

*Curriculum Vitae*

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Associate Professor  
Department of Earth, Atmospheric, and  
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**EDUCATION:**

- 2011 **Ph. D.** Meteorology, University of Oklahoma, School of Meteorology
- 2004 **M. S.** Meteorology, University of Oklahoma, School of Meteorology
- 2001 **B. S.** Atmospheric and Oceanic Sciences, University of Wisconsin – Madison

**PROFESSIONAL EXPERIENCE:**

- 2022 – present **Associate Professor**, Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, West Lafayette, Indiana
- 2015 – 2022 **Assistant Professor**, Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, West Lafayette, Indiana
- 2014 – 2015 **Research Scientist**, University of Oklahoma, Cooperative Institute for Mesoscale Meteorological Studies, Norman, Oklahoma
- 2012 – 2014 **National Research Council Postdoctoral Fellow**, National Severe Storms Laboratory, Norman, Oklahoma
- 2011 – 2012 **Postdoctoral Research Associate**, University of Oklahoma, Center for Analysis and Prediction of Storms, Norman, Oklahoma
- 2010 – 2011 **Research Assistant**, University of Oklahoma, Cooperative Institute for Mesoscale Meteorological Studies, Norman, Oklahoma
- 2005 **Independent Consultant**, Weathernews, Inc., Tokyo, Japan
- 2002 – 2010 **Research Assistant**, University of Oklahoma, College of Atmospheric & Geographic Sciences (formerly: College of Geosciences), School of Meteorology, Norman, Oklahoma
- 2000 – 2002 **Research Intern**, University of Wisconsin – Madison, Atmospheric & Oceanic Science, Space Science and Engineering Center, Madison, Wisconsin

**RESEARCH INTERESTS:**

Severe convective storms, tornadoes, polarimetric Doppler weather radar, radar data analysis, high-resolution numerical modeling of convective storms and tornadoes, radar data assimilation, ensemble Kalman filter (EnKF) techniques, mesoscale meteorology, atmospheric radiometry, infrared thermography, atmospheric undular bores, atmospheric science education research.

**FUNDING:**

1. **Principal investigator:** *VORTEX-SE: Characterization of microphysical processes in potentially tornadic Southeast U.S. storms via polarimetric radar - disdrometer - lightning synthesis*, NOAA/DOC award NA19OAR4590209, **\$227,901**, November 2019 – October 2022.

2. **Co-principal investigator:** VORTEX-SE: *Understanding the influence of microphysical processes on the environment and behavior of southeastern-U.S. potentially tornadic storms*, NOAA/DOC award NA18OAR4590313, **\$235,905**, September 2018 – August 2022.
3. **Principal Investigator:** *Collaborative Research: Polarimetric tornado precursor signatures*, National Science Foundation award AGS-1741003, **\$692,700**, November 2017 – October 2023. [Includes CARES Act supplement.]
4. **Principal investigator:** *X-band, Polarimetric, Doppler Weather Radar*. Award from Executive Vice President for Research for installation of a weather radar at Purdue University. **\$312,000**, June 2017 – May 2018.
5. **Co-principal investigator:** *Improved Understanding of Tornado Development and Risk using Models and Observations from VORTEX-SE 2017*, NOAA/DOC award NA16OAR4590208, **\$173,981**, September 2016 – August 2017.
6. **Co-principal investigator:** *Improved Understanding of Tornado Development and Risk using Models and Observations from VORTEX-SE*, NOAA/DOC award NA15OAR4590231, **\$192,901**, September 2015 – September 2017.

**TEACHING:**

**Purdue University:**

2023	Spring	EAPS 13800	Thunderstorms and Tornadoes
2023	Spring	EAPS 49700	Undergraduate Research Experience
2022	Fall	EAPS 22700	Introduction to Atmospheric Observations and Measurements
2022	Summer	EAPS 49700	Undergraduate Research Experience
2022	Spring	EAPS 52300	Radar Meteorology
2022	Spring	EAPS 49700	Undergraduate Research Experience
2021	Fall	EAPS 22700	Introduction to Atmospheric Observations and Measurements
2021	Fall	EAPS 49700	Undergraduate Research Experience
2021	Spring	EAPS 13800	Thunderstorms and Tornadoes
2021	Spring	EAPS 49700	Undergraduate Research Experience
2020	Fall	EAPS 22700	Introduction to Atmospheric Observations and Measurements
2020	Fall	EAPS 49700	Undergraduate Research Experience
2020	Spring	EAPS 52300	Radar Meteorology
2020	Spring	EAPS 49700	Undergraduate Research Experience
2019	Fall	EAPS 22700	Introduction to Atmospheric Observations and Measurements
2019	Fall	EAPS 49700	Undergraduate Research Experience
2019	Summer	EAPS 59100	Severe Storms Field Work
2019	Summer	EAPS 49700	Undergraduate Research Experience
2019	Spring	EAPS 49700	Undergraduate Research Experience
2018	Fall	EAPS 53500	Atmospheric Observations and Measurements
2018	Fall	EAPS 49700	Undergraduate Research Experience
2018	Summer	EAPS 59100	Severe Storms Field Work
2018	Spring	EAPS 52300	Radar Meteorology
2018	Spring	EAPS 49700	Undergraduate Research Experience
2017	Fall	EAPS 53500	Atmospheric Observations and Measurements
2017	Summer	EAPS 59100	Severe Storms Field Work
2016	Fall	EAPS 53500	Atmospheric Observations and Measurements
2016	Summer	EAPS 49700	Undergraduate Research Experience

