



Minutes of CLIVAR/GEWEX Monsoons Panel Meeting

MEETING INFORMATION

Meeting Number	2024-7	Meeting Title	CLIVAR/GEWEX Monsoons Panel Meeting
Objective/Purpose	Discuss on the Agenda Items and progress on action items		
Time & Date	12 November 2024 15:30-17:30 UTC	Venue	Microsoft Teams Video Conference

MEETING DETAILS

Chairperson(s)	Leila Carvalho and Suryachandra Rao A. (MP Co-Chairs)	Rapporteur	E.N. Rajagopal
Attendees	MP: Leila Carvalho, Suryachandra Rao A., Annalisa Cherchi, Satyaban Ratna, Hui Su, Samson Hagos, Thea Turkington, Ajaya Mohan Ravindran, Jhan-Carlo Espinoza IMPO: E.N. Rajagopal, Rupakumar		
Absentees	MP: Ruth Cerezo-Mota, Shabehul Hassan, Salvatore Pascale, Rondrotiana Barimalala, Hiroshi Takahashi IMPO: Susmitha Joseph		

ACTIONS

Deadline	Action	Responsible
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
Ongoing	MP members to participate in WG meetings of their interest and collaborate on any activity.	MP members & Co-Chairs
20 December 2024	MP's 2024 Annual Report finalization	Co-chairs of MP & WGs and IMPO
15 December 2024	MP's 2025 Membership updation	MP Co-chairs & IMPO
31 December 2024	Get Feedback from WGs on the IMPO's support rendered to them and suggestions for any additional support required	MP & IMPO
31 December 2024	MP's participation in the ACAM Training School and Workshop during 9-13 June 2025 in Bali. IMPO to send out an e-mail to all members of MP and WGs seeking their possible contributions.	IMPO

Deadline	Action	Responsible
28 February 2025	Reconstitution of WG-AFM and WG-AMM after consultations with various stakeholders	MP & IMPO

AGENDA AND KEY OUTCOMES

Agenda Point	Description
1	<p>Opening Remarks (Leila):</p> <ul style="list-style-type: none"> Leila and Surya (Co-Chairs) welcomed all the members present in the meeting. Screenshots of the in-progress online meeting can be found in Appendix-I.
2	<p>Updates from the Regional Working Groups:</p> <p>❖ WG on Asian-Australian Monsoons [WG-AAM]: - (Thea)</p> <p>Activity Highlights:</p> <ul style="list-style-type: none"> The new co-chairs have been confirmed. Lin Wang will be taking over from Gill in Jan 2025, and Thea Turkington will be taking over from Tieh Yong in July 2025. Other new members have been invited and accepted (will attend the next meeting on 21 Nov 2024) WG is working on contributions to the MP's annual report GEWEX article has been published. WG meeting on 21 November to review the 2023/2024 monsoons. IWM-8: Few members have joined the scientific organization committee and have been reviewing abstract submission. Several members have also submitted abstracts and are planning on attending. The next regular AAM WG meeting will likely take place in January 2025. <p>Comments from members:</p> <ul style="list-style-type: none"> <i>Ajayamohan:</i> WG-AAM's brief report comparing the Monsoons of 2022 and 2023 was published in GEWEX Quarterly Vol. 34, No. 3 Quarter 3 2024 <p>❖ WG on African Monsoons [WG-AFM] (Rajagopal):</p> <p>Activity Highlights:</p> <ul style="list-style-type: none"> WG-AFM Co-chairs have given their recommendations on 2025 membership revisions and potential new co-chairs to IMPO. Details are given under agenda point number 5. WG-AFM's review paper on "Modeling of Precipitation over Africa: Progress, Challenges, and Prospects", <i>Advances in Atmospheric Sciences</i>. DOI: 10.1007/s00376-024-4187-6 <p>❖ WG on American Monsoons [WG-AMM]: - (Leila)</p> <p>Activity Highlights:</p> <ul style="list-style-type: none"> Ruth has cancelled the November 2024 Workshop on the American Monsoons in Mexico for which ICTP has provided some funds. She has also informed her decision to quit the Monsoons Panel on 18th Sept by an email. Alice Grimm is putting together the special edition for the journal "Advances in Atmospheric Sciences" on the South American monsoon.

