

## Minutes of CLIVAR/GEWEX Monsoons Panel Meeting

### MEETING INFORMATION

Meeting Number	2025-2	Meeting Title	CLIVAR/GEWEX Monsoons Panel Meeting
Objective/Purpose	Discuss on the Agenda Items and progress on action items		
Time & Date	11 March 2025 06-08 UTC	Venue	Microsoft Teams Video Conference

### MEETING DETAILS

Chairperson(s)	Leila Carvalho (MP Co-Chair)	Rapporteur	E.N. Rajagopal
Attendees	<b>MP:</b> Leila Carvalho, Rondrotiana Barimalala, Annalisa Cherchi, Satyaban Ratna, Hui Su, Thea Turkington, Hanh Nguyen, Fengfei Song <b>IMPO:</b> E.N. Rajagopal, Rupakumar Kolli <b>ICPO:</b> Agus Santoso, Di Zhang		
Absentees	<b>MP:</b> Suryachandra Rao A., Vasubandhu Misra, Jhan-Carlo Espinoza, Luis Brito-Castillo, Samson Hagos, Hiroshi Takahashi <b>IMPO:</b> 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
21 April 2025	Reconstitution of WG-AFM after consultations with various stakeholders	WG-AFM new Co-chairs, MP & IMPO
30 April 2025	Reconstitution of WG-AMM after consultations with various stakeholders	WG-AMM new Co-chairs, MP & IMPO
As and when required by MP	WGs to provide PPT slides of their scientific results for projecting in MP's presentations in CLIVAR/GEWEX SSG and WCRP JSC meetings	WGs, MP Co-chairs & IMPO
Next MP meeting	Members to present their views on the proposed MP's new Observational cum Modelling project planned to be submitted to CLIVAR/GEWEX/WCRP for approval/funding	MP members

Deadline	Action	Responsible
Ongoing	Members to actively get involved in GPEX and its Working Groups' activities by providing ideas for the experiment and supporting in the augmentation of existing precipitation datasets.	MP and all WGs

## AGENDA AND KEY OUTCOMES

Agenda Point	Description
1	<p><b>Opening Remarks (Leila):</b></p> <ul style="list-style-type: none"> <li>Leila (Co-Chair) welcomed all the members to the meeting. All members briefly introduced themselves for the benefit of the new members.</li> <li>Screenshots of the in-progress online meeting can be found in Appendix-I.</li> </ul>
2	<p><b>Updates from the Regional Working Groups:</b></p> <p>❖ <b>WG on Asian-Australian Monsoons [WG-AAM]: - (Thea)</b></p> <p><b>Activity Highlights:</b></p> <ul style="list-style-type: none"> <li>Last WG meeting held on 5 Feb 2025</li> <li>Subgroup brief updates: <ul style="list-style-type: none"> <li>Subgroup 1: Working on cold surge and its teleconnections. Lin Wang, Hui Su, and Zizhen Dong are applying an international project with SEA countries (see external activities)</li> <li>Subgroup 2: continued progress on the Southeast Asia Monsoon Index paper (presenting at IWM-8 results), as well as a second paper.</li> <li>Subgroup 3: New co-lead Raghu – co lead (with Kieran). Restarted work on paper (plan to discuss at IWM-8).</li> </ul> </li> <li>Presentations of Monsoon 2024 (presentations that were not able to be presented at the earlier meeting) <ul style="list-style-type: none"> <li>Raghu presented the state of the Indian monsoon in 2024, noting a large number of storms in late summer which is rather unusual.</li> <li>Thea presented on the Southeast Asian monsoon (reviews from ASEANCOF, 2023/2024 boreal winter monsoon and 2024 boreal summer monsoon)</li> <li>Lin proposed to write a paper to summarize the 2024-25 AAM. Many members from the AAMWG and MP volunteered to join, although as yet to have a lead for the paper.</li> </ul> </li> <li>IMPO website update: <ul style="list-style-type: none"> <li>Write up on the Asian Australian Monsoon has been updated, Gill submitted to Rajagopal for IMPO's use on its website. This was legacy work from a few years ago.</li> </ul> </li> <li>Related external activities: <ul style="list-style-type: none"> <li>MP-ACAM Workshop in SE Asia – members were encouraged to participate but the lack of funding is a likely constraint</li> <li>Maheshwar submitted a proposal of training workshop at IITM with CLIVAR funding.</li> <li>Lin proposed an international collaboration project among EA and SEA countries. Zizhen Dong is leading the writing, with Lin Wang and Hui Su as team members.</li> </ul> </li> </ul> <p><b>Comments from members:</b></p> <ul style="list-style-type: none"> <li><i>Hui Su:</i> It is an international project like a collaborative project sponsored by the National Science Foundation of China. It requires at least the three</li> </ul>