2016	Spring	EAPS 52300	Radar Meteorology
2016	Spring	EAPS 39100	Special Topics: VORTEX-SE Field Research
2015	Fall	EAPS 53500	Atmospheric Observations and Measurements

### University of Oklahoma:

2015	Spring	METR 4911 & 4922	Senior Capstone (mentor)
2012	Summer	N/A	Radar Meteorology Training Workshop for the Nigerian Meteorological Agency (instructor)
2007	Spring	METR 2603	Severe and Unusual Weather

### PUBLICATIONS:

#### Refereed articles:

1. LaFleur, A. T., **R. L. Tanamachi**, Dawson II, D. T. and D. D. Turner, 2022: Factors affecting the rapid recovery of CAPE on 31 March 2016 during VORTEX-Southeast. *Mon. Wea. Rev.*, in press.
2. Kollias, P., and 22 coauthors (incl. **R. L. Tanamachi**), 2022: Science Applications of Phased Array Radars. *Bull. Amer. Meteor. Soc.*, 103, E2370–E2390, doi:10.1175/BAMS-D-21-0173.1.
3. Araújo da Silva, M., F. Rocadenbosch, **R. L. Tanamachi**, and U. Saeed, 2022: Motivating a synergistic mixing-layer height retrieval method using backscatter lidar returns and microwave-radiometer temperature observations. *IEEE Transactions on Geoscience and Remote Sensing*, 60, 1–18, doi:10.1109/TGRS.2022.3158401.
4. Sharma, M., **R. L. Tanamachi**, E. C. Bruning, and K. M. Calhoun, 2021: Polarimetric and Electrical Structure of the 19 May 2013 Edmond-Carney, Oklahoma Tornadoic Supercell. *Mon. Wea. Rev.*, **149**, 2048 – 2078; doi:10.1175/MWR-D-20-0280.1.
5. **Tanamachi, R. L.**, D. T. Dawson, and L. C. Parker, 2020: Students of Purdue Observing Tornadoic Thunderstorms for Research (SPOTTR): A severe storms field work course at Purdue University. *Bull. Amer. Meteor. Soc.*, **101**, E847–E868, doi:10.1175/BAMS-D-19-0025.1.
6. Rocadenbosch, F., R. Barragán, S. J. Frasier, J. Waldinger, D. D. Turner, **R. L. Tanamachi**, and D. T. Dawson, 2020: Ceilometer-Based Rain-Rate Estimation: A Case-Study Comparison With S-Band Radar and Disdrometer Retrievals in the Context of VORTEX-SE. *IEEE Transactions on Geoscience and Remote Sensing*, **58**, 8268–8284, doi:10.1109/TGRS.2020.2984458.
7. Murdzek, S. S., P. M. Markowski, Y. P. Richardson, and **R. L. Tanamachi**, 2020: Processes Preventing the Development of a Significant Tornado in a Colorado Supercell on 26 May 2010. *Mon. Wea. Rev.*, 148, 1753–1778, <https://doi.org/10.1175/MWR-D-19-0288.1>.
8. **Tanamachi, R. L.**, S. J. Frasier, J. Waldinger, A. T. LaFleur, D. D. Turner, and F. Rocadenbosch, 2019: Progress toward Characterization of the Atmospheric Boundary Layer over Northern Alabama Using Observations by a Vertically Pointing, S-Band Profiling Radar during VORTEX-Southeast. *J. Atmos. Oceanic Technol.*, **11**, 2221–2246, doi:10.1175/JTECH-D-18-0224.1.
9. Wood, V. T., **R. L. Tanamachi**, and L. W. White, 2017: Influences of larger-scale vortex variability on tornado pressure minima in an outer-flow region: Explorations using a parametric tangential wind model. *Mon. Wea. Rev.*, **145**, 1597–1614, doi:10.1175/MWR-D-16-0191.1.
10. **Tanamachi, R. L.**, and P. L. Heinselman, 2016: Rapid-scan, polarimetric observations of central Oklahoma severe storms on 31 May 2013. *Wea. Forecasting*, **31**, 19–42, doi:10.1175/WAF-D-15-0111.1.
11. **Tanamachi, R. L.**, P. L. Heinselman, and L. J. Wicker, 2015: Impacts of a storm merger on the 24 May 2011 El Reno, Oklahoma tornadoic supercell. *Wea. Forecasting*, **30**, 501–524, doi:10.1175/WAF-D-14-00164.1.

