Overview of Technical Program

Monday 29 April

7:00 AM–6:30 PM
Prince William Sound Field Seminar

Tuesday 30 April

8:00 AM–4:30 PM
Alaska Geophysics in the Field

10:00 AM–4:00 PM
Data Mining on the Cloud 101 Workshop
Tikahtnu Ballroom C, Third Level

10:00 AM–4:00 PM
Seismic Instrumentation Workshop
Tikahtnu Ballroom E/F, Third Level

12:30–4:30 PM
Publishing: How to Review and How to Be Reviewed Workshop
Kahtnu 1, Second Level

3:00–7:30 PM
Registration
Lobby

4:30–6:00 PM
Opening Reception and Exhibits
Exhibit Hall

6:00–7:00 PM
Plenary
Tikahtnu Ballroom A/B, Third Level

Wednesday 1 May

7:00 AM–5:00 PM
Registration
Lobby

8:00–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Exhibit Hall

10:30–11:45 AM
Technical Sessions

11:45 AM–2:00 PM
Lunch Break

Noon–1:00 PM
Newcomer's Welcome Lunch*
Exhibit Hall

2:00–3:15 PM
Technical Sessions

3:15–4:30 PM
Poster Break
Exhibit Hall

4:30–5:45 PM
Technical Sessions

6:00–7:00 PM
Plenary
Tikahtnu Ballroom A/B, Third Level

7:00–8:00 PM
Student/Early-Career Reception*
Exhibit Hall

Thursday 2 May

7:00 AM–5:00 PM
Registration
Lobby

7:15–8:00 AM
GR Briefing
Exhibit Hall

8:00–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Exhibit Hall

10:30–11:45 AM
Technical Sessions

Noon–1:45 PM
Annual Business and Awards Luncheon
Exhibit Hall

2:00–3:15 PM
Technical Sessions

3:15–4:30 PM
Poster Break
Exhibit Hall

4:30–5:45 PM
Technical Sessions

6:00–7:00 PM
Joyner Lecture
Tikahtnu Ballroom A/B, Third Level

7:00–8:00 PM
Joyner Reception
Tikahtnu Ballroom Foyer, Third Level

Friday 3 May

7:00 AM–5:00 PM
Registration
Lobby

8:00–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Exhibit Hall

10:30–11:45 AM
Technical Sessions

11:45 AM–2:00 PM
Lunch Break

2:00–3:15 PM
Technical Sessions

3:15–4:30 PM
Poster Break
Exhibit Hall

4:30–5:45 PM
Technical Sessions

* Invite only

Wednesday, 1 May

Oral Sessions

Time	*K'enakatnu 6/ Boardroom*	*Kahtnu 1*	*Kahtnu 2*	*Tikahtnu Ballroom A/B*	*Tikahtnu Ballroom C*
8:00–9:15 AM	From Faults to Fjords: Earthquake Evidence in Terrestrial and Subaqueous Environments	How Well Can We Predict Broadband Site-Specific Ground Motion and Its Spatial Variability So Far?	Induced Earthquakes: Source Characteristics, Mechanisms, Stress Field Modeling and Hazards	The 2023 USGS National Seismic Hazard Model and Beyond	Creating Actionable Earthquake Information Products
9:15–10:30 AM	Poster Break				
10:30–11:45 AM	From Faults to Fjords: Earthquake Evidence in Terrestrial and Subaqueous Environments	How Well Can We Predict Broadband Site-Specific Ground Motion and Its Spatial Variability So Far?	Induced Earthquakes: Source Characteristics, Mechanisms, Stress Field Modeling and Hazards	The 2023 USGS National Seismic Hazard Model and Beyond	Creating Actionable Earthquake Information Products
11:45 AM–2:00 PM	Lunch Break				
2:00–3:15 PM	From Faults to Fjords: Earthquake Evidence in Terrestrial and Subaqueous Environments	How Well Can We Predict Broadband Site-Specific Ground Motion and Its Spatial Variability So Far?	Induced Earthquakes: Source Characteristics, Mechanisms, Stress Field Modeling and Hazards	The 2023 USGS National Seismic Hazard Model and Beyond	Network Seismology: Recent Developments, Challenges and Lessons Learned
3:15–4:30 PM	Poster Break				
4:30–5:45 PM	From Faults to Fjords: Earthquake Evidence in Terrestrial and Subaqueous Environments	Planetary Seismology	The OSIRIS-REx Sample Return Capsule Re-entry: Geophysical Observations		Network Seismology: Recent Developments, Challenges and Lessons Learned
6:00–7:00 PM	Plenary: Challenges in Geohazards Research in Alaska				
7:00–8:00 PM	Student/Early-Career Reception				

