

# Weiqiang Zhu

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## Academic Appointments

|                                                                                                   |                                       |
|---------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Assistant Professor</b><br><i>University of California, Berkeley</i>                           | 2023 – present<br><i>Berkeley, CA</i> |
| <b>Postdoctoral Fellow</b><br><i>California Institute of Technology, Seismological Laboratory</i> | 2021 – 2023<br><i>Pasadena, CA</i>    |

## Education

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Ph.D., Geophysics (Minor in Computer Science)</b><br><i>Stanford University</i> <ul style="list-style-type: none"><li>• Thesis: <i>Applications of Deep Learning in Seismology</i></li><li>• Adviser: Gregory C. Beroza</li></ul> | 2016 – 2021<br><i>Stanford, CA</i>   |
| <b>M.S., Geophysics</b><br><i>Peking University</i>                                                                                                                                                                                  | 2013 – 2016<br><i>Beijing, China</i> |
| <b>B.S., Geophysics</b><br><i>Peking University</i>                                                                                                                                                                                  | 2009 – 2013<br><i>Beijing, China</i> |

## Awards & Honors

|                                                                         |      |
|-------------------------------------------------------------------------|------|
| Charles F. Richter Early-Career Award, Seismological Society of America | 2025 |
| Director's Postdoctoral Fellowship, Caltech Seismological Laboratory    | 2021 |
| Exceptional Thesis Award, Geophysics, Stanford University               | 2021 |
| Outstanding Student Presentation Award, American Geophysical Union      | 2021 |
| National Scholarship, Peking University                                 | 2015 |
| Outstanding Student Paper Award, Chinese Geophysical Society            | 2014 |
| National Scholarship, Peking University                                 | 2012 |

## Publications

- [54] Y. Jie, S. S. Wei, **W. Zhu**, J. Freymueller, and J. Elliott. Deep-Learning-Based Catalog of Background Seismicity and Aftershocks of the 2020–2021 Large Earthquakes Along the Alaska Peninsula. *Seismological Research Letters* (2026).
- [53] J. Wolf, B. Romanowicz, E. Garnero, **W. Zhu**, and J. D. West. Widespread Deformation at the Base of the Mantle Linked to Subducted Slabs. *The Seismic Record* (2026).
- [52] C. Zhang, **W. Zhu**, B. A. Romanowicz, R. M. Allen, K. Soga, and Y. Wu. A Deep Learning Framework for Marine Acoustic and Seismic Monitoring with Distributed Acoustic Sensing. *arXiv preprint arXiv:2603.14844* (2026).
- [51] C. Zhu, Y. Yang, K. Yang, **W. Zhu**, and Q. Yang. Monitoring Landslide Disturbances Using Distributed Acoustic Sensing under Extreme Weather Conditions. *npj Natural Hazards* (2026).
- [50] Q. Ding, Z. Shen, **W. Zhu**, and B. Liu. DASFormer: Self-Supervised Pretraining for Earthquake Monitoring. *Visual Intelligence* (2025).
- [49] Y. Gou, R. M. Allen, **W. Zhu**, T. Taira, and L.-W. Chen. Leveraging Submarine DAS Arrays for Offshore Earthquake Early Warning: A Case Study in Monterey Bay, California. *Bulletin of the Seismological Society of America* (2025).
- [48] G. Poggiali, L. Chiaraluce, Z. E. Ross, **W. Zhu**, and C. Marone. Fault Geometry and Source Mechanics of the Altotiberina Fault System from a High-Resolution Machine-Learning Earthquake Catalog. *Bulletin of the Seismological Society of America* (2025).
- [47] J. Song, **W. Zhu**, J. Zi, H. Yang, and R. Chu. An Enhanced Focal Mechanism Catalog of Induced Earthquakes in Weiyuan, Sichuan, from Dense Array Data and a Multitask Deep Learning Model. *The Seismic Record* (2025).

