

Wednesday, 15 April 2026—Oral Sessions

Presenting author is indicated in bold.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Regional Source, Path and Site Effects in Earthquake Ground Motions</b> (see page 1524).	<b>ESC-SSA Joint Session: Advanced Methods for Harnessing Seismic Noise Analysis in Applied Seismology</b> (see page 1403).		<b>Physics of Earthquakes: Insights from Theory and Observations</b> (see page 1506).		<b>Network Seismology: Recent Developments, Challenges and Lessons Learned</b> (see page 1469).	<b>Planetary and Gravitational Wave Seismology</b> (see page 1515).	<b>Physical Properties of Fault Zones from the Seismic Source to Earth's Surface</b> (see page 1500).	<b>New Possibilities for InSAR in Earthquake Science: the NISAR Mission and OPERA Displacement Maps</b> (see page 1491).
8:00 AM	Analysis of Rupture Directivity and Wave Propagation Effects on Simulated Ground Motion for M7 Earthquakes on the Hayward Fault. <b>Nakata, R.</b> , McCallen, D., Pitarka, A., Tang, H., Pinilla Ramos, C.	Performance Assessment of the Hybrid Standard Spectral Ratio Approach in the Norcia Basin, Central Italy. <b>Panzer, F.</b> , Borzi, A., Amiri Fard, R., Parolai, S.		INVITED: Inference of Absolute Stress From Earthquake-induced Stress Rotations in Subduction Zones. <b>Hardebeck, J.</b>	8:00 AM	Evaluation of Distributed Acoustic Sensing Phase Pick Quality and Performance for Operational Earthquake Monitoring. <b>Tepp, G.</b> , Artiaga, N., Biondi, E.	Seismic Evidence for Widespread Mantle Heterogeneity on Mars. <b>Charalambous, C.</b> , Pike, W. T., Kim, D., Samuel, H., Fernando, B., Bill, C., Lognonné, P. H., Banerdt, B. W.	INVITED: Triggng of Pore Pressure Drop in the Active Milun Fault by the Near-field M7.4 Hualien, Taiwan Earthquake. <b>Hung, R.</b> , Randolph-Flagg, N., Ma, K., Manga, M.	A GNSS-based Time-variable Surface Displacement Product for OPERA DISP InSAR Corrections. <b>Hammond, W. C.</b> , Govorcin, M., Blewitt, G., Kreemer, C., Mirzaee, S., Oliver-Cabrera, T., Cinquini, L., Chan, S., Handwerker, A. L.
8:15 AM	On the Scalability of Non-ergodic GMMs From Numerical Simulations: A Case Study Using the SCEC Cybershake Dataset and Southern California Power Network. <b>Zhao, J.</b> , Lavrentiadis, G., Asimaki, D.	Improved Bedrock Mapping in the Upper Mississippi Embayment, Kentucky, Using Ambient Noise HVSr. <b>Carpenter, S.</b> , Islam, M., Schmidt, J. P., Araji, A., Beck, G., Woolery, E. W., Wang, Z.		Stress Orientation Around Japan Trench Inferred From Focal Mechanism Solutions of Small Earthquakes. <b>Uchide, T.</b> , Imanishi, K.	8:15 AM	Optimizing Station and Source Graphs for Graph-based Earthquake Phase Association. <b>McBrearty, I. W.</b> , Beroza, G. C.	Insights Into Martian Crustal Formation Through Seismic Anisotropy. <b>Beghein, C.</b> , Li, J.	STUDENT: How Depth-dependent Seismic Properties Control Fault Damage Zone Structure: Insights From 3D Damage-breakage Rheology Model. <b>Zhao, C.</b> , Ben-Zion, Y., Elbanna, A.	New Fringes: Earthquake Monitoring in Vegetated Regions With NISAR. <b>Zebker, M.</b> , Sandwell, D.
8:30 AM	STUDENT: Comprehensive Ground Motion Analysis in the Mendocino Fracture Zone. <b>Rajasekhar, A.</b> , Parker, G. A., Hirakawa, E. T., Baltay, A.	Ambient Seismic Imaging of Subsurface Fractures at the Newberry Volcano Geothermal Field Using the Method of Permeable Fracture Imaging. <b>Malin, P.</b> , Eppink, J., Fleure, T., Mathews, A., Mclain, B., Ontiveros, H., Sicking, C., Stroujkova, A., Valenzuela, S., Vermilye, J.		STUDENT: Coseismic Stress Field Perturbations From the 1999 Chi-Chi and 2024 Hualien Earthquakes, Taiwan. <b>Wang, R.</b> , Houston, H., Hsu, Y.	8:30 AM	Source Type Classification of Non-earthquake Signals Commonly Recorded on Regional Seismic Networks: Implementation and Pipeline Development. <b>Toney, L.</b> , Allstadt, K., Collins, E., Yeck, W. L.	New Magnitude Scaling and Seismic Source Characterization for Marsquakes and Impacts. <b>Song, J.</b> , Kim, D., Tsai, V. C., Kolawole, F.	Influence of Fault Roughness Coupled With Shear-induced Inelastic Dilatancy on Earthquake Sequences. <b>Abdelmeguid, M.</b> , Lapusta, N.	NISAR Urgent Response Products for Earthquakes. <b>Fielding, E. J.</b> , Jones, C. E., Simons, M., Agrawal, R., Borsa, A., Bekaert, D., Chen, J., Fattahi, H., Govorcin, M., Havazli, E., Jasir, M. C. M., Jung, J., Lobos, D. A. L., Lohman, R. B., Meyer, F. J., Pritchard, M. E., Rosen, P. A., Sreejith, K. M., Tymofyeyeva, E., Zebker, H.
8:45 AM	Application of Non-ergodic Site Response Analysis to Seismic Retrofit Projects in Los Angeles. <b>Hudson, K. S.</b> , Stewart, J. P., Hudson, M. B.	Estimation of the Complex Site Response Including Cross-coupling Effects: Toward the Calculation of Virtual Seismograms. Amiri Fard, R., <b>Parolai, S.</b> , Panzer, F., Romanelli, F.		STUDENT: Sensitivity of Co-seismic Displacements to Volumetric Components in Intermediate and Deep Earthquake Sources. <b>Chen, S.</b> , Park, S.	8:45 AM	Phase Picking Beyond Local Distances: Where Waveform Filtering Still Matters. <b>Park, Y.</b> , Alfaro-Diaz, R., Begnaud, M. L.	Updating Venus' Predicted Seismicity Using New Global Wrinkle Ridge Map Generated Using Machine Learning. Sabbeth, L., Smrekar, S. E., <b>Stock, J. M.</b>	STUDENT: Dilatancy-driven Transitions Between Large Earthquakes and Slow Slip Events in 3D Earthquake Cycle Simulations. <b>Tang, Z.</b> , Duan, B., Liu, M., Bordbar, H.	Mapping Creep Along the Central San Andreas Fault Using NISAR and ALOS-2. <b>Tymofyeyeva, E.</b> , Liu, Z., Zinke, R., Rosen, P. A.

Wednesday, 15 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Regional Source, Path and Site Effects</b> (continued)	<b>ESC-SSA Joint Session</b> (continued)		<b>Physics of Earthquakes: Insights</b> (continued)		<b>Network Seismology</b> (continued)	<b>Planetary and Gravitational Wave Seismology</b> (continued)	<b>Physical Properties of Fault Zones</b> (continued).	<b>New Possibilities for InSAR</b> (continued)
9:00 AM	STUDENT: Spatial and Azimuthal Variability of Seismic Site Response in the Los Angeles Basin Revealed by a Sub-basin Framework. <b>Shams, R., Nweke, C. C.</b>	STUDENT: Monitoring Seasonality and Directionality in Ambient Seismic Noise Generated by Africa's Circumfluent Oceans. <b>Kabanda, A., van der Lee, S.</b>		Stress Variations and Non-shear Earthquakes Prior to the 2021 Iceland Eruption: Implications for Magmatic Fluid Flow Dynamics. <b>Hrubcova, P., Vavrycuk, V., Fischer, T. J., Doubravova, J.</b>	9:00 AM	Background Seismicity, Swarms and Fluid-injection Induced Earthquakes in New Mexico: New Constraints from USArray Data. <b>Woo, J., Chen, T.</b>	From Deep Space to Deep Earth - How the Earth Shapes the Way in Which We Observe the Cosmos. <b>Di Giovanni, M.</b>	INVITED: Rapid Fault Healing From Cementation Controls the Dynamics of Deep Slow Slip and Tremor. <b>Thomas, A. M., Watkins, J. M., Beeler, N. M., French, M. E., Behr, W. M., Reed, M. H.</b>	Incorporating NISAR to Resolve Three-dimensional Fault and Landslide Deformation. <b>Xu, Y., Simons, M., Fielding, E. J., Bürgmann, R., Guo, A., Lindsay, D., Handwerker, A. L.</b>
9:15–10:30 AM	Poster Break				9:15–10:30 AM	Poster Break			
	<b>Regional Source, Path and Site Effects in Earthquake Ground Motions</b> (see page 1524).	<b>Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches</b> (see page 1345).		<b>Physics of Earthquakes: Insights from Theory and Observations</b> (see page 1506).		<b>Network Seismology: Recent Developments, Challenges and Lessons Learned</b> (see page 1469).	<b>Planetary and Gravitational Wave Seismology</b> (see page 1515).	<b>Physical Properties of Fault Zones from the Seismic Source to Earth's Surface</b> (see page 1500).	<b>Fault Networks and Seismic Hazard in the Nevada-California Borderland</b> (see page 1416).
10:30 AM	Understanding the Regional Variability of Ground Motion Across South America for Subduction Earthquakes. <b>Paredes Estacio, J. L., De Risi, R.</b>	Version 2 of an Integrated Earthquake Catalog for Aotearoa New Zealand and 3D Earthquake-depth Models. <b>Rollins, C., Manea, E., Thingbaijam, K., Graham, K., Salichon, J., Williams, C., Rampersad, A., Hutchinson, J., Bourguignon, S., Eberhart-Phillips, D., Christophersen, A., Bradley, B. A., Chamberlain, C. J., Gerstenberger, M. C.</b>		INVITED: Accounting for Site Effects Significantly Reduces Uncertainties in Earthquake Stress Parameters. <b>Archuleta, R. J., Ji, C.</b>	10:30 AM	SCSN Live: A Realtime View of the Network. <b>Acharya, P., Yu, E., Husker, A.</b>	Geophysical Site Investigation for a Future Einstein Telescope (ET) in Lusatia, Saxony, Germany. <b>Rietbrock, A., Haberland, C., Ryberg, T., Yao, S., Lindner, M.</b>	STUDENT: Linear Streaks of Seismicity Around California. <b>Shrestha, R., Bürgmann, R., Ross, Z. E.</b>	STUDENT: Characterizing Walker Lane Aftershock Geometry and Productivity with a Novel High-resolution Catalog of the 2020 Mw 6.5 Monte Cristo Earthquake. <b>Zhang, M., Trugman, D. T., Scalise, M. E., Eckert, E. E.</b>
10:45 AM	STUDENT: Source Parameters, Attenuation Characteristics and Site Effects Derived From the Non-parametric Generalized Inversion Technique (GIT) for the Mw 8.8 Maule Aftershock Sequence. <b>Flores Allende, R., Seydoux, L., Bonilla, L. F., Bindi, D., Beauce, E., Gueguen, P.</b>	Should the CEUS SSC Model Be Updated? <b>Arcos, M., Coppersmith, K., Coppersmith, R., Montaldo Falero, V., Youngs, R.</b>		An Entropic Origin for Gutenberg-Richter Scaling. <b>Page, M., Field, E. H.</b>	10:45 AM	Webservices of the Italian National Accelerometric Network - RAN. <b>Franke, M., Filippi, L., Zambonelli, E., Manto, L., Ammirati, A., Radman, S. M.</b>	Fundamental Noise and Gravitational-wave Sensitivity of the Laser Interferometer Lunar Antenna (LILA). <b>Jani, K., Creighton, T., Quetschke, V., Panning, M. P., Lognonné, P. H., Trippe, J.</b>	Correlation Between Anisotropic Crustal Fabric Strength and Fault Creep. <b>Schulte-Pelkum, V., Kilb, D., Becker, T. W.</b>	Evaluation of Complex Transtensional Fault Systems Distributed Between Lake Almanor and Madeline, Northeastern California. <b>Koehler, R. D.</b>

Wednesday, 15 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Regional Source, Path and Site Effects</b> (continued)	<b>Advancing Seismic Hazard and Risk Assessment</b> (continued)		<b>Physics of Earthquakes</b> (continued)		<b>Network Seismology</b> (continued)	<b>Planetary and Gravitational Wave Seismology</b> (continued)	<b>Physical Properties of Fault Zones</b> (continued)	<b>Fault Networks and Seismic Hazard</b> (continued)
11:00 AM	Regionalizing NGA-Sub Ground-motion Models for Chile: Source and Path Adjustments. Cáceres, C., Villanueva, F., <b>Contreras, V.</b>	Developing Strong Motion Data Platform for Ground-motion Model Project in Japan. <b>Iwaki, A.</b> , Morikawa, N., Matsumoto, Y., Imai, R., Akiyama, S., Suzuki, W., Kubo, H., Senna, S., Kawai, S., Nakamura, H., Fujiwara, H.		STUDENT: Global Repeating Earthquakes Reveal a Scattered Triangular Recurrence Time–moment Scaling Consistent with Crack Models in a Complex Fault Zone. <b>Wang, B.</b> , Wu, B., Zhou, Y.	11:00 AM	The GRMT Project: Global Real-time Centroid Moment Tensor Analysis for Significant Earthquakes. <b>Lee, S.</b> , Liu, T., Lin, T.	Thermoelastic Perturbations in Lunar Regolith: An Analytical Model for Surface Shielding. <b>Kizhaekke Pakkathillam, S.</b> , Ann Joseph, A., H Lognonné, P.	Exploring (A)seismic Slip and Off-fault Deformation Caused by the 2021 Mw5.3 Calipatria Earthquake, Salton Sea, CA. <b>Guns, K.</b> , Materna, K., Barbour, A. J., McGuire, J. J.	Estimating Long-term Fault Slip Rates Using Geomorphological Evidence. <b>Mason, H. B.</b> , Struble, W. T., McCoy, S. W., Gregory, L. C., Tucker, G. E.
11:15 AM	Nonergodic Ground-motion Models for Subduction Events in Alaska. <b>Sung, C.</b> , Abrahamson, N., Largent, M.	Scenario ShakeMaps for Cascadia Subduction Zone Megathrust Earthquakes Using 3D Ground Motion Simulations. <b>Dunham, A.</b> , Wirth, E. A., Grant, A., Frankel, A. D.		The Time Clustering of Earthquakes. <b>Frank, W. B.</b> , Münchmeyer, J.	11:15 AM	ISC: Collaborating with Seismic Networks Worldwide. <b>Storchak, D. A.</b> , Harris, J., Di Giacomo, D., Garth, T., Gallacher, R.	South Pole Seismic Station (SPSS): An Active and Passive Seismic Deployment for Artemis IV Astronauts. <b>Panning, M. P.</b> , Nunn, C., Lognonné, P. H., Tsuji, T., Abe, S., Cutler, J., Delbo, M., Drilleau, M., Garcia, R., Kawamura, T., Knapmeyer-Endrun, B., Podgornova, O., Tanaka, S., Avdellidou, C., Beuclet, É., Jani, K., Mimoun, D. C.	Estimate of Inelastic Strain and Fault Zone Damage Due to Aftershocks. <b>Fialko, Y.</b>	STUDENT: Improving Reno Earthquake Hazard Assessment Through Ground-motion Model Comparisons and a Paleoseismic Study. <b>Dills, C. W.</b> , Trugman, D. T., Koehler, R. D., Rodrigues, K., Wesnousky, S. G.
11:30 AM	Short-distance Attenuation Characteristics of Ground Motions for Induced Earthquakes in South Sichuan, China. <b>Xie, J.</b> , Wu, F., Wang, Y., Zhu, C., Kwak, D.	Development of Stochastic Ground-motion Models for a Reference Rock Condition in South Korea. <b>Park, S.</b> , Noh, M., Min, K., Han, S.		STUDENT: Gutenberg–Richter or Safer? On the Magnitude–frequency Distributions of Induced Seismicity. <b>Li, L.</b> , Avouac, J., Im, K.	11:30 AM	How Not to Be Fooled by Seismicity Depth Distribution: Lessons From the 2023 Kahramanmaraş (Se Türkiye) Aftershock Sequence. Ding, H., <b>Zhou, Y.</b> , Ge, Z.	Lunar DAS: Compact Fiber-optic Sensing to Map the Moon’s Interior. <b>Zhan, Z.</b> , Costa, L., Fu, X., Husker, A., Jackson, J. M., Klesh, A., Kubiak, G., Lefler, C., Steinkraus, J., Stubbailo, I., Tamama, Y., Wang, J., Zhai, Q.	Effects of Non-causative Fault Zones on Ground-motion Path Effects: A Simulation Study. <b>Nye, T.</b> , Hirakawa, E. T., Parker, G. A., Baltay, A.	Automated Extraction of Surface Fault Rupture Profiles for Fault Displacement Hazard Analysis. <b>Boggaram, S.</b> , Lavrentiadis, G., Asimaki, D., Reitman, N. G.
11:45 AM–2:00 PM	Lunch Break				11:45 AM–2:00 PM	Lunch Break			

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	<b>Regional Source, Path and Site Effects in Earthquake Ground Motions</b> (see page 1524).	<b>Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches</b> (see page 1345).		<b>Physics of Earthquakes: Insights from Theory and Observations</b> (see page 1506).		<b>Network Seismology: Recent Developments, Challenges and Lessons Learned</b> (see page 1469).	<b>Cryoseismology: Advances in Technology and Scientific Discovery</b> (see page 1367).	<b>Earth's Structure from the Crust to the Core</b> (see page 1397).	<b>Fault Networks and Seismic Hazard in the Nevada-California Borderland</b> (see page 1416).
2:00 PM	STUDENT: Do 3D Dynamic Rupture Models Capture the Variability in Long-period Velocity Pulses? Insights From the 2023 Mw 7.8 Kahramanmaraş Earthquake. <b>Preca Trapani, R.</b> , Marchandon, M., Palgunadi, K. H., Wu, B., Yen, M., Cotton, F., Gabriel, A.	Seismic Hazard Evaluation Based on Ground-motion Waveforms Using Machine Learning Techniques. <b>Matsumoto, Y.</b> , Yaoyama, T., Lee, S., Iwaki, A., Itoi, T.		Impact of Lithospheric Anisotropy on Moment Tensors: Toward Anisotropic Earthquake Seismology. <b>Kawakatsu, H.</b> , Takeo, A.	2:00 PM	Evidence-based Seismic Impact of Wind Farms and Borehole Sensor Performance at the EKA Array. <b>Hasting, M. A.</b> , Suárez, G.	INVITED: Integrated Seismic and Space Geodetic Remote Sensing of Tidewater Glacier Calving in Greenland. <b>Borsa, A.</b> , Fan, W., Davidson, H.	INVITED: Complex Lithospheric Structure of North America Revealed by a New Sp Receiver Function Stack. <b>Golos, E.</b> , Brunsvik, B., Eilon, Z., Fischer, K. M.	STUDENT: Principal Surface Rupture Hazard: Moving Beyond Aggregate Displacement Metrics. <b>Marmarchinia, S.</b> , Lavrentiadis, G.
2:15 PM	STUDENT: Ground Motion Directionality of Horizontal Response Spectral Ordinates From the 2023 Kahramanmaras, Türkiye Earthquake Sequence. <b>Girmay, N.</b> , Poulos, A., Miranda, E.	Enhancing Reference Ground Motions: Isolating Site Effect-free Time Series via Application of the Complex-valued Generalized Inversion Technique. <b>Pilz, M.</b> , Cotton, F.		Characterization of Seismic Sources in the Middle East Using 3D Velocity Models: Current Capabilities and Frontiers. <b>Rodriguez-Cardozo, F. R.</b> , Braunmiller, J., Sawade, L., Orsvuran, R., Bozdog, E., Ghods, A., Thurin, J., Hu, J., Pham, T., Tkalčić, H., Tape, C.	2:15 PM	Measurements of the Magnetic Sensitivity of Geophysical Instruments. Bloomquist, D. K., <b>Merchant, B. J.</b>	Searching for Glacier-related Seismic Events in Greenland with Waveform Similarity and Machine Learning. <b>Tan, F.</b> , Fan, W., Shearer, P. M.	Seismic Evidence for Slab Breakup Triggering Deep Mantle Upwelling Beneath Central America. Yuan, M., <b>Yu, C.</b> , Jing, Z.	STUDENT: Challenges and Opportunities for Earthquake Early Warning in Nevada. <b>Kinkel, D.</b> , Trugman, D. T.
2:30 PM	Estimating Systematic Source, Site, and Path Effects in Non-ergodic Ground Motion Models: Insights From the Turkish Ground Motion Database. <b>Liu, C.</b> , Macedo, J.	STUDENT: Using “Did You Feel It?” Data to Map Spatially Variable Site Amplification in the Central and Eastern United States. <b>Meyer, E. H.</b> , Baise, L. G., Kaklamanos, J., Pezeshk, S., Roberts, M. E., Nie, S.		Inconsistencies in Moment Magnitude Estimates and How to Fix Them. <b>Trugman, D. T.</b> , Ben-Zion, Y.	2:30 PM	A Frequency Response Model for Passive Seismometers With Complex Impedance Damping. <b>Merchant, B. J.</b> , Bloomquist, D. K.	Seismic Evidence of Widespread Sediments Beneath the Greenland Ice Sheet. <b>Yang, Y.</b> , Fan, W., Behn, M. D., Das, S. B., McGuire, J. J.	STUDENT: Unified Mapping of the African Rift System: Lithospheric Strength and Magmatic Evolution. <b>Maenner, M. E.</b> , Legre, J., Stamps, D. S., Adams, A., Olugboji, T.	Seismic Faults Inside Principal Underground Laboratory for Subcritical Experimentation at the Nevada National Security Site. <b>Li, Y.</b> , Dacayanan, H., Jackson, R., Powers, A., Thangavelu, S.
2:45 PM	Using Earthquake Clustering to Minimize Between-event Ground-motion Residuals for Continental Australia. <b>Allen, T. I.</b>	On Implementing the International Macroseismic Scale (IMS) in the United States and Canada. <b>Wald, D. J.</b> , Hortacsu, A., Porter, K., Hobbs, T. E.		Enigmatic Seismic Excitation of the 1957 Andreanof, Aleutian is., Earthquake. <b>Kanamori, H.</b> , Rivera, L.	2:45 PM	Scoring the Quality of Ground Motion Records. <b>Thompson, E. M.</b> , Steidl, J. H., Aagaard, B. T., Hearne, M., Smith, J. A., Withers, K. B., Moschetti, M. P., Schleicher, L. S.	Monitoring Changes in the Greenland Ice Sheet Using Seismic Waves. <b>Zhu, H.</b> , Zhao, S., Luo, B.	Reflection Seismic Profiling of Mantle Structure Under the Contiguous United States From Ambient Noise Cross-correlation. <b>Shearer, P. M.</b> , Fan, W., Wei, S. S., Rychert, C. A.	Fault Geometry From 12 Years of Relocated Earthquakes (2013-2025) Near Lake Almanor, Northern California, Reveals a Connection at Depth Between Two Mapped Surface Faults. <b>Yoon, C. E.</b> , Skoumal, R. J., Hardebeck, J., Catchings, R. D., Goldman, M., Chan, J., Sickler, R.

