

Sinan O. Akçiz

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RESEARCH INTERESTS:

I am a structural geologist and a paleoseismologist who conduct field-oriented research to better understand how continents internally partition deformation and accommodate strain. I am particularly interested in understanding the geological processes that control the development of regional-scale strike-slip fault zones. I conduct structurally based field studies, typically through the creation of new geologic maps (at previously unpublished scales or resolutions) and/or detailed trench logs, and collect samples for geochronologic analysis. Field observations are accompanied by analyses of digital data (e.g. topography including LIDAR, satellite imagery and aerial photography) using GIS.

EDUCATION:

- Ph.D. Massachusetts Institute of Technology, MA, USA (September 2004)
Structural and Geochronological constraints on the ductile deformation observed along the Gaoligong Shan and Chong Shan shear zones, Yunnan (China).
Thesis Advisor: Prof. B. Clark Burchfiel
- B.S. Istanbul Technical University, Turkey
Senior Thesis: Study of the Mesoscopic Structures Between Çangal Dag and Yenikonak, Sinop, Turkey.
Thesis Advisor: Prof. A. M. Celal Şengör

PROFESSIONAL EXPERIENCE:

- Organizing committee member for the US-Turkey Workshop: Comparative studies of the North Anatolian Fault (Northwest Turkey) and the San Andreas Fault (southern California) Istanbul Technical University (August 14-16, 2006).
- 2005 – Present. Part-time teaching faculty at California State University at Fullerton. Courses taught:
 - Physical Geology Lab
 - Geology of National Parks
- 2005 - Present. Postdoc at UC Irvine. Main project is: Multi-cycle Rupture History of the San Andreas Fault in the Carrizo Plain, Bidart Fan Site.
- 2004-2005 Adjunct Assistant Professor at Boston College. Courses taught:
 - Structural Geology
 - GIS
 - Mission to Earth (I have designed an application-based Introduction to Earth class)
 - Earth Systems Seminar (A Master's level seminar course comparing the Appalachians with the Himalayas)
 - Exploring the Earth II (Introduction to Earth Sciences)
- 2003 Digital Field Geology Instructor as a part of the Field Camp class at MIT.
- 1998-1999 and 2001-2003 Field Geology TA at MIT
- 1997-1998 Structural Geology TA at MIT
- 1996 summer. Intern as a field geologist for BHP Minerals in Chagai Hills, Pakistan.

INVITED TALKS:

- Rupture History of the San Andreas Fault in the Carrizo Plain, California

Ohio State University, November 30, 2007

- Past and future earthquakes along the southern San Andreas fault: A paleoseismologists view. California Institute for Hazards Research. October 17, 2007.
- New paleoseismological constraints on the behavior of the San Andreas Fault in the Carrizo Plain USGS, Menlo Park. February 28, 2007
- New paleoseismological constraints on the behavior of the San Andreas Fault in the Carrizo Plain University of California at Los Angeles, February 20, 2007
- How did India penetrate into Eurasia? Structural and geochronological constraints from SW China. California State University at Fullerton. November 8, 2006.

AWARDS:

AGU Outstanding Student Paper Award, Tectonophysics Section, Fall 2003.

PUBLICATIONS:

Akciz, S.O., Burchfiel, B.C., Crowley, J.L., Jiyun, Y., Liangzhong, C., 2007. Geometry, Kinematics and Regional Significance of the Chong Shan Shear Zone, Eastern Himalayan syntaxis, Yunnan, China: *Geosphere*: v. 4, no. 1, pp. 292-314.

Akciz, S.O., Grant, L.B., Arrowsmith, J R., An average recurrence interval of 144 years for repeated rupture of the San Andreas Fault in the Carrizo Plain, California, since A.D. 1280: *J. Geophys. Res.* (in review).

Geissman, J.W., Burchfiel, B.C., Studnicki-Gizbert, C., **Akciz, S.O.**, Chen, L., Brocklehurst, S., Complexities in the early Cenozoic extrusion of crustal fragments around the Eastern Himalayan syntaxis: *Geosphere* (in review).

Selective abstracts:

Akciz, S.O., Yilmaz, R., Tuysuz, O., Sengor, A.M.C., 1997, Backthrusting-related fold and thrust belt in the central Pontides. Geological Society of America, 1997 annual meeting, Salt Lake City, UT.

Akciz, S.O., Sheehan, D., Niemi, N.A., Nguyen, H.Q., Hutchison, W.E., Carr, C.E., Fuller, E., Hodges, K. V., and Burchfiel, B.C., 2002, What does it take to collect GIS data in the field? Geological Society of America, 2002 annual meeting, Denver, CO.

Akciz, S.O., Burchfiel, B. C., Crowley, J.L., Chen, Liangzhong, and Yin, Jiyun, 2003, Structural and geochronological constraints on the exhumation of the metamorphic rocks along the Chong Shan shear zone, Western Yunnan, China. Geological Society of America, 2003 Annual Meeting, Seattle, WA.

Akciz, S.O., Burchfiel, B.C., Crowley, J.L., Chen, Liangzhong, and Yin, Jiyun, 2003, Gaoligong and Chong Shan shear zones, Yunnan, and accommodation of the northward movement of India relative to Indochina during Mid-Cenozoic time. AGU 2003 Fall Meeting, San Francisco, CA.

Akciz, S.O., Grant, L.B., Arrowsmith, J R., Zielke, O., Toke, N., Noriega, G., Cornoyer, J., Starke, E., Rousseau, N., Campbell, B., 2006, Does the new paleoseismological evidence from the Carrizo Plain section of the San Andreas Fault indicate abnormally high late Holocene slip rates?: *Eos Trans. AGU*, 87 (52), Fall Meet. Suppl., Abstract T21E-01, p. T21E-01.

Akciz, S.O., Grant, L.B., Arrowsmith, J R., 2006, New and extended paleoseismological evidence for large earthquakes on the San Andreas Fault at the Bidart Fan site, California. *Seismological Research Letters*, 77(2), March/April, p. 269.

Burchfiel, B.C., **Akciz, S.O.**, Geissman, J.W., 2007, Pre-extrusion location of the Indochina fragment and its shear zone cicatrix in SE Tibet: Geological Society of America, 2007 Annual meeting, Denver, CO.