Jason C. Furtado | Ph.D.

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Jason Furtado

EDUCATION

2010 **Georgia Institute of Technology**
Ph.D. - Earth and Atmospheric Sciences • Graduate Certificate in Public Policy

Dissertation - On the Uncertainties and Dynamics of Pacific Interannual and Decadal Climate Variability and Climate Change

Advisor - Emanuele Di Lorenzo

2005 **Colorado State University**
M.S. - Atmospheric Science

Thesis - On the Balanced Response of the Troposphere to Variability in the Extratropical Stratosphere

Advisor - David W. J. Thompson

2002 **Lyndon State College** (Now: **Vermont State University at Lyndon**)
B.S. - Meteorology & B.S. - Mathematics

PROFESSIONAL APPOINTMENTS

2015 – **University of Oklahoma**
Chesapeake Energy Professor in Climate Systems Science (2026 –)
Professor of Meteorology, School of Meteorology (2026 –)
Faculty Fellow for Strategic Partnerships, School of Meteorology (2025 –)
Carlisle and Lurline Mabrey Presidential Professor (2022 –)
Associate Professor of Meteorology, School of Meteorology (2021 – 2026)
Affiliate, Data Institute for Societal Challenges (2021 –)
Fellow, Cooperative Institute for Severe & High-Impact Weather Research & Operations (2021 –)
Affiliate Faculty, School of Psychology (2016 –)
Affiliate, South Central Climate Adaptation and Science Center (2015 –)
Assistant Professor of Meteorology, School of Meteorology (2015 – 2021)

2014 – 2015 **Boston University**
Lecturer, Department of Earth and Environment

2011 – 2015 **Atmospheric and Environmental Research**
Staff Scientist, Climate Analysis Branch

2008 – 2010 **Georgia Institute of Technology Athletics**
Forecaster, NCAA Football and Baseball Games

VISITING APPOINTMENTS

2024 **Karlsruhe Institute of Technology, Karlsruhe, Germany**
International Excellence Fellow, Institute of Meteorology and Climate Research

2024 **Salient Predictions**
Visiting Research Scientist

REFEREED PUBLICATIONS

* - Student/Postdoc Author

IN PREPARATION

- Dickinson, T.* and **J. C. Furtado**, 2026: Predicting subseasonal extreme precipitation in the US using convolutional neural networks. *Artif. Intell. Earth Syst.*, in prep.
- **Furtado, J. C.** and O. T. Millin*, 2026: Representation and predictability of stratospheric wave reflection events in subseasonal forecast models. *Geophys. Res. Lett.*, in prep.
- Laurinaitis, S., **J. C. Furtado**, Z. Lebo, and V. Gensini, 2026: Examining precipitation type changes across the Northeastern U.S. in a warming world. *Geophys. Res. Lett.*, in prep.
- Millin, O. T.*, **J. C. Furtado**, and R. J. Lynn, 2026: A subseasonal prediction tool for Central US severe cold waves. *Science*, in prep.

UNDER REVIEW

- Chabert, P.*, E. Di Lorenzo, C. Galeotti, S. Masina, E. Scoccimarro, **J. C. Furtado**, B. Sadhukhan, S. B. Ajjur, J. M. Pringle, and B. Fox-Kemper, 2026: Decline and poleward shift of extra-tropical storm frequency and intensity in the Northwest Atlantic. *Geophys. Res. Lett.*, under review.
- Hartman, C. T.*, S. M. Hitchcock, C. R. Homeyer, **J. C. Furtado**, T. P. Lane, and J. D. Heaton*, 2026: A climatology of turbulence near thunderstorms. *J. Appl. Meteor. Climatol.*, under review.
- Olayiwola, H. O.*, **J. C. Furtado**, J. B. Basara, J. I. Christian, S. G. Edris, J. S. Lee*, and T. M. Grace, 2026: Evolution and influences of land-atmospheric coupling and synoptic drivers of compound droughts and heatwave events in the US Southern Plains. *Climate Dyn.*, accepted pending major revisions.

PUBLISHED

2026

66. Ćwik, P.*, R. A. McPherson, F. Li, **J. C. Furtado**, H. E. Brooks, and H. Lee, 2026: Projecting May tornado outbreak patterns in a warming climate. *npj Climate Atmos. Sci.*, https://doi.org/10.1038/s41612-026-01474-w

65. **Furtado, J. C.**, M. J. Molina, M. C. Arcodia, W. Anderson, T. Beucler, J. A. Callahan, L. M. Ciasto, V. A. Gensini, M. L. L'Heureux, K. Pegion, J. S. Pérez-Carrasquilla*, M. Sonnewald, K. Takahashi, B. Xiang, and B. G. Zimmerman, 2026: Setting the standard: Recommended practices for data preprocessing in data-driven climate prediction. *Bull. Amer. Meteor. Soc.*, **107**, E1386–E1401, https://doi.org/10.1175/BAMS-D-24-0292.1.

64. Delfanizari, M., J. Q. Li, M. Zaman, A. Ali, and **J. C. Furtado**, 2026: Data-driven evaluation of climate projections using statistical and deep learning methods for pavement ME design. *J. Transp. Eng. Part B: Pavements*, in press.

63. Millin, O. T.* and **J. C. Furtado**, 2026: Analyzing stratospheric and tropical contributions to the subseasonal forecasts of the December 2017 and January 2004 North American cold air outbreaks. *J. Climate*, **39**, 2937–2954, https://doi.org/10.1175/JCLI-D-25-0420.1.

62. Anderson, W., M. C. Arcodia, D. Amaya, E. Becker, J. A. Callahan, **J. C. Furtado**, B. Kirtman, S. Kumar, M. L. L'Heureux, D. Li, S. M. Larson, M. J. Molina, M. Newman, K. Pegion, A. Roberston, E. Towler, and B. Xiang, 2026: The critical need for hindcast infrastructure in climate science and sectoral applications. *Bull. Amer. Meteor. Soc.*, **107**, E615–E627, https://doi.org/10.1175/BAMS-D-24-0311.1.

61. Millin, O. T.* and **J. C. Furtado**, 2026: Predictability of central United States cold spells in subseasonal forecast models. *Quart. J. Roy. Meteor. Soc.*, **152**, e70081. https://doi.org/10.1002/qj.70081.

2025

60. Giannakopoulos, K.*, and **J. C. Furtado**, 2025: Examining the characteristics and evolution of wintertime temperature whiplash events in the United States Southern Plains. *J. Climate*, **39**, 37–49, https://doi.org/10.1175/JCLI-D-24-0572.1.

59. Edris, S.*, A. McGovern, J. B. Basara, J. I. Christian, **J. C. Furtado**, and X. Xiao, 2025: Evaluation of flash drought identification with machine learning techniques. Part 2: Neural network algorithms. *Artif. Intell. Earth Syst.*, **4**, 240069, https://doi.org/10.1175/AIES-D-24-0069.1.

58. Edris, S.*, A. McGovern, J. B. Basara, J. I. Christian, **J. C. Furtado**, and X. Xiao, 2025: Evaluation of flash drought identification with machine learning techniques. Part 1: Traditional machine learning algorithms. *Artif. Intell. Earth Syst.*, **4**, 240068, https://doi.org/10.1175/AIES-D-24-0068.1.

57. Ćwik, P.*, R. A. McPherson, F. Li, and **J. C. Furtado**, 2025: Can a global climate model reproduce tornado outbreak atmospheric pattern? Methodology and a case study. *Atmos.*, **6**, 923, https://doi.org/10.3390/atmos16080923.

56. Pehl, J.*, G. McFarquhar, J. Snyder, and **J. C. Furtado**, 2025: Exploring impacts of differing aerosol environments on radar signatures of deep convection near Houston, TX using a bulk statistical framework. *J. Atmos. Sci.*, **82**, 749–773. https://doi.org/10.1175/JAS-D-24-0008.1.

55. Ćwik, P.*, R. A. McPherson, **J. C. Furtado**, and M. Taszarek, 2025: Relationships between WMAXS-HEAR parameter and atmospheric patterns associated with May tornado outbreaks in USA. *Atmos. Res.*, **315**, 107872, https://doi.org/10.1016/j.atmosres.2024.107872.

2024

54. Millin, O. T.*, **J. C. Furtado**, and C. Malloy, 2024: The impact of North American winter weather regimes on electricity load in the central United States. *npj Climate Atmos. Sci.*, **7**, 254, https://doi.org/10.1038/s41612-024-00803-1.

53. Christian, J. I.*, T. M. Grace*, B. J. Fellman*, D. F. Mesheske*, S. G. Edris*, H. O. Olayiwala*, J. B. Basara, B. A. Fuchs, and **J. C. Furtado**, 2024: The flash droughts across the South-Central United States in 2022: Drivers, predictability, and impacts. *Wea. Climate Extremes*, **46**, 100730, https://doi.org/10.1016/j.wace.2024.100730.

52. Foskey, S. R.*, N. Sakaeda, J. Basara, and **J. C. Furtado**, 2024: The impact of the Madden-Julian Oscillation on extreme winter weather over the contiguous United States. *Quart. J. Roy. Meteor. Soc.*, **150**, 4915–-4932, https://doi.org/10.1002/qj.4848.

51. Chiappa, J.*, D. B. Parsons, **J. C. Furtado**, and A. Shapiro, 2024: Extreme convective rainfall events in the central United States during the summer: 2003-2021 trends and interannual variability. *Geophys. Res. Lett.*, **51**, e2024GL110424, https://doi.org/10.1029/2024GL110424.

50. Woolnough, S., F. Vitart, A. W. Robertson, C. Coelho, R. Lee, H. Lin, A. Kumar, C. Stan, M. Balmaseda, A. Caltabiano, M. Yamaguchi, H. Afargan-Gerstman, F.M. De Andrade, D. Büeler, A. Carreric, D. A. Campos Diaz, J. Day, J. Dorrington, M. Feldmann, **J. C. Furtado**, C. Grams, R. Koster, L. Hirons, V. S. Indasi, P. Jadhav, Y. Liu, P. Nying'uro, C. Roberts, E. Rouges, and J. Ryu, 2023: Celebrating 10 years of the Sub-Seasonal to Seasonal Prediction Project and looking to the future. *Bull. Amer. Meteor. Soc.*, **105**, E521–E526, https://doi.org/10.1175/BAMS-D-23-0323.1.

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49. Christian, J.*, J. B. Basara, E. R. Martin, **J. C. Furtado**, J. A. Otkin, L. E. L. Lowman, E. D. Hunt, V. Mishra, and X. Xiao, 2023: Global projections of flash drought in a warming climate. *Comm. Earth Environ.*, **4**, 165, https://doi.org/10.1038/s43247-023-00826-1

48. Di Lorenzo, E., B. T. Anderson, A. Capotondi, **J. C. Furtado**, E. Guderian, Y. Joh, G. Liguori, A. J. Miller, G. Navarra, M. Newman, N. Schneider, S. Stevenson, D. Vimont, T. Xu, and Z. Zhao, 2023: Mechanisms and modes of Pacific decadal-scale variability. *Ann. Rev. Mar. Sci.*, **15**, 249–275, https://doi.org/10.1146/annurev-marine-040422-084555.

2022

47. Millin, O. T.*, and **J. C. Furtado**, 2022: The role of wave breaking in the development and subseasonal forecasts of the February 2021 Great Plains Cold Air Outbreak. *Geophys. Res. Lett.*, **49**, e2022GL100835, https://doi.org/10.1029/2022GL100835.

46. Cohen, J., L. Agel, M. Barlow, **J. C. Furtado**, M. Kretschmer, and V. Wendt, 2022: The "Polar Vortex" Winter of 2013/14. *J. Geophys. Res. Atmos.*, **127**, e2022JD036493, https://doi.org/10.1029/2022JD036493

45. Lee, S. H.*, A. J. Charlton-Perez, S. J. Woolnough, and **J. C. Furtado**, 2022: How does the stratosphere influence North American winter weather regimes? *J. Climate*, **35**, 5915–5932, https://doi.org/10.1175/JCLI-D-21-0413.1.

44. Zekavat, S., F. Afghah, R. Askari, J. Delabrouille, N. French, **J. C. Furtado**, S. Hanany, and V. Lubecke, 2022: Electromagnetic spectrum contribution in astronomy, health, atmospheric, geology, and environment applications. *Intl. J. Wire. Info. Net.*, **29**, 281–302, https://doi.org/10.1007/s10776-022-00558-7.

43. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2022: Characteristics, evolution, and formation of cold air outbreaks in the Great Plains of the United States. *J. Climate*, **35**, 4585–4602, https://doi.org/10.1175/JCLI-D-21-0772.1.

42. Rogers, M. H.*, **J. C. Furtado**, and B. T. Anderson, 2022: Representation of the Pacific Decadal Precession in the CMIP6 models. *Climate Dyn.*, **59**, 23–40, https://doi.org/10.1007/s00382-021-06114-y.

2021

41. Christian, J. I.*, J. B. Basara, E. D. Hunt, J. A. Otkin, **J. C. Furtado**, R. Randall, V. Mishra, M. D. Svoboda, and N. Klingaman, 2021: Global distribution and trends of flash drought occurrence. *Nature Comm.*, **12**, 6330, https://doi.org/10.1038/s41467-021-26692-z.

40. Wakefield, R. A., J. B. Basara, J. M. Shepherd, N. Brauer, J. A. Santanello, Jr., and **J. C. Furtado**, 2021: The inland maintenance and re-intensification of Tropical Storm Bill (2015). Part 1: Contributions of the Brown Ocean Effect. *J. Hydrometeor.*, **22**, 2675–2693, https://doi.org/10.1175/JHM-D-20-0150.1.

39. Dickinson, T. A.*, M. B. Richman, and **J. C. Furtado**, 2021: Subseasonal to seasonal extreme precipitation events in the contiguous United States: Generation of a database and climatology. *J. Climate*, **34**, 7571–7586, https://doi.org/10.1175/JCLI-D-20-0580.1.