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3:00 PM	<b>Regional Source, Path and Site Effects</b> (continued).	<b>Advancing Seismic Hazard and Risk Assessment</b> (continued)		<b>Physics of Earthquakes</b> (continued)
	Preliminary Regionally Adjustable Models for Effective Amplitude Spectra Based on the NGA-West3 Dataset. <b>Parker, G. A.</b> , Atkinson, G. M., Baltay, A., Boore, D. M., Buckreis, T. E., Stewart, J. P.	Probabilistic Seismic Hazard Assessment for Mainland France and the French Lesser Antilles Islands. <b>Beauval, C.</b> , Marinier, J., López Ordóñez, S., Alloncle, M., Bertil, D., Bonami, T., Corbeau, J., Foix, O., González, O., Jeandet, L., Hoste-Colomer, R., Jomard, H., Reddy Kotha, S., Lemoine, A., Lambotte, S., Laurendeau, A., Masson, F., Maufroy, E., Mazzotti, S., Métois, M., Periollat, A. J., Philippon, M., Roulle, A., Satriano, C., Saurel, J., Shible, H.		Enigmatic Seismic Excitation of the 1957 Andreanof, Aleutian is., Earthquake. <b>Kanamori, H.</b> , Rivera, L. (Continued)
3:15– 4:30 PM	Poster Break			
4:30 PM	<b>Seismology for All: Expanding STEM Education Through Accessible Tools and Global Collaboration</b> (see page 1530).	<b>Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches</b> (see page 1345).	<b>Detecting, Characterizing and Monitoring Mass Movements</b> (see page 1375).	<b>Physics of Earthquakes: Insights from Theory and Observations</b> (see page 1506).
	INVITED: Recruitment by Design: Making Seismology and Scientific Computing Accessible and Engaging Through the Seismology Skill Building Workshop. <b>Hubenthal, M.</b> , Brudzinski, M., Haberli, G., Meyer, E. H., Ventura-Valentin, W., Sultana, N.	STUDENT: Probabilistic Seismic Hazard Assessment in Guatemala Incorporating Geodetic Data for Crustal Faults and Subduction Zone. Arroyo-Solórzano, M., <b>Gamboa-Canté, C.</b> , Maurer, J., Flores, O., Benito, M. B., Cotton, F.	Modeling Tilt From Near-source Broadband Seismic Records of Lahar and Pyroclastic Density Currents at Volcán De Fuego, Guatemala. <b>Waite, G. P.</b> , Bejar-Lopez, G., Krier, J. A.	Are Stress Drops Magnitude-independent? Insights From Seismological Stress-drop Estimates for Earthquake Sources Simulated on Rate-and-state Faults. <b>Lapusta, N.</b> , Lin, Y., Schaal, N.
4:45 PM	Riding Waves for STEM: Earthquake Location for Dummies. <b>Pascale, A.</b>	Ontological Testing of Seismic Hazard Models. <b>Marzocchi, W.</b> , Herrmann, M., Jordan, T. H.	Why Do Some Landslides Give Warning Prior to Failure? Characteristics of Precursory Seismic Sequences in Landslides. <b>Caplan-Auerbach, J.</b> , John, S., Pierce, E., West, M. E., Karasozen, E.	Predicting the Depth Scaling of Stress Drop From a Model of Elastic Loading. <b>Tsai, V. C.</b> , Lee, J., Faulkner, D. R., Hirth, G., Aso, N.

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
3:00 PM	<b>Network Seismology</b> (continued)	<b>Cryoseismology</b> (continued)	<b>Earth's Structure</b> (continued)	<b>Fault Networks and Seismic Hazard</b> (continued)
	Revolutionizing Borehole/Posthole Installations: Self-orienting Seismic System. <b>Bainbridge, G.</b> , Somerville, T., Pelyk, N.	Internal Structures and Seasonal Variations in Antarctica and Greenland Revealed by Teleseismic P- and S-wave Autocorrelations. <b>Pham, T.</b> , Sanjayan, A., Tkalčić, H.	STUDENT: Hierarchical Bayesian Joint Inversion of HVSR and Surface Wave Data for Multi-scale Crustal Imaging of the Lower Appalachians & Atlantic Coastal Plain Sediments. <b>Rotimi, B. I.</b> , Russell, J. B.	Rupture Process of the M5.7 December 9, 2024 Parker Butte, Nevada, Earthquake. <b>Pollitz, F. F.</b> , Guns, K., Hammond, W. C., Trugman, D. T.
3:15– 4:30 PM	Poster Break			
4:30 PM	<b>Subaqueous Evidence for Earthquakes, Coseismic Landslides, Tsunamis and other Cascading Hazards</b> (see page 1552).	<b>Cryoseismology: Advances in Technology and Scientific Discovery</b> (see page 1367).	<b>Earth's Structure from the Crust to the Core</b> (see page 1397).	<b>Time-Dependent Seismic Hazard Assessment: Models, Data and Applications</b> (see page 1557).
	Submarine Faulting and Landslide Deposits in the Outer California Borderland, Southern California. <b>Maloney, J.</b> , Fabbri, A.	Monitoring Glacial Grounding Zone Icequakes With Fiber-optic and Dense Seismic Arrays. <b>Zhang, H.</b> , Zhai, Q., Reid-McLaughlin, A. M., Park, S., Chamberlin, T., Luis, L., Kubiak, G., Lefler, C., Steinkraus, J., Klesh, A., Kaip, G., Zhan, Z.	Imaging the Architecture of the Main Himalayan Thrust in Central Nepal With 3D Local Earthquake Tomography. <b>Douilly, R.</b> , Mendoza, M. M., Ghosh, A., Lee, H.	A Three-dimensional Diffusion Model for Spatiotemporal Aftershock Forecasting Applied to Taiwan Seismicity. Ku, H., <b>Phoa, F.</b>
4:45 PM	Lack of Empirical Links Between Shaking and Turbidity Current Generation in Barkley Canyon, Cascadia Subduction Zone. <b>Sahakian, V. J.</b> , Kilb, D., Ogston, A. S., Chaknova, M., De Leo Cabrera, F., Walczak, M., Hill, J. C.	Single-station Characterization of Tidally Triggered Icequakes Across the Grounding Line of the Ross Ice Shelf at Roosevelt Island, Antarctica. <b>Garza-Giron, R.</b> , Aster, R. C.	Subtle Long-wavelength Topography of the Earth's Core-mantle Boundary. <b>Chen, Y.</b> , Wu, W., Zhang, B., Ni, S., Chu, R., Mao, W., Zhang, H.	The Modulation of Microseismicity by the Solid Earth Tides Characterizes Fault Zone Physics and May Help With Physics-based, Time-dependent Seismic Hazard Assessment. <b>Beauce, E.</b> , Waldhauser, F., Poli, P.

Wednesday, 15 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
	<b>Seismology for All</b> (continued)	<b>Advancing Seismic Hazard</b> (continued)	<b>Detecting</b> (continued)	<b>Physics of Earthquakes</b> (continued)
5:00 PM	Toward Developing Local, Impactful Earthquake Science Projects With Community Engagement. <b>Velasco, A. A.</b> , Garcia, M. A., April, L., Karplus, M.	Assessing Seismic Risk in the United States. <b>Jaiswal, K.</b>	STUDENT: Precursory Earthquakes From the Tracy Arm Landslide. <b>John, S.</b> , West, M. E., Caplan-Auerbach, J., Karasozen, E.	Constraining Earthquake Stress Drop Methods Using Stochastic Simulations. <b>Baltay, A.</b> , Abercrombie, R. E., Shearer, P. M., Bindi, D., Cochran, E. S.
5:15 PM	STUDENT: Expanding Earthquake Science Education With Quakeworx Interactive Web-based Tools. <b>Rekoske, J. M.</b> , Kutschera, F., Yun, J., Oryan, B., Gabriel, A., May, D. A., Chourasia, A., Youn, C., Silva, F., Zhao, C., Tainpakdipat, N., Bhatthal, A., Serafini, F., Ronquillo, J., Winjum, B., Maechling, P. J., Elbanna, A., Ben-Zion, Y.	Financial Recovery Modelling for Earthquake Risk in Canada. <b>Hobbs, T. E.</b>	STUDENT: Landslide Seismicity Records Slip Events on Lateral Shear Margins and on Internal Faults Accommodating Longitudinal Extension. <b>Iwasaki, Y.</b> , Schwartz, S., Finnegan, N.	STUDENT: Breaking the Cubic Dependence: Stabilizing Earthquake Stress Drop Estimates via Asymptotic Spectral Ratios. <b>Knudson, T.</b> , Ellsworth, W. L., Beroza, G. C., Shaw, B. E.
5:30 PM	STUDENT: Student Perspectives on Increasing STEM Engagement and Lowering Barriers to Seismology. <b>Robinson, B.</b>	Urban-scale Seismic Modeling Reshapes Risk Priorities in Basel, Switzerland. <b>Imtiaz, A.</b> , Papadopoulos, A. N., Fäh, D.	Systematic Detection of Glacial Earthquakes in Thwaites Glacier, West Antarctica, by Regional Surface Waves. <b>Pham, T.</b>	Focal Mechanisms in the Southeastern South Island of Aotearoa New Zealand Indicate Scale-dependent Partitioning of Transpressional Strain. <b>Williams, J. N.</b> , Eberhart-Phillips, D., Bourguignon, S., Stirling, M. W., Reyners, M., Upton, P.
6:00–7:00 PM	Panel Presentation: Building a Resilient Future: What New Research Directions, Technology Developments and Partnerships are Needed?			

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Subaqueous Evidence for Earthquakes</b> (continued)	<b>Cryoseismology</b> (continued)	<b>Earth's Structure</b> (continued)	<b>Time-Dependent Seismic</b> (continued)
5:00 PM	INVITED: STUDENT: Distinguishing Earthquakes From Flood Deposits in a Submarine Canyon Head: Implications for the Marine Paleoseismic Record. <b>Lahr, E.</b> , Hill, J. C., Ogston, A. S., Moore, G.	INVITED: STUDENT: Strength and Seismic Properties of Ross Ice Shelf Ice Rifts Constrained through Joint Seismic and Geodetic Deployments. <b>Udell-Lopez, K.</b> , Huang, M., Schmerr, N., Lekić, V., Dapré, K., Schlossnagle, Z., Harkleroad, E., Eisl, S., Hurford, T.	Rank-reduction Based Uncertainty Quantification for FWI. <b>Keating, S.</b> , Zunino, A., Fichtner, A.	Time-dependent Ground-motion Scenarios for Large Megathrust Earthquakes and Mature Seismic Gaps Along the Chilean Margin. <b>Ojeda, J.</b> , Montalva, G. A., Osses-Valenzuela, M., Bastías, N., Leyton Flórez, F., Heresi, P., Jünemann, R., Calderón, S.
5:15 PM	Lacustrine Record of Paleoseismicity in the Patagonian Andes South of the Chile Triple Junction: Evidence of Seismic Activity From a Silent Subduction Zone. <b>Magnani, M.</b> , Villalobos Claramunt, A., Ito, E.	STUDENT: Large-N Seismic Nodes and Broadband Observations at the South Pole: Enabling High-resolution Cryoseismology in Extreme Polar Environments. <b>Wu, H.</b> , Shen, W.	Constraining Slab Geometry and Seismic Velocity Structure From Tillamook to Portland, Oregon. <b>Wirth, E. A.</b> , Trehu, A. M., Stone, I., Hooft, E. E. E., Ward, K.	Assessing Temporal Variations of H/V Spectral Ratio From Long-term Seismic Noise Records. <b>Leyton Flórez, F.</b> , Pasten, C., Montalva, G. A., Heresi, P.
5:30 PM	Post-glacial Seismoturbidite Deposits in Ozette Lake, Washington, Reveal Clustering and Bi-modal Recurrence of Strong Shaking During the Last 14,000 Years. <b>Brothers, D. S.</b> , Padgett, J., Singleton, D. M., Sherrod, B., Kluesner, J., Derosier, B., Hill, J. C., LeSelle, S.	Development and Deployment of the Deep (2.46 Km) Ice Seismometer at South Pole, Antarctica. <b>Anthony, R. E.</b> , DuVernois, M., Grulke, S., Weber, J., Stoup, V., Sandstrom, P., Bainbridge, G., Braun, J., Cherwinka, J., Kelley, J., Chan, J., Griffin, S. C., Auer, R., Bastien, P., Karle, A., Kromer, E., Ng, C., Quiros, F., Tanner, G. C., Telesha, T., Tosi, D., Trerice, N., Patton, J. V., Wilson, D. C.	Modelling 3D Teleseismic Waveforms Above 1 Hz Using a SEM-DSM Hybrid Method. <b>Wu, W.</b>	STUDENT: Non-Poisson Probabilistic Seismic Hazard Analysis. <b>Largent, M.</b> , Abrahamson, N.
6:00–7:00 PM	Panel Presentation: Building a Resilient Future: What New Research Directions, Technology Developments and Partnerships are Needed?			

## Poster Sessions

### Cryoseismology: Advances in Technology and Scientific Discovery (see page 1370).

1. Source Study of Ice-quakes in a Ross Ice Shelf Rift. **Aziz Zanjani, F.**, Wiens, D. A., Wysession, M. E.
2. STUDENT: Basal Icequake Detection at Eastern Shear Margin of Thwaites Glacier, Antarctica. **Fleenor, D.**, Walter, J., Smith, E. C., Karplus, M., Gonzalez, L., Longhauser, W., Miller, N.
3. STUDENT: Wind-wave Scaling in Antarctic Coastal Polynyas From Microseism Observations. **Yang, M.**, Williams, E. F.
4. Seismic Full-wavefield Imaging of the West Antarctica Ice Sheet. **Zhang, Z.**, Nakata, N., Wei, S., Liu, Y.
5. Using Ambient Seismic Noise to Characterize the Polar Environment Near Baffin Bay. **Gong, J.**

### Network Seismology: Recent Developments, Challenges and Lessons Learned (see page 1472).

6. Earthquake Detection, Classification and Location in the Wabash Valley Seismic Zone. **Gong, J.**
7. ANSS Station Information System: A Centralized Station Metadata Repository for Populating, Managing and Distributing Seismic and GNSS Station Metadata. **Acharya, P.**, Yu, E., Kientz, S., Alvarez, M., Husker, A.
8. Using Version Control to Manage Seismic Software Configurations. **Antolik, L.**, Friberg, P. A., Lisowski, S. W.
9. Combining Strong and Weak Motion Data, with Amplitude Ratio as a New State of Health Metric. **Bainbridge, G.**, Perlin, M., Somerville, T., Pelyk, N.
10. Earthquake Source Depth Refinement in France and Nearby Regions. **Barkat, A.**, Zhang, M., Li, W., Arroucau, P.
11. Building a Stronger Seismic Network for Statewide Earthquake Monitoring in New Mexico. **Basu, U.**, Record, A., Ochoa, E.
12. Incorporating Machine Learning to Improve Monitoring at the Southern California Seismic Network (SCSN). **Bhadha, R.**, Black, M. L., Jones, A., Good, A. D., Tam, R. W., Yu, E., Tepp, G., Husker, A.
13. Recent Innovations and Improvements for Real-time Operations at the Southern California Seismic Network (SCSN). **Bhadha, R.**, Watkins, M., Black, M. L., Stubbailo, I., Hoggro, C., Jones, A., Husker, A.
14. Architecture and Infrastructure of the Southern California Earthquake Data Center (SCEDC). **Chen, S. E.**, Yu, E., Bhaskaran, A., Dungan, S., Pinkston, D., Husker, A.
15. Phase Associator Comparison for Small Scale Seismic Networks. **Friberg, P. A.**, Dzubay, A. J., Stachnik, J., John, S.

16. Ultra Low Power, High Resolution Standalone Seismic Digitizer. Germenis, N. G., **Friberg, P. A.**
17. Ultra Low Power, Standalone Wide-band Miniature Seismometer. Germenis, N. G., **Friberg, P. A.**
18. A New Local Magnitude Scale for Alaska. **Gossett, D.**, Karasozen, E., Holland, A. A., McFarlin, H., West, M. E.
19. Architecture of Generation 3 Real-time System at the Alaska Earthquake Center. **Holland, A. A.**, West, M. E., Murphy, N. W., McFarlin, H., Gossett, D., Karasozen, E.
20. Monitoring Network and Station State of Health with Grafana. **Kessinger, J.**, Acharya, P., Stubbailo, I., Bhadha, R., Watkins, M., Yu, E., Ramsay, J., Husker, A.
21. Shaking Intensity Parameters Computed at Seismic Sensor Sites for Real-time Monitoring: Application to the Community Seismic Network. **Kohler, M.**, Banda, E., Guy, R., Clayton, R. W., Yu, E.
22. Multidisciplinary Stations: A Next Generation Tool Kit for Geoscience. **Laporte, M.**, Somerville, T., Perlin, M., Easton, D., Pelyk, N., Jusko, M.
23. Practical Digitizer Testing: The Albuquerque Seismological Laboratory Digitizer Test Suite. **Litherland, M.**, Bastien, P., Beutel, C., Holcomb, A., Holland, J., Kearns, A., Kromer, E., Podmore, I., Ringler, A.
24. A Seismic Network Assessment for Prioritizing Analog Upgrades Based on Pick-ability and Location Performance. **Morton, E. A.**, Trow, A. J., Wilson, D. C., Pankow, K.
25. STUDENT: Training and Performance of Machine Learning Pickers With Alaska-specific Data. **Noel, S. K.**, West, M. E.
26. STUDENT: The RAII-UABC Urban Accelerometric Network: Real-time Seismic Monitoring and Ground-shaking Products for Emergency Response. **Nuñez, A.**, Ramírez, E., Arregui, S., Arce, R., Rosado, R. S.
27. Human-centered AI for Seismic Phase Picking in Operational Monitoring. **Park, Y.**
28. Güralp Data Centre: Cloud-based Data Acquisition and State-of-health Monitoring for Seismic Networks. Calver, J. M., **Restelli, F.**
29. Generalized, Automated Mapping of High-impact Regions for Seismic Station Deployment. **Siervo Plata, D.**, Savvaidis, A., Breton, C., Huang, G.
30. Comparing Verizon and AT&T FirstNet Latency During the 2026 Rose Parade. **Stubbailo, I.**, Watkins, M., Jones, A., Black, M. L., Wright, D., Chen, S. E., Yoon, C. E., Bhadha, R., Husker, A.
31. Do You See What I See? Comparing Operational Shakemap Products in Northern California. **Terra, F.**, Schleicher, L. S.
32. Integration of MEMS Accelerometers in Regional Seismological Networks: Piloting A Low-cost Edge Computing Approach. **Walter, J.**, Xiao, H., Ogwari, P. O., Thiel, A., Gregg, N., Woelfel, I., Mace, B., Muñoz-Santos, L. F., Fleenor, D.

33. Variability in Seismic Sensor Calibrations. **Wilson, D. C.**, Bastien, P., Litherland, M., Ringler, A.
34. Seismology as a Service: Portable Product Generation at the Southern California Seismic Network (SCSN) Using Service-oriented Architecture and Cloud Computing. **Yu, E.**, Tepp, G., Tam, R. W., Bhaskaran, A., Baker, B., Chen, S. E., Askari, A., Choi, J., Husker, A.
35. STATION: A Scalable Platform for Cross-regional Seismic Station and Site Characterization. Tarchini, G., Scafidi, D., **Parolai, S.**, Picozzi, M., Bindi, D., Spallarossa, D.

### Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches (see page 1349).

36. A High-frequency Magnitude Scale (M3HZ): From Instrumental Ground Motions to Historical Earthquake Catalogs. **Parolai, S.**, Spallarossa, D., Picozzi, M., Amiri Fard, R., Oth, A., Bindi, D., Rovida, A.
37. A Partially Nonergodic Seismic Hazard Framework Using Earthquake-cycle Simulations. **Aspiotis, T.**, Zielke, O., Aquib, T., Mai, P.
38. Modeling Multi-hazard Assessment in the Western Corinthian Gulf, Central Greece, Using Machine Learning and Gis. **Bathrellos, G.**, Andriopoulou-Mounteanou, S., Paliou, Z., Skilodimou, H. D., Zymvragakis, A., Spingos, I., Kaviris, G.
39. Regional Seismic Risk Assessment in Taiwan Using Optimized Exposure and Fragility Models: Insights From the 2016 Meinong and 2024 Hualien Earthquakes. **Chan, C.**, Hung, J.
40. Updated Mmax Distributions for Seismic Hazard Analyses of Nuclear Facilities in the Central and Eastern US. **Chandrasekhar, S.**, Montaldo Falero, V., Youngs, R.
41. Looking for the Possible Epicenters and Magnitudes of Strong Prehistoric Earthquakes Near Boston, Massachusetts. **Ebel, J. E.**, Monecke, K., Hubeny, J., McCarthy, F. M. G., Theis, L., Alderson, A.
42. STUDENT: Linked Earthquake and Tsunami Hazard Modeling on Puget Sound's Crustal Faults. **Grossman, J. B.**, Wirth, E. A., Dunham, A., Stone, I., LeVeque, R. J., Adams, L. M., Wei, Y., Moore, C.
43. STUDENT: Development of an Empirical Ground Motion Model for Spectral Displacement Using High Rate GNSS. **Hensley, B.**, Sahakian, V. J., DeGrande, J., Crowell, B. W.
44. Seismic Hazard Studies in West Africa Using Integrated Techniques for Planning and Development of Critical Facilities. **Kadiri, U. A.**, Kijko, A.
45. STUDENT: Applying Selena for Seismic Risk Analysis in Kenya. **Kuria, K. K.**, Brassai, O. K.
46. STUDENT: Region-specific Empirical Models for Arias Intensity, Cumulative Absolute Velocity, and Significant Duration in the Alborz Region. **Pakniat, S.**, Davatgari-Tafreshi, M., Pezeshk, S.

47. On the Development of Multi-hazard Map at the Lefkada Island (Western Greece) by Combining Seismic and Landslide Hazard Maps. **Skilodimou, H. D.**, Andriopoulou-Mounteanou, S., Paliou, Z., Bathrellos, G., Zymvragakis, A., Spingos, I., Kaviris, G.
48. Simulation-based Scenario Shakemaps for Earthquakes on the Seattle, Tacoma, and Southern Whidbey Island Faults, Washington, U.S.A. **Stone, I.**, Wirth, E. A., Grant, A., Grossman, J. B., Frankel, A. D.
49. Advancing Seismic Hazard and Risk Inputs for Tbilisi. **Tsereteli, N.**, Kharanauli, D., Silva, V., Varazanashvili, O.
50. STUDENT: Gulfnet: Large-scale Nodal Seismic Deployment Along the Texas-Louisiana Coast. **Villagomez, J.**, McNease, J., Zhang, Z., Murphy, M., Suppe, J., Zheng, Y.
51. Ball Lightnings in Earthquakes and Seismic Damage. **Zimin, M.**, Zimin, M.
52. Stochastic Analysis of Avalanches and Slushflows Triggered by Earthquakes. **Zimin, M.**, Gavrilenko, T., Zimin, M., Kulikova, O., Kumukova, O.
53. Complex Monitoring of Potential Earthquake Localities. **Zimin, M.**, Zimina, S.
54. Open Scientific Data: A Case Study on the Phoenix Drainage Basin (Greece) for Seismic and Flood Hazard Assessment. **Kaviris, G.**, Zymvragakis, A., Spingos, I., Andriopoulou-Mounteanou, S., Paliou, Z., Skilodimou, H. D., Bathrellos, G.

### Time-Dependent Seismic Hazard Assessment: Models, Data and Applications (see page 1558).

55. Smoothing Kernel-based Versus Uncertainty-driven Seismicity Models: Performance Comparison in the Gulf of Corinth (Greece). **Kaviris, G.**, Bonatis, P., Karakostas, V., Kourouklas, C., Papadimitriou, E.
56. STUDENT: Toward the Incorporation of Anelastic Path Attenuation in Non-ergodic Ground-Motion Models (GMMs): A 3D Perspective for the Chilean Subduction Zone. **Bastias, N.**, Montalva, G. A., Ojeda, J., Leyton Flórez, F.
57. New Seismic Hazard Research Capabilities in OpenSHA v26.1. **Bhatthal, A.**, Maechling, P. J., Milner, K. R., Callaghan, S. A., Elbanna, A.
58. STUDENT: Seismic Hazard Assessment for the Levant Fault System Using the MCQsim Earthquake Simulator. **Bilal Peralta Nemr, B.**, Beauval, C., Brax, M., Zielke, O., Klinger, Y.
59. Time-dependent Seismic Hazard Assessment of the San Ramón Fault in Santiago, Chile. **Heresi, P.**, Fernández, M., Montalva, G. A., Leyton Flórez, F.
60. Utilizing the RSQSim Long-term Earthquake Simulator to Generate a Synthetic Earthquake Catalog for the Eastern California Bay Area. **Marschall, E.**, Gabriel, A., Shaw, B. E., Yun, J., Kottke, A. R., Donahue, J.