Time	*Tikahtnu Ballroom E/F*	*Tubughneq' 3*	*Tubughneq' 4*	*Tubughneq' 5*
8:00–9:15 AM	Earth's Structure from the Crust to the Core	Cryptic Faults: Advances in Characterizing Low Strain Rate and Environmentally Obscured Faults	Numerical Modeling in Seismology: Developments and Applications	Learning Across Geological, Geophysical & Model-Derived Observations to Constrain Earthquake Behavior
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Earth's Structure from the Crust to the Core	Cryptic Faults: Advances in Characterizing Low Strain Rate and Environmentally Obscured Faults	Numerical Modeling in Seismology: Developments and Applications	Learning Across Geological, Geophysical & Model-Derived Observations to Constrain Earthquake Behavior
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM	Earth's Structure from the Crust to the Core	Towards Advancing Earthquake Forecasting and Nowcasting: Recent Progress Using AI-Enhanced Methods	Numerical Modeling in Seismology: Developments and Applications	Learning Across Geological, Geophysical & Model-Derived Observations to Constrain Earthquake Behavior
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	Marine Seismoacoustics	Special Applications in Seismology	Translating Seismic Imaging into Geodynamic Understanding	Structure, Seismicity and Dynamics of the Queen Charlotte-Fairweather Fault System
6:00–7:00 PM	Plenary: Challenges in Geohazards Research in Alaska			
7:00–8:00 PM	Student/Early-Career Reception			

Poster Sessions

- The 2023 USGS National Seismic Hazard Model and Beyond
- Creating Actionable Earthquake Information Products
- Cryptic Faults: Advances in Characterizing Low Strain Rate and Environmentally Obscured Faults
- From Faults to Fjords: Earthquake Evidence in Terrestrial and Subaqueous Environments
- How Well Can We Predict Broadband Site-Specific Ground Motion and Its Spatial Variability So Far?
- Induced Earthquakes: Source Characteristics, Mechanisms, Stress Field Modeling and Hazards
- Learning Across Geological, Geophysical & Model-Derived Observations to Constrain Earthquake Behavior
- Marine Seismoacoustics
- Network Seismology: Recent Developments, Challenges and Lessons Learned
- Numerical Modeling in Seismology: Developments and Applications
- The OSIRIS-REx Sample Return Capsule Re-entry: Geophysical Observations
- Special Applications in Seismology
- Structure, Seismicity and Dynamics of the Queen Charlotte-Fairweather Fault System
- Towards Advancing Earthquake Forecasting and Nowcasting: Recent Progress Using AI-Enhanced Methods
- Translating Seismic Imaging into Geodynamic Understanding

Thursday, 2 May

Oral Sessions

Time	*K'enakatnu 6/Boardroom*	*Kahtnu 1*	*Kahtnu 2*	*Tikahtnu Ballroom A/B*
8:00–9:15 AM	3D Wavefield Simulations: From Seismic Imaging to Ground Motion Modelling	Illuminating Complex, Multiplet Earthquake Sequences at Kahramanmaras (Turkiye), Herat (Afghanistan), and Beyond	Detecting, Characterizing and Monitoring Mass Movements	Seismic Monitoring, Modelling and Management Needed for Geothermal Energy and Geologic Carbon Storage
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	3D Wavefield Simulations: From Seismic Imaging to Ground Motion Modelling	Illuminating Complex, Multiplet Earthquake Sequences at Kahramanmaras (Turkiye), Herat (Afghanistan), and Beyond	Detecting, Characterizing and Monitoring Mass Movements	Seismic Monitoring, Modelling and Management Needed for Geothermal Energy and Geologic Carbon Storage
Noon–1:45 PM	Annual Business and Awards Luncheon			
2:00–3:15 PM	3D Wavefield Simulations: From Seismic Imaging to Ground Motion Modelling	Six Decades of Tsunami Science: From the Source of the 1964 Tsunami to Modern Community Preparedness	Detecting, Characterizing and Monitoring Mass Movements	Seismic Monitoring, Modelling and Management Needed for Geothermal Energy and Geologic Carbon Storage
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	Applications and Discoveries in Cryoseismology Across Spatial and Temporal Scales	Special Applications in Seismology	New Insights into the Development, Testing and Communication of Seismicity Forecasts	
6:00–7:00 PM	Joyner Lecture: Why Seismic Hazard Modeling Has Become a Risky Business			
7:00–8:00 PM	Joyner Reception			

