

## **Professor Sharon E. Nicholson**

**Earth, Ocean and Atmospheric Sciences (EOAS)**  
**Florida State University**  
**snicholson@fsu.edu**

### **Education**

Ph.D., University of Wisconsin (Meteorology; Geology Minor), 1976  
Major Professor: H. Lettau  
Languages: fluency, German, French; reading, Portuguese, Czech, Russian  
Special Student, Universitaet Bonn, West Germany, 1974-76  
M.S., University of Wisconsin (Meteorology), 1972  
B.S. Honors Degree, University of Wisconsin (Meteorology), 1971  
Thesis: A Carbon Monoxide Survey for Madison, Wisconsin  
National Science Foundation Summer Course Programs:  
University of Iowa, 1965 (Meteorology, Geology)  
Louisiana State, 1966 (Marine Biology, Oceanography)

### **Areas of Interest**

Tropical meteorology; remote sensing; climatic change; paleo- and historical climatology; land-atmosphere interaction; arid lands; water-balance modeling

### **Employment History**

Professor of Meteorology, Florida State University (1991-present)  
Associate Professor of Meteorology, Florida State University (1985-1990)  
Adjunct Assistant Professor of Physics, Clark University (1981-1985)  
Assistant Professor, Graduate School of Geography, Clark University (1979-1985)  
Research Associate, Dept. of Environmental Sciences, University of Virginia (1977-79)  
Postdoctoral Fellow, National Center for Atmospheric Research, Advanced Study Program, Boulder, Colorado (1976-77)  
Student Researcher in CSP Special Analysis Group for GARP Atlantic Tropical Experiment, Dakar, Senegal, UCAR (1974, summer)  
Lecturer, University of Wisconsin (Milwaukee), Geography Department (1974)  
Teaching Assistant (one semester), Research Assistant (six semesters), University of Wisconsin (Madison), Department of Meteorology (1971-74)  
Meteorological Technician, NOAA: Environmental Research Labs Geoacoustics Group, Washington, D.C. (1969, summer employment)  
Student Employment, University of Wisconsin: Space Science and Engineering, Institute for Environmental Studies, Marine Studies Center, Meteorology (1968-71)  
Trainee and Observer, NOAA: Weather Bureau, Columbus, Ohio (summer 1967, 1968)

### **Professional Societies**

American Meteorological Society  
American Geophysical Union  
International Association of the Hydrological Sciences  
American Association for the Advancement of Science

## Honors and Awards

Fulbright Global Scholar Program Award (2019)

Charles E. Anderson Award of the American Meteorological Society (2009)

FSU Named Professorship (Heinz & Katharina Lettau Professor of Climatology) (2002ff)

Hugh Robert Mill Medal from the Royal Meteorological Society (United Kingdom) (2001)

POWRE Award, National Science Foundation Special awards program) (2000)

Fellow, American Meteorological Society (1999)

Distinguished Research Professor, Florida State University (1998).

Finalist in National Geographic Traveller's Travel Photography Contest (1998)

Honorable Mention for Photographic Entry, American Geophysical Union Geophysical Images Contest (1994)

Faculty Award for Women (1991-1996), National Science Foundation (Special awards program, one of only ten in all of the geosciences)

Fulbright Fellowship for research in Niger and Botswana (1991-1992)

Developing Scholar Award, Florida State University (1987)

Postdoctoral Fellowship, National Center for Atmospheric Research (1976-77)

DANK-Fellowship, Deutscher Akademischer Austausch Dienst (DAAD) (1974-76)

University Fellowship, University of Wisconsin Graduate School (1971)

2nd Place Macelwane Award (for undergraduate research), American Meteorological Society (1970)

Westinghouse Science Talent Search Winner (1967)

## Recent Professional Service

WMO Climate Commission Working Group on Climate Data Exchange (chair, 2018-2020).

