



45th Session of the WCRP Joint Scientific Committee (JSC)

27-30 May 2024

Report to the WCRP Joint Scientific Committee *International Monsoons Project Office (IMPO)*

1. **Highlights for Joint Scientific Committee** (including high-level publications, new achievements/products, and capacity building activities – **in particular anything you feel should go into a WCRP annual achievement report or brochure**)

- ❖ IMPO has provided key support to the CLIVAR/GEWEX Monsoons Panel (MP):
 - Rigorously supported the Monsoons Panel in the preparation of its Annual Report of 2023 and its subsequent submission to the CLIVAR/GEWEX SSGs.
 - Coordinated with Monsoons Panel (MP) Co-Chairs for organizing online meetings of MP. The Minutes of the Meetings were finalized with the suggestions from Co-chairs and members and subsequently they were forwarded to CLIVAR and GEWEX IPOs for their records.
 - Drafted the MP's recommendation proposals for the 2024 membership (for 6 vacant positions) based on CLIVAR/GEWEX nominations and submitted them with the concurrence of MP Co-chairs for the approval of the SSGs of and CLIVAR and GEWEX. Both SSGs endorsed the membership changes, and subsequently IMPO completed the formalities of appointing the new members and thanking the departing members.
 - Finalized and submitted the MP's funding proposal (totalling to 10K CHF) for an in-person meeting of MP & WG-AAM at GEWEX OSC with the concurrence of MP Co-chairs for CLIVAR & GEWEX SSGs approval and the same has been approved.
 - Played a key role in the successful organization of the Fifth Session of the Monsoons Panel (MP) along with an In-person meeting of MP and Working Group on African Monsoons (WG-AFM) on 27th October 2023 at Kigali, Rwanda in hybrid mode.

- ❖ IMPO provided key support to the Monsoon Panel's three regional Working Groups on Asian Australian Monsoons (WG-AAM), African Monsoons (WG-AFM) and American Monsoons (WG-AMM):
 - Participated in WG-AAM meetings to discuss on the activities of the group and its 3 sub-groups (Viz., Monsoon Processes and Teleconnections; R2O for monsoon seasons in SE Asia; High Impact Weather Events)
 - Participated in the WG-AFM general meetings held to discuss the activities of their 3 sub-groups (Viz., South & East Africa, West Africa, and Central Africa).
 - Organized a special online meeting between MP and WG-AMM on 20th February to energise the WG's activities.

- ❖ **Activities related with WCRP:**
 - **Joint WCRP/WWRP Monsoons Panel Webinar Series:** IMPO played a key role in the successful organization of the four Webinars of the series, namely on:
 - "Global Monsoon" held on 13th September 2023
 - "Asian-Australian Monsoons" held on 30th November 2023
 - "African Monsoons" held on 6th March 2024
 - "American Monsoons" held on 24th April 2024

The video recordings of the four webinars are made available in the [IITM YouTube Channel](#) by IMPO for wider viewership of the enlightening webinars.

- IMPO actively participated in the WCRP OSC during 23-27 October 2023 at Kigali, Rwanda, and was actively involved in the following activities:
 - Supported WCRP in organization of OSC-2023 as Speaker Coordinator during 23-25 October 2023.
 - Functioned as Session Moderator of S03: Global and Regional Monsoons on 25th October 2023.
 - Functioned as Moderator of the online poster presentation of S03: Global and Regional Monsoons of OSC-2023 on 11th October 2023.
 - Coordinated with CLIVAR and GEWEX for travel support of 3 members of CLIVAR/GEWEX Monsoons Panel and 2 members of Working Group on African Monsoons for participation in the WCRP OSC.
 - A 5-minute video on Monsoons Panel & IMPO Activities was created for display at the WCRP booth during OSC-2023

- As per WCRP's urgent request for identifying new leads for the WCRP Concept Paper on Global and Regional Monsoons, persuaded the MP Co-chairs to become the Co-leads.
 - Organized and participated in the WCRP Concept Paper on Global & Regional Monsoons lead authors' Brainstorming meeting on 4th and 22nd September 2023.
 - Actively involved in drafting the inputs from the Concept Paper on Global and Regional Monsoons to the Kigali Declaration from OSC-2023.
 - Participated in the in-person meeting of the co-authors of the Concept Paper on 25th October 2023 at Kigali, Rwanda.

- ❖ **Activities related with International Project Offices (IPOs) and WCRP Secretariat Group:**
 - Actively participated in the group's meetings held on 6th July & 22nd September 2023 and 4th March 2024 and provided an update on the activity highlights & the forward look of IMPO during the corresponding reporting periods.