Time	*Tikahtnu Ballroom C*	*Tikahtnu Ballroom E/F*	*Tubughnenq' 3*	*Tubughnenq' 4*	*Tubughnenq' 5*
8:00–9:15 AM	Characteristics and Mechanics of Fault Zone Rupture Processes, from Micro to Macro Scales	Advancements in Forensic Seismology and Explosion Monitoring	Seismology in the Oceans: Pacific Hemisphere and Beyond	From Earthquake Recordings to Empirical Ground-Motion Modelling	Network Seismology: Recent Developments, Challenges and Lessons Learned
9:15–10:30 AM	Poster Break				
10:30–11:45 AM	Characteristics and Mechanics of Fault Zone Rupture Processes, from Micro to Macro Scales	Advancements in Forensic Seismology and Explosion Monitoring	Seismology in the Oceans: Pacific Hemisphere and Beyond	From Earthquake Recordings to Empirical Ground-Motion Modelling	Network Seismology: Recent Developments, Challenges and Lessons Learned
Noon–1:45 PM	Annual Business and Awards Luncheon				
2:00–3:15 PM	Regional-Scale Hazard, Risk and Loss Assessments	Advancements in Forensic Seismology and Explosion Monitoring	Multidisciplinary Approaches for Volcanic Eruption Forecasting	From Earthquake Recordings to Empirical Ground-Motion Modelling	Network Seismology: Recent Developments, Challenges and Lessons Learned
3:15–4:30 PM	Poster Break				
4:30–5:45 PM	Regional-Scale Hazard, Risk and Loss Assessments	Advancements in Forensic Seismology and Explosion Monitoring	Multidisciplinary Approaches for Volcanic Eruption Forecasting	Leveraging Cutting-Edge Cyberinfrastructure for Large Scale Data Analysis and Education	Cordilleran Strike-Slip Faults as Seismogenic and Seismological Features
6:00–7:00 PM	Joyner Lecture: Why Seismic Hazard Modeling Has Become a Risky Business				
7:00–8:00 PM	Joyner Reception				

Poster Sessions

- 3D Wavefield Simulations: From Seismic Imaging to Ground Motion Modelling
- Advancements in Forensic Seismology and Explosion Monitoring
- Applications and Discoveries in Cryoseismology Across Spatial and Temporal Scales
- Characteristics and Mechanics of Fault Zone Rupture Processes, from Micro to Macro Scales
- Cordilleran Strike-Slip Faults as Seismogenic and Seismological Features
- Detecting, Characterizing and Monitoring Mass Movements
- Earth's Structure from the Crust to the Core
- From Earthquake Recordings to Empirical Ground-Motion Modelling
- Illuminating Complex, Multiplet Earthquake Sequences at Kahramanmaras (Turkiye), Herat (Afghanistan), and Beyond
- Leveraging Cutting-Edge Cyberinfrastructure for Large Scale Data Analysis and Education
- Multidisciplinary Approaches for Volcanic Eruption Forecasting
- New Insights into the Development, Testing and Communication of Seismicity Forecasts
- Seismic Monitoring, Modelling and Management Needed for Geothermal Energy and Geologic Carbon Storage
- Seismology in the Oceans: Pacific Hemisphere and Beyond
- Six Decades of Tsunami Science: From the Source of the 1964 Tsunami to Modern Community Preparedness