61. On the Temporal Stationarity of Systematic Effects in Non-ergodic Ground-motion Models: Evidence From Chilean Megathrust Sequences. **Montalva, G. A.**, Bastias, N., Heresi, P., Leyton Flórez, F., Cabello, C.
62. STUDENT: Physics-based Seismic Hazard Assessment Using RSQSim Synthetic Catalogs: Validation Against USGS Nshm 2023 for Los Angeles. **Olawayin, V. T.**, Ebel, J. E.
63. Unrecoverable Crust Destructions Incurred by Low-permeability Heterogeneity—Based on Time-dependent Continuous Leakage Detecting Models. **Zhang, Y.**, Fu, L., Qi, S., Zhang, H., Manga, M.
64. Innovations in Time-dependent Methodologies for Earthquake Loss Modeling. **Neely, J. S.**, Apel, T., Safiey, A., Gupta, N.

#### Physics of Earthquakes: Insights from Theory and Observations (see page 1511).

65. What's Real and What's Not? Assessing Spectral Stress Drop Observations With Synthetic Earthquakes. **Neely, J. S.**, Park, S., Abercrombie, R. E.
66. STUDENT: Fault Zone Structure and Earthquake Generation Mechanisms at the Xinfengjiang Reservoir, China, From the Earthquake Catalog (2013-2014). **Hu, Y.**, Ye, L., Xu, S.
67. STUDENT: A Seismically Active Shear Zone in the Uppermost Mantle Beneath the Canadian Rockies. **Hutchings, S. J.**, Koper, K. D., Pang, G.
68. Rupture Properties Diversities Across Taiwan Area Revealed by Back-projection Method. **Jian, P.**
69. The 10 September 2025 Mw 4.1 Earthquake in Northeastern Utah, USA: An Archetypal Continental Mantle Event. **Koper, K. D.**, Hutchings, S. J., Burlacu, R., Whidden, K., Tibi, R., Pang, G., Springer, V.
70. Is Stress-drop Depth Dependent?—Insights From Observations, and the Roles of Normal-stress and Attenuation. **Kurzon, I.**, Lyakhovskiy, V., Sagy, A.
71. Large Repeating Gorda Intraplate Earthquakes Occurring Along an Inherited Weak Zone Near the Mendocino Triple Junction. **McPherson, R. C.**, Patton, J. R., Hellweg, M., Smith, S. W., Dengler, L., Lomax, A., Dreger, D. S.
72. A Geometric Explanation for Faulting-style-dependent Non-double-couple Components in Global Moment Tensors. **Rösler, B.**
73. West Texas Earthquake Catalog Using a 3D Earth Model. **Savvaidis, A.**, Lomax, A., Parastatidis, E., Salles, V., Huang, G.
74. STUDENT: Physics-bounded Maximum Magnitude of Production-induced Earthquakes in the Groningen Gas Field. **Shi, Q.**
75. Applications of MTUQ: A Framework for Estimating Moment Tensors, Point Forces, and Their Uncertainties. **Thurin, J.**, Modrak, R., McPherson, A., Tape, C., Rodriguez-Cardozo, F. R., Braunmiller, J., Hu, J., Tkalčić, H.

76. STUDENT: The Spatio-temporal Scales of a Self-sustaining Stress Transfer Mechanism Responsible for Intermediate-Depth Earthquakes Within the Bucaramanga Nest, Colombia. **Tsuchiya, A.**, Frank, W. B., Prieto, G. A.
77. Coda-derived Source Parameters of Shallow Earthquakes in Mainland Alaska. **West, M. E.**, Al-Kaabi, M., Mayeda, K., Roman-Nieves, J., Barno, J.
78. STUDENT: Earthquake Focal Depths and Tectonic Implications of the Shanxi Rift Based on a Depth-phase Scanning Algorithm. **Wu, Y.**, Yu, H., Zhang, S., Wang, Y., Li, L.
79. The Connected Nucleation Spectrum of an M5.6 Earthquake. **Zi, J.**, Yang, H.

#### Detecting, Characterizing and Monitoring Mass Movements (see page 1377).

80. Adapting a Granular Flow Model to the U.S. Geological Survey Experimental Debris-flow Flume. **Biegel, K.**, Conner, A., Thomas, A. M., Allstadt, K., Obryk, M., Farin, M.
81. Linking Landslide Dynamics to Seismic Detection at Barry Arm Landslide, Alaska. **Karasozen, E.**, Allstadt, K., Barnhart, K.
82. Advances in Seismic Monitoring of Landslides in Alaska. **Karasozen, E.**, West, M. E.
83. Triggering of Slow-moving Landslides in New Zealand and Northern California: Insights From InSAR Time Series Analysis of the 2016 Kaikōura and 2022 Ferndale Earthquakes. **Lindsay, D.**, Burgmann, R., Massey, C., Hamling, I.
84. STUDENT: Seismic Monitoring of Flooding, Debris Flows, and Landslide Dynamics After the 2025 Palisades Fire, California. **Ma, Y.**, Tan, B., Fiorillo, E., Mills-Terry, I., Akin, I., West, A., Paige, D. A., Moon, S., Meng, L.
85. Seismic Monitoring of Mass Movements and Cascading Surface Hazards in Mountain Regions. **Zhang, Z.**, Walter, F., He, S., Tan, Y.

#### ESC-SSA Joint Session: Advanced Methods for Harnessing Seismic Noise Analysis in Applied Seismology (see page 1404).

86. STUDENT: Toward Monitoring Groundwater-induced Seismic Velocity Changes Using Ambient Noise Correlation in the Upper Mississippi Embayment. **Araji, A.**, Carpenter, S., Rodriguez-Cardozo, F. R., Beck, G., Schmidt, J. P., Braunmiller, J., Woolery, E. W.
87. Beyond Source Homogeneity: High-frequency Control for Empirical Green's Function Retrieval. **Chen, Y.**
88. STUDENT: Traveltime Tomography Using Ambient Noise P Body-waves From Distant Typhoons. **Du, M.**, Gao, J., Zhang, H.

89. STUDENT: Characterizing Fundamental Frequencies Across Geologies Using Ambient-noise HVSR. **Mansfield, R.**, K C, S., Nweke, C. C.
90. STUDENT: Capturing Subsurface Impacts of Recent Rainstorms in the San Joaquin Valley Using Coda Wave Interferometry. **Moussissa, N.**, Taira, T., Allen, R.
91. Preliminary Shallow Subsoil Velocity Imaging of the Contursi Terme Hydrothermal System (Southern Italy). **Serlenga, V.**, Cabrera-Perez, I., D'Auria, L., Napolitano, F., Panebianco, S., Stabile, T., Giampaolo, V., Amoroso, O.
92. Shear-wave Velocities in the Bellingham and Everett Basins, Washington State: Insights From Multimethod Characterization With krSPAC and Active-source Linear Arrays. **Stephenson, W. J.**, Lindberg, N. S., Leeds, A. L., Odum, J. K.
93. Artius: A Revolutionary Broadband Node to Enable Passive Seismology. **Watkins, N. M.**, Spark, R. M.

#### Fault Networks and Seismic Hazard in the Nevada-California Borderland [Poster] (see page 1418).

94. Quaternary Geologic and Fault Mapping to Inform Future Paleoseismic Characterization at Yucca Mountain, Nevada. **Koehler, R. D.**, Gross, M., Rutherford, R.
95. STUDENT: Active Faulting in the Klamath Mountains Revealed by Lidar Data. **Lynch, R. M. C.**, Oskin, M. E.
96. STUDENT: Earthquake Hazard and Geomorphic Mapping in the Reno Urban Area. **Marino, D.**, Rowe, C. D., Koehler, R. D., Bogolub, K. R., Cashman, P. H., Pretell, R., Wesnousky, S. G.
97. STUDENT: Right-oblique Slip Rate of the Round Valley Fault, Eastern California. Alatorre-Acevedo, E., Franck, S., Lynch, R. M. C., Papin, L., **Perkins, E.**, Yepishin, E., Oskin, M. E.
98. STUDENT: ELVIS: A Seismic Array for Hazard and Structure in the Las Vegas Basin. **Samuel, D.**, Ford, H. A., Byrnes, J., Barth, N., Catchings, R. D., Doreme, G., Douilly, R., Gaherty, J. B., Garcia, J., Marschall, E., Parida, B., Perzan, Z., Porter, R. C., Shallon, B., Shillington, D. J., Stroup, A.

#### Earth's Structure from the Crust to the Core (see page 1400).

99. STUDENT: Constraining Depths of Basin and Crustal Discontinuities Across the Powder River Basin, Wyoming, and Black Hills South Dakota. **Samuel, D.**, Ford, H. A., Bezeda, M. J., Byrnes, J.
100. Inherited Lithospheric Structure Controls Cenozoic Intraplate Basaltic Volcanism in Central Mongolia Due to Mantle Upwelling. **Bao, X.**, Jiang, M.
101. STUDENT: Joint Body and Surface Wave Inversion for the Structure of the Northern Los Angeles Basins. **Bird, E.**, Biondi, E., Clayton, R. W., Zhan, Z.

102. Possible Layered Crustal Seismic Anisotropy in the NE Tibetan Plateau. **Gao, Y.**, Li, S., Xia, X.
103. Imaging the Crust and Upper Mantle of Georgia Using Receiver Functions TRANSECT and SNECCA Seismic Arrays. **Godoladze, T.**, Nabelek, J., Ratiani, L., Kakhoberashvili, S., Sandvol, E., Grigalashvili, R., Javakhishvili, Z.
104. STUDENT: Mantle Transition Zone Imaging Beneath the East Sea (Sea of Japan) Using Teleseismic Receiver Functions. **Hwang, J.**, Chang, S.
105. Resolving the Deep Structure of the Yellowstone Mantle Plume. **Kumar, U.**, Romanowicz, B., Wolf, J., Lyu, C., Munch, F.
106. Layered Seismic Anisotropy and Tectonics of the Anatolian Plate. **Liu, C.**, Schulte-Pelkum, V., Becker, T. W., Link, F.
107. STUDENT: Rayleigh-wave Attenuation in the Southern Korean Peninsula From Helmholtz Tomography. **Park, S.**, Chang, S.
108. STUDENT: Mantle Transition Zone Thickness Variation Across Tibet Using P-wave Receiver Functions. **Singh, A.**, Sandvol, E., Liu, C.
109. STUDENT: Deep Learning for Deep Earth: Global D'' Reflections in Massive Seismic Dataset. **Wang, H.**, Wolf, J., Zhu, W.
110. A Comprehensive Crustal Coda Attenuation Map of Continental China. **Wang, W. W. W.**
111. STUDENT: A Machine Learning Enhanced Catalogue for New Zealand: Observations From Two Decades of Seismicity. **Williams, C.**, Chamberlain, C. J., Townend, J.
112. Upper Crustal Structural Heterogeneity and Its Role in Intracontinental Seismogenesis in the Western United States. **Yang, X.**, Levandowski, W., Cao, Z.
113. STUDENT: The Shallow Moho Below the Los Angeles Basin. **Villa, V.**, Clayton, R. W.

#### Physical Properties of Fault Zones from the Seismic Source to Earth's Surface (see page 1503).

114. STUDENT: Hydraulic Tomography of Faults Near Cahuilla, Southern California. **Villa, V.**, Ross, Z. E., Cochran, E. S.
115. STUDENT: The Effects of Plasticity on Vertical Off-fault Deformation Percentages for the 1971 San Fernando Earthquake. **Bravo, G.**, Oglesby, D. D., Gaudreau, É., Funning, G. J., Nissen, E., Hollingsworth, J.
116. STUDENT: Space-time Variations of In-situ Vp/Vs Ratios in the San Jacinto Fault Zone. **Huang, S.**, Ben-Zion, Y.
117. STUDENT: Integrated Geophysical Investigation of Quaternary Paleo-earthquake Evidence in Soft Soil Deposits Using GPR, ERT, MASW, and HVSR Surveys. **Jeon, Y.**, Kim, B., Kim, S., Choi, J., Lee, H.
118. STUDENT: Investigating the Geometric Origin of Slip Asperities. **Lee, J.**, Tsai, V. C., Hirth, G., Trugman, D. T.

119. Fault Damage Zone Structure at Depth Extracted by FZTWs and Receiver Functions From Teleseismograms. **Li, Y.**
120. Monitoring Temporal Variations in Dtp/Dts Ratio Owing to Water-saturation Within the Fault Zone - a Plausible Earthquake Precursor. **Li, Y.**
121. Comparing Fault Zones that Host Induced and Tectonic Earthquakes in Oklahoma and California. **Neo, J., Huang, Y.**
122. Depth-dependent Frictional Stability and Rupture Arrest on the Pütürge Segment of the East Anatolian Fault Zone, Turkey (Türkiye). **Nevitt, J. M.,** Jeppson, T. N., Bilham, R., Moore, D. E., Lockner, D. A., Barnhart, W. D., Çakır, Z., Ayruk, E. T., Brooks, B. A., Ruth, D. C. S., Ekhtari, N., Gomez, F. G., Weiss, J. R., Minson, S. E., Ergintav, S., Doğan, U., Özarpaçi, S., Reitman, N. G., Harris, R. A.
123. STUDENT: Influence of Fault Zone Overstrengthening on Future Earthquake Processes. **Smith, Z. D.,** Bürgmann, R., Waligora, F., Griffith, A., Nevitt, J. M., Materna, K., Gleeson, M., Yan, R., Idzakovich, M.
124. STUDENT: Depth Dependence of Seismic Velocity Recovery Following the 2009 LAquila and 2016 Amatrice Earthquakes. **Van Linn, J.,** Tarantino, S., Poli, P., McLaskey, G. C.
125. Multiparametric Geophysical Monitoring Reveals Fluid-driven Precursors to Seismic and Volcanic Events: Rgunal Network Design and Preliminary Results. **Vargas, C. A.,** Caneva, A., Monsalve, G., Duque, E., Duque, S., Perez, J., Angulo, V., Osorio, J. D., Duque, G., Barbosa, A., Gulisano, A., Delgado-Toala, D.
126. Speeds, Modes and Directionality of the 2025 Mw 7.8 Madalay Earthquake Explained by the Fault Core Structure. **Xia, K.,** Wang, C., Zhu, S., Rosakis, A.
127. Fault Zone Structure of the Alpine Fault in New Zealand Imaged by Seismic Receiver Functions. **Zhang, P.,** Miller, M. S., Wang, X., Townend, J., Michailos, K.

**New Possibilities for InSAR in Earthquake Science: the NISAR Mission and OPERA Displacement Maps** (see page 1492).

128. Identification of Potential Slow-moving Landslides Using ICA on InSAR Time Series and Terrain Analysis. **Chaves Fitzgerald, G., Huang, M.**
129. Leveraging Multitemporal InSAR Products for Geohazards and Geomechanics Research: Characterizing Data Quality and Lessons Learned. **Jiang, J.,** Bodunde, S., Kang, Z., Shodunke, G., Thapa, M., Zhao, X.
130. Mapping Surface Deformation at Scale: A Look at the Opera Displacement Products for Earthquake Science and Hazards Applications. **Sangha, S. S.,** Bato, G., Handwerker, A. L., Mirzaee, S., Staniewicz, S., Fattahi,

- H., Govorcin, M., Oliver-Cabrera, T., Yoon, P., Agram, P., Chan, S., Cinquini, L., Fielding, E. J., Bekaert, D.
131. STUDENT: Triggered Aseismic Creep Following the 2023 Ocotillo Swarm Constrained by 3D InSAR Observations. **Tan, M.,** Materna, K.

**Planetary and Gravitational Wave Seismology** (see page 1517).

132. Seismo-acoustic Characterization of Lunar Rocket Plume Hazards Using Distributed Acoustic Sensing. **Donahue, C. M.,** Lanza, N. L.
133. STUDENT: Using Inertial Measurement Units as Seismometers for Planetary Missions. **Gansler, K. R.,** Schmerr, N., Wang, J., Lewis, K. W., Fernando, B.
134. Seismological Characterization of the Sardinia (Italy) Candidate Site for the Einstein Telescope. **Giunchi, C.,** Cianetti, S., Diaferia, G., Molinari, I., Olivieri, M.
135. Detection of a Martian Long Range Thermospheric Acoustic Wave by SEIS/InSight. **Lognonné, P. H.,** Froment, M., Charalambous, C., Kim, D., Xu, Z., Panning, M. P.
136. Determining Lunar Interior Structure through LILA, a Lunar Gravitational Wave Observatory Concept. **Panning, M. P., Lognonné, P. H.,** Creighton, T., Jani, K., Trippe, J., Quetschke, V., Majstorović, J.
137. STUDENT: Probing Small-scale Lunar Mantle Heterogeneities Using High-frequency P-wave Scattering from Shallow Moonquakes. **Margarit, R.,** Lognonné, P. H., Drilleau, M., Kawamura, T., Menina, S.
138. STUDENT: Benchmarking Single-station Focal Mechanism Inversion to Characterize Martian Crustal Anisotropy. **Mohanna, S.,** Singh, N., Meng, L., Li, J.
139. A Microseismometer for Venus. **Pike, W. T.,** Funk, N. W., Hunter, G. W., Chen, L., Adams, C. M., Krasowski, M. J.
140. Seismic Evidence of Active Deep Crustal Deformation Beneath Valles Marineris, Mars. **Song, J.,** Kim, D., Kolawole, F., Tsai, V. C., Davis, J.
141. STUDENT: High-resolution Characterization of Seismic Scattering in the Lunar Near-surface From Observations and Synthetic Records. **Tamama, Y.,** Civilini, F., Husker, A., Jackson, J. M., Biondi, E., Wang, J., Zhai, Q., Zhan, Z.
142. Early Earthquake Detection With Elasto-gravitational Waves. **Wang, S.,** Chua, S. S. Y., Fichtner, A., Cummins, P. R., Ward, R. L., Slagmolen, B. J. J.

**Regional Source, Path and Site Effects in Earthquake Ground Motions** (see page 1527).

143. Extraordinarily Large Site Amplification Factors in Noto, Japan, Possibly Due to 3D Resonance. **Ito, E.,** Kawase, H.

144. Path-dependent Topographic Site Effects Revealed by 3D Ground Motion Simulations and Ambient Noise. **Kizhaekke Pakkathillam, S.,** Oral, E., Larmat, C., Asimaki, D.
145. Modeling Non-ergodic Path Effects Using Conditional Generative Model for Fourier Amplitude Spectra. **Lacour, M.,** Ren, P., Nakata, R., Nakata, N., Mahoney, M.
146. STUDENT: Effect of Subsurface Variability on Surface Ground Motion: Uncertainty Quantification in Equivalent-linear Analysis. **Muratoglu, G.,** Askan, A.
147. Multi-scale Geospatial Site Terms for Fourier Amplitude Spectrum Modeling in NGA-West 3. **Nie, S.,** Baise, L. G., Kottke, A. R., Kuehn, N., Bozorgnia, Y., Campbell, K. W.
148. The Soft Soil Effect of Marine Soil on Ground Motion Parameters. **Peng, Y.,** Lv, Y., Fang, Y.
149. Developing a Dataset for Non-ergodic Subduction Ground-motion Models in Alaska. **Smith, J. A.,** Thompson, E. M., Kottke, A. R., Sung, C., Abrahamson, N.
150. Slip Kinematics, Radiation Pattern, and Rupture Directivity Effects on the Peak Ground Velocity (PGV) of the 2024 Mw4.8 Tewksbury, New Jersey, Earthquake. **Wu, B.,** Kolawole, F., Gabriel, A.
151. Evaluating Ground Motion Models for the Chilean Subduction Zone. **Wu, Q.,** Wong, I. G.

**Seismology for All: Expanding STEM Education Through Accessible Tools and Global Collaboration** (see page 1531).

152. Lowering Barriers to Seismology Education Through Open-access Computing Tools and Shared Educational Infrastructure. **Bravo, T.,** Haberli, G., Weber, M., Hubenthal, M., Brudzinski, M.
153. STUDENT: Seismic Monitoring of Tapir Ground Interactions in Costa Rica: Nodal Arrays as Opportunistic Biologgers for Quantifying Wildlife Visits, and Impulse. **Campos, N. A.,** Vargas Hernández, C., Monge Velazquez, M., Hajaji, S., Nuñez Alpizar, E., Porrás Murillo, L., Chaves, E. J.
154. STUDENT: A Community-deployed Raspberry Shake Network for Seismic Monitoring in El Paso, Texas. **Garcia, M. A.,** Macias, M., Velasco, A. A., Karplus, M.
155. The InSAR Lookbook: A Visual Guide to Understanding Earthquake Deformation Interferograms. **Sethanant, I.,** Nissen, E.
156. Seismology 4 All. **Zeiler, C. P.,** Russell, J., Anderson, D., Parker, B.

**Subaqueous Evidence for Earthquakes, Coseismic Landslides, Tsunamis and other Cascading Hazards** (see page 1554).

157. Submarine Deformation by the Intra-arc Strike-slip System in Southern Chile: Faulting, Sedimentation, and Seismicity Processes on the Liquiñe-Ofqui Fault Zone. **Cortés Rivas, V.,** González, J., Morales-Yáñez, C., Díaz-Naveas, J.
158. Lacustrine Paleoseismic Proxies from Lake Whatcom, Washington, USA: Decoding Megathrust and Crustal Shaking Using 14 m Sediment Cores. **Derosier, B.,** Brothers, D. S., Singleton, D. M., Hill, J. C., Sherrod, B., Ponton, C.
159. Characterizing Earthquake-triggered Sedimentation in an Intraplate Setting: Delta Collapse and Turbidite Deposition From the 2020 Mw 6.5 Stanley Earthquake (Idaho, USA). **DuRoss, C. B.,** Nicovich, S. R., Jobe, J. A. T., Briggs, R. W., Powell, J. H., Shapley, M., Finney, B. P., Thackray, G.
160. Detailed Marine Paleoseismic Records From Earthquake Triggered Submarine Landslides in Outer Prince William Sound, Alaska. **Hill, J. C.,** Kluesner, J., Brothers, D. S., Singleton, D. M., Witter, R., Haeussler, P. J., Watt, J., Derosier, B., Balster-Gee, A.
161. STUDENT: Offshore Site Effects in Alaska: Geologic Factors and Pervasive Small-strain Nonlinearity. **Huang, L.,** Williams, E. F.
162. Using Lake Records to Investigate Earthquakes in Stable Continental Interiors: Case Study of the 1638 M6.5 New Hampshire, USA, Earthquake. **Jobe, J. A. T.,** Nicovich, S. R., Rodysill, J., DuRoss, C. B.
163. Evidence of Widespread and Historical Earthquake-triggered Deformation, Slope Failure, and Associated Deposits Within Lake Washington and Lake Sammamish. **Kluesner, J.,** Hill, J. C., Brothers, D. S., Sherrod, B., Takesue, R., Conrad, J., Dartnell, P.
164. Potential Effects of the 1983 M6.9 Borah Peak Earthquake on Nearby Lakes. **Nicovich, S. R.,** DuRoss, C. B., Shapley, M., Finney, B. P., Jobe, J. A. T., Thackray, G.
165. Fingerprinting of Mass Transport Deposits Using High-resolution XRF Core Scanning. **Prouty, N.,** Singleton, D. M., Derosier, B., Moy, C., Brothers, D. S.
166. Evidence of Seismic, Climatic, and Volcanic Events in the Sedimentary Record at Chelatna Lake, Alaska Over the Past 11,000 Yrs. **Singleton, D. M.,** Witter, R., Kaufman, D., Allen, H., Haeussler, P. J., Brothers, D. S., Jensen, B.
167. Shaking Evidence Near the Epicenter of the 1964 Great Alaska Earthquake at Allison Lake, Alaska USA. **Witter, R.,** Singleton, D. M., Haeussler, P. J., Kaufman, D., Allen, H., Derosier, B., Brothers, D. S.

Thursday, 16 April 2026—Oral Sessions

Presenting author is indicated in bold.