Program Committee, American Geophysical Union Chapman Conference on Hydrologic Research in the Congo Basin (2015 to 2018)

Editorial Board, Oxford Research Encyclopedia of Climate Science (2015 to 2018)

Senior Editor, Oxford Research Encyclopedia of Climate Science, volume on Africa (2015 to 2018)

Guest Editor, Proceedings of the National Academy of Sciences (2015)

Editorial Board for *Desert* (an Iranian publication) (2014 to 2018)

WMO Climate Commission, Climate Monitoring and Assessment and Climate Data Management panels (2014-2018), Task Team on the Statement of Guidance on CCI Observational Needs.

Review Panelist for NSF Graduate Research Fellowship Program in Geosciences (Fall 2013/Spring 2014)

WMO Precipitation Extremes Committee (2013 to 2018)  
International Advisory Panel, Dictionary of Physical Geography (2013ff)  
American Meteorological Society Awards Nominating Committee (2009-2012)  
PAGES (Past Global Changes) Africa 2k Working Group of IGBP (2010-2017)  
Review Panel for the Georgian National Academy of Sciences (2008 to present)

## **Recent Research Grants And Contracts**

Examining the 19th Century Record of Sahel Rainfall in the Context of Global Change; NOAA, Climate Change Data and Detection, 7/1/08-6/30/10, \$211,000, (Principal Investigator, S. E. Nicholson).

Further studies on the meteorology of western equatorial Africa, NSF, 7/1/2008-6/30/2011, \$458,233 (Principal Investigator, S.E. Nicholson).

Water Sustainability and Climate in the Great Lakes Region of East Africa: Water Sustainability and Climate (WSC) Category I Grant, NSF, 10/01/2010 to 09/30/2011, \$136,809 (Grant Collaborator, T. C. Johnson, University of Minnesota, Principal Investigator).

Examination of select factors influencing the interannual variability of rainfall in the African Sahel, COFRS: 2011/2012; \$13,967 (Principal Investigator, S.E. Nicholson).

RAPID: Assessment of the drought situation in the Horn of Africa; NSF, 9/09/2011 to 9/21/2012, \$75,445 (Principal Investigator, S. E. Nicholson).

From flood to famine: the rainfall regime in East Africa, its interannual variability, and large-scale teleconnections; NSF, 12/09/2011 to 11/09/2014, \$601,553 (Principal Investigator, S. E. Nicholson).

Improved rainfall databases for evaluating climatic trends in equatorial and West Africa and the Middle East; USGS, 10/1/2014 to 9/30/2015, \$28,919 (Principal Investigator, S. E. Nicholson).

A new look at Sahel rainfall variability over two centuries; NSF, 2/1/2015 to 1/31/2018, \$736,306 (Principal Investigator, S. E. Nicholson).

Collaborative Research: Understanding Congo rainfall variability; NSF, 9/1/2015-8/31/2019, \$259,553 to FSU (Principal Investigators, L.Zhou (SUNY Albany) and S.E. Nicholson).

## **Publications**

**Web of Science: h-index, 50, 10,008 citations**  
**Google Scholar: h-index, 68, 18,769 citations**  
**Number of citations in Web of Science in parentheses;**  
**(citations in red, from Google Scholar)**  
**\*= students, # = posts-docs**

## Books:

Nicholson, S. E., 2001: *Dryland Climatology*. Cambridge University Press, Cambridge, 516 pp.

