

Mark A. Snyder

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Education

Ph.D. Earth Sciences	University of California, Santa Cruz	2003
M.S. Earth Sciences	University of California, Santa Cruz	2001
B.S. Geology	University of California, Davis	1996

Positions

Assistant Project Earth Scientist	University of California, Santa Cruz	Present
Postgraduate Researcher	University of California, Santa Cruz	2004-2006
Graduate Student Researcher	University of California, Santa Cruz	1998-2003

Teaching

Guest Lecturer, ENV5 24, General Ecology, UCSC	2005
Guest Lecturer, ENV5 80B, Forecasting Global Climate Change, UCSC	2004
Teaching Assistant, Five quarter courses, UCSC	1999-2003

Peer Reviewed Publications

- Snyder, M.A.**, B. Sansó, and L.C. Sloan, "Validation of Climate Model Output using Bayesian Statistical Methods", *Climatic Change*, 2007, in press
- Kueppers, L.M., **M.A. Snyder**, L.C. Sloan (2007), "Irrigation cooling effect: Regional climate forcing by land-use change", *Geophys. Res. Lett.*, 34, L03703, doi:10.1029/2006GL028679.
- Kueppers, L.M., **M.A. Snyder**, L.C. Sloan, D.Cayan, J. Jin, H. Kanamaru, M. Kanamitsu, N.L. Miller, M. Tyree, H. Du, B.C. Weare, "Seasonal temperature responses to land-use change in the western United States", *Global and Planetary Change*, 2007, in press
- Howat, I., S. Tulaczyk, P. Rhodes, K. Israel, **M.A. Snyder**, "A precipitation-dominated, mid-latitude glacier system: Mount Shasta, California", *Climate Dynamics*, DOI 10.1007/s00382-006-0178-9, 2006
- Kueppers, L.M., **M.A. Snyder**, L.C. Sloan, E.S. Zavaleta, B. Fulfrost, "Modeled regional climate change and California endemic oak ranges", *Proceedings of the National Academy of Science*, PNAS 102(45): 16281-16286, DOI 10.1073/pnas.0501427102, 2005
- Snyder, M.A.** and L.C. Sloan, "Transient Future Climate over the Western U.S. using a Regional Climate Model." *Earth Interactions*, 2005, 9: 1-21
- Snyder, M.A.**, Sloan, L.C., and Bell, J.L., "Modeled Regional Climate Change in the Hydrologic Regions of California: A CO2 Sensitivity Study." *Journal of the American Water Resources Association*, 40 (3): 591-601 June, 2004.
- Bell, J.L., Sloan, L.C., and **Snyder, M.A.**, "Regional changes in extreme climatic events," *Journal of Climate*, 17 (1), pgs 81-87.

- Diffenbaugh, N.S., **M.A. Snyder**, and L.C. Sloan, “Could CO₂-Induced Land Cover Feedbacks Alter Near-shore Upwelling Regimes?” *Proceedings of the National Academy of Science*, 101(1), 27-32, 2004.
- Snyder, M.A.**, Sloan, L.C., Diffenbaugh, N.S., and Bell, J.L., “Future climate change and upwelling in the California Current.” *Geophysical Research Letters*, Vol. 30, No. 15, 1823, 10.1029/2003GL017647.
- Diffenbaugh N.S., L.C. Sloan, and **M.A. Snyder**, “Orbital suppression of wind driven upwelling in the California Current at 6 ka.” *Paleoceanography*, 18 (2), 1051, 10.1029/2002PA000865.
- Diffenbaugh, N.S., L.C. Sloan, **M.A. Snyder**, J. L. Bell, J. Kaplan, S. L. Shafer and P. J. Bartlein, “Vegetation sensitivity to global anthropogenic carbon dioxide emissions in a topographically complex region.” *Global Biogeochemical Cycles*, 17 (2), 1067, 10.1029/2002GB001974.
- Haddad, B.M., Sloan, L.C., **Snyder, M.A.**, and Bell, J.L., “Regional climate change impacts: The role of institutional adaptability.” *International Journal for Sustainable Development*, Vol. 6, No. 3, 2003.
- Snyder, M.A.**, Bell, J.L., Sloan, L.C., Duffy, P.B., and Govindasamy, B., “Climate responses to a doubling of atmospheric carbon dioxide for a climatically vulnerable region.” *Geophysical Research Letters*, 29 (11), 10.1029/2001GL014431.

Selected Presentations (Invited)

- Sloan, L.C., L.M. Kueppers, **M.A. Snyder**, D. Cayan, M. Tyree, M. Kanamitsu, H. Kanamaru, N. Miller, J. Jin, G. Franco, and B. Weare, H. Du, G. Franco, “Modeling the Effects of Land Use Changes on California’s Climate”, Third Annual Climate Change Research Conference, September 14, 2006.
- Snyder, M.A.**, Climate Change from the Global to the Regional Scale, Environmental Studies Seminar, UC Santa Cruz, October 3, 2005, Santa Cruz, CA
- Snyder, M.A.**, Impact of Future Climate Change on Wind-Driven Upwelling in the California Current System, The 21st Annual Pacific Climate Workshop on Climate Variability of the Eastern North Pacific and Western North America (PACLIM), March 28-31, Asilomar, CA.
- Snyder, M.A.**, Regional Climate Modeling of a Topographically Complex Region: California, Lawrence Livermore National Lab, February 9, 2004, Livermore, CA
- Snyder, M.A.**, Regional Climate Change in California, NOAA Fisheries, Santa Cruz Lab, January 8, 2004, Santa Cruz, CA
- Snyder, M.A.**, Climate Change and California, NOAA Pacific Fisheries Environmental Laboratory, August 14, 2003, Pacific Grove, CA.

Public Outreach/Education

- Voices*, Santa Cruz Community Television, Topic: “Global Warming: Is it real?” Moderator: Tom Conant. Panel: Dr. Gerald Webber (UCSC), Dr. Mark Snyder (UCSC), and Dr. Noah Diffenbaugh (UCSC), March 4th, 2004.

Awards, Fellowships, and Grants

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| Central Coast Joint Data Committee, 2004 GIS Day Map Contest Award | 2004 |
| University of California Revelle Climate Change Grant | 2002 |

University of California Regents Fellowship

1999-2000