3	<p>Updates from IMPO (Rajagopal):</p> <p>1) Activity Highlights:</p> <ul style="list-style-type: none"> IMPO organized an online meeting of the International Scientific Committee (ISC) for the 8th WMO International Workshop on Monsoons (IWM-8) on 11th October 2024 to discuss on the abstract evaluation process and extension of abstract submission deadline IMPO participated in the online GEWEX Scientific Steering Group (SSG) meeting on 16th October 2024 and provided an update on the recent activities of CLIVAR/GEWEX Monsoons Panel. A summary of the meeting proceedings was provided to the Co-chairs of the Monsoons Panel. IMPO finalized the 2025 Membership revision proposal of Working Group on Asian-Australian Monsoons (WG-AAM) on obtaining approval from CLIVAR/GEWEX Monsoons Panel. Formal appointment letters were issued by IMPO to the 12 continuing members and to the 5 new members on 17th October. IMPO is playing a key role in the organization of the Eighth WMO International Workshop on Monsoons (IWM-8) at IITM Pune, India to be held during 17-21 March 2025: Played a key role in the creation of the abstract evaluation Google Sheets, distributing the Google Sheets to the Reviewer Groups of ISC, finalizing the abstract evaluation and notifying the status abstracts to individual participants. <ul style="list-style-type: none"> <i>Total Number of Abstracts Received: 294</i> <i>Abstracts Selected for Oral Presentation: 68</i> <i>Abstracts Selected for Poster Presentation: 225</i> Played a key role in drafting the scientific programme of the workshop Rajagopal and Susmitha Joseph participated in the IMS Pune Chapter's Annual Monsoon Workshop 2024 organized at SPPU, Pune on 18th October 2024. <i>Susmitha Joseph made a presentation on Extended Range Prediction of Monsoon 2024.</i> <p>2) Future Activities:</p> <ul style="list-style-type: none"> IMPO will continue to provide support in the organization of IWM-8 at IITM, Pune. IMPO will work on MP Membership revisions for 2025 IMPO will be working on reconstituting WG-AFM and WG-AMM IMPO will work on finalizing the MP's 2024 Annual Report before the deadline of 31st December set by CLIVAR
4	<p>Discussions on Monsoons Panel's 2025 Membership (Rajagopal):</p> <ul style="list-style-type: none"> IMPO has received 6 nominations from CLIVAR's call and 3 from GEWEX's call. IMPO will finalize the MP 2025 Membership early next month. MP Co-chairs has sought a brief proposal from the nine nominees on their potential contribution to MP's activities. 6 have responded and other 3 have been reminded. Decisions on how many members to be given extension and how many new members to induct is required to be made. <p>Comments from members:</p> <ul style="list-style-type: none"> <i>Surya:</i> As we have sought brief proposal on the potential contribution to MP's activities from nine new nominees, all current members whose term is expiring in 2024 should also give a brief proposal to make the selection process same for all candidates. <i>Surya:</i> A summary on the involvement of MP and WG members in IWM-8, highlighting the ISC members' participation in abstract evaluation, abstract submissions by MP & WGs members, etc. should be incorporated in 2024 MP Annual Report

