

# Environmental Seismology

## Earth's Surface and Subsurface Hazards, Dynamics and Resources

14–18 October 2025 • Denver, CO

### Schedule at a Glance

Please note: Presenting author is bold in the schedule below. Schedule is current as of 20 June 2025 and is subject to change.

All poster and oral presentation abstracts may be viewed online at [online gallery](#). As new presentations are added, the online gallery will update automatically.

### Tuesday, 14 October 2025

3:30–7:30 PM	Registration Open
4:00–6:00 PM	Know Your Noise Workshop
5:30–6:30 PM	Opening Reception & Posters
6:30–7:30 PM	Opening Keynote: Environmental Forcing of Faults and Slow-moving Landslides. <b>Roland Bürgmann</b>

### Wednesday, 15 October 2025

7:00–8:00 AM	Breakfast & Posters
<b>Cryoseismology</b>	
8:00–8:30 AM	KEYNOTE: News From the Dark: Portable and Distributed Seismic Sensors Shed Light on Subglacial Processes. <b>Fabian Walter</b>
8:30–8:45 AM	The Seismic Signature of Transient Water Flow Underneath the Greenland Ice-sheet. <b>Florent Gimbert</b>
8:45–9:00 AM	INVITED: Quantifying the Cryoseismic Background of Mount Baker Volcano, Washington, USA <b>Nathan Stevens</b>
9:00–9:15 AM	INVITED: Assessing the Mechanisms Behind Ice Fracture Using Surface and Downhole Seismic Observations on the Brunt Ice Shelf, Antarctica <b>Emma Pearce</b>
9:15–9:30 AM	How Surface Melt Drives Dynamic Fjord-ice Interactions in Greenland <b>Dominik Gräff</b>
9:30–10:30 AM	Coffee Break and Posters
10:30–10:45 AM	Time-lapse Active Source Seismic Measurements through Seasonal Snow: Mechanical Property Changes Within and Beneath the Snowpack <b>Lee Liberty</b>
10:45–11:00 AM	Creating a Comprehensive Cryoseismic Catalog at Rhonegletscher: A Scalable Approach Using Distributed Acoustic Sensing and Machine Learning <b>Rachel Willis</b>
11:00–11:30 AM	Discussion Period
11:30 AM–1:30 PM	Lunch and Posters

### Geophysical and Biogenic Signals from the Oceans, Surface Water, and Atmosphere

1:30–2:00 PM	KEYNOTE: Using Seismology for Non-earthquake Signals <b>Victor Tsai</b>
2:00–2:15 PM	Decadal Analysis of Nonlinear Internal Waves in the South China Sea Using Satellite and Ocean Bottom Pressure Data. <b>Amanda Syamsul</b>
2:15–2:30 PM	Effect of Wide Excitation and Multipath Propagation of T-wave for Ocean Tomography <b>Shane Zhang</b>
2:30–2:45 PM	Monitoring Alongshore Coastal Processes in South Island, New Zealand Using Distributed Acoustic Sensing <b>Voon Hui Lai</b>
2:45–3:00 PM	Behind the Curtain: Characterizing the Nisqually Watershed of MORA as a Means to Explore the Use of Non-contact Data Sources in Mountain Hydrology <b>Taylor Kenyon</b>
3:00–4:00 PM	Poster Session
4:00–4:15 PM	Turbulent Seismoacoustic Imprints of a Hurricane Landfall <b>Qing Ji</b>
4:15–4:30 PM	High-latitude IMS Infrasound Station Noise and Seasonal Sea-ice Extent <b>Loring Schaible</b>
4:30–5:00 PM	Discussion Period
5:00–6:30 PM	Reception, Posters, and Sponsor Table Time

### Thursday, 16 October 2025

7:00–8:00 AM	Breakfast & Posters
<b>Anthropogenic and Urban Seismology</b>	
8:00–8:30 AM	KEYNOTE: Machine-learning Ground Motions for Infrastructure Risk Reduction <b>Domniki Asimaki</b>
8:30–8:45 AM	INVITED: Scalable Urban Sensing and Monitoring via Telecom Fiber Networks with DAS <b>Jingxiao Liu</b>
8:45–9:00 AM	Investigating Subsurface Changes in a Quick Clay Risk Area with Urban Seismic Noise and Low-cost Seismic Sensors. <b>Charlotte Bruland</b>
9:00–9:15 AM	INVITED: Investigating Geothermal Energy Potential in Singapore and Central Java, Indonesia <b>Ping Tong</b>

