



# WCRP My Climate Risk Third General Assembly

16 May 2023, Online



June 2023

WCRP Publication No.: 5/2023

## **Bibliographic information**

This report should be cited as:

*Rombach, S., Rodrigues, R., Shepherd, T., van der Wel, N. 2023. WCRP My Climate Risk Third General Assembly, 5/2023, May 16, 2023, online format.*

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This report was authored by the WCRP My Climate Risk Lighthouse Activity

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The My Climate Risk Lighthouse Activity aims to develop and mainstream a 'bottom-up' approach to regional climate risk, which starts with the requirements of decision-makers. By developing a new framework for assessing and explaining regional climate risk using all the available sources of climate information, climate information will be made meaningful at the local scale. More information is available at: [www.wcrp-climate.org/my-climate-risk](http://www.wcrp-climate.org/my-climate-risk)

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# 1. Introduction

Nearly a year after the [first](#) and half a year after the [second](#) collective meeting, the third WCRP My Climate Risk (MCR) General Assembly (GA) took place virtually on 16 May 2023. The GA was split into two online sessions, each lasting two hours, to accommodate the Eastern and Western hemispheres. Participation was by invitation only and included members of the MCR Scientific Steering Group (SSG), representatives of the 14 MCR regional hubs, ex-officio representatives of other bodies, invited guests, and WCRP Secretariat staff (see Figure 1 and Annex 1). Both sessions followed the same agenda, which allowed for updates from the original hubs and introductions of new hubs and members, as well as discussions on MCR developments and interactions (see Annex 2).



Figure 1: Participants of the third MCR GA on May 16, 2023.

## 2. Update on MCR and WCRP developments

Following a warm welcome and a round of introductions of the participants, MCR chairs Regina Rodrigues and Ted Shepherd gave a brief overview of MCR and the six new hubs (see figure 2), including:

- Centre Régional AGRHYMET (Niamey, Niger): Abdou Ali,
- IGAD Climate Prediction and Applications Centre (ICPAC) (Nairobi, Kenya): Masilin Gudoshava,
- South African Environmental Observation Network (SAEON) (Pretoria, South Africa): Nicole du Plessis and Jennifer Veitch,
- Indian Institute of Tropical Meteorology (IITM) (Pune, India): Roxy Koll,
- University of Tsukuba (Tsukuba, Japan): Van Doan,
- Royal Scientific Society (RSS) (Amman, Jordan): Iain Stewart,

as well as four new ex-officio members, including:

- World Weather Research Programme (WWRP): Shipra Jain,
- WWRP Working Group on Societal and Economic Research Applications (SERA): Isadora Christel Jimenez and Carla Mooney,
- World Adaptation Science Programme (WASP): Elisabeth Gilmore,

and three additional hubs under consideration, including:

- University of the South Pacific (joint with Safe Landing Climates Lighthouse Activity (LHA) theme on sea level rise),
- Centre for Climate Research Singapore,
- Central America/northern South America, driven by SSG members Ana María Durán Quesada (Costa Rica) and Paola Arias (Colombia).