5	<p>Discussions on WG-AAM, WG-AFM and WG-AMM 2025 Membership (Lead: Rajagopal):</p> <p>WG-AAM: 2025 Membership renewal of WG-AAM was approved by MP on 15th Oct 2024. The 5 new members are:</p> <ol style="list-style-type: none"> 1) Dr. Hui Su (MP Member from HKUST, China) 2) Dr. Hiroshi Takahashi (MP Member from Tokyo Metropolitan University, Japan) 3) Dr. Tim Cowan (BoM/University of Queensland, Australia) 4) Dr. Zizhen Dong (Yunnan University, Kunming, China) 5) Dr. Maheswar Pradhan (IITM, Pune, India) <ul style="list-style-type: none"> • Five existing members Drs. H. Annamalai, Suryachandra Rao A., Usha Tune, Huqiang Zhang and P. Mukhopadhyay who have been rotated off on their request. <p>WG-AFM:</p> <ul style="list-style-type: none"> • The current Co-chairs (Akinsanola and Rodro) have recommended the renewal of the 7 members for the next term, given their active participation and contributions throughout their tenure: <ol style="list-style-type: none"> 1) Akintomide Akinsanola 2) Rondrotiana Barimalala 3) Paul-Arthur Monerie 4) Ross Dixon 5) Masilin Gudoshava 6) Kenedy Silverio 7) Mojisola Adeniyi • Additionally, they suggested that new members, particularly those based in Africa, be considered for inclusion and that the number of memberships be reduced from the current 21 to an optimum one. They have also suggested 3 potential co-chairs. • IMPO contacted Masilin Gudoshava and Paul-Arthur Monerie and they have agreed to lead the WG from 2025. <p>WG-AMM:</p> <ul style="list-style-type: none"> • The plan is to rotate off all members when their tenure ends on 31st December 2024 as the WG is not performing satisfactorily and start afresh after identifying 2 new Co-chairs to lead the recast working group. This could be finalized in the first half of 2025 only. <p>Comments from members:</p> <ul style="list-style-type: none"> • <i>Surya:</i> There is a need to get feedbacks from WG members if they are satisfied with the support provided by IMPO. Suggestions for any additional support will be useful.
6	<p>Discussions on MP 2024 Annual Report (Lead: Rajagopal)</p> <ul style="list-style-type: none"> • The last date for inputs given to WGs is 15th November. WG-AAM report is almost ready. • Have reminded Co-chairs of WG-AFM and WG-AMM for giving their inputs urgently. • IMPO's target for submission of Annual Report to CLIVAR is 20th December. <p>Comments from members:</p> <ul style="list-style-type: none"> ○ <i>Leila:</i> Collaborations between members was expected this year for writing up the review papers for the special issue of Advances in Atmospheric Sciences. The status of this collaboration will be revealed in this AR. We need to be more proactive in reinvigorating the American Monsoons working group ○ <i>Thea:</i> The MP webinars were good in increasing the visibility of MP and WGs. We could think of another webinar series in the next year. ○ <i>Rajagopal:</i> Request inputs from all MP members too. ○ <i>Samson:</i> 4 members of WG-AFM (Drs. Akintomide Akinsanola, Aissatou Faye, Ross Dixon and Ismaila Diallo) including me participated in the <u>UCAR Africa</u>

