIVAR research focuses on MHW, summer school at ICTP in Italy last year — a success with 42 students and ECR from 13 countries with good gender balance and geographical distribution. Produced an article in <u>BAMS</u> — methodology for students' long term projects and publications, with cross-panel activities particularly IORP. A session in Ocean Sciences and WCRP Open Science. Special collection in journal.

Other updates

Ingo – TBI RF had a workshop in Seoul, Yonsei University in late June, with a business meeting. To get the coordinated pacemaker experiments going, and making progress to make available in ESGF as a MIP. One of the conditions to publish in ESGF is a paper that describes the experiments (a draft is available, almost ready for submission).

Greg – observations WG of TBI RF, main project of the past several of months has been putting a draft of review paper (title: toward integrated pan-tropical observing system), plan to submit in a couple of months, involving ARP, GOOS, OOPC, TPOS scientific committee, TBI RF – goal is to synthesize different tropical basin observing reviews, white papers from the OceanObs'19, common needs across the tropics, has different sections western boundary currents, extreme events (tropical cyclones, MHW), decadal-multi decadal variability, BGC and ecosystem, and coastal regions. Anyone interested to contribute can contact Greg. Another goal is to come up with recommendations for an integrated observing system for tropical basin interactions. Other activities happening: PIRATA steering group meeting this



week, to bring together participants from different countries to plan cruises, science talks, and update on research going on in the tropical Atlantic.

Discussion on future activities

Regina proposed for the panel to continue with current activities and get new members engaged and invited to propose activities.

Eleanor asked about the procedure for organizing events with the ICTP (e.g., for a future AMOC summer school). Regina recommends co-organising events with the ICTP as they are well set up for event organizing, financial support, good location, and recommends applying the methodology outlined in the BAMS article (promote further activities beyond the training school). Could also organize along with IAPSO/IAMAS/IACAS joint assembly in South Korea Regina proposed two sections (that she will co-chair): atmosphere-land-ocean-cryosphere compound events, impacts of climate change on the ocean (Catia Domingues). The program is not yet available. Most likely there will be an AMOC section.

Agus asked about engagement with NORP and SORP as raised in the SSG feedback to ARP previous annual report. Eleanor attended a NORP annual meeting this year on behalf of ARP. Could involve NORP/SORP in the AMOC working group.

Panel membership

Expiring in 2024: Eleanor (renewable for 1 more year), Olga Sato (renewable for 2 years), Dariia (renewable for 2 years) Rotating off: Greg Foltz, Tarron Lamont, Ingo Richter.

Eleanor intends to rotate off. Penny would like to rotate off due to her new job (chief scientist at NOC).

Regina mentioned Renellys Perez (PIRATA, SAMOC) as potential members. Philip Tuchen (from Open Call). Ingo will try to provide suggestions.

Panel meetings – frequency: previously annually all-day online meeting, Ingo suggested more frequent meetings (every 2-3 months). The overall suggestion is for shorter quarterly meetings, with the support of ICPO.

Tannecia: activity on sea level rise that overlaps with/might be useful for small islands (e.g., detection and attribution, tropical cyclones). <u>Action</u>: Regina suggests putting Tannecia in contact with WCRP lighthouse activity MyClimate Risk, which can enhance interaction between ARP and the lighthouse activity.

Eleanor closed the meeting: expect members to be contacted with regards to annual report, membership, to think about engage / lead topic areas that enhance ARP activities.

Next meeting

Next panel meeting is expected before Christmas.