

TYLER NEWTON

Department of Earth Sciences
1272 University of Oregon
Eugene, OR 97403-1272

CV updated December 29, 2020
Email: tnewton@uoregon.edu
Website: tnewton.com

Scholar: [UtN0rwYAAAAJ](https://orcid.org/0009-0001-8000-0000)
LinkedIn: [tylerjnewton](https://www.linkedin.com/in/tylerjnewton)
Github: [tjnewton](https://github.com/tjnewton)

EDUCATION:

Ph.D. Earth Sciences, University of Oregon, *in progress* (2016-present)
B.S. Geology with Honors, University of Maryland, 2013

RESEARCH APPOINTMENTS:

Graduate Student Researcher	- University of Oregon	2016-present
Visiting Graduate Student Researcher	- University of Washington	2017, 2018
Undergraduate Research Assistant	- University of Maryland	2011-2013
Intern (InFOCμS group)	- NASA Goddard Space Flight Center	2011

TEACHING APPOINTMENTS:

Teaching Assistant	- University of Oregon	2016-present
--------------------	------------------------	--------------

- Courses: Advanced Computational Earth Science, Fault Mechanics, Tectonics, Introductory Earth Science*

PROFESSIONAL APPOINTMENTS:

Intern	- Pacific Northwest Seismic Network	2020-2020
Consultant	- Environmental Resources Management Inc.	2013-2016
Machinist	- Kelco Inc.	2008-2011

PEER-REVIEWED ARTICLES:

- Newton, T. J.**, Weldon, R. Miller, I. M., Schmidt, D., Mauger, G., Morgan, H., Grossman, E. (in review). An Assessment of Vertical Land Movement to Support Coastal Hazards Planning in Washington State. *Water*.
- Newton, T. J.**, Thomas, A. M. (2020). Stress Orientations in the Nankai Trough Constrained Using Seismic and Aseismic Slip. *Journal of Geophysical Research: Solid Earth*. <https://doi.org/10.1029/2020JB019841>

NON-REFEREED REPORTS:

- Miller, I. M., Morgan, H., Mauger, G., **Newton, T.**, Weldon, R., Schmidt, D., Welch, M., Grossman, E. (2018). Projected Sea Level Rise for Washington State – A 2018 Assessment. *Prepared for the Washington Coastal Resilience Project*.
- Newton, T.** (2013). Geochemistry of the Timberville Zn-Pb District, Rockingham County, VA. *University of Maryland Honors Bachelor of Science Thesis*. Advisors: McDonough, W.F., Candela, P.A., Piccoli, P.M.

HARDWARE & CITABLE SOFTWARE:

- Uieda, L., Dongdong, T., Leong, W. J., Toney, L., **Newton, T.**, Wessel, P. (2020). PyGMT: A Python interface for the Generic Mapping Tools. *Zenodo*. <https://doi.org/10.5281/zenodo.425345>
- Newton, T. J.** (2018) *Research tool*. Positioning device for 3-component nodal seismometers.

DISTINCTIONS:

2020: Smith Scholarship, UO Research Recognition Award
2019: IRIS/UNAVCO Earth in 4D Travel Scholarship, ASPRS Photogrammetry Scholarship, Wikipedia Scientist Fellowship
2018: Stovall Fellowship, UO Special Opps Travel Award
2017: Weiser Scholarship, Marthe E. Smith Memorial Science Scholarship

DISTINCTIONS (continued):

2013: University of Maryland Excel Research Scholarship

2012: Mineralogical Society of America Undergraduate Award

2011: NASA Certificate of Appreciation (InFOCμS)

FIRST AUTHOR CONFERENCE PRESENTATIONS:

Relating Microseismicity to Fault Geometry at the Rattlesnake Ridge Landslide

Newton, T. J., Thomas, A. M., DeLong, S. B., Pickering, A. J.

2019 poster at the American Geophysical Union meeting, San Francisco, CA

Vertical Land Motion in Western Washington: Separating Cascadia Locking from Other Sources

Newton, T. J., Weldon R. J., Schmidt D. A., Miller I. M.

2019 poster at the Seismological Society of America meeting, Seattle, WA

Stress Regime of the Nankai Trough Megathrust: A Stress Analysis Incorporating Geodetic and Seismic Fault Slip

Newton, T. J., Lin J-T., Thomas A.

2019 poster at the Seismological Society of America meeting, Seattle, WA

Stress regime of the Nankai trough

Newton, T. J., Thomas A. M.

2018 poster at the International Joint Workshop on Slow Earthquakes, Fukuoka, Japan

Stress orientations in the Nankai trough region of Japan

Newton, T. J., Thomas A. M., Bletery Q.

2017 poster at the American Geophysical Union meeting, New Orleans, LA

A multi-methods approach for assessing vertical land motion in coastal Washington

Newton T. J., Weldon R., Welch M., Schmidt D., Miller I., Mauger G., Grossman E.

2017 talk at Northwest Climate Conference, Tacoma, WA

FIELD EXPERIENCE:

Pacific Northwest Seismic Network Internship (July-October 2020)

Installed solar-powered broadband ShakeAlert station (station ID: JAZZ).

Rattlesnake Ridge Landslide (2018-2019)

Deployed 40 Fairfield Nodal 5 Hz 3C seismometers for a continuous four-month period. Assisted with terrestrial LiDAR scans.

Cholame Dense Array Experiment (July-October 2018)

Deployed 80 Fairfield Nodal 5 Hz 3C seismometers for a continuous three-month period.

Environmental Resources Management (2013-2016)

Extensive experience organizing and implementing field campaigns focused on the remediation of contaminated sites. Served as field safety officer and subsurface clearance specialist.

SERVICE:

- Reviewer (n=15), Copy Editor (n=8), Ask-A-Scientist (n=1), *Journal of Emerging Investigators*, (2019-present)
- Graduate Student Representative, *University of Oregon, Department of Earth Science*, (2019-2020)
- Graduate Student Liaison, *University of Oregon Earth Sciences Honor Society*, (2017-2019)
- Mentoring: Conrad Nielsen (UO Undergraduate, IgDEAS program, 2020-present), Cadie Cagle (UO Undergraduate, JUMP program, 2019-2020), Alice Yeager (UO Undergraduate, JUMP program, 2019), Ty Amorosano (McGill University, IRIS Summer Intern, 2018)

TECHNOLOGIES:

Languages: Python, C, MATLAB

Python Frameworks: NumPy, pandas, matplotlib, ObsPy, Pyrocko, PyGMT

Other: bash, Git, Vim, Conda, Jupyter, L^AT_EX, GMT, MacOS, Linux