	<p><u>Initiative Workshop</u> held during 21-22 March 2024 at Center Green, Boulder, CO, USA and online. Drs. Akintomide Akinsanola and me were Chairs/Facilitators of the Group Discussions on Climate and Weather respectively. A BAMS article on the workshop has been submitted.</p>
7	<p>Discussions on the Cross-Panel Activities with APARC arising out of Lin Wang's participation in APARC SSG meeting (Lead: Rajagopal):</p> <ul style="list-style-type: none"> The brief report on the Participation of Prof. Lin Wang (WG-AAM) in the APARC SSG meeting held in Jülich, Germany during 28-30 October 2024 along with responses from ACAM Co-Lead Michelle Santee and MP Co-chair (Surya) was presented (Report is given in Apppendix-II) <p>Comments from members:</p> <ul style="list-style-type: none"> <i>Surya:</i> I have informed APAC Co-lead that MP will be happy to contribute to this training school that is going to happen in Bali in 2025. So, most of the MP members can get involved. APAC will circulate and we can discuss on this aspect. They want some MP members give some tutorials on how to analyse model outputs that are totally related to monsoons. There is lot of expertise there in MP itself. WG-AAM may contribute a lot more as it is being held in Bali. They also want MP to be a coordinator of this workshop. So, if anybody is interested to contribute to this workshop, more details will be shared after hearing from ACAM. <i>Surya:</i> So, basically this is a very good initiative that all members should utilize this opportunity and contribute as much as possible to this 6th ACAM workshop in Bali, Indonesia. This could be one of the first activity between ACAM and MP. IMPO will send out an e-mail to all the members who wants to contribute. Then MP Co-chairs will look all the responses for MP members and then try to discuss with ACAM Co-Leads (Michelle Santee and Ritesh Gautam) <i>Leila:</i> This a very important problem, not only for the Asian monsoon, but also for other monsoons. ACAM is focusing more on the Asian monsoon, but I am wondering if we could create some space for other monsoons. The American monsoon people have been looking to this the importance of pollution in the stratosphere or even transport of water vapor and all those things that are changing the decomposition of the stratosphere and altering the ozone layer and their feedbacks that we do not understand. So, I am just wondering if we could be a little more open and include other monsoons in the proposed ACAM workshop. <i>Surya:</i> We will request ACAM to include few presentations from other WGs in the workshop.
8	<p>Any other business:</p> <ul style="list-style-type: none"> <i>Surya:</i> Under the cross-panel activity with <u>SynObs Project's Observing System Evaluation Task Team</u>, the impact of different ocean observations on model simulations, particularly of Asian monsoon and Indian monsoon is ongoing. The results of this evaluation will be presented next year to MP. <i>Samson:</i> Update on the East African Observational Proposal: <ul style="list-style-type: none"> The scientific review of the proposal went off well The lab that operates the observational facility has decided that it is not safe for them to go and deploy in Kenya due to the current political instability in Kenya and they have suggested to locate the site on the western side of Victoria Lake in Rwanda. So, a revised proposal with new locations will be submitted <i>Surya:</i> On an invitation from <u>CLIVAR/ IOC-GOOS Indian Ocean Regional Panel (IORP)</u>, I made a presentation on the skill of the models in predicting Asian monsoon, especially Indian summer monsoon. As a follow-up IORP and WG-AAM will work together to create

	<p>a document suggesting the future requirements to improve the monsoon prediction skill. Maheswar Pradhan (new Member WG-AAM) will also be associated in it.</p> <ul style="list-style-type: none"> • <i>Rajagopal</i>: As few of the WG-AAM and MP members will be attending IWM-8 in-person, a cross-panel meeting between MP and IORP may be planned after determining how many IORP members will be attending IWM-8. I shall update the likely IORP members from the abstract submissions made. • <i>Leila</i>: There is this <u>14th International Conference on Southern Hemisphere Meteorology and Oceanography</u> organized by AMS in Cape Town, South Africa during 31 March to 4 April 2025, which is expected to bring people doing research on Southern Hemisphere. Interested members can still apply as the Abstract deadline is 20th November 2024 • <i>Leila</i>: I have interest in African monsoons. I have been working with colleagues and new projects to specifically investigate the West African monsoon. I have a student from Nigeria. I have worked with the Climate Hazard Center, UCSB in doing predictions for the African monsoon, so the idea is to improve the sub seasonal predictions for the region my student is doing well, and he would be interested in getting involved in discussions on improving predictions of extreme variability of the monsoon on sub seasonal time scales. • <i>Hui Su</i>: I going to attend the GPEX meeting just right before the AGU in December 2024, As I am the Co-chair for the data part of GPEX, I will also keep MP in mind so that MP members can contribute. Samson and Annalisa will also be attending the GPEX meeting. • <i>Annalisa</i>: I will be the Co-chair GPEX SSG with effect from 1 January 2025. • <i>Samson</i>: We have a network of African Scientists who work on African monsoons, if anyone (like Leila or her new student) wants to be included in the mailing list, so that they can know what is going in African climate discussions. • <i>Rajagopal</i>: WG-AFM is looking for new members and this opening can be circulated in this network of African Scientists for getting some active members into the WG.
9	<p><i>Date/time of next meeting:</i></p> <p>The next meeting will be in the second half of January 2025 at a time convenient to Europe and African Continent</p>

NEXT MEETING

Meeting Number	2025-1	Meeting Time & Date	14-16 UTC in the 2 nd half of January 2025
Location	MS Teams Online Meeting		

The screenshot shows a Microsoft Teams meeting in progress. The main window displays a document titled "Monsoons Panel Notebook" with the following content:

MP: 2024-7 (12 November 2024)
24 October 2024 11:42

Monsoons Panel (MP: 2024-7) Online Meeting on 12th November 2024 (15:30-17:30 UTC)
Draft Agenda

1. Opening remarks (Leila, & Surya) - 4 min
2. Updates from WGs
 - WG-AAM (Thea) - 5 min
 - WG-AFM (Rondro) - 5 min
 - WG-AMM (Leila) - 5 min
3. Update on IMPO activities (Rajagopal) - 5 min
4. Discussions on MP 2025 Membership (Lead: Leila/Surya) - 10 min
5. Discussions on WG-AAM, WG-AFM and WG-AMM 2025 Membership (Lead: Rajagopal)
6. Discussions on MP 2024 Annual Report
7. Discussions on the Cross-Panel Activities with APARC arising out of Lin Wang's participation in APARC SSG meeting (Lead: Rajagopal) - 10 min
8. Any other business - 2 min

The bottom of the screen shows a video player with the title "CLIVAR_GEWEX Monsoons Panel Meeting (MP_ 2024-7) during 15_30-17_30 UTC..." and a list of participants: E N Rajagopal, Jhan-Carlo Espinoza, SU Hui, Thea Turki..., Satyaban..., Leila Carv..., ANNALIS..., Ajaya Rav..., Suryachan..., Hagok, S..., and Rupa Ku....

The screenshot shows a Microsoft Teams meeting in progress. The main window displays a grid of participants. The participants are:

- E N Rajagopal
- SU Hui
- ANNALISA CHERCHI
- Leila Carvalho
- Thea Turkington
- Ajaya Ravindran

The bottom of the screen shows a video player with the title "CLIVAR_GEWEX Monsoons Panel Meeting (MP_ 2024-7) during 15_30-17_30 UTC..." and a list of participants: E N Rajagopal, Jhan-Carlo Espinoza, SH, Hagok, Samson M, SR, Satyaban B Ratna, Suryachandra Rao, and Ajaya Ravindran.

Screenshots of the in-progress online MP meeting held on 12th November 2024

A Brief Report on the Participation of Prof. Lin Wang (WG-AAM) in the APARC SSG meeting held in Jülich, Germany during 28-30 October 2024

I delivered my talk on the morning of the first day. In addition to the information shown in the PPT file, I summarize Monsoons Panel's (MP's) activity during the past ~12 months into two aspects:

1. Link research to operation (i.e., help with the regional climate prediction and Steer regional monsoon research), which include four bullet points:

- (1) Write joint papers summarizing the main characteristics and reasons for the 2022-2023 monsoon.
- (2) Attend and support the regional climate outlook forum (e.g., SASCOF).
- (3) Find weaknesses in climate prediction and bring them to the science community.
- (4) Identify priorities in monsoon research

2. Knowledge exchange and Education for the ECRs

- (1) Webinars.
- (2) Organize sessions in GEWEX OSC meetings 2024.
- (3) STIPMEX, with APARC (APARC mentioned this meeting and the support from MP and IMPO)
- (4) IWM-8 Workshop (I advertised the workshop and invited attendance from the APARC community)

I also informed the MP's willingness to collaborate with the APARC and the broader community in the following two aspects:

- 1) Seek new insights to improve monsoon's understanding and prediction, such as stratospheric process and interactions between dynamical & atmospheric components.
- 2) Participate in the ACAM bi-annual workshop and training school.

I believe that our message and willingness to collaborate more closely with the community has been well received. **Here are some items that I especially want to draw your attention.**

1. The collaboration with the ACAM of APARC

On the one hand, the research priorities of ACAM and MP are complementary, so there is large room for potential collaborations, such as the influences of monsoon circulation on atmospheric components (e.g., pollution) and the influences of the opposite way. I think we may encourage scholars from our community to work on this direction. On the other hand, ACAM has a bi-annual workshop and training school series to help capacity building, especially for the Global South. I think MP should consider contributing to this. There will be another Workshop in [June 2025](#) in Bali, Indonesia. I strongly suggest that someone from MP or three WGs participate and deliver at least one lecture. More details of the workshop's theme can be discussed with Michelle (michelle.l.santee@jpl.nasa.gov).

