

WATER SCIENCE AND TECHNOLOGY BOARD/BOARD ON EARTH SCIENCES AND RESOURCES

## AI-Ready Data for Cascading Hazards

September 15, 2026



National Academy of Sciences, 2101 Constitution Ave NW  
Lecture Room

### MEETING OBJECTIVE

Cascading natural hazards are phenomena where each event affects the next, such as severe storms followed by flooding followed by landslides. Understanding these cascades requires that scientists from multiple disciplines work together. The goal of this joint meeting of the Board on Earth Sciences and Resources and the Water Science and Technology Board is to consider how machine learning and artificial intelligence can inform our understanding of cascading hazards, and assess the adequacy of existing data to make the best use of these emerging tools.

### TUESDAY, SEPTEMBER 15, 2026

12:30 pm ET Welcome

12:40 pm Keynote Introduction to Cascading Hazards

Marin Clark, University of Michigan, CLASH co-PI

1:00 pm Status of AI-Ready Data for Assessing Cascading Hazards

Douglas Rao, NC Institute for Climate Studies of NOAA

### Cascading Hazards and the Potential for ML/AI: Three Scenarios

1:20 pm Cascading Hazard Scenario #1: Severe Storms Followed by Flooding

Corey Potvin, NOAA National Severe Storms Lab

1:35 pm Cascading Hazard Scenario #2: Wildfire Followed by Precipitation and Debris Flows

Luke McGuire, University of Arizona

**1:50 pm**      **Break**

**2:05 pm**      **Cascading Hazard Scenario #3: Earthquake Followed by Landslides**  
**Eric Thompson, USGS**

**2:20 pm**      **Using ML to Get from Hazard Predictions to Societal Impacts**  
**Rudolfo Hernandez Perez, Howard University**

**2:20 pm**      **Panel Discussion with All Speakers**  
Moderators: Michael Manga and Shemin Ge, WSTB Members

**3:25 pm**      **Wrap up**

**3:30 pm**      **Adjourn**

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