

Michael A. Bell

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Society, The Earth Institute at Columbia University
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EDUCATION

University of Oklahoma, Norman, Oklahoma

Master of Science in Meteorology (Minor in Hydrologic Science) **2001**
Bachelor of Science in Meteorology, cum laude, (Minor in Mathematics) **1994**

TEACHING AND TECHNICAL EXPERIENCE

Senior Staff Associate/Staff Associate

*International Research Institute for Climate and Society (IRI), The Earth Institute
at Columbia University, Palisades, NY* **2005-present/
2001-2005**

- Provide operational support for technical and non-technical users of the IRI Data Library, a web-based analysis tool and repository of climate and earth science-related data sets
- Teach introductory Data Library training course
- Development of new climate monitoring products and analysis tools
- Climate data and analysis support for IRI projects
- Edited and produced a monthly online publication summarizing climate anomalies and their impacts on human activities (IRI Climate Information Digest)
- Represent the IRI internationally at workshops and scientific conferences

Graduate Research Assistant

School of Meteorology/CIMMS, University of Oklahoma, Norman, OK **1997-2001**

- Conducted statistical analysis of large IR satellite & West African (Sahelian) daily station rainfall data sets to document contribution of rainfall disturbance line variability to long-term drought
- Research included 10 weeks of work at the African Center for Meteorological Applications for Development (ACMAD) in Niamey, Niger, and 5 weeks with the Tropical Applications of Meteorology using Satellite and Other Data (TAMSAT) group, University of Reading, Reading, UK

Graduate Teaching Assistant

School of Meteorology, University of Oklahoma, Norman, OK **1995-1997**

- Taught weekly laboratory section of introductory meteorology course for majors, which included brief oral presentations, grading, and delivery of some lectures

Graduate Teaching Assistant

School of Meteorology, University of Oklahoma, Norman, OK

1995

- Taught sophomore-level synoptic meteorology laboratory course for majors. Organized syllabus, lectures, assignments, and tests in coordination with instructor, delivered majority of classroom lectures, and administered and graded all assignments and tests

PUBLICATIONS

Ropelewski, C. F., and M. A. Bell, 2008: Shifts in the statistics of daily rainfall in South America conditional on ENSO phase. *J. Climate.*, **21**, 849-865.

Arguez, A., 2007: Supplement to state of the climate in 2006. *Bull. Amer. Meteor. Soc.*, **88**, s1-s135.

Ceccato, P., M. A. Bell, T. Dinku, and S. J. Connor, 2007: Application of remote sensing technologies for monitoring human health. In: *The Full Picture*, published by Tudor Rose on behalf of the Group on Earth Observations (GEO). ISBN 978-92-990047-0-8, pp. 184-187.

Ceccato, P., T. Ghebreskel, M. Jaiteh, P. M. Graves, M. Levy, S. Ghebreselassie, A. Ogbamariam, A. G. Barnston, M. Bell, J. del Corral, S. J. Connor, I. Fesseha, E. P. Brantly, M. C. Thomson, 2007: Malaria stratification, climate, and epidemic early warning in Eritrea. *Am. J. Trop. Med. Hyg.*, **77** (6_Suppl), 61-68.

Graves, P. M., D. E. Osgood, M. C. Thomson, K. Sereke, A. Araia, M. Zerom, P. Ceccato, M. Bell, J. del Corral, S. Ghebreselassie, E. P. Brantly, T. Ghebreskel, 2008: Effectiveness of malaria control during changing climate conditions in Eritrea, 1998-2003. *Trop. Med. Int. Health.*, **13**, 218-228.

Bell, M. A., and P. J. Lamb, 2006: Integration of weather system variability to multidecadal regional climate change: The West African Sudan-Sahel Zone, 1951-98. *J. Climate*, **19**, 5343-5365.

Shein, K. A., Ed., 2006: State of the climate in 2005. *Bull. Amer. Meteor. Soc.*, **87** (June), S1-S102.

Levinson, D. H., Ed., 2005: State of the climate in 2004. *Bull. Amer. Meteor. Soc.*, **86** (June), S1-S86.

Levinson, D. H., and A. M. Waple, Eds., 2004: State of the climate in 2003. *Bull. Amer. Meteor. Soc.*, **85** (June), S1-S72.

Lamb, P. J., M. A. Bell, & J. D. Finch, 1998: Variability of Sahelian disturbance lines and rainfall during 1951-1987. *Water Resources Variability in Africa during the XXth Century* (Proceedings of the Abidjan'98 Conference held at Abidjan, Côte d'Ivoire, November, 1998). IAHS Publ. no. 252, 19-26.

SELECTED PRESENTATIONS

Ropelewski, C., and M. Bell, 2006: Shifts in the statistics of daily rainfall in South America conditional on ENSO phase. 8th International Conference on Southern Hemisphere Meteorology and Oceanography, Foz do Iguacu, Brazil, 24-28 April, 2006 (Oral Presentation).

Bell, M., A. Seth, B. Lyon, E. Grover-Kopec, and C. Ropelewski, 2006: The Climate Information Digest: A monthly web-based publication of recent climate events, impacts, and seasonal forecasts. 4th Annual NOAA Climate Prediction Applications Science Workshop, Tucson, Arizona, 21-24 March, 2006 (Oral Presentation).

Bell, M. A., and P. J. Lamb, 2005: Integration of weather system variability to multidecadal regional climate change: West African Soudano-Sahel zone, 1951-98. First International AMMA Conference, Dakar, Senegal, 28 November-2 December, 2005 (Poster).

Bell, M. A., 2002: Using satellite rainfall estimates for climate impacts studies. Workshop on Satellite and Radar Rainfall Estimation in West Africa and Applications in Agriculture, Dakar, Senegal, 28-30 May, 2002 (Oral Presentation).

Bell, M. A., and P. J. Lamb, 2000: A Perspective on the West African monsoon for 1951-1998 from daily observations. In: *Proceedings of the Workshop on the West African Monsoon Variability and Predictability (WAMAP)*, Dakar, Senegal, June, 1999, 95-98. (Oral Presentation)

Bell, M. A., and P. J. Lamb, 1994: Temporal variations in the rainfall characteristics of disturbance lines over Subsaharan West Africa: 1951-90. In: *Proceedings of the Nineteenth Annual Climate Diagnostics Workshop*, College Park, Maryland, 14-18 November, 1994, 480-484. (Oral Presentation)

COMPUTER SKILLS

- Experienced with MS Office Suite products Word, Powerpoint, and Excel, Perl (including CGI), Fortran-77 programming, HTML/CSS
- Some experience with Adobe Photoshop, Adobe Illustrator, and Paint Shop Pro
- Proficient with Unix/Linux and IRI Data Library Ingrid data analysis and display software
- Experienced with Kaleidagraph graphing software, WinDisp image analysis and display software
- Some experience with Splus statistical programming language, GrADS, Matlab, Protégé ontology editor, and Surfer mapping software
- Limited experience with ArcView GIS, PostgreSQL database, NCAR Graphics, GEMPAK, and GARP meteorological analysis software

OTHER ACTIVITIES

- Organized IRI contributions (talks, posters, activities, exhibits) to annual Lamont-Doherty Earth Observatory Open House **2002-2007**
- Volunteer stream monitoring in Rockland County, New York **2007**

HONORS & AWARDS

Father James B. Macelwane Annual Award, 3rd Place, American Meteorological Society, for undergraduate honors thesis *Temporal Variations in the Characteristics of Rainfall Disturbances of the West African Sahel: 1951-1990* **1995**