### My Climate Risk Regional Hubs

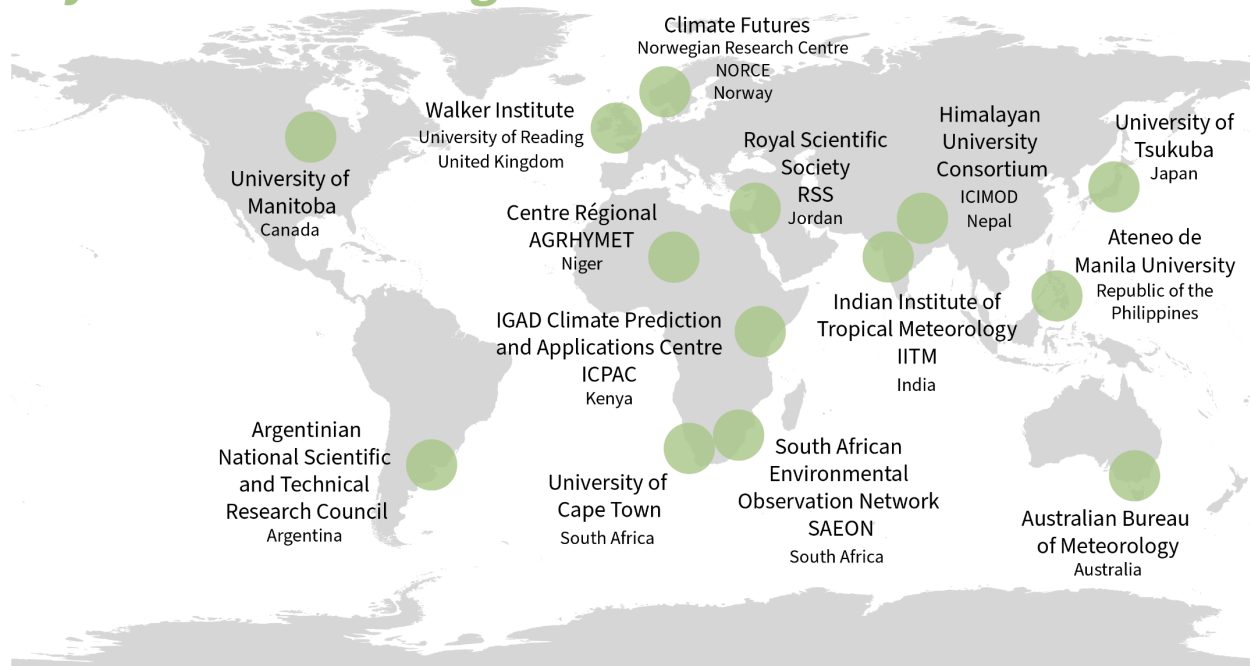


Figure 2: Overview of MCR regional hubs as of May 2023.

The update on the MCR network expansion was followed by an overview of the [44<sup>th</sup> Session of the Joint Scientific Committee](#) (JSC), which was held in Brussels in a hybrid format from May 8 to 12, 2023. A major focus of this session was on Core Project and Lighthouse Activity interactions. During breakout sessions, where the LHAs were reviewed and discussed in depth, there was very positive feedback regarding MCR's way of operating. This included comments on MCR being the part of WCRP where the "W" is most evident and MCR truly acting as an LHA in the sense of a beacon. Regina and Ted reiterated that the MCR vision is quite different from most parts of WCRP, which is organized by science topics. However, there seemed to be a recognition of the opportunities this provides since MCR fosters a non-hierarchical ecosystem of communities of practice, where the structure can evolve organically. By actively working to ensure balance in region, gender, and career stage, and avoiding dominance by the Global North, MCR promotes a more open and equal concept of collaboration and sensitizes the Global North to the way climate science is conducted in the Global South. In this sense, MCR deliberately tries to reach parts of the world that are not well represented within WCRP. Interactions with other parts of WCRP generally occur at the hub level, according to the interests of each hub and respecting the local situation. With this overall structure, MCR aims to avoid climate science being controlled by elite groups.

Therefore, the main goals of MCR, on which success is measured, are: 1) mainstreaming a bottom-up approach to climate risk starting from decision context and scale, and 2) building an ecosystem of communities of practice, especially in the Global South. Although 1) is also a stated goal of the Regional Information for Society (RIfS) core project, MCR can be seen as applying and developing RIfS-type science in a variety of situations where there is much more direct interaction with stakeholders, which RIfS is not currently doing. Thus, MCR and RIfS are complementary.

The MCR Chairs mentioned a suggestion from the JSC meeting that something like the IPCC hexagon figures could be used to identify gaps in knowledge at a global scale, which could be targeted through the development of new hubs. Although this idea was considered interesting by the GA participants, it was noted that there is a need to further specify the exact knowledge needed and for what decisions, as the corresponding hexagon map could look very different depending on the questions asked.

During the JSC session, several action items were identified, which will take a few weeks to be finalized. However, for MCR, it was noted that there is a need to clarify that the [Draft Science Plan](#) (June 2021) has been superseded by the MCR component of the WCRP Implementation Plan, which will be finalized soon. It was also highlighted that it would be useful to have information available on what the different hubs are interested in (e.g., a table on the web page), as the "Explaining and Predicting Earth System Change" (EPESC) LHA expressed interest in knowing what hazards the different hubs are interested in. In this context, the EPESC WG3 mentioned being keen to work with the BoM hub on the attribution of drought in Australia. Additionally, JSC member Lisa Alexander would like to know the extent of hub interest in National Adaptation Plans.

### **3. Summary of MCR hub presentations**

To get to know each other and connect the roots of the network, introductory presentations from new MCR hubs followed, providing insights into the hubs, the people involved, their alignment with the spirit of MCR, and their particular interests, among others. The original eight hubs presented updates on the progress of their hubs.



### 3.1. Introduction of new MCR hubs

#### *University of Tsukuba (Tsukuba, Japan)*

The Tsukuba hub is based in the public University of Tsukuba in the Center of Computational Science. At this stage, the hub has seven members and is currently learning about MCR's activities while also looking to expand the group involved. The focus of the hub is to understand regional climate change, its mechanisms, and the human dimension associated with it. They started an urban climate initiative last year, including climate downscaling linked to CORDEX. The hub aims to understand regional climate change through modeling, machine learning, and AI. One relevant topic the hub is working on is the development and application of regional climate risk prediction for the urban thermal environment and agricultural meteorology. They are also building a database of fine-scale urban climate information for megacities in Japan and Asia. Initially, the hub plans to establish a research group in and outside Japan and connect MCR with CORDEX-South-East Asia (SEA) and American Meteorological Society Board on the Urban Environment (AMS BUE). They will organize a workshop to exchange information and provide training, together with CORDEX-SEA, at the beginning of 2024.