- [46] R. Suzuki, N. Uchida, **W. Zhu**, G. C. Beroza, T. Nakayama, K. Yoshida, G. Toyokuni, R. Takagi, R. Azuma, and A. Hasegawa. The Forearc Seismic Belt: A Fluid Pathway Constraining Down-Dip Megathrust Earthquake Rupture. *Science* (2025).
- [45] G. Tepp, E. Yu, A. Bhaskaran, R. Tam, **W. Zhu**, Z. Newman, E. Jaski, and N. Scheckel. Improvements from Incorporating Machine Learning Algorithms into Near Real-Time Operational Post-Processing. *Scientific Reports* (2025).
- [44] **W. Zhu**, B. Rong, Y. Jie, and S. S. Wei. Robust Earthquake Location Using Random Sample Consensus (RANSAC). *arXiv preprint arXiv:2502.10933* (2025).
- [43] **W. Zhu**, J. Song, H. Wang, and J. Münchmeyer. Towards End-to-End Earthquake Monitoring Using a Multi-task Deep Learning Model. *arXiv preprint arXiv:2506.06939* (2025).
- [42] **W. Zhu**, H. Wang, B. Rong, E. Yu, S. Zuzlewski, G. Tepp, T. Taira, J. Marty, A. Husker, and R. M. Allen. California Earthquake Dataset for Machine Learning and Cloud Computing. *arXiv preprint arXiv:2502.11500* (2025).
- [41] J. Atterholt, Z. Zhan, Y. Yang, and **W. Zhu**. Imaging the Garlock Fault Zone with a Fiber: A Limited Damage Zone and Hidden Bimaterial Contrast. *Journal of Geophysical Research: Solid Earth* (2024).
- [40] Y. Feng, **W. Zhu**, and X. Lu. QuakeFormer: A Uniform Approach to Earthquake Ground Motion Prediction Using Masked Transformers. *arXiv preprint arXiv:2412.00815* (2024).
- [39] Z. Xi, S. S. Wei, **W. Zhu**, G. C. Beroza, Y. Jie, and N. Saloor. Deep Learning for Deep Earthquakes: Insights from OBS Observations of the Tonga Subduction Zone. *Geophysical Journal International* (2024).
- [38] E. Biondi, **W. Zhu**, J. Li, E. F. Williams, and Z. Zhan. An Upper-Crust Lid over the Long Valley Magma Chamber. *Science Advances* (2023).
- [37] J. Li, **W. Zhu**, E. Biondi, and Z. Zhan. Earthquake Focal Mechanisms with Distributed Acoustic Sensing. *Nature Communications* (2023).
- [36] Z. E. Ross, **W. Zhu**, and K. Azizzadenesheli. Neural Mixture Model Association of Seismic Phases. *arXiv preprint arXiv:2301.02597* (2023).
- [35] H. Sun, Z. E. Ross, **W. Zhu**, and K. Azizzadenesheli. Phase Neural Operator for Multi-Station Picking of Seismic Arrivals. *Geophysical Research Letters* (2023).
- [34] J. D. Wilding, **W. Zhu**, Z. E. Ross, and J. M. Jackson. The Magmatic Web beneath Hawai‘i. *Science* (2023).
- [33] J. Yin, M. A. Soto, J. Ramirez, V. Kamalov, **W. Zhu**, A. Husker, and Z. Zhan. Real-Data Testing of Distributed Acoustic Sensing for Offshore Earthquake Early Warning. *The Seismic Record* (2023).
- [32] J. Yin, **W. Zhu**, J. Li, E. Biondi, Y. Miao, Z. J. Spica, L. Viens, M. Shinohara, S. Ide, K. Mochizuki, A. Husker, and Z. Zhan. Earthquake Magnitude with DAS: A Transferable Data-Based Scaling Relation. *Geophysical Research Letters* (2023).
- [31] **W. Zhu**, E. Biondi, J. Li, J. Yin, Z. E. Ross, and Z. Zhan. Seismic Arrival-Time Picking on Distributed Acoustic Sensing Data Using Semi-Supervised Learning. *Nature Communications* (2023).
- [30] A. Datta, D. J. Wu, **W. Zhu**, M. Cai, and W. L. Ellsworth. DeepShake: Shaking Intensity Prediction Using Deep Spatiotemporal RNNs for Earthquake Early Warning. *Seismological Research Letters* (2022).
- [29] L. Retailleau, J.-M. Saurel, M. Laporte, A. Lavayssière, V. Ferrazzini, **W. Zhu**, G. C. Beroza, C. Satriano, and J.-C. Komorowski. Automatic Detection for a Comprehensive View of Mayotte Seismicity. *Comptes Rendus Géoscience* (2022).
- [28] L. Retailleau, J.-M. Saurel, **W. Zhu**, C. Satriano, G. C. Beroza, S. Issartel, and P. Boissier. A Wrapper to Use a Machine-Learning-Based Algorithm for Earthquake Monitoring. *Seismological Research Letters* (2022).
- [27] K. Wang, W. Ellsworth, G. C. Beroza, **W. Zhu**, and J. L. Rubinstein. DevelNet: Earthquake Detection on Develocorder Films with Deep Learning: Application to the Rangely Earthquake Control Experiment. *Seismological Research Letters* (2022).
- [26] K. Xu, **W. Zhu**, and E. Darve. Learning Generative Neural Networks with Physics Knowledge. *Research in the Mathematical Sciences* (2022).
- [25] L. Yang, X. Liu, **W. Zhu**, L. Zhao, and G. C. Beroza. Toward Improved Urban Earthquake Monitoring through Deep-Learning-Based Noise Suppression. *Science Advances* (2022).
- [24] M. Zhang, M. Liu, T. Feng, R. Wang, and **W. Zhu**. LOC-FLOW: An End-to-End Machine Learning-Based High-Precision Earthquake Location Workflow. *Seismological Research Letters* (2022).