different countries and so, we reached out to Professor Jinhui Wang in NTU, Singapore and a Collaborator in Vietnam. The project is going to focus on S2S prediction of like extreme weather (floods, drought, and heat waves). The proposal is almost ready and will be submitted by end of March 2025.

- *Leila*: As usual, excellent progress in working group's activities. Both CLIVAR and GEWEX have been recommending about starting collaborative projects by MP with other groups. WG-AAM's this international project is in line with what is expected for the working groups.
- *Rajagopal*: The working group on Asian Australia Monsoons has completed their new write-up for the IMPO webpage. Still awaiting the new write-ups from other working groups and MP. Request to expedite the same.

#### ❖ **WG on African Monsoons [WG-AFM] (Rondro):**

##### **Activity Highlights:**

- Our last meeting was in November. The work in Group has been kind of inactive since then.
- Some of the working group members have been active with Cross-panel activities with EPSEC LHA. There is a group of members planning to do a case study for Africa and a lot of the previous members of the working group are involved in that.
- There is also the CORDEX-Africa and RIfS joint meeting planned to be held in September 2025 and a lot of the past working group members are involved in it.
- Lastly, Rondro went to the Scoping Meeting for the IPCC Seventh Assessment Report (AR7) in Kuala Lumpur, Malaysia during 9-13 December 2024, and Rondro is selected into the Working Group 1.

##### **Comments from members:**

- *Rajagopal*: Working group on African monsoons is being reconstituted. We have two new coaches, Paul and Masilin. In response to the Open Call sent out through IMPO, the co-chairs received 33 applications. They have accepted everybody and sent them an invitation to join the working Group without taking approval from the Monsoons Panel. Which is not the right way. Hence, IMPO informed Paul and Masilin about it and asked him to collect filled-in nomination forms from all of them and reduce the number of members. The previous co-chairs believed 21 is itself a large number. I hope to discuss with Paul next week as he will be coming to IWM-8.

#### ❖ **WG on American Monsoons [WG-AMM]: - (Leila)**

##### **Activity Highlights:**

- The working group has 2 new Co-chairs (Michelle and Caio)
- An open call for membership has been advertised by IMPO with a deadline of 15<sup>th</sup> March 2025
- There was a meeting between the Co-chairs and MP Co-chair (Leila). The co-chairs have many ideas and are responsive. They are trying to get more Members interested in the North American monsoons. Michelle has some ideas already on the activities of the WG, viz., building networks, building capacity, etc. She has been working a lot on building capacity and creating webinars, activities which are very important. This could help in connecting more to operational activities.

##### **Comments from members:**

- *Thea*: It is great to hear about the exciting developments in the Americas. Will, either of the Co-chairs be joining this panel?
- *Rajagopal*: We could invite them as special invitees. To become formal member of MP, they will have to wait till next year, 2026. There is already an issue raised by both CLIVAR and GEWEX that we do not enough representation from Africa in the Panel.