38. **Furtado, J. C.**, J. Cohen, E. Becker, and D. Collins, 2021: Evaluating the relationship between sudden stratospheric warmings and tropospheric weather regimes in the NMME Phase-2 models. *Climate Dyn.*, **56**, 2321–2338. https://doi.org/10.1007/s00382-020-05591-x.

2020

37. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2020: Representation of the Scandinavia-Greenland dipole and its relationship with the polar vortex in S2S forecast models. *Quart. J. Roy. Meteor. Soc.*, **146**, 4083–4098, https://doi.org/10.1002/qj.3892.

36. Flournoy, M. D.*, M. C. Coniglio, E. N. Rasmussen, and **J. C. Furtado**, 2020: Modes of storm-scale variability and tornado potential in VORTEX2 near- and far-inflow tornadic environments. *Mon. Wea. Rev.*, **148**, 4185–4207, https://doi.org/10.1175/MWR-D-20-0147.1.

35. Jennrich, G. C.*, **J. C. Furtado**, J. Basara, and E. R. Martin, 2020: Synoptic characteristics of 14-day extreme precipitation events across the United States. *J. Climate*, **33**, 6423–6440, https://doi.org/10.1175/JCLI-D-19-0563.1.

34. Pegion, K., C. M. Selman, S. Larson, **J. C. Furtado**, and E. J. Becker, 2020: The impact of the extratropics on ENSO diversity and predictability. *Climate Dyn.*, **54**, 4469?4484, https://doi.org/10.1007/s00382-020-05232-3.

33. Domeisen, D. I., A. H. Butler, A. J. Charlton-Perez, B. Ayarzagüena, M. P. Baldwin, E. Dunn-Sigouin, **J. C. Furtado**, C. I. Garfinkel, P. Hitchcock, A. Y. Karpechko, J. Knight, A. Lang, E.-P. Lim, Y. Lim, A. Marshall, C. Schwartz, I. R. Simpson, S.-W. Son, K. Song, and M. Taguchi, 2020: The role of stratosphere - troposphere coupling in sub-seasonal to seasonal prediction: 2. Predictability arising from stratosphere - troposphere coupling. *J. Geophys. Res. Atmos.*, **125**, e2019JD030923, https://doi.org/10.1029/2019JD030923.

32. Domeisen, D. I., A. H. Butler, A. J. Charlton-Perez, B. Ayarzagüena, M. P. Baldwin, E. Dunn-Sigouin, **J. C. Furtado**, C. I. Garfinkel, P. Hitchcock, A. Y. Karpechko, J. Knight, A. Lang, E.-P. Lim, Y. Lim, A. Marshall, C. Schwartz, I. R. Simpson, S.-W. Son, K. Song, and M. Taguchi, 2020: The role of stratosphere - troposphere coupling in sub-seasonal to seasonal prediction: 1. Predictability in the stratosphere. *J. Geophys. Res. Atmos.*, **125**, e2019JD030920, https://doi.org/10.1029/2019JD030920.

2019

31. Lee, S. H.*, **J. C. Furtado**, and A. J. Charlton-Perez, 2019: Wintertime North American weather regimes and the Arctic stratospheric polar vortex. *Geophys. Res. Lett.*, **46**, 14892–14900, https://doi.org/10.1029/2019GL085592.

30. Green, M. R.*, and **J. C. Furtado**, 2019: Evaluating the joint influence of the Madden-Julian Oscillation and the stratospheric polar vortex on weather patterns across the Northern Hemisphere. *J. Geophys. Res. Atmos.*, **124**, 11693–11709, https://doi.org/10.1029/2019JD030771.

29. You, Y.* and **J. C. Furtado**, 2019: The relationship between South Pacific atmospheric internal variability and ENSO in the NMME Phase-II Models. *Geophys. Res. Lett.*, **46**, 12398–12407, https://doi.org/10.1029/2019GL084637.

28. Barnes, E. A., S. Samarasinghe*, I. Ebert-Uphoff, and **J. C. Furtado**, 2019: Tropospheric and stratospheric causal pathways between the MJO and NAO. *J. Geophys. Res. Atmos.*, **124**, 9356–9371, https://doi.org/10.1029/2019JD0310254.

27. Flanagan, P. X.*, J. B. Basara, **J. C. Furtado**, E. R. Martin, and X. Xiao, 2019: Role of Pacific sea surface temperatures in forcing circulation anomalies driving United States Great Plains pluvial years. *J. Climate*, **32**, 7081–7100, https://doi.org/10.1175/JCLI-D-18-0726.1.

26. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2019: Abrupt stratospheric vortex weakening associated with North Atlantic anticyclonic wave breaking. *J. Geophys. Res. Atmos.*, **124**, 8563–8575, https://doi.org/10.1029/2019JD030940.

25. Kuster, C. M., J. C. Snyder, T. J. Schuur, T. Lindley, P. L. Heinselman, **J. C. Furtado**, J. W. Brogden, and R. Toomey, 2019: Rapid-update radar observations of ZDR column depth and its use in the warning decision process. *Wea. Forecasting*, **34**, 1173–1188, https://doi.org/10.1175/WAF-D-19-0024.1.

24. Wakefield, R. A.*, J. B. Basara, **J. C. Furtado**, B. G. Illston, C. R. Ferguson, and P. Klein, 2019: A modified framework for quantifying land-atmosphere covariability during hydrometeorological and soil wetness extremes in Oklahoma. *J. Meteor. Appl. Climatol.*, **58**, 1465–1483, https://doi.org/10.1175/JAMC-D-18-0230.1.

2018

23. You, Y.*, and **J. C. Furtado**, 2018: The South Pacific Meridional Mode and its role in tropical Pacific climate variability. *J. Climate*, **31**, 10141–10163, https://doi.org/10.1175/JCLI-D-17-0860.1.

22. Henderson, G. R., Y. Peings, **J. C. Furtado**, and P. Kushner, 2018: Snow-atmosphere coupling in the Northern Hemisphere. *Nature Climate Change*, **8**, 954–963, https://doi.org/10.1038/s41558-018-0295-6.

21. Flanagan, P. X.*, J. B. Basara, **J. C. Furtado**, and X. Xiao, 2018: Primary atmospheric drivers of pluvial years in the United States Great Plains. *J. Hydrometeor.*, **19**, 643–658, https://doi.org/10.1175/JHM-D-17-0148.1.

2017

20. You, Y.*, and **J. C. Furtado**, 2017: The role of South Pacific atmospheric variability in the development of different types of ENSO. *Geophys. Res. Lett.*, **44**, 7438–7446, https://doi.org/10.1002/2017GL073475.

19. Anderson, B. T., **J. C. Furtado**, D. J. S. Gianotti*, and E. Di Lorenzo, 2017: Tracking the Pacific Decadal Precession. *J. Geophys. Res. Atmos.*, **122**, 3214–3227, https://doi.org/10.1002/2016JD02596.

2016

18. Anderson, B. T., D. J. S. Gianotti*, G. Salvucci, and **J. C. Furtado**, 2016: Dominant timescales of potentially predictable precipitation variations across the continental United States. *J. Climate*, **29**, 8881–8897, https://doi.org/10.1175/JCLI-D-15-0635.1.

17. **Furtado, J. C.**, J. Cohen, and E. Tziperman, 2016: The combined influences of autumnal snow and sea ice on Northern Hemisphere winters. *Geophys. Res. Lett.*, **43**, https://doi.org/10.1002/2016GL068108.

16. Anderson. B. T., D. J. S. Gianotti*, **J. C. Furtado**, and E. Di Lorenzo, 2016: A decadal precession of atmospheric pressures over the North Pacific. *Geophys. Res. Lett.*, **43**, 3921–3927, https://doi.org/10.1002/2016GL068206.

2015

15. Di Lorenzo, E., G. Liguori*, N. Schneider, **J. C. Furtado**, B. T. Anderson, and M. A. Alexander, 2015: ENSO and meridional modes: A null hypothesis for Pacific climate variability. *Geophys. Res. Lett.*, **42**, 9440 – 9448, https://doi.org/10.1002/2015GL066281.

14. **Furtado, J. C.**, J. L. Cohen, A. H. Butler, E. E. Riddle, and A. Kumar, 2015: Eurasian snow cover variability and links to winter climate in the CMIP5 models. *Climate Dyn.*, **45**, 2591– 2605, https://doi.org/10.1007/s00382-015-2494-4.

2014

13. Cohen, J., J. A. Screen, **J. C. Furtado**, M. Barlow, D. Whittleston*, D. Coumou, J. Francis, K. Dethloff, D. Entekhabi, J. Overland, and J. E. Jones, 2014: The relationship between recent Arctic Amplification and extreme mid-latitude weather. *Nature Geosci.*, **7**, 627–637, https://doi.org/10.1038/ngeo2234.

12. Cohen, J., **J. C. Furtado**, J. Jones, M. Barlow, D. Whittleston*, and D. Entekhabi, 2014: Linking Siberian snow cover to precursors of stratospheric variability. *J. Climate*, **27**, 5422 – 5432, https://doi.org/10.1175/JCLI-D-13-00779.1.

2013

11. Di Lorenzo, E., V. Combes, J. E. Keister, T. P. Strub, A. C. Thomas, P. J. S. Franks, M. D. Ohman, **J. C. Furtado**, A. Bracco, S. J. Bograd, W. T. Peterson, F. B. Schwing, S. Chiba, B. Taguchi, S. Hormazabal, and C. Parada, 2013: Synthesis of Pacific Ocean climate & ecosystems dynamics. *Oceanogr.*, **26**, 68–81, http://dx.doi.org/10.5670/oceanog.2013.76.

10. Cohen, J. L., J. Jones, **J. C. Furtado**, and E. Tziperman, 2013: Warm Arctic, cold continents: A common pattern related to Arctic sea ice melt, snow advance, and extreme winter weather. *Oceanogr.*, **26**, 150–160, http://dx.doi.org/10.5670/oceanog.2013.70.

9. Anderson, B. T., **J. C. Furtado**, K. M. Cobb and E. Di Lorenzo, 2013: Extratropical forcing of El Niño/Southern Oscillation asymmetry. *Geophys. Res. Lett.*, **40**, 4916–4921, https://doi.org/10.1002/grl.50951.

8. Riddle, E. E., A. H. Butler, **J. C. Furtado**, J. L. Cohen, and A. Kumar, 2013: CFSv2 ensemble prediction of the wintertime Arctic Oscillation. *Climate Dyn.*, **41**, 1099–1116, https://doi.org/10.1007/s00382-013-1850-5.

2012

7. **Furtado, J. C.**, E. Di Lorenzo, B. T. Anderson, and N. Schneider, 2012: Linkages between the North Pacific Oscillation and central tropical Pacific SSTs at low frequencies. *Climate Dyn.*, **39**, 2833–2846, https://doi.org/10.1007/s00382-011-1245-4.

6. Cohen, J., **J. C. Furtado**, M. A. Barlow, V. A. Alexeev, and J. C. Cherry, 2012: Asymmetric seasonal temperature trends. *Geophys. Res. Lett.*, **39**, L04705, https://doi.org/10.1029/2011GL050582.

5. Cohen, J., **J. C. Furtado**, M. A. Barlow, V. A. Alexeev, and J. C. Cherry, 2012: Arctic warming, increasing snow cover, and widespread boreal winter cooling. *Env. Res. Lett.*, **7**, 014007, https://doi.org/10.1088/1748-9326/7/1/014007.

2011

4. **Furtado, J. C.**, E. Di Lorenzo, N. Schneider, and N. Bond 2011: North Pacific decadal variability and climate change in the IPCC AR4 models. *J. Climate*, **24**, 3049–3067, https://doi.org/10.1175/2010JCLI3584.1.

2010

3. Di Lorenzo, E., K. M. Cobb, **J. C. Furtado**, N. Schneider, B. Anderson, A. Bracco, M. A. Alexander, and D. Vimont, 2010: Central Pacific El Niño and decadal climate change in the North Pacific. *Nature Geosci.*, **3**, 762–765, https://doi.org/10.1038/ngeo984

2009

2. **Furtado, J. C.**, E. Di Lorenzo, K. M. Cobb, and A. Bracco, 2009: Paleoclimate reconstructions of tropical sea surface temperatures from precipitation proxies: Methods, uncertainties and nonstationarity. *J. Climate*, **22**, 1104–1123, https://doi.org/10.1175/2008JCLI2415.1.

2006

1. Thompson, D. W. J., **J. C. Furtado**, and T. G. Shepherd, 2006: On the tropospheric response to anomalous stratospheric wave drag and radiative heating. *J. Atmos. Sci.*, **63**, 2616–2629, https://doi.org/10.1175/JAS3771.1.

BOOK CHAPTERS

2025

1. **Furtado, J. C.**, J. T. Ripberger, K. Diodosio, B. Fellman, M. Leon-Corwin, E. Martin, O. T. Millin*, and B. Puxley, 2025: Subseasonal to Seasonal Weather Patterns. *Oklahoma's Wicked Problems: A Framework for Socially Sustainable Solutions for Water, Land Use, & Infrastructure*. M. Leon-Corwin and H. Jenkins-Smith, eds. University of Oklahoma. https://shareok.org/items/26c63c55-e49b-4d19-bc9a-e1dfef24743d.

OTHER NON-REFEREED PUBLICATIONS

2019

4. **Furtado, J. C.**, 2019: Links between autumn snow cover and sea ice extent and Northern Hemisphere wintertime climate variability. *U.S. CLIVAR Variations*, Spring 2019 Edition, 12–19, https://indd.adobe.com/view/b0e5a374-5321-4058-a31d-4b2130ac765e.