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	<b>The Landscape Record of Earthquakes and Faulting</b> (see page 1450).	<b>ESC-SSA Joint Session: Interpreting Volcanic Unrest and Eruption Data for Effective Crisis Management</b> (see page 1406).	<b>International Collaboration to Advance Earthquake Science and Disaster Response</b> (see page 1447).	<b>Physics of Earthquakes: Insights from Theory and Observations</b> (see page 1506).		<b>Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond</b> (see page 1337).	<b>Data-Driven and Computational Characterization of Non-Earthquake Seismoacoustic Sources</b> (see page 1372).	<b>Earthquake Ground Motions and Structural Response: Emerging Tools and Applications</b> (see page 1386).	<b>Mechanisms and Seismogenic Structure for Large Continental Earthquakes</b> (see page 1464).
8:00 AM	INVITED: STUDENT: Climate Oscillations and Slip Rate Control Channel and Hillslope Responses to Slow Strike-slip Faulting in the Hyper-arid Atacama Desert. <b>Aranguiz-Rago, T. E.</b> , Duvall, A. R., Crowell, B. W.	Detection and Monitoring of Volcano-seismic Processes During an Eruption Cycle at Axial Seamount. <b>Waldhauser, F.</b> , Wang, K., Colet, M., Wilcock, W. S. D., Zhang, M., Tolstoy, M., Tan, Y., Wang, P.	INVITED: Global Collaborations for Seismic Resilience: Advancing Seismic Hazard and Risk Modeling Through GEM's Projects Worldwide. Johnson, K., <b>Styron, R. H.</b> , Pagani, M., Rao, A., Silva, V., Yepes-Estrada, C., Calderón, A., Crowley, H., Bayliss, K., Todorovic, L., Brooks, C., Villani, M.	Borehole Seismic Attenuation Measurements and Strong-motion Kappa_0 Estimates Imply More High-frequency Radiation From Earthquakes Than Simple $\omega^2$ Model Predictions. <b>Shearer, P. M.</b> , Abercrombie, R. E.	8:00 AM	ShakeAlert Earthquake Early Warning Testing Developments Review. <b>Smith, D. E.</b> , Crummey, J., McGuire, J. J., Sumant, J., Bunn, J.	Seismoacoustic Source Localization: Case Study from AES Tennessee Explosion. <b>Koch, C.</b>	An Overview of NGA-West3 Research Program. <b>Bozorgnia, Y.</b> , Donahue, J., Abrahamson, N., Al Atik, L., Atkinson, G. M., Bahrapouri, M., Baise, L. G., Bayless, J., Boore, D. M., Bradley, B. A., Buckreis, T. E., Campbell, K. W., Chiou, B., Idriss, I. M., Kishida, T., Kottke, A. R., Kuehn, N., Lavrentiadis, G., Nie, S., Parker, G. A., Pinilla Ramos, C., Rodriguez-Marek, A., Stafford, P., Stewart, J. P., Sung, C., Youngs, R.	Progressive Eastward Rupture of the Main Marmara Fault Toward Istanbul. <b>Bohnhoff, M.</b> , Martinez-Garzon, P., Chen, X., Becker, D., Nunez-Jara, S., Kartal, R., Turker, E., Dresen, G., Ben-Zion, Y., Jara, J., Cotton, F., Kadirioglu, F., Kilic, T.
8:15 AM	Reconciling the Paradox of Offshore Fault Slip in the 1906 San Andreas Earthquake. <b>Herman, M. W.</b> , Furlong, K. P., McKenzie, K. A., Kummerfeldt, S. R.	INVITED: STUDENT: Rapid Seismicity Migration in the 2025 Santorini-Amorgos sequence. <b>Tan, X.</b> , Beroza, G. C., Ellsworth, W. L., Prejean, S. G., Pesicek, J. D.	Pager 2.0: Next Generation Forecasts to Inform Rapid Global Earthquake Response. <b>Jaiswal, K.</b> , Wald, D. J., Earle, P. S., Marano, K. D., Hearne, M., Schmitt, R.	S/P Amplitude Ratios with Distributed Acoustic Sensing and Application to Earthquake Focal Mechanisms. <b>Skoumal, R. J.</b> , Atterholt, J. W., Barbour, A. J., Hardebeck, J.	8:15 AM	Station Expected Contribution Metric for the ShakeAlert EEW System. <b>Biasi, G.</b> , Bunn, J., Stubailo, I., Alvarez, M.	Seismoacoustic Monitoring of Explosive Sources on the Korean Peninsula. <b>Park, J.</b> , Hayward, C., Che, I., Arrowsmith, S., Kim, K., Kim, B., Lee, H.	STUDENT: Testing Data-driven Techniques for Separating Free-field Ground-motion From Building Response in Smartphone Data. <b>Marcou, S.</b> , Allen, R.	Hierarchical Architecture of the 2025 Mw7.1 Dingri, Southern Tibet Normal Earthquake. <b>Yao, D.</b> , Wang, D., Wang, M., Chen, F., Liao, J., Yao, J.
8:30 AM	Surface Ruptures and Near-fault Deformation of the 2025 Mw 7.7 Myanmar Earthquake. Min, S., Aung, T., Chen, C., Reitman, N. G., Tsutsumi, H., Htun, W., Mon, C., Aung, L., Win, K., Min, S., Myo, E., Htay, K., Khaing, S., Thant, M., Tun, S., <b>Wang, Y.</b>	Bulk Locations and Mechanisms of Repetitive Long-period Seismicity at Mount St. Helens in July 2005. <b>Matoza, R. S.</b> , Chouet, B. A., Dawson, P. B.	From Source to Impacts: Advances in Real-time Analysis of NZ's Big Quakes Through the RCET Programme. <b>Kaiser, A.</b> , Fry, B., Andrews, J., Caballero, E., Horspool, N., Warren-Smith, E., Aden, F., Chamberlain, C. J., D'Anastasio, E., Goded, T., Jamelot, A., Zweck, C., Behr, Y., Bernardi, F., Liao, W., Solares, M., Crowell, B. W., Melgar, D., Böse, M., Massin, F., Moseley, A., Lukovic, B., Massey, C.	STUDENT: Multi-episode Rupture Kinematics of a Microearthquake in Weak Crust Revealed by Dense DAS Observations. <b>Han, S.</b> , Kim, Y., Kim, J., Nayak, A., Yin, F., Ajo-Franklin, J.	8:30 AM	Exploring the Use of Existing Offshore Cabled Infrastructure for Earthquake Early Warning in the Pacific Northwest. <b>Krauss, Z.</b> , Thompson, M., Dunham, A., Dybing, S. N., Hartog, J.	Exploring Seismo-acoustic Sources From an Underground Fully Decoupled Chemical Explosion. <b>Ezzedine, S. M.</b>	State-of-the-art Use of Simulated Ground Motions to Enhance Urban Seismic Resilience in Turkey. <b>Askan, A.</b> , Erberik, M.	Seismic Reflection Imaging of the Source Zone of the 2024 Mw4.8 Tewksbury, New Jersey, Earthquake, and the Relation of Eastern U.S. Seismicity to Crustal Structure. <b>Pratt, T. L.</b> , Chapman, M.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>The Landscape Record</b> (continued)	<b>ESC-SSA Joint Session</b> (continued)	<b>International Collaboration</b> (continued)	<b>Physics of Earthquakes</b> (continued)		<b>Advancing Earthquake Early Warning</b> (continued)	<b>Data-Driven and Computational</b> (continued)	<b>Earthquake Ground Motions</b> (continued)	<b>Mechanisms and Seismogenic Structure</b> (continued)
8:45 AM	Post-glacial Surface Faulting Along the East Gallatin-Reese Creek Fault System, Yellowstone National Park. <b>Mauch, J.</b> , Gavillot, Y.	Interpreting Campi Flegrei Unrest Through Integrated Seismic Tomography and Earthquake Analysis: Implications for Fault Reactivation and Hazard. <b>De Landro, G.</b> , Nazeri, S., Scotto di Uccio, F., Zollo, A., Vanorio, T., Lomax, A., Muzellec, T., Virieux, J., Natale, J., Russo, G., Festa, G., Di Toro, G., Convertito, V., Strumia, C., Bobbio, A., Antonio, I. G., Longobardi, V., Palo, M., Sollai, A.	Post-earthquake Response Activities and Planning at the Statewide California Earthquake Center (SCEC). <b>Elbanna, A.</b>	Source Characterizations of Northern California Earthquakes Through Moment Rate Function Properties and Finite-fault Modeling. <b>Taira, T.</b> , Dreger, D. S.		Improving the Reliability of High-rate Global Positioning System Data for Earthquake Early Warning Using Long Short-term Memory-based Anomaly Detection. <b>Manaster, A. E.</b> , Murray, J. R., Murray, M. H., Santillan, M., Scrivner, C., Melbourne, T.	Source Model for Non-steady Flow Within Fractures. <b>Maier, N.</b> , Donahue, C. M., Woo, J., Frash, L.	Quantification of Ground Shaking Effects on Buried Gas Transmission Pipelines. <b>Peng, Y.</b> , Guan, X., Bozorgnia, Y., Honegger, D., Seylabi, E., McCallen, D.	Why Do Large Earthquakes Occur in the New Madrid Seismic Zone, Central United States? <b>Langston, C.</b>
9:00 AM	How Has the Landscape Affected by the Ridgecrest CA Earthquake Sequence Changed Since 2019? A View From Repeat Lidar and Field Observations. <b>DeLong, S. B.</b> , Hammer, M., DuRoss, C. B., Scharer, K., Vermeer, J., Philiposian, B., Hanagan, C. E., Zimmerman, J., Jobe, J. A. T.	Recurrent Hydrothermal Pressurization at Campi Flegrei Revealed by Seismic Tomography and Laboratory Rock Physics. <b>Vanorio, T.</b> , Guo, T., De Landro, G., Williams, S. A., Virieux, J., Zollo, A., Russo, G.	INVITED: The Global Collaboratory for the Study of Earthquake Predictability (CSEP): International Standards, Software, and Benchmarks for Prospective Testing of Earthquake Forecast Models. <b>Serafini, F.</b> , Iturrieta, P., Bayona, J. A., Savran, W. H., Silva, F., Herrmann, M., Maechling, P. J., Graham, K., Gerstenberger, M. C., Marzocchi, W., Mizrahi, L., Schorlemmer, D., Jordan, T. H., Zhang, Y., Werner, M. J.	Fracture Energy of Earthquakes May Scale Linearly with Slip Across Ten Orders of Magnitude. <b>Kaneko, Y.</b> , Watanabe, S.		Mitigating the Effect of Spurious Displacements on Magnitudes Estimated From Peak Ground Displacement Measured With Real-time Global Positioning System Data. <b>Murray, J. R.</b> , Manaster, A. E.	STUDENT: On the Feasibility of Single-station Scalar Moment Estimation for Earthquake and Non-earthquake Sources. <b>Moyer, B. L.</b> , Lekic, V.	Towards the Development of Static Ground Displacement and Transient Ground Strain Shakemaps. <b>Wald, D. J.</b> , Atterholt, J. W., Barbour, A. J., Burgi, P., Graves, R. W., Yin, H. Z., Davis, C. A.	INVITED: A Tale of Three Events: Systematic Comparison of Mainshock Rupture Properties, Sequence Behaviors and Fault Zone Structures for Recent Major Continental Earthquake Sequences. <b>Peng, Z.</b> , Mach, P., Si, X., Lei, X., Deng, Y., Sandvol, E., Kato, A.
9:15–10:30 AM	Poster Break				9:15–10:30 AM	Poster Break			

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>The Landscape Record of Earthquakes and Faulting</b> (see page 1450).	<b>Advances and New Challenges in Investigating Seismic Site Response</b> (see page 1331).	<b>Earthquake Swarms Across the Earthquake Cycle: Precursors, Transients and Aftershocks</b> (see page 1394).	<b>Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science</b> (see page 1378).		<b>Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond</b> (see page 1337).	<b>Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond</b> (see page 1456).	<b>Earthquake Ground Motions and Structural Response: Emerging Tools and Applications</b> (see page 1386).	<b>Evolving Frontiers in Explosion Monitoring and Source Physics</b> (see page 1409).
10:30 AM	Two Surface-rupturing Earthquakes on the Great Southern Puerto Rico Fault Zone Since ~19 Ka. <b>Lynch, E. M.</b> , Jobe, J. A. T., Briggs, R. W., DuRoss, C. B., Nicovich, S. R., Hanagan, C. E., López Venegas, A., Tan, M., Gray, H., Strickland, L. E.	STUDENT: Seismic Site Characterization Using Ambient Noise and Earthquake Data in the Mexicali Valley, Northern Baja California, Mexico. <b>Aregawi, A. B.</b> , Huerta-López, C. I., Vidal-Villegas, J.	STUDENT: Examining Swarm and Foreshock Behavior in Tiny Earthquakes Resolved by Nodal Arrays around the San Jacinto Fault in Southern California. <b>Morioka, T.</b> , Brenguier, F., Cochran, E. S., Fan, W., Higuieret, Q., Hollis, D., Shearer, P. M., Vernon, F., Vidale, J., Wang, R., Zhang, H.	INVITED: Random Splitting and the Risk of Information Leakage in Seismic AI. <b>Park, Y.</b> , Delbridge, B. G.		The M5.9 Dayton, NV ShakeAlert False Alert: Lessons Learned. <b>Lux, A. I.</b> , Terra, F., Akimov, A., Henson, I., Crummey, J.	Constraining the Shallow Structure of Cook Inlet Basin, Alaska Using P-wave Autocorrelations: Insights Into Subduction Zone and Forearc Structure. <b>Dey, S.</b> , Golos, E.	Automated Operational Modal Analysis of High-rise Buildings Using Crowdsourced Smartphone Data. <b>Kumar, U.</b> , Allen, R., Hutchinson, T. C., (Charlie) Zhang, J., Sorosh, S.	Posterior Source-type Classification for Explosion Monitoring Using Moment Tensors. <b>Alvizuri, C. R.</b>
10:45 AM	STUDENT: Holocene Fault Activity Near the Oak Grove Fork Clackamas River: Kinematic Linkage of the Clackamas River and Mount Hood Fault Zones. <b>Schwarzbart, S.</b> , Streig, A., Bennett, S. E. K., Madin, I., Amos, C. B., Briseno, D., Vazquez, R. A., Sullivan, J. K.	STUDENT: High-resolution Mapping of Site Response Variability in the Los Angeles Basin Using Dense Community Seismic Network Data. <b>Shams, R.</b> , Nweke, C. C., Kohler, M.	STUDENT: Fault-zone Evolution During the Preparatory Stage of the 2024 Noto Peninsula Earthquake in Japan. <b>DeSalvio, N. D.</b> , Fan, W., Okuwaki, R., Morzfeld, M., Huang, Y.	Robust Moment Tensor Inversion on Irregular Arrays With Physics-structured Sim-to-teal Training. <b>Jia, Z.</b> , Zhang, J., Li, J.		Operating EEW in Eastern Canada Part I: Reducing False Alerts in Testing. <b>Crane, S.</b> , Adams, J., Seywerd, H., McCormack, D., Perry, C., Ackerley, N., Bird, A., Nykolaishen, L.	Razor Sharp Edge – the Yakutat Slab Dissecting South-central Alaska. <b>Miller, M. S.</b> , Zhang, P., Pickle, R. C., Waldien, T., Roeske, S. M.	Assessment of Building Risk Based on an Affordable Structural Health Monitoring System Developed in Taiwan. <b>Liang, W.</b> , Chang, G. T., Kumar, U., Ma, K.	Identifying Sensor Types and Models Using a Deep Learning Model. <b>Quinones, L. A.</b> , Davenport, K.
11:00 AM	STUDENT: Assessing Active Faults in the Cascade Arc: A Case Study of the Blue Ridge Fault, Mount Hood, Oregon. <b>Carlson, M. L.</b> , Streig, A., Madin, I., Bennett, S. E. K.	INVITED: Experimental and Numerical Analysis of the Effects of 3D Velocity Structures on HVSR. González, J. G., Baena-Rivera, M., Spurlin, J. H., Ramos-Pérez, E., Jaramillo-Rivera, A. H., Iturrarán, U., López-Sugahara, O. I., Cruz-Jiménez, H., <b>Sánchez-Sesma, F. J.</b>	INVITED: Spatio-temporal Migration Patterns of Micro-seismicity Driven by Fluid Injections and Induced Aseismic Slip. <b>Sáez, A.</b> , Sarma, A., Avouac, J., Lecampion, B.	STUDENT: Machine-learned Acceleration of Earthquake Sequence Simulations. <b>Yanagi, R.</b> , Kim, T., Bhattacharya, K., Lapusta, N.		Expansion of the Metro Vancouver Network-based EEWs: Challenges and Opportunities. <b>Zaicenco, A. G.</b> , Weir-Jones, I.	Control of Slab Tearing on Deep-focus Earthquakes and Volcanoes. <b>Zhang, H.</b>	Measuring Structural Motion Without Permission. <b>Castellaro, S.</b>	Seismo-acoustic Analysis of the 22 September 2023 Pingtung, Taiwan Chemical Explosion From Near Source Records. <b>Huang, B.</b> , Ho, M., Ku, C., Lin, C.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>The Landscape Record (continued)</b>	<b>Advances and New Challenges (continued)</b>	<b>Earthquake Swarms (continued)</b>	<b>Developing Data-Driven Methods (continued)</b>		<b>Advancing Earthquake Early Warning (continued)</b>	<b>Linking Subduction Zone Processes (continued)</b>	<b>Earthquake Ground Motions (continued)</b>	<b>Evolving Frontiers in Explosion (continued)</b>
11:15 AM	STUDENT: First Paleoseismic Evidence of Late Quaternary Surface Rupture in the Fraser Canyon of British Columbia, Canada. <b>Mendoza, R.</b> , Hobbs, T. E., Nissen, E., Leonard, L. J., Bennett, S. E. K., Woor, S., Salomon, G., Podhorodeski, A., Menounos, B., Yakuden, L., Lian, O., D'Arcy, M.	Three-dimensional Numerical Analyses of Local Seismic Response in Complex Geological Settings: Applications to the Norcia Sedimentary Basin and the Introdacqua Rock Site (Central Italy). <b>Linsalata, F.</b> , Puglia, R., Costanzo, A., Massa, M., Lovati, S., Smerzini, C., Pischiutta, M., Vanini, M., Parolai, S., D'Onofrio, A., Silvestri, F., Raggiunti, M.	Seismic Moment Release Patterns in a Swarm-dominated Fault System. <b>Fischer, T. J.</b> , Vlček, J., Káldy, E.	Development of an Enhanced Seismicity Catalog for the Cascadia Subduction Zone. <b>Hirao, B. W.</b> , Thomas, A. M., Ni, Y., Denolle, M. A., Bachelot, L., Trugman, D. T., Marfo, W., Hartog, J., Tobin, H. J.		Testing Earthquake Early Warning for New Zealand: Performance and Adaptation of the Finite Fault Rupture Detector (Finder) Algorithm. <b>Andrews, J.</b> , Behr, Y., Böse, M., Kaiser, A., Fry, B., Planès, T.	Pick Aggregator: A Multi-model Ensemble of Machine Learning Pickers to Detect Offshore Seismic Swarms North of Puerto Rico and the Virgin Islands. <b>Aziz Zanjani, A.</b> , DeShon, H. R.	Bridging Numerical Simulation, Cost-effective Condition Monitoring and Experimental Testing for Post-earthquake Resilience. Gunay, S., <b>Mosalam, K. M.</b>	STUDENT: Aircraft Detection with Surface-draped Fiber Optic Cable. <b>McGhee, E. A.</b> , Viens, L., Donahue, C. M., Boschelli, J. D., Carr, C. G., Aster, R. C.
11:30 AM	INVITED: Restraining Bend Topography Records Long-term Fault Slip and Fault Strength. <b>Baden, C. W.</b> , Nevitt, J. M., Hilley, G. E.	Limits of 1D Site Response in Basel's Urban 3D Geological Environment. <b>Imtiaz, A.</b> , Hallo, M., Dresmann, H., Steiner, B., Panzera, F., Fäh, D.	Low-activity, Steady-state Earthquake Clustering in SW Australia: Evidence for Significant Prehistoric Activity? <b>Pickle, R. C.</b> , Allen, T. I., Miller, M. S.	STUDENT: Automated Labeling to Build Deep Learning Models for OBS Phase Picking. <b>Qi, Q.</b> , Du, K., Liu, X., Nakanishi, A., Tonegawa, T., Fujie, G.		Towards Public Earthquake Early Warning in Switzerland, Greece, Romania and Croatia. <b>Planès, T.</b> , Clinton, J., Boese, M., Massin, F., Burgoa Rosso, B. E., Marmureanu, A., Anghel, M., Neagoe, C., Ene, D., Manea, E., Evangelidis, C. P., Boukouras, K., Zailac, K., Sećanj, M., Stipčević, J., Dasović, I.	Low-frequency Earthquakes Track the Motion of a Captured Slab Fragment at the Mendocino Triple Junction. <b>Shelly, D. R.</b> , Thomas, A. M., Materna, K., Skoumal, R. J.	Urban-scale Assessment of Soil-building Resonance Effects Using Ambient Noise Measurements in Matera, Southern Italy. <b>Gallipoli, M.</b> , Calamita, G., Tragni, N., Mucciarelli, M., Stabile, T., Perrone, A., Amato, L.	Sparse Seismo-acoustic Data Reveals the Timing and Size of the Accurate Energetic Systems Explosion. <b>Carmichael, J. D.</b> , Kintner, J. A., Bishop, J. W., Alfaro-Diaz, R., Blom, P. S.
Noon–12:50 PM	Annual Business and Awards Ceremony				Noon–12:50 PM	Annual Business and Awards Ceremony			
1:00–2:15 PM	Luncheon				1:00–2:15 PM	Luncheon			
	<b>The Landscape Record of Earthquakes and Faulting (see page 1450).</b>	<b>Advances and New Challenges in Investigating Seismic Site Response (see page 1331).</b>	<b>New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling (see page 1479).</b>	<b>Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science (see page 1378).</b>		<b>Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond (see page 1337).</b>	<b>Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond (see page 1456).</b>	<b>SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip (see page 1541).</b>	<b>Evolving Frontiers in Explosion Monitoring and Source Physics (see page 1409).</b>
2:15 PM	Geology and Geomorphology of the Creeping Central Calaveras Fault. Martin, H. R., <b>Rowe, C. D.</b> , Koehler, R. D., Duncan, M., Travers, A.	INVITED: OpenAmp: An Open-source Site Amplification Database to Unlock the Potential of Machine Learning. <b>Zhu, C.</b> , Kwak, D., Pilz, M., Haendel, A., Xie, J., Kawase, H., Cotton, F.	Dynamic Branching and Surface Rupture in the Signal Hill Stepmover on the Newport-Inglewood Fault, Southern California. <b>Oglesby, D. D.</b> , Toghramadjian, N., Plesch, A., Shaw, J. H., Zhang, W.	Data-driven Seismology for Nonstationary Wavefields and Hydromechanics. <b>Denolle, M. A.</b> , Ni, Y., Sanger, M., Stone, I., Bao, Y., Maurer, B. W., Kutz, J.		Beyond Earthquakes: The Role of Emergency Management in Seismic Events. Lambeth, D. J., <b>Gudel, J.</b>	STUDENT: Reconstructing Spatial and Temporal Megathrust Rupture History Using Stratigraphy and Microfossils at Sitkinak Island, Alaska. <b>Nowak, T.</b> , Dura, T., Engelhart, S., Briggs, R. W., Witter, R., Koehler, R. D., Haeussler, P. J.	Temperature Controls the Episodic Dynamics of Deep Slow Slip. El Yousfi, Z., Rousset, B., Radiguet, M., <b>Frank, W. B.</b>	STUDENT: Characterizing Anthropogenic Signals at Rellis Campus Explosion Site Using Nodal Arrays. <b>Metzler, E.</b> , Chen, X., Arthur, L., Asirifi, R.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
	<b>The Landscape Record</b> (continued)	<b>Advances and New Challenges</b> (continued)	<b>New Developments in Earthquake</b> (continued)	<b>Developing Data-Driven Methods</b> (continued)
2:30 PM	STUDENT: Spatiotemporal Trends in Slip Rate and Earthquake Recurrence on the Sierra Madre-Cucamonga Fault Zone, Southern California. <b>Kindred Weigandt, C.</b> , Dolan, J. F., Rodrigues, K., Jordan, F. F.	Dense Array Experiment on Mt. Plaia (Central Italy), to Improve Understanding of Site Amplification on Topography. <b>Raggiunti, M.</b> , Pischiutta, M., Pastori, M., Roselli, P., Cammarano, F., Speciale, S., Scudero, S., Cabrera-Perez, I., Savard, G., Lisi, A., Linsalata, F.	Complex Rupture Behavior of the 2023 Mw 7.8 Kahramanmaraş, Türkiye Earthquake Revealed by Broadband Ground-motion Simulations. <b>Akinci, A.</b> , Pitarka, A., Artale Harris, P., Graves, R. W., Tsuda, K., Cuius, A.	STUDENT: Large-scale 3D Ground-motion Synthesis With Physics-inspired Latent Operator Flow Matching. <b>Shi, Y.</b> , Lavrentiadis, G., Ross, Z. E., Asimaki, D.
2:45 PM	STUDENT: Deep Earthquakes Can Generate Larger and Far-reaching Co-seismic Displacements Than Shallow Events. <b>Chen, S.</b> , Park, S.	Integration of Non-ergodic Site Response Into NEHRP Provisions & ASCE-7. <b>Stewart, J. P.</b> , Teague, D. P., Crouse, C. B., Kasali, G., Mazzoni, S., Murphy, D., Pezeshk, S., Walling, M., Williams, T., Zafir, Z.	INVITED: A Physics-informed Probabilistic Approach to Forecast Large Earthquake Ruptures. <b>Ampuero, J.</b> , Michel, S., Molina-Ormazabal, D., Jolivet, R., Tassara, A.	STUDENT: The Digital Archivist: Automating Legacy Macroseismic Data Processing Mining Using Large Language Models. Agrawal, A., <b>Hough, S. E.</b> , Mousavi, S., Yoon, C. E., Blanco, S. E., Hellweg, M.
3:00 PM	Gold Deposits as a Proxy to Identify Paleoseismic Cycles: A Numerical Investigation. <b>Walker, R. L.</b> , Hood, S.	Effects of Damping Contrasts at Soil and Soil-rock Boundaries on the Response of Layered Soil Deposits. <b>Borcherdt, R. D.</b>	When and Where Does Aseismic Creep Stop Rupture Propagation? <b>Lozos, J.</b>	Scalable Earthquake Phase Association Based on Wadati and Voronoi Diagrams. <b>Song, J.</b> , Zhu, W., Wang, H., Kumar, U., Taira, T., Allen, R.
3:15 PM	Validating Physics-engine Simulations of Precariously Balanced Rocks for Hazards Applications. <b>McPhillips, D.</b> , Chen, Z., Klabie, K.	STUDENT: Development of Non-linear Site Response Model Based on 1D Simulations. <b>Anbazhagan, B.</b> , Kottke, A. R., Stafford, P., Rodriguez-Marek, A., Bradley, B. A., Bahrapouri, M.	INVITED: The “Finite Volume” Effects of Faults in Dynamic Earthquake Rupture and Sequence Simulations. <b>Huang, Y.</b>	STUDENT: Optimizing Seismic Phase Picking in West Indonesia Using Transfer-learned Phasenet Models. <b>Febriarta, B.</b> , Sahara, D. P., Widiyantoro, S., Rosalia, S., Nugraha, A. D., Triyoso, W., Wibowo, A., Pratama, C., Wibisono, A., Krisnadhi, A. A., Putra, A. S., Muttaqy, F., Kusumawati, D., Faturrochman, I.