12. **Tanamachi, R. L.**, H. B. Bluestein, M. Xue, W.-C. Lee, K. A. Orzel, S. J. Frasier, and R. M. Wakimoto, 2013: Near-surface vortex structures in a tornado and a sub-tornado strength, convective-storm vortex observed by a mobile, W-band radar during VORTEX2. *Mon. Wea. Rev.*, **141**, 3661-3690.
13. **Tanamachi, R. L.**, L. J. Wicker, D. C. Dowell, H. B. Bluestein, and M. Xue, 2013: EnKF assimilation of high-resolution, mobile Doppler radar data of the 4 May 2007 Greensburg, Kansas supercell into a numerical cloud model. *Mon. Wea. Rev.*, **141**, 625-648.
14. Dawson, D. T., L. J. Wicker, E. R. Mansell, and **R. L. Tanamachi**, 2012: Impact of the environmental low-level wind profile on ensemble forecasts of the 4 May 2007 Greensburg, KS tornadic storm and associated mesocyclones. *Mon. Wea. Rev.*, **140**, 696-716.
15. **Tanamachi, R. L.**, H. B. Bluestein, J. B. Houser, S. Frasier, K. Hardwick, 2012: Mobile, polarimetric, X-band Doppler radar observations of the 4 May 2007 Greensburg, Kansas tornadic supercell. *Mon. Wea. Rev.*, **140**, 2103-2125.
16. Walden, V. P., **R. L. Tanamachi**, P. M. Rowe, H. E. Revercomb, D. C. Tobin, and S. A. Ackerman, 2010: Improvements in the data quality of the Interferometric Monitor for Greenhouse Gases. *Appl. Opt.*, **49**, 520-528.
17. **Tanamachi, R. L.**, W. F. Feltz, M. Xue, 2008: Observations and numerical simulations of rapid upper boundary layer drying and moistening events during the International H<sub>2</sub>O Project (IHOP\_2002). *Mon. Wea. Rev.*, **136**, 3106-3120.
18. Bluestein, H. B., M. M. French, **R. L. Tanamachi**, S. Frasier, K. Hardwick, F. Junyent, A. Pazmany, 2007: Close-range observations of tornadoes in supercells made with a dual-polarization, X-band, mobile Doppler radar. *Mon. Wea. Rev.*, **135**, 1522-1543.
19. Bluestein, H. B., C. C. Weiss, M. M. French, E. Holthaus, **R. L. Tanamachi**, S. Frasier, A. Pazmany, 2007: The structure of a tornado near Attica, Kansas on 12 May 2004: High-resolution, mobile, Doppler-radar observations, *Mon. Wea. Rev.*, **135**, 475-506.
20. **Tanamachi, R. L.**, H. B. Bluestein, W.-C. Lee, M. Bell, A. Pazmany, 2007: Ground-Based Velocity Track Display (GBVTD) analysis of W-band Doppler radar data in a tornado near Stockton, Kansas on 15 May 1999. *Mon. Wea. Rev.*, **135**, 783-800.
21. **Tanamachi, R. L.**, H. B. Bluestein, S. S. Moore, R. P. Madding, 2006: Infrared thermal imagery of cloud base in tornadic supercells. *J. of Atmospheric and Oceanic Tech.*, **23**, 1445 – 1461.

**Invited talks:**

- 2023 Panelist, Girls Who Chase Spring Training 2023
- 2023 Remote seminar, Iowa State University, “Experiential learning in atmospheric science: Why it works, and how to put it into practice”
- 2023 Remote presentation, AMS St. Louis chapter, “Dirty Radar Secrets”
- 2022 Presentation, Indiana Storm Chaser Convention, “Dirty Radar Secrets”
- 2022 Guest presentation, Carmel Clay Public Library, “The Tornado Scientist: Storm Chasing with Dr. Tanamachi”
- 2022 Seminar, Notre Dame University, “Experiential learning in atmospheric science: Why it works, and how to put it into practice”
- 2021 Guest lecture, Purdue University, EAPS 11700, “My Storm Science Journey”
- 2021 Purdue College of Science Women in Science Program panel, “Professional/Academic Social Media Use”
- 2021 DOCTSS Weather Briefing, Salina, Kansas (virtual)
- 2021 Presentation, Klondike Elementary School, West Lafayette, Indiana: “Tornado facts and safety”

- 2021 Central Indiana Severe Weather Symposium (virtual): “Integration of research weather radars into atmospheric science education at Purdue University”
- 2021 California Academy of Sciences, [NightSchool: Extreme Science](#) (virtual): “Radar-based investigations of tornadoes: Where we’ve been and we’re going”
- 2021 Wabash Heartland Innovation Network Agricultural Forum (virtual): “Teaching meteorology in a time of COVID-19”
- 2020 [Women in Science Panel](#) (virtual), National Weather Festival, Norman, Oklahoma
- 2020 Presentation, Klondike Elementary School, West Lafayette, Indiana: “Tornado facts and safety”
- 2019 Presentation, Indiana Storm Chaser Convention: “Integration of Research Weather Radars into Atmospheric Science Education at Purdue University”
- 2019 Presentation, Bauer Family Resource Center, Lafayette, Indiana: “Tornado facts and safety”
- 2019 Guest lecture, Purdue University, EAPS 13700 (Freshman Seminar): “Atmospheric science major” (delivered both Spring and Fall)
- 2019 Presentation, Ohio University Meteorological Symposium, Athens, Ohio: “A New Weather Radar at Purdue University: The X-band Teaching and Research Radar (XTRRA)”
- 2019 Seminar, University of Illinois – Urbana-Champaign, Department of Atmospheric Science, Urbana, Illinois. “A New Weather Radar at Purdue University: The X-band Teaching and Research Radar (XTRRA)”
- 2018 Presentation, Purdue University Meteorological Association (PUMA). “What’s New in Radar at Purdue University”
- 2018 Colloquium, Ball State University, Department of Geography, Muncie, Indiana. “A New Weather Radar at Purdue University: The X-band Teaching and Research Radar (XTRRA)”
- 2018 Burgett’s Learning Center Summer Camp, West Lafayette, Indiana. “Tornado facts and safety”
- 2018 Guest lecture, Purdue University, EAPS 13700 (Freshman Seminar): “Atmospheric science major” (delivered both Spring and Fall)
- 2017 Guest lecture, Purdue University, EAPS 13700 (Freshman Seminar): “Radar-based investigations of tornadoes: Where we’ve been, and where we’re going”
- 2016 *28<sup>th</sup> Conf. on Severe Local Storms*, Portland, Oregon, American Meteorological Society: “Research Tools Tutorial” (radar section)
- 2016 Public lecture, Imagination Station, Lafayette, Indiana: “An Introduction to Tornado Science”
- 2016 Purdue Girls Science Camp, West Lafayette, Indiana: “Unraveling Tornadoes with Mobile Doppler Radar”
- 2016 Guest lecture, Purdue University, EAPS 13700 (Freshman Seminar): “Radar-based investigations of tornadoes: Where we’ve been, and where we’re going”
- 2015 OU Aviation Workshop, Norman, Oklahoma: “Fundamentals of Radar Interpretation”
- 2015 Guest lecture, University of Oklahoma, METR / ECE 5683 (Weather Radar Applications): “Radar-based investigations of tornadoes: Where we’ve been, and where we’re going”
- 2014 Seminar, University of Oklahoma, School of Meteorology: “Investigation of a cell merger accompanying cyclic tornado production”
- 2013 Keynote, Minnesota Skywarn Workshop, Minneapolis, Minnesota: “Unraveling Tornadoes with Mobile Doppler Radar: Scientific Storm Chasing on the Great Plains”.
- 2012 University of Wisconsin – Madison IEEE Section: “Unraveling Tornadoes with Mobile Doppler Radar”

