WCRP My Climate Risk Second General Assembly

November 21 – 23, 2022, online

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Table of Contents

Introduction	1
Update on WCRP developments	2
Reflections on the progress of existing hubs	2
Possible additional hubs	4
Interactions with other parts of WCRP	5
Interactions with other bodies	6
WCRP Open Science Conference	6
Other business	6
Final thoughts	7
Annex 1	8
Annex 2	8

Introduction

The second WCRP My Climate Risk (MCR) General Assembly (GA) was held virtually November 21 – 23, 2022. This was the second collective meeting of MCR, following the <u>first one</u> held in early summer 2022. The GA took place in four online sessions of two hours each, spread over three days. Meetings were separated into eastern and western hemispheric groups to accommodate time-zone differences. For each hemispheric group, one session was an "open" hub-led presentation session and one was a "closed" administrative discussion session, the details of which can be found in Annex 1. Invited participants for the closed sessions included members of the MCR Scientific Steering Group (SSG), representatives of the eight MCR regional hubs, ex-officio representatives of other bodies, and WCRP Secretariat staff (Figure 1). The open sessions also included other members of the MCR hubs and several invited guests (see Annex 2 for a full participant list). The open sessions provided an opportunity for the members of the hubs to get to know one another and share their experiences thus far, which were rich and diverse. This report records the administrative discussion that occurred during the two closed sessions.



Taylor Blair (WCRP Secretariat)

Figure 1: Participants in the closed sessions

Update on WCRP developments

MCR Chairs Regina Rodrigues and Ted Shepherd reported on the outcomes of the 43rd Session of the WCRP Joint Scientific Committee (JSC43). The soft relaunch of the WCRP is now largely complete, and all nominations for membership of the MCR SSG were approved. The JSC was very pleased with the progress made by MCR since the previous JSC meeting. A number of actions from JSC43 involve MCR. Action 9 is for MCR to explore opportunities, perhaps through the MCR hubs, for holding joint webinars with other parts of the WCRP. Webinars are already starting within some of the hubs, and all MCR hubs are accordingly asked to help in carrying this action forward. Other members of the MCR SSG could also consider doing so at their own institutions. Action 12 is to explore how sea level rise fits within the WCRP structure. For MCR the most natural context for this is through its regional hubs, and this will be addressed through the proposed ocean-focused hubs (see further discussion below). Action 14 is to engage the African climate research community in the run-up to the WCRP Open Science Conference in Kigali in October 2023. Bruce Hewitson of RIfS has been tasked with taking the lead on this, so MCR can engage with him in this respect. A number of MCR members indicated an interest in doing so, and should contact Bruce directly. Action 15 is to identify ways to strengthen links between the Lighthouse Activities and Core Projects. There will be a dedicated day at the JSC meeting in May 2023 to discuss this. Specific linkages between MCR and the Core Projects are enumerated further below.

Reflections on the progress of existing hubs

There was a general discussion on the progress of the current MCR regional hubs (see Figure 2), reflecting on the hub-led sessions preceding the closed sessions. The eight hubs are all very different, reflecting their different circumstances and histories. (See the detailed descriptions of each of the hubs in the <u>report of the First MCR GA</u>.) As that diversity reflects the diversity of local situations, this is a strength of MCR, and we can all learn from each other (both the successes and the failures).



My Climate Risk Regional Hubs

Figure 2: MCR regional hubs as of November 2022

The MCR webinar series hosted by the Ateneo de Manila University (ADMU) hub from October to December 2022 was seen as an interesting model for community-building and raising the profile of MCR

within the local community. The first webinar series was titled "Climate Voices on the Ground", which aimed to better understand the local contexts and, hence, the adaptation needs of diverse stakeholders on the ground. The second series was titled "Climate Research as if People Mattered", which sought to explore innovative approaches for climate change research, communication, and risk management from an inter- and trans-disciplinary perspective, highlighting research as a means of caring for communities and building relationships as well as resilience. This order nicely reflects the principle that we should always start by listening. The main presentations were bookended by substantial reflections, and there was extensive discussion. Recordings of all the webinars are available at https://linktr.ee/MCR_ADMU, and will be eventually migrated to the main ADMU MCR hub website. (Recordings may also be viewed on the Facebook page of the Ateneo Institute of Sustainability.) This seems like the sort of model that could work well for holding joint webinars with other parts of the WCRP within a particular region, or joint webinars between hubs within compatible time zones.

