

## Meeting Minutes of CLIVAR/GEWEX Monsoons Panel

### MEETING INFORMATION

Meeting Number	2023-3	Meeting Title	CLIVAR/GEWEX MP Teleconference
Objective/Purpose	Discuss on the Agenda Items below and progress on action items		
Time & Date	1 June 2023 06:00-07:30 UTC	Venue	Microsoft Teams Video Tele-Conference

### MEETING DETAILS

Chairperson(s)	Leila Carvalho & Suryachandra Rao A. (MP Co-Chairs)	Rapporteur(s)	E.N. Rajagopal & Somnath Mahapatra
Attendees	<b>MP:</b> Leila Carvalho, Suryachandra Rao Anguluri, Gill Martin, Thea Turkington, Ruth Cerezo-Mota, Hiroshi Takahashi, Hui Su, Ajay Mohan Ravindran, Pankaj Kumar <b>WCRP Sectt.:</b> Hindumathi Palanisamy and Wushan Ying <b>IMPO:</b> E.N. Rajagopal, Rupakumar Kolli, Somnath Mahapatra, Sushmitha Joseph		
Apologies	<b>MP:</b> Annalisa Cherchi, Mary Kilavi, Rondrotiana Barimalala, Shabehul Hassan, Salvatore Pascale,		

### 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
30 June 2023	Organisation aspects of the first WCRP MP Webinar Series	MP Co-chairs, IMPO & WCRP Sectt.
15 July 2023	Send doodle poll for the next meeting by teleconference, preferably in the fourth week of July 2023	IMPO

## AGENDA AND KEY OUTCOMES

Sl. No.	Description
1	<p><b>Opening Remarks (Leila &amp; Surya):</b></p> <ul style="list-style-type: none"> <li>Leila (Co-Chair) welcomed all the MP members and IMPO members present in the third meeting of the Monsoons Panel in 2023 (MP 2023-3). A screenshot of the in-progress online meeting showing the participants can be found in Appendix-I.</li> <li>Leila also welcomed Hindumathi and Wushan Ying from WCRP Secretariat. and requested them to introduce themselves briefly.</li> </ul>
2	<p><b>Introductory Remarks from WCRP Secretariat members:</b></p> <ul style="list-style-type: none"> <li>Hindumathi introduced herself by mentioning that at the WCRP Secretariat, she is responsible for supporting three of WCRP's Core Projects, CLIVAR, GEWEX and SPARC. She is now keen to get involved in MP's activities.</li> <li>Wushan Ying introduced himself by mentioning that he will work as an intern in WCRP Secretariat for one year. He will support monsoon precipitation and hydrology activity at WCRP Secretariat, mainly assist in Monsoons Panel's activities. He is also a Ph.D. student from China focussing on the East Asian Monsoon and he is willing to discuss some advances in Monsoon Research with the members.</li> </ul>
3	<p><b>Updates from the Regional Working Groups:</b>  <b>(A) WG on Asian-Australian Monsoons [WG-AAM]: - (Gill Martin)</b></p> <ol style="list-style-type: none"> <li><b>1) Activity Highlights of the Monsoon Processes &amp; Teleconnections (MPT) sub-group:</b> <ul style="list-style-type: none"> <li>Draft paper on S2S model prediction skill is ongoing.</li> </ul> </li> <li><b>2) Activity Highlights of the R2O for monsoon seasons in SE Asia (R2O) sub-group:</b> <ul style="list-style-type: none"> <li>The R2O group has had two meetings since Feb, during which there were in-depth discussions about specific issues with our working definition of the South-East Asian Monsoon Progression Index (SEAMPI).</li> <li>Thea and Donaldi separately tested the SEAMPI definition on NCEP reanalysis and ERA datasets. We realised that certain regions within Southeast Asia are sensitive to the nominal definition of the windows in which we look for the onsets and terminations of northerly and southerly monsoons.</li> <li>This is an outstanding problem which we shall further address in the next meeting which takes place in less than two weeks' time.</li> </ul> </li> <li><b>3) Activity Highlights of the High impact weather events (HIW) sub-group:</b> <ul style="list-style-type: none"> <li>In our May meeting we discussed both the forecast versus actual monsoon conditions in 2022 and the outlooks for summer 2023. For this year, seasonal outlooks indicate a largely dry season in Nepal, normal-to-dry (with late onset) over India. Forecasts for China show regional variations with dry/hot conditions in the Yangtze River valley with wetter in southern China (due to more landfalling cyclones) and wetter over the eastern Tibetan Plateau.</li> <li>The disconnect between seasonal outlooks, which are for the country and season as a whole, and the variability on sub-seasonal and medium-range timescales, plus extreme events, that are experienced on the ground, were discussed.</li> <li>Some countries, e.g., Nepal, have no capacity for creating sub-seasonal outlooks, despite a pressing need for landslide and lightning forecasts.</li> <li>There is a lack of consistency in how each regional met service communicates the risks of extreme events, as inferred from the seasonal outlooks, to their stakeholders. Sharing information, and modelling, between different countries might help, but there are issues with models' regional biases (e.g., over Nepal).</li> <li>A draft document will be written on this topic, with examples contributed by WG members documenting the issues based on some benchmark extreme event case in their respective region.</li> </ul> </li> </ol>

