Joshua C. Stachnik

Dept. of Geology and Geophysics University of Wyoming 1000 E. University Ave. Laramie, WY 82071 PO Box 1531 Laramie, WY 82073 (307) 399-7392 (C) jstachni@uwyo.edu

EDUCATION

- Ph.D. Geophysics. University of Wyoming, Jan. 2006-present. Topics: Global seismology. Crustal evolution, growth, and structure. Advisor: Ken Dueker
- M.A. Earth Sciences. Boston University, 2002. Thesis: Seismic Attenuation in Central Alaska Advisor: Geoffrey A. Abers
- B.S. Geological Engineering. Michigan Technological University, 1999.

Computer and Technical Skills

- ♦ Scripting/Programming. UNIX Bourne/CSH shell, sed, awk, Perl, Tcl, Matlab, C, Fortran.
- ♦ Seismological Software. Antelope (ARTS, ASIS), SAC.
- ♦ Computer Administration. Linux (UNIX), Network (TCP/IP, Cisco OS).
- ♦ Productivity Software. GMT, LATEX, HTML, OpenOffice, etc.
- ♦ Seismic Instrumentation. Quanterra, Kinemetrics, Guralp, Reftek.
- ◊ Other Equipment. Spread-spectrum radios, serial servers, wireless technology (802.11b/g), Analog telemetry equipment.

WORK EXPERIENCE

Seismology Support Staff, 2005-present.

Alaska Earthquake Information Center (AEIC), University of Alaska Fairbanks, Geophysical Institute, Fairbanks, AK.

Ongoing software development and maintenance for AEIC as needed.

Staff Seismologist/Data Manager, 2002-2005.

Alaska Earthquake Information Center (AEIC), University of Alaska Fairbanks, Geophysical Institute, Fairbanks, AK.

AEIC collects near-real-time seismic data from over 400 stations throughout Alaska, Canada, Russia, and Japan; and maintains over 200 remote stations in Alaska. Duties include selecting equipment and installing new sites in remote locations; developing software for data acquisition; and improving seismic event detection, notification, and location techniques. Responsible for data quality control and designing new tools for analyst data user interface. Familiar with new technology related to seismic instrumentation, radio telemetry, computers, and networking.

Research and Teaching Experience

Graduate Research Assistant. University of Wyoming, Jan. 2006 - present.

Teaching Fellow. University of Wyoming, Intro. Geophysics (currently), Phys. Geology (Fall 2006).

Graduate Research Assistant. Boston University, 2000 - 2002.

Teaching Fellow. Boston University, Hydrology, Spring 2001.

Student Research Assistant. Michigan Technological University, 1998-1999.

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FIELD WORK

- $\diamond\,$ seismic station maintenance for IRIS/PASSCAL BATHOLITHS project in western British Columbia, Canada (2006).
- $\diamond\,$ installation, ongoing maintenance, and problem trouble shooting for 200 station regional seismic network in Alaska (2002-2005).
- ◊ site selection, field deployment, station maintenance, and database management for IRIS/PASSCAL RAMP deployment following M7.9 Denali Fault earthquake (2002-2003).
- \diamond field deployment and station maintenance for IRIS/PASSCAL Broadband Experiment Across the Alaska Range (BEAAR) (1999-2001).
- ◊ structural geology mapping in central Argentina (spring 2001).
- ♦ IRIS/PASSCAL summer intern assisting initial BEAAR deployment (1999).
- ♦ field geology and geophysics courses, Michigan Technological University(1999).

HONORS AND PROFESSIONAL ACTIVITES

2001-present	Member of Sigma Xi, The Scientific Research Society
2000-present	Member of American Geophysical Union and Seismological Society of America
1995-1999	Dean's List (GPA 3.5+), Michigan Technological University

SELECTED PUBLICATIONS

- Stachnik J C, K G Dueker, D L Schutt, and H Yuan. "Imaging Yellowstone plume-lithosphere interactions from inversion of ballistic-diffusive Rayleigh wave and crustal thickness constraints." *Geochemistry*, *Geophysics, Geosystems* (2008). In preparation.
- Stachnik J C, G A Abers, and D H Christensen. "Seismic attenuation and mantle wedge temperatures in the Alaska subduction zone." Journal of Geophysical Research (Solid Earth) 109 (2004).
- Ratchovski N A, R A Hansen, **J C Stachnik**, and et al. "Aftershock sequence of the Mw 7.9 Denali, Alaska, earthquake of 3 November 2002 from regional seismic network data." *Seismological Research Letters* **74**, 743–752 (2003).

References

References available upon request.