

Brady Flinchum

1253 N. 18th Street Laramie, WY 82072

Phone: 775-772-8239 E-Mail: bflinch1@uwyo.edu

Education

M.S. University of Wyoming

Expected Graduation 2015
Advisor: Steven W. Holbrook
GPA: 3.526

I am using electrical resistivity, ground penetrating radar, seismic refraction, and magnetic methods to quantify regolith thickness in various granitic terrains. The objective is to integrate geochemical, mineralogical, and biological data to better understand the process of granitic weathering.

I am also working on substantiating the already present evidence of hydrocarbon plumes within the water column by using traditionally acquired seismic data (10 – 100 Hz).

B.S. University of Nevada Reno

2008-2012
GPA: 3.418

I received my bachelor's of science from the University of Nevada Reno with a major in geophysics and a minor in electrical engineering

Professional Experience

Multi-Phase Technologies, LLC

2011-2012
Chief Scientist: Douglas J. LaBrecque

I processed and interpreted electrical resistivity tomography (ERT) and magnetometric resistivity (MMR) data. I worked on projects such as: abandoned mine tunnel location, monitoring thermal changes, and carbon sequestration time-lapse imaging.

Research Experience

Nevada Seismological Laboratory

2009-2011

I simulated basin response for probable earthquakes in the Las Vegas basin using a deterministic computer-modeling program.

Incorporated Research Institutions for Seismology

Summer 2011

I worked on a semi-automated location algorithm to find and locate tremor that was triggered by teleseismic events.

Skills

- Familiar with many different computer languages including: Java, Python, C++, MATLAB, and Visual Basic.
- Proficient with programs such as: MATLAB, Generic Mapping Tools (GMT), Earth Imager, OpendTect, and Linux/Unix systems.

Publications

Flinchum B., Savran, W. H., Smith, K. D., Louie, J. N., Pullammanappallil, S. K., And Pancha, A. (2013), Validation of Las Vegas basin response to the 1992 Little Skull Mtn. earthquake as predicted by physics-based Nevada ShakeZoning computations, accepted to *Bulletin of Seismological Society of America*, October 8.

Submitted Abstracts and Presentations

Flinchum B., W.S. Holbrook, B. Carr, S. N. Miller, J. St. Clair, J. Vithanage, (2013). Surface-groundwater interactions mediated by fractures: seismic refraction and electrical resistivity results from the Laramie Range, Wyoming, presented at American Geophysical Union Annual Meeting, San Francisco, December 12.

Flinchum B., W.S. Holbrook, M. Provar, B. Carr, (2013). Geophysical investigation of variability in granite weathering thickness, Laramie Range, Wyoming, presented at Geological Society of America Annual Meeting, Denver, October 28.

Flinchum B., W.S. Holbrook, M. Provar, B. Carr, (2013). Preliminary geophysical results from an elevation transect in the Southern Sierra CZO, presented at Deep Critical Zone: Drilling, Sampling and Imaging workshop, Denver, October 24-26.

Flinchum B., W. H. Savran, K. D. Smith, J. N. Louie, S. K. Pullammanappallil, And A. Pancha, (2012). Validation of Las Vegas basin response to the 1992 Little Skull Mtn. earthquake as predicted by physics-based Nevada ShakeZoning computations, presented at *Seismological Society of America Annual Meeting*, San Diego, April 17.

Flinchum, M. Brudzinski (2011), Non-volcanic Tremor Triggered by Teleseismic Surface Waves in South-Central Alaska, Abstract 1210130 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec

Labrecque, D., **B. Flinchum**, R. Brigham, N. Pendrigh, P. Sirles, and P. Ivancie (2013), Application of borehole magnetometric resistivity (BMR) for tunnel detection at the Captain Jack Mine, *Proceedings of SAGEEP*, 2013

Labrecque, D., D. Casale, R. Brigham, **B. Flinchum**, (2013), A Multi-Source Approach for Electrical Resistivity Tomography, *Proceedings of SAGEEP*, 2013

LaBrecque, D., R. Brigham, **B. Flinchum**, N. Pendrigh, P. Sirles, P. Ivancie, and M. Momayez (2012), Using ERT to locate a historical mine tunnel, *Proceedings of SAGEEP*, 2012

Savran, **B. Flinchum**, G. Plank, C. Dudley, N. Prina, and J. N. Louie, 2011, Comparing physics-based Next-Level ShakeZoning computations with USGS ShakeMap statistics for So. Nevada earthquake scenarios: presented at the *Symposium on Engineering Geology and Geotechnical Engineering (EGGE)* Las Vegas, NV, Mar. 25.