#### *Indian Institute of Tropical Meteorology (IITM) (Pune, India)*

The IITM is a governmental research institution well connected to Meteorological Departments and academic institutions in South Asia. They are still determining the scope of the hub and its activities but would like to focus on oceans and corresponding extremes and coastal risks for the larger Indian Ocean region, which could also be of interest to other hubs based in Africa or SEA. The need for this perspective was illustrated using the Mocha cyclone and the absence of Early Warning Systems in Myanmar. Citizen science is also of great importance to them, and they have initial experience with citizen science networks in relation to rain and river monitoring. The IITM hub aims to avoid overlapping with other hubs and their activities. Therefore, they consider joint activities on aspects of mutual interest helpful, particularly in the beginning. For this purpose, they proposed initial exchange meetings for hubs in the Asia-Pacific region, as they are interested in learning about the structure of different hubs and how the interactions work. Furthermore, it was noted that the IITM will be hosting virtual sessions for the Asia Pacific at the ICRC-CORDEX 2023 in late September 2023, where a two-hour session could be a joined MCR hub session.

#### *South African Environmental Observation Network (SAEON) (Pretoria, South Africa)*

SAEON is one of the seven national facilities of the South African National Research Foundation (NRF) and has a distributed network of seven nodes that span terrestrial and marine ecosystems. Additionally, they have three research infrastructures: the Expanded Freshwater and Terrestrial Environmental Observation Network (EFTEON), the South African Polar Research Infrastructure (SAPRI), and the Shallow Marine and Coastal Research Infrastructure (SMCRI). The three main focal areas of SAEON are environmental observations, data management and provision, and education outreach. As an institute, they have the capacity to make extensive contributions as an MCR hub. Project examples were provided from SAEON's Marine Offshore Node, Grassland Node, and a sustainable ocean modelling initiative. Their work is being integrated into the National Oceans and Coastal Information Management System, which offers short-term decision support tools and enhances the value of global forecast products. They engage in science diplomacy and stakeholder engagement and are currently exploring the possibility of providing climate-scale decision support tools. Furthermore, they offer policy support, serving as a national platform for academics to interact



with policymakers, as well as research support, stakeholder engagement, and networking. The hub will be developed in collaboration with all SAEON nodes.

*IGAD Climate Prediction and Applications Centre (ICPAC) (Nairobi, Kenya)*

ICPAC is a climate center located in Nairobi and serves as a WMO Regional Climate Center for Eastern Africa. Their mission is to promote climate services and knowledge to enhance community resilience for prosperity in the Greater Horn of Africa. Their service areas encompass climate forecasting, disaster risk management, water resources, agriculture and food security, environmental monitoring, capacity development, climate change, as well as climate information and co-production. They produce various products, including weekly and monthly forecasts for rainfall and temperature, as well as a prototype product for heat stress. Prior to the rainy season, they organize the "Greater Horn of Africa Climate Outlook Forum," where stakeholders from member states are invited to collaborate on producing advisories and discussing the impacts of the previous season. One outcome of these forums is the creation of summaries of the forecasts for decision-makers. Additionally, ICPAC has developed the 'East Africa hazards watch,' which provides multi-hazard monitoring. Through their structure, they aim to bridge the gap between climate information and society, with a focus on renewable energy, AI, climate security, climate change and wildlife, and climate and health. The hub will establish communities of practice for different sectors while pursuing a common goal within the region. The first kick off meeting will be in June, including different members states.

*Royal Scientific Society (RSS) (Amman, Jordan)*

While the RSS is based in Jordan, they see the hub as broadening out in the MENA region. RSS places a strong emphasis on people and can be described as a science and society ecosystem. They operate as an NGO and are part of a larger group of societies in Jordan. They have research centers dedicated to water, environment, and climate (WEC), buildings and infrastructure, as well as energy. All three areas, especially the WEC group, are closely interconnected in terms of taking the science to the community. RSS conducts extensive work in fundamental environmental science and collaborates with industry and individuals striving to enhance Jordan's prosperity. Additionally, all three groups actively engage with the community and increasingly involve local stakeholders in participatory initiatives. Iain Stewart, the representative of the hub, holds a research chair in sustainability as part of a UK-Jordan partnership, with a specific focus on fostering two-way communication. The aim is to achieve three-way communication, empowering end-users with scientific knowledge. Lastly, they presented their project "Restorifying Azraq," which aims to empower at-risk communities to make sense of their own situation and serves as an example of community-centered participatory science.

