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#### **EDUCATION**

Ph.D., Adult & Higher Education, Educational Leadership and Policy Studies

University of Oklahoma

M.S., Atmospheric Science

University of Wisconsin-Madison

B.A., Cum Laude, Major: Physics; Minor: Mathematics

Anderson University, Anderson, Indiana

## **PROFESSIONAL EXPERIENCE**

**University of Oklahoma** 

1995-present

Senior Research Scientist, Center for Analysis and Prediction of Storms, 2018–present Research Scientist, Center for Analysis and Prediction of Storms, 2011–2018 Research Associate, Center for Analysis and Prediction of Storms, 2007–2011 Research Associate, Cooperative Institute for Mesoscale Meteorological Studies, Teamed with NOAA National Severe Storms Laboratory, 1995–2006

#### **University of Wisconsin-Madison**

**Associate Researcher** 

1994–1995

Cooperative Institute for Meteorological Satellite Studies

Teamed w/ NOAA National Environmental Satellite, Data, and Information Service in Camp Springs, MD

# **Science Applications International Corporation**

**Atmospheric Scientist** 

1992-1994

Teamed with NASA's Langley Research Center, Hampton, VA

## **PUBLICATIONS**

#### **Selected Refereed Publications**

- \* Indicates undergraduate student author
  - Saunders, M. E., **D. S. LaDue**, J. R. Friedman, A. Marmo, D. Fenske, *2025:* The Impact of the Brief Vulnerability Overview Tool on NWS and EM Operations and Communication in the Hazardous Weather Testbed. *Weather and Forecasting, submitted 12/20/24; in revision.*
  - **LaDue, D. S.,** D. Roueche, F. T. Lombardo, and L. Mayeux, 2024: Linking Survivor Stories to Forensic Engineering: How an Interscience Approach Reveals Opportunities for Reducing Tornado Vulnerability in Residential Structures. *Bulletin of the American Meteorological Society*, **105** (8), E1521–E1541, <a href="https://doi.org/10.1175/BAMS-D-23-0036.1">https://doi.org/10.1175/BAMS-D-23-0036.1</a>.
  - Friedman, J. R., **D. S. LaDue**, E. H. Hurst, M. E. Saunders, A. N. Marmo, 2024: Making Social Science Actionable for the NWS: The Brief Vulnerability Overview Tool (BVOT). *Bulletin of the*

- *American Meteorological Society*, **105** (6), E915–E931, <a href="https://doi.org/10.1175/BAMS-D-23-0042.1">https://doi.org/10.1175/BAMS-D-23-0042.1</a>.
- Cross\*, R.N., and **D. S. LaDue**, 2021: When uncertainty is certain: a nuanced trust between emergency managers and forecast information in the Southeast U.S. *Weather, Climate, and Society,* **13** (1), 137–146, <a href="https://doi.org/10.1175/WCAS-D-20-0017.1">https://doi.org/10.1175/WCAS-D-20-0017.1</a>.
- **LaDue, D. S.**, and A. E. Cohen, 2018. Facilitating the self-directed learning efforts of professional meteorologists. *Bulletin of the American Meteorological Society*, 99(12), 2519-2527, <a href="https://doi.org/10.1175/BAMS-D-17-0324.1">https://doi.org/10.1175/BAMS-D-17-0324.1</a>.
- Karstens, C. D., J. Correia Jr., D. S. LaDue, J. Wolfe, T. C. Meyer, D. R. Harrison, J. L. Cintineo, K. M. Calhoun, T. M. Smith, A. E. Gerard, and L. P. Rothfusz, 2018: Development of a human-machine mix for forecasting severe convective events. *Weather and Forecasting*, 33(3), 715-737, https://doi.org/10.1175/WAF-D-17-0188.1
- **LaDue, D. S.,** P. L. Heinselman, and J. F. Newman\*, 2010: Strengths and limitations of current radar systems for two key stakeholder groups in the southern plains. *Bull. American Meteorological Society*, **91** (7), 899–910, <a href="https://doi.org/10.1175/2009BAMS2830.1">https://doi.org/10.1175/2009BAMS2830.1</a>.
- Arndt, D. S., and **D. S. LaDue**, 2008: Applying concepts of adult education to improve weather and climate literacy. *Physical Geography*, **29** (6), 487–499, <a href="https://doi.org/10.2747/0272-3646.29.6.487">https://doi.org/10.2747/0272-3646.29.6.487</a>.

