

Publications from Supported Research
1993/94
ICS Contributions

ARCHULETA, RALPH J.

"Empirical Prediction of Site-Specific Ground Motion Spectra." *Proceedings of the International Workshop on Strong Motion Data, Menlo Park, California, December 13-17.* (with **Tumarkin, Alexei G.**) (ICS Contribution #0182-45EQ)

BEHR, J.

"Increased surface creep rates on the San Andreas fault southeast of the Loma Prieta mainshock." *U.S.G.S. Professional Paper on the Loma Prieta, California earthquake of October 17, 1989, Chapter on Aftershocks and Postseismic effects.* (with **Bilham, R., Bodin, P., Breckenridge, K., and Sylvester, Arthur G.**) (ICS Contribution #0171-40EQ)

CARVER, G. A.

"Coastal uplift associated with the 1992 Cape Mendocino earthquake, northern California." *Geology.* (with **Jayko, A. S., Valentine, David W., and Li, W. H.**) (ICS Contribution #0165-36EQ)

CULLEN, STEPHEN J.

"Vadose Zone Monitoring: Part II. A Systematic Approach to Designing a Multiphase Unsaturated Zone Monitoring Network." *Proceedings of the Regional Course and Workshop on Groundwater Contamination, July 26-30, 1993, San Jose, Costa Rica.* (with **Kramer, John H., and Luellen, Jon R.**) (ICS Contribution #0176-33HW)

"A Risk-Based Approach to the Design of a Vadose Zone Monitoring System for a Solid Waste Landfill." *Proceedings of the 87th Annual Meeting of the Air and Waste Management Association, June 19-24, 1994.* (with **Kramer, John H., and Luellen, Jon R.**) (ICS Contribution #0177-34HW)

"Vadose Zone Monitoring: Part I. Experiences and Future Trends in the United States." *Proceedings of the Regional Course and Workshop on Groundwater Contamination, July 26-30, 1993, San Jose, Costa Rica.* (ICS Contribution #0178-35HW)

ENGLAND, PHILIP

"Cause and effect among thrust and normal faulting, anatexis melting and exhumation in the Himalaya." in *Himalayan Tectonics*, Treloar, P. J. and Searle, M. P. (eds), *Geological Society Special Publication*. (with **Molnar, Peter**) (ICS Contribution #0170-40TC)

GRATIER, JEAN-PIERRE

"Pressure Solution as a Mechanism for Crack Sealing Around Faults: Natural and Experimental." *USGS: Red Book, The Mechanical Involvement of Fluids in Faulting*. (with **Chen, T., and Hellmann, R.**) (ICS Contribution #0152-37TC)

KEDAR, S.

"The 1989 Macquarie Ridge Earthquake: Seismic Moment Estimation from Long Period Free Oscillations." *Submitted to: Journal of Geophysical Research*. (with **Watada, S., and Tanimoto, Toshiro**) (ICS Contribution #0160-33EQ)

KELLER, EDWARD A.

"Fluid-Pressure Induced Seismicity at Regional Scales." *Geophysical Research Letters*. (with **Loaiciga, Hugo A.**) (ICS Contribution #0163-34EQ)

KRAMER, JOHN

"Vadose Zone Monitoring with the Neutron Moisture Probe, Section 1, Chapter 2, Book 2 in *Vadose Zone Characterization and Monitoring Principles, Methods and Case Studies*." *Submitted to: L. G. Wilson for inclusion in an upcoming book by Lewis Publishers*. (with **Cullen, Stephen J., and Everett, Lorne G.**) (ICS Contribution #0155-32HW)

LEES, JONATHAN

"Three-dimensional tomography of the 1992 Southern California sequence: Constraints on dynamic earthquake rupture?" *Geology*. (with **Nicholson, Craig**) (ICS Contribution #0167-38EQ)

LINDLEY, GRANT T.

"Preliminary Spectral Analysis of the 1994 Northridge Earthquake and Aftershocks from Broad-Band TERRAscope Data." *Submitted to: Geophysical Research Letters.* (ICS Contribution #0180-43EQ)

LUYENDYK, BRUCE P.

"Glaciation, Block Faulting, and Volcanism in western Marie Byrd Land." *Submitted to: Terra Antarctica.* (with **Smith, Christine H. and van der Wateren, Frederik.**) (ICS Contribution #0169-41TC)

MOLNAR, PETER

"Very long baseline interferometry and active rotations of crustal blocks in the Western Transverse Ranges, California." *Geological Society of America Bulletin.* (with **Gipson, John M.**) (ICS Contribution #0183-43TC)

NICHOLSON, CRAIG

"Microplate capture, rotation of the western Transverse Ranges, and initiation of the San Andreas transform as a low angle fault system." *Geology.* (with **Sorlien, Chris C., Atwater, Tanya, Crowell, John C., and Luyendyk, Bruce P.**) (ICS Contribution #0172-41TC)

OPPENHEIMER, D.

"The Cape Mendocino, California Earthquake Sequence of April, 1992 - Subduction at the Triple Junction." *Science.* (with **Valentine, David and others**) (ICS Contribution #0164-35EQ)

RODGERS, PETER W.

"Signal Coil Calibration of Electro-Magnetic Seismometers." *Submitted to: Bulletin of the Seismological Society of America.* (with **Martin, Aaron J., Robertson, Michelle C., Hsu, Mark M. and Harris, David B.**) (ICS Contribution #0175-42EQ)

SORLIEN, CHRISTOPHER C.

"Faulting and Uplift of the Northern Channel Islands, California." *in, Halvorson, W. L., and Maender, G. J., eds., the Fourth Channel Islands Symposium: Update on the Status of Resources, Santa Barbara Museum of Natural History, Santa Barbara, California, in press.* (ICS Contribution #0173-42TC)

"Miocene extensional terranes and post-Miocene transpression in offshore south-central California." *submitted to: USGS Bulletin (with Nicholson, Craig and Luyendyk, Bruce P.)* (ICS Contribution #0184-44TC)

SYLVESTER, ARTHUR G.

"Technical Report, Final Nearfield Geodetic Investigations of Crustal Movements, Southern California." (ICS Contribution #0161-38TC)

"Nearfield vertical displacement in the creeping segment of the San Andreas fault, central California, 1975 to 1994." *Submitted to: Tectonophysics, Gerhard Oertel volume.* (ICS Contribution #0179-42TC)

STEIN, DANIEL J.

"Rheometry of a dacitic melt: Experimental results and tests of empirical models for viscosity estimation." *Geophysical Research Letters.* (with Spera, Frank J.) (ICS Contribution #0150-33CM)

TANIMOTO, TOSHIRO

"Global images of the Earth's Crust." *Submitted to: Geophysical Research Letters.* (ICS Contribution #0157-26CS)

"Formalism for travel time inversion with finite frequency effects." *Submitted to: Geophysical Journal International.* (ICS Contribution #0174-41EQ)

TUMARKIN, ALEXEI G.

"Empirical Ground Motion Prediction." *Submitted to: Annali Di Geofisica, March 29, 1994.* (with Archuleta, Ralph J.) (ICS Contribution #0181-44EQ)

VAN DER WATEREN, FREDERICK

"Glaciation and deglaciation of the uplifted margins of the Cenozoic West Antarctic rift system, Ross Sea, Antarctica." *Submitted to: Geologisches Jahrbuch.* (with Verbers, A.L.L.M., Luyendyk, Bruce P., Smith, Christine, H., and Hofle, Hans Chr.) (ICS Contribution #0162-39TC)

WEILAND, CHARLEY M.

"3-D Seismic Tomography and the Velocity Structure Beneath Long Valley Caldera." *Submitted to: Journal of Geophysical Research.* (with Steck, Lee K. and Dawson, P. B.) (ICS Contribution #0185-26CS)