

Inaugural Meeting of the WCRP-GEP Working Group on Event Attribution

26-29 November 2024

Room 514, Meteorological Building, NUIST, Nanjing, China

Attendees: Mark McCarthy (co-chair), Megan Kirchmeier-Young (co-chair), Pandora Hope, Mark New, Izidine Pinto, Ying Sun, Yukiko Imada, Aurélien Ribes, Xuebin Zhang (GEP), Naomi Goldenson (RIfS), Botao Zhou (GEP-SU), Ying Han (GEP-SU), Qiaohong Sun (GEP-SU)

Apologies: Luke Harrington (RIfS SSG), Sarah Perkins-Kirkpatrick

Meeting outcomes:

The working group agreed an updated Terms of Reference, a list of major activities/themes, and a work plan to cover the next year with ideas for longer-term actions.

Summary of agenda and outcomes:

Tuesday 26: Agreed terms of reference and priority activities for the working group

- Introductory talks were given providing perspectives from Botao Zhou (GEP) outlining the importance of extremes research and the value of the working group on event attribution to the GEP goals. Xuebin Zhang (GEP) summarized the mandate for the working group to lead strategic discussion, review existing literature and practices, and develop technical guidance on methods and interpretation. The goal is to provide the assessment and guidance needed to ensure that EEA information, particularly in an operational context, is clear, robust and confident. Maureen Wanzala (WCRP) provided a pre-recorded presentation. Extremes and attribution is a cross-cutting theme for WCRP. It is explicit within a number of WCRP core projects, and there are strong attribution focus activities within EPESC lighthouse activity so it is important that this group engages across WCRP activities. Naomi Goldenson (RIfS) provided a perspective from RIfS, particularly within the context of 'Robust climate change information for decisions'. A challenge but advantage of RIfS is that it interfaces with a range of different communities. Robust can mean very different things, for climate scientists it may relate to fitness of purpose of climate models, for decision makers it might refer to suitability for informing policy. Emerging themes include assessing models and model error, what do users want/need?, development of climate services, and communicating uncertainties.
- Individual members described their own activities in event attribution and what they considered priority activities for the working group.

- Open discussion on emerging themes, terms of reference, and workplan priority activities.

Wednesday 27: Agreed work plan of activities to achieve overarching aim relating to the development of collaboration and best practice in EEA. This was achieved through review and discussion of the following key topics:

- Review of recent and known related activities – mapping the landscape
- Methodological and literature review
- Development of best practice guidance
- Strategic gaps
- Communication and Interpretation of EEA.

Thursday 28: Agreed work plan of activities to achieve overarching aim on capacity building in EEA for the global south and underrepresented regions. This was achieved through review and discussion of the following key topics:

- Review of recent and known related activities
- Potential for data sharing and exchange
- Potential for knowledge exchange
- Targeted recruitment to improve representation of Africa and South America in the working group.
- Engagement with the WMO annual state of climate reports.

Friday 29: Finalized documentation and agreed all actions, timeline of activity, and how and when we will communicate/meet as a committee.

Summary of outcomes:

The Working Group aims to 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.

The main activities of the working group are documented in a separate workplan. They will focus on:

- Mapping current event attribution activities, beginning with surveying the community and engaging with relevant activities across WCRP and wider.
- Conducting a methodology and literature review
- Developing best practice guidance, beginning with a perspective based on lessons learned from current groups conducting operational event attribution
- Performing a strategic gap analysis and encouraging directions for community research

- Mapping communication of results and applications of event attribution, considering experts in these areas to present at a new webinar series
- Reviewing recent and known capacity-building activities and considering the development of training workshops and documentation as an introduction to event attribution
- Conducting a targeted recruitment to improve regional representation in the membership of the Working Group
- Consider ways to facilitate and encourage data sharing and exchange, by creating tables of available event-attribution-appropriate datasets and finding a platform to host operationally run event attribution model simulations
- Consider ways to facilitate and encourage the sharing of knowledge, tools, and expertise



From left to right: Ying Han, Ying Sun, Mark McCarthy, Megan Kirchmeier-Young, Xuebin Zhang, Aurélien Ribes (on-line), Izidine Pinto, Naomi Goldenson, Mark New, Pandora Hope, Botao Zhou