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Advancing Earthquake Early Warning</b> (continued)	<b>Linking Subduction Zone Processes</b> (continued)	<b>SSJ-SSOC-SSA Joint Session</b> (continued)	<b>Evolving Frontiers in Explosion</b> (continued)
	How to Learn an Industry in 10 Days! Utilizing Qualitative Methods to Build Industry-specific Expertise Within the ShakeAlert Earthquake Early Warning Technical Engagement Team. Stanley, S. M., <b>Vinci, M.</b> , Lotto, G., Reusch, M.	Impact of Rough Topography and Seamount Subduction on Near-trench Deformation in the Taltal Seismic Gap, Northern Chile. <b>Cortés Rivas, V.</b> , Moreno, M., Contreras-Reyes, E., Melnick, D., Lange, D.	INVITED: Slow Earthquake Activity and the Role of Seamount Subduction in the Guerrero Seismic Gap, Mexico. <b>Ito, Y.</b> , Flores-Ibara, K., Chen, Y., Hernández Díaz de León, S. A., Banales, I. M. R., Plata-Martínez, R., Cruz-Atienza, V. M.	The Source Physics Experiment on Seismic Waves Generated by Explosions: Results So Far and Future Plans. <b>Walter, W. R.</b> , Snelson, C. M., Abbott, R. E., Scalise, M. E., Pyle, M. L., Carr, C. G., Bodmer, M., Miller, A., Alger, E., Kintner, J. A., Berg, E., Turley, R. S., Pennington, C. N., Alfaro-Diaz, R., Stanciu, A., Smith, K., Bonner, J., Laintz, K., Luckie, T. W., Dietel, M., Price, A., Wilson, J., Gochenour, J. A., Harding, J., Aerts, J.
	Caution! Dangerous Intersections Ahead: Understanding Human Behavior, Traffic Patterns, Protective Actions and Accidents. McBride, S. K., Baldwin, D., Young, J., <b>Fox, E. J.</b> , McGuire, J. J., de Groot, R. M., Chupp, W.	Stress, Strain, the Seismic Cycle and Long-Term Forearc Deformation in Northern Chile. <b>Schurr, B. D.</b> , Dielforder, A., Lehmann, L., Sippl, C.	Seamount-controlled Tremor Distribution at Hyuga-nada Revealed by High-Resolution Vp and Vs Imaging. <b>Nakata, R.</b> , Ma, Y., Mochizuki, K., Kinoshita, M., Nakata, N., Hashimoto, Y., Hamada, Y., Miura, S., Nakamura, Y., Arai, R.	Physical Mechanisms of Underground Explosion-generated Shear Waves. <b>Lei, Z.</b> , Euser, B., Rougier, E., Knight, E., Larmat, C.
	Deaf, Deafblind and Hard of Hearing University Student Experiences With Earthquake Early Warning in the United States: Evaluating Language Planning and Technology Access. Cooper, A. C., Takayama, K., Cooke, M. L., Drakes, O., Sumy, D. F., <b>McBride, S. K.</b>	Do Coupled Megathrusts Rupture? Oryan, B., <b>Gabriel, A.</b>	Coupling Heterogeneity in the Cascadia Slow-slip Zone From GNSS Inversions and Physics-based Modeling. <b>Magen, Y.</b> , Gabriel, A., May, D. A.	Simulation of P/S Amplitude Ratio Discriminant at the Rock Valley, Nevada. <b>Pitarka, A.</b> , Walter, W. R., Pyle, M. L.
	Implementing Public EEW in Guatemala: From Seismic Detection to Public Action. Orihuela Gonzales, B., Yani, R., Castro, D., Marroquin, T., <b>Planès, T.</b> , Burgoa Rosso, B. E., Clinton, J.	The 2017 Mw 8.2 Mexican Earthquake Jumped From a Normal Outer-rise Fault Onto the Megathrust Interface. <b>Husker, A.</b> , Garcia, M. A., Velasco, A. A.	Spatiotemporal Modulation of Episodic Tremor and Slow Slip Behavior by Tectonic and Environmental Stresses in Cascadia. <b>Meng, Q.</b> , Liu, Z., Adhikari, S., Luo, Y.	Effects of Lateral Heterogeneity, Shallow Scattering, and Variable Crustal Thickness on High-frequency Explosion Waveforms. <b>Modrak, R.</b> , Gao, K., Creasy, N., Kintner, J. A., Nelson, P., Zhou, R., Saikia, C.

Thursday, 16 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
3:30– 4:30 PM	Poster Break			
	<b>Source Properties of Microearthquakes: Insights from Laboratory, Induced and Natural Events</b> (see page 1536).	<b>Recent Contributions of Social Science Research to Understanding Earthquakes</b> (see page 1520).	<b>New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling</b> (see page 1479).	<b>Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science</b> (see page 1378).
4:30 PM	INVITED: Towards Improving Estimates of Small Earthquake Source Properties and Their Interpretation. <b>Abercrombie, R. E.</b> , Chen, X.	INVITED: 50 Years of the California Seismic Safety Commission: Where Social Science, Public Policy, Seismology, Geology, and Engineering Collide. <b>McBride, S. K.</b>	Constraining Rupture-generator Scaling Using Measured Surface Offsets, Near-fault Ground Motions and Rupture Dynamic Simulations. <b>Pinilla Ramos, C.</b> , Abrahamson, N.	STUDENT: A Machine-learning-enhanced Catalog of California Statewide Seismicity Over Two Decades. <b>Rong, B.</b> , Zhu, W., McBrearty, I. W., Beroza, G. C.
4:45 PM	Induced Earthquake With 200-to-800 Hz, Bell-shaped Source Spectra From 6 Kms Deep Injection in Igneous Basement Rock Near Helsinki, Finland. <b>Malin, P.</b> , Heikkinen, P., Leary, P., Blumle, F.	INVITED: Prototyping User-centered Graphics and Maps for Aftershock Forecasts. <b>Schneider, M.</b> , Wein, A., Artigas, B., McBride, S. K., van der Elst, N., Becker, J., Castro, R. R., Gonzalez-Huizar, H., Diaz, M., Hardebeck, J., Michael, A. J., Mixco, L., Page, M.	Realistic Representation of the Complex Dynamic Rupture Process to Simultaneously Account for Asperity Pulses and High-frequency Radiation: Syncro-shock Hypothesis. <b>Kawase, H.</b>	Performance of the Deep-learning Phase Picker Phasenet on Magnitude 3+ Earthquakes in Southern California. <b>Tepp, G.</b> , Shimota, B., Biondi, E., Zhu, W., Husker, A.
5:00 PM	INVITED: The Energy Budget of Laboratory Failure Experiments. <b>Ortega-Arroyo, D.</b> , Ghaffari, H., Peč, M., Gong, Z., Fu, R., Ohl, M., Cattania, C., Plümper, O.	Used and Useful: Usability Research on Earthquake Event Pages. <b>Macías, M.</b> , McBride, S. K., Davis, A., Palermo, L., Hunter, E., Pope, I. E.	Characterizing Rupture Speed Through Near-fault Particle Motions in Large Strike-slip Earthquakes. <b>Yang, H.</b> , Yao, S., Bhat, H., Aochi, H.	A Systematic Comparison of Foundation Models for Earthquake Detection. <b>Si, X.</b> , Peng, Z., Wu, X., Li, J., Cui, X., Li, Z.
5:15 PM	STUDENT: Ubiquitous Interactions and Subcritical Patches Explain the Irregularity of Repeating Earthquakes. <b>Li, L.</b> , Lapusta, N.	STUDENT: Real-time Public Reactions to Earthquakes via an Earthquake Early Warning Platform in Japan: Implications for Risk Perception. <b>Fukurai, M.</b> , Yong, A., Grant Ludwig, L., Bocekli, B., Wang, P., Matsushima, S., Hudson, K. S., Stanley, S. M.	Neural Operator Augmented Earthquake Sequence Simulations with Elastic Heterogeneities. <b>Wang, T.</b> , Abdelmeguid, M., Im, K., Ross, Z. E., Cattania, C.	STUDENT: AkiNet: A Physics-informed AI for Wave Extraction From Noise. Xue, S., <b>Olugboji, T.</b>

Thursday, 16 April (continued)

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
3:30– 4:30 PM	Poster Break			
	<b>Fiber-Optic Sensing Applications in Seismology and Environmental Science</b> (see page 1419).	<b>Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond</b> (see page 1456).	<b>SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip</b> (see page 1541).	<b>Seismotectonics of Southern and Baja California</b> (see page 1532).
	Unveiling Stick-slip Dynamics in Deep-seated Landslides Using Borehole Distributed Acoustic Sensing. <b>Huang, H.</b> , Huang, Y., Chen, H., Wang, K., Hsu, Y., Chen, C., Ku, C.	2025 Mw 7.0 Hubbard Glacier Earthquake: Seismic Hazard in Fault Corridor. <b>Parameswaran, R. M.</b> , Karasozen, E., Thurin, J., West, M. E., Grapenthin, R., Holland, A. A., Tape, C.	INVITED: Supershear Rupture Enabled by Bimaterial Effect and Favorable Energy Ratio Enablein the 2025 Myanmar-Mandalay Earthquake. <b>Meng, L.</b> , Xu, L., Yunjun, Z., Weng, H., Su, E., Ji, C.	INVITED: Urban Sedimentary Basins of Southern California: A Plate Boundary View of Seismic Hazard. <b>Persaud, P.</b> , Nardoni, C., Villa, V., Contreras, J., Clayton, R. W.
	INVITED: Ultra-broadband Fiber-optic Strain Sensing: Development and Applications to Plate Boundary Processes. <b>Araki, E.</b> , Yokobiki, T., Shuhei, N., Zumberge, M., Tsuji, S., Matsumoto, H.	STUDENT: Constraining the Coseismic Slip Distribution of a Megathrust Earthquake by Stress-driven Afterslip. <b>Zhuo, Z.</b> , Jeffrey, J., Fukuda, J., Xiao, Z., Elliott, J., Grapenthin, R.	A New Fault Slip Mode Unveiled in the Regional Dynamic Triggering of the 2023 Turkey Kahramanmaraş Earthquake Sequence. Luo, H., <b>Zhou, Y.</b> , Zhao, Z., Wang, T., Yue, H., Song, X., Bürgmann, R.	Shifting Patterns of Faulting in the Big Bend Domain of the Pacific-north America Plate Margin. <b>Fletcher, J. M.</b> , Rockwell, T. K.
	Illuminating Ruptures of Moderate Earthquakes With Multi-fibre Networks. <b>Zhang, H.</b> , Zhan, Z.	The Duality of Doublets: Unusually Large Aftershocks or Unusually Strong Fault Interactions? <b>Jiang, Y.</b> , Stein, R. S., Trugman, D. T.	STUDENT: Stress Interactions Among Strong-weak Fault Patches Govern Earthquake Cycle. Jiang, L., Zhang, S., <b>Zhang, H.</b>	INVITED: STUDENT: How Does the Cumulative Interaction of Diverse Faulting Mechanisms Shape the Long-term Tectonic Evolution of the Gulf of California? The Yuha Desert Case of Study. <b>Jasso Lara, A. D.</b> , Fletcher, J. M., Rockwell, T. K., Pascal, C., González Fernández, A., Inguaggiato, C.
	Investigating the Feasibility of Incorporating DAS Into Ground Motion Modeling. <b>Meng, X.</b> , Zhai, Q., Kottke, A. R., Atterholt, J. W., Pinilla Ramos, C., Ben-Zion, Y.	STUDENT: Tectonic Pump Closes the Evolutionary Loop for Long-buried Subseafloor Microbes. <b>Li, Z.</b> , Barbot, S., Lloyd, K.	Characterization of Focal Mechanisms for Small Earthquakes Preceding the Mw 7.5 Noto Peninsula Earthquake. <b>Zhang, M.</b> , Kato, A.	Complications in Characterizing Seismic Hazards in the Blind Fault System of the Santa Maria Basin, California. <b>McGregor, I. S.</b> , Onderdonk, N. W.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
	<b>Source Properties of Microearthquakes</b> (continued)	<b>Recent Contributions of Social Science Research</b> (continued)	<b>New Developments in Earthquake Rupture Physics</b> (continued)	<b>Developing Data-Driven Methods</b> (continued)
5:30 PM	STUDENT: Comparing Earthquake Interaction on Creeping Faults in California with Induced Earthquakes in the Central US. <b>Ries, R.</b> , Beroza, G. C., Ellsworth, W. L.	Assessing Behavioral Response to Earthquake Early Warnings: What We Know and Would Like to Know About Response. <b>Goltz, J. D.</b>	Unified Nucleation Mode and Mechanics Model for All Earthquake Rupture Speeds. <b>Xia, K.</b> , Dong, P.	Qseek: Scalable Data-driven Earthquake Detection and Localization. <b>Isken, M. P.</b> , Peter, N., Münchmeyer, J., Büyükkakpınar, P., Torsten, D.
6:00–7:00 PM	Joyner Lecture: Seismic Wave Propagation in Complex Geological Domains: From Site Effects in Ground Motion to Diffuse Fields in Passive Seismology			
7:00–8:00 PM	SSA Honors Reception			

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Fiber-Optic Sensing Applications</b> (continued)	<b>Linking Subduction Zone Processes</b> (continued)	<b>SSJ-SSOC-SSA Joint Session</b> (continued)	<b>Seismotectonics of Southern and Baja California</b> (continued)
	Acoustic Coda-based Yield Estimation of Surface Explosions With Distributed Acoustic Sensing. <b>Delbridge, B. G.</b> , Viens, L.	Patterns of Coseismic Landslides in Subduction Zones: Observations From the 2025 M8.8 Kamchatka Peninsula Earthquake and Beyond. <b>Grant, A.</b> , Allstadt, K., Collins, E., Dunham, A.	Supercritical Fluid Flow, Phase Transitions, and Seismicity at the Brittle-ductile Transition Imaged by Integrated Active and Passive Seismology. <b>Tsuji, T.</b>	Structure, Seismicity, Earthquake and Tsunami Potential of the San Clemente Fault System. <b>Legg, M.</b> , Kamerling, M.
6:00–7:00 PM	Joyner Lecture: Seismic Wave Propagation in Complex Geological Domains: From Site Effects in Ground Motion to Diffuse Fields in Passive Seismology			
7:00–8:00 PM	SSA Honors Reception			

**Poster Sessions**

**Advances and New Challenges in Investigating Seismic Site Response** (see page 1333).

- STUDENT: Subsurface Velocity Structure at Eureka, NV, for Inferring Acoustic-to-seismic Conversion From the OSIRIS-REx Capsule Re-entry Sonic Boom. **Bazargan, S.**, Langston, C. A.
- STUDENT: Global Annual Long Period Seismic Background Variability. **Becker, J.**, Rapoport, Y., Aster, R. C., Lee, T. A., Simons, F. J., Ringler, A., Anthony, R. E.
- Generic Nonlinear Amplification Functions for Taiwan. Wang, Y., **Chang, Y.**, Hsu, S., Wang, S.
- Near Surface S-wave Velocity Measurement and Site Classification at 46 Sites in the East Bay and Delta. **Craig, M.**, Romero, M., Hayashi, K.
- Predictions of Ground Motions and Wave Radiation Patterns From a Chemical Explosion in Highly Faulted Testbed: Applications to the Nevada Rock Valley Source Physics Experiment. **Ezzedine, S. M.**
- Reconnaissance Noise Survey for Seismic Network Expansion in Ukraine Under Wartime and Infrastructure Constraints. **Farfuliak, L.**, Amashukeli, T., Mackey, K., Chiang, A., Stachnik, J., Daniel, B., Aderhold, K., Petrenko, K., Haniiev, O., Kuplovskiy, B.
- Application of Machine Learning in Ground Motion Prediction: A Case Study From West Java, Indonesia. **Kaka, S.**, Rachmdn, A.

- Assessment of Site Amplification Factors From the Non-reference Site Approach – a Case Study of the Taipei Basin. **Kuo, C.**, Chen, Y.
- STUDENT: Predictive Models for Depth to Rock Using Horizontal-to-Vertical Spectral Ratio Method and Geospatial Parameters in Southeastern Korea. **Lee, J.**, Ahn, S., Seo, H., Kim, B.
- STUDENT: HVSR Site Response in the Willamette Valley, Oregon. **Mann, C. A.**, Sahakian, V. J.
- Site-specific Hazard Analysis of a Liquefied Natural Gas Tank Located in South-central Virginia. **Pezeshk, S.**, Zandieh, A., Wong, I. G., Wu, Q.
- A Systematic Analysis of Directional Site Amplification Effects at Stations of the Seismic Network (Nz), to Test the Relation With Local Geological and Morphological Proxies. **Pischiutta, M.**, Kaiser, A., Puglia, R., Manea, E.
- Ground Velocity and Ground Tilt From Seismometers: Two for the Price of One. Guralp, C., **Rademacher, H.**
- Engineering Site Response Validation of Method Using Random Vibration Theory. **Thornley, J.**, Dutta, U.
- Site-response Characterization in Tbilisi Using Integrated Geophysical Data. **Tsereteli, N.**, Dvali, L., Kvirtskhalia, T.
- STUDENT: Behind the Curtain: Developing Methods and Toolkits Supporting Practical Assessment of Discharge and Bedload of the Nisqually River Within Mount Rainier National Park. **Zawol, Z.**
- An Additive Approach for Developing Hybrid VS30 Models: Incorporating Geological Information Into a Geospatial Model for an Updated VS30 Map of Chinese Mainland. **Zhou, J.**, Rong, Y., Li, L., Ren, Y., Tian, X.

**Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond** (see page 1341).

- The Testsuite and the Baseline Performance for Canada’s National Earthquake Early Warning System. **Crane, S.**, Saravanamutto, P., Seywerd, H.
- Operating EEW in Eastern Canada Part II: Seismological Parameters. **Crane, S.**, Perry, C., Kolaj, M., Adams, J., Seywerd, H.
- Outreach and Engagement to Ensure the Success of Canada’s Earthquake Early Warning System. Bird, A., Seywerd, H., Boucher, C., **Crane, S.**, Blais, C.
- Evaluating GFAST-PGD’s Contributions to ShakeAlert® System Performance for Simulated Cascadia Subduction Zone Earthquakes. **Dybing, S. N.**, Ulberg, C. W., Dunham, A., Murray, J. R., Thompson, M., Krauss, Z., Hartog, J.
- Testing Cloud-based Resiliency Options for the U.S. ShakeAlert Earthquake Early Warning System. **Felizardo, C.**, Saunders, J. K., Bhadha, R., Husker, A.
- Continued Testing of FinDer Templates for Earthquake Early Warning and Implementation of a Dash Application for Visualizing and Analyzing Performance. Thompson, M., **Hartog, J.**, Böse, M., Saunders, J. K., Felizardo, C., Andrews, J., Ceylan, S., Good, A. D.
- Earthquake Early Warning Instrumentation and System Considerations. **Laporte, M.**, Somerville, T., Perlin, M., Easton, D., Jusko, M., Pelyk, N.
- STUDENT: Designing Seismic Arrays for Offshore Earthquake Early Warning Applications: Insights From Coastal Deployments in Alaska. **Quigley, C.**, West, M. E.

- Stress Testing ShakeAlert® Using the 2023 M7.7 Kahramanmaraş Earthquake Sequence, Türkiye. **Saunders, J. K.**, Boese, M., Ulberg, C. W., Bunn, J., Lux, A. I., Dybing, S. N., Ceylan, S., Murray, J. R., McGuire, J. J., Felizardo, C., Jha, S., Crowell, B. W.
- Field Test of Deep Learning-based, Real-time, False-pick Filter for EEW: 1-second Time-window Approach. **Seo, J.**, Lee, J.
- System Monitoring, Telemetry Quality Control and DAS Testing at SCSN. **Stubailo, I.**, Zhai, Q., Wang, J., Biasi, G., Alvarez, M., Watkins, M., Bhadha, R., Husker, A.
- Sparse Rupture Inversion Using Moment Tensor Interpolation – Synthetic Benchmark and Application to the 2025 Mw 7.6 Aomori Prefecture Earthquake, Japan. **Thurin, J.**, Maubant, L., Itoh, Y.
- Optimizing the Epic Algorithm’s Performance to Detect and Characterize Recent Moderate Sized Earthquakes in Alaska. **Williamson, A. L.**, Lux, A. I., Henson, I., Akimov, A., Allen, R.
- Calibrating Per-station Magnitude Corrections in Epic Using a Large Dataset of Past Detections. **Williamson, A. L.**, Lux, A. I., Henson, I., Akimov, A., Allen, R.
- Earthquake Early Warning and Real-time Shakemap Development Using Low-cost Sensors in Taiwan. **Wu, Y.**

**Data-Driven and Computational Characterization of Non-Earthquake Seismoacoustic Sources** (see page 1373).

- STUDENT: Catalog of Clustered Strombolian Eruptions Using Waveform Cross-correlation and Matched Filtering - Erebus Volcano, Ross Island, Antarctica. **Burton, S.**,

- Aster, R. C., Chaput, J., Garza-Giron, R., Emerson, T., Grapenthin, R.
35. Observed and Simulated Seismic Ground Motions From a 13-story Building Implosion-collapse in Hayward, California. **Hirakawa, E. T.**, Nye, T., Poulos, A., Catchings, R. D., Goldman, M., Parker, G. A., Baltay, A.
36. Explosion Yield Estimation and Impacts of Small-scale Atmospheric Perturbation on Infrasound Propagation. **Kim, K.**
37. STUDENT: Interpretable Spectral Representations of Planetary Signals in Vector Spaces (Spec2VEC). Swar, S. K., Mittal, T., **Olugboji, T.**
38. STUDENT: Cryospheric Clutter. **Sivam, S.**, Matoza, R. S.
39. STUDENT: Broadband Seismic and Infrasonic Signals From Two Recent Tornadoes. **Thompson, S. C.**, Carpenter, S., Soni, Y., Wang, Z., Woolery, E. W.
40. Component-dependent Seismic Ambient Noise Amplification During Hurricane Milton (2024) in South Florida. **Yang, X.**, Lin, G., Wang, Y.
41. Radiosonde-to-space (R2S) Atmospheric Specifications: Bridging Observations and Models for Infrasound Propagation. Schaible, L. P., Silber, E. A., **Albert, S. A.**
42. A Multi-year Regional Infrasound Array Network in Utah, USA. **Albert, S. A.**, Pankow, K., Forbes, N., Kelley, S.

