

# Dorian J. Burnette

Curriculum Vitae  
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## EDUCATION

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Degree	Major	University	Year
Ph.D.	Environmental Dynamics	Arkansas	2009
M.S.	Physical Science	Emporia State	2002
B.S.	Meteorology	Mississippi State	1999

## GRADUATE ADVISORS

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J.S. Aber (Chair, M.S.), S.K. Boss, M.K. Cleaveland, R. McCoy, C.J. Mock, R.O. Sleezer, D.W. Stahle (Chair, Ph.D.), E. West

## PROFESSIONAL AFFILIATIONS

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American Geophysical Union (AGU)  
American Meteorological Society (AMS, Full Member)  
AMS/NWA High Plains Chapter  
AMS/NWA Wichita Chapter--former President and Webmaster  
Association of American Geographers (AAG)  
International Commission on the History of Meteorology (ICHM)  
National Weather Association (NWA)  
Sigma Xi  
The American Quaternary Association (AMQUA)  
The Planetary Society

## PH.D. DISSERTATION

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Burnette, D.J., 2009: Reconstruction of the Eastern Kansas Temperature and Precipitation Records into the Mid-19<sup>th</sup> Century using Historical Sources. Ph.D. Dissertation, University of Arkansas, 173 pp.

## M.S. THESIS

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Burnette, D.J., 2002: Meteorological Reconstruction of the Lewis and Clark Expedition. M.S. Thesis, Emporia State University, 105 pp.

## **PUBLICATIONS**

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- Burnette, D.J., D.W. Stahle, and C.J. Mock, in press: Daily mean temperature reconstructed for Kansas from early instrumental and modern observations. *Journal of Climate*.
- Dodds, S.F., D.J. Burnette, and C.J. Mock, 2009: Historical accounts of the drought and hurricane season of 1860. *Historical Climate Variability and Impacts in the United States*, Springer, 61-77.
- Stahle, D.W., E.R. Cook, J. Villanueva-Diaz, F.K. Fye, D.J. Burnette, R.D. Griffin, R. Acuña-Soto, R. Seager, and R.R. Heim Jr., 2009: Early 21<sup>st</sup> century drought in Mexico. *EOS*, **90**, 89-90.
- Stahle, D.W., M.K. Cleaveland, H. Grissino-Mayer, R.D. Griffin, F.K. Fye, M.D. Therrell, D.J. Burnette, D.M. Meko, and J. Villanueva-Diaz, 2009: Cool- and warm-season precipitation reconstructions over western New Mexico. *Journal of Climate*, **22**, 3739-3750.

## **GRANTS**

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- Stahle, D.W. (PI) and D.J. Burnette (Co-PI), "Doctoral Dissertation Research: 19th Century Meteorology and Climatology in Kansas", National Science Foundation, Geography and Regional Science Program, Doctoral Dissertation Research Improvement Grant, August 2006 – January 2009, \$7,032.

## **AWARDS**

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- Certificate of Achievement for Outstanding Presentation, Graduate Student Paper Competition, High Plains AMS/NWA Chapter, 2007.
- Earth Science Club (Lanier) Award of Excellence, Emporia State University, 2002.
- Lightning Award for redesign of company intranet, WeatherData, Inc., November 2002.
- Nominated for Board of Trustees Excellence in Teaching Award, Wichita State University, 2002.
- Nominated for Academy for Effective Teaching Award, Wichita State University, 2002.

## **INVITED PRESENTATIONS**

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- Burnette, D.J., 2009: A new 180-year daily temperature record for Kansas. Paper presented and abstract published. Annual Meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science, "Climatology and Ecology of the Cross Timbers and Southern Great Plains," Tulsa, OK.
- Burnette, D.J., 2008: Screening, correction, and analysis of a new 180-year daily temperature record for Kansas. Paper presented and abstract published,

- Annual Meeting of the Association of American Geographers, "Climate History II: Thermal Climate History," Boston, MA.
- Burnette, D.J., 2008: Recovery, screening, and correction of instrumental climate records in the Great Plains. Paper presented at "Historical Climate Change Reconstruction in the Great Plains" workshop, University of Saskatchewan, Saskatoon, SK, Canada.
- Burnette, D.J., 2008: A new daily temperature record for Kansas, 1 July 1828-31 August 2007. Invited presentation, Department of Geology, Wichita State University, Wichita, KS.
- Burnette, D.J., 2008: A new daily temperature record for Kansas, 1 July 1828-31 August 2007. Presented to the University of Arkansas Sigma Xi Chapter, Fayetteville, AR.
- Burnette, D.J., 2008: The value of historical climate data to archaeology and ecology. Paper presented and abstract published, Society for Historical Archaeology Conference, "Recent Research in Archaeobiology and Historical Ecology," Albuquerque, NM.
- Stahle, D., E. Cook, J. Villanueva-Diaz, F. Fye, D. Burnette, and R. Seager, 2008: Drought in Mexico: 1944-2008. Paper presented and abstract published, Annual Meeting of the Association of American Geographers, "Climate History V: Drought Histories," Boston, MA.
- Stahle, D., E. Cook, J. Villanueva-Diaz, F. Fye, D. Burnette, and R. Seager, 2008: Drought in Mexico: 1994-2008. Paper presented at Mexican climate meeting, Ensenada, Mexico.
- Burnette, D.J., 2007: Screening, correction, and analysis of a new 180-year daily temperature record for Kansas. Departments of Physical Sciences, Emporia State University, Emporia, KS.
- Burnette, D.J., 2007: Historical Meteorology/Climatology. Departments of Physical Sciences, Emporia State University, Emporia, KS.

