

JEREMY L. WEISS

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EDUCATION

Post-graduate Coursework, The University of Arizona, 2004-present

- Objective Analysis in the Atmospheric and Related Sciences
- Spatial Analysis and Modeling
- Fundamentals of Past Climate Dynamics
- Ecology of Savannas, Shrublands and Woodlands

Master of Science, University of New Mexico, 2002

- Major: Earth and Planetary Sciences
- Minors: Climatology, Ecology, Geographic Information Systems
- Advisor: Dr. David S. Gutzler
- Thesis: “Relating Vegetation Variability to Meteorological Variables at the Sevilleta National Wildlife Refuge, New Mexico”

Bachelor of Science, Arizona State University, 1998

- Major: Botany
- Minors: Horticulture, Spanish, Statistics

Honors and Awards

- Master of Science degree examination passed with distinction, 2002
- Geology Alumni Scholarship, 2002
- Jerry Harbour Memorial Scholarship, 2001
- Graduated *Summa Cum Laude*, 1998
- Outstanding graduating senior award, Department of Plant Biology, 1998
- Dougherty Foundation Scholarship Award, 1996-1998
- Phi Kappa Phi Honor Society, 1995
- Award for Outstanding Scholarship, 1993-1996
- Hudson Achievement Award, 1993-1996
- Northern Arizona University Academic Award, 1993-1996

RESEARCH EXPERIENCE

Senior Research Specialist, The University of Arizona, Tucson, AZ, 2002-present

- Plan and carry out multiple interdisciplinary research projects on climate and vegetation
- Design and maintain web-based GIS mapping applications of areas susceptible to sea level rise
- Create GIS-based images of sea level rise for news and education groups of various countries
- Provide GIS support for the Institute for the Study of Planet Earth
- Collaborate with the Climate Assessment for the Southwest (CLIMAS) project
- Perform media interviews and give presentations in English and Spanish about climate change

- Develop GIS datasets for and give GIS consultation to Climate Appraisal Services
- Prepare scientific manuscripts for publication and proposals for funding
- Construct and maintain Environmental Studies Laboratory website
- Manage analysis instruments, computers, field equipment, and sediment core archives
- Oversee purchasing, grants, and hiring of laboratory assistants
- Participate in lake coring expeditions and field work

Research Assistant, University of New Mexico, Albuquerque, NM, 2000-2002

- Designed and performed interdisciplinary research focusing on climate and vegetation
- Integrated vector and remote sensing data with GIS software
- Created and demonstrated GIS applications for environmental science datasets
- Prepared scientific manuscripts for publication

Research Technician, The University of Arizona, Tucson, AZ, 1998-1999

- Recorded and organized data from field studies at the Citrus Agricultural Center
- Assisted in installation and maintenance of research projects
- Supervised and worked with harvesting crews
- Prepared field samples for laboratory analyses

Research Assistant, Arizona State University, Tempe, AZ, 1997

- Assisted in data collection and organization from field studies of desert riparian areas
- Utilized survey and tree coring equipment
- Collected and identified vegetation species

ADDITIONAL WORK EXPERIENCE

Biologist, Taschek Environmental Consulting, Albuquerque, NM, 1999-2000

- Performed biological surveys in New Mexico and western Texas
- Produced reports and communicated survey findings with state and federal agencies
- Determined habitat presence of endangered, threatened, and sensitive species
- Delineated wetlands as per United States Army Corps of Engineers guidelines

PEER-REVIEWED PUBLICATIONS

Weiss, J.L., and J.T. Overpeck. 2005. Is the Sonoran Desert losing its cool? *Global Change Biology* 11: 2065-2077.

Weiss, J.L., D.S. Gutzler, J.E. Allred Coonrod, and C.N. Dahm. 2004. Long-term vegetation monitoring with NDVI in a diverse semiarid setting, central New Mexico, U.S.A. *Journal of Arid Environments* 58: 248-271.

Weiss, J.L., D.S. Gutzler, J.E. Allred Coonrod, and C.N. Dahm. 2004. Seasonal and interannual relationships between vegetation and climate in Central New Mexico, U.S.A. *Journal of Arid Environments* 57: 507-534.

MANUSCRIPTS IN PREPARATION

Weiss, J.L., C.L. Castro, and J.T. Overpeck. (*in preparation*). Climate, Drought, and the Changing of the Seasons in the Southwestern U.S.A.

Weiss, J.L., and J.T. Overpeck. (*in preparation*). Phenology, Drought, and the Changing of the Seasons in the Southwestern U.S.A.

Overpeck, J.T., and **J.L. Weiss**. (*in preparation*). Coastal areas susceptible to sea level rise.

Weiss, J.L., and J.T. Overpeck. (*in preparation*). Susceptibilidad de áreas costeras a la subida del nivel del mar.

Drake, A.J., J.T. Overpeck, **J.L. Weiss**, J.L. Betancourt, and T. Swetnam. (*in preparation*). Future climate-driven ecosystem changes in southwest North America.

PRESENTATIONS

Weiss, J.L. (invited speaker), and J.T. Overpeck. December 2007. "Sea Level Rise Modeling for the Caribbean". Developing an Approach for Adaptation to Climate Change in the Insular Caribbean: The Hawksbill Sea Turtle as an Indicator Species. WWF and MacArthur Foundation workshop. Miami, FL.