	<ul style="list-style-type: none"> <li>• <i>Rajagopal:</i> In response to the Open Call for 2025 Membership in WG-AMM, till date only around 10 nominations have been received. IMPO will work on the nominations only after IWM-8 is over.</li> <li>• <i>Leila:</i> It would be nice to diversify a little bit. Have people from different countries other than Brazil. We want more other countries in Latin America being represented in the working group to make sense. It may be good to invite some people from the previous the working group to join again.</li> <li>• <i>Thea:</i> WG-AAM has a quite several members from the operational centres. Curious to know how WG-AMM is going to involve people in operations in the WG.</li> <li>• <i>Leila:</i> We thought about people to invite who could help us to do this, this bridging. It is not easy because we end up getting more people from academia. The tradition with WG-AAM is different because they have more people working in different institutions that are part of the working group. Building those kinds of things is challenging for WG-AMM. Sharing experiences is important. That might be a reason why it is important to have one of the Co-chairs of WG-AMM attending MP meetings, then members from the Asian Australian Working group who participate in MP meetings could help.</li> </ul>
3	<p><b>Updates from IMPO (Rajagopal):</b></p> <p><b>1) Activity Highlights:</b></p> <ul style="list-style-type: none"> <li>• IMPO is playing a key role in the organization of the Eighth WMO International Workshop on Monsoons (IWM-8) at IITM Pune, India being during 17-21 March: <ul style="list-style-type: none"> <li>◦ Organized an online meeting with the Co-chairs of IWM-8 ISC, WCRP and WWRP officials to finalize the IWM-8 programme schedule for Orals and Posters on 23<sup>rd</sup> January.</li> <li>◦ Subsequently the schedules of <u>Oral Presentations</u> and <u>Poster Presentations</u> were made public in <u>IWM-8 webpage</u>.</li> <li>◦ The meetings of the Local Organizing Committee of IWM-8 were organized on 5<sup>th</sup> February, 19<sup>th</sup> February &amp; 4<sup>th</sup> March 2025 and subsequently, the minutes of the meeting (MoM) were circulated. The next LOC meeting is scheduled on 11<sup>th</sup> March afternoon.</li> <li>◦ Coordinated with the IT Support Team to creation, activation and resolving issues of the <u>IWM-8's Registration Fee Payment Portal</u></li> <li>◦ Created the first version of <b>IWM-8 Abstracts Volume</b> of Oral and Poster presentations.</li> <li>◦ Played a key role in drafting the invitation letters to invited speakers and special invitees.</li> <li>◦ Played a key role in finalizing the contents for IWM-8 Banner and Standees</li> </ul> </li> <li>• IMPO played a key role in the organization of the CLIVAR/GEWEX Monsoons Panel's online meeting held on 22<sup>nd</sup> January 2025 <ul style="list-style-type: none"> <li>◦ Organized the MS teams meeting. Video recording was shared with all members after the meeting.</li> <li>◦ Minutes of the Meeting (MoM) were finalized and circulated.</li> </ul> </li> <li>• IMPO created the Doodle poll and notified to all MP members to ascertain the preferable date/time of the next MP meeting in March 2025 during 6-8 UTC</li> <li>• Contributed significantly to the drafting and finalization of the MP's Annual Report for the year 2024 for GEWEX SSG, with support of Co-Chairs of MP and WGs. Subsequently, the Annual Report were submitted to the GEWEX SSG.</li> <li>• Created PPT on CLIVAR/GEWEX Monsoons Panel's activities in 2024 for presentation in the GEWEX SSG meeting by MP Co-chair (Leila) on 10<sup>th</sup> February.</li> <li>• Supported MP Co-chair (Surya) in finalizing the PPT for CLIVAR SSG online meeting held on 3<sup>rd</sup> March 2025.</li> <li>• IMPO issued letters to inform all the members of the Working Group on American Monsoons on the decision to reconstitute the working group by the CLIVAR/GEWEX Monsoons Panel.</li> </ul>