## Peer Reviewed Articles:

- Nicholson, S. E., 1975: A pollution model for street-level air. *Atmospheric Environment*, **9**, 19-31. [90]
- Nicholson, S. E., 1978: Climatic variations in the Sahel and other African regions during the past five centuries. *Journal of Arid Environments*, **1**, 3-24 (invited article for inaugural issue of journal). [196]
- Nicholson, S. E., 1979: The methodology of historical climate reconstruction and its application to Africa. *Journal of African History*, **20**, No. 1, 31-49. [48]
- Nicholson, S. E., 1979: Revised rainfall series for the West African subtropics. *Monthly Weather Review*, **107**, 620-623. [82]
- Nicholson, S. E., 1979: Statistical typing of rainfall anomalies in sub-Saharan Africa. *Erdkunde*, **33**, 95-103. [4]
- Nicholson, S. E., 1980: The nature of rainfall fluctuations in subtropical West Africa. *Monthly Weather Review*, **108**, 473-487. [162]
- Nicholson, S. E., and H. Flohn, 1980: African environmental and climatic changes and the general atmospheric circulation in late Pleistocene and Holocene. *Climatic Change*, **2**, 313-348. [158]
- Nicholson, S. E., 1981: Rainfall and atmospheric circulation during drought periods and wetter years in West Africa. *Monthly Weather Review*, **109**, 2191-2208. [133]
- Nicholson, S. E., 1982: Pleistocene and Holocene climates in Africa. *Nature*, **296**, 779. [8]
- Nicholson, S. E., 1983: Sub-Saharan rainfall in the years 1976-1980: evidence of continued drought. *Monthly Weather Review*, **111**, 1646-1654. [84]
- Nicholson, S. E., 1985: Sub-Saharan rainfall 1981 - 1984. *Journal of Climate and Applied Meteorology*, **24**, 1388-1391. [100]
- Nicholson, S. E., and D. Entekhabi\*, 1986: The quasi-periodic behavior of rainfall variability in Africa and its Relationship to the Southern Oscillation. *Archives for Meteorology, Geophysics and Bioclimatology, Series A*, **34**, 311-348. [154]
- Nicholson, S. E., 1986: The spatial coherence of African rainfall anomalies: Interhemispheric teleconnections. *Journal of Climate and Applied Meteorology*, **25**, 1365-1381. [165]
- Nicholson, S. E., 1986: The nature of rainfall variability in Africa south of the equator. *Journal of Climatology*, **6**, 515-530. [50]
- Nicholson, S. E., and D. Entekhabi\*, 1987: Rainfall variability in Equatorial and Southern Africa: relationships with sea-surface temperatures along the southwestern coast of Africa, *Journal of Climate and Applied Meteorology*, **26**, 561-578. [151]
- Nicholson, S. E., 1988: Land surface-atmosphere interaction: physical processes and surface changes and their impact. *Progress in Physical Geography*, **12**, 36-65. [50]
- Nicholson, S. E., and D. Entekhabi\*, 1988: Reply to L. Druryan, Comments on "Rainfall Variability in Equatorial and Southern Africa: Relationships with SSTs Along the Southwestern Coast of Africa." *Journal of Climate*, **1**, 570. [0]

