



Ted Shepherd
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World Climate Research Programme

My Climate Risk

44th Session of the WCRP JSC
Brussels, 8-11/05/2023



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Motivation

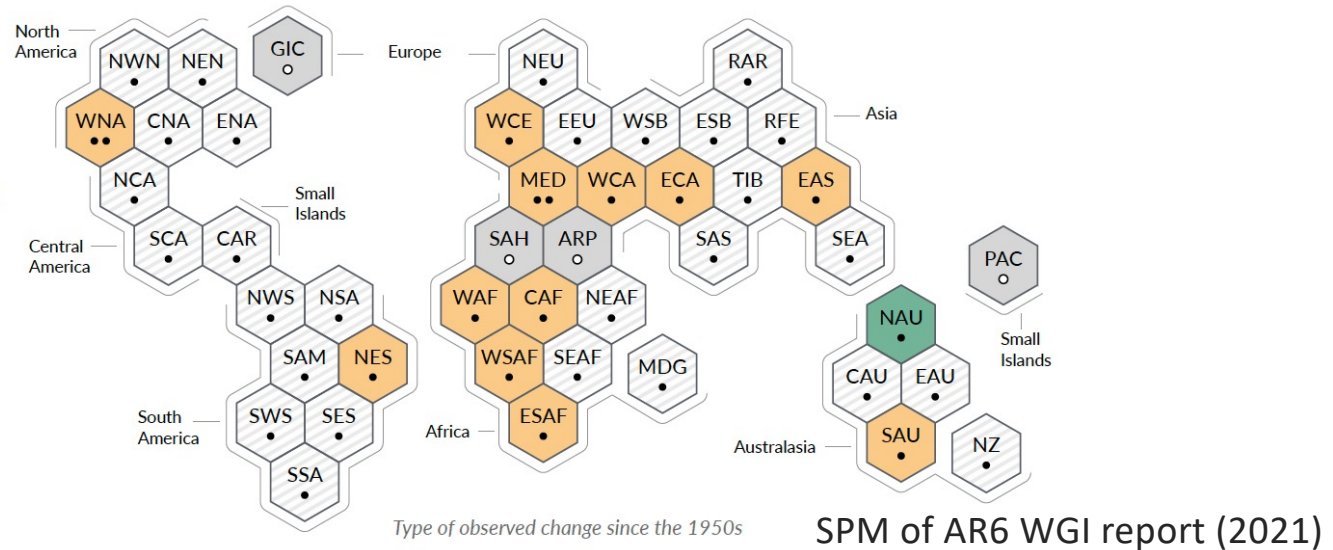
c) Synthesis of assessment of observed change in **agricultural and ecological drought** and confidence in human contribution to the observed changes in the world's regions

Type of observed change in agricultural and ecological drought

- Increase (12)
- Decrease (1)
- Low agreement in the type of change (28)
- Limited data and/or literature (4)

Confidence in human contribution to the observed change

- High
- Medium
- Low due to limited agreement
- Low due to limited evidence



Traditional ways of producing aggregated climate information can leave climate scientists empty-handed for many regions of the world

Yet there can be a wealth of local climate knowledge (e.g. Chapter 10 of IPCC AR6)

Motivation



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Small is beautiful: climate-change science as if people mattered

Regina R Rodrigues, Theodore G Shepherd 

PNAS Nexus, Volume 1, Issue 1, March 2022, pgac009,

<https://doi.org/10.1093/pnasnexus/pgac009>

Grappling with complexity of local situations...

...by expressing climate knowledge in a conditional form

The importance of simplicity when dealing with deep uncertainty...

...through the use of physical climate storylines

Empowering local communities to make sense of their own situation...

...by developing “intermediate technologies” that build trust and transparency

Our ambition



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Goal



To develop and mainstream a *'bottom-up'* approach to regional climate risk, which starts from the decision context (and the decision scale) and enables relevant climate information to be brought into that context

Purpose



By developing a *new framework* for assessing and explaining the physically plausible climate drivers of regional climate risk, climate information will be made meaningful at the local scale

Equity and Legitimacy



"...inequitable *North–South partnerships* [are] borne out of a paradigm of knowledge deficit and capacity development that runs the risk of entrenching existing inequalities....Creating frameworks that enable the establishment of equitable partnerships requires a shift in perspectives on, and processes related to, the design, implementation and evaluation of success." Vincent et al. (*Nature Climate Change*, 2020)

