46th Session of the World Climate Research Programme Joint Scientific Committee



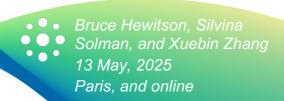
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Presenters (bold):

- RIfS overview: **Bruce Hewitson**, Silvina Solman, Sara Pryor (RIfS SSG co-chairs)
- CORDEX: Silvina Solman, José-Manuel Gutiérrez, Daniela Jacob (CORDEX co-chairs)
- GEP: Xuebin Zhang, Sonia Sereviratne (GEP co-chairs)











MISSION

The World Climate Research Programme (WCRP) coordinates and facilitates international climate research to develop, share, and apply the climate knowledge that contributes to societal well-being.

VISION

A world that uses sound, relevant, and timely climate science to ensure a more resilient present and sustainable future for humankind.

MISSION

Regional Information for Society (RIfS) builds understanding, develops, coordinates and enhances collaboration among scientists, decision makers and society to enhance the scientific value of regional climate information in policy and decision contexts.

VISION

RIfS envisions a world where deepened systemic understanding and integration of different knowledge systems enhances the value of climate science for stakeholders in policy and adaptation decisions.





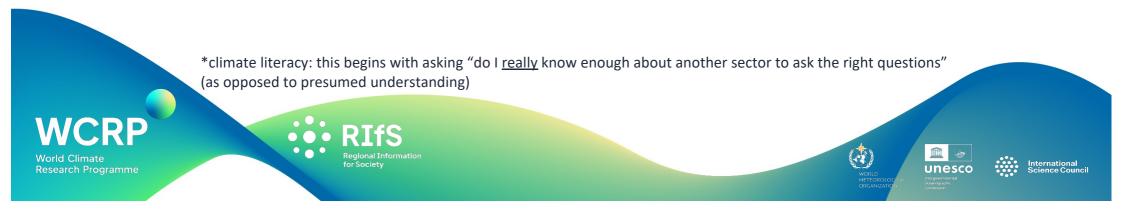






Our Priority Foci for 2025/26

- 1. Unpacking the breadth of realities of what is entailed in "Climate Information", when understood from the heterogeneous contexts of decision maker's consequential actions (with value to AR7).
- 2. Engagement with cognate communities to build dialogues about roles and responsibilities, and evolve a common comprehension and climate literacy* across the web of actors about issues involved in the generation, analysis, communication, and adoption of climate information for decisions (with value to AR7).
- **3. Using existing and new "exemplar" end-to-end studies**, through cross/trans-disciplinary collaboration in the Global South to explore, evaluate, and test new understanding about climate information through.
- **4. Support the evolution and development** of CORDEX, GEP, RIfS working group, and task forces on targeted issues.



Key highlights for the Joint Scientific Committee

- New RIfS (interim) working group (IWG): a product of the RIfS 2024 Expert Meeting on Robustness of Climate Change Information for Decisions. The IWG held a planning retreat (Dec 2024) to develop strategy and work plan, with two initial task teams under it (the call for task team nominations closes this week).
- Joint Task Team between RIfS and CMIP have formed on Responsible Data Use
 - Space reserved for CORDEX involvement
 - Connection with Fresh Eyes on CMIP group on this topic
- New funded partnership with the CLARE Africa programme (IDRC + FCDO funded)
 - Initial 2 years duration (420,000USD): science officer, two post-docs and pilot activities in Africa.
 - Synthesizes knowledge from across existing activities on the continent
 - Strengthen collaboration, cross-project learning, and capacity to produce and use climate information
 - Support and develop guidance for new emerging actions (see RIfS report sections 4 & 7).
 - Oversight from new RIfS Africa Task Team (Africa membership)







RIfS' evolving structure

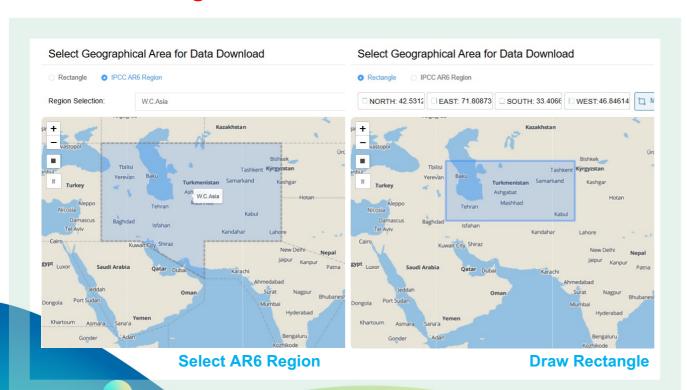




Key highlights for the Joint Scientific Committee



globalextremeindices.com



Extreme Indices

- The Global Extreme Indices Data Portal is Online, providing indices at regional scale
- Allow users to select the region (AR6 region or any rectangle) and then generate downloadable data, and to do simple analysis