Another interesting but distinctly different model for community-building was described by the Argentinian (CONICET) hub. There, an interdisciplinary group of 19 members has been meeting regularly, learning how to understand each other's language, e.g. the different understandings of storylines, or of risk, between the physical sciences and the social sciences and humanities. In other words, they are operating as a 'community of practice' or 'lab', as envisaged in the MCR Science Plan. They have just submitted a paper on interdisciplinary storylines to Global Environmental Change and are developing a Strategic Plan for the hub. The hub website is in Spanish and hub meetings are conducted in Spanish. Although this limits the dissemination of hub activities around the world, everybody agreed that the first priority of MCR hubs must be to engage with the local community (which in the case of the Argentinian hub extends across Latin America). We need to acknowledge that the use of English can drive the most vulnerable groups away from the conversation. Thus, the activities developed by the hubs need not only to be inclusive but also to be considerate so that language is not a limiting issue.

The different modalities between the different hubs prompted a wider discussion of what it means to be a hub, or to be a member of a hub. There is no simple answer to this, as it will inevitably be contextual. A hub can be a centre of activity; a platform that facilitates/enables connections; or even a node that vets, disseminates and shares data and information. Thus, MCR can espouse an openness to all forms of activity that contribute to the engagement of different stakeholders towards understanding of and action on 'our climate risks'. However, commitment from individuals is key, and the discomfort that this question may provoke is what ultimately builds social capital and leads to the agility that is needed to respond to opportunities and changing circumstances, and to fill gaps. There was general agreement with the proposition that MCR needs to be somewhat disruptive, and that climate scientists in particular need to lose control; if we are not uncomfortable then we are doing something wrong. Carlo Buontempo (ex-officio member from Copernicus Climate Change Service, C3S) suggested that we need to move from a *decision-support* to a *discussion-support* framework, which again moves power away from the climate scientists.

There was also considerable discussion around connections with training or educational activities, bearing in mind that training should be seen as a two-way process (and that scientists are generally perceived as being not very good at listening!). The possibility of hybrid schools was discussed, as with the Himalayan University Consortium (HUC) school on statistics in August 2021 which was designed to combine online lectures with on-site practicals, led by local instructors. That sort of model could allow sharing of knowledge between hubs, e.g., on complex systems thinking which seems to be a common theme. It was noted that engagement with stakeholders or field work can be a very important part of training, which might suggest a model of school+engagement+school, where the engagement component could be over

an extended period. Another potential mechanism, which has been introduced by the Walker Institute hub, is twinned PhD students. This could potentially be enabled through Horizon Europe programmes.

The question of possible collective publications from MCR came up (again). There was general agreement that a special issue of a journal, or an edited book, was still premature and would require a very large effort to accomplish. However, there was also a feeling from what had been presented by the hubs that there was probably enough existing material to be able to put together one or two joint publications, of a Perspective nature, or perhaps something of a more unconventional nature such as a Conversation or Dialogue. There does seem to be something of an MCR approach emerging, with two main themes: (i) Climate stories, namely the importance of listening and working from the local situation, in its own language and ontology, before building climate storylines and other forms of climate information; (ii) What are the wider framings that are most useful for representing climate risk in a people-centred way? If we can develop such an approach in a reproducible and transparent way, this could be the legacy of MCR.

Possible additional hubs

The long-term goal of MCR is to establish hubs around the world which are able to continue once MCR formally winds down. However, we need to walk before we can run, meaning that we need to nurture a 'mycorrhizal network' around and between the existing hubs, before expanding too much. In this respect it is important to emphasize that the hubs are not so much regional representatives of MCR (although of course they do that as a side effect) as they are laboratories, to experiment with the MCR approach.

The immediate priority is to expand the network of MCR hubs in regions which are currently not well represented within the WCRP. This particularly includes the tropics (see also Figure 2). It is also a priority to have some ocean-focused hubs. Several initiatives were discussed during the meeting.