## **CONTRIBUTED PRESENTATIONS**

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- Burnette, D.J., 2007: A new daily temperature record for Kansas, 1 July 1828-28 February 2007. Paper presented and abstract published, High Plains American Meteorological Society/National Weather Association Chapter Conference, Hastings, NE.
- Burnette, D.J., 2007: A new daily temperature record for Kansas. Paper presented and abstract published, Annual Meeting of the Association of American Geographers, "Climate Reconstructions from Land to Sea," San Francisco, CA.
- Mock, C.J., D.O. Mayes, D.J. Burnette, and M. Chenoweth, 2004: Meteorological aspects of the Lewis and Clark journals in the Northern Plains as compared to other historical extremes in the last 200 years. Presented at the Center for Great Plains Studies Symposium, "The Nature of Lewis and Clark on the Great Plains," Lied Conference Center, Nebraska City, NE.

Burnette, D.J., 2002: Meteorological reconstruction of the Lewis and Clark expedition. Presented at the American Meteorological Society/National Weather Association Wichita Chapter, Wichita, KS.  
Burnette, D.J., 1997: Case study: upslope flow yielding severe thunderstorm event (25 June 1997). Presented at the Mississippi State University Summer Workshop, Starkville, MS.

## **RESEARCH INTERESTS**

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Instrumental and Documentary Climate Variability and Change  
Case Studies of Weather Events  
Severe Weather  
Weather and Climate Prediction  
Use of Computer Technology in Science  
Tree-Rings  
Land Use/Land Cover Change

## **CLASSES AND SHORT COURSES TAUGHT**

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Astronomy  
Calculus  
Climatology  
Earth Science and the Environment  
Environmental Geology Lab  
General Geology Lab  
Honors General Geology Lab  
Introduction to Earth Science  
Introduction to Earth Science Lab  
Meteorology  
Research Methods  
Severe Weather  
Trigonometry  
Visual Basic.NET Programming  
Weather Forecasting

## **SKILLS**

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Building Personal Computers (Intel-based and AMD-based systems)  
Geographic Information Systems Software: ArcGIS (ESRI Certificate in ArcGIS I) and Idrisi  
Programming Languages: Basic, C, C++, HTML, Javascript, R, SAS, Visual Basic, Visual Basic.NET, Visual C++, and Visual C++.NET  
Tree-Ring Lab Software: ARSTAN and COFECHA  
Other Software: Dreamweaver, Fireworks, Flash, Illustrator, Microsoft Office, and Photoshop

## **ACADEMIC EXPERIENCE**

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Postdoctoral Research Associate, Department of Geosciences, University of Arkansas, Fayetteville, AR, January 2010-Present  
Research Assistant, Department of Geosciences, University of Arkansas, Fayetteville, AR, May 2009-December 2009.  
Graduate Assistant, Department of Geosciences, University of Arkansas, Fayetteville, AR, August 2003-May 2009.  
Instructor, Upward Bound Math-Science Program, Wichita State University, Wichita, KS, Summer 1999-Summer 2007.  
Lecturer, Department of Physical Science, Emporia State University, Emporia, KS, January 2003-May 2003.  
Lecturer, Department of Geology, Wichita State University, Wichita, KS, January 1999-May 2002.  
Graduate Teaching Assistant, Department of Physical Science, Emporia State University, Emporia, KS, August 2000-December 2001.  
Presenter, K-12 Teacher's Earth Science Conference Update, Emporia State University, Emporia, KS, July 2001.  
Graduate Research Assistant, Department of Physical Science, Emporia State University, Emporia, KS, August 1999-May 2000.  
Paper Grader, Department of Physics, Wichita State University, Wichita, KS, August 1997-August 1998.

## **PROFESSIONAL EXPERIENCE**

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Storm Warning Meteorologist and Shift Leader, WeatherData Services, Inc., Wichita, KS, Summer 2006, 2007.  
Storm Warning Meteorologist and Shift Leader, WeatherData, Inc., Wichita, KS, July 2002-July 2003.  
Back Up and Severe Weather Meteorologist, KSNW-TV, Wichita, KS, September 1998-July 2003.  
Storm Warning Meteorologist, WeatherData, Inc., Wichita, KS, March 1999-July 2002.  
FOX Weekend Meteorologist, KSNW-TV/KSAS-TV, Wichita, KS, May 1998-September 1998.  
Meteorological Internship, KSNW-TV, Wichita, KS, January 1994-May 1998.

## **COMMITTEES**

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Student Representative, Environmental Dynamics Ph.D. Program Steering Committee, Department of Geosciences, University of Arkansas, Fayetteville, AR, December 2005-October 2007.