



Megan L. Anderson, Ph.D.

Earthquake Geologist/Geophysicist

Megan is a geophysicist in the Survey's seismic hazards section. She primarily applies geophysics to map active faults and create new geologic maps. Field mapping of potential field anomalies forms the core of her investigations, but her projects are multi-disciplinary because she believes the most powerful interpretations of geophysical data include multiple data types. She has a variety of other interests in structure, kinematics, and dynamics of tectonic regions from the upper mantle through the crust, particularly in subduction zone settings.

Job Responsibilities

Fault mapping, geological mapping, field collection and analysis of gravity and magnetic data, building Washington's tectonic framework, supporting seismic hazard assessment and preparation for Washington communities.

Professional Interests

Active tectonics, subduction zones, active faults, earthquakes and earthquake hazards, seismicity, plate kinematics and dynamics, mountain building, basement-involved uplifts.

Skills

Field equipment: gravimeter, magnetometer, broadband seismometer, active source seismology, multi-node electrical resistivity, campaign GPS, Trimble and Javad GPS systems; GIS: Oasis/Montaj, GMT, ArcGIS, Gaia GPS; Modeling & Seismology: GmSYS, Move, SAC, Focmec, SplitLab, TauP, HypoDD, Gmel; Programming: UNIX, scripting languages, Matlab; Office: Adobe products, Microsoft products.

Professional Experience

- Associate Professor, The Colorado College, Colorado Springs, CO
- Mendenhall Postdoctoral Fellow, USGS, Menlo Park, CA
- NSF Graduate Research Fellow, University of Arizona, Tucson, AZ

Education

- Ph.D. Geosciences, concentration in Geophysics, University of Arizona, Tucson, AZ
- B.A. Geology, Carleton College, Northfield, MN

Personal Interests

Hiking, canyoneering, road and mountain biking, running, swimming, packrafting, van-life with my family (including the cat), gardening, cooking, canning, crochet, history, democracy, U.S. justice system.



The gravimeter goes here!
Risky benchmark gravity reading: a bridge abutment outside the rail. Oh the lengths I go for good data.