- [23] **W. Zhu**, A. B. Hou, R. Yang, A. Datta, S. M. Mousavi, W. L. Ellsworth, and G. C. Beroza. QuakeFlow: A Scalable Machine-Learning-Based Earthquake Monitoring Workflow with Cloud Computing. *Geophysical Journal International* (2022).
- [22] **W. Zhu**, I. W. McBrearty, S. M. Mousavi, W. L. Ellsworth, and G. C. Beroza. Earthquake Phase Association Using a Bayesian Gaussian Mixture Model. *Journal of Geophysical Research: Solid Earth* (2022).
- [21] **W. Zhu**, K. S. Tai, S. M. Mousavi, P. Bailis, and G. C. Beroza. An End-to-End Earthquake Detection Method for Joint Phase Picking and Association Using Deep Learning. *Journal of Geophysical Research: Solid Earth* (2022).
- [20] **W. Zhu**, K. Xu, E. Darve, B. Biondi, and G. C. Beroza. Integrating Deep Neural Networks with Full-Waveform Inversion: Reparameterization, Regularization, and Uncertainty Quantification. *Geophysics* (2022).
- [19] B. Ma, **W. Zhu**, and Q. Huang. Imaging Shallow Fault Structures by Three-Dimensional Reverse Time Migration of Ground Penetration Radar Data. *Journal of Applied Geophysics* (2021).
- [18] Y. J. Tan, F. Waldhauser, W. L. Ellsworth, M. Zhang, **W. Zhu**, M. Michele, L. Chiaraluce, G. C. Beroza, and M. Segou. Machine-Learning-Based High-Resolution Earthquake Catalog Reveals How Complex Fault Structures Were Activated during the 2016–2017 Central Italy Sequence. *The Seismic Record* (2021).
- [17] **W. Zhu**. *Applications of Deep Learning in Seismology*. PhD thesis. Stanford University, 2021.
- [16] **W. Zhu**, K. Xu, E. Darve, and G. C. Beroza. A General Approach to Seismic Inversion with Automatic Differentiation. *Computers & Geosciences* (2021).
- [15] C. Chai, M. Maceira, H. J. Santos-Villalobos, S. V. Venkatakrishnan, M. Schoenball, **W. Zhu**, G. C. Beroza, and C. Thurber. Using a Deep Neural Network and Transfer Learning to Bridge Scales for Seismic Phase Picking. *Geophysical Research Letters* (2020).
- [14] M. Liu, M. Zhang, **W. Zhu**, W. L. Ellsworth, and H. Li. Rapid Characterization of the July 2019 Ridgecrest, California, Earthquake Sequence from Raw Seismic Data Using Machine-Learning Phase Picker. *Geophysical Research Letters* (2020).
- [13] S. M. Mousavi, W. L. Ellsworth, **W. Zhu**, L. Y. Chuang, and G. C. Beroza. Earthquake Transformer—an Attentive Deep-Learning Model for Simultaneous Earthquake Detection and Phase Picking. *Nature Communications* (2020).
- [12] Y. Park, S. M. Mousavi, **W. Zhu**, W. L. Ellsworth, and G. C. Beroza. Machine-Learning-Based Analysis of the Guy-Greenbrier, Arkansas Earthquakes: A Tale of Two Sequences. *Geophysical Research Letters* (2020).
- [11] K. Xu, **W. Zhu**, and E. Darve. Distributed Machine Learning for Computational Engineering Using MPI. *arXiv preprint arXiv:2011.01349* (2020).
- [10] J. Zheng, S. Shen, T. Jiang, and **W. Zhu**. Deep Neural Networks Design and Analysis for Automatic Phase Pickers from Three-Component Microseismic Recordings. *Geophysical Journal International* (2020).
- [9] **W. Zhu**, K. L. Allison, E. M. Dunham, and Y. Yang. Fault Valving and Pore Pressure Evolution in Simulations of Earthquake Sequences and Aseismic Slip. *Nature Communications* (2020).
- [8] **W. Zhu**, Q. Huang, L. Liu, and B. Ma. Three-Dimensional Reverse Time Migration of Ground-Penetrating Radar Signals. *Pure and Applied Geophysics* (2020).
- [7] **W. Zhu**, S. M. Mousavi, and G. C. Beroza. Seismic Signal Augmentation to Improve Generalization of Deep Neural Networks. *Advances in Geophysics* (2020).
- [6] S. M. Mousavi, Y. Sheng, **W. Zhu**, and G. C. Beroza. STanford EArthquake Dataset (STEAD): A Global Data Set of Seismic Signals for AI. *IEEE Access* (2019).
- [5] S. M. Mousavi, **W. Zhu**, W. Ellsworth, and G. Beroza. Unsupervised Clustering of Seismic Signals Using Deep Convolutional Autoencoders. *IEEE Geoscience and Remote Sensing Letters* (2019).
- [4] S. M. Mousavi, **W. Zhu**, Y. Sheng, and G. C. Beroza. CRED: A Deep Residual Network of Convolutional and Recurrent Units for Earthquake Signal Detection. *Scientific Reports* (2019).
- [3] **W. Zhu**, S. M. Mousavi, and G. C. Beroza. Seismic Signal Denoising and Decomposition Using Deep Neural Networks. *IEEE Transactions on Geoscience and Remote Sensing* (2019).
- [2] **W. Zhu** and G. C. Beroza. PhaseNet: A Deep-Neural-Network-Based Seismic Arrival-Time Picking Method. *Geophysical Journal International* (2018).
- [1] **W. Zhu** and Q.-H. Huang. Attenuation Compensated Reverse Time Migration Method of Ground Penetrating Radar Signals. *Chinese Journal of Geophysics* (2016).

