

### 45th Session of the World Climate Research Programme **Joint Scientific Committee** by, of, with **RIfS:** Regional Information for Society

co-chairs: Bruce Hewitson, Silvina Solman, Sara C. Pryor

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RIfS Regional Information for Society

wcrp-rifs.org



(bringing society into the science)

Outline:

- **RIfS** overview: Bruce Hewitson
- GEP update: Xuebin Zhang
- CORDEX update: Silvina Solman
- RIfS wrap-up: Bruce Hewitson

World Climate **Research Programme** 

Bruce Hewitson, Silvina Solman (CORDEX), Xuebin Zhang (GEP) 28 May, 2024

Virtual & Lima





- **The RIfS IPO** hired its first director (Naomi Goldenson) who started in late September of 2023. In February a second staff person joined her (Anne Debrabandere), and the office is still hiring for two more positions.
- **The RIfS SSG** had its first in-person meeting in early October 2023 at the Barcelona Supercomputing Center, with online participants as well. A report is now available.
- A running **list of presentations** about RIfS can be found on our website: <u>https://www.wcrp-rifs.org/activities/presentations-about-rifs/</u>



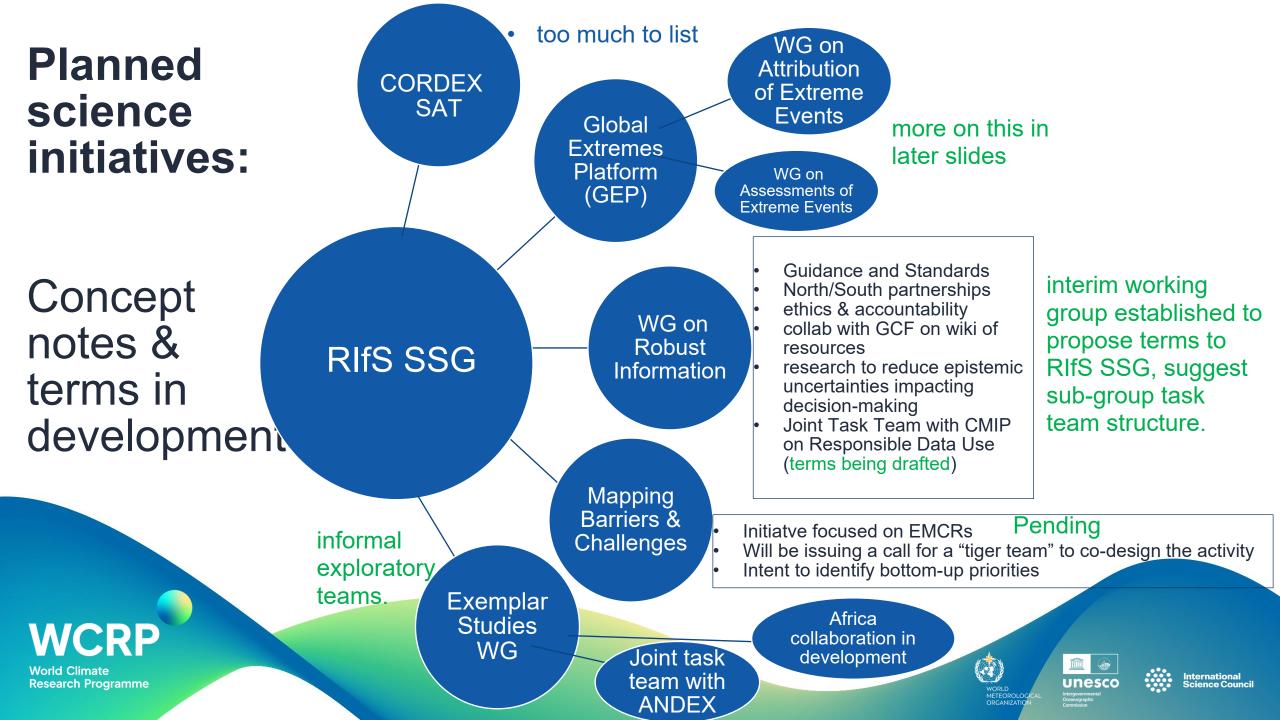


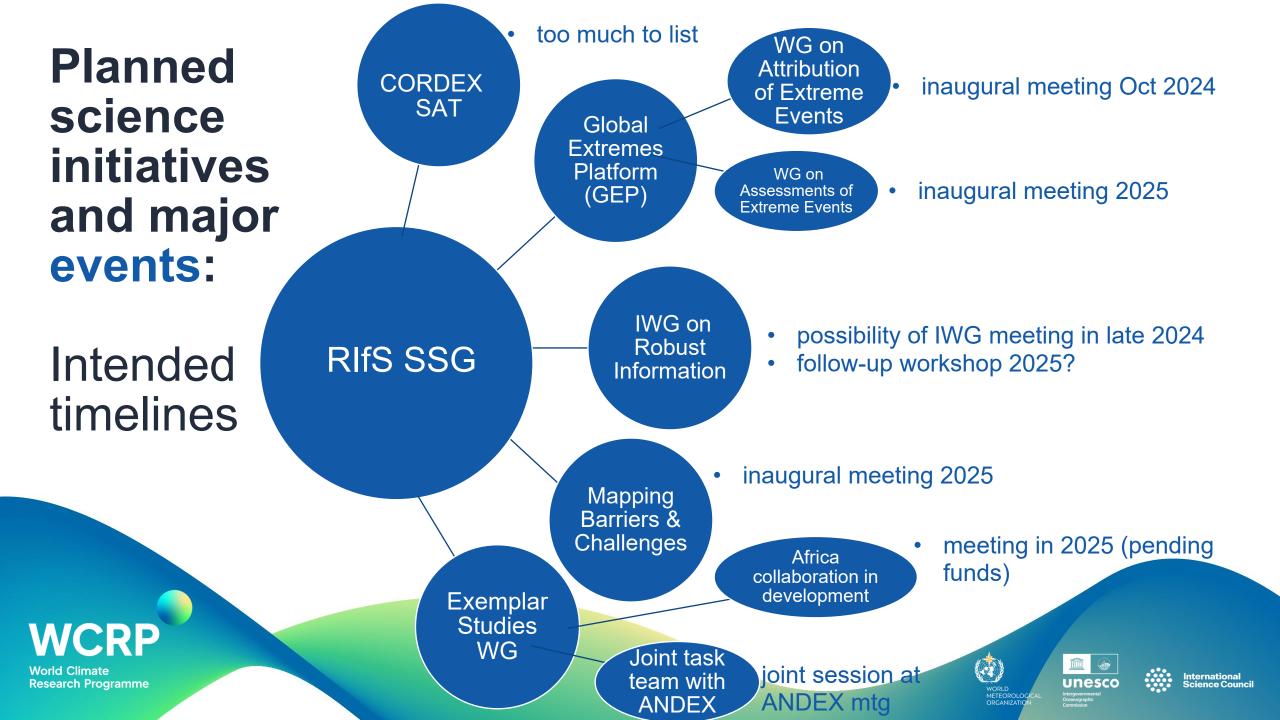


**RIfS conceived, designed, and hosted an expert meeting**, with support from the Green Climate Fund and hosted at the European Commission: *Robustness of Climate Change Information for Decisions* in April 2024. There were ~60 people in-person in Brussels with another 30-40 online, by invitation. The workshop programme is available <u>here</u>, and a report will be forthcoming, with a goal to have a draft by mid-June.

- Diverse participants included physical climate researchers (including representatives of all WCRP groupings), organizations that work directly with decision-makers in different sectors, the impacts and adaptation community, those working on climate services, and donor agencies.
- An Interim Working Group has been established to develop multiple activities on this theme and build on the momentum of our engaged participants and their networks.
- Donors are being actively engaged and have expressed strong support.







