

## Caleb Schiff

3120 N. Snow Cap Way  
Flagstaff, AZ 86001

t: 928-773-0335  
f: 928-523-9220  
e: caleb.schiff@nau.edu

**Qualifications:** a well-trained earth-science researcher with strong science writing and critical thinking skills; experience at multiple institutes, creating a strong ability to collaborate with others; a focused skill-set in lake sediment records; understanding of the fundamentals of the stable isotopes of precipitation; lake coring field experience

### ***Experience (skills acquired are bulleted)***

#### ***Quaternary Sediment Lab, Northern Arizona University, 2008 to present***

- Use of Geographical Information System mapping software
- Water chemistry and isotope analyses
- Sediment grain size (Coulter analyzer), organic matter, and biogenic silica analyses
- Volcanic tephra identification and classification
- Lab oversight and student training

#### ***Lake sediment studies, Alaska, 2005-2007 (3 field seasons)***

- Environmental water collections
- Lake sediment core recovery
- Lake bathymetry mapping
- Glacier moraine mapping
- Oxygen isotope analyses of lake diatoms and regional waters
- Determining causal relationships

#### ***Glacier ablation studies, Svalbard, Norway, 2004***

- Glacier mass-balance monitoring
- Meteorological data compiling
- Use of Geographical Information System
- Determining causal relationships

#### ***Tree-ring investigations, Indiana University, 2004***

- Tree core recovery
- Dendrochronology analysis techniques
- Stable isotope analyses of tree-ring cellulose

#### ***Ocean sediment provenance studies, Columbia University, 2003***

- Thermal Ion Mass Spectrometer analyses of bulk detritus

#### ***Stable isotopes of precipitation studies, University of Colorado, 2001-2003***

- Stable isotope analyses of meteoric water and Antarctic ice-cores
- Use of Geographical Information System
- Determining causal relationships

### ***Education***

Northern Arizona University Flagstaff, AZ	Geology MS	2007
--	---------------	------

**Thesis:** *A modern survey and holocene record of lake water and diatom isotopes from south Alaska*

Indiana University Bloomington, IN	Geological Sciences BS, magna cum laude	2005
---------------------------------------	--	------

**Thesis:** *Investigations of Tree Rings in Southern Indiana*

### ***Publications***

- Schiff, C.J.**, Kaufman, D.S., Wallace, K.L., Werner, A., Ku, T., and Brown, T.A. 2008. Modeled tephra ages from lake sediments, base of Redoubt Volcano, Alaska. *Quaternary Geochronology* 3, 56-67.
- Schiff, C.J.**, Kaufman, D.S., Wolfe, A.P., Dodd, J., and Sharp, Z., 2008. Late Holocene storm-trajectory changes inferred from the oxygen isotope composition of lake diatoms, south Alaska. *Journal of Paleolimnology* DOI 10.1007/s10933-008-9261-z.

### ***Conference proceedings***

- Schiff, C.J.**, Kaufman, D.S. A modern survey and Holocene record of lake water and diatoms isotopes from south Alaska. *Arctic Workshop* 2008.
- Schiff, C.J.**, Kaufman, D.S., Dodd, J., and Sharp, Z. Unprecedented 20<sup>th</sup> century warming in the Prince William Sound of southern Alaska inferred from the oxygen-isotope composition of lake diatom. *Arctic Workshop* 2007.
- Schiff, C.J.**, Kaufman, D.S. and Wallace, K.L., 2006. Holocene Tephrochronology from Lake Sediments, Redoubt Volcano, Alaska. *EOS Transactions, American Geophysical Union* 87(52) V33B-0660.
- Schiff, C.J.** and Sauer, P. Width and oxygen isotope composition of tree-rings as a proxy for recent Southern Indiana Climate. *Geological Society of America Abstracts with Programs*, Vol. 37, No. 5, p. 33.
- Schiff, C.J.**, Werner, A., Roof, S., and Sauer, P. Unsustainable glacier ablation at 78° N Latitude, Linnèbreen, Svalbard. *Geological Society of America Abstracts with Programs*, Vol. 37, No. 1, p. 14.