#### 4) **Meetings and other activities:**

- Several WG members attended and presented at EGU in April, in the [Monsoons](#) session convened by Andy Turner.
- Surya Rao gave a talk on behalf of the WG-AAM entitled "Status of seasonal predictions for Asian monsoon and how to improve outlook reliability" at the SASCOF (24-26 April, 2023). Several WG members attended and presented seasonal outlooks at this meeting.
- The WG-AAM discussed the proposal for a Monsoons Panel webinar series and provided constructive suggestions:
  - The WG-AAM is in favour of a webinar series for the Monsoons Panel with contributions from the individual WGs.
  - Suggested frequency is bi-monthly or quarterly
  - Needs to be a Monsoons Panel -led webinar series, with contributions from each of the WGs either individually or in combinations according to topic.
  - Start with an introductory webinar (by co-chairs of MP and WGs) at the start of the series to introduce the Panel and WG goals, ways of working etc.
  - Suggest rotating topics to cover e.g., monsoon status reports, cutting-edge research, operational activities, making use of synergy with other meetings.
  - WGs (and subgroups thereof) would contribute according to topic, but with expectation that requirement from individuals (as part of those groups) would be to contribute to ~1 webinar per year.

#### 5) **Upcoming Meetings**

- Next full WG-AAM meeting will be held in early June. This will include talks on the northeast monsoon during winter 2022/23 and on the outlooks for monsoon 2023.

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

- *Hui Su:* Is the Seasonal outlook for the summer based on some model simulations, can people access that forecast?
- *Surya:* The seasonal outlook is generated from the various dynamical models and some empirical models. So, there is a package that the whole group runs and makes those forecast. As it is not a single dynamical model forecast, model data is not available, but final outlook with grid wise probabilistic distribution of rainfall and temperature is available in [https://mol.tropmet.res.in/year2023/imd-reports/SASCOF25\\_JJAS2023\\_28April2023.pdf](https://mol.tropmet.res.in/year2023/imd-reports/SASCOF25_JJAS2023_28April2023.pdf)

#### **(B) WG on American Monsoons [WG-AMM]: - (Ruth)**

##### 1) **Activity Highlights:**

- Still waiting for the replace/vacancy of Mary Kayano (Alice has not nominated anyone)
- Have applied for a grant from the ICTP for a workshop in 2024 in Mexico (funding requested for 3 speakers, 4 participants, and Alice)
- Will also apply to CORDEX grants (for the same workshop)
- Looking for suitable venues for the meeting in Merida, Yucatan, Mexico
- Tentative dates October 2024 (mainly due to local weather and is not yet high season so flights will be cheaper)

