

Meeting Minutes of CLIVAR/GEWEX Monsoons Panel

MEETING INFORMATION

Meeting Number	2023-1	Meeting Title	CLIVAR/GEWEX MP Teleconference
Objective/Purpose	Discuss on the Agenda Items below and progress on action items		
Time & Date	31 January 2023 06:00-07:00 UTC	Venue	Microsoft Teams Video Tele-Conference

MEETING DETAILS

Chairperson(s)	Suryachandra Rao Anguluri (MP Co-Chairs)	Rapporteur(s)	E.N. Rajagopal and Somnath Mahapatra
Attendees	MP: Suryachandra Rao Anguluri, Gill Martin, Annalisa Cherchi, Ajay Mohan Ravindran, Renguang (Randy) Wu, Rondrotiana Barimalala, Mary Kilavi, Pankaj Kumar IMPO: E.N. Rajagopal, Rupa Kumar Kolli, Somnath Mahapatra, Sushmitha Joseph		
Apologies	MP: Leila Carvalho, Mouhamadou Bamba Sylla, Shabehul Hassan, Salvatore Pascale, Thea Turkington		

ACTIONS

Deadline	Action	Responsible
As and when required	Updating of contents of webpages and websites of Monsoons Panel, populating the IMPO webpage with more information on the activities of panel and WGs.	MP & IMPO
Ongoing	Continue to build connections with other panels and Light House Activities (LHA) of WCRP and make strong linkages with partner projects.	MP members & Co-Chairs
October 2023	Active participation in OSC-2023 through active participation in the monsoon session, poster clusters and in drafting WCRP OSC's Concept Note on Monsoons	MP members & IMPO
Ongoing	MP members to participate in WG meetings of their interest and collaborate on any activity.	MP members & Co-Chairs
15 Mar. 2023	Send doodle poll for the next meeting by teleconference, preferably in the fourth week of March 2023	IMPO
15 Dec. 2023	Submission of MP 2023 Annual Report to CLIVAR/GEWEX SSGs	IMPO & MP
15 Dec. 2023	IMPO to prepare the proposal for 2024 membership updates of the CLIVAR/GEWEX Monsoons Panel for submission for SSG approvals	IMPO & MP

AGENDA AND KEY OUTCOMES

Sl. No.	Description
1	<p>Opening Remarks (Surya):</p> <ul style="list-style-type: none"> Surya (Co-Chair) welcomed all the MP members and IMPO members present in the first meeting of the Monsoons Panel in 2023 (MP 2023-1). Surya in his opening remarks briefly mentioned about submission of MP 2022 Annual Report and MP 2023 Membership proposal to CLIVAR/GEWEX and said that the same will further be discussed as per the meeting agenda.
2	<p>Updates from the Regional Working Groups:</p> <p>(A) WG on Asian-Australian Monsoons [WG-AAM]: - (Gill Martin)</p> <p>1) Activity Highlights of the Monsoon Processes & Teleconnections (MPT) sub-group:</p> <ul style="list-style-type: none"> The prediction skills of wintertime surface air temperature in C3S models were evaluated preliminarily for the Asian region. The skill is found to be high in the subtropical regions and much lower in the mid- and high-latitude inner lands. The capability of the models to capture the observed temperature modes was also evaluated, but the results are very sensitive to the choice of domain. <p>2) Activity Highlights of the R2O for monsoon seasons in SE Asia (R2O) sub-group:</p> <ul style="list-style-type: none"> Exploring explore a wind-based definition that incorporates regional clustering of rainfall patterns in South-East Asia, drawing upon research published by Lee and McBride (2016). The preliminary theoretical development of such a South-East Asian Monsoon Progression Index was completed by Nov 2022. The index is undergoing tests using NCEP/NCAR Reanalysis (CDAS) and ECMWF Reanalysis 5 datasets as of Jan 2023. <p>3) Activity Highlights of the High impact weather events (HIW) sub-group:</p> <ul style="list-style-type: none"> Case studies of high impact events from recent years are being reviewed to see how they were observed and forecast, and how decision-making was affected. Sometimes there are large differences between probabilistic forecast warning and deterministic nowcast warning. For Nepal, there is difficulty because forecasts are not high enough resolution for highly complex orography. Requires sharing between countries with higher resolution forecast systems. Currently reviewing winter weather events and TC warning systems. <p>4) Future Activities:</p> <ul style="list-style-type: none"> The R2O subgroup plans to have a first draft of a manuscript on the development of the South-East Asian Monsoon Progression Index sometime between end-2023 and 2024. This publication will be a collaboration between academic and operational researchers in AAM-WG and other selected scientists. HIW and MPT subgroups also plan to draft review papers on their topics during the coming year. WG-AAM intends to draft an overview of this year's AA monsoon, how it related to large-scale conditions, and how this was manifest in regional monsoons and extreme events, and later to examine the forecasting, how this was communicated and what actions were taken (or not taken) as a result (needs WG member to coordinate). WG-AAM members will participate in the EGU General Assembly 2023 session on "Monsoon systems in the past and present and under future climate change" (convened by former WG-AAM co-chair and Monsoons Panel co-chair Dr Andy Turner). <p>Comments from members:</p> <ul style="list-style-type: none"> Surya added that the MPT sub-group (in which he is also a member) has started writing a manuscript on "Teleconnections in MME models and our Operational models" with an initial focus on South Asian monsoon.

