

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

27-30 May 2024

Report to the WCRP Joint Scientific Committee My Climate Risk LHA

1. Highlights for Joint Scientific Committee

- *Expansion of network of hubs.* In order to achieve the desired bottom-up approach, My Climate Risk mainly operates through autonomous regional hubs, collaborating organically. Although we are not necessarily seeking to further expand our network of hubs, we continue to explore opportunities to reach parts of the world that are underrepresented within WCRP, with a particular focus on the Global South. Since JSC-44 we have added two hubs (note that the Royal Scientific Society of Jordan was added between the preparation of the JSC-44 report and JSC-44 itself):
 - Hong Kong University of Science and Technology (Hong Kong)
 - Universidad Veracruzana (Veracruz, Mexico)

The current list of MCR hubs can be found at https://www.wcrp-climate.org/mcr-hubs. Discussions are currently underway concerning potential new hubs in the South Pacific, Southeast Asia, Eastern Europe, Senegal, northwestern South America, and northern South America/Central America.

- MCR General Assemblies. In order to ensure equal participation from around the world, our pan-. MCR meetings (known as General Assemblies) are entirely online. We held our Third MCR General Assembly on 16 May 2023, with the report available at https://www.wcrp-climate.org/WCRP-publications/2023/WCRP-MCR-GA-Report-May-2023-Final.pdf. The meeting consisted of two 2-hour sessions, one scheduled for the Eastern Hemisphere and one for the Western Hemisphere and was restricted to members of the MCR General Assembly strictly defined (SSG members, hub representatives, ex-officio members, WCRP Secretariat, and invited guests). Normally we expect to hold online GAs every six months, however we decided not to hold one in the second half of 2023 because of the significant MCR involvement in the WCRP Open Science Conference. Our Fourth MCR GA is scheduled during May 2024. To allow more time for in-depth discussion, we have reverted to the format of our Second GA with a hub-led session (open to all hub members, with the different hubs sharing their activities and experiences) preceding the closed part of the GA. Moreover, we have introduced a third time zone to accommodate the growth of the network of hubs. Thus, we are holding three sessions of between 3.5-4 hours each, targeting the Americas (May 3), Africa/Europe (May 16), and East Asia (May 17). A report will be made available on the MCR website.
- WCRP Open Science Conference. MCR was well represented at the OSC, thanks to the travel support
 provided by the WCRP. See the brief news item at https://www.wcrp-climate.org/news/wcrpnews/2085-mcr-osc. The highlight of the week for MCR was the Learning Lab, "Democratizing climate science: Making it meaningful at local scales", led by the Argentina hub with assistance from
 several other MCR hubs, which was documented in this report: https://www.wcrp-climate.org/images/documents/My_Climate_Risk/Research_Report_LLO6.pdf.
- Adaptation Futures Conference 2023. A number of MCR hubs, led by the Walker Institute hub at the University of Reading, convened a session at AF2023 (2-6 October 2023 in Montreal, Canada) entitled "All Eyes on 'My Climate Risk': Q-Storming towards Collective Pathways to Adaptation Action, from Local to Global": https://walker.reading.ac.uk/event/adaptation-futures-october-2-to-6-2023.







International Science Council

- Argentina Hub Webinar Series. The Argentinian National Scientific and Technical Research Council (CONICET) hub hosted a series of four webinars over austral winter 2023, reflecting on the different perspectives the physical and social sciences have concerning four central concepts: risk, storylines, co-development, and multiple lines of evidence. The webinars had simultaneous Spanish-English translation. Recordings are available via the MCR website at https://www.wcrp-climate.org/mcr-events-opportunities.
- Education Working Group Webinar Series. The MCR Education Working Group organized a webinar series over 5-6 October 2023 on Climate Science and Colonialism. A summary https://www.wcrpclimate.org/news/wcrp-news/2067-mcr-climate-colonialism-highlight and recordings are available https://www.wcrp-climate.org/mcr-events-opportunities/mcr-climate-science-and-colonialism. The Working Group is currently collaborating with the Himalayan University Consortium hub to develop an Educator's Guide on Climate Science and Colonialism based on the above series, to be disseminated in multiple online venues including the WCRP Academy.
- ADMU Hub Webinar Series. The Ateneo de Manila University (ADMU) hub held two webinar series in boreal spring 2024, following on from their earlier webinar series in boreal autumn 2022. One was entitled "Climate Voices on the Ground", and the other "Climate Research 'As if People Mattered'". Recordings are available via the MCR website and/or the Ateneo Institute of Sustainability Facebook page (as livestream recordings, https://www.facebook.com/ADMU.AIS/). Another panel session under the "Climate Voices on the Ground" theme is planned to align with the celebration of Laudato Si' Week on May 22, 2024.
- Himalaya Hub Risk Data Platform. Facilitated by the HUC hub, HiRISK (https://hirisk.org/) brought together early career scientists in High Mountain Asia to freely exchange on pressing issues related to data in the wider risk context. The production, sharing and curating of data formed the core of many challenges in addressing climate risks in the region; this initiative aimed to inform those challenges from the bottom up. A month-long "Understanding Risk Himalayan Climate Data Field Lab" (https://urfieldlab.com/UR2024/), catering to 120 participants from 17 countries and using an "unconference" format, provided a collaborative learning space for members to jointly examine and remake the ways climate change data is used in the Hindu Kush Himalaya.
- Establishment of an MCR Early Career Researcher Group. The group was established to provide an entry point for ECRs who are interested in MCR but are not connected to a hub, to discuss questions, experiences and issues working on MCR-related projects, and to influence the MCR agenda from an ECR perspective. The group currently convenes once a month for a presentation by an ECR member and subsequent discussion.

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

MCR workshop in the run-up to the COP30 meeting in Brazil. To provide a space for learning and open discussion across disciplines and hubs, to collaborate and work on specific research projects that address challenges in interdisciplinary, equitable and bottom-up climate science, or shed new light on MCR ideas from interesting disciplinary perspectives (e.g. feminist epistemologies, decision-making under deep uncertainty, literature on community-led adaptation) or from a regional angle, and to provide an entry point for interested researchers to become engaged with MCR and perhaps start a new MCR regional hub, we propose to hold an in-person workshop in Latin America in the run-up to COP30 in Brazil in November 2025, in a low-cost setting (i.e. not in close proximity to the COP itself). This will allow for synergy with the members of the MCR community who regularly attend the COPs and provide material to be disseminated at COP30. Depending on how this works out, we expect to hold similar events in future years, in different Global South locations.

- ECR Summer School in South Asia/Indo-Pacific Region. Dr Shikha Singh, an ECR (PhD in 2022) in the MCR regional hub located at IITM in Pune, India, has developed an innovative approach to capacity development called SDA2 (Skill Development, Awareness and Application). The aim of SDA2 is to augment the usual training component of a Summer School in a way that builds long-term ECR collaboration. SDA2 was first trialled at a CLIVAR Summer School on marine heat waves held at the ICTP in Trieste, Italy in 2023, with 50% of the trainees coming from the Global South. The IITM hub proposes to run another such event somewhere in the South Asia/Indo-Pacific region in 2025, focusing on "Climate Research and Modelling for Action in the Indo-Pacific region", with the exact details to be discussed during the upcoming online MCR General Assembly in May 2024.
- ECR Workshop and Training School in Senegal. MCR will be a co-organizer of the proposed Joint APARC/WCRP Workshop and Training School in the Global South, intended to be held at the University of Cheikh Anta Diop, Dakar, Senegal, in early 2025. The proposed activity follows on from a very successful Training School on AI for Climate Science organized by the same team at the University of Rwanda immediately following the OSC in Kigali. MCR plans to leverage the proposed activity to help develop an MCR hub in Senegal, and the programme for the Workshop and Training School would be developed with that goal in mind, although still with a data science/AI focus.

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

MCR special issue of a journal. MCR is dedicated to advancing a bottom-up, locally grounded approach to understanding societal risk arising from climate variability and change at the local scale. This kind of research is inherently interdisciplinary and can be difficult to publish in existing journals, especially for scientists located in the Global South where their work is frequently rejected (often without review) as being "too regional". The solution to this problem is to create a critical mass of scholarship which can be recognized as a rigorous scientific paradigm. We propose to initiate this process through a special issue of a suitably chosen journal. It would be an open special issue, over a number of years, to allow work to be submitted when it is ready. Although MCR would take responsibility for the special issue (and provide guest editors), submissions would of course be open to anybody.

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

- The IITM and SAEON regional hubs are both involved in the CLIVAR Research Focus on Marine Heat Waves, and have connections with the relevant CLIVAR regional panels.
- Several MCR representatives participated in the RIfS Workshop on Robustness of Climate Change Information for Decisions (April 22-24); they will explore potential involvement in the next steps.
- SSG member Douglas Maraun participated in the EURO-CORDEX Distillation Workshop (Jan. 25).
- The MCR Regional Urban Hubs (led by Van Doan at University of Tsukuba and Alexis Lau at the Hong Kong University of Science and Technology) coordinate urban climate modelling with the CORDEX-Southeast Asia project.
- The ADMU hub is exploring potential collaborations with CORDEX Southeast Asia (through Faye Cruz and Julie Dado) together with the UK Met Office project WISER (through Laura Burgin).
- There are close interactions between the Argentinian Hub and ANDEX (a Regional Hydroclimatology Project within the GEWEX Hydroclimatology Panel). This will continue during the ANDEX annual meeting in Lima, Peru, in late May 2024, concretely with hub members contributing to the ANDEX

annual meeting session on inter- and trans-disciplinary science and to the post-meeting workshop on the same issue.

- SSG member and ICPAC hub representative Masilin Gudoshava is participating in the Explaining and Predicting Earth System Change Africa Working Group.
- Work is in progress for the establishment of a MCR hub for Central America and northern South America, expected to be formalized during the second semester of 2024. SSG members Paola Arias and Ana María Durán-Quesada are exploring potential collaborations with the Regional Committee of Hydraulic Resources from the Central American Integration System and the Costa Rica WMO Regional Formation Centre currently operating in the Costa Rica National Meteorological Institute.

5. Partnerships with entities outside of WCRP

- As of JSC-44 we had the following *external partners* represented in an ex-officio capacity on the MCR General Assembly: Copernicus Climate Change Services; World Weather Research Programme (WWRP); the Societal and Economics Research Application (SERA) Working Group of the WWRP; World Adaptation Science Programme. Since then, we have added the following external partners: World Bank; Red Cross/Red Crescent Climate Centre. Our approach is to offer ex-officio status to external partners who are interested in learning more about MCR and working with us, as a way to develop the relationship. Note that the MCR hubs have their own partnerships, specific to their particular situation, which we do not document here.
- *WWRP linkages* include representation from the ADMU regional hub in the Progressing EW4All Oriented to Partnerships and Local Engagement (PEOPLE) steering group.

6. Suggestions, issues or challenges

- One challenge is *developing meaningful interactions between the hubs*. We had anticipated (based on the experience during the Covid pandemic) that this could be done online, but for various reasons it has not really materialized. The OSC in Kigali demonstrated the value of in-person interactions for building interactions between hubs. Although we still do not want to move to in-person General Assemblies (because they would inevitably disenfranchise those who were unable to participate), we would like to hold in-person MCR events every year, moving to different locations around the world, in order to help build the community. The first is our proposed workshop in the run-up to COP30 in Brazil, in November 2025 (see Section 2). Because so many of our community are based in the Global South, this will require substantial financial resource on an ongoing basis.
- A second challenge is the *engagement of SSG members in MCR activities beyond the General Assemblies*. A primary focus of MCR has been the establishment of the network of MCR regional hubs. This decentralized structure, which is in contrast to the traditional WCRP structure of panels and working groups, was deliberate, and has ensured that much of the leadership and science agenda within MCR is driven from the Global South. However, the structure does not provide natural entry points for those interested in MCR methodologies who are not connected with a hub, including many members of the SSG. To address this, we have been organically developing cross-MCR activities such as the Education Working Group and the ECR group, which one can view as mycorrhizae spreading around and across the network of hubs. This process is continuing.
- A third challenge is the *limited amount of administrative support that can be provided to MCR from the WCRP Secretariat*. We have now reached the point where this is constraining the further evolution of the LHA. A cost-effective option would be to fund some partial administrative support in the Global South, as with the WCRP Academy.