#### Evolving Frontiers in Explosion Monitoring and Source Physics (see page 1411).

43. DL-G2S: A Deep Learning Ground-to-space Uncertainty Model for Infrasound Propagation. **Albert, S. A.**, Silber, E. A., Sakamoto, J., Cho, M.
44. Source-type Discrimination of Local-distance Seismic Events in the Utah Region Using Machine Learning Differential Seismic Phase Detection Probabilities. **Beskaides, G. D.**, Tibi, R., Young, C. J., Heck, S., Koper, K. D.
45. Uncertainty Quantification of Two Recent Chemical Explosion Experiments Using Time Variable Moment Tensor Seismic Source Inversions. **Darrh, A.**, Preston, L., Stanciu, A.
46. Signatures of the Damage Zone of Underground Explosions. **Delorey, A. A.**
47. Monitoring Ongoing Seismicity in the Southern Nevada National Security Site: Toward Understanding the Shallow Structure of the Rock Valley Fault Zone. **Gochenour, J. A.**, Smith, K., Scalise, M. E., Eckert, E. E., Turley, R. S.
48. Decoding Underground Explosions with Time-domain Seismic Source Functions. **Kintner, J. A.**, Alfaro-Diaz, R., Lei, Z., Euser, B., Vitali, E., Pippin, J. E.
49. Source Characterization of Nuclear Tests From Reloaded Tunnels in Degelen Mountain From Digitalized Regional Short-period Seismic Data. **Likhovod, M.**, Berezina, A., Mackey, K., Burk, D.

50. Recovery and Digitalization of Legacy Semipalatinsk Test Site Nuclear Explosion Seismograms From Kazakhstan and the Kyrgyz Republic. **Mackey, K.**, Burk, D., Berezina, A., Shiman, D., Yeginbekova, N., Abdrakhmatov, K.
51. Low-magnitude Seismic Source Inversions for the Rock Valley, Nevada. **Modrak, R.**, Kintner, J. A., Scalise, M. E., Larmat, C., Eckert, E. E., Pitarka, A.
52. Modelling Observed Backazimuth and Slowness Deviations From Local Earthquakes at a Small Aperture Broadband Seismic Array. **Nippres, S. E. J.**, Green, D. N.
53. Detection Capability Analysis for the RV/DC Experiment Design. **Pennington, C. N.**, Pyle, M. L., Walter, W. R.
54. STUDENT: Discriminating Between Natural Earthquakes, Induced Events, and Explosions in West Texas. **Pippin, J. E.**, Alfaro-Diaz, R., Kintner, J. A., Chen, T., Velasco, A. A.
55. Quantifying Uncertainty in Regional-scale Seismic Moment Tensors. **Preston, L.**, Darrh, A.
56. Reevaluating the 1993 Rock Valley Sequence: How Can New Information Help Constrain Historic Event Locations? **Pyle, M. L.**, Chen, T., Gao, K., Gochenour, J. A., Luckie, T. W., Park, Y., Preston, L., Rowe, C., Scalise, M. E., Smith, K., Syracuse, E., Trugman, D. T.
57. Waveform Tomography for Improved 3D Wavespeed Models and Moment Tensors for Nuclear Explosion Monitoring. **Rodgers, A. J.**, Doody, C.
58. Simulating Locally Recorded Earthquakes to Evaluate the Rock Valley Geologic Framework Model. **Scalise, M. E.**, Eckert, E. E., Pitarka, A., Modrak, R., Larmat, C.
59. Signal Separation and Enhancement in the Stockwell Transform Domain and Application to Local and Regional Seismic Data. **Tibi, R.**
60. Waveform-based Machine Learning Detection and Characterization of Small Events. **Tibi, R.**, Quinones, L. A.

#### Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science (see page 1382).

61. STUDENT: A Graph-based Generative Framework for Modeling Spatial Correlation of Within-event Ground-motion Residuals. **Aquib, T.**, Mai, P.
62. Chatting With the Earth: LLMs for Seismic Data Processing. **Blanco, S. E.**, Mousavi, S., Liu, J.
63. Seismicity of the Western Idaho Suture Zone Illuminated by Machine Learning. **Bockholt, B.**, Lifton, Z.
64. Cautions for Applying Automated Earthquake Cataloging Workflow to Local Nodal Arrays. **Chen, X.**, Asirifi, R., Woo, J., Chen, T., Fan, W., Abercrombie, R. E.
65. Which is Better: Deep-learning or Manual Seismic Arrival-time Picking? **Cianetti, S.**, Lomax, A., Michelini, A., Giunchi, C.
66. ESM25: A Machine-learning Ready Snapshot of the European Engineering Strong-motion Database. **Cianetti,**

- S.**, Mascandola, C., Faenza, L., Felicetta, C., Russo, E., Jozinović, D., Münchmeyer, J., Luzi, L., Michelini, A.
67. Transfer Learning with Self-normalizing Neural Network-based Ground Motion Models: From NGA-West to CEUS. **Fallahpour Mojavery, S.**, Pezeshk, S.
68. A Critical Assessment of Domain Adaptation Methods for NGA-West2-to-CEUS Transfer. **Fallahpour Mojavery, S.**, Pezeshk, S.
69. STUDENT: Conditional Ground Motion Generation using Diffusion Transformer (DiT). **Feng, Y.**, Zhu, W., Lu, X.
70. Space-time Completeness of Seismic Ground Motions via Non-intrusive Model Order Reduction. May, D. A., **Gabriel, A.**, Trugman, D. T., Krämer, B.
71. STUDENT: Earthquake Forecasting With Single-station Waveform Detection Without Relying on Event Catalogs. **Iwasaki, Y.**, Brodsky, E., Dascher-Cousineau, K.
72. STUDENT: Constraining Parameters of Earthquake Cycle Models With Uncertainty Quantification Using Paleoseismic Records: A Synthetic Study. **Kaveh, H.**, Dunbar, O., Avouac, J., Stuart, A.
73. Machine Learning-based Ground Motion Models for Shallow Crustal Earthquakes in California Using NGA-West3 Database. **Kim, S.**, Seyhan, E., Cao, Y.
74. STUDENT: Constraining Fault Geometry of the Marlborough Fault System in Aotearoa New Zealand, Using Machine Learning. **Montalvo-Lara, C. E.**, Townend, J., Chamberlain, C. J., Warren-Smith, E., Jacobs, K., Okada, T., Iio, Y., Matsumoto, S.
75. STUDENT: Interpretable Gradient Boosting Machines for Post-earthquake Building Damage Assessment: Data from the 2015 Nepal Gorkha Earthquake. **Niu, Y.**, Foroughi, H.
76. From Redundancy to Coverage: Compact Benchmarks for Seismic Artificial Intelligence Models. **Parikh, N.**, Myren, S., Rael, R., Alfaro-Diaz, R., Gopalan, G., Casleton, E.
78. STUDENT: Graph-regularized Receiver-function Interpretation Using Gravity Constraints. **Villa, V.**, Clayton, R. W., Persaud, P.
79. STUDENT: I-Hades: A Seismic Event Locator Combining Deep Learning With Distance Geometry Methods. **Vullo, G.**, Grigoli, F.
80. A Regional Multi-station Deep Learning Model for Earthquake South Depth Determination in Southern California. Li, W., **Zhang, M.**
81. STUDENT: Deep Image Prior-based Framework for Simultaneous Regularization and Denoising of Teleseismic Receiver Functions. **Zuo, P.**, Chen, Y., Li, C., Chen, Y.

#### Earthquake Ground Motions and Structural Response: Emerging Tools and Applications (see page 1389).

82. STUDENT: Identifying Reference Stations for SSR-based Site-effect Studies Near the Mississippi. **Abbasi Hafshejani, Z.**, Pezeshk, S., Cramer, C.

83. Damage Detection Across California: Using the Myshake Smartphone App to Measure Building Modal Frequencies. **Allen, R.**, Kumar, U.
84. STUDENT: Seismological Overview of the Toppling of Easter Island Moai Statues Using Real and Synthetic Ground Motion Records. **Bhandari, A.**, Sharma, J., DeShon, H. R., Aghagholizadeh, M., McCoy, M.
85. Ambient Noise Deconvolution Seismic Interferometry as a Complementary Tool for Structural Characterization of Civil Infrastructures. **Gallipoli, M.**, Tragni, N., Serlenga, V., Petrovic, B., Parolai, S.
86. Monitoring Multimodal Frequency Variations in a 10-story Cold-formed Steel (CFS10) Building for Damage Assessment. **Guo, H.**, Zhang, S., Kohler, M., Sorosh, S., Zhang, J., Hutchinson, T. C., Guy, R.
87. Only Very Strong Shaking Can Break a Tree. **Hough, S. E.**
88. The Güralp Stratis: A Commercial Six-degree-of-freedom Seismometer for Ground Motion and Structural Monitoring. **Lindsey, J.**, Restelli, F.
89. Integrating Distributed On-premises Linux Back-ends With Scalable Azure Web Infrastructure for Real-time Seismic Data Distribution. **Lisowski, S. W.**, Haddadi, H., Branum, D., Antolik, L., Mertl, S., Cooke, A.
90. Assessing the Role of Low-cost MEMS Sensors in Strong-motion Networks Through Industry's Lens. **Saifullah, M.**, Skolnik, D. A.
91. STUDENT: 1D Velocity Profiles and Site Characteristic Assessment, Using Bayesian SPAC Analysis, in Puerto Rico. **Toro Acosta, C.**, Vanacore, E., Pacchai, S.
92. Seismic Strain Demand Prediction of Natural Gas Pipelines via Active Learning With a Query-by-committee Approach. **Zengin, E.**, Peng, Y., Ayello, F., Hyun, G., Honegger, D., Bozorgnia, Y.

#### Earthquake Swarms Across the Earthquake Cycle: Precursors, Transients and Aftereffects (see page 1395).

93. Depth-dependent Interaction of Tectonic Tremors, Repeating Earthquakes, and Earthquake Swarms in a Collision Zone of Taiwan. **Chen, K.**, Peng, W.
94. Aseismic Slip and Seismic Swarms Leading Up to the 2024 M7.3 Hualien Earthquake. Peng, W., **Chen, K.**, Bürgmann, R., Hsu, Y., Chen, Y.
95. Automated Workflow for Earthquake Cluster Detection, Classification, and Migration Analysis: Application to California Seismicity. **Cui, X.**, Li, Z., De Barros, L., Ampuero, J.
96. Comparison of Swarm Activity in Natural and Induced Intraplate Tectonic Settings. **DeShon, H. R.**, Seldon, Y., Neupane, P., Aziz Zanjani, A., Walter, J.
97. STUDENT: Stress Heterogeneity of Seismogenic Structures Revealed by Waveform Similarity: Before and After the

- 2024 Mw 7.4 Hualien Earthquake, Taiwan. **Hung, H.**, Ma, K., Tseng, T.
98. Characterizing Aseismic Stress Transients During Earthquake Swarms in California and Nevada From Seismicity Rate Observations. **Jiang, Y.**, Trugman, D. T.
99. Burst-like Rapid Earthquake Migrations During the 2025 Tokara Islands Seismic Swarm, Japan. **Kato, A.**, Yakiwara, H., Hirano, S., Nakao, S., Sakai, S.
100. STUDENT: Physically Scaled Nearest-neighbor Clustering for Identifying Swarm and Aftershock Regimes in Tectonic and Volcanic Environments. **Montazeri, S.**, Chen, X.
101. Study of Seismic Stresses and Foreshock Patterns Before the 1978 Magnitude 7.8 Oaxaca Earthquake. **Nunez-Cornu, F. J.**

**ESC-SSA Joint Session: Interpreting Volcanic Unrest and Eruption Data for Effective Crisis Management** (see page 1408).

102. Source Modelling of Surface Deformation and Seismicity at the Campi Flegrei. **Cheng, J.**, Li, Z., Acosta, M., Lecampion, B., Avouac, J.
103. Surface-wave Relocation and Characterization of the 2024-2025 Dyking Episode Along the Fentale-Dofen Segment of the Ethiopian Rift. **Deane, C. A.**, Pesicek, J. D., Bagnardi, M. D., Shelly, D. R., Prejean, S. G., Yeck, W. L., Earle, P. S.
104. STUDENT: Spectral Energy Distribution and Multiplet Analysis of Seismicity at Nevado del Ruiz Volcano Near Eruptive Events. **Rave-Bonilla, Y. P.**, Rodgers, M., Rodriguez-Cardozo, F. R., Braunmiller, J., Londono, J. M., Thompson, G.
105. Challenges and Opportunities for Seismic and Infrasonic Monitoring at Ecuadorian Volcanoes. **Ruiz, M. C.**, Mothes, P., Hernandez, S.
106. STUDENT: Exploring Automated P-wave Polarity Picking for Focal Mechanism Determination for Seismicity on the Island of Hawai'i. **San Ramon, G. Z.**, Matoza, R. S., Uchide, T., Chang, J. C., Flinders, A. F., Ji, C.
107. Volcanic Tsunami and Its Prediction for Early Warning. **Song, Y.**
108. Interpretation of Shallow Hybrid Earthquakes at Campi Flegrei. **Tramelli, A.**, Petrosino, S., Dalla Via, G., Tan, X., Aquino, I., Beroza, G. C., Bianco, F., D'Auria, L., Ellsworth, W. L., Manzo, R., Orazi, M., Marzocchi, W., Ricciolino, P., Ricco, C.

**International Collaboration to Advance Earthquake Science and Disaster Response** (see page 1449).

109. The NEHRP Post-earthquake Investigations Program. **Blanpied, M. L.**

110. The U.S. Geological Survey's PAGER System at 15: A Performance Evaluation and Lessons Learned. **Marano, K. D.**, Wald, D. J., Jaiswal, K., Hearne, M.
111. International Aftershock Forecasting and Products at the U.S. Geological Survey. **Schneider, M.**, van der Elst, N., McBride, S. K., Page, M., Michael, A. J., Hardebeck, J., Davis, L., Blanpied, M. L., Hayes, G.
112. Improving Seismic Monitoring in the Southwest Pacific. **Shiro, B.**, Yeck, W. L., Benz, H. M., Wilson, D. C., Mooney, W. D.

**The Landscape Record of Earthquakes and Faulting** (see page 1454).

113. STUDENT: Preliminary Characterization of the Multitorpor Mountain Fault: Evidence for Repeated Late Quaternary Faulting on the Mount Hood Fault Zone, North-central Oregon. **Briseno, D.**, Streig, A., Bennett, S. E. K.
115. Middle to Late Pleistocene Faulting on the Puyé Fault Zone, Española Basin, New Mexico. **Jobe, J. A. T.**, Cline, M., Reitman, N. G., Briggs, R. W., Sion, B., Mahan, S., Gray, H., Ellett, N., Gold, R., Tan, M., Nicovich, S. R.
116. STUDENT: Can Sackungen in Arthur's Pass Record Past Large Earthquakes? **Parker, M. O.**, Howell, A., Nicol, A., Coffey, G., O'Kane, A.
117. No Apparent Coseismic Surface Rupture in Trench Exposures of the Creeping San Andreas Fault at Topo Creek. **Philibosian, B.**, Vermeer, J., Usher, E., Trexler, C. C., Alongi, T., Elliott, A., Hammer, M., Hanagan, C. E., DeLong, S. B.
118. Paleoseismic Investigation of Quaternary Faulting in the Southwest Montezuma Hills, Sacramento – San Joaquin Delta Region, California. **Trexler, C. C.**, Philibosian, B., Vermeer, J., Gray, H., Elliott, A., Alongi, T., Cunetta, N.
119. Comparison of Lidar-differencing Fault Displacement Maps With Geomorphic Fault Mapping on the Central San Andreas Fault. **Vermeer, J.**, Hanagan, C. E., DeLong, S. B., Hammer, M., Powell, J. H., Philibosian, B., Arrowsmith, R.
120. Late Quaternary Fault Scarps in the Saratoga Valley, Wyoming: A Potential Source for 1882 Colorado Earthquake? **Zellman, M.**, Hartleb, R., Lindvall, S. C., Unruh, J. R., Rockwell, T. K., Chase, R. E.

**Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond** (see page 1459).

121. STUDENT: Machine Learning-based High-resolution Earthquake Catalog for the Middle America Trench Using Ocean Bottom and Land Seismometers. **Asgarvand, O.**, DeShon, H. R., Aziz Zanjani, A.

122. Evaluating Seismic Hazards for Carbon Storage on the Scotian Shelf Offshore Nova Scotia. **Barkat, A.**, Zhang, M., Nedimović, M., Niksejel, A., Wach, G., Cairns, G., Bosman, K., Thibodeau, J.
123. PACSAFE LEG2: Investigating Seismicity in the Northern Segment of the Queen Charlotte Triple Junction Using a Year-long OBS Deployment. **Barkat, A.**, Zhang, M., Nedimović, M., Plourde, A., Schaeffer, A. J., Hobbs, T. E., Sun, T., Cairns, G., Bosman, K., Thibodeau, J., Bostock, M. G., Nissen, E., Peacock, S., Kao, H., Wang, K., Rohr, K., Lintern, G.
124. Investigating Interseismic Vertical Land Motion Along the Cascadia Subduction Zone Using High-resolution Diatom-based Paleogeodesy and Radiocarbon Chronologies. **Bruce, D.**, Dura, T., Hawkes, A. D.
125. STUDENT: Machine Learning Detection of Offshore Tremor in the Cascadia Subduction Zone Using Multi-year Continuous Offshore and Onshore Seismic Data. **Dong, B.**, Byrnes, J., Janiszewski, H. A.
126. A 2D and 3D Community Fault Model for the Cascadia Subduction Zone: Release of CRESCENT CFM Version 1.0. **Fildes, R. A.**, Amos, C. B., Roland, E., Streig, A., Bennett, S. E. K., Hatem, A. E., Ledeczi, A., Meigs, A., Styron, R. H., Tobin, H. J.
127. Dynamic Rupture Modeling of the 2010 Mw 7.8 Mentawai Tsunami Earthquake With Self-Similar Stress Drop and Wedge Inelasticity. **Hung, R.**, Ma, S.
128. STUDENT: Comparison of Seismicity Along the Northern and Southern Central Andes and Its Relationship With Along-strike Variations in Andean Deformation. **Mahanti, S.**, Kiser, E., Bradford, J. M., Beck, S. L., Fernandez, M., Tauber, S., Porter, R. C., Leon-Rios, S., Reyes-Wagner, V., Trad, S., Ortiz, G. F., Saez, M., Roecker, S., Comte, D., Orosco, L.
129. A Surface-in-cell Approach to Including Evolving Faults in Geodynamic Models. **Moresi, L.**, Gollapalli, T.
130. STUDENT: Low Frequency Earthquakes in the Alaska Subduction Zone. **Perez Estay, N. A.**, Bostock, M. G., Sammis, C.
131. STUDENT: Forearc Seismic Structure at the Alaska Peninsula Revealed From AACSE Receiver Functions. **Rojas Churkovic, I. P.**, Janiszewski, H. A., Wei, S. S., Kim, H.
132. STUDENT: Revisiting the Tectonic Geomorphology of the Nicaragua Segment of the Middle America Trench Using Newly Collected High-resolution Bathymetry and Reprocessed Marine Seismic Reflection Data. **Rysanek, S.**, Lindsey, E., Worthington, L., Xie, S., Zumberge, M., Dixon, T.
133. Crustal Stress and Faulting in the Pacific Northwest: Insights From an Updated Focal Mechanism Catalog. **Stone, I.**, Wirth, E. A., Pollitz, F. F.

134. The Cascadia Offshore Subduction Zone Observatory Infrastructure Project. **Thompson, M.**, Wilcock, W. S. D., Harrington, M. J., Schmidt, D. A., Kelley, D. S., Tobin, H. J., Denolle, M. A., Cram, G. S., Khoo, M., Labrado, A. L., Manalang, D. A., McGuire, C., Smith, K., Tilley, J. W., Zumberge, M., Sasagawa, G.
135. Monitoring Seafloor Deformation in Taiwan via Ocean-bottom Geodetic Instrumentation. **Tung, H.**, Hsu, Y., Chen, H., Tang, C.
136. Using Seafloor Geodesy to Constrain Gorda Plate Kinematics and Shallow Megathrust Locking in Southern Cascadia. **Watt, J.**, Erickson, T., DeSanto, J., Brooks, B. A., Parsons, T., Zumberge, M., Sasagawa, G., Phillips, E., Marcuson, R., Chadwell, D.
137. STUDENT: Subduction, Faulting and Earthquake Interaction Across the Cook Strait of New Zealand. **Williams, C.**, Chamberlain, C. J., Townend, J.
138. STUDENT: Seismic Patterns of the Luzon Arc South of Taiwan. **Wiyono, S. H.**, Chi, W., Kuo, B., Liang, W., Lin, C., Lin, P. P.
139. Ensemble Analysis of Large Megathrust Earthquakes: From Rupture Heterogeneity to Stress Changes and Ground Motion. **Jiang, J.**, Viteri Lopez, J., Zhao, X.

**SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip** (see page 1544).

140. Resolving Spatiotemporal Variabilities of Fast and Slow Slip on California Crustal Faults. **Jiang, J.**, Zhao, X., Kang, Z.
141. STUDENT: Post-seismic Deformation Associated With the 2020 Mw7.0 Samos (Eastern Aegean Sea) Earthquake. **Bonatis, P.**, Karakostas, V., Papadimitriou, E., Kaviris, G., Fomelis, M., Kaplon, J., Pikridas, C.
142. STUDENT: Classifying Missing Seismic Sources Offshore of Southeast Japan. **Burnett, H. J.**, Fan, W., Okuwaki, R., Matsuzawa, T.
143. STUDENT: Use of Repeating Earthquakes to Discriminate Slow Earthquakes in the Central Pacific Subduction Zone of Costa Rica. **Campos, N. A.**, Chaves Sibaja, E. E.
144. LFEs and Slow Slip Beneath the Aguas Zarcas Landslide: Evidence for Coupled Gravitational and Strike-slip Deformation in Northern Costa Rica. Campos, N. A., **Chaves, E. J.**, Hajaji, S., Nuñez Alpizar, E., Sequeira Arguedas, J.
145. STUDENT: How Do Stick-slip Events Initiate on a Rough Fault? **Chen, H.**, McLaskey, G. C.
146. STUDENT: Detection of Repeating Microearthquakes in Southeastern Costa Rica. **Hajaji, S.**, Chaves, E. J., Peng, Z.

147. STUDENT: When Strike-slip Is Not Enough: The Full Kinematics of the Central San Andreas Fault. **Lin, L.**, Funning, G. J.
148. STUDENT: Observational Evidence of a Very-low-frequency Earthquake (Mw 3.8) Leading to an Earthquake (Mw 4.2): Minto Flats Strike-slip Fault Zone, Central Alaska. **McPherson, A.**, Tape, C., Kaneko, Y.
149. STUDENT: Constraining Slow Slip in Cascadia Using a Joint Tremor-GNSS Inversion. **Papin, L.**, Thomas, A. M.
150. How Does Slow Slip Reshape Megathrust Locking? **Periollat, A. J.**, Costantino, G., Funning, G. J.
151. Arias Intensity as an Indicator of Rupture Kinematics in Tsunami Earthquakes. **Riquelme, S.**, Crempien, J.
152. Interaction Between Seismic and Aseismic Slip Along the Mendocino Oceanic Transform Fault Offshore Northern California. Liu, M., Liu, H., **Tan, Y.**
153. STUDENT: Cyclic Sealing and Drainage on an Oceanic Transform Fault. **Yang, H.**, Ye, L., Zhang, H.