- Nicholson, S. E.**, 1989: Remote sensing of land surface parameters. *Progress in Physical Geography*, **13**, 1-12. [3]
- Nicholson, S. E.**, 1989: Long-term changes in African rainfall. *Weather*, **44**, 47-56. [146]
- Schonher\*, T., and **S.E. Nicholson**, 1989: The relationship between California rainfall and ENSO events. *Journal of Climate*, **2**, 1258-1269. [165]
- Lare\*, A. R., and **S. E. Nicholson**, 1990: A climatonic description of the surface energy balance in the central Sahel. Part I. Shortwave radiation. *Journal of Applied Meteorology*, **29**, 123-137. [17]
- Nicholson, S. E.**, and A. R. Lare\*, 1990: A climatonic description of the surface energy balance in the central Sahel. Part II. The evapoclimatology submodel. *Journal of Applied Meteorology*, **29**, 138-146. [18]
- Nicholson, S. E.**, and B. S. Nyenzi\*, 1990: Temporal and spatial variability of SSTs in the tropical Atlantic and Indian Oceans. *Archives for Meteorology, Geophysics and Bioclimatology, Series A*, **42**, 1-17. [29]
- Malo\*, A., and **S. E. Nicholson**, 1990: A study of rainfall and vegetation dynamics in the African Sahel using Normalized Difference Vegetation Index. *Journal of Arid Environments*, **19**, 1-24. [184]
- Nicholson, S. E.**, M. L. Davenport\*, and A. R. Malo\*, 1990: A comparison of the vegetation response to rainfall in the Sahel and East Africa, using Normalized Difference Vegetation Index from NOAA AVHRR. *Climatic Change*, **17**, 209-241. [285]
- Nicholson, S. E.**, 1992: Prediction of trace gas emissions and their climatic impacts: some geographical considerations. *Ecological Bulletins*, **42**, 1-12. [2]
- Nicholson, S. E.**, and I. M. Palao\*, 1993: A re-evaluation of rainfall variability in the Sahel. Part I. Characteristics of rainfall fluctuations. *International Journal of Climatology*, **13**, 371-389. [143]
- Nicholson, S. E.**, 1993: An overview of African rainfall fluctuations of the last decade. *Journal of Climate*, **6**, 1463-1466. [145]
- Davenport\*, M., and **S.E. Nicholson**, 1993: On the relationship between rainfall and the Normalized Difference Vegetation Index for diverse vegetation types in East Africa. *International Journal of Remote Sensing*, **14**, 2369-2389. [193]
- Lare\*, A. R., and **S. E. Nicholson**, 1994: Contrasting conditions of surface water balance in wet years and dry years as a possible land surface-atmosphere feedback mechanism in the West African Sahel. *Journal of Climate*, **7**, 653-668. [50]
- Nicholson, S. E.**, 1994: Recent rainfall fluctuations in Africa and their relationships to past conditions over the continent. *The Holocene*, **4**, 121-131. [137]
- Nicholson, S. E.**, and T. J. Farrar\*, 1994: The influence of soil type on the relationships between NDVI, rainfall and soil moisture in semi-arid Botswana. Part I. Response to rainfall. *Remote Sensing of Environment*, **50**, 107-120. [232]
- Farrar\*, T. J., **S.E. Nicholson** and A.R. Lare\*, 1994: The influence of soil type on the relationships between NDVI, rainfall and soil moisture in semi-arid Botswana. Part II. Response to soil moisture *Remote Sensing of Environment*, **50**, 121-133. [155]
- Ba#, M.B., R. Frouin, and **S. E. Nicholson**, 1995: Satellite-derived interannual variability of West African rainfall 1983-88. *Journal of Applied Meteorology*, **34**, 411-431. [22]