2018

3. **Furtado, J. C.**, 2018: Look south, ENSO forecasters! NOAA ENSO Blog. https://www.climate.gov/news-features/blogs/enso/look-south-enso-forecasters.

2015

2. Cohen, J. and **J. C. Furtado**, 2015: How climate change may be producing more blockbuster snowstorms. Guest article. The Washington Post. https://www.washingtonpost.com/news/capital-weather-gang/wp/2015/03/09/how-climate-change-may-be-producing-more-blockbuster-snowstorms/.

2011

1. **Furtado, J. C.**, and E. Di Lorenzo, 2011: Pacific climate variability in IPCC coupled climate models. In PICES Scientific Report No. 40: Report of Working Group 20 on Evaluations of Climate Change Projections, 165 pp.

INVITED PRESENTATIONS

2026

31. **[12 June 2026]** "Setting the Standard: Recommended Practices for Data Preprocessing in Data-Driven Climate Prediction." IAG Monthly Meeting. Online.

2025

30. **[25 Sep 2025]** "Stratospheric Polar Vortex Variability and Subseasonal Predictions of North American Cold Extremes." University of North Dakota Atmospheric Science Seminar Series. Grand Forks, ND, USA.

29. **[24 Apr 2025]** "The Role of Weather Regimes in Subseasonal Weather Forecasts For Energy and Commodity Markets." Commodity Weather Group Seminar. Houston, TX, USA.

2024

28. **[13 Nov 2024]** "Latest Research on Extreme Rainfall Trends and S2S Forecasting of Extreme Rainfall in South Florida." South Florida Water Management District Water and Climate Resilience Metrics Monthly Meeting. Virtual.

27. **[30 May 2024]** "Stratospheric Polar Vortex Variability & North American Winter Weather Patterns." MeteoSwiss / ETH Zurich. Zurich, Switzerland.

26. **[15 May 2024]** "Understanding the Drivers & Predictability of Cold Air Outbreaks in the Central US." Karlsruhe Institute of Technology International Excellence Fellow Seminar. Karlsruhe, Germany.

25. **[24 Apr 2024]** "Stratospheric Polar Vortex Variability & North American Winter Weather Patterns." University of Lausanne Expertise Center for Climate Extremes. Lausanne, Switzerland.

24. **[11 Apr 2024]** "Navigating Uncertainty: Harnessing Probabilistic S2S Forecasts for Decision Making." Panelist. Salient Predictions. Virtual.

2023

23. **[27 Nov 2023]** "S2S Forecasting with Machine Learning: A Private Sector Perspective." National Academy of Sciences Board on Atmospheric Sciences and Climate Fall 2023 Meeting. Virtual.

22. **[23 May 2023]** "Understanding the Drivers & Predictability of Cold Air Outbreaks in the Central US." NOAA Climate Prediction Center. Virtual.

21. **[19 April 2023]** "Navigating Climate Change Risk Thru Cutting-Edge Training & Device Technology." World Aviation Training Summit 2023. Orlando, FL, USA.

20. **[10 January 2023]** "North American Winter Weather Regimes in a Warming World." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA.

2022

19. **[10 November 2022]** "Climate Change and Extreme Weather in the South Central US." South Central Climate Adaptation Science Center Fall 2022 Meeting. Baton Rouge, LA, USA.

18. **[28 July 2022]** "Climate Change and Extreme Weather." South Central Climate Adaptation Science Center Early Career Researcher Workshop. Norman, OK, USA.

17. **[15 March 2022]** "Overview of Current Understanding of the Role of Stratosphere-Troposphere Interactions in S2S Prediction." 2022 US CLIVAR Summit. Washington, DC, USA.

16. **[18 February 2022]** "Stratospheric Polar Vortex Variability & North American Subseasonal Winter Weather Patterns." University of Oklahoma School of Meteorology Colloquium Series. Norman, OK, USA.

2021

15. **[29 September 2021]** "How a Warming Arctic and Climate Change May Be Impacting Extreme Winter Weather." American Clean Power Resource and Project Energy Assessment Virtual Summit. Webinar.

14. **[5 August 2021]** "A Warming Arctic: How Climate Change May Impact Future Winter Weather." 26th Annual Inter-Tribal Environmental Council Conference. Webinar.

13. **[9 March 2021]** "Bundle Up! Extreme Winter Weather in a Warming World." Texas Tech Climate Science Center. Webinar.

12. **[29 January 2021]** "A Warming Arctic: How Climate Change May Impact Future Winter Weather." South Central Climate Adaptation Science Center. Webinar.

2019

11. **[22 November 2019]** "Looking to the South Pacific to Improve ENSO Predictability." University of Reading, Department of Meteorology, Reading, UK.

10. **[19 June 2019]** "The Role of the South Pacific in Tropical Pacific Climate Variability." University of New South Wales, Climate Change Research Centre, Sydney, NSW Australia.

9. **[11 April 2019]** "Links Between Autumn Snow Cover and Sea Ice Extent and Northern Hemisphere Wintertime Climate Variability." U.S. CLIVAR. Webinar.

2018

8. **[12 July 2018]** "Polar Vortex Variability in the NMME Phase-2 Models." NOAA CPC / NMME Task Force. Webinar.

7. **[17 May 2018]** "The Role of the South Pacific in Tropical Pacific Climate Variability." NOAA Climate Prediction Center, College Park, MD, USA.

2017

6. **[14 Nov 2017]** "The Role of the South Pacific in Tropical Pacific Climate Variability." University of Oklahoma, School of Meteorology Colloquium Series, Norman, OK, USA.

2016

5. **[11 Nov 2016]** "Tropical - North Pacific Climate Interactions on Multiple Timescales." University of Virginia, Department of Environmental Sciences, Charlottesville, VA, USA

4. **[10 Nov 2016]** "From Siberia With Love: How Autumnal Arctic Climate Variability May Influence NH Winter Weather." University of Virginia, Department of Environmental Sciences, Charlottesville, VA, USA.

2015

3. **[13 Mar 2015]** "Towards a New Paradigm of Pacific Climate Variability." University of Oklahoma, School of Meteorology, Norman, OK, USA

2012

2. **[7 Feb 2012]** "Central Pacific Warming and the North Pacific Oscillation: A New Look at Pacific Decadal Climate Variability." NOAA Climate Prediction Centers, Camp Springs, MD, USA.

2005

1. **[14 March 2005]** "On the Balanced Response of the Troposphere to the Stratosphere." NASA GISS, New York, NY, USA.

PRESENTATIONS

* - Student/Postdoc Author. First author is presenter.

2026

140. **Furtado, J. C.** and O. T. Millin*, 2026: "Contributions of the Stratosphere vs. the Tropics to the Subseasonal Forecast Skill of North American Cold Air Outbreaks." 21st Cyclone Workshop. Bad Durkheim, Germany. Oral Presentation.

139. **Furtado, J. C.** and O. T. Millin*, 2026: "Contributions of the Stratosphere vs. the Tropics to the Subseasonal Forecast Skill of North American Cold Air Outbreaks." WCRP/WWRP Third International Conference on Subseasonal to Seasonal to Decadal Prediction (S2S2D). Reading, United Kingdom. Oral Presentation.

138. **Furtado, J. C.**, O. T. Millin*, and R. J. Lynn, 2026: "Performance of a Medium Range to Subseasonal Prediction Model for Extreme Cold across the Central United States." WCRP/WWRP Third International Conference on Subseasonal to Seasonal to Decadal Prediction (S2S2D). Reading, United Kingdom. Poster Presentation.

137. Millin, O. T.*, **J. C. Furtado**, and R. J. Lynn, 2026: "Performance of a Medium Range to Subseasonal Prediction Model for Extreme Cold across the Central United States." American Meteorological Society 106th Annual Meeting. Houston, TX, USA. Oral Presentation.

136. Butterfield, R. A., **J. C. Furtado**, S. M. Loría-Salazar, and E. Kuster, 2026: "Assessing Climate Change and Whiplash Events in National Parks." American Meteorological Society 106th Annual Meeting. Houston, TX, USA. Poster Presentation.

135. **Furtado, J. C.**, and O. T. Millin*, 2026: "The Role of Stratosphere-Troposphere Coupling in Subseasonal Model Predictions of Cold Spells in the Central United States." American Meteorological Society 106th Annual Meeting. Houston, TX, USA. Oral Presentation.

134. Laurinaitis, S. V.*, Z. J. Lebo, **J. C. Furtado**, and V. A. Gensini, 2026: "Utilizing Dynamically Downscaled Climate Simulations to Examine Changes in Winter Weather Across the Northeastern United States Associated with a Warming Climate." American Meteorological Society 106th Annual Meeting. Houston, TX, USA. Poster Presentation.

133. Fields, J. L.*, **J. C. Furtado**, and S. Cavallo, 2026: "Analysis of the Driving Factors of Extratropical Blocking Patterns in the Northern Hemisphere." American Meteorological Society 106th Annual Meeting. Houston, TX, USA. Oral Presentation.

2025

132. Olayiwola, H.*, **J. C. Furtado**, J. Christian, S. Edris, J. Lee, J. B. Basara, and T. Grace, 2025: "Evolution and Influences of Land-Atmospheric Coupling and Synoptic Drivers of Compound Droughts and Heatwave Events in The US Southern Plains," American Geophysical Union Fall Meeting 2025. New Orleans, LA, USA. Poster Presentation.

131. **Furtado, J. C.** and O. T. Millin*, 2025: "Contributions of the Stratosphere vs. the Tropics to the Subseasonal Forecast Skill of North American Cold Air Outbreaks." American Geophysical Union Fall Meeting 2025. New Orleans, LA, USA. Oral Presentation.

130. **Furtado, J. C.**, J. Quinting, O. T. Millin*, and F. Mockert*, 2025: "Subseasonal Predictability of North American Winter Weather Regimes." American Meteorological Society 105th Annual Meeting. New Orleans, LA, USA. Oral Presentation.

129. Edris, S. G.*, A. McGovern, J. B. Basara, J. I. Christian, **J. C. Furtado**, H. O. Olayiwola*, and X. Xiao, 2025: "Investigation of Machine Learning Algorithms in Representing Global Flash Drought Patterns." American Meteorological Society 105th Annual Meeting. New Orleans, LA, USA. Poster Presentation.

128. O. T. Millin*, **J. C. Furtado**, and C. Malloy, 2025: "The Impact of North American Winter Weather Regimes on Electricity Load in the Central United States." American Meteorological Society 105th Annual Meeting. New Orleans, LA, USA. Oral Presentation.

2024

127. Mesheske, D.*, J. Christian*, **J. C. Furtado**, J. B. Basara, T. M. Grace*, B. Fellman*, and P. X. Flanagan, 2024: "Teleconnections and Regional Drivers of Flash Droughts in the Central United States." American Geophysical Union Fall Meeting 2024. Washington, DC, USA. Poster Presentation.

126. **J. C. Furtado**, O. T. Millin*, and C. Malloy, 2024: "The Impact of North American Winter Weather Regimes on Electricity Load in the Central United States." Electric Power Research Institute (EPRI) Climate Resilience and Adaptation Initiative (READi) Annual Meeting. San Antonio, TX, USA. Poster Presentation.

125. **J. C. Furtado**, J. Quinting, O. T. Millin*, and F. Mockert*, 2024: "Subseasonal Predictability of North American Winter Weather Regimes." US Department of Energy EESM PI Meeting. North Bethesda, MD, USA. Oral Presentation.

124. Millin, O. T.*, and **J. C. Furtado**, 2024: "The Role of Stratosphere-Troposphere Coupling in Subseasonal Forecasts of the North American 2017-2018 Cold Air Outbreak." Community Earth System Model (CESM) Workshop. Boulder, CO, USA. Oral Presentation.

123. Millin, O. T.*, and **J. C. Furtado**, 2024: "Stratosphere Troposphere Interactions and Impacts on Weather Prediction." Commodity Weather Group Workshop 2024. Houston, TX, USA. Oral Presentation.

122. Millin, O. T.*, and **J. C. Furtado**, 2024: "The Role of Stratosphere-Troposphere Coupling in Subseasonal Forecasts of the North American 2017-2018 Cold Air Outbreak." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Oral Presentation.

121. Olayiwola, H. O.*, **J. C. Furtado**, J. B. Basara, J. I. Christian*, and T. M. Grace*, 2024: "Quantifying the Drivers of Compound Heatwaves and Drought Events in The Contiguous United States." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Poster Presentation.

120. Mesheske, D.*, J. I. Christian*, J. B Basara, and **J. C. Furtado**, 2024: "Using Seasonal Evaporative Stress Across Europe to Identify Areas Primed for Flash Drought." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Poster Presentation.

119. Giannakopoulos, K.*, and **J. C. Furtado**, 2024: "Sunshine to Shivers: The Characteristics and Evolution of Wintertime Temperature Whiplash in the Southern Plains." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Oral Presentation.

118. Edris, S. G.*, J. B. Basara, J. I. Christian*, **J. C. Furtado**, A. McGovern, and X. Xiao, 2024: "Evaluation of Flash Drought Identification with Machine Learning Techniques, Part 3: Global Perspectives." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Oral Presentation.

117. Edris, S. G.*, J. B. Basara, J. I. Christian*, **J. C. Furtado**, A. McGovern, and X. Xiao, 2024: "Evaluation of Flash Drought Identification with Machine Learning Techniques, Part 2: Common Deep Learning Algorithms." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Poster Presentation.

116. Edris, S. G.*, J. B. Basara, J. I. Christian*, **J. C. Furtado**, A. McGovern, and X. Xiao, 2024: "Evaluation of Flash Drought Identification with Machine Learning Techniques, Part 1: Standard Machine Learning Algorithms." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Poster Presentation.

115. **Furtado, J. C.**, and O. T. Millin*, 2024: "Representation and Predictability of Stratospheric Wave Reflection Events in Subseasonal Forecast Models." American Meteorological Society 104th Annual Meeting. Baltimore, MD, USA. Oral Presentation.