2. Potential collaborations with other APARC activities.

There are three more activities in APARC that focus on dynamics (<https://www.aparc-climate.org/activities/dynamical-variability/>), predictability (<https://www.aparc-climate.org/activities/assessing-predictability/>), and attribution (<https://www.aparc-climate.org/activities/leader-large-ensembles-for-attribution-of-dynamically-driven-extremes/>). We may consider collaboration with them to tackle monsoon-related problems.

3. The Dakar training school to be organized in late 2025

APARC is organizing a second training school in November or [December 2025](#) with the theme "Data Science for Weather and Climate Research in the Global South". We may consider contributing to this event. More details can be obtained from Dr. Mohamadou Diallo, a member of the APARC Office (aparc-office@fz-juelich.de).

ACAM Co-lead Dr. Mitchell Santee's Response to the Prof. Lin Wang's Brief Report:

It was great to meet Lin in Jülich, where the potential overlaps in the research priorities of the MP and the ACAM APARC activity were discussed, as Lin nicely summarized in his message.

In particular, as Lin noted, encouraging and assisting in the development of early-career scientists (especially those from the Global South) is a vital part of ACAM's mission to help build a vibrant community of researchers studying the Asian monsoon and its regional and global impacts. To that end, Training Schools for early-career scientists, including PhD/Masters students and postdoctoral scholars, are conducted in conjunction with the biennial ACAM Workshops. The next ACAM Training School and Workshop will take place during the week of 9-13 June 2025 in Bali, Indonesia. The first two days will be devoted to the Training School, followed by the Workshop. ACAM Training Schools typically involve lectures on topics related to monsoon and air pollution science (e.g., operational satellite instruments, chemistry-transport models, etc.), and they also include practical modules to build associated real-world skills (e.g., processing and visualizing satellite data and model and reanalysis fields using open-source tools and visualization platforms). The call for applicants for next year's Training School will go out within the next couple of months, and we expect to select 35–40 early-career participants. We would be absolutely delighted to have someone from the MP involved in the Training School, either as a coordinator helping to arrange the sessions or as an instructor/lecturer (and of course their participation in the Workshop would be extremely welcome as well). I have cc'ed here the other ACAM Co-Lead, Ritesh Gautam, to keep him in the loop on these discussions.

By the way, I mentioned this issue to Lin when we spoke last week, but it is good if everyone on this correspondence understands a peculiarity of the situation with my email: unfortunately, because of a law passed by the US Congress, as someone with a NASA email address, I cannot directly send/receive any emails to/from anyone at a Chinese institution (i.e., from a .cn address). There is absolutely nothing that I can do about this restriction (believe me, I have tried). As a result, although I was cc'ed on Lin's original message, I did not receive it (it was blocked by my institution's mail server). Lin will not have been informed that his message did not get through to me. For a time, I could not even receive any emails from a third party that contained a .cn address in the cc list, but at least that limitation has been relaxed, so I did get the message from Rajagopal, which fortunately included Lin's initial message. In addition, I believe it possible (if not likely) that the JPL mail server will block the transmission of emails from me to Lin. Thus, it would be helpful if Rajagopal or someone else in the recipient list could reply all to ensure that he sees this response. I am very sorry for the inconvenience that this constraint causes (but please excuse me if I appear to be ignoring messages originating from .cn addresses – I simply will not have gotten them).

I will be very happy to discuss MP involvement in the upcoming Training School / Workshop in more detail, and I look forward to strengthening the connection between ACAM and the MP in general going forward.

MP Co-chair (Surya) response to Dr. Mitchell Santee's mail

Thanks for your mail and invitation to participate in upcoming Training workshop in Bali in 2025. MP will be very happy to contribute to this training school and workshop both as coordinator and lecturer/instructor. We have scheduled our next MP meeting on 12th November, and we will discuss this proposal at length. Leila and I will get back to you on specifics of how MP can contribute to this activity immediately after our MP meeting.