- Nicholson, S. E.,** A.R. Lare\*, J.A. Marengo#, P. Santos\*, 1996: A revised version of Lettau's Evapoclimatology model. *Journal of Applied Meteorology*, **35**, 549-561. [19]
- Marengo#, J. A., **S.E. Nicholson**, A. R. Lare\*, B. A. Monteny, and S. Galle, 1996: Application of Evapoclimatology to monthly surface water balance at the HAPEX-Sahel supersites. *Journal of Applied Meteorology*, **35**, 562-573. [7]
- Nicholson, S. E.,** M. B. Ba#, and J. Y. Kim, 1996: Rainfall in the Sahel during 1994 (). *Journal of Climate*, **9**, 1673-1676. [30]
- Nicholson, S. E.,** 1997: An analysis of the ENSO signal in the tropical Atlantic and western Indian Oceans. *International Journal of Climatology*, **17**, 345-375. [134]
- Nicholson, S. E.,** J. A. Marengo#, J. Kim, A.R. Lare\*, S. Galle, and Y. Kerr, 1997: A daily resolution Evapoclimatology model applied to surface energy and water balance calculations at the HAPEX-Sahel supersites. *Journal of Hydrology*, **188-189**, 946-964. [6]
- Ba#, M., G. Dedieu, Y. H. Kerr, **S. E. Nicholson** and J. Lecocq, 1997: Reduction of bidirectional effects on NOAA/AVHRR data acquired during HAPEX-SAHEL Experiment. *Journal of Hydrology*, **188-189**, 749-778. [3]
- Nicholson, S.E.,** and J. Kim, 1997: The Relationship of the El-Nino Southern Oscillation to African Rainfall. *International Journal of Climatology*, **17**, 117-135. [330]
- Grist\*, J., **S. E. Nicholson**, and A. Mpolokang, 1997: On the use of NDVI for estimating rainfall fields in the Kalahari of Botswana. *Journal of Arid Environments*, **35**, 195-214. [53]
- Nicholson, S. E.,** J. Kim, M. B. Ba#, and A. R. Lare\*, 1997: The mean surface water balance over Africa and its interannual variability. *Journal of Climate*, **10**, 2981-3002. [24]
- N'Tchayi Mbourou, G., J. J. Bertrand, and **S. E. Nicholson**, 1997: The diurnal and seasonal cycles of desert dust over Africa north of the equator. *Journal of Applied Meteorology*, **36**, 868-882. [120]
- Ba#, M. B., and **S. E. Nicholson**, 1998: Analysis of convective activity and its relationship to the rainfall over the Rift Valley lakes of East Africa during 1983-1990 using the METEOSAT infrared channel. *Journal of Climate and Applied Meteorology*, **10**, 1250-1264. [46]
- Nicholson, S. E.,** C. J. Tucker and M. B. Ba#, 1998: Desertification, drought and surface vegetation: an example from the West African Sahel. *Bulletin of the American Meteorological Society*, **79**, 815-829. [332]
- Yin\*, X., and **S. E. Nicholson**, 1998: The water balance of Lake Victoria. *Hydrological Sciences Journal*, **43**- 789-811. [76]
- Nicholson, S. E.,** 1999: Historical and modern fluctuations of Lakes Tanganyika and Rukwa and their relationship to rainfall variability. *Climatic Change*, **41**, 53-71. [54]
- Tucker, C. J., and **S. E. Nicholson**, 1999: Variations in the size of the Sahara Desert from 1980 to 1997. *Ambio*, **28**, No. 2, 587-591. [123]
- Nicholson, S. E.,** and X. Yin\*, 1999: Response to comment on "The water balance of Lake Victoria", by J. V. Sutcliffe. *Hydrological Sciences Journal*, **44**, 836-837. [0]
- Ogallo, L. A., S. J. Mason, S. M. King'uyu, **S. E. Nicholson**, B. S. Nyenzi, E. Matari, and G. M. Mimmack, 1999: Indices and indicators of climate extremes in Africa. *Journal of the African Meteorological Society*, **4**, 17-29. [0]
- Nicholson, S. E.,** 2000: Land Surface Processes and Sahel Climate. *Reviews of Geophysics*, **38**, 117-139. [205]

- Nicholson, S. E.,** X. Yin\* and M. B. Ba#, 2000: On the feasibility of using a lake water balance model to infer rainfall. *Hydrological Sciences Journal*, **45**, 75-95. [37]
- Yin\*, X., and **S. E. Nicholson**, 2000: On the diurnal cycle of cloudiness over Lake Victoria and its influence on evaporation from the lake. *Hydrological Sciences Journal*, **45**, 407-424. [16]
- Nicholson, S.E.,** B. Some, and B. Kone, 2000: An analysis of recent rainfall conditions in West Africa, including the rainy seasons of the 1997 el Niño and 1998 la Niña years. *Journal of Climate*, **13**, 2628-2640. [216]
- Long\*, M., D. Entekhabi, and **S. E. Nicholson**, 2000: Interannual variability in rainfall, water vapor flux, and vertical motion over Africa. *Journal of Climate*, **13**, 3827-3841. [36]
- Nicholson, S. E.,** and J. C. Selato\*, 2000: The influence of La Nina on African rainfall. *International Journal of Climatology*, **20**, 1761-1776. [99]
- Nicholson, S. E.,** 2000: The nature of rainfall variability over Africa on time scales of decades to millennia. *Global and Planetary Change Letters*, **26**, 137-158. [377]
- Nicholson, S. E.,** and X. Yin\*, 2001: Rainfall conditions in equatorial East Africa during the nineteenth century as inferred from the record of Lake Victoria. *Climatic Change*, **48**, 387-398. [79]
- Ba#, M. B., G. Dedieu, **S. E. Nicholson** and R. Frouin, 2001: Satellite-derived surface radiation budget over the African continent. Part I. Derivation of global solar irradiance and surface albedo. *Journal of Climate*, **14**, 45-58. [12]
- Ba#, M. B., **S. E. Nicholson**, and R. Frouin, 2001: Satellite-derived surface radiation budget over the African continent. Part II. Temporal and spatial variability of surface global solar irradiance, albedo and net radiation. *Journal of Climate*, **14**, 60-76. [30]
- Nicholson, S. E.,** D. Leposo, and J. Grist\*, 2001: The relationship between El Nino and drought over Botswana. *Journal of Climate*, **14**, 323-335. [42]
- Grist\*, J. P., and **S. E. Nicholson**, 2001: A study of the dynamic factors influencing the interannual variability of rainfall in the West African Sahel. *Journal of Climate*, **14**, 1337-1359. [173]
- Nicholson, S. E.,** 2001: Climatic and Environmental Change in Africa during the Last Two Centuries. *Climatic Research*, **17**, 123-144. [276]
- Nicholson, S. E.,** 2001: A semi-quantitative, regional precipitation data set for studying African climates of the nineteenth century, Part I. Overview of the data set. *Climatic Change*, **50**, 317-353. [29]
- Nicholson, S. E.,** and J. P. Grist\*, 2001: A simple conceptual model for understanding rainfall variability in the West African Sahel on interannual and interdecadal time scales. *International Journal of Climatology*, **21**, 1733-1757. [91]
- Grist\*, J. P., **S. E. Nicholson**, and A. I. Barcion, 2002: Easterly waves over West Africa II. Observed and modelled contrasts between wet and dry years. *Monthly Weather Review*, **130**, 212-225. [38]
- Prospero, J. M., P. Ginoux, O. Torres, and **S. E. Nicholson**, 2002: Global Soil Dust Sources I: Environmental Characterization. *Reviews of Geophysics*, **40**, No. 2, doi: 10.1029/2000RG000095, 31 pp. [1465]
- Yin\*, X., and **S. E. Nicholson**, 2002: Interpreting annual rainfall from the levels of Lake Victoria. *Journal of Hydrometeorology*, **3**, 406-416. [13]
- Nicholson, S. E.,** and J. P. Grist\*, 2003: The seasonal evolution of atmospheric circulation over West Africa and Equatorial Africa. *Journal of Climate*, **16**, 1013-1030. [136]