(B) WG on African Monsoons [WG-AFM]: - (Rondro)

1) Activity Highlights:

- A review paper on “Climate Modeling of Precipitation over Africa: Progress, Challenges and Prospects” was submitted to the International Journal of Climatology. The manuscript reviews our current knowledge of the modeling of the African precipitation and more importantly identifies the gaps that need to be addressed by the research community. The paper is led by the two co-chairs with the co-authorship of the three subgroups from the African continent sub-regions (Western, Central and Southern and Eastern Africa).
- The WG-AFM started to have a short scientific presentation during their bi-monthly meetings. The aim is to discuss new/ongoing research ideas as well as to foster collaboration between the WG members.

2) Future Activities:

Western Africa Sub-group:

- Organize a workshop on climate model output analysis for students and early career researchers. This activity aims to foster the next the generation of African climate scientists and modelers.
- Build collaborative project ideas based on existing climate model outputs, such as the DYAMOND initiative

Central Africa Sub-group:

- Completing the already started review paper on “the roles of Central Africa in modulating the regional monsoons over the continent”. This is based on the fact that Central Africa as a region does not have a separate monsoon but located in between the other regional monsoons as a transition zone.

Eastern and Southern Africa Sub-group:

- Write a paper on southeastern African monsoon forecasts, focusing at subseasonal to seasonal time scale.

Comments from members:

- Surya mentioned that the activities of WG-AFM has picked up very well, which is a very good sign.

(C) WG on American Monsoons [WG-AMM]: - (Leila Carvalho: Absent)

1) Activity Highlights:

- Not reported

2) Future Activities:

- Not reported

Comments from members:

- Surya mentioned that as Leila is absent there is none associated with WG-AMM to provide an update.
- Rajagopal added that there was no update even in the SharePoint MP Notebook.

Updates from IMPO (Rajagopal):

1) Activity Highlights:

- IMPO nominations of Surya and Andy Turner as session convenors of "Global & Regional Monsoons" have been accepted by OSC-2023.
- IMPO finalized and submitted the Monsoon Panel's funding request (totaling to 10K CHF) for the in-person meeting MP & WG-AFM at OSC-2023 for the approval SSGs of CLIVAR & GEWEX.
 - CLIVAR SSG has approved its share of 5K CHF and the GEWEX SSG's approval for its share of 5K CHF is awaited.
 - Participation in the In-person meeting of MP with WG-AFM at OSC-2023:
 - 7 MP members have indicated their availability (NFR=2 & FR=5)
 - 12 WG-AFM members have indicated their availability (NFR=6 & FR=6)[NFR=No Funding Required for Travel & FR=Funding Required for Travel]
 - As the travel funds are quite less, all members who require funding have been requested to submit papers in the monsoons session and seek OSC travel funds.
- **Takeaways from the IPOs & WCRP Group meeting held on 17th January 2023:**
 - OSC-2023 will be in Hybrid mode - WCRP has managed to finalize the agency for the online facility. There will be 5 parallel sessions in OSC during 23-26 October 2023 and the final day's single session will end by lunchtime.
 - Day 1 of Early & Mid-Career Researchers (EMCR) symposium will be held a day before the OSC opens –for 100 participants at OSC venue. Day 2 of ECMR will be on 28th October at Rwanda Space Agency or Carnegie Mellon University.
 - EMCRs & IPOs will be invited to assist as Rapporteurs to sessions. - IMPO has offered to assist, subject to travel fund support.
 - The requirement of a meeting room with online facility for the in-person meeting of the regional WG of African Monsoons & Monsoons Panel at OSC-2023 was highlighted. Nico (WCRP) wanted a separate mail exchange with him on this matter as smaller rooms are already booked by the side events (side events are at full capacity).
 - International CLIVAR Project Office (ICPO) will be next hosted by Ocean University of China, Qingdao, China from April 2023 for 5 years.
 - The next IPO & WCRP Sect. Group meeting will be hosted by IMPO in April 2023.
- **CLIVAR/GEWEX MP Membership Vacancies:** There are **5** membership positions to be considered for either rotating off or extension of tenure and filling up of vacant positions.
 - **9** CLIVAR, **2** GEWEX and **1** MP nominations have been received for the 2023 Monsoons Panel memberships.
 - IMPO has put up the MP recommended proposal to SSGs of CLIVAR and GEWEX for their approval this month.
- IMPO rigorously supported the Monsoons Panel in the preparation of its Annual Report of 2022, for submission before the next CLIVAR SSG meeting on 2 February 2023. **Leila has agreed to report the MP 2022 updates at the SSG online meeting on 2 February 2023.**
- IMPO actively participated in the preparation of a review article on **Climate Modelling of Precipitation over Africa; Progress, Challenges, and Prospects** by the regional Working Group on African Monsoons (WG-AFM), which is now under review in the International Journal of Climatology.
- IMPO developed an "Monsoons Panel Notebook" using OneNote for sharing updates on the activities of MP, WGs and IMPO via Microsoft SharePoint, which is trialed in this MP meeting. *An E-mail exchange with Fernande (GEWEX) helped to fine tune the Notebook!*
- Removed emails of non-members/old members of all WGs/MP and the final email list within the email groups were updated by ICPO.

2) Future Activities:

- IMPO to continue with the use of MP Notebook (OneNote) for MP & WGs updates.
- IMPO looks forward to its active involvement in WCRP OSC-2023 through the session on Global & Regional Monsoons and the two accepted Poster Clusters.
- Looks forward to the involvement in the proposed In-person meeting of MP and WG-AFM during OSC-2023 at Kigali.

Open Discussion on MP & WG Activities: (All)