## Patents

- [1] **Zhu, W.**, Zhan, Z., & Ross, Z. E. (2024). Seismic Arrival-Time Picking on Distributed Acoustic Sensing (DAS) Using Semi-Supervised Learning. US Provisional Patent Application No. 63/444,031.

## Teaching

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|----------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>EPS 130: Introduction to Seismology</b><br><i>UC Berkeley</i>                                   | Spr 2025, 2026<br><a href="#">Website</a> |
| <b>EPS 254: Advanced Topics in Seismology and Geophysics</b><br><i>UC Berkeley</i>                 | Spr 2025                                  |
| <b>EPS 88: PyEarth – A Python Introduction to Earth Science</b><br><i>UC Berkeley</i>              | Fall 2024<br><a href="#">Website</a>      |
| <b>EPS 207: Observational Seismology</b><br><i>UC Berkeley</i>                                     | Fall 2023<br><a href="#">Website</a>      |
| <b>EPS 260: Research in Earth Science</b><br><i>UC Berkeley</i>                                    | Fall 2023, 2024                           |
| <b>Teaching Assistant, Stanford University</b><br>Earthquakes and Volcanoes<br>Crustal Deformation | Spr 2020<br>Win 2019                      |

## Mentoring

### Graduate Students

- Bo Rong, UC Berkeley, 2023–present
- Haoyu Wang, UC Berkeley, 2024–present
- Chun Zhang, UC Berkeley, 2025–present
- Mrinal Dursun, UC Berkeley, 2023–2025 (co-advised)
- Isis Lemus, UC Berkeley, 2023–2024 (second project)
- Sarah Shi, UC Berkeley, 2025–2026 (second project)