Our vision



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Regional Hubs

Foster a non-hierarchical ecosystem of labs/communities of practice, like a *mycorrhizal network*, sharing resources rather than competing for them, and anchored by 'mother trees' in the form of regional hubs



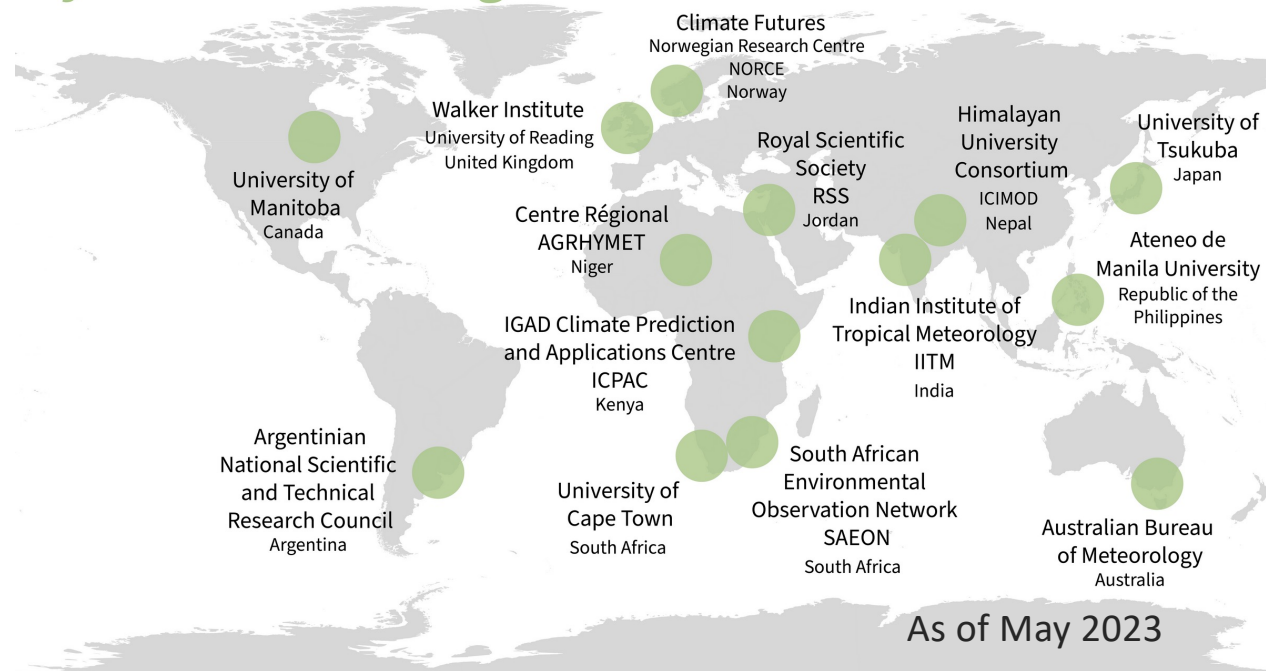
Progress so far



My Climate Risk

- ✓ Hubs need to be anchored in a *local institution*
- ✓ Hubs need to share the *bottom-up* approach of MCR
- ✓ Priority is to reach *regions not well represented* within WCRP
- ✓ See the *MCR website* for FAQs about hubs

My Climate Risk Regional Hubs



- ✓ Several ocean-oriented hubs are joint with CLIVAR (with a focus on marine heat waves)