	<ul style="list-style-type: none"> <li>○ IMPO prepared and advertised an <u>Open Call for new Memberships</u> to the CLIVAR/GEWEX Monsoons Panel's Working Group on American Monsoons in IMPO webpages and circulated the advertisement to other networks.</li> <li>• IMPO advertised the 6<sup>th</sup> International Workshop and Training School on Atmospheric Composition and the Asian Monsoon (<u>ACAM 2025</u>), Bali, Indonesia during 9-13 June 2025 in <u>IMPO webpage</u> on the request from the organizers.</li> <li>• IMPO participated in the Monsoons Panel's Working Group on Asian-Australian Monsoons online meeting held on 5<sup>th</sup> February 2025 and provided suggestions on the proposal for holding a training school by the group with CLIVAR's financial support in 2026. The final proposal submitted by WG-AAM was forwarded to ICPO on 3<sup>rd</sup> March 2025.</li> <li>• IMPO advertised the 6th International Workshop and Training School on Atmospheric Composition and the Asian Monsoon (ACAM 2025), to be held in Bali, Indonesia during 9-13 June 2025 in IMPO webpage on the request from the organizers.</li> <li>• IMPO participated in the WCRP's International Project Offices (IPOs) &amp; WCRP Secretariat Group meeting held on 27<sup>th</sup> February 2025 and presented an update on the IMPO's recent activities.</li> <li>• IMPO provided an update on "Recent Activities and Achievements of IMPO" to IITM for incorporating in the revised IMPO Poster.</li> </ul> <p><b>2) Future Activities:</b></p> <ul style="list-style-type: none"> <li>• IMPO will continue to be busy in the organization of IWM-8 at IITM, Pune.</li> <li>• IMPO will be working on the 2025 reconstitution of the WG on African Monsoons and WG on American Monsoons</li> </ul>
4	<p><b>Suggestions from the recent CLIVAR and GEWEX SSG meetings (Leila):</b></p> <ul style="list-style-type: none"> <li>• The GEWEX SSG meeting was held at Wellington, New Zealand during 10-14 February 2025 which was attended online by Leila and Annalisa on some days. <ul style="list-style-type: none"> <li>○ Discussions were mainly on the activities mentioned in MP's 2024 Annual Report submitted to GEWEX SSG.</li> <li>○ Got good feedback and as usual, GEWEX SSG was trying to engage MP more with other groups.</li> </ul> </li> <li>• Surya attended the CLIVAR SSG online meeting on 3<sup>rd</sup> March 2025 <ul style="list-style-type: none"> <li>○ SSG was very happy with the presentation on MP's activities. They mentioned that there is lot of activity.</li> <li>○ The feedback on MP's Annual Report from CLIVAR SSG is awaited.</li> </ul> </li> </ul> <p><b>Comments from members:</b></p> <ul style="list-style-type: none"> <li>• <i>Annalisa:</i> On the last day, GEWEX SSG were reporting back to the different projects. As both MP Co-chairs were not present, they decided not to report then, but to contact the Co-chairs online separately.</li> </ul>
5	<p><b>Discussions on the MP's contributions to the <u>Sixth International Workshop and Training School on ACAM</u></b></p> <ul style="list-style-type: none"> <li>• <i>Rajagopal:</i> Funding is limited. The Organisers have approached IITM and MoES for funding. One of the members of WG-AAM contacted the organizers for funding and has not been successful.</li> <li>• APARC SSG member from IITM will be attending the workshop.</li> </ul>

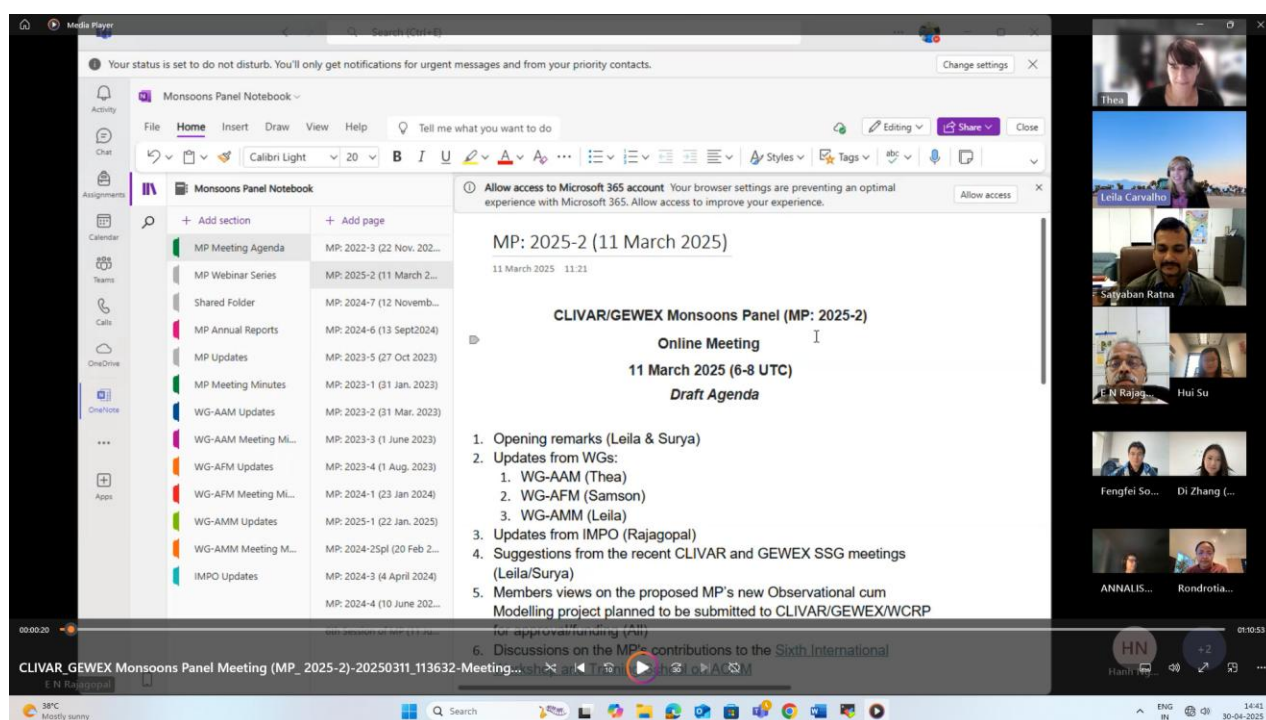
6	<p><b>Discussions on the participation in the Pan-CLIVAR meeting at Bali, Indonesia during 22-26 September 2025 (Rajagopal)</b></p> <ul style="list-style-type: none"> <li>As per the mails from ICPO, CLIVAR expects all their panels including MP to have their next in-person meeting alongside this Pan-CLIVAR meeting and try to identify some cross-panel with other relevant CLIVAR panels through in-person interactions.</li> <li>As per the schedule which was recently 23<sup>rd</sup> September forenoon is kept for all panel meetings, including monsoons panel.</li> <li>CLIVAR's plans to allocate 10000 USD for each Panel for travel is unsure now due to the 20-30% funding cuts by WMO. CLIVAR's allocation of 5000 USD for MP participation in IWM-8 is unspent, so there should have been 15000 USD from CLIVAR if there were funding cuts.</li> <li>We may try to get another 5000 USD from GEWEX for this meeting as only 5000 USD of the allocated funds for IWM-8 has been spent. So, with 20K USD, at least 8-10 MP members should be able to attend this Pan-CLIVAR meeting.</li> </ul> <p><b>Comments from members:</b></p> <ul style="list-style-type: none"> <li><i>Di Zhang:</i> Getting US funds to support American members, now seems impossible. So, we may try to save some money for allocating to American members to join the Pan-CLIVAR meeting.</li> <li><i>Agus:</i> We also adjusted the event format. Instead of starting panel meetings on the 22<sup>nd</sup> September, it has been moved to 23<sup>rd</sup> September so as to save some cost on accommodation. Members are encouraged to use your own research project funding as CLIVAR cannot provide full support. The US funding situation for UNESCO will be clear by May 2025 – UNESCO funds to WCRP will be known.</li> <li><i>Agus:</i> The Pan-CLIVAR meeting website is ready and has more details on the meeting including registration, travel support, et. (<a href="https://pan-clivar2025.sciencesconf.org/">https://pan-clivar2025.sciencesconf.org/</a>). The one-day CLIVAR Symposium "Bridging Science and Society in Southeast Asia and Beyond" is on 24<sup>th</sup> September.</li> </ul>
7	<p><b>Open Discussion on the ongoing MP &amp; WG activities (All)</b></p> <ul style="list-style-type: none"> <li><i>Satyaban:</i> Attended the CLIVAR Climate Dynamics Panel <u>5<sup>th</sup> Annual workshop</u> in Lorne, Melbourne, Australia during 24-27 March 2025 being a member of CDP. Could meet in-person for the first time some of MP members as well as WG-AAM members. We could discuss on our work that we are planning for the 2024 monsoon.</li> <li><i>Annalisa:</i> <u>GPEX SSG</u> has started having regular meetings. There is an <u>Open Call for Membership of the GPEX Working Groups</u> with a deadline of 31 March 2025. Request more members from MP and WG to join the GPEX WGs of their interest. We are waiting for more members to join the WGs, so that the activities can be better planned and organized. In the meanwhile, we are trying to find connections to campaigns like Eurocon and AsiaPEX.</li> <li><i>Annalisa:</i> If any of the members have any idea that can be taken up by GPEX, the same may be shared. I shall identify a shared document through which ideas can be exchanged by members of MP and its regional WGs.</li> <li><i>Annalisa:</i> The special issue of AAS on global and regional monsoons have received 3 more papers, which are under review. 2 papers are already accepted. Papers can be submitted until the summer 2025.</li> <li><i>Hui Su:</i> The GPEX Working Group 2 (WG-2) in-charge of precipitation data is looking for new members, MP and its WG members are welcome to join. The major objective of the WG-2 is to augment existing precipitation dataset, particularly surface rain gauge data. Augmentation is required in the data sparse regions such as tropics, mountain regions, the cold snow-covered regions, and polar regions. If anyone would like to contribute to this data augmentation effort, we certainly welcome a lot of suggestions and also your involvement in the WG-2.</li> </ul>