### Postdoctoral Scholars

- Jonathan Wolf, Miller Postdoctoral Fellow, UC Berkeley, 2024–2026
- Junhao Song, UC Berkeley, 2026–present

### Undergraduate Students

- Ava Aryana Rouzmehr, UC Berkeley, 2025–2026
- Kendrick Anh Nguyen, UC Berkeley, 2024–2025
- Pedro Juan Shuncax, UC Berkeley, 2024–2025

### Visiting Students

- Chris D.-J. Lin, National Taiwan University, Spr 2025 – Fall 2026
- Guoyi Chen, University of Science and Technology of China, Fall 2024 – Sum 2025
- Yanhan Chen, Kyoto University, Sum 2024
- Yitian Feng, Tsinghua University, Spr–Fall 2024
- Ling Xia, University of Science and Technology of China, Sum 2023

## Invited Talks

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|------------------------------------------------------------------------|----------|
| [27] Invited Showcase Talk, ARMA Symposium, Tucson                     | Jun 2026 |
| [26] Featured Speaker, NSF GAGE/SAGE Community Science Workshop        | May 2025 |
| [25] Geological Seminar, UW-Madison                                    | Apr 2025 |
| [24] Lawrence Livermore National Laboratory GMP Seminar                | Mar 2025 |
| [23] IGPP Seminars, UC Santa Cruz                                      | Dec 2024 |
| [22] Geomechanics and Mitigation of Geohazards Deep Dive: DAS, Caltech | May 2024 |
| [21] Slow-to-Fast Earthquakes Session, JpGU Meeting                    | May 2024 |
| [20] Department Seminar, Tongji University                             | May 2024 |
| [19] Panel: Science in the AI Era, UC Berkeley                         | Nov 2023 |
| [18] BIDMaP AI + Physical Sciences Seminar, UC Berkeley                | Nov 2023 |
| [17] EEPs Department Seminar, Rice University                          | Nov 2023 |

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|------|--------------------------------------------------------------------|----------|
| [16] | Workshop: DAS Advances and ML Techniques, IMAGE 2023               | Sep 2023 |
| [15] | Workshop: Machine Learning & AI, SZ4D                              | Aug 2023 |
| [14] | 4th AI Seismology Conference, China                                | Jul 2023 |
| [13] | Earthquake Science Center Seminars, USGS                           | Jun 2023 |
| [12] | IGPP Seminar Series, UC San Diego                                  | May 2023 |
| [11] | Panel: ML for Real-time Monitoring, SSA                            | Apr 2023 |
| [10] | Earth & Environmental Sciences Seminars, Michigan State University | Apr 2023 |
| [9]  | 13th UJNR Panel for Earthquake Research                            | Sep 2022 |
| [8]  | Plenary Speaker, Computational Science, SCEC                       | Sep 2022 |
| [7]  | Keynote, Geomechanics and Mitigation of Geohazards, Caltech        | Sep 2022 |
| [6]  | EAS Seminar Series, Cornell University                             | Jan 2022 |
| [5]  | Geology Colloquium, UIUC                                           | Dec 2021 |
| [4]  | Department Seminar, Peking University                              | Oct 2021 |
| [3]  | 37th General Assembly, European Seismological Commission           | Sep 2021 |
| [2]  | ESSC Seminars, Chinese University of Hong Kong                     | Aug 2021 |
| [1]  | Seismological Methods and Programs Course, USTC                    | Aug 2021 |

## Grants & Funding

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>DOE, PI</b>                                                                                                                                                             | 2025–2030 |
| Seismic Foundation Model for Integrated Subsurface Monitoring: Pioneering Multi-Modal Learning from Seismic Networks, Borehole Arrays, and Distributed Fiber-Optic Sensing |           |
| <b>NSF, Co-PI</b>                                                                                                                                                          | 2025–2027 |
| Collaborative Research: Investigating Seismogenesis and Faults in Eastern North America Using a Deep Magnitude Earthquake Catalog                                          |           |
| <b>USGS, PI</b>                                                                                                                                                            | 2025–2026 |
| Refining Focal Mechanism Catalogs through a Multi-Task Deep Learning Model for Seismic Arrival Time and Polarity Picking                                                   |           |
| <b>Utah FORGE (DOE), Co-PI</b>                                                                                                                                             | 2024–2027 |
| Cutting-edge Application of Machine Learning, Geomechanics, and Seismology for Real-time Decision-making Tools during Stimulation                                          |           |
| <b>SCEC, PI</b>                                                                                                                                                            | 2025–2026 |
| Temporal and Spatial Creep Variability: Detecting Changes in Fault Behavior in Northern California                                                                         |           |
| <b>SCEC, PI</b>                                                                                                                                                            | 2023–2024 |
| Building a Deep-Learning Training Dataset for Earthquake Monitoring                                                                                                        |           |
| <b>Hellman Fellowship, UC Berkeley, PI</b>                                                                                                                                 | 2025      |
| Hellman Fellows Fund early-career research award                                                                                                                           |           |