**Conference publications and other non-refereed items:**

1. Miller, E. M., 2023: Characterizing Differential Reflectivity Calibration Dependence on Environmental Temperature using the X-Band Teaching and Research Radar (XTRRA). *22nd Annual Student Conference*, 103rd American Meteorological Society Annual Meeting, Denver, Colorado, American Meteorological Society, S238. [Prof. Tanamachi served as mentor.]
2. Belak, S., **R. Tanamachi**, and S. Frasier, 2023: UMass S-band FMCW Profiling Radar Data. Version 2.0. 1314 data files, 2 ancillary/documentation files, 544 GiB, doi:10.5065/D67P8WS3.
3. **Tanamachi, R. L.**, L. C. Parker, and R. Koopmans, 2022: Using an online storm chasing game as a vehicle to teach meteorology. *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, American Meteorological Society, P39.
4. **Tanamachi, R. L.**, L. C. Parker, and R. Koopmans, 2022: Using an online storm chasing game as a vehicle to teach meteorology. *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, American Meteorological Society, P117.
5. Sharma, M., **R. L. Tanamachi**, D. T. Dawson II, E. C. Bruning, and E. R. Mansell, 2022: Investigating the Relationship between Cloud Microphysics and Electrification in Southeast US Storms Using Cold pool and Lightning Characteristics. *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, American Meteorological Society, 18.2.
6. LaFleur, A. T., and **R. L. Tanamachi**, 2022: Impacts of hail on ZDR arc identification. *30th Conf. on Severe Local Storms*, 30th Conf. on Severe Local Storms, Santa Fe, New Mexico, American Meteorological Society, P123.
7. Navarre, R., and **R. L. Tanamachi**, 2022: On Using Radar Reflectivity to Assess the Impact of Changing Temperature on Rainfall. *Purdue Undergraduate Research Expo*, West Lafayette, Indiana, Purdue University.
8. Miller, E., and **R. L. Tanamachi**, 2022: Characterizing Differential Reflectivity Calibration Dependence on Environmental Temperature using the X-band Teaching and Research Radar (XTRRA). *Purdue Undergraduate Research Expo*, West Lafayette, Indiana, Purdue University.
9. Eichenauer, M., and **R. L. Tanamachi**, 2022: Effects of Beam Occultation on Radar-Based Precipitation Estimates. *Purdue Undergraduate Research Expo*, West Lafayette, Indiana, Purdue University.
10. Sharma, M., **R. L. Tanamachi**, D. T. Dawson II, E. C. Bruning, and E. R. Mansell, 2022: The Relationship Between Cloud Microphysics and Electrification in Southeast U.S. Storms Investigated Using Polarimetric, Cold Pool, and Lightning Characteristics. *AGU Fall Meeting 2022*, Chicago, Illinois, American Geophysical Union.
11. Bruss, J., 2022: Polarimetric Radar and VHF Lightning Observations in a Significantly Tornadoic Supercell. *J. of Purdue Undergraduate Research*, **12**, 116–117. [Prof. Tanamachi served as mentor.]
12. LaFleur, A. T., and **R. L. Tanamachi**, 2022: The relationship between ZDR arcs and storm-relative helicity in simulated tornadoic and non-tornadoic thunderstorms. *10th European Conf. on Radar Meteorology and Hydrology*, Locarno, Switzerland, MeteoSwiss, NCT.P14.
13. LaFleur, A. T., and **R. L. Tanamachi**, 2022: How hail fallout affects the accuracy of automated ZDR arc identification: Preliminary Results. *10th European Conf. on Radar Meteorology and Hydrology*, , Locarno, Switzerland, MeteoSwiss, NCT.P15.
14. **Tanamachi, R. L.**, L. Carleton Parker, and R. Koopmans, 2022: Using an online storm chasing game as a vehicle to teach meteorology. *Earth Educator's Rendezvous 2022*, Minneapolis, Minnesota, SERC, Thursday B1.