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

- *Leila:*
  - We discussed a couple of things in last meeting with Co-chairs in February 2023. I do not think that those things have been evolved. How to engage more the community in charge of seasonal forecasts. I think that activities that we see happening in the WG-AAM unfortunately are not happening in the WG-AMM.
  - Alice also had an idea of writing a paper or doing research to see how good are the models that are used in South America, forecasting for S2S scale. I do not see much, of this progressing, but I think may be the workshop will help put things together too. People have been a little disconnected for a couple of years due to

Covid-19. It is important that we have these workshops and more research, including more countries in South America interested in monsoons.

- *Surya:*
  - It looks like the WG-AMM is mostly trying to get a physical meeting to happen, for which funds are not easy get these days.
  - The WG-AAM has created few sub-groups and they are working very seriously. WG-AMM should initiate their activities on the similar lines immediately, once they do something then it can become a strong case for holding workshop afterwards.
- *Leila:* The replacement for Mary Kayano must be from an operational background so that the disconnect between researchers in the group with operational activities can be reduced.
- *Surya:* In case the WG-AMM Co-chairs are unable to identify a person, MP can suggest a person
- *Hindumathi:* I was just wondering, Surya attended the GEWEX SSG meeting, and it was based in the South American continent and to my understanding his presentation on the monsoons panel gathered a lot of interest. So, do you think there could be someone who attended the meeting and who is working closely on the monsoon aspect, who could also fit in to this specific WG? Do you think there could be someone from there who could also be a way to connect more with the local community there?
- *Surya:* Actually, some people have come forward to be part of the working group. I do have some their e-mail contacts. Lot of people have shown lot of interest; however, they are unaware that there is a working group on American Monsoons as its activity is not much.
- *Rupakumar:* On the number of members in each working group, we have the different working groups having different sizes and there is no limit because we normally do not support meetings of these working groups and there are no financial implications for WCRP. So, in that sense, I think looking for a number with an open-ended requirement of expertise may not be really bringing any special benefit and what I would suggest is that to look at the current memberships and then see if some specific expertise or influence is missing and then see among the community who can bring that expertise into the working group. So, it is a bit of complex exercise, but at the same time it requires good understanding of the locally available expertise, particularly on the American monsoons. Another factor is that it is not necessary that members should be located within the American monsoon region. We do have members working elsewhere, but at the same time having expertise on the regional monsoons and supporting our working groups of AAM and AFM.
- *Ruth:* I still would prefer if it were possible that someone from the region, who living in the region and experiencing the monsoon be nominated as member. I shall discuss with Alice and subsequently with Leila and come up with a nomination.

**(C) WG on African Monsoons [WG-AFM]: - (Rondro- Absent)**

- Both members (Rondro & Mary) from WG-AFM did not attend the meeting
- There were also no updates in the [Monsoons Panel Notebook](#). Rondro will be requested to update the Notebook.

## Updates from IMPO (Rajagopal):

### 1) Activity Highlights:

- IMPO organized the IPOs & WCRP Secretariat Group meeting on 18th April. Prepared the Meeting notes and made it available online on 20<sup>th</sup> April 2023.
- Participation in SASCOF-25 Session on 27<sup>th</sup> April 2023. The first session on “Seasonal Prediction of South Asian Summer Monsoon (JJAS season) 2023: Country Perspectives” was chaired by Rupakumar (IMPO). Surya made presentation on the behalf of MP on “Status of seasonal predictions for Asian monsoon and how to improve outlook reliability”
- Successful organization of a 2-hour online meeting with Stakeholders, WGTMR & IMPO to identify the needs and gaps in S2S monsoon prediction for agricultural management on 28<sup>th</sup> April 2023. A [S2S Stakeholders Notebook](#) was created using Microsoft 365 OneNote on tropmet.onmicrosoft.com for viewing/uploading the meeting relevant documents.
- Surya attended GEWEX SSG-35 meeting in Santiago, Chile during 1-4 May 2023 with GEWEX Travel Support.
- IMPO finalized MP’s add-on report for GEWEX SSG-35 meeting and forwarded to GEWEX
- Finalized IMPO’s Report for JSC-44 and submitted to WCRP along with the proposal for “International Monsoons Summit”.
  - 3-day “International Monsoons Summit” is proposed to be organized by IMPO/IITM jointly with Monsoons Panel and WWRP/WGTMR at Pune in late 2024/early 2025.
  - The preliminary budget estimate for the summit is 60K CHF. Support from WCRP has been sought for 25K CHF and another 25K CHF will be sought from WMO/WWRP.
  - Rajagopal attended the WCRP JSC-44 sessions online during 8-11 May 2023.
- Announcement: WMO/WWRP IWM-8 is likely to be held in Brazil in 2026. Michelle Reboita, member of WG-AMM & WGTMR, will explore further in Brazil on the logistics/location etc.

