Haiyang Liam Kehoe

Contact Department of Geosciences

(520) 222-8912

University of Arizona 1040 E. 4th Street Tucson, AZ 85721

hlkehoe@email.arizona.edu https://seismolo.gy

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 B.S. Physics (GPA: 3.3/4.0)

La Jolla, CA Spring 2017

Advisors: Mark Thiemens and Subrata Chakraborty

Publications

- 2. **Kehoe, H. L.**, & E. D. Kiser (2020). Evidence of a Supershear Transition Across a Fault Stepover. Geophysical Research Letters, 47, 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 algorithmbased back-projection technique. Geophysical Research Letters, 46, 2467–2474. https://doi.org/10.1029/2018GL080397

- Presentiations 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 Mw 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 Stepover Observed During the 2017 Magnitude 7.7 Komandorsky Islands Earthquake. Oral presentation at the University of Arizona Virtual Geosciences Symposium, Tucson,
 - 8. Kehoe, H. L. & E. D. Kiser (2019). A Genetic Algorithm-Based Back-Projection Method Reveals the Bilateral and Supershear Rupture of the 2017 Mw 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.
- Kehoe, H. L., S. Chakraborty, T. L. C. Pham, E. Alvarado, & M. H. Thiemens (2016).
 Δ¹⁷O Trends of Collected Atmospheric CO₂ 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	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	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	Teaching Assistant (UA):	
Experience	GEOS 322: Introduction to Geophysics	Spring 2018
	GEOS 212: Introduction to Oceanography	Fall 2018
Field	Lassen Volcanic National Park Nodal Experiment	2019
Experience	White Wolf Fault Active Source Nodal Experiment	2019
1	Grand Teton National Park Nodal Experiment	2018
	Raton, New Mexico Nodal Experiment	2018
	Joshua Tree National Monument Nodal Experiment	2017
Service	UA WiSSC Grant Judge	2020-Present
	UA GPSC Student Showcase Judge	2020-Present
	UA GeoClub President	2019–Present
	UA GPSC Grant Judge	2019–Present

(Current as of 5 February 2021)