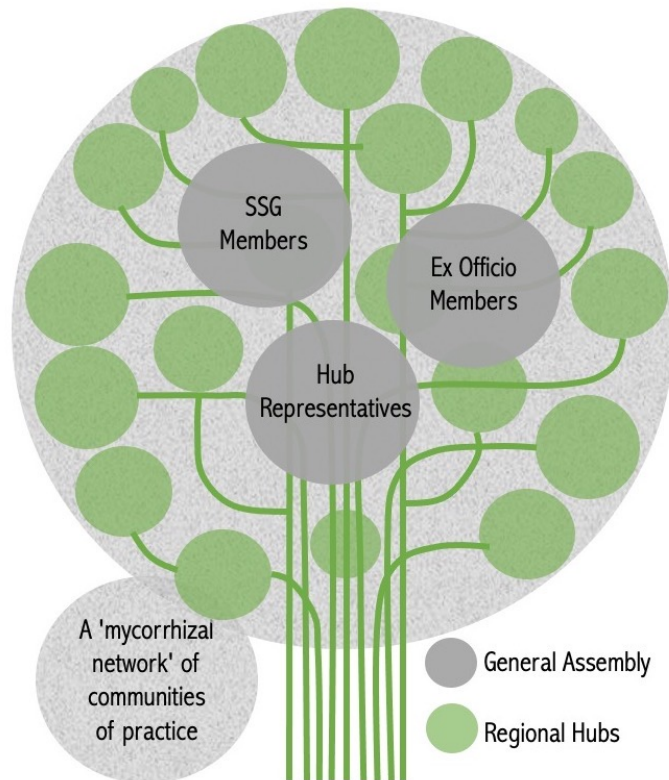
Our structure



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Doing things differently

- ✓ No dominance by the Global North (let alone by the Anglo-American axis within it)
- ✓ Balance in region, gender, and career stage
- ✓ No MCR-wide in-person meetings
- ✓ No panels with formal membership
- ✓ SSG members meet together with hub representatives in virtual General Assemblies (twice a year, with separate sessions targeting the Eastern and Western hemispheres)
- ✓ Most of the activity in MCR happens *organically*, emanating from the hubs (see list of events on the MCR website)

Progress so far



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SSG Membership

- ✓ 14 EMCR x 5 SCR
- ✓ 12 Women x 7 Men
- ✓ 10 Global South x
9 Global North



Progress over last year



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Second MCR General Assembly

- ✓ 21-23 November 2022
- ✓ 4 two-hour sessions
- ✓ 2 for each hemisphere, Eastern and Western
- ✓ 1st hub-led and open to all hub members
- ✓ 2nd restricted to members
- ✓ Report available online



My Climate Risk General Assembly

November 21-23, 2022



Progress over last year



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Expansion of the network with 6 additional hubs

- ✓ Centre Régional AGRHYMET (Niamey, Niger)
- ✓ IGAD Climate Prediction and Applications Centre (ICPAC) (Nairobi, Kenya)
- ✓ South African Environmental Observation Network (SAEON) (Pretoria, South Africa)*
- ✓ Indian Institute of Tropical Meteorology (IITM) (Pune, India)*
- ✓ University of Tsukuba (Tsukuba, Japan)
- ✓ Royal Scientific Society (RSS) (Amman, Jordan)



Establishment of an education working group

- ✓ To share or develop training materials between the hubs and strengthen linkages with the WCRP Academy
- ✓ Led by MCR SSG member Vandana Singh
- ✓ Initial meeting 15 March 2023
- ✓ First step: To gain an understanding of what it means to decolonise climate science and education

Progress over last year



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ADMU Webinar series

- ✓ We are developing a pair of cross-MCR, hub-led publications arising from these two webinar series, led by the leaders of the HUC and ADMU hubs
- ✓ The recordings of these webinars are available from the ADMU My Climate Risk website



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**CLIMATE VOICES
ON THE GROUND**

PERSPECTIVES FROM DIFFERENT SECTORS
WEBINAR SERIES

**CLIMATE
RESEARCH**

"AS IF PEOPLE MATTERED"
WEBINAR SERIES



**7 WEBINARS
FROM OCTOBER TO DECEMBER 2022**

Register at: linktr.ee/MCR_ADMU

Progress over last year



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**CLIMATE RESEARCH
AS IF PEOPLE MATTERED**

Open Climate Science
A panel discussion on the meanings and practice of open science

FEBRUARY 15, 2023 WED 4:30-6:00 PM

FIONA SPULER, MSc **NORALENE UY, PhD, ENP** **CHRISTOPHER D. JACK, PhD** **JOHN LEO C. ALGO, MSc** **FR. JOSE RAMON VILLARIN, SJ**

Register at: linktr.ee/MCR_ADMU



ADMU Webinar on WCRP OSC

- ✓ To promote the WCRP OSC in Kigali within its region
- ✓ “Open Climate Science: A Panel Discussion on the Meanings and Practice of Open Science”
- ✓ With speakers also from the Cape Town and Walker Institute hubs
- ✓ Leading into the MCR Learning Lab side event at the OSC