Weiss, J.L. (invited speaker), and J.T. Overpeck. November 2007. "Past and Future Climate Change: Global and Western U.S. Perspectives". Pima Community College. Tucson, AZ.

Weiss, J.L., and J.T. Overpeck. October 2007. "Climate and Phenology during the 1950s and 2000s Droughts in the Southwestern U.S.A.". Ninth Biennial Conference of Research on the Colorado Plateau. Flagstaff, AZ.

Garfin, G.M., R. Novak, and **J. Weiss**. October 2007. "Projected Climate Changes and Their Potential Impacts on Native American Lands of the Southern Colorado Plateau". Ninth Biennial Conference of Research on the Colorado Plateau. Flagstaff, AZ.

Weiss, J.L. (invited speaker), and J.T. Overpeck. October 2007. "Global Warming in the Desert". Trinity Presbyterian community workshop. Tucson, AZ.

Weiss, J.L., and J.T. Overpeck. October 2007. "Climate and Phenology during the 1950s and 2000s Droughts in the Southwestern U.S.A.". ASPRS 'Towards a Southwest Phenology Network' symposium. Tucson, AZ.

Weiss, J.L. (invited speaker), and J.T. Overpeck. July 2007. "Past and Future Climate Change in the Western U.S.: Patterns and Causes". SAMEC Solar Science Workshop. Tucson, AZ.

Weiss, J.L., and J.T. Overpeck. May 2007. "*Is the Sonoran Desert Losing Its Cool?*" and Other Global Climate Change Questions for Southwestern Deserts". Sixth Conference on Research and Resource Management in the Southwestern Deserts: Borders, Boundaries and Time Scales. Tucson, AZ.

Garfin, G., J. Morrill, A. Comrie, and **J. Weiss**. November 2005. "A Tale of Two Droughts: Changing Temperatures and Southwestern Droughts". Eighth Biennial Conference of Research on the Colorado Plateau. Flagstaff, AZ.

Garfin, G.M., M.A. Crimmins, and **J.L. Weiss**. November 2005. "A Brief History of Southwest Climate Changes and a Glimpse at the Future". Eighth Biennial Conference of Research on the Colorado Plateau. Flagstaff, AZ.

SELECT CONFERENCES AND WORKSHOPS ATTENDED

WWF – MacArthur Foundation workshop: Developing an Approach for Adaptation to Climate Change in the Insular Caribbean – the Hawksbill Turtle as an Indicator Species. December 2007. Miami, FL.

Ninth Biennial Conference of Research on the Colorado Plateau. October 2007. Flagstaff, AZ.

ASPRS Towards a Southwest Phenology Network. October 2007. Tucson, AZ.

Fourth Symposium on Southwest Hydrometeorology. September 2007. Tucson, AZ.

Climate Variability and Change in the San Juan Mountains. October 2006. Durango, CO.

Weeds across Borders. May 2006. Hermosillo, Sonora, Mexico.

Sixth Conference on Research and Resource Management in the Southwestern Deserts: Borders, Boundaries and Time Scales. May 2006. Tucson, AZ.

Climate and Rangelands Workshop: Beyond Boxes and Arrows – Assessing Climate Change/Variability and Ecosystem Impacts/Responses in Southwestern Rangelands. January 2006. San Carlos, AZ.

Sustainability under Uncertainty in Arid and Semiarid Ecosystems. May 2005. Tucson, AZ.

Biodiversity and Management of the Madrean Archipelago II: Connecting Mountain Islands and Desert Seas. May 2004. Tucson, AZ.

CLIVAR/PAGES/IPCC workshop: A multi-millennia perspective on drought and implications for the future. November 2003. Tucson, AZ.

Climatology, hydrology, biotic responses, and feedback of drought. September 2002. Sevilleta LTER, NM.

Southern Rocky Mountains Ecoregion Experts Workshop. June 2000. Albuquerque, NM.

MEDIA INTERVIEWS

- Radio interview in Spanish with Radio Univision. May 2007. Topic: climate change.
- Radio interview in Spanish with La Nueva Onda. May 2007. Topic: climate change.
- Newspaper interview with The News-Press. April 2007. Topics: climate change, sea level rise.
- Television interview with KOLD News 13. February 2007. Topic: climate change.

SELECT TECHNICAL SKILLS

- Platforms: Mac OSX, Windows
- Software: ArcGIS 9.2, ArcIMS 9.2, MATLAB 7.5, Sigma Plot, MINITAB, Microsoft Office
- Data types: AVHRR, MODIS, DEMs, NetCDF, PRISM

LANGUAGE SKILLS

- Reading, writing, and speaking fluency in English and Spanish

PUBLIC SERVICE

Volunteer, Sonoran Desert Weedwackers, Pima County, AZ, 2005-present

- Contribute to locating and removing invasive exotic species from Tucson Mountain Park

Volunteer, Tucson Audubon Society, Pima County, AZ, 2004-2005

- Assisted with native vegetation planting for riparian habitat restoration project

FIELD EXPERIENCE

- Lake coring expedition to Galápagos, Ecuador, 2005