

Haiyang Liam Kehoe

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1040 E. 4th Street https://seismolo.gy
Tucson, AZ 85721
- Education** University of Arizona Tucson, AZ
Ph.D. Geosciences (GPA: 4.0/4.0) Expected Spring 2022
Advisor: Eric Kiser
- University of California, San Diego La Jolla, CA
B.S. Physics (GPA: 3.3/4.0) Spring 2017
Advisors: Mark Thiemens and Subrata Chakraborty
- Research Appointments** U. S. Geological Survey Golden, CO
Student Trainee (Physical Science) 2021–Present
Supervisors: Morgan Moschetti and Sean Ahdi
- Publications**
4. Kiser, E. D. & **H. L. Kehoe** (2021). The hazard of coseismic gaps: the 2021 Fukushima earthquake. *Geophysical Journal International*, 227 (1), 54–57. <https://doi.org/10.1093/gji/ggab208>
 3. Kiser, E. D., **H. L. Kehoe**, M. Chen, & A. N. Hughes (2021). Lower Mantle Seismicity Following the 2015 M_w 7.9 Bonin Islands Deep-Focus Earthquake. *Geophysical Research Letters*, 48 (13), e2021GL093111. <https://doi.org/10.1029/2021GL093111>
 2. **Kehoe, H. L.** & E. D. Kiser (2020). Evidence of a Supershear Transition Across a Fault Steepland. *Geophysical Research Letters*, 47 (10), e2020GL087400. <https://doi.org/10.1029/2020GL087400>
 1. **Kehoe, H. L.**, E. D. Kiser, & P. G. Okubo (2019). The rupture process of the 2018 M_w 6.9 Hawai'i earthquake as imaged by a genetic algorithm-based back-projection technique. *Geophysical Research Letters*, 46 (5), 2467–2474. <https://doi.org/10.1029/2018GL080397>
- Presentations**
12. Kiser, E. D., **H. L. Kehoe**, M. Chen, A. N. Hughes (2020). Conjugate Faulting, Lower Mantle Seismicity, and Slab Settling Associated with the 2015 Bonin Islands Deep-Focus Earthquake. Poster presentation at the *American Geophysical Union Fall Meeting*, Virtual.
 11. **Kehoe, H. L.**, E. D. Kiser, M. Chen (2020). Four-Dimensional Rupture Processes of Deep-Focus Earthquakes Near Japan. Poster presentation at the *American Geophysical Union Fall Meeting*, Virtual.
 10. Chen, M., Z. Xi, E. D. Kiser, **H. L. Kehoe** (2020). Slab morphology at the source region of the 2015 M_w 7.9 Bonin earthquake imaged by full waveform inversion. Poster presentation at the *American Geophysical Union Fall Meeting*, Virtual.
 9. **Kehoe, H. L.** & E. D. Kiser (2020). Supershear Transition Across a Fault Steepland Observed During the 2017 Magnitude 7.7 Komandorsky Islands Earthquake. Oral presentation at the *University of Arizona Virtual Geosciences Symposium*, Tucson, AZ.
 8. **Kehoe, H. L.** & E. D. Kiser (2019). A Genetic Algorithm-Based Back-Projection Method Reveals the Bilateral and Supershear Rupture of the 2017 M_w 7.8 Komandorsky Islands Earthquake. Poster presentation at the *American Geophysical Union Fall Meeting*, San Francisco, CA.

7. **Kehoe, H. L.**, E. D. Kiser, & P. G. Okubo (2019). Complex Rupture Properties of the 2018 Mw 6.9 Hawai'i Earthquake as Imaged by a Genetic Algorithm-Based Back-Projection Technique. Oral presentation at the *University of Arizona Geosciences Symposium*, Tucson, AZ.
6. **Kehoe, H. L.**, E. D. Kiser, & P. G. Okubo (2018). The Rupture Process of the 2018 Mw 6.9 Hawai'i Earthquake as Revealed by a Genetic Algorithm-Based Source Imaging Technique. Oral presentation at the *American Geophysical Union Fall Meeting*, Washington, DC.
5. **Kehoe, H. L.** & E. D. Kiser (2018). Back-Projection Results of the 4 May 2018 Hawai'i Earthquake using a Genetically Optimized Sub-Array Selection Scheme. Poster presentation at the *IRIS Workshop*, Albuquerque, NM.
4. **Kehoe, H. L.** & E. D. Kiser (2018). Genetic Algorithm Optimization Applied to Back-Projection Sub-Array Selection. Poster presentation at the *University of Arizona Geosciences Symposium*, Tucson, AZ.
3. **Kehoe, H. L.**, S. Chakraborty, T. L. C. Pham, E. Alvarado, & M. H. Thiemens (2016). $\Delta^{17}\text{O}$ Trends of Collected Atmospheric CO_2 Resulting from Seasonal Changes in the Biosphere. Poster presentation at the *American Geophysical Union Fall Meeting*, San Francisco, CA.
2. **Kehoe, H. L.** & S. Chakraborty (2016). Synthesis of Oxides over a Dust Surface Analog. Oral presentation at the *29th UC San Diego Undergraduate Research Conference*, La Jolla, CA.
1. Chakraborty S., **H. L. Kehoe**, & M. H. Thiemens (2016). New Experimental Evidence of Silicate Formation with Meteorite Like Oxygen Isotopes on a Dust Surface Analog. Oral Presentation at the *Lunar Planetary Science Conference XXXXVII*, Houston, TX.

Awards	James D. and Stella M. Robertson Scholarship, SEG	2021
	Best Overall Presentation, UA Geosciences Symposium	2020
	UA GPSC Travel Grant	2018, 2019
	Best Geophysics Talk, UA Geosciences Symposium	2019
	IRIS Workshop Student Scholarship	2018
	Best Overall Poster, UA Geosciences Symposium	2018
	UA Graduate Access Fellowship	2017
	Lee Davis Family and Sulzer Scholarship, UA	2017
	Provost Honors, UC San Diego	2015, 2016, 2017
	UC San Diego Physics Chair's Challenge	2016
Excellence in Research and Presentation, UC San Diego	2016	
Teaching Experience	Teaching Assistant (UA):	
	GEOS 322: Introduction to Geophysics	Spring 2018
	GEOS 212: Introduction to Oceanography	Fall 2018
Field Experience	Lassen Volcanic National Park Nodal Experiment	2019
	White Wolf Fault Active Source Nodal Experiment	2019
	Grand Teton National Park Nodal Experiment	2018
	Raton, New Mexico Nodal Experiment	2018
	Joshua Tree National Monument Nodal Experiment	2017
Service	UA GPSC Grant Judge	2019–Present
	UA GeoClub President	2019–2021
	UA GPSC Student Showcase Judge	2020
	UA WiSSC Grant Judge	2020

(Current as of 5 October 2021)