Process-based Modeling Approaches for Attribution Science: Challenges and Opportunities

Information Gathering Session for the Consensus Study on Attribution of Extreme Weather and Climate Events and their Impacts

MEETING REGISTRATION AND EVENT LINK   **Slido Link**

MARCH 11, 2025 | 11 AM–2:15 PM ET (ALL TIMES ET)

Purpose
The purpose of this information gathering session is to explore the challenges and opportunities for physical, process-based modeling approaches that enable attribution science. This session will focus on large-scale and small-scale modeling challenges, needs, and current capabilities as well as the interactions between these scales and the future uses and needs of climate models for attribution science.

11:00–11:15   **Welcome and Meeting Agenda**
- Standard study/process introduction
- Brief introduction to session purpose and guiding questions
- Definition of any key terms
- Recap of past information gathering session

11:15–12:05   **Panel 1: "Large Scale" modeling needs and opportunities for attribution science**
Moderator: Tim Palmer
Speakers
- **Richard Seager**, *Columbia University*
- **Tiffany Shaw**, *University of Chicago*
- **Isla Simpson**, *NCAR*
- **Sonia Seneviratne**, *ETH*

12:05–12:55   **Panel 2: "Small scale/local" modeling needs and opportunities**
Moderator: Nicole Jackson
Speakers
- **Ruby Leung**, *PNNL*
- **Noah Diffenbaugh**, *Stanford*
- **Reinhard Schiemann**, *University of Reading*
- **Janice Coen**, *NCAR*

12:55–1:05   **Break**

1:05–2:15   **Panel 3: Multi-scale modeling needs and opportunities for attribution science.**
Moderator: James Done
Speakers

- *Andreas Prein*, ETH
- *Ben Kirtman*, University of Miami
- *Elizabeth Barnes*, Colorado State University

Panelists

- *Richard Seager*, Columbia University
- *Tiffany Shaw*, University of Chicago
- *Isla Simpson*, NCAR
- *Sonia Seneviratne*, ETH
- *Ruby Leung*, PNNL
- *Noah Diffenbaugh*, Stanford
- *Reinhard Schiemann*, University of Reading
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