- Surya:
 - As per the MP 2022 AR circulated to all, WG-AAM is doing excellent work. The group is very vibrant, and the outputs are clearly visible in the AR.
 - WG-AFM even though started late, their activities have picked up fast.
 - WG-AMM is really a concern. MP Co-chairs have raised this issue and has planned to have meeting with WG-AMM Co-chairs, before the CLIVAR SSG meeting to see what MP can do to help them.
 - Urged members to attend meeting of WGs and participate in the discussions. IMPO to henceforth provide information on WG meetings to all MP members.
 - Requested members to increase their panel activity by collaboration across members and with other panels. MP's low cross-panel activity was a concern raised in the last CLIVAR SSG meeting. Other than Annalisa's contribution to GPEX white paper, MP did not have any other cross-panel activity in 2022.
 - If help is required in facilitating cross-panel activity, IMPO can be contacted. Next AR should not have this concern.
 - Reacting to Pankaj's query on reporting individual papers on monsoons in AR, Surya reiterated that CLIVAR SSG wants only panel activity related papers to be in the AR.
 - Urged panel members to collaborate among themselves and write technical reports/papers.
 - Reacting to Ajay's mention of being unaware of WG-AAM activities, Surya mentioned that henceforth group's meeting details will be circulated to all MP members by IMPO.
- Rajagopal:
 - ARs of 2021 and 2022 are available in the MP Notebook under MP ARs section.
 - IMPO plans to use this Notebook concept further for all future meetings.
 - Gill, Rondo and IMPO have updated their pages – a happy sign.
- Surya:
 - Using the Notebook is easy. Could easily upload my PPT. Encourage all to share docs through the Notebook. Requested Rajagopal to do a quick demo of the Notebook to members and the same was done. Ajay and Pankaj reported about access issue due to link being broken.
- Rupakumar: Attributed the access issues to people having their own Microsoft 365 with a different email than that available in MP email list, leading to some sort of clash between theirs and IITM 365 subscriptions
- Rajagopal mentioned that only thing that is known is that one needs to login with email address to which read/edit access of MP Notebook is given.
- Rupakumar mentioned that his home PC is linked to his personal Microsoft 365 subscription and login with his IITM email creates a problem of losing access to his personal 365.
- Rajagopal intervened to suggest that members can share their personal MS 365 user email and the same can be given permission to access the Notebook.
- Surya concluded the discussion by requesting all members to intimate access issues if any to IMPO. If there are still issues with 365, IITM will take it up with the service provider.
- Rupakumar mentioned that the MP should consider populating the IMPO webpage with more information on the activities of panel and WGs. Whatever that can be shared with public should be systematically updated in the webpage. The webpage currently has only names of the members with some links to their own webpages. The webpage must be more dynamic and should contain interesting details of panel and WGs work. Highlights of non-panel activity publications of individuals which can be of interest to publicise the work.
- Surya intervened to mention that the highlights of publications which are from non-panel activity can be shared with IMPO. After taking the concurrence of MP Co-chairs the same can be published on the IMPO webpage. Highlights of publications related with panel activities can be published by IMPO directly. He added further that WG-AAM can convert their vibrant activity to few good papers. The highlights of the review article of WG-AFM can be posted once it is published by the journal.

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	<ul style="list-style-type: none"> • Rajagopal mentioned that IMPO was under great stress for generating the MP 2022 AR. IMPO was last to submit after several reminders from Jose (ICPO). Henceforth we should target to submit AR by 15th December every year. • Surya added that members can share highlights of completed work as and when done with IMPO, which can be added to the AR being drafted by IMPO. • Pankaj queried if there is a framework for collaboration between MP and WGs or is it based on interest based? • Surya replied that WGs have focussed activities. MP Members can join any WG activity. IMPO will circulate the meeting information to all members. Members can attend the meetings and contribute to any activity, which will then be a panel activity. Members can develop cross-panel activities on their own. Sometimes SSGs request MP to nominate a member to a cross-panel activity, just as in the case of Annalisa's nomination for drafting WCRP's white paper on GPEX. For future SSG requests also MP will identify a member for the cross-panel activity based on domain of expertise.
5	<p>Discussions on new MP Memberships: (Lead: Surya)</p> <ul style="list-style-type: none"> • Surya mentioned that as MP has received 9 CLIVAR nominations and 2 GEWEX nominations, MP will have to consider at least 1 nomination each from CLIVAR and GEWEX • MP has recommended the extension of the tenure of retiring members for one more year. • MP has also given its recommendations for the likely vacant positions as given below: <ul style="list-style-type: none"> ○ Position 1: Ruth CERESO-MOTA (Mexico) Recommended ○ Position 2: Mr. Hiroshi TAKAHASHI (Japan) Recommended ○ Position 3: Ms. Hui SU (Hong Kong/USA) Recommended • GEWEX SSG agrees with MP's recommendations. CLIVAR SSG's decision is awaited.
6	<p>Discussions on Monsoons Session at OSC-2023: (Lead: Surya)</p> <ul style="list-style-type: none"> • The convenors of the session are Andy Turner, Paola Andrea Arias Gomez of University of Antioquia, Colombia; Surya (MP Co-Chair) and Tereza Cavazos (WG-AMM) <ul style="list-style-type: none"> ○ Surya welcomed suggestions on the keynote speakers for the 3 sub-themes, namely: <ul style="list-style-type: none"> ▪ Monsoons in a Changing Climate ▪ Processes relevant to extreme rainfall events in monsoons ▪ Monsoons and oceanic processes ○ Encouraged all to submit abstracts to the 3 sub-themes. The available funding has been discussed by Rajagopal. Shall try to support travel to the maximum extent possible. Others can avail from OSC or other sources. ○ Session duration is 120 mins, 20 min. each for the 3 invited talks, 10 min. for the 4 oral talks and 20 min. for wrapping up discussion. ○ Abstracts that are not selected for oral talks shall be considered for session posters ○ In the last segment, the session will be summarized by the chair and there will also be a discussion on a Concept Note on Monsoons (Any volunteers to co-author this note are welcome) ○ Responding to Rupakumar query, it was clarified that OSC will provide travel support to Keynote speakers. It is normal to fund invited speakers. Further updates on this funding will be provided subsequently. ○ Invitation letters to Keynote speakers will be drafted by the Convenors and the letter will be finally send by WCRP. ○ Surya requested for wide publicity of the session across members' various networks. • Rupakumar requested to consider predictability related topic also under the Keynote talk. Surya responded that the letter of invitation can have a mention to cover predictability aspects in their talk. • Rupakumar mentioned that there could some OSC sessions relevant to monsoons, which needs to be identified and should not be in parallel. Surya informed that the monsoon session convenors have identified 6 sessions [<i>S01: Climate variability on timescales from weeks to centuries and millennia, S02: Climate predictability and prediction, S15: Water cycle, S23: Circulation change in the climate system (atmosphere and ocean), S25: Regional climate change, S27: Hazards and Extreme events</i>] and intimated Valery Detemmerman (WCRP) to take note of it.