15. **Tanamachi, R. L.**, L. C. Parker, R. Koopmans, 2022: Use of an online game for engagement in a large, hybrid meteorology course. *31st Conf. on Education*, 102nd AMS Annual Meeting, Houston, Texas, American Meteorological Society, 11.6.
16. LaFleur, A. T., and **R. L. Tanamachi**, 2022: The Relationship between Z<sub>DR</sub> Arcs and Storm-Relative Helicity in Simulated Tornadic and Nontornadic Thunderstorms. *19th Conf. on Mesoscale Processes*, 102nd AMS Annual Meeting, Houston, Texas, American Meteorological Society, P133.
17. Bruss, J., M. Sharma, and **R. L. Tanamachi**, 2022: Analysis of a ZDR Column Footprint Relative Lightning Flash Size Distribution during the 19 May 2013 Norman–Shawnee Supercell. *21st Annual Student Conference*, 102nd AMS Annual Meeting, Houston, Texas, American Meteorological Society, S181.
18. Araújo da Silva, M., F. Rocadenbosch, **R. L. Tanamachi**, and U. Saeed, 2022: Synergistic mixed-layer height retrieval method using microwave radiometer and lidar ceilometer observations. *IGARSS 2022*, Kuala Lumpur, Malaysia, IEEE, P1132.
19. Sharma, M., **R. L. Tanamachi**, E. C. Bruning, and S. De Iaco, 2021: Spatiotemporal analysis of cold pool and lightning observations for a tornadic supercell from VORTEX-SE 2016 field campaign. *2021 AGU Annual Meeting*, New Orleans, Louisiana, American Geophysical Union, AE12A-06.
20. Nelson, R., 2021: Automated Detection and Characterization of Mesocyclones in X-band Radar Observations. *J. of Purdue Undergraduate Research*, **11**, Article 26, <https://doi.org/10.7771/2158-4052.1498>. [**Prof. Tanamachi** served as mentor.]
21. **Tanamachi, R. L.**, 2021: Can severe storms field work be taught remotely? A proposed experiment at Purdue University. *2021 Undergraduate Field Experiences Research Network (U-FERN) Meeting*, Virtual, Oregon State University, C.2.
22. Nelson, R., and **R. L. Tanamachi**, 2021: Automated Detection of Mesocyclones Including Area and Intensity in X-band Radar Observations. Purdue Undergraduate Research Fair, West Lafayette, Indiana, Purdue University.
23. Bruss, J., M. Sharma, and **R. L. Tanamachi**, 2021: Polarimetric Analysis of the 19 May 2013 Norman-Shawnee, Oklahoma Tornadic Supercell. Purdue Undergraduate Research Fair, West Lafayette, Indiana, Purdue University.
24. **Tanamachi, R. L.**, L. C. Parker, and D. T. Dawson II, 2021: Benefits of Active Student Participation in a Severe Storms Field Work Course. *30th Conf. on Education*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, 11.8.
25. Sharma, M., **R. L. Tanamachi**, D. T. Dawson II, Y. Jung, E. Mansell, E. C. Bruning, and K. W. Thomas, 2021: Investigating the Coupling of Supercell Dynamics and Microphysics through Lightning and Cold Pools. *10th Conf. on the Meteorological Application of Lightning Data*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, P559.
26. Nelson, R., and **R. L. Tanamachi**, 2021: Automated Detection of Mesocyclones Including Area and Intensity in X-band Radar Observations. *20th Student Conf.*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, P142.
27. LaFleur, A. T., **R. L. Tanamachi**, and R. Nelson, 2021: A comparative study of ZDR arcs in simulated radar data of tornadic and non-tornadic thunderstorms. *20th Conference on AI for Environmental Science*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, 14.6.
28. Beveridge, S. L., **R. L. Tanamachi**, M. Asel, G. Dennany, S. Chan, S. J. Frasier, and A. Gnanasambandam, 2021: Removal of Spurs in Doppler Spectra from a Vertically Pointing, S-Band