2023

114. Parsons, D. B., J. Chiappa*, I. Tsonevsky, **J. C. Furtado**, A. Shapiro, and M. Ake*, 2023: "Predicting and Representing Extreme Rainfall Events over the United States using Observations, Modeling, and Statistical Approaches." AGU Fall Meeting 2023. San Francisco, CA, USA. Oral Presentation.

113. Mesheske, D.*, J. I. Christian*, J. B Basara, and **J. C. Furtado**, 2023: "Using Seasonal Evaporative Stress Across Europe to Identify Areas Primed for Flash Drought." AGU Fall Meeting 2023. San Francisco, CA, USA. Oral Presentation.

112. **Furtado, J. C.**, and O. T. Millin*, 2023: "Importance of Tropospheric Wave Breaking for Subseasonal Forecasts of the February 2021 North American Cold Air Outbreak." 28th Annual IUGG General Assembly. Berlin, Germany. Oral Presentation.

111. Dickinson, T.*, **J. C. Furtado**, and M. B. Richman, 2023: "Forecasting Subseasonal Extreme Precipitation in the Contiguous United States Using a Convolutional Neural Network." WWRP/WCRP S2S Summit 2023. Reading, UK. Oral Presentation.

110. Millin, O. T.*, and **J. C. Furtado**, 2023: "The Impact of Rossby Wave Breaking on the Subseasonal Forecasts of the February 2021 Great Plains Cold Air Outbreak." WWRP/WCRP S2S Summit 2023. Reading, UK. Poster Presentation.

109. **Furtado, J. C.**, and O. T. Millin*, 2023: "Predictability of Stratospheric Wave Reflection Events in Subseasonal Forecast Models." WWRP/WCRP S2S Summit 2023. Reading, UK. Oral Presentation.

108. Christian, J. I.*, E. R. Martin, J. B. Basara, **J. C. Furtado**, J. A. Otkin, L. Lowman, E. Hunt, V. Mishra, and X. Xiao, 2023: "Global Projections of Flash Drought in a Warming Climate." EGU General Assembly 2023. Vienna, Austria. Oral Presentation.

107. Foskey, S. R.*, N. Sakaeda, J. B. Basara, and **J. C. Furtado**, 2023: "The Impact of the Madden-Julian Oscillation on Extreme Winter Weather in the Contiguous United States." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

106. Christian, J. I., E. R. Martin, J. B. Basara, and **J. C. Furtado**, 2023: "Global Projections of Flash Drought in a Warming Climate." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

105. Dickinson, T., **J. C. Furtado**, and M. B. Richman, 2023: "Forecasting Subseasonal Extreme Precipitation in the Contiguous United States Using a Convolutional Neural Network." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

104. McAfee, D.*, E. R. Martin, and **J. C. Furtado**, 2023: "Bias Correction and Evaluation of S2S Model Performance for Forecasting US Extreme Precipitation Events." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Poster Presentation.

103. Edris, S. G.*, J. B. Basara, J. I. Christian, A. McGovern, **J. C. Furtado**, and X. Xiao, 2023: Evaluation of Flash Drought Identification with Machine Learning Techniques. Part 2: Deep Learning Learning Algorithms. American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

102. Edris, S. G.*, J. B. Basara, J. I. Christian, A. McGovern, **J. C. Furtado**, and X. Xiao, 2023: Evaluation of Flash Drought Identification with Machine Learning Techniques. Part 1: Standard Machine Learning Algorithms. American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Poster Presentation.

101. Jester, S. M.*, S. Crowell, X. Wang, and **Furtado, J. C.**, 2023: Constraint of Vegetation Photosynthesis and Respiration Model (VPRM) Using a Markov Chain Monte Carlo (MCMC) Technique. American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

100. Millin, O. T.*, and **J. C. Furtado**, 2023: "The Impact of Rossby Wave Breaking on the Subseasonal Forecasts of the February 2021 Great Plains Cold Air Outbreak." American Meteorological Society 103rd Annual Meeting. Denver, CO, USA. Oral Presentation.

2022

99. Edris, S. G.*, J. B. Basara, J. I. Christian, A. McGovern, **J. C. Furtado**, and X. Xiao, 2022: "Assessment of Drought Characteristics of the Past Millenium using a High Resolution PMIP4 Model." American Geophysical Union Fall 2022 Meeting. Chicago, IL USA. Poster Presentation.

98. Christian, J. I., E. R. Martin, J. B. Basara, and **J. C. Furtado**, 2022: "Global Projections of Flash Drought in a Warming Climate." American Geophysical Union Fall 2022 Meeting. Chicago, IL USA. Oral Presentation.

97. **Furtado, J. C.**, and O. T. Millin*, 2022: "Importance of Tropospheric Wave Breaking for Subseasonal Forecasts of the February 2021 North American Cold Air Outbreak." 47th NOAA Climate Diagnostics and Prediction Workshop. Logan, UT, USA, Oral Presentation.

96. McAfee, D.*, E. R. Martin, and **J. C. Furtado**, 2022: "Evaluation and Bias Correction of S2S Reforecast Ensemble for Forecasting US Extreme Precipitation Events." 47th NOAA Climate Diagnostics and Prediction Workshop. Logan, UT, USA, Oral Presentation.

95. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2022: "The Stratospheric Connection to Cold Air Outbreaks in the Great Plains of the United States." 7th SPARC General Assembly. Boulder, CO, USA. Poster Presentation.

94. Millin, O. T.*, and **J. C. Furtado**, 2022: "Characteristics, Evolution, and Formation of Cold Air Outbreaks in the Great Plains of the United States". Commodity Weather Group Webinar Series 2022. Oral Presentation.

93. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2022: "The Different Stratospheric Mechanisms Influencing the Formation of Cold Air Outbreaks in the Great Plains of the United States." CIWRO Workshop on S2S Prediction for High-Impact Weather Events. Norman, OK, USA, Oral Presentation.

92. **Furtado, J. C.**, T. A. Dickinson*, and M. B. Richman, 2022: "Predicting Subseasonal Extreme Precipitation Events Across the United States." CIWRO Workshop on S2S Prediction for High-Impact Weather Events. Norman, OK, USA, Oral Presentation.

91. Kuster, C. M., J. Carlin, T. Schurr, R. Bowers, T. Lindley, J. Snyder, and **J. C. Furtado**, 2022: Using Dual-Polarization Radars to Nowcast Severe Weather Events. 11th European Conference on Radar in Meteorology and Hydrology. Locarno, Switzerland. Poster Presentation.

90. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2022: "Characteristics of Cold Air Outbreaks in the Great Plains and Their Subseasonal Predictability Potential." Oklahoma NSF EPSCoR S^3OK Annual State Conference. Tulsa, OK, USA. Oral Presentation.

89. Woodward, A. K.*, J. B. Basara, and **J. C. Furtado**, 2022: "Synoptic Evolution of the October 2020 Ice Storm across the Southern Great Plains." American Meteorological Society 102nd Annual Meeting. Virtual. Poster Presentation.

88. Edirs, S. G.*, J. B. Basara, J. I. Christian, A. McGovern, **J. C. Furtado**, and X. Xiao, 2022: "Identification of Flash Drought Events Using Machine Learning Techniques." American Meteorological Society 102nd Annual Meeting. Virtual. Poster Presentation.

87. Martin, E. R., J. B. Basara, H. Brooks, R. Bunker*, P. Ćwik*, T. Dickinson*, **J. C. Furtado**, C. R. Homeyer, G. C. Jennrich, H. Lazrus, D. M. McAfee*, R. A. McPherson, E. Mullens, M. Richman, D. Rosendahl, M. Schroers*, and O. G. VanBuskirk*, 2022: "Lessons from the Prediction of Rainfall Extremes at Subseasonal-to-Seasonal Periods (PRES^{2}iP) Project." American Meteorological Society 102nd Annual Meeting. Virtual. Oral Presentation.

86. Lee, S. H.*, A. J. Charlton-Perez, S. J. Woolnough, and **J. C. Furtado**, 2022: "How Do Stratospheric Perturbations Influence North American Weather Regime Predictions?" American Meteorological Society 102nd Annual Meeting. Virtual. Oral Presentation.

85. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2022: "The Different Stratospheric Mechanisms Influencing the Formation of Cold-Air Outbreaks in the Great Plains of the United States." American Meteorological Society 102nd Annual Meeting. Virtual. Oral Presentation.

84. Dickinson, T. A.*, M. B. Richman, and **J. C. Furtado**, 2022: "Forecasting Subseasonal Extreme Precipitation in the Contiguous United States: Examining the Utility of Random Forests." American Meteorological Society 102nd Annual Meeting. Virtual. Oral Presentation.

83. McAfee, D.*, E. R. Martin, and **J. C. Furtado**, 2022: "Evaluation of S2S Model Performance for Forecasting US Extreme Precipitation Events." American Meteorological Society 102nd Annual Meeting. Virtual. Poster Presentation.

2021

82. Puxley, B., E. R. Martin, J. B. Basara, **J. C. Furtado**, and J. B. Christian, 2021: "Precipitation Whiplash Events Across the Southern Great Plains of the United States." American Geophysical Union Fall Meeting 2021. New Orleans, LA, USA. Poster Presentation.

81. Cohen, J., L. Agel, M. Barlow, **J. C. Furtado**, M. Kretschmer, and V. Matthias: "The Polar Vortex Winter of 2021." American Geophysical Union Fall Meeting 2021. New Orleans, LA, USA. Oral Presentation.

80. **Furtado, J. C.**, O. T. Millin, S. Cavallo, J. H. Ruppert, A. Reinert, and S. Lakshmivarahan, 2021: "Subseasonal Predictors of Extreme Cold Air Outbreaks in the Central US." American Geophysical Union Fall Meeting 2021. Virtual. Poster Presentation.

79. **Furtado, J. C.**, O. T. Millin, and J. B. Basara, 2021: "A Meteorological Evaluation of the February 2021 North American Cold Wave." Society for Risk Analysis Annual Meeting 2021. Virtual. Oral Presentation.

78. Millin, O. T.*, **J. C. Furtado**, and J. B. Basara, 2021: "The Differing Influence of the Stratosphere on Cold Air Outbreaks in the Great Plains of the United States." NOAA's 46th Climate Diagnostics and Prediction Workshop. Virtual. Oral Presentation.

77. Dickinson, T. A.*, M. B. Richman, and **J. C. Furtado**, 2021: "Examining the Utility of Random Forests to Forecast Subseasonal Extreme Precipitation in the Contiguous United States." NOAA's 46th Climate Diagnostics and Prediction Workshop. Virtual. Oral Presentation.

76. McAfee, D.*, E. R. Martin, and **J. C. Furtado**, 2021: "Evaluation of S2S Model Performance for Forecasting US Extreme Precipitation Events." NOAA's 46th Climate Diagnostics and Prediction Workshop. Virtual. Poster Presentation.

75. McAfee, D.*, E. R. Martin, and **J. C. Furtado**, 2021: "Regional and Seasonal Analysis of S2S Reforecast Ensemble Extreme Precipitation Event Performance With a Subseasonal-to-Seasonal Forecast Range Emphasis." American Meteorological Society 101st Annual Meeting. Virtual. Poster Presentation.

74. Flanagan, P. X., J. B. Basara, E. R. Martin, R. Mahmood, and **J. C. Furtado**, 2021: "Impact of Anthropogenic Climate Change on Future U.S. Great Plains Wet and Dry Years." American Meteorological Society 101st Annual Meeting. Virtual. Oral Presentation.

73. Lee, S. H.*, **J. C. Furtado**, and A. J. Charlton-Perez, 2021: "Wintertime North American Weather Regimes and the Stratospheric Polar Vortex." American Meteorological Society 101st Annual Meeting. Virtual. Oral Presentation.

72. Wakefield, R. A.*, J. B. Basara, J. M. Shepherd, N. Brauer, **J. C. Furtado**, J. Santanello, and R. Edwards, 2021: "Reintensification of Tropical Storm Bill (2015): Contributions of the Brown Ocean Effect." American Meteorological Society 101st Annual Meeting. Virtual. Oral Presentation.

2020

71. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2020: "Representation of the Scandinavia-Greenland Pattern and its Relationship with the Polar Vortex in S2S Forecast Models." American Geophysical Union 2020 Fall Meeting. Virtual. Poster Presentation.

70. Ćwik, P.*, R. McPherson, and **J. C. Furtado**, 2020: "Relationships between WXMAXSHEAR Parameter and Atmospheric Patterns Associated with Tornado Outbreaks in the USA." American Geophysical Union 2020 Fall Meeting. Virtual. Oral Presentation.

69. **Furtado, J. C.**, 2020: "Winter 2020/21 Seasonal Forecast Discussion." NSF PRES^{2}iP Project. Virtual. Oral Presentation.

68. **Furtado, J. C.**, B. T. Anderson, and M. H. Rogers*, 2020: "Links between the Pacific Decadal Precession and North American Winter Climate Extremes." NOAA's 45th Climate Diagnostics and Prediction Workshop. Virtual. Oral Presentation.

67. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2020: "Representation of the Scandinavia-Greenland Pattern and its Relationship with the Polar Vortex in S2S Forecast Models." 6th United Kingdom Climate Dynamics Workshop. Virtual. Oral Presentation.

66. Ćwik, P.*, E. Martin, R. McPherson, H. Lazrus, **J. C. Furtado**, E. Mullens, C. M. Kuster, and M. J. Wagner, 2020: "User's Perspective and Decision-Making Process Based on S2S Extreme Precipitation Forecast Products? What We Learned during the PRES^{2}iP Workshop." American Meteorological Society 100th Annual Meeting. Boston, MA, USA. Oral Presentation.