### 2) Future Activities:

- Susmitha will be representing IMPO at the WWRP/WCRP S2S Summit, in Reading, UK during 3-7 July 2023 with WWRP’s IMPO travel funds.
- 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 IMPO’s active involvement in the proposed In-person meeting of MP and WG-AFM during OSC-2023 at Kigali.

### Comments from Members:

*Hindumathi:*

- The funding request to the WCRP to organise the International Monsoon Summit was taken to the JSC at the JSC only meeting that took place on 12<sup>th</sup> May 2023. WCRP will be sending out an official letter to the IMPO soon. What the JSC thinks is that:
  - *the proposal needs to have a detailed explanation on what exactly the monsoon summit is going to address.*
  - *there was not a very clear link between the WCRP and WWRP in the proposal*
  - *and that a draft programme of the main objectives of the summit would be more interesting to see within the WCRP framework how this can move forward.*
- Krishnan also mentioned about the possibility of hosting a stakeholders engagement meeting along with this international Monsoon summit, but this has not been completely clear or concrete. So, the JSC would like to hear more about it from the IMPO.
- As for the funding request, a decision has not been made so far because another aspect that JSC wanted to consider was to for the monsoon panel to engage more with SPARC as they have also shown interest in the monsoon activity. As such the JSC would like to know how exactly the other core projects can merge within this summit aspect.
- Hence, the plan would be to request for a detailed proposal along with these possible collaborations within different core projects of the WCRP. And then once this is sent, I will also seek the opinion from CLIVAR and GEWEX SSGs. For now, CLIVAR SSG has been supportive of this, but they also requested more information on this. The proposal might work if a concrete proposal can be provided.

## Updates from GEWEX SSG-35 meeting (Surya):

- **Recommendations from SSG:**

- GEWEX appreciated the rejuvenation of the working groups.
- Enquired about the American Monsoon working group activities
- Noticed that majority of the activities reported are from WG-AAM and suggested that next review there should be more activities from others WGs
- Encouraged to have cross-panel activities with GEWEX panels
- GEWEX-ANDES has been initiated (American Monsoon may be interested)
- Some collaboration activities were discussed with GASS/GLASS on resolving diurnal cycles in GCMS and routing the river runoff in models.
  - In fact, both GASS & GLASS have been running high resolution models and they never investigated how the monsoons looks like in those models. So, they really want MP to help in analysing their high-resolution models and get back to them to tell them what is missing in the model in respect of monsoons.
- MP needs to focus on the following:
  - Contribution to WCRP, Including the Light House Activities
  - Contribution to the GEWEX Science Questions and Plans
  - Contribution to Developing GEWEX Science and the GEWEX Imperatives
  - Cooperation with Other WCRP Projects, Outside Bodies and Links to Applications
- One member nomination required: who can address/collaborate with SPARC's ACAM (Atmospheric Composition and Asian Monsoon). People who are working on aerosols, stratosphere can volunteer.
- GPEX: More involvement from MP is expected (Analisa is already nominated for Tiger Team). They have also asked for a nomination from MP to AsiaPEX