*Centre Régional AGRHYMET (Niamey, Niger)*

AGRHYMET will serve as a WMO Regional Climate Center for Western Africa and the Sahelian regions. Their primary areas of focus encompass AGRometeorology, HYdrology, and METeorology. With these thematic topics in mind, their missions and activities revolve around providing information, training, and research services. AGRHYMET consists of five departments dedicated to hydrology, climate and meteorology, food and nutrition security, degree programs and short-term training, as well as natural resource management and monitoring, along with information technology. They possess various resources and capabilities, including a regional multidisciplinary database, bias correction techniques, development of regional climate scenarios and their impacts, monthly bulletins, forecasting hydroclimate extremes, and regional-level

modeling. Additionally, they operate the Weather Research and Forecasting Model (WRF) for the West African region. AGRHYMET serves as the coordinator for the Règlement sur les commissions officielles (RCOFs) in West Africa, providing rainfall forecasts, river level information, and details on the rainy seasons. They also offer extensive training programs, including at the master's level. As part of their fundamental strategy, the hub plans to establish connections with universities in West Africa, forming a network to enhance their operations.

### **3.2. Updates of original MCR hubs**

#### *Australian Bureau of Meteorology, BoM (Melbourne, Australia)*

The BoM hub has now engaged with adaptation scientists who are involved in two of Australia's largest climate change research programs (the Australian Climate Service, and the National Environmental Science Program Climate Systems Hub). Their focus is diverse, and their stakeholders range from large organizations to local communities. However, the underlying common denominator is that they are working on bridging the divide between climate change science and climate adaptation in the real world. The collective plan is to begin a conversation through a webinar series, to build a multidisciplinary community capable of connecting the needs of the communities they serve with the big data and science that currently constitutes the centerpiece of Australia's climate change services. It was noted that any feedback or advice from other hubs on their own experiences is welcome. They have noticed that many of the other hubs have already gone a long way towards the same goal.

#### *Ateneo de Manila University, ADMU (Manila, Philippines)*

The ADMU hub has been highly active over the past year, organizing several events such as the webinar "[Open Climate Science: A Panel Discussion on the Meanings and Practice of Open Science](#)" and the hybrid event "[MCR Brown Bag Session: Research As Care](#)" during Laudato Si' Week. These initiatives were inspired by a collaborative publication effort involving multiple hubs. The hub also announced that news articles and recordings of previous webinar series and events, including [Climate Voices 2022](#), [Climate Research 2022](#), and [Open Climate Science](#), are now available on their website. They provided a preview of upcoming activities, including the climate stories initiative, the use of system thinking tools as intermediate technology, and a potential "Climate and..." Philippine series based on a series by NOAA.

#### *Himalayan University Consortium (HUC) (Kathmandu, Nepal)*

The HUC hub highlighted their collaborative publication "[Storying Multipolar Climes of the Himalaya, Andes and Arctic](#)", which features two open-access chapters authored by MCR Chair Ted Shepherd together with SSG member and HUC hub lead Shachi Truong, and by SSG member Vandana Singh. This publication serves as an excellent example of HUC's approach to clustering across countries. Their clusters consist of meetings on a person-to-person basis and comprise at least three members from different countries, although they can also be country-based. In this context, the hub mentioned the experience of familiarizing themselves with the concept of Environmental Humanities, which is not commonly known in climate science. They discussed additional collaborative cluster activities, including the publication "Multi-hazard Resilience of Higher Educational Institutions in Asia Pacific" and the draft paper "Mapping the climate risk landscape of the Diamer-Basha Dam in Pakistan: A storyline approach." Finally, they presented other ongoing activities such as inter-hub discussions with the Walker hub and a planned OSC presentation by an HUC member on the impacts of droughts in Afghanistan.

*University of Manitoba (UoM) (Winnipeg, Canada)*

The Manitoba hub presented their 4+1 summer school program in the town of Churchill on Hudson's Bay, which adopts a bottom-up grassroots approach to science by considering the youth perspective and perceived climate risks and directing it into climate action. The summer school collaborated with numerous national and international partners and was piloted in 2022. It included morning lectures and hands-on learning activities on climate science from various perspectives. Based on the lessons learned from the pilot, the hub plans to incorporate more hands-on engagement and include a creative final deliverable to share with the community in the next summer school scheduled for June 2023. Additionally, the upcoming summer school will involve scientists visiting Churchill and incorporate a component on seasonal calendars. The hub intends to share relevant announcements through social media, posters, and local radio. They emphasized that seasonal calendars, which integrate biological, physical, and anthropological events, will be a focus of the hub as they provide insights into individuals' perspectives on seasons. The hub hopes that this approach will serve as a launching point for a more socially guided approach to MCR.

*Walker Institute, University of Reading (Reading, UK)*

The Walker Institute is closely connected to other hubs such as the Himalayan University Consortium, the Royal Scientific Society, and AGRHYMET, as their focus lies in catalyzing collaboration and hub growth. The hub is pushing on research and the co-development of MCR science, integrating it into national and regional adaptation strategies. They presented upcoming events, including the session "All Eyes on 'My Climate Risk': Q-Storming towards Collective Pathways to Adaptation Action, from Local to Global" at the Adaptation Futures conference in October 2023, as well as side event applications for COP27 and COP28. Over the next month, the hub aims to gain a deeper understanding of what MCR science entails and how it can be applied in practice. They plan to organize workshops and webinars with other hubs to facilitate knowledge exchange regarding frameworks used across their networks and to explore the challenges of adaptation, particularly in conflict-affected countries. Furthermore, the hub expressed its desire to support the MCR ECR community beyond the OSC. They consider the integration of climate information with contextual data, such as livelihoods modelling, to be crucial and intend to build more capacity and create train-the-trainer activities in this area.