Friday, 3 May

Oral Sessions

Time	*K'enakatnu 6/Boardroom*	*Kahtnu 1*	*Kahtnu 2*	*Tikahtnu Ballroom A/B*
8:00–9:15 AM	Advancing Seismology with Distributed Fiber Optic Sensing	Physics-Based Ground Motion Modeling	Seismoacoustic, Geodetic and Other Geophysical Investigations of Active Volcanoes	Structure and Behavior of the Alaska-Aleutian Subduction Zone
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Advancing Seismology with Distributed Fiber Optic Sensing	Physics-Based Ground Motion Modeling	Seismoacoustic, Geodetic and Other Geophysical Investigations of Active Volcanoes	Structure and Behavior of the Alaska-Aleutian Subduction Zone
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM	Advancing Seismology with Distributed Fiber Optic Sensing	Assessing Seismic Hazard for Critical Facilities and Infrastructure—Insights and Challenges	Seismoacoustic, Geodetic and Other Geophysical Investigations of Active Volcanoes	Structure and Behavior of the Alaska-Aleutian Subduction Zone
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	From Geodynamics to Earthquake Rupture, Models That Cross Time- and Length-Scales	Assessing Seismic Hazard for Critical Facilities and Infrastructure—Insights and Challenges	Machine Learning for Full Waveform Inversion: From Hybrid to End-to-End Approaches	Structure and Behavior of the Alaska-Aleutian Subduction Zone

Time	*Tikahtnu Ballroom C*	*Tikahtnu Ballroom E/F*	*Tubughnenq' 3*	*Tubughnenq' 4*	*Tubughnenq' 5*
8:00–9:15 AM	The 2024 Magnitude 7.5 Earthquake and the Associated Earthquake Swarm Beneath the Noto Peninsula, Central Japan (See Supplemental Material)	End-to-End Advancements in Earthquake Early Warning Systems	Understanding and Quantifying the Variability in Earthquake Source Parameter Measurements	Anisotropy Across Scales	Tectonics and Seismicity of Stable Continental Interiors
9:15–10:30 AM	Poster Break				
10:30–11:45 AM	The 2024 Magnitude 7.5 Earthquake and the Associated Earthquake Swarm Beneath the Noto Peninsula, Central Japan (See Supplemental Material)	End-to-End Advancements in Earthquake Early Warning Systems	Understanding and Quantifying the Variability in Earthquake Source Parameter Measurements	Anisotropy Across Scales	Tectonics and Seismicity of Stable Continental Interiors
11:45 AM–2:00 PM	Lunch Break				
2:00–3:15 PM	ESC-SSA Joint Session: Climate Change and Environmental Seismology	End-to-End Advancements in Earthquake Early Warning Systems	Understanding and Quantifying the Variability in Earthquake Source Parameter Measurements	Advances in Operational and Research Analysis of Earthquake Swarms	Tectonics and Seismicity of Stable Continental Interiors
3:15–4:30 PM	Poster Break				
4:30–5:45 PM	ESC-SSA Joint Session: Climate Change and Environmental Seismology	End-to-End Advancements in Earthquake Early Warning Systems		Advances in Operational and Research Analysis of Earthquake Swarms	Tectonics and Seismicity of Stable Continental Interiors

Poster Sessions

- The 2024 Magnitude 7.5 Earthquake and the Associated Earthquake Swarm Beneath the Noto Peninsula, Central Japan
- Advances in Operational and Research Analysis of Earthquake Swarms
- Advancing Seismology with Distributed Fiber Optic Sensing
- Anisotropy Across Scales
- Assessing Seismic Hazard for Critical Facilities and Infrastructure—Insights and Challenges
- End-to-End Advancements in Earthquake Early Warning Systems
- ESC-SSA Joint Session: Climate Change and Environmental Seismology
- From Geodynamics to Earthquake Rupture, Models That Cross Time- and Length-Scales
- Integrative Assessment of Soil-Structure Interaction and Local Site Effects in Seismic Hazard Analysis
- Machine Learning for Full Waveform Inversion: From Hybrid to End-to-End Approaches
- Physics-Based Ground Motion Modeling
- Regional-Scale Hazard, Risk and Loss Assessments
- Research Advances in "High-Impact", "Under-Studied" Earthquakes and Their Impacts on Communities
- Seismic Cycle-Driven Sea-Level Change Over Decades to Centuries: Observations and Projections
- Seismoacoustic, Geodetic and Other Geophysical Investigations of Active Volcanoes
- Structure and Behavior of the Alaska-Aleutian Subduction Zone
- Tectonics and Seismicity of Stable Continental Interiors
- Understanding and Quantifying the Variability in Earthquake Source Parameter Measurements