65. Dickinson, T. A.*, M. B. Richman, and **J. C. Furtado**, 2020: "Developing a Subseasonal-to-Seasonal Extreme Precipitation Events Database for the Contiguous United States." American Meteorological Society 100th Annual Meeting. Boston, MA, USA. Poster Presentation.

64. Flanagan, P. X., J. B. Basara, E. R. Martin, R. Mahmood, and **J. C. Furtado**, 2020: "Primary Atmospheric Drivers of Dry and Wet Periods over the U.S. Great Plains within CMIP5 Models." American Meteorological Society 100th Annual Meeting, Boston, MA, USA. Poster Presentation.

63. **Furtado, J. C.** and B. A. Jarrett*, 2020: "Characterizing Regimes of Northern Hemisphere Stratospheric Polar Vortex Variability." American Meteorological Society 100th Annual Meeting. Boston, MA, USA. Poster Presentation.

62. Ohnstad, J. D. R.*, and **J. C. Furtado**, 2020: "Subseasonal Winter Weather Predictability Associated with Single versus Multiple Wave Pulse Events and Their Impacts on the Arctic Stratospheric Polar Vortex." American Meteorological Society 100th Annual Meeting. Boston, MA, USA. Oral Presentation.

61. Rogers, M. H.*, and **J. C. Furtado**, 2020: "The Pacific Decadal Precession and Its Relationship to Tropical and Extratropical North Pacific Decadal Variability in the CMIP6 Models." American Meteorological Society 100th Annual Meeting. Boston, MA, USA. Poster Presentation.

2019

60. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2019: "Abrupt stratospheric vortex weakening associated with North Atlantic anticyclonic wave breaking." ECMWF Workshop: Stratospheric predictability and impact on the troposphere. Reading, UK. Poster Presentation.

59. **Furtado, J. C.** and M. R. Green*, 2019: "The Combined Influence of the MJO and the Stratospheric Polar Vortex on Northern Hemisphere Winter Weather Patterns." ECMWF Workshop: Stratospheric predictability and impact on the troposphere. Reading, UK. Poster Presentation.

58. Lee, S. H.*, A. J. Charlton-Perez, **J. C. Furtado**, and S. J. Woolnough, 2019: "Abrupt stratospheric vortex weakening associated with North Atlantic anticyclonic wave breaking." Atmospheric Circulation in a Changing Climate Workshop. Madrid, Spain. Poster Presentation.

57. **Furtado, J. C.** and Y. You*, 2019: "Using South Pacific Climate Variability to Improve ENSO Forecast Skill." 2nd Meridional Mode Workshop. Columbus, OH, USA. Oral Presentation.

56. **Furtado, J. C.**, G. C. Jennrich*, J. B. Basara, and E. R. Martin, 2019: "Characteristics of and Precursors to Extreme Precipitation Events in the United States." NOAA's 44th Climate Diagnostics and Prediction Workshop. Raleigh, NC, USA. Oral Presentation.

55. **Furtado, J. C.** and Y. You*, 2019: "Using South Pacific Climate Variability to Improve Seasonal ENSO Forecast Skill." 2019 Australian Meteorological and Oceanographic Society / International Conference on Tropical Meteorology and Oceanography (AMOS-ICTMO) Meeting. Darwin, NT, Australia. Oral Presentation.

54. Flanagan, P. X., J. B. Basara, **J. C. Furtado**, E. R. Martin, and X. Xiao, 2019: "Role of Pacific Sea Surface Temperatures in the U.S. Great Plains Pluvial Years." American Meteorological Society 99th Annual Meeting, Phoenix, AZ, USA. Oral Presentation.

53. Jennrich, G. C.*, and **J. C. Furtado**, 2019: "Synoptic Precursors to Subseasonal to Seasonal Extreme Precipitation Events Across the United States." American Meteorological Society 99th Annual Meeting, Phoenix, AZ, USA. Oral Presentation.

2018

52. Ćwik, P.*, E. Martin, J. Basara, H. Brooks, C. Homeyer, **J. C. Furtado**, G. C. Jennrich*, H. Lazrus, R. McPherson, E. Mullens, M. Richman, A. Robinson-Cook, and D. Rosendahl, 2018: "PRES^{2}iP: Prediction of Rainfall Extremes at Subseasonal-to-Seasonal Periods - Year #1." American Geophysical Union 2018 Fall Meeting, Washington, DC, USA. Poster Presentation.

51. **Furtado, J. C.**, G. C. Jennrich*, and J. B. Basara, 2018: "Synoptic Precursors to Subseasonal to Seasonal Extreme Precipitation Events Across the United States." American Geophysical Union 2018 Fall Meeting, Washington, DC, USA. Oral Presentation.

50. **Furtado, J. C.**, and Y. You*, 2018: "The South Pacific Meridional Mode and its Role in Tropical Pacific Climate Variability." International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA. Poster Presentation.

49. **Furtado, J. C.**, M. R. Green*, E. A. Barnes, M. L'Heureux, L. M. Ciasto, K. Harnos, and A. Allgood, 2018: "The Combined Influence of the MJO and the Stratospheric Polar Vortex on NH Winter Weather Patterns." International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA. Poster Presentation.

48. **Furtado, J. C.**, P. Ćwik*, E. Martin, J. Basara, H. Brooks, C. Homeyer, G. C. Jennrich*, H. Lazrus, R. McPherson, E. Mullens, M. Richman, A. Robinson-Cook, and D. Rosendahl, 2018: "PRES^{2}iP: Prediction of Rainfall Extremes at Subseasonal-to-Seasonal Periods - Year #1." International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA. Poster Presentation.

47. Anderson, B. T., **J. C. Furtado**, E. Di Lorenzo, and A. Capotondi, 2018: "The Pacific Decadal Precession: Our Current Understanding of its Dynamics, Regional Climate Effects, and Predictability." International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA. Oral Presentation.

46. Domeison, D. I., A. H. Butler, A. J. Charlton-Perez, B. Ayarzagüena, M. P. Baldwin, E. Dunn-Sigouin, **J. C. Furtado**, C. I. Garfinkel, P. Hitchcock, A. Y. Karpechko, J. Knight, A. Lang, E.-P. Lim, Y. Lim, A. Marshall, C. Schwartz, I. R. Simpson, S.-W. Son, K. Song, and M. Taguchi, 2018: "The Role of Stratosphere - Troposphere Coupling in Sub-seasonal to Seasonal Prediction using

the S2S Database." International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA. Oral Presentation.

45. **Furtado, J. C.**, and C. Narotsky*, 2018: "Trends in the Northern Hemisphere Stratospheric Polar Vortex During the 20th and 21st Centuries." AOGS 15th Annual Meeting, Honolulu, HI, USA. Oral Presentation.

44. **Furtado, J. C.**, and Y. You*, 2018: "The South Pacific Meridional Mode and its Role in ENSO Variability." AOGS 15th Annual Meeting, Honolulu, HI, USA. Oral Presentation.

43. **Furtado, J. C.**, and Y. You*, 2018: "The South Pacific Oscillation and Its Potential Role in ENSO Development." AGU / ASLO / TOS 2018 Ocean Sciences Meeting, Portland, OR, USA. Oral Presentation.

42. You, Y.*, and **J. C. Furtado**, 2018: "The South Pacific Meridional Mode and Its Role in the Tropical Pacific Interannual-to-Decadal Variability: Observations and Models." AGU / ASLO / TOS 2018 Ocean Sciences Meeting, Portland, OR, USA. Oral Presentation.

41. Green, M. R.*, **J. C. Furtado**, E. A. Barnes, M. L'Heureux, L. M. Ciasto, and K. Harnos, 2018: "Joint Influences of the MJO and the Stratospheric Polar Vortex on the Northern Hemisphere Extratropical Circulation." American Meteorological Society 98th Annual Meeting. Austin, TX, USA. Oral Presentation.

40. Flanagan, P. X.*, J. Basara, **J. C. Furtado**, and X. Xiao, 2018: "Primary Atmospheric Drivers of Pluvial Years in the United States Great Plains." American Meteorological Society 98th Annual Meeting. Austin, TX, USA. Oral Presentation.

39. Narotsky, C.* and **J. C. Furtado**, 2018: "Quantifying Stratospheric Polar Vortex Trends during the 20th and 21st Centuries." American Meteorological Society 98th Annual Meeting. Austin, TX, USA. Poster Presentation.

38. Balderas, N.*, G. Jennrich*, N. Myers*, and **J. C. Furtado**, 2018: "Recent and Future Trends of Cold Season Extratropical Cyclones over the Eastern United States." American Meteorological Society 98th Annual Meeting, Austin, TX, USA. Poster Presentation.

37. **Furtado, J. C.**, and Y. You*, 2018: "The Role of the South Pacific Oscillation in ENSO Predictions." 98th American Meteorological Society Annual Meeting, Austin, Poster Presentation.

36. You, Y.*, and **J. C. Furtado**, 2018: "The South Pacific Meridional Mode and Its Role in the Tropical Pacific Interannual-to-Decadal Variability: Observations and Models." American Meteorological Society 98th Annual Meeting, Austin, TX, USA. Oral Presentation.

2017

35. Rosendahl. D. H., P. Ćwik*, E. R. Martin, J. Basara, H. Brooks, **J. C. Furtado**, C. Homeyer, H. Lazrus, R. McPherson, E. Mullens, M. Richman, and A. Robinson-Cook, 2017: "Developing a Framework for Seamless Prediction of Sub-Seasonal to Seasonal Extreme Precipitation Events

in the United States." American Geophysical Union 2017 Fall Meeting. New Orleans, LA, USA. Poster Presentation.

34. Lampert, D., **J. C. Furtado**, K. Karleskint, M. Moursy*, and C. Dyson*, 2017: "Analysis of Future Flood Risks associated with Climate change on Oklahoma City Infrastructure." AWRA Annual Water Resources Conference, Portland, OR, USA. Oral Presentation.

33. Lampert, D., **J. C. Furtado**, K. Karleskint, M. Moursy*, and C. Dyson*, 2017: "Analysis of Future Flood Risks associated with Climate change on Oklahoma City Infrastructure." Oklahoma Governor's Water Conference, Oklahoma City, OK, USA. Oral Presentation.

32. Green, M. R.*, **J. C. Furtado**, E. A. Barnes, M. L'Heureux, L. M. Ciasto, and K. Harnos, 2017: "Evaluating the Joint Influence of the MJO and the Stratospheric Polar Vortex on Northern Hemisphere Winter Weather Patterns." 42nd Annual NOAA Climate Diagnostics and Prediction Workshop, Norman, OK, USA. Oral Presentation.

31. Flanagan, P. X.*, J. Basara, **J. C. Furtado**, and X. Xiao, 2017: "Primary Atmospheric Drivers of United States Great Plains Pluvial Years." 42nd Annual NOAA Climate Diagnostics and Prediction Workshop, Norman, OK, USA. Oral Presentation.

30. **Furtado, J. C.**, J. Cohen, E. Becker, and D. Collins, 2017: "Predictability of Sudden Stratospheric Warmings in Operational Subseasonal-to-Seasonal Forecasting Models." 42nd Annual NOAA Climate Diagnostics and Prediction Workshop, Norman, OK, USA. Oral Presentation.

29. Rosendahl. D. H., P. Cwi*k, E. R. Martin, J. B. Basara, H. Brooks, **J. C. Furtado**, C. Homeyer, H. Lazrus, R. McPherson, E. Mullens, M. Richman, and A. Robinson-Cook, 2017: "Developing a Framework for Seamless Prediction of Sub-Seasonal to Seasonal Extreme Precipitation Events in the United States." 42nd Annual NOAA Climate Diagnostics and Prediction Workshop, Norman, OK, USA. Poster Presentation.

28. **Furtado, J. C.**, M. R. Green*, E. A. Barnes, M. L'Heureux, L. M. Ciasto, and K. Harnos, 2017: "Modulation of Wintertime MJO Teleconnections by the Northern Hemisphere Stratospheric Polar Vortex." 18th Cyclone Workshop. Saint-Adele, Quebec, Canada. Oral Presentation.

27. **Furtado, J. C.**, J. Cohen, E. Becker, and D. Collins, 2017: "Predictability of the Tropospheric NAM and SSWs in the NMME Phase-2 Models." NOAA OAR/CPO NMME Webinar Series. Oral Presentation.

26. **Furtado, J. C.**, J. Cohen, E. Becker, and D. Collins, 2017: "Predictability of the Tropospheric NAM and SSWs in the NMME Phase-2 Models." American Meteorological Society 97th Annual Meeting, Seattle, WA, USA. Oral Presentation.

25. Newman, B.*, B. Elmer*, M. Angst*, and **J. C. Furtado**, 2017: "The Association Between El Niño Intensity and North American Winter Weather." American Meteorological Society 97th Annual Meeting, Seattle, WA, USA. Poster Presentation.

24. Barlow, M., J. Cohen, **J. C. Furtado**, and L. Agel, 2017: "Three-Dimensional Structure and Daily Evolution of Vertically-Coherent Troposphere-Stratosphere Wave Activity Pulses." American Meteorological Society 97th Annual Meeting, Seattle, WA, USA. Oral Presentation.

2016

23. Anderson, B. T., **J. C. Furtado**, E. DiLorenzo, and D. J. S. Gianotti*, 2016: "The Pacific Decadal Precession and Climate Disturbances in the Northwest." 7th Annual Northwest Climate Conference, Skamania, WA, USA. Poster Presentation.

22. **Furtado, J. C.**, E. DiLorenzo, B. T. Anderson, D. J. S. Gianotti*, N. Schneider, and M. A. Alexander, 2016: "Tropical - North Pacific Climate Interactions on Multiple Timescales." SCENARIO Workshop, Reading, UK. Oral Presentation.