*National Scientific and Technical Research Council (CONICET) (Buenos Aires, Argentina)*

The CONICET hub has continued to conduct intra-hub meetings and is working on organizing four open webinars on climate information accessible for action between June and September 2023. These webinars will cover topics such as climate risk, storylines, multiple lines of evidence, and co-production, and will include simultaneous translation in English. The hub has also developed an initial version of its strategic working plan, which highlights its interdisciplinary perspective. With 14 scientific papers and 2 oral presentations, the hub will actively participate in the OSC. Additionally, the hub will take part in the Transformations Conference in July 2023, where they will mainly focus on action-oriented research.

*University of Cape Town (UCT) (Cape Town, South Africa)*

While the Climate System Analysis Group (CSAG) officially hosts the hub at the University of Cape Town (UTC), they engage extensively with the African Climate Development Initiative (ACDI) on various initiatives. CSAG's thematic areas revolve around impacts science, climate

services, core climate science, and social aspects. The hub aims to transform thinking around climate risk and has developed a toolkit on localizing climate projections. Another project focuses on providing guidance for implementing climate resilient development pathways using a pathways approach. They also introduced the "Cascading Climate and Health Risks in Cities (CASCADE)" project, which involves multiple partners and stakeholders across Africa and employs a storyline approach and intervention guidance. The hub highlighted the project "The Heat and Health African Transdisciplinary (HE2AT) Center Project,". Although it was difficult to bring MCR into this project, it serves as a valuable basis for discussing how hubs can incorporate MCR principles into projects that are framed differently. Additionally, the hub runs its annual CSAG climate risk training school in July.

*Climate Futures, Norwegian Research Centre (NORCE) (Bergen, Norway)*

The My Climate Risk Hub in Bergen, Norway is hosted by NORCE, and specifically Climate Futures, which is a centre for research driven innovation comprised of nearly 40 partners representing research institutions, public administration, industry, and NGOs. The thematic areas addressed are sustainable food production, renewable energy, smart shipping, and resilient societies, including insurance, finance, and risk management services. Our focus is on co-developing tailored methods and practices for climate risk management. One of the projects involves end-users in the agricultural sector, where scientists work directly with the farmers on developing subseasonal to seasonal forecasts tailored to their needs, and to figure out how these can be used in the day-to-day decision making on the farm.

## **4. Synthesis of discussions and (potential) interactions within and outside WCRP**

Interesting discussions were taking place in the form of questions among the hubs, both during the sessions and through the exchange in the Zoom chat. As a result, there were many hints and recommendations for potential collaborations with other organizations, hubs, and individuals within and outside of WCRP. However, due to the short duration of the third General Assembly, there wasn't enough time to delve deeply into the discussions. This issue will be addressed for the next General Assembly (see Section 7).

While the Tsukuba hub was referring to their connection to CORDEX-SEA and AMS BUE, Ted noted that during the JSC meeting Fredolin Tangang expressed his excitement about a hub with connections to CORDEX-SEA. Furthermore, the Indian Institute of Tropical Meteorology hub raised a question about whether hubs, particularly the Tsukuba hub, plan their scope of work only within a specific country. In response, it was emphasized that the Tsukuba hub already has established links with the wider region, including SEA, Vietnam, Singapore, and India, and they are open to further collaboration. Ted confirmed that the hubs will tend to grow organically. Additionally, Faye Cruz from the Manila Observatory, part of the Ateneo de Manila University hub, was highlighted as another valuable connection in this context, and efforts to strengthen this collaboration will continue in the future.

Regarding the Indian Institute of Tropical Meteorology hub's mention of their experience with the citizen science approach, the Himalayan University Consortium hub mentioned their collaboration with the OpenStreetMap HOTOSM Asia Pacific Hub, where they provide training to local female mappers in response to disasters. The Himalayan University Consortium hub has already engaged with local stakeholders in Pakistan after the recent flood and is seeking to reach



out to existing fellows in Bangladesh and find collaborators in Myanmar through their network. Furthermore, the Indian Institute of Tropical Meteorology hub acknowledged the importance of in-person contact and expressed their desire for face-to-face interactions, including at the OSC in Kigali. Ted clarified that while in-person meetings are not organized at the SSG level, they can occur at any time. In response to the Indian Institute of Tropical Meteorology hub's attendance at ICRC-CORDEX 2023, Chi Truong from the Himalayan University Consortium hub mentioned that her colleague Mandira Shrestha will also be attending the conference, providing an opportunity for cross-hub in-person exchange. Lastly, the Indian Institute of Tropical Meteorology hub highlighted the potential for collaboration with other LHAs, specifically Safe Landing Climates, as they have a member in its working group.