#### Mechanisms and Seismogenic Structure for Large Continental Earthquakes (see page 1466).

154. An Evaluation of Factors that Influence Earthquake Event Magnitudes. **Bent, A. L.**
155. The Stagnant Pacific Slab in the Lower Mantle Transition Zone Beneath Northeast Asia Continental Margin and Large Deep Outboard Earthquakes. **Cui, Q.**, Zhou, Y., Gao, Y., Chu, R., Liu, L., Su, H.
156. Slab Morphology Change and Subduction-zone Dynamics Beneath the Kuril-Kamchatka From Topographies of the 410-Km and 660-Km Discontinuities. **Cui, Q.**, Zhou, Y., Gao, Y., Liu, L.
157. Earthquake Nucleation Along Paleotectonic Weak Zones in Stable Intraplate Regions. **Hong, T.**, Lee, J., Kim, B., Lee, J., Kim, D.
158. STUDENT: Unveiling the Pre-rupture Seismicity of the 2022 Ferndale Fault: A 15-year Template Matching Analysis. **Islam, M.**, Gong, J.
159. STUDENT: Corrosion of Rupture Barriers Through Rock Damage Induced by Aftershocks. **Ju, F.**, Ben-Zion, Y.
160. Microseismicity and Upper-crustal Anisotropy in the Southern Sichuan-Yunnan Block, SE Tibetan Plateau. **Li, Y.**, Gao, Y.
161. STUDENT: Advancing Earthquake Catalog Completeness and Slab Imaging in Hispaniola Using Deep-learning Phase Pickers and Fine-Tuned Machine-learning Workflows. **Muñoz-Santos, L. F.**, Walter, J., Pulliam, J., Xiao, H., Polanco, E., Leonel, J., Rodríguez, J.
162. STUDENT: Assessing the Sensitivity of Recurrence Parameters to Completeness Choices. **Ocrospoma Valverde, J.**, Aguíndá Navarro, C., Maldonado Pariona, J.

163. Exploring New Statistical Metrics to Evaluate the Magnitude Distribution of Earthquake Forecasting Models. **Serafini, F.**, Mizrahi, L., Han, M., Bayliss, K., Iturrieta, P., Bayona, J. A., Naylor, M., Werner, M. J.
164. Fault Branching, Slip Partitioning, and Tectonic Implications of the 2021 Mw 7.4 Maduo Earthquake, Northern Tibet. **Su, Z.**
165. Pulse-like Ground Motion Observed During the 6 February 2023 Mw 7.8 Pazarcık Earthquake, Türkiye. Wu, F., **Xie, J.**, Taymaz, T., Li, X.
166. An Intraplate Long-lasting Earthquake Sequence Near Feidong County, Hefei, East China (2024-2025). **Ye, L.**, Zeng, L., Yao, H., Xu, S., Chen, X.

#### New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling (see page 1482).

167. Improving Parallel Scalability and Solver Performance in the PyLith Crustal Deformation Modeling Software. **Aagaard, B. T.**, Knepley, M. G., Williams, C. A.
168. STUDENT: Identify Transient Supershear Rupture Through Deciphering Near-fault data. **Deng, D.**, Yao, S., Yang, H.
169. STUDENT: Analysis of Energy Budgets as a Means of Comparing Modeled Earthquakes Along the Cascadia and Sumatra Subduction Zones. **Hsieh, S.**, Gross, L., Lisemby, C., Madden, E.
170. STUDENT: Mitigating Geometry-induced Stress Singularities in Three-dimensional Boundary Element Method Simulations of Rough Faults. **Huang, X.**, Cattania, C.
171. STUDENT: Rich Rupture Dynamics of the 2025 Mw 7.7 Mandalay Earthquake Revealed by Unprecedented Near-fault and High-resolution Observations. **Zheng, F.**, Gao, J., Liu, Z., Meng, H., Hou, Y., Wang, L., Xu, S., Peng, Z., Wang, C., Zhou, M., Yue, H., Sun, J., Wang, Z., Ben-Zion, Y.

#### Recent Contributions of Social Science Research to Understanding Earthquakes (see page 1521).

172. STUDENT: The Ethics of Infrastructure Resilience to Earthquakes: Philosophy Meets Seismic Policy. **Leung, G.**
173. Operationalizing Equity: Assessing the Usability of Near-real-time Earthquake Information for Supporting Impacted Communities. **Macías, M.**, Loos, S., Reddy, E., Knodel, E., McGowan, S.
174. STUDENT: Does the Rainbow Palette Negatively Impact the Use of Shakemap? **Pope, I. E.**, Worden, C. B., Wald, D. J.

#### Seismotectonics of Southern and Baja California (see page 1534).

175. STUDENT: Insights into a Transform Fault Bounded Pull-apart Basin, Cerro Prieto, Northern Baja California, México. **Aladro, Y.**
176. A New Approach for Estimating Inbuilt Age Effects on Paleoseismic Event Dates. **Biasi, G.**, Scharer, K., McPhillips, D.
177. Vertical Offset and Recurrence of Large Earthquakes on the Cañada David Detachment, Baja California, Mexico. Cambrón-Rosas, J. F., **Fletcher, J. M.**, Rockwell, T. K., Spelz, R. M., Hinojosa-Corona, A., Helenes-Escamilla, J., González-Ortega, A., Gudiño-Elizondo, N., Lacan, P., Rösler, B., Peña-Villa, I. A., Guerrero-Murcia, L. A., García Meza, I. F.
178. STUDENT: An Updated San Andreas Fault Geometry in Parkfield, California. **Margolis, A.**, Oglesby, D. D., Periollat, A. J., Funning, G. J., Lin, L.
179. STUDENT: Testing Uplift Rates of the Palos Verdes Peninsula Using Luminescence Dating on Marine Terraces. **Martin, A.**
180. High Resolution Holocene Slip Rate for the Southern San Andreas Fault in the Salton Trough, California. **Rockwell, T. K.**, Scharer, K., Buckley, W., Figueiredo, P. M., Brown, N., Williams, P.
181. STUDENT: Paleoseismology of the Southern Segment of the Compton Blind Thrust Fault: Defining the Potential for Multi-segment, Large-magnitude Earthquakes Beneath Metropolitan Los Angeles. **Salinas, M. P.**, Leon, L. A., Dolan, J. F., Shaw, J. H., Pratt, T. L., Anthonissen, C. J.
182. New Mapping and Subsurface Data on the Southernmost Extent of the San Jacinto Fault. **Scharer, K.**, Rockwell, T. K., Blair, L., Figueiredo, P. M.

#### Source Properties of Microearthquakes: Insights from Laboratory, Induced and Natural Events (see page 1537).

183. Investigating Source Properties of Ultra-shallow Nanoearthquakes Using the Midas Borehole Seismic Monitoring System in Taiwan. **Chan, J.**, Lin, Y.
184. Using Borehole Distributed Acoustic Sensing to Investigate Microearthquake Source Parameter Variability in an Enhanced Geothermal System. **Chang, H.**, Nakata, N., Abercrombie, R. E., Dadi, S., Titov, A.
185. Rupture Directivity—Insights From Theoretical Studies Applied to Observations. **Kurzon, I.**, Grinberg, L., Lior, I.
186. STUDENT: Spatiotemporal Evolution of the Dapu Earthquake Sequence in the Frontal Western Foothills, Taiwan: Insights from a Dense Near-source Seismic Array. **Lai, C.**, Chen, Y., Wen, S., Lin, Y.
187. Lightning-induced Implosive Microseismic Events at Depth Detected by Downhole Distributed Acoustic Sensing in Taiwan. **Lin, Y.**, Huang, H., Hsieh, M., Kuo, L., Chen, C., Chang, M., Chen, T., Chen, H., Brown, D.
188. Reconciling Seismological and Numerical Source Parameters of Repeating Earthquakes Near Parkfield. **Lui, S. K. Y.**, Lin, Y., Pun, H.
189. The Impact of Wastewater Injection Enhanced In-situ Stress on Hydraulic Fracturing Induced Seismicity Near Kingsher, Oklahoma. **Ogwari, P. O.**, Walter, J., Xiao, H., Thiel, A., Gregg, N., Woelfel, I., Mace, B.
190. Small Earthquake Monitoring for Structural Potential Characterization and Source Parameter Analysis in Northern Hualien, Taiwan, by a Borehole Seismometer Array. **Tsai, R.**, Lin, Y., Yen, Y., Chen, C.
191. Normal-faulting Earthquakes Under a Compressional Stress Regime, Insights from the Weiyuan Shale Gas Field, China. **Yang, H.**, Jiang, Y., Zi, J.

Friday, 17 April 2025—Oral Sessions

Presenting author is indicated in bold.

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>On the State of Knowledge/Art/Practice for mHVSr Analyses; A Prelude to the ESG7-COSMOS mHVSr Pre-Event Forum</b> (see page 1496).	<b>From Drilling to Ground Shaking: Mechanisms, Monitoring and Mitigation of Induced Earthquakes</b> (see page 1432).	<b>Generating, Calibrating and Validating Multi-Scale Seismic Velocity Models</b> (see page 1436).	<b>Advancing the U.S. Geological Survey National Seismic Hazard Models</b> (see page 1354).		<b>Fiber-Optic Sensing Applications in Seismology and Environmental Science</b> (see page 1419).	<b>Geophysical Perspectives on Volcanic Systems: Seismicity, Structure and Dynamics</b> (see page 1441).		<b>Observation and Analysis of Topography and Deformation: Relating Earthquakes to Cascading Hazards</b> (see page 1493).
8:00 AM	Perspectives on the State of Knowledge and Practice About Single-station Microtremor Horizontal-to-vertical Spectral Ratio (mHVSr) Analysis for Evaluating Seismic Site Response. <b>Yong, A.</b>	Probabilistic Induced Seismic Hazard Analysis in the Western Canada Sedimentary Basin. <b>Mahani, A.</b> , Kao, H., Assatourians, K.	Multi-scale Statewide California Seismic Velocity Models: Version 1. <b>Yeh, T.</b> , Ben-Zion, Y., Olsen, K. B.	Nonergodic Ground Motion Model for the Central and Eastern United States. <b>Davatgari-Tafreshi, M.</b> , Pezeshk, S., Campbell, K. W.	8:00 AM	STUDENT: A Contribution to the Assessment of DAS Performance With Surface Waves: A Case-study From Northern Italy. <b>Beretta, S.</b> , Castellaro, S.	STUDENT: Arc Magma Migration Inferred at Laguna Del Maule, Chile Using Well Constrained Seismicity and Receiver Function Imaging. <b>Bradford, J. M.</b> , Mahanti, S., Kiser, E., Beck, S. L., Fernandez, M., Trad, S., Porter, R. C., Maharaj, A., Howe, H. E., Ortiz, G. F., Saez, M.		INVITED: The Center for Land Surface Hazards (Clash): A Community Effort to Understand Cascading Land Surface Hazards. <b>West, A.</b> , Clark, M., Roering, J., Yanites, B., Zekkos, D.
8:15 AM	H/V Processing of Seismic Noise Recordings: A Retrospective and Roadmap for Updating the SESAME Guidelines. <b>Cornou, C.</b> , Bard, P.	Characteristics of Fracture Networks Regularly Activated by Geothermal Production at the Coso Geothermal Field. <b>Holmgren, J. M.</b> , Kaven, J., Oye, V.	Multi-scale Velocity Model Integration for the Los Angeles Basin: A Framework for Continuous Neural Representation. <b>Jia, Z.</b> , Clayton, R. W.	Efficient Non-ergodic Predictions of Path Effects and Applications to National Seismic Hazard Maps. <b>Lacour, M.</b> , Abrahamson, N., Sung, C.	8:15 AM	Coda Wave Interferometry with DAS for Continuous Relative Velocity Change Monitoring of a Tailings Dam in British Columbia. <b>Savard, G.</b> , Ouellet, S., Dettmer, J., Mikesell, T., Forbes, B., Sangha, A.	INVITED: Dynamic Evolution of the Magmatic-hydrothermal System at Uturuncu Volcano, Bolivia. <b>Liu, Y.</b> , Zhang, H., Kendall, M., Blundy, J., Wang, X., Xu, X.		Gravity Modulates Earthquake-triggered Sliding During the 2025 Dingri Normal-fault Earthquake on the Tibetan Plateau. <b>Li, Z.</b> , Wang, T., Yue, H.
8:30 AM	Characteristics of Microtremor Horizontal-to-Vertical Spectral Ratios and Resulting Subsurface Structures in Japan and Taiwan. <b>Matsushima, S.</b> , Chou, Y., Nagashima, F., Kaigara, T.	STUDENT: Mapping Fracture Growth During the Utah Forge 2024 Extended Circulation. <b>Spraker, G. M.</b> , Niemz, P., Pankow, K.	Constructing Basin Seismic Velocity Structure Constrained by Chronostratigraphy - a Case Study in the Los Angeles Basin. <b>Olsen, K. B.</b> , Yeh, T., Kohler, M.	INVITED: Overview of the NGA-West3 Project Database. <b>Buckreis, T. E.</b> , Bozorgnia, Y., Donahue, J., Abrahamson, N., Al Atik, L., Atkinson, G. M., Bahrapouri, M., Bayless, J., Baise, L. G., Boore, D. M., Bradley, B. A., Brandenburg, S. J., Campbell, K. W., Chiou, B., Gulerce, Z., Idriss, I. M., Kishida, T., Kottke, A. R., Kuehn, N., Lavrentiadis, G., Nie, S., Nweke, C. C., Parker, G. A., Pinilla Ramos, C., Rodriguez-Marek, A., Stafford, P., Stewart, J. P., Sung, C., Youngs, R.	8:30 AM	Subsurface Characterization Along Rail Lines - Distributed Acoustic Sensing in the Swiss Alps. <b>Bowden, D.</b> , Bajad, S. N., Fern, E. J., Fichtner, A., Bharadwaj, P., Edme, P.	Deep-learning-based Monitoring of Volcano-tectonic and Long-period Earthquakes. Zhong, Y., <b>Tan, Y.</b>		Active Stress Pattern Investigations and Earthquake Probabilities in North Pakistan: Implications for Seismic Hazard. <b>Shah, S.</b>

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
8:45 AM	<b>On the State of Knowledge (continued)</b> The New Sesame Criteria: Why Not Ai? <b>Castellaro, S.</b>	<b>From Drilling to Ground Shaking (continued)</b> INVITED: The Bound Growth of Induced Earthquakes Could De-risk Hydraulic Fracturing. <b>Schultz, R.,</b> Lanza, F., Dyer, B., Karvounis, D., Fiori, R., Shi, P., Ritz, V., Linus, V., Meier, P., Wiemer, S.	<b>Generating, Calibrating (continued)</b> Ambient Noise Tomography Across the 2022 Los Angeles Basin Nodal Array. <b>Gkogkas, K., Lin, F.,</b> Clayton, R. W.	<b>Advancing the U.S. Geological (continued)</b> Suitability of Ground-motion Models for Seismic Hazard Assessments in Guam, the Northern Mariana Islands and American Samoa. <b>Aagaard, B. T.,</b> Moschetti, M. P., Withers, K. B.		<b>Fiber-Optic Sensing Applications (continued)</b> STUDENT: Distributed Acoustic Sensing-based Joint Inversion for the Structure of the Reykjanes Peninsula, Iceland. <b>Bird, E.,</b> Biondi, E., Hjörleifsdóttir, V., Zhan, Z.	<b>Geophysical Perspectives on Volcanic (continued)</b> STUDENT: Event Classification Using Seismic Arrays in Volcanic Environments. <b>Rinty, S.,</b> Goebel, T.		<b>Observation and Analysis (continued)</b> A GNSS-derived Strain Rate Map of North America and Implications for Continental Deformation. <b>Zeng, Y.</b>
9:00 AM	Estimating Regional Shallow 3D S-Wave Velocity Model From Active and Passive Surface Wave Methods and Horizontal-to-Vertical Spectral Ratios Based on Neural Networks. <b>Hayashi, K.,</b> Suzuki, T., Inazaki, T., Konishi, C., Suzuki, H., Matsuyama, H.	Tremor and Slow Slip in Sedimentary Basins. <b>Ushakov, N.,</b> Byrnes, J., Bochen, D.	STUDENT: Calibration of the Near-surface Seismic Structure in the San Francisco Community Velocity Model (SFCVM). <b>Patel, A.,</b> Olsen, K. B.	Forecasting Gridded Seismicity Rates for the USGS National Seismic Hazard Models for U.S. Pacific Territories. <b>Llenos, A.,</b> Haynie, K. L., Michael, A. J., Shelly, D. R., Shumway, A. M.		DAS Surface-wave Observations of Deep-crustal Structure in Western Nevada From a 56 Km Infrastructure Fiber. <b>Louie, J. N.,</b> Barnes, D., Watson, P., Sayyadi, S., Kratt, C.	Interconnected Magma Reservoirs at Santorini and Kolumbo: Insights From the Recent Magmatic Crisis. <b>Isken, M. P.,</b> Karstens, J., Nomikou, P., Parks, M. M., Hooft, E. E. E., Anastasiou, D., Shapiro, N. M., Walter, T. R., Rivalta, E., Kopp, H., Torsten, D., Berndt, C.		INVITED: Coseismic Landslides and Their Cascading Hazards: Improving Modeling, Assessment and Communication. <b>Allstadt, K.,</b> Thompson, E. M., Grant, A., Burgi, P., Wald, D. J., Collins, E., Jensen, E., Eiden, E.
9:15–10:30 AM	Poster Break				9:15–10:30 AM	Poster Break			
10:30 AM	<b>On the State of Knowledge/Art/Practice for mHVSr Analyses; A Prelude to the ESG7-COSMOS mHVSr Pre-Event Forum (see page 1496).</b>	<b>From Drilling to Ground Shaking: Mechanisms, Monitoring and Mitigation of Induced Earthquakes (see page 1432).</b>	<b>Generating, Calibrating and Validating Multi-Scale Seismic Velocity Models (see page 1436).</b>	<b>Advancing the U.S. Geological Survey National Seismic Hazard Models (see page 1354).</b>		<b>Fiber-Optic Sensing Applications in Seismology and Environmental Science (see page 1419).</b>	<b>Geophysical Perspectives on Volcanic Systems: Seismicity, Structure and Dynamics (see page 1441).</b>	<b>New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets (see page 1483).</b>	<b>Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice (see page 1362).</b>
	The Physical Basis for the Modeling of HVSR Under the Diffuse Fields Assumption. <b>Sánchez-Sesma, F. J.,</b> Weaver, R. L., Campillo, M., Perton, M., Baena-Rivera, M., González, J. G., Piña-Flores, J., Iturrarán, U., Luzón, F., García-Jerez, A., Lontsi, A. M., Matsushima, S., Kawase, H.	INVITED: Localized Transfer Learning for Detection of Induced Seismicity Across Diverse Monitoring Systems. <b>Xiao, H.,</b> Walter, J., Ogwari, P. O., Ho, L., Thiel, A., Gregg, N., Mace, B., Woelfel, I.	Full Waveform Inversion Tomography for Improved Earthquake Ground Motion Simulations in California and Japan. <b>Rodgers, A. J.</b>	Insights From Fault System Inversions for Rupture Modeling in the New Madrid Seismic Zone. <b>Velasquez, J.,</b> Milliner, C. W. D., Papadopoulos, A. N., Crume, H. R.		STUDENT: Fiber-optic Seismic Sensing of River-amplified Permafrost Warming. <b>Sun, H.,</b> Cheng, F., Xia, J.	STUDENT: New Focal Mechanism Constraints on the Caldera Ring Fault System at Axial Seamount from an Expanded OBS Network. <b>Zhang, M.,</b> Wilcock, W. S. D., Waldhauser, F., Wang, K., Colet, M., Tolstoy, M., Tan, Y.	Widespread Urban Seismic Quietening During the 2024 Total Solar Eclipse. <b>Fernando, B.</b>	INVITED: Implementing Physics-based Ground-motion Simulations in Probabilistic Seismic Hazard Analysis Practice. <b>Abrahamson, N.</b>

Friday, 17 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
10:45 AM	<b>On the State of Knowledge</b> (continued) Basics of Double-correction Method for mHVSr Based on the Diffuse-field Concept as a Replacement for “Nakamura Method”. <b>Kawase, H.</b> , Ito, E., Nakano, K., Nagashima, F.	<b>From Drilling to Ground Shaking</b> (continued) A Comprehensive Machine Learning-based Catalog for Effective Monitoring of Induced Seismicity in Southeastern New Mexico. <b>Aziz Zanjani, A.</b> , Basu, U.	<b>Generating, Calibrating</b> (continued) A New 3D Crustal Velocity Model for Northern Israel: Tomography and Validation. Ben Dor, G., Tape, C., Kurzon, I., <b>Tsesarsky, M.</b>	<b>Advancing the U.S. Geological</b> (continued) STUDENT: Geophysical Studies Provide New Insights of the Tectonic Evolution of the Lajas Valley, Southwestern Puerto Rico. <b>Justiniano, C.</b> , Vanacore, E., López Venegas, A.	11:00 AM	<b>Fiber-Optic Sensing Applications</b> (continued) INVITED: STUDENT: Illuminating Tidally Modulated Grounding Zone Migration at Constellation Inlet: A Seismic Motion Picture With Distributed Acoustic Sensing. <b>Reid-McLaughlin, A. M.</b> , Park, S., Chamberlin, T., Steinkraus, J., Klesh, A., Lefler, C., Kubiak, G., Costa, L., Kaip, G., Zhang, H., Zhai, Q., Zhan, Z.	<b>Geophysical Perspectives on Volcanic</b> (continued) Transcrustal Anisotropic Imaging of Magmatic Structures Along the Alaska-Aleutian Arc Using Receiver Functions. <b>Schulte-Pelkum, V.</b> , Gandhi, A., Haney, M. M.	<b>New Frontiers in Seismic Observations</b> (continued) Seafloor Topography Controls Primary Microseism Generation: New Insights From Cyclone-forced Seismic Observations in Northeastern Australia. Pandey, A., <b>Pham, T.</b> , Tkalčić, H.	<b>Constraining GMMs</b> (continued) Validation for Cybershake in Northern California. <b>Callaghan, S. A.</b> , Meng, X., Graves, R. W., Olsen, K. B., Su, M., Moschetti, M. P., Kottke, A. R., Pinilla Ramos, C., Milner, K. R., Silva, F., Maechling, P. J., Abrahamson, N., Ben-Zion, Y., Elbanna, A.
11:00 AM	3D Numerical Modeling of Ambient Seismic Noise: Assessing the Impact of Noise Source Directivity and 3D Basin Structure on Ambient Seismic mHVSr Ratios. <b>Gregor, D.</b> , Chaljub, E., Wathelet, M., Hollender, F., Perron, V., de Martin, F.	Modulation of Injection Induced Seismicity in Complex Fault Network. <b>Elbanna, A.</b> , Mia, M., Abdelmeguid, M.	STUDENT: Seismic Interferometry as a Cost-effective Tool for Seismic Velocity-model Validation in Geothermal Fields. <b>Naranjo, D.</b> , Draganov, D.	Stress and Fault Slip Potential of Alaskan Crustal Faults Included in the USGS National Seismic Hazard Model. <b>Levandowski, W.</b> , Yang, X.	11:15 AM	Direct Ice Density Constraints from Multimode Surface Waves using DAS. Lanteri, A., <b>Fichtner, A.</b> , Keating, S., Gebraad, L., Klaasen, S., Pienkowska-Cote, M., Eisen, O., Zunino, A., Jonsdottir, K., Hofstede, C., Zigone, D.	Seismic Constraints on the Magmatic System Beneath the San Francisco Volcanic Field in Northern Arizona. <b>Kiser, E.</b> , Porter, R. C., Bradford, J. M., Mahanti, S., Moitra, P.	Earthquake Observations From Moored Vertical Hydrophone Array in Arctic Ocean. <b>Pipatprathanporn, S.</b> , Dzieciuch, M. A., Shearer, P. M.	Performance Evaluation Metrics for Velocity Models Used for Numerical Simulations of Ground Motions for Seismic Hazard Applications. <b>Pinilla Ramos, C.</b> , Abrahamson, N., Liou, I. Y.
11:15 AM	Review of Site Response Modeling Conditional on HVSr. <b>Stewart, J. P.</b>	Complex Fault Slip Behavior Modulated by Injection Rate With Implications to Hazard Mitigation of Induced Seismicity. <b>Wang, C.</b> , Wang, P., Xu, Y., Bhat, H., Bhattacharya, P., Xie, Y., Xia, K., Schubnel, A.	Combining Multiple Data Types to Improve or Merge Models in Arrival Time Tomography: Virtual VSP's. <b>Thurber, C.</b>	STUDENT: Characterizing Differences in Seismicity Clustering and Background Rates Between Hawaii and California. <b>Rinty, S.</b> , Goebel, T.	11:30 AM	STUDENT: Chasing Storms with Distributed Acoustic Sensing (DAS) in Fiordland, South Island, New Zealand. <b>Smart, A. F. J.</b> , Miller, M. S., Sun, T., Michailos, K., Hui Lai, V., Townend, J., Osborne, N.	Probing the Wairakei-Tauhara Geothermal System, Taupō Volcanic Zone, With a Dense Nodal Seismic Array. <b>Jiang, C.</b> , Miller, M. S., Illsley-Kemp, F., Mestel, E. R. H., Hughes, B., Townend, J., Ayling, B.	Tremor-like Signals Along the San Jacinto Fault: Observations From a Long-term Dense Seismic Array (Faultscan). <b>Higueret, Q.</b> , Vignon-Livache, M., Brenguier, F., Mordret, A., Sheng, Y., Lavoue, F., Vernon, F., Hollis, D., Aubert, C., Ben-Zion, Y.	Toward the 2028 Short-term Time-dependent Revision of New Zealand National Seismic Hazard Model: A Framework for Ground-motion Characterization Modelling Update. <b>Bora, S.</b> , Li, D., Gerstenberger, M. C.
11:30 AM	Examples of Microtremor Horizontal-to-Vertical Spectral Ratios as a Useful Tool for Geotechnical Site Characterization. <b>Hudson, K. S.</b>	STUDENT: Understanding Rupture and Source Properties of Induced Microearthquakes in the Western Canadian Sedimentary Basin. <b>Hasnain, M. S.</b> , Lui, S. K. Y., Ushakov, N.	STUDENT: Velocity and Attenuation Models of Mississippi Embayment Sediments Derived From Refraction Wavefields. <b>Islam, S.</b> , Langston, C. A.	Progress on a USGS Nationwide Long-term Time-dependent Earthquake Rupture Forecast. <b>Field, E. H.</b> , Hatem, A. E., Milner, K. R., Neely, J. S., Briggs, R. W.	11:45 AM–2:00 PM	STUDENT: Distributed Acoustic Sensing for Environmental and Weather Monitoring Using Existing Fiber-optic Infrastructure. <b>Rading, R.</b> , Hoffman, M., Isleif, K., Gerberding, O., Hadziioannou, C., Schlarb, H.	Magmatic Volatile Flux Drives Non-eruptive Volcano-tectonic Seismicity at Mount St. Helens, USA From 2008–2024. <b>Hirao, B. W.</b> , Thomas, A. M., Shelly, D. R., Thelen, W. A.	Extremely Shallow Semi-repeating Tremor Caused by Water Hammers in a Sewer Pipe in Social Circle, Georgia. Si, X., <b>Peng, Z.</b>	Practical Approaches to Physics-based PSHA. <b>Liou, I. Y.</b> , Weatherill, G., Cotton, F., Abrahamson, N.
11:45 AM–2:00 PM	Lunch Break				11:45 AM–2:00 PM	Lunch Break			