### Additional Comments from Surya:

- Every member of the GEWEX panels is actively involved in one other two projects and actually they lead their own projects and try to create cross panel activities.
- When it comes to the monsoons panel, that may not be the case. As individual scientists, we are working on our own research problems and now we should try to create projects from those research problems and try to work with another cross panel or within the panel members. Each of us must come up with our own research project and try to find who have the similar interests within the panel and try to work with them and try to see who are the across panels who will be interested.
- I had lot of discussions with GASS and GLASS panels personally and also as a MP member and they showed their keen interest for cross-panel collaborations. Hence, next time when we make the presentation in CLIVAR/GEWEX SSG meetings, we may be able to show that many projects are going on in the panel.

### Comments from Members:

- *Hui Su*: I would like to contribute to the GPEX as I am setting up a surface observing facility in Hong Kong, and I can also connect to people in China. We have in-situ measurements of precipitation, cloud particles and moisture winds, which can be a useful contribution to the GPEX from the MP. Few people in Guangdong and southwest southeast of China, can collect intensive observations at few sites to support the GPEX.
- *Surya*: GEWEX have also asked for a nomination from MP to AsiaPEX. Hui can get in touch with IMPO about interest in GPEX. MP Co-chairs will forward your name to GPEX
- *Hindumathi*: I can add a few things about the GPEX initiative.
  - GPEX Science plan has been accepted by the JSC and the next step would be to distribute the science plan to the wider WCRP community, which means that the monsoon panel will also be receiving the Science plan and WCRP will be requesting to seek input from the members of the monsoon panel itself.
  - It is important specially to establish the regional precipitation activity and one of the plans is also to have AsiaPEX integrated within some aspect of GPEX, because the main aim of GPEX is not to do the science research all by itself, but to connect with coordinated activities in different regions and to have a timeline of what kind of outputs

	<p>can be made use from these regional collaborations. So, in this case, if you are already working on it and you are willing to set up the observational network in your region, I think it will be very important for GPEX.</p> <ul style="list-style-type: none"> <li>▪ So, the plan would be once WCRP sends out the science plan to IMPO or MP, they can communicate with all the members of the MP and seek their input and also at the same time one can also express interest in being a part of the GPEX community.</li> </ul>
6	<p><b>Updates on Monsoons Session at OSC-2023 (Surya):</b></p> <ul style="list-style-type: none"> <li>• Co-chairs: Andy Turner, Suryachandra A Rao, Paola Andrea Arias Gomez (GEWEX, GHP), Tereza Cavazos</li> <li>• Abstracts Received: 50</li> <li>• Keynote Speakers: <i>Roxy Matthew (Asian Monsoon)</i>, <i>Alice Grimm (American Monsoon)</i>, <i>Rondro Barimalala (African Monsoon)</i></li> <li>• Duration of the Session; 120 mins, # keynote Speakers (60 min. 20 mins each)</li> <li>• Brainstorming/concluding session: 20 mins</li> <li>• Paper presentations: 40 mins (4 oral presentations were selected, 10 mins each)</li> <li>• Oral Speakers: <ul style="list-style-type: none"> <li>○ <i>Ibrahim Laouali</i>: How well does MPAS simulate the West African monsoon system</li> <li>○ <i>Pascale Braconnot</i>: Monsoon trend and multi-scale variability changes over the last 6000 years</li> <li>○ <i>Nirupam Karmarkar</i>: Performance assessment of a multi-physics multi-model ensemble strategy in simulating northward propagation of the Indian summer monsoon rainfall</li> <li>○ <i>Chao He</i>: Zonal asymmetric response of northern hemispheric monsoon to global warming</li> </ul> </li> </ul> <p><b>Comments from Members:</b></p> <ul style="list-style-type: none"> <li>• <i>Hindumathi</i>: The OSC concept paper is due end of September. At least 4 weeks before the OSC. Andy Turner has been contacted a few times as he has shown interest to lead it but we haven't had any responses from him yet.</li> </ul>
7	<p><b>Discussions on the In-person MP meeting at OSC-2023 (Lead: Rajagopal)</b></p> <ul style="list-style-type: none"> <li>• <i>Surya</i>: The last in-person meeting of MP was held in December 2019 during the American Geophysical Union conference in San Francisco, USA. So, we want to have an In-person meeting after a gap of 4 years, during OSC-2023 with maximum member participation. Either Rajagopal or Hindumathi can update on the funding available.</li> <li>• <i>Rajagopal</i>: There is only 10,000 USD available for this in-person meeting from GEWEX and CLIAVR together, and we are hoping some people from the global South who submitted papers to OSC will get funded for poster presentations. If not, only maximum 5 people can be accommodated from global S with the available 10000 USD.</li> <li>• <i>Hindumathi</i>: The funding allocations for the OSC, the review has been done, but the allocations have not been finalized because we have sponsors from different regions of the world, and we must check with them if they are ok with funding the participants that have been selected. So, this is take taking a bit longer than we hope for. We wanted to send out the funding information by end of May, but this has been taking more time because the sponsors are also having to review it within their national funding services. So, we hope that in about a week or two maximum time we will be able to respond to the funding request of the participants who have requested for funding by submitting an abstract.</li> <li>• <i>Hindumathi</i>: With respect to the 10K USD that has been allotted to the MP, CLIVAR would like the WCRP to directly get in touch with the MP to arrange the funds. So, once we know about the participants who have already been funded under the OSC, IMPO/MP can shortlist the other participants and send the names to WCRP for the funding arrangements for 5000 USD. In case of GEWEX, the entire annual budget has been transferred to them already, IMPO can get in touch with GEWEX Project Office for the other 5K USD allocation.</li> </ul>

