

## BIOGRAPHICAL SKETCH

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### *M. MEGHAN MILLER*

Professor & Director, Geodesy Laboratory and PANGA Data Analysis Facility  
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### *EDUCATION:*

- 1975 - 1977 Smith College, Northampton, Massachusetts; transferred to Yale.  
1977 - 1979 Yale University, New Haven, Connecticut; B. S., Geology 1979; Magna cum laude & Distinction in the Major.  
1981 - 1986 Stanford University, Stanford, California; Ph.D., Structure and tectonics, January, 1987. Dissertation: Tectonic evolution of Late Paleozoic island arc rocks within the western U. S. Cordillera; with detailed studies from the eastern Klamath Mountains, northern California.  
1986 - 1988 Post-doctoral research fellow, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, California.  
1988 - 1990 National Research Council post-doctoral fellow, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California.

### *APPOINTMENTS:*

- 1994 - present Professor, Department of Geology, & Director, Geodesy Laboratory, Central Washington University, Ellensburg, Washington.  
1998 - 1999 NSF Visiting Professor, Earth, Atmospheric & Planetary Sciences, Massachusetts Institute of Technology, Cambridge, Mass.  
1992 - 1998 Chair, Department of Geology, Central Washington University, Ellensburg, Washington  
1991 - 1994 Associate Professor, Department of Geology, Central Washington University, Ellensburg, Washington.  
Since July 1990 Research Geologist (Member of the Technical Staff), Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California.  
Summer 1985 Intern Development Geologist, SOHIO Petroleum Company, San Francisco, California.  
1983 - 1986 Graduate Intern Geologist, Branch of Paleontology and Stratigraphy, U. S. Geological Survey, Menlo Park, California.  
Summer 1979 Intern Research Geologist, Chevron Oil Field Research Company, La Habra, California.  
Summer 1978 Field Assistant in minerals exploration, Duval Corporation, Anchorage, Alaska.

### *ACADEMIC AWARDS AND FELLOWSHIPS:*

- NSF Visiting Professor, Professional Opportunities for Women in Research and Education, 1998-1999.  
National Research Council Resident Research Associate at JPL, National Academy of Sciences, 1988-1989.  
IBM Research Fellow, Division of Earth & Planetary Sciences California Institute of Technology, 1986-1987. Division Fellow, 1987-1988.  
Graduate Internship, U. S. Geological Survey, 1983, 1984 & 1985.  
Chevron Fellowship, Stanford University, 1982-1983.  
Alan M. Bateman Award for excellence in undergraduate geologic research, Yale, 1979.

### *PROFESSIONAL AFFILIATIONS AND ACTIVITIES:*

- Member, Plate Boundary Observatory Steering Committee 1999 to the present.  
Member, UNAVCO Steering Committee 2000 to the present.  
Director and Treasurer, Board of Directors, UNAVCO, Inc., 200.  
Associate Editor, *GEOLOGY*, Geological Society of America, 1992 to 1995.

Visiting Associate, Division of Earth and Planetary Sciences, California Institute of Technology, Pasadena, California, February 1989 to 1991.  
Editor, Geological Society of America Special Paper 255. 1990.  
Convener, Geological Society of America Theme Session, Paleozoic and early Mesozoic paleogeography: Klamath Mountains, Sierra Nevada, and North America. May 1989.  
Convener, Penrose Conference, Paleozoic and early Mesozoic paleogeographic relations: Klamath Mountains, northern Sierra Nevada, and North America. June 1988.  
Geological Society of America, 1984 to the present.  
American Geophysical Union, 1984 to the present.

*PUBLICATIONS:*

*Relevant:*

- M. Meghan Miller, Frank H. Webb, David Townsend, Matthew P. Golombek, and Roy K. Dokka, 1993, Regional co-seismic deformation from the June 28, 1992 Landers, California, earthquake. Results from the Mojave GPS Network - Special Report: *Geology*, v. 21, p. 868-872.
- T. H. Dixon, M. M. Miller, F. Farina, H. Wang, and D. J. Johnson, 2000, Present-day motion of the Sierra Nevada block, and some implications for Basin and Range tectonics. *Tectonics*, v. 19, p. 1-24.
- Kyle Antonelis, Daniel J. Johnson, M. Meghan Miller, and Randy Palmer, 1999, GPS determination of current Pacific-North America plate motion. *Geology*, v. 27, p. 299-302.
- M Meghan Miller, Daniel J. Johnson, Timothy H Dixon, and Roy K. Dokka, 2001, Refined kinematics of the Eastern California shear zone from GPS observations, 1993-1998. *Journal of Geophysical Research*. v. 106, p. 2245-2264.
- M. Meghan Miller, Daniel J. Johnson, Charles M. Rubin, Herb Dragert and Kelin Wang, Anthony Qamar, Elliot Endo, and Chris Goldfinger, 2001, GPS-determination of along-strike variation in Cascadia margin kinematics: Implications for relative plate motion, subduction zone coupling, and permanent deformation. *Tectonics*. v. 20, p. 161- 176.
- S.C. McCluskey, S.C. Bjornstad, B.H. Hager, R.W. King, B.J. Meade, M. M. Miller, F. C. Monastero, B.J. Souter, Present day kinematics of the Eastern California shear zone from a geodetically constrained block model. *Geophysical Research Letters*, v. 28, p. 3369-3372.
- M. Meghan Miller, Tim Melbourne, Daniel J. Johnson, and William Q. Sumner, 2002, Periodic slow earthquakes from the Cascadia subduction zone. *Science*. v. 295, p. .

*Others:*

- M. Meghan Miller, 1989, Intra-arc sedimentation and tectonism: Late Paleozoic evolution of the eastern Klamath terrane, California. *Geological Society of America Bulletin*, v. 101, p. 170-187.
- M. Meghan Miller and Jason B. Saleeby, 1991, Continental detrital zircon in Carboniferous ensimatic arc rocks, Bragdon Formation, eastern Klamath terrane, northern California. *Geological Society of America Bulletin*, v. 103, p. 268-276.
- M. Meghan Miller and Timothy H. Dixon, 1992, Proterozoic evolution of the northern part of the Hamisana zone, northeast Sudan: Constraints on Pan-African accretionary tectonics. *Journal of the Geological Society, London*, v. 149, p. 743-750.
- M. Meghan Miller and Jason B. Saleeby, 1995, U-Pb Geochemistry of detrital zircon from Upper Jurassic synorogenic turbidites, Galice Formation and related rocks, western Klamath Mountains: Correlation and Klamath Mountains provenance. *Journal of Geophysical Research*, v. 100, n B9, p. 18,045-18,058.
- Jeffrey Lee, M. Meghan Miller Robert Crippen, Bradley Hacker, and Jorge Ledesma-Vazquez, 1996, Middle Miocene Extension in the Gulf Extensional Province, Baja California: Evidence from the southern Sierra Juarez. *Geological Society of America Bulletin*, v. 108, p. 505-525.