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

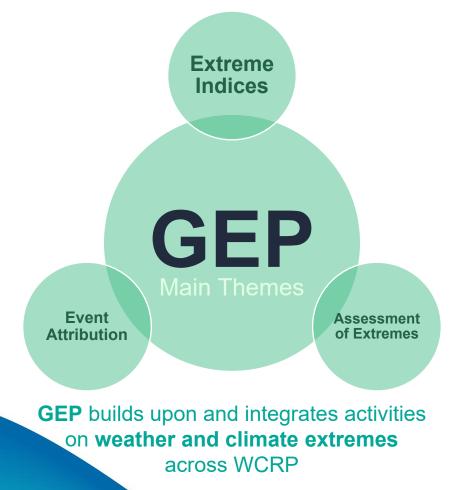
- Several journal articles or white papers are in conception, draft, or about to be submitted:
  - a general introduction to RIfS, the science foci, and research imperatives
  - a paper on the "ethical-epistemic elephant" of regional climate information
  - an update on WMO Bulletin paper on ethics and values in climate services
- A **report from our expert meeting** on *Robustness of Climate Change Information for Decisions*, along with a meeting summary (e.g. in EOS), as well as exploring opportunities for an op-ed to highlight the need for more research activity on this theme.
- **Partnering with GCF** on a wiki that collates resources about the processes and frameworks for developing actionable climate information appropriate for those applying for adaptation funding.
- The **"mapping barriers and challenges"** group will produce a report to inform conversations within WCRP about new initiatives.



[transition to Xuebin to talk about GEP]







### Support-Unit staff hiring

- a coordination officer (Ying Han)
- a science officer (Qiaohong Sun)

### Data website development

- Determined the suppliers through open tendering; signed contracts with the suppliers; made initial payments
- Held a kick-off meeting for data website development in January 2024
- The website is **under construction**.





### WCRP

### Working Group on Event Attribution

- Introduced the idea of the Working Group during the IDAG Meeting in July 2023
- Drafted a concept note
- Peter Stott gave a presentation about the Working Group to the IDAG community in February 2024.
- Issued a call for volunteers of a 'tiger team' in March 2024 to develop a draft terms of reference
- Open call for self-nomination planned for May 2024

Seminar and workshop



Extreme Weather and Climate Seminar for Climate Change Adaptation, 3 June 2023

Workshop on Extreme Weather and Climate Change and Attribution, 11 September 2023







## Planned science initiatives and major events

### Portal development

- Get a **portal** (different from the data website) with support from RIfS

### Working Group on Event Attribution

- Open call for self-nomination to be issued in May and discussed at IDAG/IMSC meeting in June 2024
- Membership selection in July-August
- In-person kick-off meeting in late 2024 in Nanjing, China

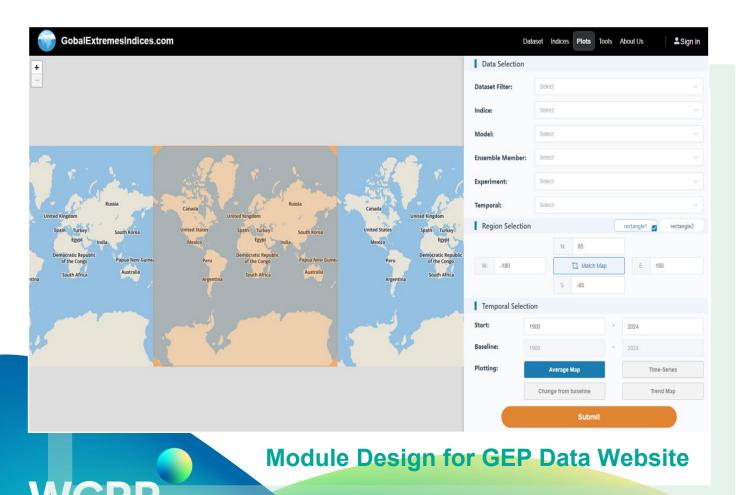
### Working Group on Assessments of Extreme Events

- An in-person Workshop on Annual WCRP / RIfS / GEP Extremes Updates: "Annual Up-dates on Regional Extremes for Society" is proposed for early 2025 in Switzerland (WMO or ETH Zurich) to gather international experts from WCRP/IPCC/WMO to contribute to assessments on attributable extreme events.
- It is hoped that the workshop will be funded by WCRP and ETH Zurich.