The Tsukuba hub expressed their interest in the storylining climates approach, and the corresponding publication presented by the Himalayan University Consortium hub, as it would greatly assist them in understanding the significance of their work in regional climate prediction, particularly in terms of downscaling. This presents an excellent opportunity for cross-hub interactions, specifically between the Asia-Pacific hubs.

During the presentation of the AGRHYMET hub, SSG member Douglas Maraun mentioned that Irene Lake is seeking groups to participate in CORDEX Africa, which presents an opportunity for collaboration with RfS. He suggested potential collaboration on various levels, including:

- defining what is relevant to preselect adequate models,
- sharing regional data for calibration and evaluation,
- co-running model simulations, and
- exploring the simulations from a regional perspective, where MCR hubs could play a key role.

SSG member Amadou Gaye and Ted supported the idea of liaising with CORDEX at the hub level. The Walker hub expressed interest in joining the activity, as they have encountered challenges when using CORDEX simulations for their NAP work in the MENA region. Additionally, the University of Cape Town hub mentioned their intention to integrate CORDEX experiment outputs into their urban health project. In response, the Walker hub mentioned that they are currently exploring the impacts of climate on the distribution of Neglected Tropical Diseases, including the application of climate/health storylines and the challenges of risk communication at multiple levels. The Walker hub is also collaborating with Sightsavers in this regard.

Furthermore, ex-officio member Carlo Buontempo noted that C3S is evaluating its engagement with the CORDEX community. They are considering several elements:

- current use of CORDEX data among C3S users,
- future plans within CORDEX,
- how to best serve the next generation of IPCC climate atlas, and
- what role Machine Learning/AI will play in future regionalization

He emphasized the importance of exchanging notes on these aspects and referred to the [CORDEX catalogue entry](#) and the ongoing expansion of quality assessment.

There was a discussion about the possibility of online participation in the 4+1 summer school organized by the Manitoba hub, which would provide students with perspectives on local-scale climate risk in other places. The hub will check with the school and its policies to explore this option. If feasible, they proposed the idea of an hour-long session where volunteers from hubs could briefly present their own climate research and interact with the students.

The University of Cape Town hub highlighted the struggles and failures they have faced in securing funding for transdisciplinary research. They raised the question of how to fund such research and emphasized the importance of engaging not only at the community level but also within the research funding community. This issue resonated with SSG members and representatives from various hubs, leading to the recognition of the need to overhaul funding application structures. It was brought up that there appears to be a disconnect in understanding interdisciplinary projects among different groups, which affects the evaluation process. Therefore, it was proposed to exchange experiences on the development of initial dialogues that kick off interdisciplinary projects. Additionally, there was a suggestion for additional training initiatives to develop and manage large-scale, interdisciplinary projects, which would also increase awareness among potential reviewers. The Himalayan University Consortium hub shared their experience of meeting with Leigh Stadler from ACDI University of Cape Town as part of discussions on conceptualizing a new research program led by universities in Least Developed Countries. Ted pointed out that WCRP could play a role in addressing this issue, for example, through the JSC meeting where many funding agencies are present.

Finally, Douglas suggested increasing connections through scientific workshops and webinars, as he sees the need for more discussion between the MCR network, particularly between SSG and hub members. Ted supported this proposal and suggested that each SSG member could organize a webinar on a specific theme. The University of Cape Town hub added the idea of having focused discussions on these issues, potentially involving relevant stakeholders. In this context, Sari Rombach from the WCRP Secretariat presented a possible tool to stimulate hub-led sessions, an interactive MCR activity whiteboard, where hubs could add digital sticky notes with descriptions or links to their activities. The tool could help everyone learning about the activities and collaborations of all hubs and facilitating the integration of new hubs. During an initial workshop with hubs from Asia-Pacific time zones shortly before the General Assembly, it was highlighted that this tool could be helpful in facilitating collaboration during the early and informal stages of planning, well before any announcements are made on websites.

## 5. Update from the Education Working Group

The Education Working Group, comprised of nine members from five regions as of January 2023, is a relatively newly founded group. Although they do not have a formal mission yet, their aim is to explore the lessons learned from hub experiences of scientists working with communities, to inform education for the general public and climate scientists. They also seek to bring best practices from social science and education to climate scientists working with communities and to promote education as a valuable ally in climate adaptation and mitigation. The group has a particular focus on the Global South and marginalized communities worldwide. As part of their plans, they intend to organize a series of two webinars with expert panelists, tentatively scheduled for September. They are seeking feedback from the MCR network on how to plan and structure these webinars and who should be involved. Ted expressed support for an open series and emphasized the value of educational materials. The WCRP Secretariat can provide logistical support for the series. Additionally, WWRP/SERA expressed their interest in collaborating with the Education Working Group. Vandana Singh who chairs the Working Group mentioned that they are actively seeking more members, whether attached to a hub or not.