#### **Selected Books & Book Chapters**

- LaDue, D. S., P. Daipha, R. Pliske, and, R. R. Hoffman 2019: Expertise in weather forecasting. In P. Ward, J. M. Schraagen, J. Gore, and E. Roth (Eds.), *The Oxford Handbook of Expertise: Research and Application* (872-897). United Kingdom: Oxford University Press, 1312pp., <a href="https://doi.org/10.1093/oxfordhb/9780198795872.013.38">https://doi.org/10.1093/oxfordhb/9780198795872.013.38</a> (chapter), <a href="https://doi.org/10.1093/oxfordhb/9780198795872.001.0001">https://doi.org/10.1093/oxfordhb/9780198795872.001.0001</a> (book).
- Hoffman, R. R., **D. S. LaDue**, H. M. Mogil, P. J. Roebber, and J. G. Trafton, 2017: *Minding the Weather: How Expert Forecasters Think*. MIT Press. <a href="http://dx.doi.org/10.2307/j.ctt1t88w2v">http://dx.doi.org/10.2307/j.ctt1t88w2v</a>

#### **Selected Invited Presentations**

- **LaDue, D. S.**, 2024: Advancing Forensic Engineering Analyses of Tornadoes with Survivor's First-Hand Accounts. *Inaugural Symposium of the Canadian Severe Storms Laboratory (October 28)*, London, Ontario, Canada.
- LaDue, D. S., 2024: How Emergency Managers Receive, Process, and Utilize Severe Weather Forecasts. *Advancing Risk Communication with Decision-Makers for Tropical Cyclones: Learning from Extreme and Unprecedented Weather Events (February 5)*, National Academy of Sciences, Washington, D.C., <a href="https://www.nationalacademies.org/event/41375">https://www.nationalacademies.org/event/41375</a> 02-2024 advancing-risk-communication-with-decision-makers-for-extreme-tropical-cyclones.
- **LaDue, D. S.,** 2019: Workshop: Effective Facilitation of Forecaster Learning. *CALMet XIII / Eumetcal Conference*, Darmstadt, Germany, EUMETSAT, https://www.eventsforce.net/eumetsat/5/home.

#### **Selected, Recent Conference Presentations**

- \* Indicates undergraduate student author
  - LaDue, D. S., A. N. Marmo, I. N. Jeffries\*, Z. C. Johnson\*, B. Pollock\*, C. B. Hurlocker\*, G. Gillenwater\*, D. Carroll-Smith, and L. Meccariello, 2025: Development of a Tabletop Method to Refine Products and Improve NWS Impact-Based Decision Support Services. *15th Conference On Transition Of Research To Operations*, New Orleans, LA, American Meteorological Society, Poster, <a href="https://ams.confex.com/ams/105ANNUAL/meetingapp.cgi/Paper/455012">https://ams.confex.com/ams/105ANNUAL/meetingapp.cgi/Paper/455012</a>.
  - Marmo, A. N., E. H. Hurst, and **D. LaDue**, 2024: Researcher Insights and Recommendations for NWS IWTs: Before, During and After the IWT. *National Weather Association 49<sup>th</sup> Annual Meeting*, Kansas City, KS, Showcase Presentation 134.
  - Johnson\*, Z. C., **D. S. LaDue**, I. N. Jeffries\*, A. N. Marmo, and D. Carroll-Smith, 2024: Developing an Effective Set of Questions to Extract Partner Needs from NWS IDSS. *19th Symposium on Societal*

- *Applications: Policy, Research and Practice*, Baltimore, Maryland, American Meteorological Society, 185, <a href="https://ams.confex.com/ams/104ANNUAL/meetingapp.cgi/Paper/429371">https://ams.confex.com/ams/104ANNUAL/meetingapp.cgi/Paper/429371</a>.
- Fenske\*, D. M. E. Saunders, and **D. S. LaDue**, 2024: The BVOT Vulnerability Tool's Effect on Information Flow in a Hazardous Weather Testbed Project and its Potential to Support Effective Responses to Severe Weather. *19th Symposium on Societal Applications: Policy, Research and Practice*, Baltimore, Maryland, American Meteorological Society, J13.4, <a href="https://ams.confex.com/ams/104ANNUAL/meetingapp.cgi/Paper/431826">https://ams.confex.com/ams/104ANNUAL/meetingapp.cgi/Paper/431826</a>.
- Friedman, J. R., **D. S. LaDue**, E. H. Hurst, M. E. Saunders, and A. N. Marmo, 2023: Multidimensional R2O: Co-producing and Co-designing Research that is Informed by Operational End-Users, 13<sup>th</sup> Conference on Transition from Research to Operations, Denver, Colorado, American Meteorological Society, 16A.2,

https://ams.confex.com/ams/103ANNUAL/meetingapp.cgi/Paper/422003.

#### **Selected Data/Tool Sharing**

- \* Indicates undergraduate student author
  - **LaDue, D. S.,** A. Marmo, I. N. Jeffries\*, B. C. Pollock\*, C. B. Hurlocker\*, and Z. C. Johnson\*, 2025: Guide for Conducting T-Minus Tabletop Exercises. doi:10.17605/OSF.IO/C7GKW. <a href="https://osf.io/c7gkw">https://osf.io/c7gkw</a>.
  - **LaDue, D. S.,** and A. Marmo, 2025: After Action Reviews. doi:10.17605/OSF.IO/93MYK. <a href="https://osf.io/93myk">https://osf.io/93myk</a>.

#### PROFESSIONAL MEMBERSHIPS

American Meteorological Society
National Weather Association
American Geophysical Union
Naturalistic Decision Making Association
National Association of Geoscience Teachers
Oklahoma Emergency Management Association