Regina reported on a plan for a network of MCR ocean hubs to operate within the context of the CLIVAR Research Focus on marine heatwaves, jointly led by Jennifer Veitch at the South African Environmental Observation Network, Roxy Koll at the Indian Institute of Tropical Meteorology, and Susan Bates at the Nature Conservancy in Virginia, USA. All three are scientists on the relevant CLIVAR Regional Panels. There was full agreement on proceeding with these three new hubs.

Regina also reported on her so far unsuccessful efforts to establish a hub in a South Pacific small island state, which remains a priority for MCR. Any assistance in this respect will be gratefully received.

Ros Cornforth reported on progress in discussions with two institutions who are keen to become MCR hubs: Agrhymet, a longstanding inter-state regional centre focused on drought risk in the Sahel, based in Niger; and the Royal Scientific Society of Jordan. The Walker Institute has been working closely with both organizations (and MCR SSG member Amadou Gaye with Agrhymet), who are very interested in adopting MCR methodologies. There was full agreement on proceeding with these two new hubs.

Paola Arias and Ana Duran are exploring the possibility of building an MCR community in the tropical part of Latin America, liaising closely with the Buenos Aires hub.

Fei Chen reported on discussions between US colleagues and colleagues in Nigeria concerning the possibility of a hub based on Lagos with a focus on urban aspects of climate change. The need to ensure sufficient critical mass was discussed. The group will explore whether a network of such hubs (analogous to the network of ocean hubs mentioned above), perhaps including Houston and Tokyo, might be a useful way to proceed.

Interactions with other parts of WCRP

Because the Lighthouse Activities were specifically designed to help integrate between the Core Projects, the strongest interactions between MCR and other parts of the WCRP are expected to be with the Core Projects, and are expected mainly (though not exclusively) to occur at the hub level. To help facilitate these interactions, the following list was enumerated (which may not be complete).

GEWEX:

- MCR SSG members Paola Arias and Anna Sörensson are on the GEWEX Hydroclimatology Panel

- Ali Nazemi is GEWEX ex-officio member within MCR

- Following a discussion between the MCR and GEWEX Regional Hydroclimate Project (RHP) chairs in August, contacts have been made between MCR regional hubs and the relevant RHPs

- Links already exist between the Buenos Aires hub and the ANDEX RHP

CLIVAR:

- MCR Chair Regina Rodrigues also chairs the CLIVAR Atlantic Panel

- New hubs are being developed within the framework of CLIVAR Research Foci (see above)

SPARC:

- MCR SSG member Lin Wang represents SPARC within MCR

- In discussions with the SPARC chairs in October, Ted suggested several potential SPARC linkages to MCR hubs

CliC:

- MCR SSG member Julienne Stroeve has agreed to liaise between CliC and MCR

- Jawairia Ahmad from HUC (based at the Lahore University of Management Sciences) is a CliC Fellow

- There are potential linkages, yet to be explored, between CliC and the HUC Climate and Cryosphere

Thematic Working Group

RIfS:

- Bruce Hewitson is RIfS ex-officio member within MCR

- Ted and Bruce are planning a joint RIfS-MCR Working Group on epistemological issues in climate risk

- Ted and Erika Coppola from CORDEX are exploring the feasibility of a joint CORDEX-MCR Working Group on using storylines to bridge CMIP and CORDEX model data

- MCR SSG member Gaby Langendijk is co-leading a CORDEX Flagship Pilot Study on urban climate change

ESMO:

- Susann Tegtmeier is ESMO ex-officio member within MCR

- Michael Grose (BoM hub) and Carlo Buontempo (C3S ex-officio member within MCR) are both on the CMIP Vulnerability, Impacts, Adaptation, and Climate Services (VIACS) Advisory Board

There are not expected to be strong interactions between MCR and the other Lighthouse Activities, since they are designed to be complementary. The one exception might be with the WCRP Academy:

- MCR SSG member Vandana Singh has agreed to act as a liaison between the Academy and MCR

- Laurice Jamero (from the Manila Observatory, a collaborator of the ADMU hub) is a consultant for the Academy

The LHAs have been asked to nominate members of the Global Precipitation Experiment (GPEX) Science Team. MCR has nominated Jakob Friedrich Steiner (HUC hub).

Interactions with other bodies

We expect many such interactions to occur at the hub level, since the hubs already work with a variety of partners outside WCRP. However, there may be a few cases where pan-MCR interactions are appropriate, and could be facilitated through ex-officio membership within the MCR GA (as is currently the case with C3S).

Chris Jack noted that the Adaptation Research Alliance (<u>https://www.adaptationresearchalliance.org/</u>), which has a theme on climate risk, might be a good connection. He offered to explore this possibility.

Paco Doblas-Reyes suggested connecting with the World Weather Research Programme's Societal and Economic Research Applications (SERA) group, and offered to help make that connection.

A question was raised about the Future Earth Risk KAN (Knowledge Action Network). Regina and Ted had met earlier with the Risk KAN leadership, but found that their focus was a bit different, and did not fit MCR. It's important to note that many parts of WCRP address risk (e.g. the Safe Landing Climates LHA), even though only MCR has the word in its title.

WCRP Open Science Conference

Kigali, Rwanda, October 23-27, 2023

Regina, who is a Theme Leader for the WCRP Open Science Conference (OSC), gave an overview of the new OSC website, including the webpages for the themes, sessions, and poster clusters. We can now nominate people as potential session chairs and participants were asked to nominate some from MCR. Regina and Ted noted that MCR will use its budget to support travel to the OSC, especially encouraging representation from the hubs, and from MCR members in the Global South. The hybrid component of the OSC will also be well-developed to facilitate remote participation.

Narelle van der Wel noted that it would be useful for this group to think about stories for the OSC website. Kendra Gotangco Gonzales said that the ADMU hub could host a webinar series on "open climate science" — what it means and how it differs from previous paradigms — to help promote the conference. This could be something of a creative play on words around "Open Science Conference". Anna Sörensson led an MCR proposal for a Learning Lab at the OSC entitled "Democratizing climate science: making it meaningful at local scales".

Other business

With regard to the GA meeting format, although the hub-led sessions were very informative, there was some frustration expressed about the fact that the time zones seemed to have become locked in, which meant that certain hubs were unable to interact with other hubs. It was therefore decided that the hub-led MCR sessions should be decoupled from the MCR GA proper, and could occur in different time zones (and staggered in terms of dates) to allow interactions between different sets of hubs. These hub-led MCR sessions are distinct from public-facing joint webinars, to allow for more informal interactions.

Vandana Singh asked the question of how MCR could help mainstream the sort of training of ourselves that is manifestly occurring through many of the hubs, especially the training offered by the people on the

ground that the hubs are working with. She also suggested that there is a huge potential for MCR experiences with communities to inform climate education for climate scientists and other disciplines and the public. There was much interest in these thoughts, and Vandana was asked to lead an MCR Working Group on Education to pursue them.

Final thoughts

Some key themes were woven throughout the closed sessions of the MCR GA. One was that climate research should be accessible and actionable for local communities. This is achieved when tools and resources are provided in local languages and when citizens are shown how climate impacts influence their real-life daily activities. This is further facilitated when we understand past legacies and power structures, allowing us to work more effectively with policymakers and adapt climate information to local communities. Another recurring theme was that activities and research topics vary across the hubs. Some hubs focus on societal aspects of climate change while others focus on physical science aspects. Several participants also indicated they experience a sort of academic "discomfort" because they are not fully sure in which research directions to take their hubs. This discomfort was discussed as being positive, as the hubs should focus on the unique needs and research gaps in their regions. Hubs are not bound to prescribed research or outreach activities and should be okay with experiencing some discomfort. A final theme was the desire to learn from and share knowledge with local populations and other experts, including other hubs. The practice of "listening" in research was mentioned multiple times. Though climate experts have traditionally done the teaching, they can gain new insights and develop deeper trust through listening to stakeholders. Participants also recognized that unique expertise exists across the hubs, which should be shared more frequently between MCR members. Sharing experiences of success and failure will help other hubs develop and achieve success. These transactions can happen more frequently than the biannual GA meetings.

Annex 1

21 November 2022, 8:00-10:00 CET 22 November 2022, 8:00-10:00 CET 22 November 2022, 17:00-19:00 CET 23 November 2022, 17:00-19:00 CET (closed) My Climate Risk General Assembly, "Eastern" session 1 (open) My Climate Risk General Assembly, "Eastern" session 2 (closed) My Climate Risk General Assembly, "Western" session 1 (open) My Climate Risk General Assembly, "Western" session 2

Annex 2

First name	Last name	Role within MCR
(Father) Jose	Villarin	MCR Hub (ADMU)
Aleksandra	Elias	MCR Hub (UM)
Alex	Crawford	MCR Hub (UM)
Ali	Nazemi	Ex-Officio (GEWEX)
Alice	McClure	MCR Hub (UCT)
Amadou Thierno	Gaye	MCR SSG Member
Ana María	Durán Quesada	MCR SSG Member
Andrew	King	MCR Hub (AU BoM)
Anna	Sörensson	MCR SSG Member
C. Kendra	Gontangco Gonzales	MCR SSG Member
Carla	Gulizia	MCR Hub (CONICET)
Carlo	Buontempo	Ex-Officio (C3S)
Chi Huyen (Shachi)	Truong	MCR SSG Member
Chris	Jack	MCR Hub (UCT)
Daira Anahi	Rosales	MCR Hub (CONICET)
Daniel	Ratilla	MCR Hub (ADMU)
Dennis	Ballard	MCR Hub (UM)
Douglas	Maraun	MCR SSG Member
Elizabeth	Worden	MCR Hub (UM)
Ellen	Hovland	MCR Hub (NORCE)
Emilia	Diaconescu	MCR Hub (UM)
Emilyn	Espiritu	MCR Hub (ADMU)
Emma	Porio	MCR Hub (ADMU)
Erik	Kolstad	MCR Hub (NORCE)
Fei	Chen	MCR SSG Member
Francisco	Doblas-Reyes	MCR SSG Member
Gaby	Langendijk	MCR SSG Member
Guy	Howard	MRC Hub (HUC)
Hindumathi Kulaiappan	Palanisamy	WCRP Secretariat
Jairus	Josol	MCR Hub (ADMU)

Jean	Jardeleza Mijares	MCR Hub (ADMU)
Jennifer	Lukovich	MCR Hub (UM)
Jennifer	Veitch	Invited Guest
Juan	Rivera	MCR Hub (CONICET)
Julia	Mindlin	MCR Hub (CONICET)
Julienne	Stroeve	MCR SSG Member
Karen	McKinnon	MCR SSG Member
Lin	Wang	MCR SSG Member
Lubna	Naz	MRC Hub (HUC)
M. Florencia Fossa	Riglos	MCR Hub (CONICET)
Manuel	Hempel	MCR Hub (NORCE)
Mark	Tadross	MCR Hub (UCT)
Masilin	Gudoshava	MCR SSG Member
Mayowa	Fasona	Invited Guest
Michael	Grose	MCR Hub (AU BoM)
Monojit	Saha	MCR Hub (UM)
Narelle	van der Wel	WCRP Secretariat
Øyvind	Paasche	MCR Hub (NORCE)
Pandora	Норе	MCR Hub (AU BoM)
Paola Andrea	Arias	MCR SSG Member
Peter	Johnston	MCR Hub (UCT)
Philip	Tuano	MCR Hub (ADMU)
Regina	Rodrigues	MCR Chair
Rosalind	Cornforth	MCR Hub (WI UoR)
Roxy	Koll	Invited Guest
Sakshi	Mankotia	MCR SSG Member
Samuel	Akande	Invited Guest
Sarika	Govender	MCR Hub (UCT)
Sugata	Narsey	MCR SSG Member
Susan	Bates	Invited Guest
Taylor	Blair	WCRP Secretariat
Ted	Shepherd	MCR Chair
Vaishali	Chaudhary	MCR Hub (UM)
Valeria	Hernandez	MCR Hub (CONICET)
Vandana	Singh	MCR SSG Member