## Friday, 17 October 2025

7:00–8:00 AM	Breakfast & Posters
<b>Subsurface Monitoring and Imaging</b>	
8:00-8:30 AM	KEYNOTE: Recent Advances in the Understanding and Forecasting of Induced Seismicity <b>Jean-Philippe Avouac</b>
8:30-8:45 AM	Monitoring Groundwater Dynamics Using Seismic Attenuation Variations from Train Signals <b>Laura Pinzon Rincon</b>
8:45-9:00 AM	Soil Slope Monitoring with Distributed Acoustic Sensing Under Cyclic Drying and Wetting Cycles. <b>Jiahui Kang</b>
9:00-9:15 AM	A Novel Near-surface Geophysics Approach to Constrain Material Porosity and Moisture Within Critical Zone Structure in Central Puerto Rico <b>Mong-Han Huang</b>
9:15-9:30 AM	Advancing Critical Zone Science with Nodal Seismic Arrays. <b>Steve Holbrook</b>
9:30-10:30 AM	Coffee Break and Posters
10:30-10:45 AM	INVITED: Unraveling Arctic Cryosphere Processes with Distributed Acoustic Sensing: Signals from Sea Ice and Permafrost. <b>Tieyuan Zhu</b>
10:45-11:00 AM	Diffusion in the Field: A Real-world Application for Velocity Change Localisation <b>Tjaart de Wit</b>
11:00-11:30 AM	Discussion Period
11:30AM-1:30 PM	Lunch and Posters

9:15-9:30 AM	Advancing Near-surface Imaging and Monitoring with Six-component Single-station Measurements. <b>Shihao Yuan</b>
9:30-9:45 AM	Daily Groundwater Monitoring Using Vehicle-DAS Elastic Full-waveform Inversion <b>Haipeng Li</b>
9:45-10:15 AM	Discussion Period
10:15-11:15 AM	Coffee Break and Posters

<b>Novel Approaches for Environmental Seismology</b>	
11:15-11:45 AM	KEYNOTE: Integrated Fiber-optic Sensing - Technological Developments and Potentials for Environmental Applications. <b>Andreas Fichtner</b>
11:45-12:00 PM	INVITED: Exploring the Use of Soft Matter Physics Frameworks for Environmental Seismology. <b>Vashan Wright</b>
12:00 PM-12:15 PM	Nature-informed Seismology: Biomimetic Method Improves Detection and Location Accuracy of Geomorphic Events. <b>Stefania Ursica</b>
12:15-2:15 PM	Lunch and Posters
2:15-2:30 PM	Monitoring Rain- and Temperature-driven Stress Changes in a Limestone Cliff with Ultrasonic Testing and Resonance Frequency <b>Juliane Starke</b>
2:30-2:45 PM	An Unprecedented View of Lake Waves in Motion Using Video InSAR. <b>Rob Abbott</b>
2:45-3:00 PM	Existing and Envisioned Environmental Seismic Models to Leverage our Understanding of Landscape Dynamics <b>Michael Dietze</b>
3:00-3:30 PM	Discussion Period
3:30-4:00 PM	Break
4:00-5:00 PM	Panel Discussion: Seismic and Environmental Data Access and Management
5:00-6:30 PM	Reception, Posters, and Sponsor Table Time

<b>Seismic Investigation of Mass Movements</b>	
1:30-2:00 PM	KEYNOTE: The Societal Relevance of Landslide Seismology <b>Kate Allstadt</b>
2:00-2:15 PM	Seismic Precursors Reveal the Role of Internal Processes in Driving Slow-to-fast Transition of the 15th June 2023 Brienz/Brinzauls Rockslide Collapse. <b>Sibashish Dash</b>
2:15-2:30 PM	Illuminating Debris Flow Dynamics at Illgraben, Switzerland with Distributed Seismic Measurements. <b>Christoph Wetter</b>
2:30-2:45 PM	Characterizing Surges from a Debris Flow Induced by a Glacial Outburst Flood at Mount Rainier, USA <b>Avery Conner</b>
2:45-3:00 PM	Seismological Monitoring of Sandstroms and Sand Dune Migration via High-frequency Seismic Signals in the Taklamakan Desert <b>Xiaofeng Liang</b>
3:00-4:00 PM	Poster Session
4:00-4:15 PM	Locating Pyroclastic Flows Using Seismic Amplitudes: Rebuilding a Lost Monitoring Tool from Soufrière Hills Volcano. <b>Glenn Thompson</b>
4:15-4:30 PM	INVITED: From Seismic Waves to Landslide and Tsunami Processes <b>Anne Mangeney</b>
4:30-5:00 PM	Discussion Period
5:00-6:00 PM	Reception, Posters, and Sponsor Table Time