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



### Extremes data website

- Working closely with relevant WMO expert team and others
- Aiming at developing indicators
- Providing timely indices data set for global and regional analysis of weather and climate extremes
- Will offer global extreme indices data
  - **ETCCDI** indices
  - **ET-SIC** indices
  - additional indices addressing drought or compound events
- Review papers and guidance document on event attribution
- Annual updates and assessments of weather and climate extremes



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[transition to Silvina to talk about CORDEX]







45th Session of the World Climate Research Programme Joint Scientific Committee

# WCRP CORREX

WCRP

World Climate Research Programme Silvina Solman 28 May, 2024 Lima, Peru



International Science Council

- The hybrid International Conference on Regional Climate-CORDEX 2023 successfully held with 2 regional hubs
- Two Side events at the WCRP OSC; CORDEX Africa and CMIP and CORDEX Analysis and Evaluation Tools.
- 6 larger capacity building activities and planning meetings in many of our domains and many smaller meetings
- Workshop on <u>Climate Data Analyses and Downscaling</u> in Samarkand, Uzbekistan
- Workshop on <u>Developing a Strategy for Future Climate Projections in</u> <u>South Asia</u> held in Nepal
- Inception workshop and stakeholder consultation in the Climatic hazard Assessment to enhance Resilience against climate Extremes for Southeast Asian megacities (CARE for SEA megacities) held in Bangkok, Thailand
- o <u>Annual Polar meeting</u> in Utrecht, the Netherlands (hybrid)
- The <u>7th International Med-CORDEX Workshop</u> (online)
- o EURO-CORDEX General Assembly (online)

### WCRP

Research Programme



- The CORDEX-CMIP6 Archiving Specifications for dynamical downscaling
- The White paper on CMIP6 GCM selection and Matrix design for EURO-CORDEX



Many new Publications

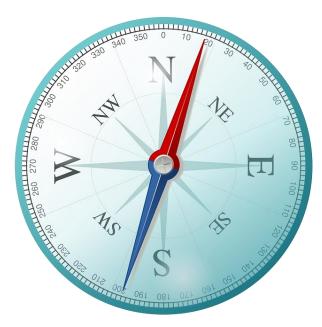
- <a href="https://cordex.org/publications/peer-reviewed-publications/publications-2023/">https://cordex.org/publications/peer-reviewed-publications/peer-reviewed-publications/publications-2023/</a>





### Planned science initiatives and major events

- Establish task forces
  - CORDEX CORE
  - Downscaling methods/Machine Learning
  - $\circ$  Oceans
  - $\circ$  Convection permitting
  - $\odot$  Preparations for CMIP7







### Planned science initiatives and major events

 Several capacity building trainings/workshops in Asia, Africa, Central and South America



• Further development of the Flagship Pilot Study initiative



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

- CORDEX white paper on bridging climate science with society
- CORDEX experiment design and archiving specifications for statistical downscaling of CMIP6



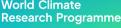


## Linkages with other WCRP activities



- GORDEX and CMIP joint session at WCRP OSC
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- Ge A My Climate Risk side event at the hub in Pune, India at the ICRC-CORDEX 2023 and involvement in a CORDEX SEA workshop
- The CORDEX Polar collaborating with CLiC and discussions for other domains ongoing
- The new task forces will look for collaboration with other WCRP CPs and LHAs
- GO CORDEX representatives in the Steering Group for the AR7 Impact and Adaptation Thematic data request paper







### Partnerships with entities outside of WCRP

- Reinitiated collaboration between CORDEX and MAIRS-FE
- CORDEX Southeast Asia potential collaboration with the ESA and EU commission initiative CopPhil
- Within the Project **CPD4Africa** (earlier CRD4Africa) liaison with new and old **partners in Africa** have been established or reinforced
- Many of the CORDEX domains are in close partnership with other organizations active in their region



