

## Amanda L. Booth

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### EDUCATION

- 2001-2006      **Stanford University**, Stanford, CA  
Ph.D. in Geology
- 1997-2001      **California Institute of Technology**, Pasadena, CA  
B.S. in Geochemistry

DISSERTATION: “Influence of river erosion on the metamorphic architecture of the eastern Himalayan syntaxis: a petrologic and geochronologic study”

Advisor: Dr. C. Page Chamberlain

This project combines U-Pb geochronology, metamorphic petrology and stable isotope geochemistry to analyze how river erosion influences the evolution of a deforming orogen.

### PROFESSIONAL EXPERIENCE

2006 – present **Postdoctoral Research Associate**, Alaska Stable Isotope Facility, University of Alaska, Fairbanks. Reconstructing Holocene paleotemperatures through stable isotope analysis of Arctic lake sediments

2003      **Research Assistant**, Stanford University, Stable Isotope Biogeochemistry Lab  
Performed oxygen isotopic analyses of carbonates (using a Gasbench II online to Delta Plus XL mass spec), and silicates (IR laser fluorination online to MAT 252 mass spec)

2001      **Research Assistant**, USGS, Alaska Biological Science Center  
Assisted with data collection and analysis for Cook Inlet seabird study, funded by Exxon Valdez

### PUBLICATIONS

Booth, A.L., Chamberlain, C.P., Kidd, W.S.F., Zeitler, P.K. (in press) Metamorphic and geochronologic constraints on the tectonic evolution of the eastern Himalayan syntaxis, Namche Barwa: GSA Bulletin.

Booth, A.L., Kolodny, Y., Chamberlain, C.P., McWilliams, M., Schmitt, A., and Wooden, J., 2005, Oxygen isotopic composition and U-Pb discordance in zircon: *Geochimica et Cosmochimica Acta*, v. 69, p. 4895-4905.

Booth, A.L., Zeitler, P.K., Kidd, W.S.F., Wooden, J., Lui, Y., Idleman, B., Hren, M., and Chamberlain, C.P., 2004, U-Pb zircon constraints on the tectonic evolution of southeastern Tibet, Namche Barwa area: *American Journal of Science*, v. 304, p. 889-929.

## ABSTRACTS

Booth, A.L., Chamberlain, C.P., and Kidd, W.S.F., 2005, Pressure-temperature conditions and timing of metamorphism at Namche Barwa, eastern Himalayan syntaxis, SE Tibet: *Geological Society of America, Abstracts with Programs*, v. 37, no. 7, p. 89.

Booth, A.L., Kolodny, Y., and Chamberlain, C.P., 2004, Oxygen isotopic composition and U-Pb discordance in zircon: *Eos Transactions AGU*, v. 85, no. 47, F1926.

Booth, A.L., Zeitler, P.K., Kidd, W.S.F., Wooden, J., Idleman, B., Lui, Y., and Chamberlain, C.P., 2003, U-Pb zircon constraints on the tectonic evolution of southeastern Tibet: *Geological Society of America, Abstracts with Programs*, v. 35, no. 6, p. 637.

Booth, A.L., Zeitler, P.K., Kidd, W.S.F., Wooden, J., Idleman, B., Lui, Y., and Chamberlain, C.P., 2003, Geochemical and geochronological constraints on the tectonic evolution of southeastern Tibet: *Eos Transactions AGU*, v. 84, no. 46, F1426.

Metcalf, J., Booth, A., Colgan, J., Hourigan, J., Krylov, K., Mattinson, C., McWilliams, M., Miller, E., Scherer, H., and Wooden, J., 2002, New constraints on the deformational and metamorphic history of the Funeral Mountains metamorphic core complex, Death Valley, California: *Geological Society of America, Abstracts with Programs*, v. 34, no. 6, p. 332.

## TEACHING EXPERIENCE

**Teaching Assistant**, Stanford University, 2001-2005

*Environmental and Geological Field Studies in the Rocky Mountains* (Summer 2002, 2003, 2004)

- Helped design and lead a 3-week field course for sophomores, integrating field-based and lecture-style teaching in the Wind River Range, Big Horn Basin, and Tetons, WY

*Introduction to Geology* (Fall 2001, Fall 2002, Winter 2002, Spring 2003, Winter 2005)

- Led field trips, taught lab sections, designed in-class projects for intro-level course for non-majors

*Earth Materials* (Fall 2005)

- Lectured and taught lab sections for mineralogy/petrology course required for majors

*Earth History* (Winter 2003)

- Led discussion and review sessions, graded homework and exams for non-major course

*Volcanoes of the Eastern Sierra* (Spring 2002)

- Ran field trip to Mono Lake and Owens Valley, CA for freshman seminar course

**Teaching Assistant**, Caltech, 2000-2001

*Frontiers in Geological and Planetary Sciences* (Spring 2000),

- Scheduled faculty speakers, organized handouts

*Oral Communication* (Spring 2001)

- Organized schedule and set up A/V equipment

#### GRANTS, HONORS & AWARDS

IPY Postdoctoral Fellow 2006

Session Chair, Metamorphic Petrology Session No. 35, GSA annual meeting 2005

Stanford Earth Sciences Fellowship 2001-2005

McGee Grant for summer research (Stanford University) 2003, 2004

Shell Fund Award 2003, 2005

GSA Graduate Student Research Grant 2003