### **WCRP Monsoons Webinar Series Discussions: (Lead: Hindumathi)**

- We have been having discussions with Rajagopal since a few months to see if the MP would be interested in hosting a series of webinars on topics of major interest to not just to the scientific community but also to the public. Because I think Monsoon is, is something that has been gathering huge interest, especially with respect to the climate change aspect.
- We were informed by IMPO that that this has already been discussed within the MP since a few months and that most of you have already shown interest in hosting a series of webinars. So, what we think from the WCRP angle is that we are happy to do that using the new WMO conference services platform, which has been successfully used for lot of webinar series within WCRP, WMO and for many activities like the LHA, SPARC, etc. SPARC had their 30<sup>th</sup> anniversary celebration last year and WCRP hosted 3 Webinar series which gathered a huge audience from the public.
- So, if you think now is the right time to start such a series on Monsoons, the WCRP, especially Wushan will be very interested in taking care of the organisation of the entire webinar series. First, we will have to define the theme of the webinar series, so as you mentioned it could be based on the activities of the three regional working groups of the MP. The first in the series can start with something very general, more international, wherein, we can have around 2 speakers, one will be a scientific expert who is much experienced and the second one, from an early career researcher, this makes the webinar series even more interactive.
- The duration of webinar can be of 1.5 hours maximum, with a panel discussion at the end. To start the webinar, we will need help in identifying the expert speakers from MP and WGs.
- The time zone should be as such that it suits the international time zone, so that we do not leave out one specific region. So even if it may not be always convenient to the Central European time zone, that is not an issue we want to make sure we engage most of the other international community as well.