## Suggestions, issues or challenges



- Suggest a **platform/forums** for WCRP CPs, LHAs and other WCRP initiatives to interact and discuss collaborations and joint efforts
  - In person meetings
  - digital possibilities for interaction
- CORDEX wishes direct contact with the JSC, including all co-chairs invited to meetings
- **Transparency** within WCRP and **bottom-up governance** to ensure future engagement from the communities





Research Programme

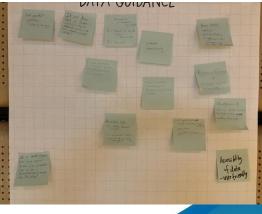
[transition back to Bruce to finish RIfS overview portion]



## Linkages with other WCRP activities

- For the expert meeting on Robust Climate Information, RIfS invited each Core Project and LHA to send a representative
- RIfS is co-developing a collaboration with the GEWEX RHP: ANDEX as a pilot for exemplar studies working with existing regional projects.
- At EGU in April 2024, RIfS+CORDEX and CMIP together held a wellattended townhall "Information for Society: from CMIP to decisionmakers". We also did a "Splinter meeting" for CORDEX and RIfS attendees to discuss collaboration, open to other WCRP leadership.
- The **RIfS SSG will revisit the cross-WCRP assembly concept** from the RIfS Science and Implementation Plan, drawing on output from the Expert Meeting and incorporating recent discussions on building collaboration, to propose concrete ways forward.





EGU Townhall







## Linkages with other WCRP activities

- **RIfS GEWEX:** RIfS and IPO leadership (Hewitson, Solman, Goldenson) have had a number of informal conversations with GEWEX about activities in Africa in the context of the RIfS Exemplar Studies focus, and has led exploring some opportunities with funders.
- **RIfS GPEX:** RIfS leadership (Pryor and Alves) have been very active within the new WCRP lighthouse Global Precipitation Experiment and specifically ensuring that goals common to RIfS and GPEX are emphasized and that synergies are fully realized.
- **RIfS Academy:** RIfS is very interested in collaborating with the WCRP Academy to develop a peermentorship activity. Subject to a more thorough needs-assessment, possibly to emerge from the "Mapping Barriers and Challenges" activity, we hope to advance this in 2025.
- **RIfS Regions:** We're interested to piggy-back additional activities that fit with our strategic themes onto activities in existing region-based communities in WCRP: noting especially the very active communities around the CORDEX domains and the MCR hubs primarily.
- GEP LHAs: collaboration opportunities with LHAs
  - Interest in Event Attribution Working Group activities has been expressed by the Explaining and Predicting Earth System Change and My Climate Risk LHAs.







### Linkages with entities outside of WCRP

- The Green Climate Fund was a sponsor of RIfS' expert meeting on Robustness of Climate Change Information for Decisions
- We had the **support of the GFCS** for the Expert Meeting and need to followup to share outcomes and explore collaborations.
- The European Commission was a co-sponsor, host, and participant in the Expert Meeting.
- Conversations are ongoing with **foundations and donor organizations** on the topic of Robust Information for Decisions, with strong interest from the donors who requested concept notes for discussions on financial support.
- RIfS request being included in any relevant discussions the WCRP leadership may have with donors.



## Suggestions, issues or challenges

- **Communications channels:** making them more direct for CORDEX and GEP leadership
- Clarifying scope and expectations of RIfS' activities
  - "We see RIfS as focusing on the coordination, collaboration, and catalysing of new research for improving systems to help make our science more fit-for-purpose for the diversity of decision-making contexts and regions. We intend a range of modalities to accomplish this, including, for example, working with existing regional projects, crosscutting activities around mapping barriers and challenges, and building consensus on better-practices"
- **Clarity** on copyright commitments and implications, limits, constraints and freedom to adapt and develop materials within Core Projects and LHAs









# Thank You



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