- ❖ **Participation in Meetings/Workshops/Committees/Working Groups**
 - IMPO's Senior Scientist (Susmitha Joseph) participated in the WWRP/WCRP S2S Summit 2023 held for celebrating 10 years of the Sub-Seasonal to Seasonal Prediction Project during 3-7 July 2023 at University of Reading, UK and was actively involved in the following activities:
 - Chairing the session on "Predictability and Processes: Precipitation and Tropical Waves" on 7th July 2023.
 - Delivered an oral talk on "Development of a Multi-physics Multi-ensemble system for efficient subseasonal prediction" in the session Modelling: M2 Ensembles & Processes on 6th July 2023
 - Presented a poster on "Diagnostics and real-time extended range prediction of cold waves over India" in the Poster: Session 2 on 4th July 2023.
 - IMPO actively participated in the [Annual Monsoon Workshop](#) on 18th March 2024 and the IMPO Executive Head chaired the 1st Session of the workshop.
 - IMPO is actively supporting in the organisation of the International Workshop on [Stratosphere-Troposphere Interactions and Prediction of Monsoon weather EXtremes \(STIPMEX\)](#) to be held at IITM, Pune during 02-07 June 2024. IMPO has played a key role in the allocation of WWRP-IMPO's travel funds to invited international speakers of the workshop.
 - IMPO is actively involved in the organisational aspects of the [Eighth WMO International Workshop on Monsoons \(IWM-8\)](#) to be held at IITM Pune during 17-21 March 2025.

2. Planned science initiatives and major events (over next 1- 5 years)

- An International Workshop on [Stratosphere-Troposphere Interactions and Prediction of Monsoon weather EXTremes \(STIPMEX\)](#) is being organized during 02-07 June 2024 at IITM Pune, with the support from IMPO, APARC, Forschungszentrum Jülich GmbH, WWRP, WGTMR, CLIVAR/GEWEX Monsoons Panel and India Meteorological Department.
- The [Eighth WMO International Workshop on Monsoons \(IWM-8\)](#) will be hosted at IITM Pune during 17-21 March 2025, which is organized jointly by the Indian Institute of Tropical Meteorology (IITM), Pune, Ministry of Earth Sciences (MoES) and the WWRP's Working Group on Tropical Meteorology Research, in cooperation with IMPO, Monsoons Panel and India Meteorological Department

3. Planned Products, high-level assessments, or other key outputs/publications

- *Highlight any strategic products that you wish to make the JSC aware of*

4. Linkages with Core Projects, Lighthouse Activities, Academy etc.

- *Activities or actions done in collaboration with CPs, LHAs or Academy you wish to make the JSC aware of*
 - All training activities, webinars and workshops organized by IMPO or involving IMPO are also being advertised through the WCRP Academy for better outreach.
- *Added value (or concerns) on synergies with other CPs*
 - MP is engaged in interactions with APARC on the role of atmospheric composition in processes relevant for the monsoons, including the Atmospheric Composition and Asian Monsoon (ACAM) activity of SPARC (<https://www.sparc-climate.org/activities/asian-monsoon/>).
 - MP is collaborating with CliC on understanding the connections between the Himalayan cryosphere and Asian monsoons & Impacts of reduced Arctic sea-ice on Asian monsoons.
 - MP is exploring a cross-panel opportunity to get involved in the "[SynObs Project](#)" on the evaluation of the Ocean Observing System.
- *Aspects that would require specific attention from the JSC*

5. Partnerships with entities outside of WCRP

❖ Partnership with WWRP and Working Group on Tropical Meteorology Research (WGTMR):

- Coordinated with WWRP to allocate 15K CHF from WWRP-IMPO funds for supporting the participation of 9 invited speakers under the theme "Prediction of Monsoon Weather Extremes" of [STIPMEX](#) workshop at IITM Pune.

6. Suggestions, issues or challenges, for example:

- *Suggestions for new topics/activities*
- *Recommendations or proposals, including any proposed changes to the science directions or structure of the Core Project*
- *Potentially a suggestion for a Global Fellowship focus for a 2025 call to be considered by the JSC: could be a broad topic of interest where science should be reinforced, or a region to be targeted for the fellowship.*
 - Research on East African Monsoon Predictability
- *Advice you require from, or questions/comments that you have for, the JSC*
 - As monsoons are of key interest to many of the WCRP sub-structures, it would be helpful to have one JSC member assigned the role of liaison to coordinate pan-WCRP interests on the monsoons and to work with IMPO to pursue them more effectively.