

Michelle E. Saunders

Curriculum Vitae

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EDUCATION

- 2020 Ph.D. Geography and Environmental Science and Policy - University of South Florida, School of Geosciences
Dissertation: The Perceived Usefulness of a Weather Radar Display by Tampa Bay Residents
Concentration: Environmental Geography
Advisor: Dr. Jennifer M. Collins
- 2015 M.S. Geography - University of Alabama, Department of Geography
Thesis: Perceptions of Hurricane Hazards in the Mid-Atlantic
Concentration: Earth System Science
Advisor: Dr. Jason C. Senkbeil
- 2013 B.S. Geography, Cum Laude - Salisbury University
Concentration: Atmospheric Science and Earth Science
Minor: Communication Arts

PROFESSIONAL EXPERIENCE

- 2020-present **Postdoctoral Research Fellow**, Center for Applied Social Research, University of Oklahoma
- 2018-2019 **Graduate Mentor**, Research Experience for Undergraduates, University of South Florida
- 2018-2019 **HHMI STEM Academy Graduate Mentor**, University of South Florida
- 2018-2020 **Graduate Teaching Associate**, School of Geosciences, University of South Florida
- 2015-2018 **Graduate Teaching Assistant**, School of Geosciences, University of South Florida
- 2013-2015 **Graduate Teaching Assistant**, Department of Geography, University of Alabama
- 2012-2013 **Broadcast Meteorology Intern**, WBOC Salisbury, MD, Salisbury University
- 2010-2013 **Geography Tutor**, Department of Geography and Geosciences, Salisbury University
- 2010-2013 **Orientation Leader**, Salisbury University

RESEARCH

Research Interests:

My research interests include atmospheric hazards, risk perception, risk communication, and geographic information science. I combine my knowledge of social science skills with my background in physical geography to study atmospheric hazards and risk perception. As a

Geographer, my research bridges the gap between the physical and human aspects of weather and climate.

Peer-Reviewed Articles:

7. **Saunders, M.E.**, Collins, J.M. (2021). Factors Influencing the Motivations & Perceived Usefulness of a Weather Radar Display in Tampa Bay. *Bulletin of the American Meteorological Society*. 1-37. DOI: 10.1175/BAMS-D-20-0052.1
6. Ersing, R.L., Pearce, C., Collins, J., **Saunders, M.E.**, and Polen, A. (2020). Geophysical and Social Influences on Evacuation Decision-Making: The Case of Hurricane Irma. *Atmosphere*, 11(851): 1-19. DOI:10.3390/atmos11080851
5. Senkbeil, J.C., Reed, J., Collins, J.M., Brothers, K., **Saunders, M.E.**, Skeeter, W., Cerrito, E., Chakroborty, S. and Polen, A. (2019). Perceptions of Hurricane Track Forecasts in the U.S.A. *Weather, Climate, and Society*. DOI:10.1175/WCAS-D-19-0031.1
4. **Saunders, M.E.**, Ash, K.E., and Collins J.M. (2018). Usefulness of the United States National Weather Service Radar Display as Rated by Website Users. *Weather, Climate, and Society*, 10: 673-691. DOI: 10.1175/WCAS-D-17-0108.1
3. Collins, J.M., R. Ersing, A. Polen, **Saunders, M.E.**, and Senkbeil, J.C. (2018). The Effects of Social Connections on Evacuation Decision Making during Hurricane Irma. *Weather, Climate, and Society*, 10(3): 459-469. DOI: 10.1175/WCAS-D-17-0119.
2. Senkbeil, J.C., **Saunders, M.E.**, and Taylor B. (2017). Changes in summer weather type frequency in Eastern North America. *Annals of the American Association of Geographers*, 107(5): 1229-1245. DOI: 10.1080/24694452.2017.1295839
1. **Saunders, M.E.** and Senkbeil, J.C. (2017). Perceptions of hurricane hazards in the mid-Atlantic region. *Meteorological Applications*, 24: 120–134. DOI: 10.1002/met.1611

Editorially Reviewed Publications:

1. Collins, J.M., Ersing, R., Polen, A., and **Saunders, M.E.**, Do We Stay or Do We Go? How Social Networks Contribute to Evacuation Decision-Making. *Disaster Research* 679, Feb, 2018.

Professional Meeting Presentations:

* Denotes presenter

Saunders, M.E.* 2021. Construal of Situational Risks and Outcomes—Exploring the Use of Radar Displays. The Annual Meeting of the American Meteorological Society, January 10-14, 2021, Virtual. Oral presentation.

Saunders, M.E.*, Friedman, J.R., and LaDue, D.S. 2021. Vulnerability, Emotions, and Fidelity in Weather Experiments: How to Capture the Human Elements in Testbed Experiments. The Annual Meeting of the American Meteorological Society, January 10-14, 2021, Virtual. Oral presentation.

Friedman, Jack R.*, LaDue, D.S., **Saunders, M.E.**, Streeter, K., and Farrell M. 2021. Vulnerability Knowledge among NWS Meteorologists and Core Partners in the Southeast: Implications for Improving Next-Generation Severe Weather Operations through the Brief Vulnerability Overview Tool (BVOT). The Annual Meeting of the American Meteorological Society, January 10-14, 2021, Virtual. Oral presentation.

- Saunders, M.E.*** 2019. Factors Influencing Tampa Bay Area Resident's Motivations & Perceived Usefulness of a Weather Radar Display. The Annual Meeting of the American Meteorological Society, January 12-16, 2019, Boston, MA. Poster presentation.
- Saunders, M.E.*** and Senkbeil, J.C. 2019. Perceptions of Hurricane Hazards in the Mid-Atlantic Region. The National Center for Atmospheric Research BRIGHT Workshop – Storm Surge and Sea-level Rise Workshop, July 16-18, 2019, National Center for Atmospheric Research, Boulder, CO. Poster presentation.
- Ash, K.D.*, **Saunders, M.E.**, Collins, J.M., and Paxton C.H. 2018. Factors Influencing the Usefulness of the NWS Website Radar Display. The Annual Meeting of the American Meteorological Society, January 8-11, 2018, Austin, TX. Oral presentation.
- Saunders, M.E.***, Ash, K.D., and Collins, J.M. 2017. Factors Influencing the Usefulness of the NWS Website Radar Display. The Annual Meeting of the South Eastern Division of The Association of American Geographers, November 19-20, 2017, Starkville, MS. Poster presentation.
- Saunders, M.E.***, Collins, J.M., Ersing, R., Amy, P., and Rehm, N. 2017. Evacuation Behavior During Hurricane Matthew: A Spatial Analysis of Social Connections. The 6th International Summit on Hurricanes and Climate Change: From Hazard to Impact, June 4-9, 2017, Heraklion, Crete, Greece. Poster presentation.
- Amy, P.*, Collins, J.M., Ersing, R., **Saunders, M.E.**, and Rehm, N. 2017. Evacuation Behavior During Hurricane Matthew: An Assessment of the Effects of Social Connections. The 6th International Summit on Hurricanes and Climate Change: From Hazard to Impact, June 4-9, 2017, Heraklion, Crete, Greece. Poster presentation.
- Saunders, M.E.***, Ash, K.D., and Collins, J.M. 2016. Public Understanding and Use of Weather Radar. The Annual Meeting of The American Association of Geographers, March 29 – April 2, 2016, San Francisco, CA. Oral presentation.
- Saunders, M.E.*** and Senkbeil, J.C. 2015. Perceptions of Hurricane Hazards in the Mid-Atlantic Region. The American Meteorological Society's 3rd Conference on Weather Warnings and Communication, June 12, 2015, Raleigh, NC. Oral presentation.
- Saunders, M.E.*** and Senkbeil, J.C. 2015. Perceptions of Hurricane Hazards in the Mid-Atlantic. The Annual Meeting of the Association of American Geographers, April 21-25, 2015, Chicago, IL. Oral presentation.
- Saunders, M.E.*** and Senkbeil, J.C. 2014. Perceptions of Hurricane Hazards in the Mid-Atlantic. The Annual Meeting of The South Eastern Division of The Association of American Geographers, November 24, 2014, Athens, GA. Poster presentation.
- Saunders, M.E.*** and Senkbeil, J.C. 2014. Tornado Vulnerability Analysis of Schools in Alabama. The Annual Meeting of The Association of American Geographers, April 10, 2014, Tampa, FL. Poster presentation.
- Saunders, M.E.***, Skeeter B., and Parnell D. 2013. The Differing Monthly Migration of United States Tornadoes: 1950-2011. The Salisbury University Student Research Conference, April 26, 2013, Salisbury, MD. Oral Presentation.
- Saunders, M.E.***, Skeeter B., and Parnell D. 2013. The Differing Monthly Migration of United States Tornadoes: 1950-2011. The Annual Meeting of The Association of American Geographers, April 10, 2013, Los Angeles, CA. Oral presentation.

- Saunders, M.E.***, Skeeter B., and Parnell D. 2012. Potential Explanations for the Differing Monthly Migration of United States Tornadoes: 1950-2011. The Annual Meeting of The South Eastern Division of The Association of American Geographers, November 18 - 20, 2012, Asheville, NC. Poster presentation.
- Saunders, M.E.***, Skeeter B., and Parnell D. 2012 Potential Explanations for the Differing Monthly Migration of United States Tornadoes: 1950-2011. The Joint Annual Meeting of The Pennsylvania Geographical Society and The Middle Atlantic Division of The Association of American Geographers, November 2-3, 2012, Salisbury, MD. Oral presentation.
- Saunders, M.E.***, Skeeter B., and Parnell D. 2012. Migration of Tornado Activity for the United States, 1950-2011. The Guerrieri Summer Research Program, August 8, 2012, Salisbury, MD. Poster presentation.

Workshops:

- 2019 National Center for Atmospheric Research BRIGHT Workshop Attendee – Storm Surge and Sea-level Rise Workshop, Boulder, CO

Media Appearances:

- 2021 Salisbury University Re:Search Magazine 2021 Edition - Mentorships. Retrieved from: https://www.salisbury.edu/administration/academic-affairs/graduate-studies-and-research/_files/research-magazine/research-magazine-s21.pdf
- 2020 Calling Earth Podcast Episode 27: USF School of Geosciences Interview <http://callingearth.lib.usf.edu/calling-earth-027-michelle-saunders-human-geographer>
- 2018 Phan, M. and Williams, C. Episode 49: Do People Think Radar is Useful? (w/ **Michelle Saunders**) *WeatherHype*. Podcast retrieved from <http://www.weatherhypepodcast.com/episode-49.html>
- 2017 Scientific American <https://blogs.scientificamerican.com/sa-visual/visualizing-uncertain-weather/>

TEACHING

Courses (Full Instructor)

- 2018-2020 Introduction to Physical Geography

Lab Courses (Full Instructor)

- 2016-2017 Introduction to Environmental Science Lab
2013-2015 Geography 101 Lab: Atmospheric Processes and Patterns

Course (Teaching Assistant)

- 2015-2016 Introduction to Environmental Science
2018, 2020 Summer: Introduction to Environmental Science
2018 Climate Studies

HONORS AND AWARDS

- 2019 Second Place Poster Award AMS Societal Applications Symposium
2019 AMS Societal Applications Symposium Student Award
2017 Certificate of Excellence in Geography, Gamma Theta Upsilon – Kappa Kappa Chapter, University of South Florida

- 2017 Second Place, Student Poster Competition, 6th International Summit on Hurricanes and Climate Change: From Hazard to Impact, Heraklion, Crete, Greece, June 4-9, 2017
- 2016 Third Place Local Chapter Poster Competition, American Meteorological Society, West Central Florida Chapter of the American Meteorological Society
- 2016 American Meteorological Society, Chapter of the Year Award, West Central Florida Chapter of the American Meteorological Society (WCFLAMS), 2015-2016. (My role – Corresponding Secretary of WCFLAMS and co-writer of application)
- 2015 First Place Local Chapter Poster Competition, American Meteorological Society, West Central Florida Chapter of the American Meteorological Society
- 2015 Dr. Dewey M. Stowers Merit Award, West Central Florida Chapter of the American Meteorological Society
- 2015 Outstanding Graduate Teaching Assistant Award, Department of Geography, The University of Alabama
- 2013 Geographic Society Award, Department of Geography and Geosciences, Salisbury University
- 2013 Outstanding Service Award, Department of Geography and Geosciences, Salisbury University
- 2013 Presidential Citizen Scholar, Salisbury University
- 2012 Middle Atlantic Division of The Association of American Geographers Geography Bowl All Star
- 2012 Cultural Laureate, Salisbury University 2012
- 2011-2013 Dean’s List, Salisbury University

Grants:

- 2018 Research Tharp Scholarship, University of South Florida (\$1,000)
- 2012 Guerrieri Summer Research Grant, Salisbury University

SERVICE

- 2018-2019 **President**, Gamma Theta Upsilon – Kappa Kappa Chapter, University of South Florida
- 2018-2020 **Event Coordinator** – Scientific Outreach, Taste of Science Tampa, Scientists Inc
- 2017-2018 **Vice President**, Gamma Theta Upsilon – Kappa Kappa Chapter, University of South Florida
- 2016-2017 **Historian and Social Chair**, Gamma Theta Upsilon – Kappa Kappa Chapter, University of South Florida
- 2016-2020 **Vice President**, West Central Florida Chapter of the American Meteorological Society, Tampa, FL
- 2015-2016 **Corresponding Secretary**, West Central Florida Chapter of the American Meteorological Society, Tampa, FL
- 2014-2015 **Vice President**, Club Geography, Department of Geography, University of Alabama

2010-2013 **President**, Geographic Society, Department of Geography and Geosciences,
Salisbury University

Professional Memberships:

2019-present Sigma Xi, University of South Florida Chapter
2015-2020 West Central Florida Chapter of the American Meteorological Society
2013-present Gamma Theta Upsilon
2012-2013 American Meteorological Society – Salisbury University Chapter
2012-present American Meteorological Society
2011-2015 Southeastern Division of the American Association of Geographers
2011-present American Association of Geographers
2010-2013 Mid Atlantic Division of the American Association of Geographers