- Profiling Radar. *21st Symp. on Meteorological Observation and Instrumentation*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, 2.8.
29. Terrell, M., D. T. Dawson II, and **R. L. Tanamachi**, 2021: Investigating the Effects of Size Sorting on the Vertical Variation of Raindrop Size Distributions Using a Collocated FMCW Profiling Radar and Parsivel Disdrometer during VORTEX-SE. *21st Symp. on Meteorological Observation and Instrumentation*, 101st AMS Annual Meeting, New Orleans, Louisiana, American Meteorological Society, 4.2.
  30. Salcedo-Bosch, A.<sup>G</sup>, J. Farré-Guarné, J. Sala-Álvarez, J. Villares-Piera, **R. L. Tanamachi**, and F. Rocadenbosch, 2021: Horizontal Wind Speed motion-induced error assessment on a floating Doppler Wind lidar. *European Geophysical Union General Assembly 2021*, Copernicus Meetings, EGU21-7656.
  31. Warner, L., 2020: High Wind Alerts: A System Created with Observations from the X-Band Teaching and Research Radar. *J. Purdue Undergraduate Research*, **10**, 78–86, <https://doi.org/10.7771/2158-4052.1448>. [**Prof. Tanamachi** served as mentor.]
  32. **Tanamachi, R. L.**, 2020: Testing the “dry snow” technique to calibrate ZDR observations of supercells from disparate X-band radars. *11th European Conf. on Radar Meteorology and Hydrology*, Locarno, Switzerland, MeteoSwiss. [Conference postponed to 2022.]
  33. Beveridge, S. L., **Tanamachi, R. L.**, M. Asel, G. Dennany, S. Chan, and S. J. Frasier, 2020: Removal of power spurs in Doppler spectra from a vertically pointing, S-band profiling radar. *11th European Conf. on Radar Meteorology and Hydrology*, Locarno, Switzerland, MeteoSwiss. [Conference postponed to 2022.]
  34. Villalonga, J., S. L. Beveridge, M. P. A. Da Silva, **R. L. Tanamachi**, F. Rocadenbosch, D. D. Turner, and S. J. Frasier, 2020: Convective boundary-layer height estimation from combined radar and Doppler lidar observations in VORTEX-SE. *11th European Conf. on Radar Meteorology and Hydrology*, Locarno, Switzerland, MeteoSwiss. [Conference postponed to 2022.]
  35. Rocadenbosch, F., **R. L. Tanamachi**, M. P. A. Da Silva, J. Villalonga, S. J. Frasier, and D. D. Turner, 2020: Atmospheric boundary layer height disambiguation using synergistic remote sensing observations: Case examples from VORTEX-SE. *11th European Conf. on Radar Meteorology and Hydrology*, Locarno, Switzerland, MeteoSwiss. [Conference postponed to 2022.]
  36. Rocadenbosch, F., **R. L. Tanamachi**, M. P. A. Da Silva, J. Villalonga, S. J. Frasier, and D. D. Turner, 2020: Atmospheric boundary layer height disambiguation using synergistic remote sensing observations: Case examples from VORTEX-SE. *Remote Sensing of Clouds and the Atmosphere XXV*, A. Comerón, E.I. Kassianov, K. Schäfer, R.H. Picard, K. Weber, and U.N. Singh, Eds., United Kingdom, SPIE, 19.
  37. Villalonga, J., S. L. Beveridge, M. P. A. Da Silva, **R. L. Tanamachi**, F. Rocadenbosch, D. D. Turner, and S. J. Frasier, 2020: Convective boundary-layer height estimation from combined radar and Doppler lidar observations in VORTEX-SE. *Remote Sensing of Clouds and the Atmosphere XXV*, A. Comerón, E.I. Kassianov, K. Schäfer, R.H. Picard, K. Weber, and U.N. Singh, Eds. United Kingdom, SPIE, 32.
  38. **Tanamachi, R. L.**, M. Sharma, A. T. LaFleur, S. J. Frasier, W. Heberling, C. Wolsieffer, L. Warner, and R. Nelson, 2020: Observations of ZDR Columns in Supercells in 2019 by a Mobile, Dual-Polarized, Phased-Array Radar. *Severe Local Storms Symp.*, 100<sup>th</sup> Annual Meeting of the American Meteorological Society, Boston, Massachusetts, American Meteorological Society, P926.
  39. Dawson II, D. T., **R. L. Tanamachi**, and Coauthors, 2020: Comparison of Simulated Rain DSDs and Polarimetric Signatures with Disdrometer and Radar Observations in the 31 March 2016 Southeast U.S. Tornado Outbreak during VORTEX-SE. *Severe Local Storms Symp.*, 100<sup>th</sup> Annual



Meeting of the American Meteorological Society, Boston, Massachusetts, American Meteorological Society, P928.

40. LaFleur, A. T., **R. L. Tanamachi**, and R. Nelson, 2020: Assessment of Two Techniques Used to Identify ZDR Arcs Automatically in Radar Observations. *19th Conf. on AI for Environmental Sci.*, Boston, Massachusetts, American Meteorological Society, 7A.5.
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50. **Tanamachi, R. L.**, S. J. Frasier, J. Waldinger, A. T. LaFleur, and F. Rocadenbosch, 2019: Observations of the Atmospheric Boundary Layer from a Vertically Pointing, S-band, FMCW Radar in Northern Alabama, during VORTEX-Southeast (2016-2017). *23rd Conf. on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface*, Phoenix, Arizona, American Meteorological Society, 18.16A.
51. **Tanamachi, R. L.**, D. T. Dawson II, and L. Carleton Parker, 2019: Students of Purdue Observing Tornadic Thunderstorms for Research (SPOTTR): An update. *28th Symp. on Education*, Phoenix, Arizona, American Meteorological Society, 8.2.
52. **Tanamachi, R. L.**, D. T. Dawson II, and L. Carleton Parker, 2019: Observations of Severe Storms by a Low-Power, Polarimetric, Phased-Array Mobile Radar. *Phased Array Radar Symp. at the 99th*