	<ul style="list-style-type: none"> • Rupakumar added that MP members attending OSC should share the responsibility to cover the entire conference and pull-out aspects that are of direct relevance to MP. He further added that after the conference there should be a debriefing in how OSC outcomes will be useful for MP activities. • Surya intervened to add that WCRP is expecting a concept note from the session, which will have major outcomes and future directions on monsoons for MP use. The concept note is a serious deliverable expected from the session convenors by WCRP. • Rajagopal, reacting to Annalisa's question of virtual participation in OSC, mentioned that there is a registration fee of \$300 for virtual participation with a waiver for low and lower-middle income countries. IMPO can check with WCRP if MP members can get a waiver of registration fee for virtual participation.
7	<p>Discussions on the In-person MP meeting at OSC-2023 (Lead: Surya)</p> <ul style="list-style-type: none"> • Already discussed in detail by Rajagopal. -With 7 MP & 12 WG-AFM being available for the meeting out of which 11 people requiring travel funding. • As the available funding is limited, encourage all to avail funding from OSC or other sources. • If any support is required from IMPO for applying for OSC funds, they will do the needful with their recommendation to OSC.
8	<p>Date/time of next meeting (Lead: Surya)</p> <ul style="list-style-type: none"> • The next meeting can be in the last week of March 2023, if everyone agrees. • MP will coordinate with IMPO for finalizing the date through a doodle poll. • To make MP meetings a bit more scientific instead of being fully administrative from next time onwards, Surya proposed to include one short presentation (10 minutes) from a member on their new results and welcomed volunteers. The new results will lead to more collaboration among MP. The PPT should be sent to IMPO a few days before the next meeting so that it can be uploaded to MP Notebook, which will enable other members to go through the PPT before the meeting and be ready for any interactions after the presentation. <i>Pankaj has volunteered to make the presentation in the next meeting</i> • Annalisa requested for rotation of the time of the meeting as it is very early for Europe. • Surya intervened to mention that it can be considered as MP needs to be accommodative of all its members. During the Doodle Poll members can suggest their convenient time. He also added the current time of 6 UTC was decided taking into consideration of the most convenient time for Leila, whose presence is essential.
9	<p>Any other business</p> <ul style="list-style-type: none"> • Surya thanked all for their presence in the meeting.

NEXT MEETING

Meeting Number	2023-2	Meeting Time & Date	Last week of March 2023. IMPO to send out doodle poll
Location	Video conference, details of the meeting will be sent out by IMPO		