## 6. Plans for the Open Science Conference

Two MCR-related items were highlighted for the OSC in Kigali in late October 2023: the approved Learning Lab Side Event titled "[Democratizing Climate Science: Making it meaningful at local](#)

[Scales](#)” led by Anna Sörensson, and the use of the Early and Mid-career Researchers (EMCRs) Symposium as a means to expand the MCR community. The question of how MCR can involve EMCRs was raised, and the idea was put forth to have MCR representatives participate in the Symposium as an opportunity to informally promote MCR, since the Break-Out-Group-themes around which the Symposium is organized are relevant for MCR. The Symposium, although officially running the day before and after the OSC, will promote some OSC side-events relevant for EMCRs to keep a red thread all through the OSC; amongst those, the Learning Lab Event could be promoted. Since there is currently no platform for involving EMCRs, the suggestion of establishing a network between Young Earth System Scientists (YESS) and MCR, as well as the WCRP Academy as a further entry point, was discussed. It was acknowledged that there will be several other sessions and side events at the OSC that, while not officially endorsed by MCR, are likely to generate discussions relevant to MCR and its associated hubs. However, it was emphasized that it is crucial to focus the event accordingly to use the dynamic. Plans can start to develop once the funding support for MCR participants is clarified.

## 7. Summarized action items and final thoughts

During the presentation and discussions, several action items were identified:

Based on the 44th Session of the JSC (cf. p. 3):

- Clarify that the Draft Science Plan has been superseded by the MCR component of the WCRP Implementation Plan (Chairs and Secretariat).
- Add the interest area of each hub to the MCR website; Regina suggested using a Google form to survey the hubs on their interests (Chairs and Secretariat).
- Provide information on the extent of hub interest in National Adaptation Plans to Lisa Alexander (Chairs and Secretariat).

Based on hub discussions (cf. p. 8f.):

- Clarify the links and interests of hubs participating in CORDEX Africa as an opportunity to liaise with RIfS (Douglas Maraun to liaise with Irene Lake).
- Organize webinars on specific themes to enhance SSG-MCR hub exchanges (SSG members).
- Initiate an exchange of experiences in initial dialogues for funding proposals and establish additional personal initiative training for developing and running interdisciplinary projects to address struggles with funding proposals (Ros Cornforth and Ana María Durán Quesada).

Based on the OSC (cf. p.10):

- Find out who is attending the OSC and how to distribute people in the EMCR Symposium and Side Events to promote MCR (Anna Sörensson).
- Collaborate on ideas to ensure MCR-ECR connections and discuss entry points for EMCRs in MCR (all).
- Establish links between YESS and the WCRP Academy with MCR and disseminate an overview of which hubs are offering annual field schools or field-based intensive training (Narelle van der Wel and Kendra Gotangco Gonzales). Note that Julia Mindlin (CONICET hub) and Fiona Spuler (Walker hub) are initiating an ECR group within MCR.

It was recognized that the two two-hour sessions of this GA did not provide enough time for in-depth discussions and exchanges between participants outside the chat. It was concluded that

more time (e.g., three-hour sessions), shorter presentations, and potentially three sessions adapted to different time zones (Americas, Europe/Africa, and Asia-Pacific) should be aimed for at the next GA. Suggestions such as pre-recorded and pre-shared presentations to facilitate thematic discussions were made. Finally, ideas such as pairing, clustering, and a world-café style approach were also suggested.



## Annex 1 – List of Participants

<b>Members of the Scientific Steering Group</b>
Regina Rodrigues, Universidade Federal de Santa Catarina, Brazil
Ted Shepherd, University of Reading, UK and Forschungszentrum Jülich, Germany
Francisco (Paco) Doblas-Reyes, Barcelona Supercomputing Center, Spain
Vandana Singh, Framingham State University, US
C. Kendra Gotangco Gonzales, Ateneo de Manila University, Philippines
Sugata Narsey, Bureau of Meteorology, Australia
Chi (Shachi) Truong, The Himalayan University Consortium, ICIMOD, Nepal
Amadou Thierno Gaye, Ecole Supérieure Polytechnique (ESP) University, Senegal
Douglas Maraun, University of Graz, Austria
Ana María Durán Quesada, University of Costa Rica, Costa Rica
Fei Chen, National Center for Atmospheric Research, US
Masilin Gudoshava, IGAD Climate Prediction and Applications Centre, Kenya
Anna Sörensson, CONICET, Buenos Aires, Argentina
<b>MCR Regional Hubs</b>
Bureau of Meteorology, Australia – Sugata Narsey
Bureau of Meteorology, Australia – Pandora Hope
Ateneo de Manila University, Philippines – C. Kendra Gotangco Gonzalez
Ateneo de Manila University, Philippines – Jean Jardeleza Mijares
Climate Futures, NORCE, Norway – Iselin Medhaug
Himalayan University Consortium, Kathmandu, Nepal – Chi (Shachi) Huyen Truong
Walker Institute, University of Reading, UK – Ros Cornforth
Walker Institute, University of Reading, UK – Celia Petty
University of Tsukuba, Japan – Van Doan
SAEON, South Africa – Jennifer Veitch
SAEON, South Africa – Nicole du Plessis
IITM, India – Roxy Mathew Koll
CONICET, Buenos Aires, Argentina – Anna Sörensson
CONICET, Buenos Aires, Argentina – Florencia Fossa Riglos
IGAD Climate Prediction and Applications Centre, Kenya – Masilin Gudoshava
University of Cape Town, South Africa - Chris Jack
University of Manitoba, Canada – Elizabeth Worden
Centre Régional AGRHYMET, Niger – Abdou Ali
RSS, Jordan – Iain Stewart