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54. **Tanamachi, R. L.**, A. T. LaFleur, M. Sharma, S. J. Frasier, W. Heberling, and C. Wolsieffer, 2018: Observations of severe storms by a novel, polarimetric, phased array mobile radar. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, 15.4.
55. **Tanamachi, R. L.**, D. T. Dawson II, E. M. Agee, and M. Baldwin, 2018: A new, polarimetric, X-band Teaching and Research RAdar (XTRRA) at Purdue University. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P98.
56. **Tanamachi, R. L.**, D. T. Dawson II, and L. Carleton Parker, 2018: Integration of research-grade meteorological instrumentation into a severe storms field work course at Purdue University. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P99.
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58. LaFleur, A. T., **R. L. Tanamachi**, D. T. Dawson II, and B. E. Coffey, 2018: Simulated ZDR arcs and tornadogenesis: A preliminary study. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P159.
59. Sharma, M., **R. L. Tanamachi**, E. C. Bruning, K. Calhoun, H. B. Bluestein, J. B. Houser, J. C. Snyder, and Z. B. Wienhoff, 2018: A case study of kinematical, microphysical and lightning characteristics of a tornadic supercell. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P172.
60. Dalman, D. M., **R. L. Tanamachi**, P. E. Saunders, B. L. Cheong, D. Bodine, H. B. Bluestein, and Z. B. Wienhoff, 2018: Cataloging rapid scan observations of ZDR columns in supercell. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P89.
61. Murdzek, S., P. M. Markowski, Y. Richardson, and **R. L. Tanamachi**, 2018: Tornadogenesis failure in the Prospect Valley, CO, supercell of 26 May 2010 intercepted by VORTEX2. *29th Conf. on Severe Local Storms*, Stowe, Vermont, American Meteorological Society, P166.
62. **Tanamachi, R. L.**, S. J. Frasier, F. Rocadenbosch, and A. T. LaFleur, 2018: Observations of the atmospheric boundary layer from a vertically pointing, S-band, FMCW radar in northern Alabama, U.S.A. during VORTEX-Southeast (2016-2017). *10th European Conf. on Radar in Meteorology and Hydrology*, The Netherlands, Wageningen University and Research, 7.2.
63. **Tanamachi, R. L.**, 2018: Integration of research weather radars into atmospheric science education at Purdue University, U.S.A. *10th European Conf. on Radar in Meteorology and Hydrology*, The Netherlands, Wageningen University and Research, abstract 27.
64. Barragan, R., F. Rocadenbosch, J. Waldinger, S. J. Frasier, D. D. Turner, **R. L. Tanamachi**, and D. T. Dawson II, 2018: Rain-rate estimation from ceilometer measurements: A comparative case study using S-band radar and disdrometer retrievals. *10th European Conf. on Radar in Meteorology and Hydrology*, The Netherlands, Wageningen University and Research, 7.5.
65. **Tanamachi, R. L.**, D. T. Dawson II, M. E. Baldwin, L. Carleton Parker, 2018: Students of Purdue Observing Tornadic Thunderstorms for Research (SPOTTR): A severe storms field work course at Purdue University. *27th Symp. on Education*, Austin, Texas, American Meteorological Society, P123.

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67. **Tanamachi, R. L.**, S. J. Frasier, W. Heberling, J. Waldinger, T. Hartley, A. T. LaFleur, and P. E. Saunders, 2017: Purdue-UMass mobile radar observations from VORTEX-SE 2017. *38th Conf. on Radar Meteorology*, Chicago, Illinois, American Meteorological Society, 7A.1.
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69. Dawson II, D. T., M. E. Baldwin, J. Bozell, J. Buckingham, D. R. Chavas, W. L. Downing, M. Guo, **R. L. Tanamachi**, A. N. Griffin, H. M. Mallinson, S. J. Frasier, W. Heberling, J. Waldinger, M. I. Biggerstaff, and S. M. Waugh, 2017: Overview of Purdue's mobile disdrometer operations during VORTEX-SE 2016-2017. *38th Conf. on Radar Meteorology*, Chicago, Illinois, American Meteorological Society.
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71. LaFleur, A. T., **R. L. Tanamachi**, S. J. Frasier, J. Waldinger, and D. D. Turner, 2017: The role of direct insolation and near-surface moisture advection in the recovery of CAPE on 31 March 2016 during VORTEX-Southeast. *38th Conf. on Radar Meteorology*, Chicago, Illinois, American Meteorological Society.
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78. **Tanamachi, R. L.**, P. L. Heinselman, and L. J. Wicker, 2014: Investigation of a cell merger accompanying cyclic tornado production. *27th Conf. on Severe Local Storms*, Madison, Wisconsin, American Meteorological Society, 8A.5.
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87. **Tanamachi, R. L.**, H. B. Bluestein, W.-C. Lee, K. A. Orzel, and S. J. Frasier, 2011: GBVTD-retrieved vortex structure in the 26 May 2010 Prospect Valley, Colorado tornado-like vortices. *35th Conf. on Radar Meteorology*, Pittsburgh, Pennsylvania, American Meteorological Society, P57.
88. Bluestein, H. B., V. Venkatesh, K. A. Orzel, I. PopStefanija, C. Baldi, **R. L. Tanamachi**, M. M. French, J. C. Snyder, J. B. Houser, S. J. Frasier, G. D. Emmitt, and R. Bluth, 2011: Mobile Doppler-radar data collected during year 2 of VORTEX2: The U. Mass. X-Pol and W-band radars and the Naval Postgraduate School MWR-05XP/TWOLF. *35th Conf. on Radar Meteorology*, Pittsburgh, Pennsylvania, American Meteorological Society, 7B.3.
89. Frasier, S. J., V. Venkatesh, K. Orzel, T. Hartley, J. Salazar, R. Medina, E. Knapp, O. Ibe, H. B. Bluestein, J. Snyder, and **R. Tanamachi**, 2011: X- and W-band mobile Doppler radar observations from VORTEX2 and current developments. *2011 IEEE RadarCon (RADAR)*, 774-777.
90. Houser, J. B., H. B. Bluestein, **R. L. Tanamachi**, K. M. Hardwick, and S. J. Frasier, 2011: Dual-Doppler analyses of the supercell that produced the Greensburg, KS tornado on 4 May 2007. *35th Conf. on Radar Meteorology*, Pittsburgh, Pennsylvania, American Meteorological Society, P12.
91. **Tanamachi, R. L.**, D. C. Dowell, L. J. Wicker, H. B. Bluestein, S. J. Frasier, and K. M. Hardwick, 2010: Impact of initial environmental velocity profiles on numerical model-based storm-scale analyses of the 5 May 2007 Greensburg, Kansas tornadic storm. *25th Conf. on Severe Local Storms*, Denver, Colorado, American Meteorological Society, 3A.6.