Progress over last year



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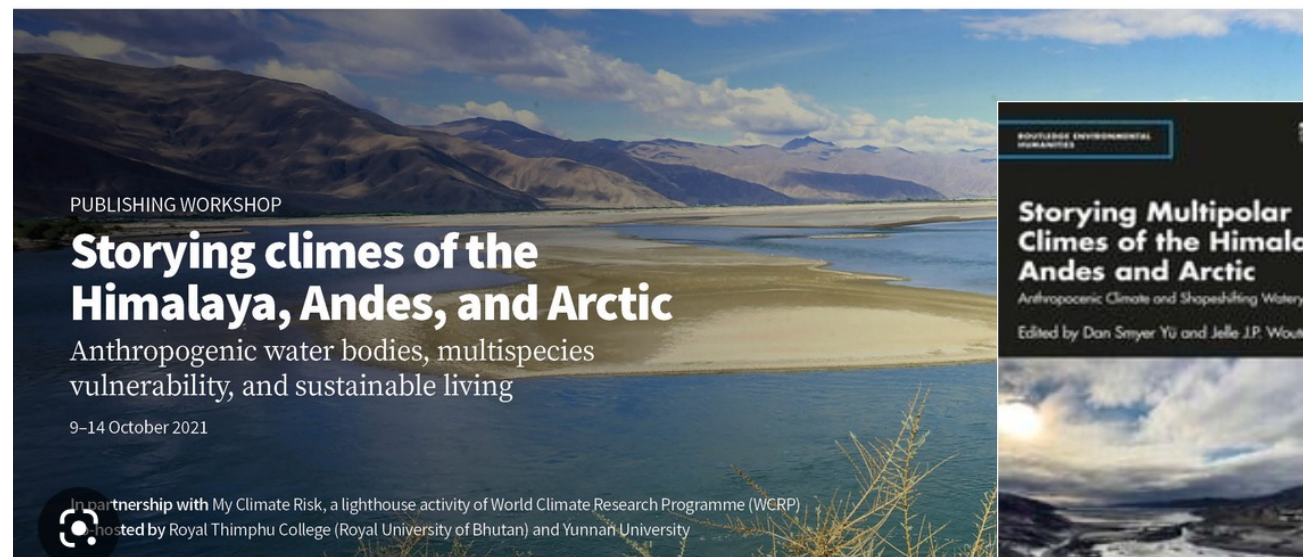
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Publication of Storying Climes Book

- ✓ Just published by Routledge (March 2023)
- ✓ Chapters by MCR SSG members Ted Shepherd, Chi Huyen Truong, and Vandana Singh

ICIMOD

HUC
Himalayan
University
Consortium



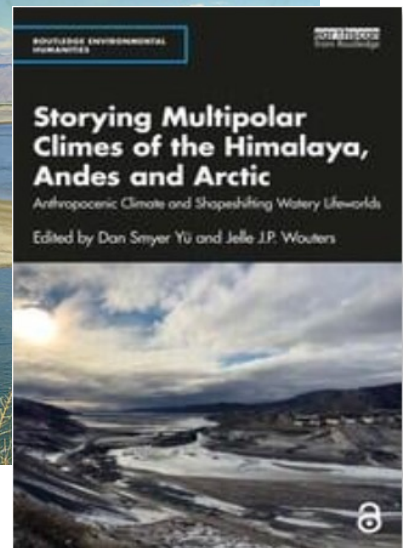
PUBLISHING WORKSHOP

Storying climes of the Himalaya, Andes, and Arctic

Anthropogenic water bodies, multispecies
vulnerability, and sustainable living

9–14 October 2021

In partnership with My Climate Risk, a lighthouse activity of World Climate Research Programme (WCRP)
hosted by Royal Thimphu College (Royal University of Bhutan) and Yunnan University



Storying Multipolar Climes of the Himalaya, Andes and Arctic

Anthropogenic Climate and Shapeshifting Watery Life-worlds

Edited by Dan Smeijer Yu and Jelle J.P. Wouters



Planned activities



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The MCR hubs are running a *Learning Lab* side event at the *WCRP Open Science Conference* in Kigali, entitled “Democratizing climate science: making it meaningful at local scales”

The Argentinian National Scientific and Technical Research Council (*CONICET*) hub will host a *series of four webinars* over austral winter of 2023 with simultaneous Spanish-English translation

The *MCR hubs* will convene a *session at Adaptation Futures Conference 2023* (2-6 October 2023, Montreal, Canada) entitled “All Eyes on 'My Climate Risk': Q-Storming towards Collective Pathways to Adaptation Action, from Local to Global”

Advancement of MCR

The Argentinian (*CONICET*) hub will *submit a paper* to *Global Environmental Change* on interdisciplinary storylines, resulting from their interactions over the past year

The *Walker Institute* hub has embedded MCR methodologies in recent funding bids, is exploring interactions with the AGRHYMET and HUC hubs, and is planning a *webinar series* for boreal autumn 2023

Planned activities



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Evolution of MCR

Discussions are currently underway concerning potential *new hubs* in the South Pacific, Southeast Asia, and northern South America/Central America

The *third MCR General Assembly* has been scheduled for 16 May 2023 and will consist of just 2 two-hour sessions, scheduled for the two hemispheres



Linkages within WCRP



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The MCR way

We expect the collaborations between MCR and other parts of WCRP to mainly occur *at the hub level*, based on the particular interests of each hub (e.g. members of the Argentina hub are involved in the GEWEX ANDEX RHP). However, a few higher-level collaborations are being established (see next slide)

WCRP Academy

Requests for the WCRP Academy to support your training activities? We would turn this around: the Walker Institute hub would be happy to co-host a bank of shared training resources on the Walker Academy portal (with auto self-logins as needed) if helpful

Linkages within WCRP



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CLIVAR

Two of the recently added MCR hubs are (together with MCR co-chair Regina Rodrigues) part of the CLIVAR region panels and new Research Focus

Safe Landing Climates

We are exploring the possibility of a joint hub in the South Pacific with a focus on sea-level rise

CORDEX

Erika Coppola from CORDEX and MCR co-chair Ted Shepherd are collaborating on a pilot study to incorporate storyline approaches within the CORDEX protocols

RiFS

There is an agreement in principle to initiate a Working Group with RiFS (and potentially other partners) on epistemological issues in climate risk, involving philosophers of science, and including how to navigate across the 'rational-social dichotomy'. This is yet to move forward

Linkages beyond WCRP



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My Climate Risk

The MCR way

We expect these partnerships to mainly occur at the hub level, based on the particular interests of each hub, since they are best placed to know the appropriate partners for what they are doing. However, we are happy to have interested external partners participate in our General Assembly in an ex-officio capacity

WWRP and SERA

The World Weather Research Programme (WWRP) is now represented in an ex-officio capacity on the MCR General Assembly, and the WWRP Societal and Economics Research Application (SERA) Working Group also has designated ex-officio representatives for the Eastern and Western Hemispheres

WASP

The World Adaptation Science Programme (WASP) is now also represented in an ex-officio capacity on the MCR General Assembly

Issues & challenges



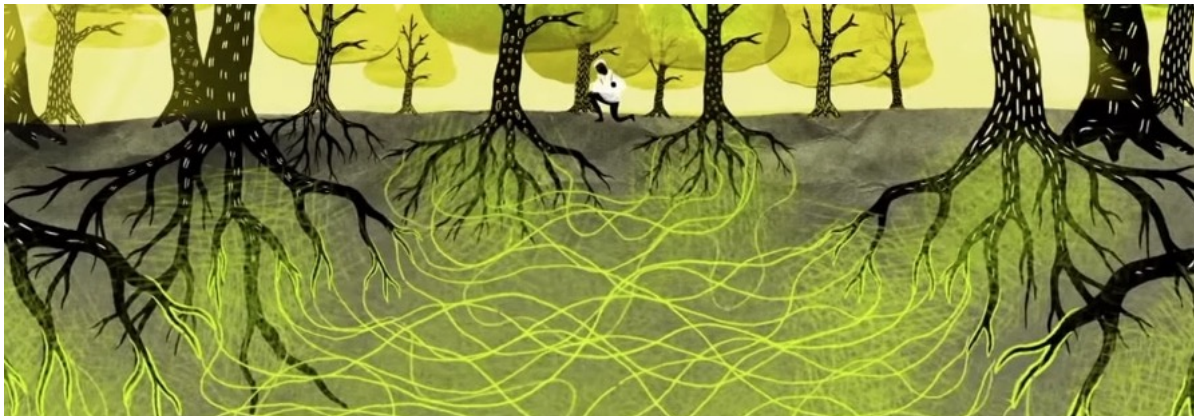
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Changes to the structure

No recommendations for changes. Our structure is *innovative* and is functioning as we envisaged

Community evolution

Our community and network are *evolving well* and as planned



Real challenge

Time constraints on everyone's side are a challenge for voluntary activities



Thanks!

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