21. Barlow, M., J. Cohen, and **J. C. Furtado**, 2016: "Three-Dimensional Structure and Daily Evolution of Vertically-Coherent Troposphere-Stratosphere Wave Activity Pulses." EGU General Assembly, Vienna, Austria. Oral Presentation.

2015

20. **Furtado, J. C.**, B. T. Anderson, D. J. S. Gianotti*, and E. DiLorenzo, 2015: "The Pacific Decadal Precession and Its Links to US Climate." South Central Climate Science Center 4th Annual Research Workshop, Fort Worth, TX, USA. Poster Presentation.

2014

19. Cohen., J., **J. C. Furtado**, M. Barlow, D. Whittleston*, and D. Entekhabi, 2014: "Linking Siberian Snow Cover to Precursors of Stratospheric Variability and Intraseasonal Predictability.'" American Geophysical Union 2014 Fall Meeting. San Francisco, CA, USA. Poster Presentation.

18. Cohen, J., J. A. Screen, **J. C. Furtado**, M. Barlow, D. Whittleston*, D. Coumou, J. Francis, K. Dethloff, D. Entekhabi, and J. Overland, 2014: "The Relationship Between Recent Arctic Amplification and Extreme Mid-Latitude Weather." American Geophysical Union 2014 Fall Meeting. San Francisco, CA, USA. Oral Presentation.

2013

17. **J. C. Furtado**, J. Cohen, J. E. Jones, M. Barlow, D. Whittleston*, and D. Entekhabi, 2013: "Linking Siberian Snow Cover to Precursors of Stratospheric Variability." American Geophysical Union 2013 Fall Meeting. San Francisco, CA, USA. Poster Presentation.

2012

16. Cohen, J., **J. C. Furtado**, M. Barlow, J. E. Cherry, and V. A. Alexeev, 2012: "Has Anthropogenic Global Warming in the Arctic Contributed to Colder Winter Weather in the Northern Hemisphere Mid-Latitudes?" American Geophysical Union 2012 Fall Meeting. San Francisco, CA, USA. Oral Presentation.

15. **Furtado, J. C.**, J. Cohen, A. Butler, E. Riddle, and A. Kumar, 2012: "Eurasian Snow Cover, Stratosphere-Troposphere Coupling, and NH Wintertime Climate Variability in CMIP5." 37th Annual NOAA Climate Diagnostics and Prediction Workshop. Fort Collins, CO, USA. Oral Presentation.

14. **Furtado, J. C.**, and E. DiLorenzo, 2012: "The Meridional Mode and Tropical Pacific Decadal Variability in the CMIP5 Models." American Geophysical Union 2012 Fall Meeting. San Francisco, CA, USA. Poster Presentation.

2011

13. Cohen, J., **J. C. Furtado**, M. Barlow, V. Alexeev, and J. Cherry, 2011: "Are the Two Recent Harsh Northern Hemisphere Winters Manifestation of Anthropogenic Global Warming in the Arctic?" WCRP Open Science Conference: Climate Research in Service to Society. Denver, CO, USA. Poster Presentation.

12. **Furtado, J. C.**, J. Cohen, A. Butler, E. Riddle, and A. Kumar, 2011: "Eurasian Snow Cover Variability and Wintertime Stratosphere / Troposphere Coupling in the CMIP5 Models." WCRP Open Science Conference: Climate Research in Service to Society. Denver, CO, USA. Poster Presentation.

11. **Furtado, J. C.**, E. DiLorenzo, B. T. Anderson, and N. Schneider, 2011: "Dynamics of the North Pacific Oscillation and Connections to Tropical Pacific Variability." 36th Annual Northeastern Storm Conference, Taunton, MA, USA. Oral Presentation.

2010

10. **Furtado, J. C.**, E. Di Lorenzo, B. T. Anderson, and N. Schneider, 2010: "Dynamics of the North Pacific Oscillation and Connections to Tropical Pacific Variability." American Geophysical Union 2010 Fall Meeting. San Francisco, CA, USA. Poster Presentation.

9. Di Lorenzo, E., K. M. Cobb, **J. C. Furtado**, N. Schneider, B. T. Anderson, M. Alexander, and D. Vimont, 2010: "ENSO, Pacific Decadal Oscillation and North Pacific Gyre Oscillation: Towards an Integrated View of Pacific Climate." American Geophysical Union 2010 Western Pacific Geophysics Meeting. Taipei, Taiwan. Oral Presentation.

8. Di Lorenzo, E., K. M. Cobb, **J. C. Furtado**, N. Schneider, B. T. Anderson, M. Alexander, and D. Vimont, 2010: "Central Pacific El Niño and North Pacific Decadal Climate Change." 2010 Western Pacific Geophysics Meeting. Taipei, Taiwan. Oral Presentation.

7. Di Lorenzo, E., K. M. Cobb, **J. C. Furtado**, N. Schneider, B. T. Anderson, M. Alexander, and D. Vimont, 2010: "ENSO and the North Pacific Gyre Oscillation: An Integrated View of Pacific Decadal Dynamics." 2010 Ocean Sciences Meeting. Portland, OR, USA. Oral Presentation.

6. **Furtado, J. C.**, and E. Di Lorenzo, 2010: "North Pacific Decadal Variability and Climate Change in the IPCC AR4 Models." American Meteorological Society 90th Annual Meeting. Atlanta, GA, USA. Oral Presentation.

2008

5. Di Lorenzo, E., **J. C. Furtado**, N. Schneider, A. Bracco, 2008: "ENSO and the North Pacific Gyre Oscillation: A Dynamical Framework to Understand Present and Future Climate." American Geophysical Union 2008 Fall Meeting. San Francisco, CA, USA. Oral Presentation.

4. **Furtado, J. C.**, and E. Di Lorenzo, 2008: "Decadal Climate Variability of the North Pacific: Past and Future." Eastern Pacific Ocean Conference 2008. Fallen Leaf Lake, CA, USA. Oral Presentation.

2007

3. **Furtado, J. C.**, E. Di Lorenzo, and K. M. Cobb, 2007: "Reconstructing Tropical Sea Surface Temperatures Using Precipitation Proxy Records: Methods and Uncertainties." IUGG General Assembly 2007. Perugia, Italy. Oral Presentation.

2. Di Lorenzo, E., **J. C. Furtado**, and K. M. Cobb, 2007: "Reconstructing Tropical Sea Surface Temperatures Using Precipitation Proxy Records: Methods and Uncertainties." American Geophysical Union 2007 Joint Assembly Meeting. Acapulco, Guerrero, Mexico. Poster Presentation.

2005

1. **Furtado, J. C.**, D. W. J. Thompson, and T. G. Shepherd, 2005: "On the Balanced Response of the Troposphere to the Stratosphere." 30th Annual Northeastern Storm Conference. Burlington, VT, USA. Oral Presentation.

OTHER WORKSHOPS AND CONFERENCES

2025

- American Meteorological Society Science Policy Colloquium. Washington, DC, USA. **Selected for Participation.**

2018

- American Meteorological Society Early Career Leadership Academy. Washington, DC, USA. **Selected for Participation.**

2016

- National Science Foundation Effectively Communicating Science Workshop – Expert Witness Training Program. St. Paul, MN, USA. **Selected for Participation.**

2006

- National Center for Atmospheric Science Advanced Study Program. "The Art of Climate Modeling." Boulder, CO, USA Washington, DC, USA. **Selected for Participation.**

RESEARCH GRANTS

CURRENT

TOTAL CURRENT FUNDING: $1,919,691

6. **PI** - Subseasonal Prediction of Low Wind / High Heat Compound Extreme Events in the Central US. Mercuria. 01/01/2026 - 12/31/2028. $347,210.

5. **Co-PI** - The BOOST Model: BOOsting extreme Subseasonal Temperature forecasts for the Continental United States. Mercuria. 01/01/2026 - 12/31/2028. $661,410.

4. **PI** - Toward Improving the Simulation and Prediction of Extratropical Northern Hemisphere Blocking Patterns and Extreme Weather. DOE. Award # DE-SC0024379. 09/01/2023 - 08/31/2027. $673,938.

3. **PI** - Building a Medium-To-Long Range Prediction Model for Severe Cold Temperatures Across the Central US. Mercuria. 01/01/2025 - 12/31/2026. $73,250.

2. **Co-I** - Updating Pavement ME Climate Module for Efficient Design, Management of Oklahoma Pavements. Oklahoma Department of Transportation. Award # SPRY-0010(093)RS. 10/01/2023 - 09/30/2026. $113,500.

1. **Co-PI** - Planning: CHIRRP: Southern Plains Dry-Line Research and Adaptation Center (SPDRAP). NSF. 09/01/2024 - 08/31/2026. $50,383.

PAST

TOTAL PAST FUNDING: $5,257,946

10. **PI** - RII Track-1: Socially Sustainable Solutions for Water, Carbon, and Infrastructure Resilience in Oklahoma. NSF. Award #OIA-1946093. 07/01/2020 - 06/30/26. $2,353,654.

9. **PI** - Understanding the Impacts of Extreme Events on our National Parks: Past, Present, and Future. USGS Climate Adaptation Science Centers. Award # G23AC00442. 08/01/2023 - 07/31/2024. $36,363.

8. **Co-PI** - PREEVENTS Track 2: Collaborative Research: Developing a Framework for Seamless Prediction of Sub-Seasonal to Seasonal Extreme Precipitation Events in the United States. NSF. Award #ICER 1663840. 07/01/17 – 06/30/22. $1,842,562.

7. **Co-PI** - Towards Improving the Prediction of Blocking Patterns and Extreme Weather on Subseasonal-to-Seasonal Timescales. Data Institute for Societal Challenges Big Ideas Challenge Seed Grant Award. 07/01/2021 - 03/31/22. $10,000.

6. **PI** - Collaborative Research: Structure and Influence of Coherent Vertical Pulses of Wave Activity Flux in Observations and Models, from Daily to Seasonal Timescales. NSF. Award # AGS-1657921. 08/15/17– 07/31/21. $231,521.

5. **PI** - Investigating the Underlying Mechanisms and Predictability of the MJO - NAM Linkage in the NMME Phase-2 Models. NOAA MAPP. Award # NA160AR4310075. 07/01/16 – 06/30/19, $185,543.

4. **PI** - Analysis of Transportation Infrastructure Risks to Climate Change. Southern Plains Transportation Center. Project #111915. 07/01/16 – 06/30/17. $12,600.

3. **PI** - Evaluating Sudden Stratospheric Warmings and NAM Predictability in the NMME Phase-2 System. NOAA MAPP. Award # NA15OAR4310077. 08/01/15 – 07/31/16. $59,118.

2. **Co-I** - Implementation and Validation of Solar Variability in Radiation Code RRTMG_SW. NASA. 08/01/13 – 07/31/16. $215,926.

1. **Co-PI** - Identifying Mechanisms of AMOC Variability in ECCO State Estimates and CMIP5 Models. NOAA. 08/01/13 – 07/31/16. $310,659.

AWARDS AND HONORS

2026	**Chesapeake Energy Professor in Climate Systems Science**, University of Oklahoma
2025	**Faculty Fellow for Strategic Partnerships**, School of Meteorology, University of Oklahoma
2024	**International Excellence Fellow**, Karlsruhe Institute of Technology, Karlsruhe, Germany **Research Performance Award**, College of Atmospheric & Geographic Sciences, University of Oklahoma
2022	**Carlisle and Lurline Mabrey Presidential Professorship**, University of Oklahoma **Research Excellence Award**, College of Atmospheric & Geographic Sciences, University of Oklahoma
2021	**Annual Award for Excellence in Research Grants**, University of Oklahoma
2019	**AGU Editor's Citation for Excellence for Refereeing**, *Geophysical Research Letters*
2018	**Top Faculty/Staff Forecaster**, Flagstaff, AZ, WxChallenge **Top Faculty/Staff Forecaster**, Portland, OR, WxChallenge
2017	**Dean's Excellence in Teaching Award**, College of Atmospheric & Geographic Sciences, University of Oklahoma **Top Faculty/Staff Forecaster**, Jackson, MS, WxChallenge

2015	**AGU Editor's Citation for Excellence for Refereeing**, *Geophysical Research Letters*
2014	**Employee of the Year**, Atmospheric and Environmental Research **Team of the Year**, Verisk Climate
2010	**Georgia Tech Earth & Atmospheric Sciences Chair Service Award**
2008	**Top Graduate Student Forecaster**, Tucson, AZ, WxChallenge
2006	**Top National Forecaster**, Salt Lake City, UT, NCWFC **Top Graduate Student Forecaster**, Pensacola, FL, NCWFC
2005–2009	**Georgia Tech Presidential Fellowship**
2006	**Top Graduate Student Forecaster**, Hoquiam, WA, NCWFC
2002–2005	**AMS/NASA Earth Science Enterprise Fellowship** **Colorado State University 3F Fellowship**
2001	**AMS Howard T. Orville Scholarship in Meteorology**
1998–2002	**Lyndon State College Presidential Scholar** **Martin Luther King Jr. Foundation Scholar** **Portuguese-American Scholar**

TEACHING EXPERIENCE

2015– **University of Oklahoma**

Courses Taught

- METR 1014 – Introduction to Weather and Climate
- METR 3980 – Honors Research
- METR 4233/4803 – Physical Meteorology III: Radiation and Climate
- METR 4523 – Climate and the General Circulation
- METR 5433 – Advanced Statistical Meteorology
- METR 5970 – Independent Study
- METR 6970 – Weather and Climate Seminar

Guest Lectures

- METR 3523 – Managing for a Changing Climate (Online)
- METR 3334 – Principles of Research & Communication in Meteorology (2022)
- METR 4443/5443 – Introduction to Tropical Meteorology (2019)
- METR 4922 – Senior Capstone II (2015, 2016, 2018)

METR 4543/5543 – Global Climate Change (2017)
METR 4491/5491 – Weather Briefing (2016, 2017)
METR 4233 – Physical Meteorology III: Radiation and Climate (2015)

2014–2015 **Boston University**
Courses Taught
GE310 – Climate and the Environment
GE507 – Dynamical Oceanography

April 2012 **University of Massachusetts Lowell**
Guest Lecture
ATMO 5080 – The Climate System

2007–2010 **Georgia Institute of Technology**
Graduate Teaching Assistant
EAS 1600HP – Introduction to Environmental Science (Honors)
EAS 8803 – Advanced Environmental Data Analysis

Guest Lecture
EAS 3113 – Energy, Environment, and the Energy Cycle (Fall 2008)

2006 – 2012 **Private Academic Tutor**

2005 – 2006 **Georgia Institute of Technology Athletic Association**
Student-Athlete Tutor

2004 **Colorado State University**
Graduate Teaching Assistant
AT605 – General Circulation of the Atmosphere

1999 – 2002 **Lyndon State College**
Math Lab Tutor

POSTDOCTORAL SCIENTISTS ADVISED

PAST

2025 – 2026 Oliver T. Millin, Ph.D.

