Accelerating Climate Progress with AI: From Science to Action Workshop

January 13-14, 2026

Beckman Center and Online

Artificial Intelligence (AI) is rapidly advancing frontiers in climate science, providing new insights into our understanding of the climate system and helping to transformation climate science into actionable information. This workshop will explore innovative ways AI can enhance and accelerate climate action with a focus on decision-making and adaptation measures to foster resilience to climate change impacts. The workshop provides a forum for interdisciplinary, cross-sectoral dialogue to facilitate cross-sector engagement, identify critical applications where AI can inform climate action at speed and scale, and consider how AI's broader societal impacts affect approaches to addressing climate change.

This workshop is an activity of the Roundtable on Artificial Intelligence and Climate Change. The Roundtable seeks to foster ongoing discussions, shared learning, and nimble coordination around emerging issues related to AI and climate change, including: how AI can combat climate change; the environmental impact of AI itself; and strategies for mitigating the impacts of AI energy consumption and climate effects.

TUESDAY JANUARY 13, 2026

8:00 AM[1] **Breakfast**

9:00 AM **Welcome and Introduction**
Stephan Sain, Jupiter Intelligence, *Workshop Planning Committee Chair*

9:10 AM **Setting the Stage: AI in Climate Research and Action**
Stephan Sain, Jupiter Intelligence, *Workshop Planning Committee Chair*

9:15 AM **Keynote Presentation**
David Rolnick, McGill University and Mila

9:45 AM **Keynote Presentation**

[1] All Times in PST

10:15 AM **Using AI to Advance Climate Science to Meet User Needs**

This session brings together researchers, decision makers, and other users of climate information to discuss where AI can help to address knowledge gaps/information needs to facilitate improved and timely climate action. Speakers will consider the opportunities and challenges across the spectrum from research using AI in climate science, to tools using AI to inform decision making to meeting specific needs of users through a series of panel discussions on select societal impacts of climate change: wildland fires, agriculture and land management, urban planning, and water resource management.

Stephan Sain, Jupiter Intelligence, *Workshop Planning Committee Chair*

10:20 AM **Panel: Living with Wildland Fire: AI to Inform Adaptation**

Moderator: TBD

Speakers:

- **W. Andre Perkins**, Allen Institute for AI (AI2)
- **James Randerson**, University of California – Irvine
- **İlkay Altıntaş**, WIFIRE

11:45 AM **BREAK**

12:00 PM **LUNCH**

1:00 PM **Panel: Use of AI in Agriculture and Land Management**

Moderator: Kaiyu Guan, University of Illinois Urbana-Champaign, *Workshop Planning Committee Member*

Speakers:

- **Catherine Nakalembe**, University of Maryland
- **David Lobell**, Stanford University

2:20 PM **Panel: AI in Urban Planning for Climate Change Impacts/Adaptation**

Moderator: Michael Méndez, University of California – Irvine

Speakers:

- **Adam Nayak**, Columbia University
- **Chris Belasco**, City of Pittsburgh Pennsylvania
- **Mariela Alfonzo**, State of Place

3:40 PM **BREAK**

3:50 PM **Panel: Water Resource Management**

Moderator: Adrienne Wootten, University of Oklahoma, *Workshop Planning Committee Member*

Speakers:

- **Debaditya Chakraborty**, University of Texas – San Antonio

4:50 PM **Day 1 Wrap-Up**
Stephan Sain, Jupiter Intelligence, *Workshop Planning Committee Chair*

5:00 PM **Adjourn**

5:00 PM **Reception**

WEDNESDAY JANUARY 14, 2026

8:00 AM **Breakfast**

9:00 AM **Welcome & Reflections from Day 1**
Stephan Sain, Jupiter Intelligence, *Workshop Planning Committee Chair*

9:25 AM **Keynote Presentation**
Kieran White, KWMEDIA

9:55 AM **Keynote Presentation**
Dan Hammer, Renaissance Philanthropy and LGND

10:25 AM **Addressing Common Opportunities & Challenges to Accelerate Action**
This session will consider common issues in the utilization of AI in climate research and the data that is utilized and generated; and near-term opportunities to address those issues to advance opportunities for greater action across sectors/topical areas. Panelists will discuss near-term opportunities to improve the incorporation of AI into climate sciences that inform decision making and challenges that need to be overcome to accelerate climate action. A Q&A session with the audience will follow.

Moderator: Soheil Salehian, Planet Reimagined, *Workshop Planning Committee Member*

Speakers:

- **Francesca Dominici**, Harvard University
- **Yuhan Rao**, North Carolina State University

11:40 AM **LUNCH**

12:40 PM **Enhancing Cross-Sectoral Partnerships**

This session will bring stakeholders engaged in AI development, climate sciences, climate action, decision making, and related areas to discuss how cross-sectoral partnerships may be strengthened and expanded to better meet societal needs. A Q&A session with the audience will follow.

Moderator: Amy Luers, Microsoft Corporation, *Workshop Planning Committee Member*

Speakers:

- **F. Paul Bertetti**, Edwards Aquifer Authority
- **Christopher Wirz**, University of Illinois Urbana-Champaign

1:55 PM **BREAK**

2:10 PM **Accelerating Climate Action with AI - A Path Forward**

This session aims to synthesize and reflect on the workshop while also bringing in new perspectives to consider how to move things forward. Panelists will highlight what they heard are the greatest near-term opportunities to advance AI for climate action.

Moderator: Katie Dagon, National Center for Atmospheric Research, *Workshop Planning Committee Member*

Speakers:

- **Marc Alessi**, Union of Concerned Scientists
- **Elizabeth A. Barnes**, Boston University
- **Amelia Cook**, University of Oklahoma

3:15 PM **Meeting Reflections and Take Aways**

3:30 PM **Adjourn**