	<ul style="list-style-type: none"> <li>• <i>Hui Su</i>: Another kind of specific task for the Working Group 2 is to quantify the different storm types' contributions to gradients in precipitation data particularly from tropical, cyclone, mesoscale convection and atmospheric rivers. We are planning to work using the existing precipitation dataset to study the storm type attribution. It will be very useful for cross-comparison of model simulations with actual observational data. We also want to calibrate the precipitation estimates, based on the storm types, which one of the proposed approaches by GPEX.</li> <li>• <i>Leila</i>: Very interesting. Encourage members to get involved in these types of projects. This is something that could be done by all including the new working groups of Americas and Africa. It would be important to discuss this within the working groups by the co-chairs.</li> <li>• <i>Hui Su</i>: The precipitation associated with monsoon, is also of the strong interest to GPEX and very relevant too.</li> <li>• <i>Leila</i>: The mesoscale and the atmospheric rivers have a role in producing monsoon precipitation.</li> <li>• <i>Rajagopal</i>: Some of the MP members who have interest in American monsoons (like Leila, Vasu Misra, Luis Brito-Castillo) should be encouraged to join WG-AMM.</li> </ul>
8	<p><b>Members views on the proposed MP's new Observational cum Modelling project planned to be submitted to CLIVAR/GEWEX/WCRP for approval/funding (All)</b></p> <ul style="list-style-type: none"> <li>• <i>Rajagopal</i>: As Surya is unable to attend today's meeting, he has proposed that we can have discussions on this point in the next meeting. I have received Hiroshi's views by email as he is unable to attend today's meeting. We can discuss all the views from MP members together in the next meeting.</li> </ul>
9	<p><b>Any other business:</b></p> <ul style="list-style-type: none"> <li>• <i>Satyaban</i>: We can plan a brief in-person meeting of MP and WG members in the sidelines of IWM-8 at IITM, Pune.</li> </ul>
10	<p><b>Date/time of next meeting:</b></p> <p>The next meeting will be in May 2025 at a time convenient to the members from American Continents</p>

#### NEXT MEETING

<b>Meeting Number</b>	<b>2025-3</b>	<b>Meeting Time &amp; Date</b>	16-18 UTC in May 2025
<b>Location</b>	MS Teams Online Meeting		



Screenshots of the in-progress online MP meeting held on 11<sup>th</sup> March 2025