<b>Ex-officio representatives</b>
Copernicus, C3S – Carlo Buontempo, Copernicus, Germany
WWRP SERA – Isadora Christel Jimenez, Spain
WWRP SSC – Shipra Jain, Singapore
GEWEX – Ali Nazemi, Canada
WASP – Elisabeth Gilmore, Canada
<b>Secretariat</b>
Narelle van der Wel, WCRP, Switzerland
Sari Rombach, WCRP, Switzerland
<b>Invited guest</b>
Thea Turkington, CCRS, Singapore

## Annex 2 – Agenda

### Agenda for WCRP My Climate Risk 3rd General Assembly, May 16, 2023

16 May 2023, 06:00-8:00 UTC My Climate Risk General Assembly, “Eastern session”

16 May 2023, 15:00-17:00 UTC My Climate Risk General Assembly, “Western session”

Note that participation was by invitation only, invited participants were welcome to attend any of the sessions, and the same agenda for both sessions was followed, with contributions as appropriate from those present at each session.

1. Tour de Table, including brief introductions from new *ex-officio* members (5 min)
2. Update on MCR and WCRP (Regina and Ted) (20 min)
3. Introductions from new hubs (10 mins each, from those present) (30 min)
4. Updates from existing hubs (5 mins each, from those present) (20 min)
5. Discussion on progress of hubs (all) (10 min)
6. Possible hub interaction tool (Sari) (10 min)
- [Eastern session only] 7. Update from Education Working Group (Vandana) (10 min)
- [Western session only] 8. Plans for Open Science Conference (Anna, all) (10 min)
9. Interactions within and outside WCRP (all) (10 min)
10. Any Other Business (5 min)

### Presentations of MCR Regional Hubs for items 3 and 4 of the agenda

#### Eastern session:

New hubs: Tsukuba, SAEON, IITM

Original hubs: BoM, ADMU, NORCE\*, HUC

#### Western session:

New hubs: ICPAC, RSS, AGRHYMET

Original hubs: UM, Walker, CONICET, UCT

- A written update was provided following the GA sessions

## Annex 3 – Acronyms

ACDI	African Climate Development Initiative
ADMU	Ateneo de Manila University, Manila, Philippines
AI	Artificial Intelligence
AIS	Ateneo Institute of Sustainability, Manila, Philippines
AMS	American Meteorological Society
BoM	Bureau of Meteorology, Melbourne, Australia
BUE	Board on Urban Environment
CDR	Climate and Disaster Resilience Laboratory
CASCADE	Cascading Climate and Health Risks in Cities
CONICET	National Scientific and Technical Research Council, Argentina
CORDEX	Coordinated Regional Climate Downscaling Experiment
CSAG	Climate System Analysis Group
ECR	Early-Career Researchers
EMCRs	Early and Mid-Career Researchers
EPESC	Explaining and Predicting Earth System Change
GA	General Assembly
HOTOSM	Humanitarian OpenStreetMap Team
HUC	Himalayan University Consortium, Kathmandu, Nepal
ICRC	International Conference on Regional Climate
ICPAC	IGAD Climate Prediction and Applications Centre
IGAD	Intergovernmental Authority on Development
IITM	Indian Institute of Tropical Meteorology
YESS	Young Earth System Scientists
JSC	Joint Scientific Committee
LHA	Lighthouse Activity
MCR	My Climate Risk
MENA	Middle East and North Africa
NAP	National Adaptation Plans
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
NORCE	Norwegian Research Centre
OSC	Open Science Conference
RIfS	Regional Information for Society
RSS	Royal Scientific Society
SAEON	South African Environmental Observation Network
SEA	South-East Asia
SERA	Working Group on Societal and Economic Research Applications
SSC	Scientific Steering Committee
SSG	Scientific Steering Group
UCT	University of Cape Town, South Africa
UoM	University of Manitoba
WASP	World Adaptation Science Programme
WCRP	World Climate Research Programme
WWRP	World Weather Research Programme





*The  
World Climate  
Research Programme  
(WCRP)*

*facilitates analysis and  
prediction of Earth system change  
for use in a range of practical  
applications of direct relevance,  
benefit and value to society.*