2023 – 2024 Jordan Christian, Ph.D.

GRADUATE STUDENTS ADVISED

CURRENT

2026 – Tieryn Hinton (M.S.)

2026 – Ian Shank (M.S.)

2024 – Jacob Fields (M.S.) **(Co-advised w/ S. Cavallo at U. Oklahoma)**

2023 – Henry Olayiwola (Ph.D.)

PAST

2020 – 2025 Oliver T. Millin (Ph.D.)
Dissertation: Subseasonal-to-Seasonal Predictability of Cold Air Outbreaks in the Central United States

2022 – 2024 Katie Giannakopoulos (M.S.)
Thesis: Examining the Characteristics and Evolution of Temperature Whiplash Events in the US Southern Plains

2018 – 2023 Ty Dickinson (Ph.D.) **(Co-Advised w/ M. Richman at U. Oklahoma)**
Dissertation: Developing a Framework for Seamless Prediction of Subseasonal to Seasonal Extreme Precipitation Events in the United States

2018 – 2021 Simon Lee (Ph.D.) **(Co-Advised w/ A. Charlton-Perez & S. Woolnough at University of Reading)**
Dissertation: Stratosphere-Troposphere Coupling on Subseasonal Timescales

2018 – 2020 Jacob Ohnstad (M.S.)
Thesis: Subseasonal Winter Weather Predictability Associated with Single vs. Multiple Wave Pulse Events and Their Impact on the Arctic Stratospheric Polar Vortex

2018 – 2020 Matthew Rogers (M.S.)
Thesis: The Pacific Decadal Precession and its Relationship to Tropical Pacific Decadal Variability in CMIP6 Models

2017 – 2019 Gregory Jennrich (M.S.)
Thesis: Synoptic Characteristics and Precursors to Subseasonal to Seasonal Extreme Precipitation Events Across the United States

2016 – 2018 Matthew Green (M.S.)
Thesis: Evaluation of the Madden-Julian Oscillation and the Stratospheric Polar Vortex and Their Joint Influence on the Northern Hemisphere Extratropical

Circulation

2016 – 2018 Yujia You (M.S.)
Thesis: South Pacific Atmospheric Internal Variability and Its Role in the El Niño-Southern Oscillation

MASTERS AND DOCTORAL COMMITTEE MEMBERSHIP

CURRENT

M.S.: Gwyneth Glanton (2025 –) ● Jessica Davis (2025 –) ● Kathryn Giesa (2024 –)

Ph.D.: Matthew Ammon (2026 –) ● Zhihong Chen (2025 –) ● ● Kayla Wheeler (2024 –) ● Stephen Foskey (2024 –) ● Sadiksha Rai (2023 –)

PAST

M.S.: Lauren Harvey (2026 – 2026) ● Christian McGinty (2025 – 2026) ● Kelly Geiger (2025 – 2026) ● Cole Hartman (2025 – 2026) ● Shaun Laurinaitis (2024 – 2025) ● Jeffrey Lee (2023 – 2024) ● Jason Chiappa (2022 – 2023) ● Jonah Pehl (2022 – 2023) ● Kayla Wheeler (2022 – 2023) ● Tatiana Esteva-Ingram (2022 – 2023) ● Joseph Burzdak (2021 – 2023) ● Benjamin Fellman (2022 – 2023) ● Steven Jester (2021 – 2023) ● Jacob Margraf (2022 – 2023) ● Madeline Diedrichsen (2022 – 2022) ● Alyssa Woodward (2021 – 2022) ● Stephen Foskey (2021 – 2022) ● Hrag Najarian (2021 – 2021) ● Sadiksha Rai (2021 – 2021) ● Taylor Grace (2020 – 2021) ● Bryony Puxley (2020 – 2021) ● Melanie Schroers (2020 – 2020) ● Andy Wilkins (2020 – 2020) ● Andrew Berrington (2019 – 2020) ● Jordan Laser (2019 – 2020) ● Ian Gesell (2019 – 2020) ● Amanda Burke (2019 – 2019) ● Madeline Clark (2018– 2019) ● Qingyu Wang (2018 – 2018) ● Ryann Wakefield (2017 – 2018) ● Allison Brannon (2016 – 2017) ● Erik Loken (2016 – 2017) ● James Danco (2015 – 2016)

Ph.D.: Rachael Cross (2022 – 2026) ● Bryony Puxley (2022 – 2026) ● Andrew Justin (2024 – 2025) ● David Stang (2024 – 2025) ● Michael Hosek (2023 – 2025) ● Guangoh Jheong (2023 – 2024) ● Paulina Ćwik (2021 – 2024) ● Melanie Schroers (2021 – 2024) ● Taylor Grace (2022 – 2024) ● Stuart Edris (2021 – 2024) ● Benjamin Davis (2021 – 2024) ● Madeline Clark (2020 – 2024) ● Andrew Berrington (2022 – 2023) ● Sean Ernst (2021 – 2023) ● David Harrison (2019 – 2022) ● Samuel Lillo (2017 – 2021) ● Ryann Wakefield (2019 – 2021) ● Jordan Christian (2017 – 2020) ● Makenzie Krocak (2017 – 2020) ● Ryan Lagerquist (2017 – 2020) ● Paul Flanagan (2016 – 2018)

UNDERGRADUATE STUDENTS MENTORED

CURRENT

William Beasley III (2026 –) ● Caden Berry (2026 –) ● Logan Ryan (2026 –) ● Joseph Wagstaff (2026 –)

PAST

Kayleigh Dennis (Fall 2025) • Brendan Morales (Fall 2025) • Matthew van Mourik (Fall 2025) • Annabelle Tappenden (Fall 2025) • Rebecca Butterfield (Summer 2025) • Megan Davies (Spring 2025) • Miles Leonard (2023 – 2024) • Skyler Everhard (Fall 2023) • Ethan Kararo (Fall 2023) • Matthew Lavoie (Fall 2023) • Taylor Sprang (Fall 2023) • Devin McAfee (2020 – 2023) • Matthew Ammon (Fall 2022) • Marcus Ake (Fall 2022) • Marshall Baldwin (Fall 2022) • Erika Pruitt (Summer 2022) • Daniel Groeneveld (2021) • Jacob Genuise (2020 – 2021) • Kelsey Westerman (2020 – 2021) • Bailey Jarrett (2018 – 2020) • Sydney Butler (2019 – 2020) • Madisyn Ferris (2019 – 2020) • Walter Wilson (2019 – 2020) • Katherine Davis (2018 – 2020) • Maci Gibson (2018 – 2020) • Andria Myers (2018 –2019) • Levi Schmitmeyer (2018 – 2019) • Benjamin Savill (2018 – 2019) • Carly Narotsky (Summer 2017) • Clarice Dyson (2016 – 2017) • Gregory Jennrich (2016 – 2017) • Nicholas Balderas (2016 – 2017) • Noah Myers (2016 – 2017) • Erin Burns (2016 – 2017) • Sarah Rodriguez (2016 – 2017) • Max Angst (2015 – 2016) • Brittany Newman (2015 – 2016) • Blake Elmer (2015 – 2016)

SERVICE AND LEADERSHIP

2026 –
Associate Editor, *npj Climate and Atmospheric Science*
Co-Convener, "Weather Regimes: Predictability, Prediction, and Applications, Session at American Meteorological Society 107th Annual Meeting

2025 –
Member, OU Artificial Intelligence Working Group – Research and Interdisciplinary Collaboration
Member, OU Information Technology Council
Member, OU Athletics Council ***Appointed by OU President Harroz***
Invited Member, Sub-seasonal Applications for Agriculture and Environment (SAGE) Energy Task Force
Panel Member, CIWRO Summer Colloquium Career Development Panel

2023 –
Editor, *Artificial Intelligence for the Earth Systems*
Associate Editor, *Journal of Climate*
Member, Electric Power Research Institute Climate READi Affinity Group

2022 –
Member, US Climate Variability and Predictability (CLIVAR) Predictability, Predictions, and Applications Interface (PPAI) Panel (Co-chair; 2024 – 2026)

2020 –
Participant, Letters to a Pre-Scientist Program

2019 –
Proposal Reviewer, UK Natural Environment Research Council (NERC)

2017 –
Participant, Skype-A-Scientist Program

2015 –
Consultant, Everstream Analytics (formerly RiskPulse)

2014 –	**Proposal Reviewer**, National Science Foundation
2003 –	**Peer Reviewer**, *Atmos. Sci. Lett., Bull. Amer. Meteor. Soc., Climate Dyn., Deep Sea Res., Geophys. Res. Lett., Intl. J. Climatol., J. Climate, J. Geophys. Res. Atmos., J. Geophys. Res. Oceans, J. Hydrometeor., J. Meteor. Soc. Japan, npj Climate Atmos. Sci., Nature Comm., Nature Climate Change, Nature Geosci., Q. J. Roy. Meteor. Soc. Wea. Climate Dyn., Wea. Forecasting*
2025 – 2026	**Co-Convener**, "Weather Regimes: Predictability, Prediction, and Applications, Session at American Meteorological Society 106th Annual Meeting
2023 – 2026	**Associate Editor**, *Frontiers in Climate*
2022 – 2026	**Advisory Board Member,** Salient Predictions
2025	**Participant,** American Meteorological Society Science Policy Colloquium
2025	**Panel Member**, OU School of Meteorology Student Affairs Committee / NOAA CWIRO Career Development Panel
2024 – 2025	**Co-Convener**, "Winter Weather In a Warming World II", Session at American Meteorological Society 105th Annual Meeting
2021 – 2024	**Co-Lead**, Extreme Weather & Climate Change Community of Practice South Central Climate Adaptation Science Center
2023 – 2024	**Planning Committee Member and S2S Chair**, NOAA CWIRO Fire Weather Workshop
2023 – 2024	**Co-Convener**, "Winter Weather In a Warming World", Session at American Meteorological Society 104th Annual Meeting
2023	**Chair,** College of Atmospheric and Geographic Sciences Dean Evaluation Committee
2022 – 2023	**Member**, AMS Mind The Gap Group
2022	**Member,** College of Atmospheric and Geographic Sciences Dean Evaluation Committee
2017, 2022	**Mentor**, National Weather Center REU Program
2022–2023	**Senator**, University of Oklahoma Faculty Senate

2021 – 2023	**Member**, OU College of Arts and Sciences Environmental Studies Program Steering Committee **Mentor**, OU School of Meteorology Mentoring Program **Member**, OU School of Meteorology Graduate Studies Committee
2015 – 2023	**Local Manager**, OU WxChallenge Team
2021 – 2022	**Member,** OU Department of Geography and Environmental Sustainability Community Resilience Faculty Search Committee
2016 – 2022	**Faculty Panelist**, OU School of Meteorology High School Visitation Days
2020 – 2021	**Proposal Panel Reviewer**, NASA
2019 – 2021	**Member**, OU School of Meteorology Strategic Planning Committee
2018 – 2020	**Mentor**, AGU Mentor Program
2016 – 2020	**Member**, NOAA MAPP Subseasonal-to-Seasonal (S2S) Task Force
2015 – 2020	**Member**, NOAA NMME Task Force
2018 – 2019	**Invited Speaker and Contributor**, Citizen's Climate Lobby, Oklahoma City Chapter
2015 – 2019	**Member**, Graduate Admissions Committee, OU School of Meteorology
2014 – 2019	**Member**, AMS Weather Analysis and Forecasting Committee
2017 – 2018	**Member**, Inaugural Class of AMS Early Career Leadership Academy **Member**, Search Committee, Director, OU School of Meteorology
2016 – 2018	**Member**, OU School of Meteorology Undergraduate Curriculum Committee
2015 – 2018	**Member**, weather.ou.edu Development Committee
2016 – 2017	**Host and Co-Organizer**, 42nd Annual NOAA Climate Diagnostics and Prediction Workshop
August 2016	**Participant**, NSF Effectively Communicating Science Workshop – Expert Witness Training Program
2015 – 2017	**Chairman**, OU School of Meteorology Reanalysis Data Bank Committee
2013 – 2015	**Debate Judge**, Boston Debate League
September 2014	**Panelist**, Belmont High School Career Night

December 2013	**Co-Convener**, Natural and Societal Impacts of Decadal Climate Variability, American Geophysical Union 2013 Fall Meeting
November 2013	**Speaker**, First Lego League Competition
2011	**Contributing Member**, PICES Working Group 20
2009 – 2010	**Secretary**, Metro Atlanta Chapter of the AMS **Member**, Prospective Graduate Student Committee, Georgia Tech School of Earth & Atmospheric Sciences **Member**, Social Committee, Georgia Tech School of Earth & Atmospheric Sciences **Member**, Undergraduate Curriculum Committee, Georgia Tech School of Earth & Atmospheric Sciences
2008 – 2010	**Speaker**, Public outreach program for elementary students about science/weather
2006 – 2010	**Local Manager**, Georgia Tech NCWFC / WxChallenge Forecast Team
2003 – 2005	**Radio DJ**, KCSU 90.5 FM
2002 – 2005	**Local Manager**, Colorado State University NCWFC Forecast Team
2002	**Radio DJ**, WWLR 91.5 FM
2001 – 2002	**President**, Lyndon State College Chapter of the AMS/NWA **Vice President**, Sigma Zeta Honorary Society
1999 – 2000	**Treasurer**, Lyndon State College Chapter of the AMS/NWA

MEDIA INTERVIEWS & APPEARANCES

2026

103. **[14 Aug 2026]** "El Niño phenomenon predicted to reach "historic levels" in Japan; risk of increased typhoons" – *NHK Japan*

102. **[30 Jul 2026]** Interview on the impact of climate change on severe storms and extreme weather in the US. – *NHK Japan*

101. **[30 Jul 2026]** "The cloud icon of doom: Weather apps are crushing America's small businesses" – *Business Insider*

100. **[24 Jan 2026]** "Is Climate Change Weakening the Polar Vortex?" – *New York Times*

99. **[23 Jan 2026]** "What weather apps sometimes miss about dangerous winter storm conditions" – *AP News*

98. **[22 Jan 2026]** "Arctic blast to wallop N. America – is climate change to blame?" – *Agence France-Presse*

97. **[21 Jan 2026]** "A massive winter storm will hit large parts of the U.S. through the weekend" – *NPR*

2025

96. **[24 Dec 2025]** "Experts say Christmas Day temperatures could reach record highs" – *Norman Transcript*

95. **[19 Dec 2025]** "Scientists push back on Trump plan to break up a critical climate and weather center" (includes audio clip) – *NPR*

94. **[5 Dec 2025]** Signals of Change Podcast - Episode #52: Dr. Jason Furtado

93. **[23 Nov 2025]** "The Polar Vortex Will Weaken Much Earlier Than Usual; Here's What That Could Mean In December" – *The Weather Channel*

92. **[22 Nov 2025]** "Cold and snowy weather could be coming for many, thanks to the polar vortex" – *ABC News*

91. **[11 Nov 2025]** "Strong winds can bring gale warnings to communities near water. Here's what that means" – *Associated Press*

90. **[16 Jul 2025]** "Where To Find The Most Reliable Weather Forecasts" – *Time*

89. **[23 Jun 2025]** "Early-season heat dome brings highest temperatures in years to parts of Eastern US" – *Associated Press*

88. **[13 Feb 2025]** "Polar vortex-tied cold snap to grip the U.S. next week" – *Axios*

87. **[17 Jan 2025]** "Siberian air will spread across US, and Trump inaugural is forced indoors" – *AP News*

2024

86. **[5 Jun 2024]** Radio Interview - Severe Weather and Climate Change – *Oklahoma Farm Report / Radio Oklahoma Ag Network*

85. **[11 Mar 2024]** "Weather, rainbows and pots of gold: What's at work here?" – *Fox News*

84. **[11 Jan 2024]** "Winter whiplash: Why a parade of storms is suddenly slamming the U.S." – *Axios*

2023

83. **[15 Nov 2023]** "How climate change has affected Rochester" – *CBS News 8 Rochester WROC*

82. **[18 Sep 2023]** "University of Oklahoma, Los Alamos National Laboratory awarded grant to study extreme weather triggers" – *ABC News Channel 8, Tulsa, OK*

81. **[15 Sep 2023]** "OU Weather Grant" – *KGOU*

80. **[14 Sep 2023]** "OU Meteorology shares cause for extreme August heat, buffs up research" – *Norman Transcript*

79. **[8 Sep 2023]** "August heat wave set records in parts of Kansas" – *Kansas Reflector*

78. **[8 Aug 2023]** Radio Interview - All-Time Record Hot July – *Oklahoma Farm Report / Radio Oklahoma Ag Network*

77. **[5 Jul 2023]** Radio Interview - Climate Change and Record Heat – *Oklahoma Farm Report / Radio Oklahoma Ag Network*

76. **[5 Jul 2023]** "Tuesday set an unofficial record for the hottest day on Earth. Wednesday may break it." – *Associated Press*

75. **[5 Jun 2023]** "Amount of warming triggering carbon dioxide in air hits new peak, growing at near-record fast rate"– *Associated Press*

74. **[15 Apr 2023]** "Here's why downpour in Florida just wouldn't stop"– *Associated Press*

73. **[7 Apr 2023]** "Why are we seeing such severe weather across the United States this year?" – *NBC 5 Dallas/Fort Worth*

72. **[22 Mar 2023]** "Tornado Alley: Where the Worst Twisters Form in the U.S."– *HowStuffWorks*

71. **[19 Mar 2023]** "Meteorologists say winters may be warmer, snowier. What is St. Paul doing to prepare?"– *Pioneer Press*

2022

70. **[23 Dec 2022]** "How climate change impacts winter weather"– *ABC News*

69. **[15 Dec 2022]** "Arctic blast takes aim at U.S. for Christmas, New Years"– *Axios*

68. **[7 Sep 2022]** "'"Don't underestimate the power of water": FEMA encourages Oklahomans to get flood insurance"– *KFOR 4 News, Oklahoma City*

67. **[30 Jul 2022]** "Finding Kentucky flood victims could take weeks, governor says"– *Associated Press*

66. **[26 Jul 2022]** "A poor wheat harvest as Oklahoma faces a hotter, drier future"– *The Frontier*

65. **[22 Jul 2022]** "Heat wave stresses AC units, emergency rooms" – *The Journal Record*

64. **[7 Jul 2022]** "Yellowstone Floods Reveal Forecasting Flaws in Warming World" – *Associated Press*

63. **[9 May 2022]** "What is the Impact of Climate Change on Texas?" – NBC 5, Dallas-Fort Worth

62. **[29 Jan 2022]** "Blizzard buffets East Coast with deep snow, winds, flooding" – *Associated Press*

2021

61. **[15 Dec 2021]** "Oklahoma City sees warmest, driest December on record" – *KOCO 5 News, Oklahoma City*

60. **[13 Dec 2021]** "Tornades meurtrières aux Etats-Unis : la crise climatique est-elle coupable?" – *Ouest-France*

59. **[12 Dec 2021]** "EXPLAINER: Was tornado outbreak related to climate change?" – *Associated Press*

58. **[8 Dec 2021]** "Texas energy regulators, gas industry try to reassure the public that the state's power grid is ready for winter." – *Texas Tribune*

57. **[21 Sep 2021]** "Climate Change Expected To Continue Stressing Oklahoma's Electric Grid To The Brink." – *KGOU*

56. **[16 Aug 2021]** "Texas regulators want to prepare the state's electricity grid for extreme weather. But that's a moving target in a warming world." – *Texas Tribune*

55. **[6 Mar 2021]** "La Niña could supercharge this year's tornado season, just like it did to deadly effect in 2011" – *CNN*

54. **[15 Feb 2021]** "14 states face rolling blackouts; millions in Texas without power" – *Associated Press*

53. **[14 Jan 2021]** "Hot again: 2020 sets yet another global temperature record" – *Associated Press*

52. **[7 Jan 2021]** "The polar vortex may be on its way" – *CNN*

2020

51. **[30 Dec 2020]** "A Nurse Got Coronavirus After Being Vaccinated ? Why Reactions Are Familiar To Meteorologists" – *Forbes.com*

50. **[23 Jun 2020]** "Does Air Conditioning Relief For Summer Heat Make Coronavirus Worse?" – *Forbes.com*

49. **[3 Mar 2020]** "What the heck is a haboob?" – *Popular Science*

48. **[26 Feb 2020]** "What is a snow squall?" – *Popular Science*

2019

47. **[30 Dec 2019]** "20 Experts Predict The Most Significant Weather And Climate Advances Of The Next Decade" – *Forbes.com*

46. **[7 Sep 2019]** "Agency reverses course on Trump's Alabama hurricane claim" – *Associated Press*

45. **[30 Aug 2019]** "As Hurricane Dorian Approaches, 'Nobody's Off the Hook' on Florida's East Coast" – *Earther.com*

44. **[26 Jul 2019]** "The European heatwave bears the fingerprint of climate change" – *Capital Weather Gang / The Washington Post*

43. **[25 Jul 2019]** Discussion of Climate Change w/ Mitch Carr – *KRLD NewsRadio 1080/ Texas State Network*

42. **[12 Mar 2019]** "The Central U.S. is About to Get Hit with a Bomb Cyclone" – *Earther.com*

41. **[3 Mar 2019]** "Winter storm blasts much of the U.S. and delays spring" – *The Washington Post*

40. **[29 January 2019]** "Here are the facts: Despite winter storms, global warming is real" – *USA Today*

39. **[20 Jan 2019]** "Dear Mr. President, that's not how global warming works" – *Capital Weather Gang / The Washington Post*

38. **[18 Jan 2019]** "February Deep Freeze On Track: A Late-Winter Outlook That Just Might Pan Out" – *Weather Underground*

37. **[16 Jan 2019]** "The Polar Vortex Has Fallen Apart, Which is Likely to Unleash a Much Colder End to January" – *The Weather Channel*

2018

36. **[17 Dec 2018]** "Polar vortex could unleash winter wallop by January" – *The Weather Channel*

35. **[30 Nov 2018]** "AP FACT CHECK: 11 Trump climate goofs and 1 correct claim"- *Associated Press*

34. **[24 Oct 2018]** "Report: Efforts to suck carbon from air must be ramped up" – *Associated Press*

33. **[23 Apr 2018]** "Climate change could leave Californians with "weather whiplash" – *CNN*

32. **[12 Mar 2018]** "Third nor'easter in 2 weeks to slam New England: What's going on here?" – *Mashable*

31. **[5 Jan 2018]** "'Bomb cyclone' is the new 'polar vortex.' Here's where this year's weather word comes from" – *Associated Press*

30. **[4 Jan 2018]** "The 'Bomb Cyclone" – *Discovery Canada*. (TV Interview)

29. **[3 Jan 2018]** "Science Says: Why there's a big chill in a warmer world" – *Associated Press*

28. **[2 Jan 2018]** "It's Somehow Going to Get Even Colder in the Eastern US" – *Associated Press*

2017

27. **[26 Dec 2017]** "Unforgiving cold snap will engulf eastern two-thirds of the nation through New Year's Day" – *Capital Weather Gang / The Washington Post*

26. **[27 Oct 2017]** "Science Says: Jack Frost nipping at your nose ever later" – *Associated Press*

25. **[5 Oct 2017]** "OU Gets $1.5 Million to Study Rain" – *The Journal Record*

24. **[17 Aug 2017]** "July ranks 2nd for heat globally, hottest recorded on land" – *Associated Press*

23. **[31 May 2017]** "A guide to global warming, Paris pact and the U.S. role" – *Associated Press*

22. **[3 May 2017]** "Climate change expected to make turbulence stronger and more frequent" – *CNN*

21. **[17 March 2017]** 'The numbers are in on this freakishly warm February" – *CBS News*

20. **[1 February 2017]** "Beyond the extreme: Scientists marvel at 'increasingly non-natural"Arctic warmth" – *Capital Weather Gang / The Washington Post*

19. **[18 January 2017]** "Scientists react to Earth's warmest year: 'We are heading into a new unknown'" – *Capital Weather Gang / The Washington Post*

18. **[18 January 2017]** "Earth Sets Hottest Year Record for Third-Straight Time" – *Associated Press*

2016

17. **[15 December 2016]** "Polar Vortex: The Chilly Science of an Arctic Blast" – *LiveScience*

16. **[13 December 2016]** "The Polar Vortex is Back - Ugh" – *NBC Connecticut*

15. **[30 November 2016]** "Arctic Air Poised to Invade the U.S. After Record Warm November" – *Mashable*

14. **[18 October 2016]** "Earth's 16-Month Record Heat Streak Ends but Warming Remains" – *ABC News / Associated Press*

13. **[17 August 2016]** "July was 'absolutely' Earth's hottest month ever recorded" – *Capital Weather Gang / The Washington Post*

12. **[2 August 2016]** "Scientists' annual physical of planet: Earth's fever rises'" – *Associated Press*

11. **[16 May 2016]** "Earth's relentless streak of record-warm months expands to seven" – *Capital Weather Gang / The Washington Post*

10. **[9 May 2016]** "Panasonic (Yes, Panasonic) May Have Created the World's Best Weather Model?" – *Slate.com*

9. **[19 April 2016]** "Earth's hot streak continues for a record 11 months" – *CBS News / Associated Press*

8. **[11 March 2016]** "Panel: Finding Climate Fingerprints in Wild Weather Is Valid" – *Associated Press*

7. **[18 February 2016]** "El Niño Weakens a Tad, but We Won't Feel That for Months" – *US News / Associated Press*

6. **[5 February 2016]** "How melting Arctic ice may have set off era of vicious East Coast snow storms" – *Capital Weather Gang / The Washington Post*

5. **[7 January 2016]** "All the winter's a weird weather stage; Here are the players" – *Yahoo News / Associated Press*

4. **[4 January 2016]** "Arctic outbreak barreling toward U.S. may be Storm Frank's revenge" – *Mashable*

2015

3. **[16 November 2015]** "By one measure, this wicked El Niño is the strongest ever recorded: What it means" – *Capital Weather Gang / The Washington Post*

2. **[23 October 2015]** Hurricane Patricia Coverage – *OU Nightly*

1. **[20 August 2015]** "Heating Up: El Niño Could Increase Business for Climate Forecasters" – *The Journal Record*

PROFESSIONAL MEMBERSHIPS

American Geophysical Union • American Meteorological Society • National Weather Association • Sigma Xi Scientific Research Honor Society