### **Comments from Members:**

- *Leila:* Who is going to be the audience? I am confused about the issue with the time zone that you explained. Who do you expect to be the audience for these webinars?
- *Hindumathi:* The audience depends on the topic that we identify. It could be anyone, not just the scientific community that we are aware of within WCRP or your own networks, but Ph.D. students or even undergraduate students or sometimes there may be a huge response from stakeholders. It really depends on the type of subject that we choose. For example, if it is going to be something scientific, but also connecting the local communities, through impacting the livelihoods of the local communities and agriculture sector, etc., we have noticed that in our previous webinar series there were about 500 participants engaging in our series. So, it all depends on how the subject is chosen. It would be better to choose a subject that is not too scientific, as if the subject is very narrow in terms of science, we will get only the scientific community as the audience. So, the more diverse it is, the better it should be, and it will also give a lot of visibility to the MP and the activities within the panel.
- *Ruth:* The language of Webinar is important because in the American monsoon region, we speak mainly Spanish and Portuguese. As in the WG-AMM we do not have people from the operational background and somehow, we want to involve them with these webinars, which is possible if these webinars are given in non-English language.
- *Hindumathi:* WCRP has done webinars in non-English language few times earlier, one of the WCRP climate research forum focused on the South American continent, in which the main language of the webinar series itself was Spanish. One of the advantages of the WMO conference services is that it also provides interpretation possibilities. So, if we are going to get in touch with the local communities of South America, we can focus on a specific topic within our series for the South American monsoon activities connecting the local population in Spanish language with interpretation provided in English for the global community.
- *Hiroshi:* The topic should be targeted for the improvement of skills of scientific and operational people.

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	<ul style="list-style-type: none"> <li>• <i>Hindumathi:</i> <ul style="list-style-type: none"> <li>○ There can be two presentations of 20 minutes each followed by a panel discussion. We can choose to have one which is some more science targeted, like advances in the scientific research on monsoons, and the second one could be on linking science to the society. In this way we will have a wider audience, not only with the scientific community, but also with others, and it could also be a better compromise.</li> <li>○ This webinar series is just to initiate the visibility of 1 particular activity (MP in this case) within WCRP and can be a limited one. We need to define exactly right from the beginning how many webinars are going to be hosted. So, if it is 4, the first one needs to be more on global monsoons and then we focus next 3 on the regional working group activities. If one working group is willing to host a webinar series, the main task from the working group would be to identify the speakers and may be, brainstorm the topics that might be of interest to everyone.</li> </ul> </li> <li>• <i>Gill:</i> If it is only going to be 4, then one could be an overview of the MP, how things work in MP and why is MP doing it, which will involve some of the science of why we are interested in monsoons, why monsoon is important, etc. The other three could be from each of the working groups or one webinar hosted by each of the working groups. This implies that each working group is only really contributing to one webinar in the year, so that that fits with the idea that it was not going to be massive overload of work. The WGs hosting the webinar could follow different formats or a similar format. The topic must be broad if we want to target a wider audience as a part of out-reach activity.</li> <li>• <i>Hindumathi:</i> The consensus from this discussion is that the first webinar should be from the monsoon panel, presumably by the Co-chairs of the panel. Then there would be three others, one from each of the regional working groups, which sort of fits within our idea of short webinar series. As Annalisa has indicated her interest to help in organization of the Webinar Series, we will get in touch with her and the Co-chairs to take this forward.</li> </ul>
9	<p><b>Date/time of next meeting (Lead: Leila)</b></p> <ul style="list-style-type: none"> <li>• The idea of rotating the meeting time zone was accepted by all members</li> <li>• The next meeting can be in the last week of July 2023 at a convenient time for members from American continents. Time to be decided based on the inputs received from members in the <a href="#">google doc</a> shared by Annalisa</li> </ul>
10	<p><b>Any other business</b></p> <ul style="list-style-type: none"> <li>• <i>Surya:</i> The proposal of IMPO to make Monsoon Panel Notebook for public access in IMPO webpage can be considered after there are more cross panel activities to report.</li> <li>• Leila thanked all for their participation in the meeting.</li> </ul>

## NEXT MEETING

<b>Meeting Number</b>	<b>2023-4</b>	<b>Meeting Time &amp; Date</b>	Last week of July 2023. IMPO to send out doodle poll
<b>Location</b>	Video conference, details of the meeting will be sent out by IMPO		



A screenshot of the in-progress online MP meeting showing the participants