Leah Salditch

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Ph.D., **Earth & Planetary Sciences,** Northwestern University, *expected June 2021,* Research focus: Earthquake Hazards
M.S., **Statistics,** Northwestern University, *expected June 2021*
*M.S., **Geosciences**,* University of Texas at Dallas, May 2016
B.A., *cum laude,* **Anthropology,** American University, December 2009

PUBLICATIONS

Hough, S.E., Page, M., **Salditch, L.,** Gallahue, M.M., Lucas, M.C., Neely, J.S., and Stein, S. (*In prep.*) Revisiting California's Past Great Earthquakes and Long-Term Earthquake Rate. Seismological Research Letters.

Salditch, L., Gallahue, M.M., Lucas, M.C., Neely, J.S., Hough, S.E., and Stein, S. (2020, *In press*). California Historical Intensity Mapping Project (CHIMP): a consistently re-interpreted dataset of maximum shaking for the past 162 years and implications for PSHA. Seismological Research Letters.

Salditch, L., Stein, S., Neely, J., Spencer, B.D., Agnon, A., and Liu, M. (2020). Earthquake Supercycles and Long-Term Fault Memory. Tectonophysics. Vol. 774, 228289. doi: https://doi.org/10.1016/j.tecto.2019.228289.

Brooks, E.M., Neely, J., Stein, S., Spencer, B.D., and **Salditch, L.** (2019). Assessments of the Performance of the 2017 One-Year Seismic-Hazard Forecast for the Central and Eastern United States via Simulated Earthquake Shaking Data. Seismological Research Letters. 90(3), p. 1155-1167. doi: 10.1785/0220190007

Salditch, L., Hough, S.E., Stein, S., Spencer, B.D., Brooks, E.M., Neely, J.S. and Lucas, M.C. (2018). The 1952 Kern County, California earthquake: A case study of issues in the analysis of historical intensity data for estimation of source parameters. Physics of the Earth and Planetary Interiors. Vol. 283, p. 140-151, doi: 10.1016/j.pepi.2018.08.007.

Brooks, E.M., Stein, S., Spencer, B.D., **Salditch, L.**, Petersen, M.D., and McNamara, D.E. (2017). Assessing Earthquake Hazard Map Performance for Natural and Induced Seismicity in the Central and Eastern United States. Seismological Research Letters. Vol. 89(1), p. 118–126, doi: 10.1785/ 0220170124.

Stein, S., **Salditch, L.**, Brooks, E.M., Spencer, B.D., and Campbell, M. (2017). Is the Coast Toast? Exploring Cascadia Earthquake Probabilities. GSA Today, Vol. 27(11).

EXPERIENCE

Graduate Research and Teaching Assistant, Northwestern University, Evanston, IL, *September 2016 – current*
Conduct scientific research into Probabilistic Seismic Hazard Assessment map performance, historical seismic intensity in California, and earthquake cycle probability models under the advisement of Prof. of geophysics Seth Stein, Dr. Susan Hough of the USGS, Prof. of statistics Bruce Spencer, and Prof. of geosystems engineering at UC Berkeley Norm Abrahamson. Publish findings in scientific journals and present research at professional conferences. Teach laboratory sections of 20 students, grade assignments, tutor in office hours, assist in field activities for: The Ocean, The Atmosphere, & Our Climate (EARTH 106); Earth's Interior (EARTH 202).

SCHOLARSHIPS, AWARDS, & GRANTS

American Geophysical Union Centennial Celebrate 100 **Grant,** *2019*
Seismological Society of America Global Student Travel **Grant,** *2019*
Northwestern Institute for Policy Research Graduate **Fellow**, *2018-2020*

North-Central Section Student Travel **Grant**, GSA Annual Meeting, *2018*
Student **Scholarship**, Enrico Fermi School of Physics, Varenna, Italy, *2018*
Student Travel **Grant**, AGU Natural Hazards Focus Group, *2017*
Student Travel **Grant**, GSA Annual Meeting, *2017*
Student **Fellowship**, PSHA Workshop, Lenzburg, Switzerland, *2017*
Student Presentation **Award**, Seismological Society of America, *2017*
UT Dallas Selden Leavell **Scholarship**, *2016*
Pioneer Natural Resources Geoscience **Scholarship**, *2015–2016*

PRESS COVERAGE

Seismological Society of America at Work: Leah Salditch, 2019.
https://www.seismosoc.org/news/at-work-leah-salditch/

"Doctoral Students Hunt for Seismic Memories," Northwestern Magazine, 2019.
https://magazine.northwestern.edu/news/doctoral-students-hunt-for-seismic-memories

The Graduate School Spotlight Series: Leah Salditch, 2019.
https://www.tgs.northwestern.edu/about/our-people/spotlight/leah-salditch.html

SERVICE

SSA Meeting Committee Member, 2019-present
Advisor to annual meeting organizers on the selection of topical sessions and workshops.

AGU Student/Early Career Representative, **Natural Hazards Section**, 2016-present.
Technical session chair, field trip organizer, outreach content creator, advocate for section student issues.

Panel Moderator, AGU Fall Meeting, San Francisco, December 2019
Moderator for AGU Centennial Interdisciplinary Careers Panel.

Panel Moderator, AGU Fall Meeting, Washington, D.C., December 2018
Moderator for IUGG-AGU Centennial Symposium panel on Disaster Science: Risk Reduction, Resilience, Response, and Recovery.

NU Graduate Leadership and Advocacy Council Earth Department Representative, 2016 - present
Advocate for issues of students in my home department.

SELECTED PRESENTATIONS

Salditch, L., Stein, S., Neely, J., Spencer, B.D., (2019). Issues in Characterization of Earthquake Sequences by Aperiodicity and Long-Term Fault Memory. AGU Fall Meeting, San Francisco.

Salditch, L., Stein, S., Neely, J., Spencer, B.D., Brooks, E.M., Liu, M. (2019). Updating the Traditional Earthquake Cycle Model Using Long-Term Fault Memory and Implications for Improved Earthquake Hazard Assessment. AGU Fall Meeting, San Francisco.

Salditch, L., Stein, S., Neely, J., Spencer, B.D. (2019). Reconciling seismologic and paleoseismologic views of earthquake supercycles via long-term fault memory. 7th International Colloquium on Historical Earthquakes & Paleoseismology Studies, Barcelona.