STEPHANIE OLINGER

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EDUCATION AND POSITIONS

Ph.D Candidate in Glacial Seismology 2018 - Present
Harvard University
Department of Earth and Planetary Sciences

Affiliate 2021 - Present
University of Washington
Department of Earth and Space Sciences

B.A. in Geophysics 2014 - 2018
Washington University in St. Louis
Department of Earth and Planetary Sciences

RESEARCH INTERESTS

Seismology	Glacier seismicity, ice shelf resonance, flexural gravity waves, ambient noise
Ice Dynamics	Ice shelf flexure, fracture processes, fluid/fracture interaction
Machine Learning	Timeseries clustering, signal detection, image analysis

SKILLS

Languages	Matlab, Python, Julia
Software & Tools	ObsPy, SpecFEM2D, ISSM, SAC, Antelope, ArcGIS
Instruments & Field Experience	Distributed acoustic sensing (DAS), active & passive seismic, gravitometer, resistivity meter, magnetometer

PUBLICATIONS

[1] S. D. Olinger et al. "Tracking the Cracking: A Holistic Analysis of Rapid Ice Shelf Fracture Using Seismology, Geodesy, and Satellite Imagery on the Pine Island Glacier Ice Shelf, West Antarctica". In: *Geophysical Research Letters* 49.10 (May 2022), pp. 6644–6652. DOI: 10.1029/2021GL097604.

[2] S. D. Olinger et al. "Tidal and Thermal Stresses Drive Seismicity Along a Major Ross Ice Shelf Rift". In: *Geophysical Research Letters* 46.12 (June 2019), pp. 6644–6652. DOI: 10.1029/2019gl082842.

[3] Z. Chen et al. "Ross Ice Shelf Icequakes Associated With Ocean Gravity Wave Activity". In: *Geophysical Research Letters* 46.15 (Aug. 2019), pp. 8893–8902. DOI: 10.1029/2019gl084123.

AWARDS

Outstanding Student Presentation Award (AGU 2018)