## Service

### Departmental Service

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|----------------------------------------------------|--------------|
| Faculty Adviser, Undergraduate Geophysics Major    | 2025–present |
| PhD Qualifying Examination Committees (7 students) | 2023–2026    |

### Conference Organization

|                                                               |          |
|---------------------------------------------------------------|----------|
| Convener, AGU Session: AI in Solid Earth Geoscience           | Dec 2024 |
| Chair, AGU Session: ML-Driven Analysis of Geophysical Signals | Dec 2023 |
| Convener, AGU Session: ML-Based Earthquake Monitoring         | Dec 2022 |

### Editorial Service

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|----------------------------------------------------------------------------|------|
| Guest Editor, Special Issue on AI in Seismology, <i>Earthquake Science</i> | 2021 |
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### Outreach

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|-----------------------------------------------------------------------------------------|----------|
| Instructor, DAS Seismology Workshop, SSA Annual Meeting ( <a href="#">Website</a> )     | Apr 2026 |
| Instructor, Earthquake Catalog Workshop, SSA Annual Meeting ( <a href="#">Website</a> ) | Apr 2026 |
| Instructor, Deep Learning for Seismology Workshop, China                                | Aug 2021 |
| Lecture for Polish High School Visiting Students                                        | Sep 2023 |

**Open Science**

Founder and lead developer of [AI4EPS](#) (Artificial Intelligence for Earth and Planetary Science), an open-source organization whose deep-learning tools for earthquake monitoring are adopted in research and operational seismic catalogs worldwide (1,000+ GitHub stars, 18,000+ views).

*PhaseNet*: deep-neural-network seismic phase picker

*DeepDenoiser*: seismic signal denoising and decomposition

*QuakeFlow*: scalable cloud-based earthquake monitoring workflow

*GAMMA*: Bayesian Gaussian-mixture phase association

*EQNet*: PhaseNet-DAS, deep-learning phase picker for distributed acoustic sensing

*CCTorch*: GPU-accelerated waveform cross-correlation

*ADLoc*: robust earthquake location using RANSAC

**Journal Reviewer**

IEEE Transactions on Geoscience and Remote Sensing; Seismological Research Letters; Geophysical Journal International; Journal of Geophysical Research: Solid Earth; Geophysics; Geophysical Research Letters; Bulletin of the Seismological Society of America; Computers & Geosciences; Scientific Reports; Earth, Planets and Space; Journal of Applied Geophysics; Earthquake Science; IEEE Geoscience and Remote Sensing Letters; Journal of Rock Mechanics and Geotechnical Engineering; Communications Engineering; Earth and Space Science; Engineering Applications of Artificial Intelligence; IEEE Internet of Things Journal; Nature Communications; Tectonophysics; Acta Geophysica; Applied Intelligence; Communications Earth & Environment; Communications Physics; Conference on Neural Information Processing Systems (NeurIPS); Earth and Planetary Science Letters; Earth-Science Reviews; Geochemistry, Geophysics, Geosystems; Geophysical Prospecting; IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing; IEEE Sensors Journal; IEEE Transactions on Neural Networks and Learning Systems; IEEE Transactions on Signal Processing; IET Signal Processing; Journal of Geophysical Research: Earth Surface; Journal of Geophysical Research: Machine Learning and Computation; Journal of Geophysical Research: Planets; Journal of Marine Science and Engineering; Journal of Seismology; Mathematical and Computational Applications; National Science Review; PLOS One; PNAS Nexus; Proceedings of the National Academy of Sciences; Science; Surveys in Geophysics; Sustainable Computing: Informatics and Systems; Volcanica