- Nicholson, S. E.**, 2003: Comment on "The South Indian Convergence Zone and interannual rainfall variability over Southern Africa" and the question of ENSO's influence on southern Africa. *Journal of Climate*, **16**, 555-562. [0]
- Nicholson, S. E.**, B.. Some, J. McCollum, E. Nelkin, D. Klotter, Y. Berte, B. M. Diallo, I. Gaye, G. Kpabeba, O. Ndiaye, J.N. Noukpozoukou, M. M. Tanu, A. Thiam, A. A. Toure, and A. K. Traore, 2003: Validation of TRMM and other rainfall estimates with a high-density gauge data set for West Africa. Part I. Validation of GPCC rainfall product and pre-TRMM satellite and blended products. *Journal of Applied Meteorology*, **42**, 1337-1354. [104]
- Nicholson, S. E.**, B.. Some, J. McCollum, E. Nelkin, D. Klotter, Y. Berte, B. M. Diallo, I. Gaye, G. Kpabeba, O. Ndiaye, J.N. Noukpozoukou, M. M. Tanu, A. Thiam, A. A. Toure, and A. K. Traore, 2003: Validation of TRMM and other rainfall estimates with a high-density gauge data set for West Africa. Part II. Validation of TRMM rainfall products. *Journal of Applied Meteorology*, **42**, 1355-1368. [166]
- Nicholson, S. E.**, 2005: On the Question of the "Recovery" of the Rains in the West African Sahel. *Journal of Arid Environments*, **63**, 615-641. [190]
- Nicholson, S. E.**, A.I. Barcilon, M. Challa, and J. Baum\*, 2007: Wave Activity on the Tropical Easterly Jet. *Journal of the Atmospheric Sciences*, **64**, 2756-2763. [15]
- Prince S. D, K. J. Wessels, C. J. Tucker and **S. E. Nicholson**, 2007: Desertification in the Sahel: a reinterpretation of a reinterpretation. *Global Change Biology*, **13**, 1308-1313. [114]
- Nicholson, S.E.**, and P. J. Webster, 2007: A Physical Basis for the Interannual Variability of Rainfall in the Sahel. *Quarterly Journal of the Royal Meteorological Society*, **133**, 2065-2084. [57]
- Balas\*, N., **S. E. Nicholson**, and D. Klotter, 2007: The relationship of rainfall variability in West central Africa to sea-surface temperature fluctuations. *International Journal of Climatology*, **27**, 1335-1349. [47]
- Nicholson, S. E.**, A.I. Barcilon, and M. Challa, 2008: An analysis of West African dynamics using a linearized GCM. *Journal of the Atmospheric Sciences*, **65**, 1182-1203. [13]
- Nicholson, S. E.**, 2008: The intensity, location and structure of the tropical rainbelt over West Africa as factors in interannual variability. *International Journal of Climatology*, **28**, 1775-1785. [52]
- Nicholson, S. E.**, 2009: On the factors modulating the intensity of the tropical rainbelt over West Africa. *International Journal of Climatology*. **29**, 673-689. [33]
- Nicholson, S. E.**, 2009: A revised picture of the structure of the "monsoon" and land ITCZ over West Africa. *Climate Dynamics*, **32**, 1155-1171. [134]
- Jackson\*, B., **S. E. Nicholson**, and D. Klotter, 2009: Mesoscale convective systems over western equatorial Africa and their relationship to large-scale circulation. *Monthly Weather Review*, **137**, 1272-1294. [53]
- Nicholson, S. E.**, 2010: A low-level jet along the Benguela coast, an integral part of the Benguela Current Ecosystem. *Climatic Change*, **99**, 613-624. [30]
- Dezfuli\*, A. K., and **S. E. Nicholson**, 2011: A note on long-term variations of the African Easterly Jet. *International Journal of Climatology*, **31**, 2049-2054. [9]
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- Nicholson, S. E.,** D. Klotter, and A. K. Dezfuli\*, 2012: Spatial reconstruction of semi-quantitative precipitation fields over Africa during the nineteenth century from documentary evidence and gauge data. *Quaternary Research*, **78**, 13-23. [37]
- Nicholson, S. E.,** A. K. Dezfuli\*, and D. Klotter, 2012: A two-century precipitation dataset for the continent of Africa. *Bulletin of the American Meteorological Society*, **93**, 1219-1231. [50]
- Dezfuli\*, A. K. and **S. E. Nicholson**, 2013: The relationship of interannual variability in western equatorial Africa to the tropical oceans and atmospheric circulation. Part II. The boreal autumn. *Journal of Climate*, **26**, 66-84. [33]
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- Nicholson, S. E., 2013: The West African Sahel: a review of recent studies on the rainfall regime and its interannual variability. *ISRN Meteorology*, 2013, Article 453521, 32 pp (doi:10.11552013/453521). [273]
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- Nicholson, S. E.,** 2014: The predictability of rainfall over the Greater Horn of Africa. Part I. Prediction of seasonal rainfall. *Journal of Hydrometeorology*, **15**, 1011-1027. [25]
- Nicholson, S. E.,** 2014: A detailed look at the recent drought situation in the Greater Horn of Africa. *Journal of Arid Environments*, **103**, 71-79. [35]
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- Nicholson, S. E.,** 2015: Long-term variability of the East African "short rains" and its links to large-scale factors. *International Journal of Climatology*, **35**, 3979-3990. [22]
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- Funk, C., **S. E. Nicholson**, M. Landsfeld, D. Klotter, P. Peterson, and L. Harrision, 2015: The centennial trends Great Horn of Africa precipitation data set Version 1.0. *Nature Scientific Data*, **2**, 150050. [122]
- Nicholson, S. E.,** 2015: Evolution and current state of our understanding of the role played in the climate system by land surface processes in semi-arid regions. *Global and Planetary Change*, **133**, 201-222 (invited review article). [9]
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