# KAITLIN ELIZABETH SCHAIBLE

Graduate Student • University of Texas Institute for Geophysics • Jackson School of Geosciences

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#### **RESEARCH INTERESTS**

Understand the spatial and temporal evolution of stress in subduction zones and along the primary plate interface through direct stress measurements and numerical modeling. Conduct laboratory experiments on materials recovered from international ocean drilling expeditions to investigate the material properties and mechanics of subduction zone sediments.

#### **EDUCATION**

#### University of Texas at Austin

PhD Candidate, Geophysics Advisor: Demian Saffer PhD Topic: Multidisciplinary investigation of stress in subduction zones through wellbore breakout analysis, numerical modeling of stress, and laboratory testing of natural subduction zone materials. Cumulative GPA: 4.0/4.0

## Carleton College, Northfield, MN

Bachelor of Arts, Geology Magna Cum Laude, Phi Beta Kappa Cumulative GPA: 3.83/4.0

#### HONORS AND AWARDS

2022 2018	AGU Outstanding Student Presentation Award Littell Internship Award		
RESEARCH AND FIELD EXPERIENCE			
2023	CK23-03, D/V Chikyu Planned participation as part of the science party for the borehole observation installation in the Nankai Trough, November 2023.	25 days tory	
2023	TN415 CORKs, R/V Thompson, ROV Jason Chief Scientist: E. Solomon. Performed watch duties during instrument deployment and recovery at CORK observatories with ROV Jason.	14 days	
2021	Civil Engineering Field and Laboratory Technician Conducted geotechnical site inspections and aggregate testing.	2 years	
2020	Electrical Resistivity field survey, THG Geophysics Conducted site surveys for a prospective wind turbine installation.	9 days	

2026 (anticipated)

June 2019

2018	Lake Powell Coring	14 days
	Chief Scientist: S. A. Hynek. Assisted with sediment core processing and	
	characterization during drilling operations. Collected water samples and	
	conducted grain size analysis.	

2018 Geology of New Zealand Field Course and Mapping

70 days

### PUBLICATIONS AND PRESENTATIONS

**Schaible, K**., & Saffer, D.M., (2023) In situ stress within the Nankai accretionary prism determined from borehole breakouts, *IODP NanTroSEIZE Synthesis Workshop* (Talk)

Schaible, K., Heidari, M., Saffer, D.M., Flemings, P.B., (2023) Revisiting stress determinations from borehole breakouts at subduction zones: the role of plastic failure, *AGU Fall Meeting Abstracts* 

Bolton, D.C., Shreedharan, S., **Schaible, K**., Saffer, D.M., Trugman, D.T., (2023) Insights into the physics of earthquake rupture from a 1-meter earthquake machine, *AGU Fall Meeting Abstracts* (Poster)

Schaible, K., & Saffer, D.M., (2022) In situ stress within the Nankai accretionary prism determined from borehole breakouts, *AGU Fall Meeting Abstracts*, T32E-0211 (Poster)

## In Preparation

Schaible, K., & Saffer, D.M., (2023) In situ stress within the Nankai accretionary prism determined from borehole breakouts and implications for fault strength. *In prep*.

# RELEVANT COURSEWORK

Python for Geoscience Research, Crustal Geofluids, Reservoir Geomechanics, Continuum Mechanics, Numerical Modeling in Geosciences, Marine Geophysics Field Course, Multivariable Calculus, Linear Algebra

#### SKILLS

Python, MATLAB, Java, R, ArcGIS, Adobe Illustrator, Microsoft Office, Geolog, Kingdom Suite

# WORKSHOPS AND SHORT COURSES

[2023] MTMOD Megathrust Modeling Framework Summer School, Austin, TX

- [2022] SZ4D Community Meeting, Houston, TX
- [2022] MTMOD Megathrust Modeling Framework Summer School, Austin, TX