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
2:00 PM		<b>SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World</b> (see page 1547).	<b>Earthquake Rupture Hazard and Forecasts from Integration of Paleoseismic Datasets</b> (see page 1392).	<b>Advancing the U.S. Geological Survey National Seismic Hazard Models</b> (see page 1354).		<b>Fiber-Optic Sensing Applications in Seismology and Environmental Science</b> (see page 1419).	<b>Action at a Distance: Understanding Seismic Triggering</b> (see page 1328).	<b>New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets</b> (see page 1483).	<b>Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice</b> (see page 1362).
2:15 PM		Tectonic Significance and Observations of Ground Failure From the 6 December 2025 Mw 7.0 Earthquake in Yukon, Canada. <b>Biegel, K.</b> , Finley, T., Gosselin, J., Lipovsky, P., Cronmiller, D., Schaeffer, A. J., Dettmer, J.	Earthquake-cycle Modality Revealed by Paleoseismic Inter-event Time Distributions. <b>Oskin, M. E.</b> , Scharer, K., Lau, W.	Taming the Logic Tree: Combinatorics and Correlations of Epistemic Uncertainties in National Hazard Models. <b>Milner, K. R.</b>		STUDENT: Integrated Fiber-optic Sensing for Multi-environment Monitoring: Earthquakes, Ocean Waves, and Vehicle Signals. <b>Wang, Y.</b> , Fichtner, A., Bogris, A., Simos, C., Simos, I., Melis, N. S., Deligiannidis, S.	STUDENT: Evaluation of Mainshock-induced Strength–stiffness Reduction Thresholds for Aftershock-triggered Slope Failures. <b>Kim, J.</b> , Kim, B.	INVITED: Railroad Buckling in Earthquakes. <b>Bilham, R.</b> , Hough, S. E.	Analytical Approximations for Hazard Calculations for Areal Sources Modeled by Virtual Faults. <b>Lacour, M.</b> , Abrahamson, N., Largent, M.
2:30 PM		STUDENT: Complex Multi-segment Rupture of the 2025 M 6.0 Afghanistan Earthquake From Sentinel-1 InSAR Data. <b>Rivera, K. M.</b> , Funning, G. J.	On the Behavior of Faults and Fault Systems: Geological Insights Into Patterns and Controls on Earthquake Occurrence in Time and Space. <b>Dolan, J. F.</b> , Gauriau, J., Cawood, T. K., Rhodes, E. J., Van Dissen, R. J., Zinke, R., Hatem, A. E., Fougere, D. M., McGill, S. F., Gordon, L.	Why are Site-specific Seismic Hazard Analyses and the National Seismic Hazard Model Different? <b>Wong, I. G.</b>		High-resolution Directionality of Ocean Swell With the SWOT Mission and Fiber Sensing. <b>Zhang, S.</b> , Ardhuin, F., Liu, M., Collard, F., Callies, J., Zhan, Z.	Dynamically Initiated Seismic Sequences in Eastern North America Following the Large 2025 Kamchatka Earthquakes. <b>Beauce, E.</b> , Waldhauser, F., Kolawole, F., Kim, W.	Potential Abiotic Methane Hydrate in Earth's Deepest Subduction Zone. <b>Wei, S.</b> , Feng, M., Yan, T., Wang, Y., Zhang, Z., Wang, X., Chen, L., Hao, T., Tong, P.	Evaluating Random Vibration Theory Assumptions for Non-ergodic Ground-motion Modeling. <b>Laurentiadis, G.</b>
2:45 PM		INVITED: SWOT Satellite Altimetry Observations and Source Model for the Tsunami From the 2025 M 8.8 Kamchatka Earthquake. <b>Melgar, D.</b> , Ruiz-Angulo, A., de Marez, C., Deniau, A., Nencioli, F., Hjörleifsdóttir, V.	Spatiotemporal Clustering of Paleo-earthquakes Along the Central Altyn Tagh Fault: Rupture Termination and Near Geometric Complexities. Han, L., <b>Liu, J.</b> , Oskin, M. E., Hu, G., Klinger, Y., Wang, W., Yao, W., Wang, H., Zhang, B., Xu, J., Shao, Y.	Risk Assessment of the 2023 National Seismic Hazard Model for Alaska: Impact of Subduction Zone Implementation Decisions on Losses. Polun, S. G., <b>Ruhl, C. J.</b> , Fadugba, O. I., Shen-Tu, B.		What Is the Upper Frequency Limit of Secondary Microseisms? <b>Titova, A.</b> , Bakulin, A.	Fluid Pressure Surge of a Hydrofracture Due to Seismic Wave Stimulation. <b>Zheng, Y.</b>	The Martian Crust Outside Elysium Planitia From Joint Probabilistic Inversion of PP/SS Precursors and Rayleigh Waves. Zhang, Z., Kim, D., <b>Olugboji, T.</b> , Lekic, V.	Resolving Site Effects in Modified Mercalli Intensity Data to Better Constrain Non-ergodic Path Terms. <b>Sung, C.</b> , Abrahamson, N.
2:45 PM		The 2025 and 1952 Kamchatka Earthquakes Viewed From Tsunami Waveforms Recorded Around the Pacific Ocean. <b>Satake, K.</b> , Fujii, Y.	Illuminating Earthquake Histories: Using Luminescence Dating to Decode Fault Slip and Magnitude Variability of Earthquake Ruptures in the Carrizo Plain, CA. <b>Akçiz, S.</b> , Brown, N.	INVITED: Updated Shaking Potential and Ground Motion Hazard Maps for California. <b>Chen, R.</b> , Kang, M., Wurgler, R., Dawson, T., Thomas, K., Bohon, W.		STUDENT: Denoising Distributed Acoustic Sensing (DAS) Data for Shallow-water Observations. <b>Huang, X.</b> , Wu, W., Lin, Y.	High Frequency Vibroseis Triggering of Microseismicity in the New Madrid Seismic Zone? <b>Langston, C. A.</b>	Earth Balloons Sensors as Precursors of Venus Seismology Missions. <b>Mimoun, D. C.</b> , Garcia, R., Gerier, S.	STUDENT: Components of Variability in Ground-motion Model Derived from Distributed Acoustic Sensing. <b>Lin, C.</b> , von Specht, S., Cotton, F.

Friday, 17 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
3:00 PM		<b>SSJ-SSOC-SSA Joint Session</b> (continued)	<b>Earthquake Rupture Hazard</b> (continued)	<b>Advancing the U.S. Geological</b> (continued)
		Rapid Characterization of the 2025 M8.8 Kamchatka, Russia Earthquake. <b>Yin, H. Z.</b> , Allstadt, K., Barnhart, W. D., Clapp, S. A., Earle, P. S., Goldberg, D. E., Grant, A., Herman, M. W., Jaiswal, K., McBride, S. K., Ringler, A., Schneider, M., Thompson, E. M., van der Elst, N., Wald, D. J., Wang, D., Worden, C. B.	Mapping Maximum Post-glacial Earthquake Magnitudes in the Northeastern U.S. From Precariously Balanced Erratics. <b>Pratt, T. L.</b> , Stirling, M. W., McPhillips, D., Figueiredo, P. M.	Fully Probabilistic Ground Motions Replace Deterministic Capping in 2026 Update of NEHRP Recommended Seismic Provisions for New Buildings and Other Structures. <b>Luco, N.</b> , Murphy, D., Mazzoni, S.
3:15– 4:30 PM	Poster Break			
		<b>SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World</b> (see page 1547).		
4:30 PM		INVITED: Rupture Propagation and Arrest in Global Strike-slip Earthquakes Constrained by CCTV Video, and Near-fault Seismic Observations. <b>Kearse, J.</b> , Kaneko, Y.		
4:45 PM		STUDENT: Along-fault Slip-rate Heterogeneity as a Control on Rupture Segmentation: Insights From Recent Major Strike-slip Earthquakes in Turkey and Myanmar. <b>Wang, B.</b> , Barbot, S., Liu, M., Guvercin, S. E., Li, Z., Wang, T., Liu, C., Ji, L.		

Friday, 17 April (continued)

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Fiber-Optic Sensing Applications</b> (continued)	<b>Action at a Distance</b> (continued)	<b>New Frontiers in Seismic</b> (continued)	<b>Constraining GMMs</b> (continued)
	Improving Travel-time Estimation in Distributed Acoustic Sensing Data Through Denoising. <b>Lin, J.</b> , Ichinose, G., Aguiar, A. C.	STUDENT: Lack of Strong Dynamically Triggered Tectonic Tremor in Costa Rica. <b>Hajaji, S.</b> , Peng, Z., Chaves, E. J., Ding, C.	Distributed Acoustic Sensing Without Burial: Implications for Seismic Studies of the Moon and Earth. <b>Donahue, C. M.</b> , Probst, S., Robertsson, J. O. A., Zandanel, A., Gao, K.	Physical Calibration of Ground Motion Models for Induced Seismicity: Application to the Prinos CO <sub>2</sub> Storage Site. <b>Pilz, M.</b> , Kiratzi, A., Vavlas, N., Anterriotis-Kalpakidis, N. K.
3:15– 4:30 PM	Poster Break			
	<b>Fiber-Optic Sensing Applications in Seismology and Environmental Science</b> (see page 1419).	<b>Southern California Seismicity: Past, Present and Future</b> (see page 1539).	<b>New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets</b> (see page 1483).	<b>Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice</b> (see page 1362).
	INVITED: Observation of Submarine Earthquake Swarm Activity in the Tokara Islands Region Using Distributed Fiber-optic Sensing on a Submarine Telecommunication Cable. <b>Araki, E.</b> , Yokobiki, T., Wakisaka, Y., Toge, K., Iida, D., Mori, A., Takahashi, H., Kito, C.	Do-it-yourself (DIY) Method to Forecast Local Earthquakes: Application to Southern California. <b>Rundle, J. B.</b> , Donnellan, A., Grant Ludwig, L.	The Distributional Finite Difference Method: An Efficient Approach for High-resolution Global Wavefield Simulations. <b>Tian, Y.</b> , Awan, M. G., Soergel, D., Wu, W., Romanowicz, B.	STUDENT: Using Dynamic Rupture Simulations to Improve Ground Motion Models for Normal Faulting Earthquakes. <b>Franco, Y.</b> , Trugman, D. T.
	INVITED: Volcanic Crisis Unraveled Using Fiber Optic Sensing of a Sub-haul Cable on the Reykjanes Peninsula, SW Iceland. <b>Jonsdottir, K.</b> , Cubuk-Sabuncu, Y., Erlendsson, P., Li, J., Hjörleifsdóttir, V., Biondi, E., Kristinsson, I., Roberts, M., Vogfjord, K., Gestsson, E. B., Morten, J. P., Zhongwen, Z.	STUDENT: The Q-score: A Magnitude-weighted Model Evaluation Score for Earthquake Forecasting. Jansson Valters, J., <b>Arjon, A.</b> , Serafini, F., Schoenberg, F.	Building Local sP and PmP Phase Datasets for Precise Earthquake Location and Whole-crust Imaging Using AI-assisted Methods. <b>Tong, P.</b> , Li, T., Chen, J., Yang, X.	Physics-based Simulations of the Dead-Sea Fault System – How Unique Geological Features Affect Ground Motion Variability. <b>Kamai, R.</b> , Shachrur, N., Porat Dekel, C., Roda, G. K., Tsessarsky, M.

Friday, 17 April (continued)

Time	Ballroom A	Ballroom B	Ballroom C	Ballroom D
5:00 PM		<b>SSJ-SSOC-SSA Joint Session</b> (continued)		
		Complex Initial Rupture of the Narli Fault Triggered the 2023 Mw 7.8 Kahramanmaraş Earthquake. <b>Ellsworth, W. L.</b> , Bulut, F.		
5:15 PM		Complex Fault Structures in Southeastern Türkiye Revealed by High-resolution Aftershock Location and Focal Mechanism Catalog of the 2023 Kahramanmaraş, Türkiye, Earthquake Sequence. <b>Si, X.</b> , Peng, Z., Mach, P., Oluwaseyifunmi, A., Gao, H., Sandvol, E., Zor, E., Ergin, M., Ding, C.		
5:30 PM		Tibetan Plateau Kinematics Revealed in a Single Event: The Mw 7.1 January 7, 2025 Tingri Earthquake. <b>Hanagan, C. E.</b> , Jobe, J. A. T., Yin, H. Z., Hatem, A. E., Reitman, N. G., Briggs, R. W., Lynch, E. M.		

Friday, 17 April (continued)

Time	Ballroom E	Ballroom F	Ballroom G	Ballroom H
	<b>Fiber-Optic Sensing Applications</b> (continued)	<b>Southern California Seismicity</b> (continued)	<b>New Frontiers in Seismic</b> (continued).	<b>Constraining GMMs</b> (continued)
	Ocean Bottom Boundary Layer Turbulence Scaling From the Vibrations of a Subsea Cable With Long-range Fiber-optic Sensing. <b>Williams, E. F.</b> , Kamalov, V., Karrenbach, M., Ruiz-Angulo, A., Hjörleifsdóttir, V., Jonsson, O., Fontaine, N. K., Ryf, R., Mazur, M.	A Decade-long Pseudo-prospective Evaluation of UCERF3-ETAS Next-day Seismicity Forecasts. <b>Serafini, F.</b> , Bayona, J. A., Silva, F., Werner, M. J., Milner, K. R., Field, E. H.	STUDENT: Full Waveform Inversion of the Los Angeles Basin Using Neural Operators. <b>Zou, C.</b> , Shi, Y., Ross, Z. E., Clayton, R. W., Azzizadenesheli, K.	Modeling Hanging Wall Effects for Ground Motion Fourier Amplitude Spectra. <b>Bayless, J.</b> , Abrahamson, N., Pinilla Ramos, C., Sung, C.
	Analysis of Seismic Body-waves Observed on Multiple Spans of the Iris Subsea Fiber-optic Cable Connecting Iceland and Ireland. <b>Hjörleifsdóttir, V.</b> , Lepere, A., Gunnarsson, A. I. G., Mazur, M., Kamalov, V., Karrenbach, M., Williams, E. F., Jonsson, O., Fontaine, N. K., Ryf, R., Dallachiesa, L., Ruiz-Angulo, A., Neilson, D.	STUDENT: Non-interacting Seismicity in the San Jacinto Fault Zone: Insights From Earthquake Cycle Simulations. <b>Villa, V.</b> , Ross, Z. E., Lapusta, N.	From Physics to Scale: Building Foundation Models for Seismic Full-waveform Inversion. <b>Lin, Y.</b> , Feng, Y., Jin, P., Chen, Y.	STUDENT: QuakeF2G: A Transformer-based Ground Motion Prediction Model Considering Fault Segments Modeling. <b>Feng, Y.</b> , Zhu, W., Lu, X.
	DAS Beyond Repeaters: Multi-span Monitoring Using Submarine Cables in the Pacific Ocean. <b>Krauss, Z.</b> , Mazur, M., Wilcock, W. S. D., Fontaine, N. K., Ryf, R., Rose, A., Dientsfrey, W., Abadi, S., Denolle, M. A., Lipovsky, B., Hartog, J.	Dynamic Rupture Simulations on the Rose Canyon, Spanish Bight, and Descanso Faults, San Diego, Southern California. <b>Lozos, J.</b> , Fabbrizzi, A., Maloney, J.	Red-Diffeq: Regularization by Denoising Diffusion Models for Solving Inverse PDE Problems With Application to Full Waveform Inversion. <b>Lu, L.</b> , Shan, S.	STUDENT: Semi-empirical Ground Motion Prediction Equations for the Central Gulf of California, Mexico, Using Stochastic Finite-fault Simulations. <b>Azua Flores, J. M.</b> , Castro, R. R.

## Poster Sessions

**Action at a Distance: Understanding Seismic Triggering**  
(see page 1329).

1. Do Earthquake Deformation and Shaking Trigger Eruptions? Gomberg, J., Prejean, S. G., **Bodin, P.**, Pesicek, J. D., Taveras, O.
2. A New Agent, Pycorelator, Advances the Starring Role of Triggering in Paleoseismology. **Gomberg, J.**, Lai, L., Sylvester, Z., Covault, J., Nieminski, N.
3. False Positives in the Identification of Dynamic Earthquake Triggering. **Hardebeck, J.**, DeSalvio, N. D., Fan, W., Barbour, A. J.
4. STUDENT: Dynamic Earthquake Triggering Regions in Texas and the Role of Fluid Injection. **Hosain, A.**, Alfaro-Diaz, R., Chen, T.
5. Hard-linking and the Hikurangi: Controls on Fault Co-rupture From Synthetic Earthquake Catalogues. **Penney, C.**, Howell, A., McLennan, T., Nicol, A., Fry, B.
6. Larger Earthquakes Happen Sooner: Non-separability of Magnitude and Time Distributions of Aftershocks. **van der Elst, N.**
7. STUDENT: Complex Faulting and Stress Transfer During the July 25, 2023 Mw 5.5 Earthquake Sequence in Kozan, Southeastern Türkiye. **Mach, P.**, Peng, Z., Si, X., Adeboboye, O., Zor, E., Ergin, M., Sandvol, E.

**SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World** (see page 1550).

8. STUDENT: Preliminary Results on Foreshock Behaviors and Mainshock Rupture Processes of the 2025 Mw 8.8 Kamchatka Earthquake Sequence. **Mach, P.**, Si, X., Wang, D., Shcherbakov, R., He, P., Taymaz, T., Ding, C., Peng, Z.
9. STUDENT: Controls of Along-strike Dip Variations on Multi-Section Ruptures: 3D Dynamic Earthquake-cycle Simulations of the Sagaing Fault. **Bordbar, H.**, Duan, B., Liu, M., Tang, Z.
10. Geosystemics Applied to the Seismic Preparatory Phase: Lessons from two Recent Major Earthquakes. **De Santis, A.**, Campuzano, S. A., Cianchini, G., D'Arcangelo, S., De Caro, M., Orlando, M., Perrone, L., Sabbagh, D., Soldani, M., Zhang, X., Xiong, P., Alimoradi, H., Rahimi, H.
11. Were the Last Two Major Megathrust Earthquakes in Kamchatka Partial Ruptures? Insights From Modeling of InSAR Data From the 2025 M8.8 Event. **Funning, G. J.**, Periollat, A. J.
12. Rupture Modeling of Major Tsunamigenic Earthquakes With Both Earthquake and Tsunami Observations. **Goldberg, D. E.**, Koch, P., Melgar, D., Hunsinger, H., Haynie, K. L.

13. Low-frequency Observations of the M8.8 Kamchatka Russia Earthquake Across the Global Seismographic Network. **Ringler, A.**, Steim, J., Adourian, S., Wilson, D. C.
14. STUDENT: Spatiotemporal and Statistical Analysis of Foreshock Activity Preceding the 2025 July 29 Mw 8.8 Kamchatka Peninsula Earthquake. **Robinson, B.**
15. Constraining Near-trench Slip Using SWOT-observed Tsunami Wave Trains. **Sepulveda, I.**, Nilsson, B., Yu, Y., Carvajal, M., Brandin, M., Gabriel, A., Sandwell, D.
16. Joint Geodetic Coseismic Slip Inversion for the 2025 Mw 8.8 Kamchatka Earthquake Using a 3D Spherical Earth Model. **Wang, K.**, Freymuller, J., Shestakov, N., Hu, Y.
17. Bilateral Supershear Rupture of the 2025 Mw 7.7 Myanmar Earthquake Imaged by Global P-wave and Regional Surface-wave Back-projections. Yao, Q., **Yu, C.**, Zhou, M.
18. STUDENT: Linkage Model and Seismic Hazard of Fold Accommodation Fault: Insights From the Pengzhou Fault in the Longmen Shan Piedmont Zone, Western China. **Zheng, N.**, He, D.

**Data-Driven Advances in Liquefaction Hazard Analysis**  
(see page 1373).

19. Nonergodic-based Risk Assessment of Liquefaction-induced Ground Damage. **Macedo, J.**, Liu, C.
20. Development of USGS Computational Tools for Long-term Forecasting of Liquefaction Ground Failure Hazards. **Makdisi, A. J.**, Grant, A., Kramer, S. L.
21. STUDENT: Geospatial Liquefaction Model Using Maximum Entropy (Maxent) Modeling for California. **Roberts, M. E.**, Baise, L. G., Srinivasan, S., Lamontagne, J.
22. STUDENT: Machine Learning-based Geospatial Liquefaction Model for California: A Comparative Study. **Shirzadi, H.**, Subedi, C., Baise, L. G., Moaveni, B.
23. Evaluation of the Lateral Displacement Index Framework for Regional-scale Liquefaction Hazard Assessment. Singh, V., **Zhan, W.**
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