92. **Tanamachi, R. L.**, H. B. Bluestein, S. J. Frasier, and K. M. Hardwick, 2010: Evolution of the 4 May 2007 Greensburg, Kansas tornadic supercell storm as inferred from mobile, X-band Doppler radar observations. *25th Conf. on Severe Local Storms*, Denver, Colorado, American Meteorological Society, P8.18.
93. **Tanamachi, R. L.**, D. Dowell, L. J. Wicker, H. B. Bluestein, S. Frasier, and K. Hardwick, 2009: Numerical simulation of a cyclic tornadic thunderstorm augmented by EnKF assimilation of mobile Doppler radar data. *34th Conf. on Radar Meteorology*, Williamsburg, Virginia, American Meteorological Society, 14.11.
94. Bluestein, H. B., M. M. French, J. C. Snyder, J. B. Houser, **R. L. Tanamachi**, I. PopStefanija, C. Baldi, G. D. Emmitt, V. Venkatesh, K. A. Orzel, R. Bluth, and S. J. Frasier, 2010: A summary of data collected during VORTEX-2 by MWR-05XP/TWOLF, UMass X-Pol, and the UMass W-band radar. *25th Conf. on Severe Local Storms*, Denver, Colorado, American Meteorological Society, 5.4.
95. **Tanamachi, R. L.**, L. J. Wicker, D. C. Dowell, H. B. Bluestein, S. J. Frasier, and K. M. Hardwick, 2008: X-band, mobile Doppler radar data collected in a tornadic thunderstorm: Data assimilation experiments. *24th Conf. on Severe Local Storms*, Savannah, Georgia, American Meteorological Society, 2.6.
96. **Tanamachi, R. L.**, R. Davies-Jones, H. B. Bluestein, D. C. Dowell, and H. Cai, 2008: Diagnostic calculations of motions of vertical velocity and low-level vertical vorticity maxima in radar data and numerically simulated supercell thunderstorms. *24th Conf. on Severe Local Storms*, Savannah, Georgia, American Meteorological Society, P3.10.
97. Bluestein, H. B., K. Hardwick, M. Umscheid, **R. L. Tanamachi**, J. B. Houser, and S. Frasier, 2008: Polarimetric-radar signatures associated with the Greensburg, Kansas tornado. *24th Conf. on Severe Local Storms*, Savannah, Georgia, American Meteorological Society, 2.5.
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99. Tsai, P., S. Frasier, **R. L. Tanamachi**, and H. B. Bluestein, 2008: The UMass mobile W-Band Doppler radar: System overview and sample observations. *24th Conf. on Severe Local Storms*, Savannah, Georgia, American Meteorological Society, P13.15.
100. Bluestein, H. B., R. Bluth, J. B. Knorr, I. PopStefanija, B. Seeger, **R. L. Tanamachi**, J. B. Houser, J. C. Snyder, and M. M. French, 2008: Observations of severe convective storms with a mobile, phased-array, X-band Doppler radar. *88th AMS Annual Meeting*, New Orleans, Louisiana, American Meteorological Society, P2.11.
101. Bluestein, H. B., **R. L. Tanamachi**, M. M. French, J. B. Houser, J. C. Snyder, R. P. Bluth, J. Knorr, I. Popstefanija, B. Seeger, C. Baldi, S. J. Frasier, and P. Tsai, 2007: Preliminary results from the fielding of a disparate triad of mobile Doppler radars to study severe convective storms. *33rd Int. Conf. on Radar Meteorology*, Cairns, Australia, American Meteorological Society, 13A.12.
102. **Tanamachi, R. L.**, H. B. Bluestein, M. Bell, and W.-C. Lee, 2006: Progress toward improved Ground-Based Velocity Track Display (GBVTD) analysis of mobile Doppler radar data collected in tornadoes. *23rd Conf. on Severe Local Storms*, St. Louis, Missouri, American Meteorological Society, P9.3.
103. Bluestein, H. B., C. C. Weiss, M. M. French, E. M. Holthaus, **R. L. Tanamachi**, S. J. Frasier, and A. L. Pazmany, 2006: High-resolution structure of tornadoes in south-central Kansas on 12 May

- 2004: Analysis of mobile Doppler radar data. *23rd Conf. on Severe Local Storms*, St. Louis, Missouri, American Meteorological Society, 15.13.
104. Snyder, J. C., **R. L. Tanamachi**, H. B. Bluestein, W.-C. Lee, M. Bell, and A. Pazmany, 2006: Reconstruction of wind profiles in dust devils: Analyses of W-band mobile radar data using the Ground-Based Velocity Track Display (GBVTD) technique. *23rd Conf. on Severe Local Storms*, St. Louis, Missouri, American Meteorological Society, P9.6.
105. Wood, V. T., L. White, C. Alexander, and **R. L. Tanamachi**, 2006: An analytical model of one- and two-celled vortices: preliminary testing. *23rd Conf. on Severe Local Storms*, St. Louis, Missouri, American Meteorological Society, P10.11.
106. **Tanamachi, R. L.**, H. B. Bluestein, M. Bell, W.-C. