

Joseph Galewsky

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EDUCATION **University of California Santa Cruz**, Santa Cruz, California
Ph.D., Geophysics, 1996
Texas A & M University, College Station, Texas
B.S., Geophysics, 1991

EXPERIENCE **Assistant Professor**
Department of Earth and Planetary Sciences
University of New Mexico **August 2005 - Present**
Developed research program focusing on climate dynamics and the links between atmospheric and land surface processes. Taught classes on earth system science and hydrometeorology.

Postdoctoral Research Scientist
Department of Applied Physics and Applied Mathematics
Columbia University **August 2002 - Present**
Conducted detailed numerical modeling studies of orographic precipitation and associated surface processes in California and Taiwan. Developed novel algorithms for diagnosing water vapor dynamics in climate models. Developed new test case for numerical shallow water models.

Senior Software Engineer
Vivid Studios, Otis, CNET Networks; San Francisco, California **December 1997 - July 2002**
Served as lead engineer for the teams that developed a wide variety of complex software applications. Managed teams of up to 5 software engineers. Applied object-oriented analysis and design techniques to extensive server-side applications. Gained significant experience in relational database design and management.

Software Training Consultant
Self-employed, San Francisco, California **May 1996 - July 2002**
Developed and taught classes on Internet technology and Java programming to more than 400 students in 6 countries. Gained significant experience with multicultural educational issues. Clients included Netscape Communications and UC Berkeley Extension.

Graduate Research Assistant
Department of Earth Sciences
University of California Santa Cruz **June 1991 - March 1996**
Studied the tectonics and sedimentology of the western Solomon Sea collision zone, offshore Papua New Guinea, using a variety of marine geophysical techniques, including seismic reflection profiling, sidescan sonar, and potential field data. Conducted onshore gravity survey in Papua New Guinea.

HONORS AND AWARDS Aaron and Elizabeth Waters Prize for Outstanding Graduate Student Thesis Proposal, UC Santa Cruz Earth Science Department, 1993

PROFESSIONAL SERVICE Contributed to NSF/IODP science planning document on the interplay between climate and tectonics in southern Alaska, 2003

PUBLICATIONS

- Galewsky, J., A. Sobel, and I. Held, 2005: Diagnosis of subtropical humidity dynamics using tracers of last saturation. **Journal of the Atmospheric Sciences**: Vol. 62, No. 9, pp. 3353-3367.
- Galewsky, J. and A. Sobel, 2005: Moist dynamics and orographic precipitation in Northern and Central California during the New Year's flood of 1997. **Monthly Weather Review**: Vol. 133, No. 6, pp. 1594-1612.
- Galewsky, J., R. Scott, L.M. Polvani, 2004: An initial-value problem for testing numerical models of the global shallow water equations. **Tellus**: Vol. 56, No. 5, pp. 429-440.
- Allen, P.A., Bennett, S.D., Cunningham, M.J.M, Carter, A., Gallagher, K., Lazzaretti, E., Galewsky, J., Densmore, A.L., Phillips, W.E.A., Naylor, D. and Solla Hach, C., 2002: The post-Variscan thermal and denudational history of Ireland. In: Dore, A., Cartwright, J., Stoker, M., Turner, J. and White, N. (eds), Exhumation of the North Atlantic Margin: Timing, Mechanisms and Implications for Petroleum Exploration, **Geological Society of London Special Publications**, 196, 371-399.
- Allen, P.A., P. M. Burgess, J. Galewsky, H. D. Sinclair, 2001: Flexural-eustatic numerical model for drowning of the Eocene perialpine carbonate ramp and implications for Alpine geodynamics. **Geological Society of America Bulletin**: Vol. 113, No. 8, pp. 1052-1066.
- Galewsky, J., 1998: The dynamics of foreland basin carbonate platforms: tectonic and eustatic controls. **Basin Research**: Vol. 10, No. 4, pp. 409-416.
- Galewsky, J., E. A. Silver, 1997: Tectonic controls on facies transitions in an oblique collision: The western Solomon Sea, Papua New Guinea. **Geological Society of America Bulletin**: Vol. 109, No. 10, pp. 1266-1278.
- Abbott, L.D., E.A. Silver, R.S. Anderson, R.B. Smith, J.C. Ingle, S.A. Kling, D. Haig, E. Small, J. Galewsky, and W. Sliter, 1997: Measurement of the tectonic uplift rate in a young collisional mountain belt, Finisterre Range, Papua New Guinea. **Nature**: Vol. 385, pp. 501-507.
- McAdoo, B. G., D.L. Orange, E.A. Silver, K. McIntosh, L.D. Abbot, J. Galewsky, L. Kahn, and M Protti, 1996: Seafloor structural observations, Costa Rica accretionary prism, **Geophysical Research Letters**: Vol. 23, pp. 883-886.
- Galewsky, J., E.A. Silver, C.D. Gallup, R. L. Edwards, D.C. Potts, 1996: Foredeep tectonics and carbonate platform dynamics in the Huon Gulf, Papua New Guinea. **Geology**: Vol. 24, No. 9, pp. 819-822.
- Silver, E.A., J. Galewsky, and K.D. McIntosh, 1995: Variation in structure, style, and driving mechanism of adjoining segments of the north Panama deformed belt, in P. Mann, ed., Geology of Central America, **Geological Society of America Special Paper 295**, p. 225-233.
- Abbott, L.D., E.A. Silver, E.A., and J. Galewsky, 1994: Structural evolution of a modern arc-continent collision in Papua New Guinea. **Tectonics**: Vol. 13, pp. 1007-1034.