Key highlights for the Joint Scientific Committee



Event Attribution

- Working Group on Event Attribution established: initial 10 memberships were approved by RIfS in August 2024.
- Major objectives: support activities that will (1) foster extreme event attribution collaboration and research to provide information globally, particularly in an operational context, that is clear, robust, traceable, and consistently interpreted, including development of best practice guidelines and (2) increase the capacity for event attribution in the Global South and underrepresented regions.
- Progress to Date:
 - Developing a critical review from an operational event attribution perspective: drafted a skeleton outline for a review paper
 - Mapping current event attribution activities, beginning with surveying the community and engaging with relevant activities across WCRP and wider: questions for a community survey are under review
 - Developing **best practice guidance**, beginning with a perspective based on lessons learned from current groups conducting operational event attribution: **a short survey was conducted among EPESC and GEP** as the first step
 - Discussing approaches for data sharing: held initial discussions around what could be done to coordinate the generation, distribution, and storage of operationally produced counterfactual datasets
 - Building networks with partners including Copernicus and the WMO State of the Climate report team

Contact Group for Weather and Climate Extremes, with a focus on ERCs

- Received about 30 nominations;
- Will build networks and share information across WCRP activities, and provide a leadership development opportunity













Key highlights for the JSC





- Task Forces established
- Five new Flagship Pilot Studies
- More Points of Contact in the domains
- Enlarged Science Advisory Team
- New North Africa Team
- Many workshops and activities in the domains
- Townhall at EGU together with RIfS and CMIP













- •RIfS plans to start developing a third exemplar study in another part of the world which would commence in 2026.
- •RIfS will be advancing this year on the previously identified objective of "Mapping Barriers and Challenges" to developing usable regional climate information. We envision that this activity could help inform science priorities and advocacy on the allocation of resources.
- •A major strategic workshop is being organized to take place in Africa as a partnership between RIfS and CORDEX-Africa, with funds from the WCRP 2025 strategic funding request and other partners. To draw in participants from a broad spectrum of communities including physical climate science, climate services, donor agencies, impacts & adaptation research, stakeholders, ethics and values, and policy actors.













Assessment of Extremes

- Concept note for an Annual Updates Working Group, submitted for RIfS' approval
- Main objective: produce retrospective scientific syntheses on extreme weather and climate events over the past year, published annually.
- Examining different precipitation datasets with an aim to identify products for timely assessing extreme precipitation on regional scale
- Extensive cooperation is expected between the Working Group and
 - GEP Working Group on Event Attribution,
 - · other WCRP initiatives.
 - the WMO State of Global Climate report team, and
 - other key organizations active in the field
- An in-person meeting is proposed for 2025 in Switzerland















- CORDEX 15 years special issues ongoing
- The five Task Forces will set out the direction, plans and strategies for their respective focus area:
 - Regional ocean modeling and climate projections Coordination with CLIVAR
 - Convection permitting modelling
 - Machine learning
 - CORDEX-CORE CMIP6
 - Preparing CORDEX-CMIP7 Coordination with CMIP



New CORDEX Project Office will be established in 2025















- Five new <u>Flagship Pilot Studies</u> endorsed to better address a number of challenges:
 - Australasia: Sub-Hourly Extreme Precipitation (SHEP)
 - Macaronesian Archipelagos: Convection Permitting projections focused on island processes (FPS-I-Mac)
 - Island Climate Pacific (IC-Pac)
 - High-Resolution downscaling of Tropical Cyclones in the Caribbean Region (High-Res TC-CAR)
 - Enhancing climate downscaling at km-scale in sub-tropical South America using machine learning CPRCM-CMIP6 emulators















- RIfS and CORDEX joint Africa strategic workshop: Building Actionable Climate Information for Africa Adaptation, September, Cape Town, South Africa
- Asian strategic workshop together with RIfS, MAIRS-FE and others
 - Expected final outcome is to establish a framework for long-lasting collaboration/networking and plan forward with actions to implement collaborative activities
 - Date and location within Asia yet to be decided
- Continue to be involved in other WCRP activities as well as activities
 outside WCRP
 - Joint activity with DE (in progress)













Suggestions, issues or challenges CORDEX



- Relevance of domain activities to build regional communities around the world
- Need to joint efforts with other WCRP activities around CORDEX regional climate issues













Suggestions, issues or challenges

- The last annual SSG meeting surfaced **additional strategic priorities** to develop, most notably targeted activities on equity in convening the research agenda and North-South collaborations.
- Addressing climate literacy* is a leading cross-cutting issue. This keeps emerging as central to all our
 activities, and applies between all actors, including within WCRP, and between IPCC WGs.
- We propose a cross-WCRP effort to **develop a shared understanding of concepts**, including the elusive "Information for Society" and "Robust Information" which are widely invoked with widely differing meanings implied and understood.
- We have submitted the idea of a Community Workshop on Regional Information for Society in 2026,
 with a CORDEX-focus on producing datasets and analyses that can be used in AR7, and a Robust
 Information WG-focus on cases of differing approaches to aligning information with decision context, and
 lessons from successes and failures.

We invite and welcome discussion and potential collaboration.



*climate literacy: this begins with asking "do I really know enough about another sector to ask the right questions" (as opposed to presumed understanding)













Thank You



www.wcrp-climate.org





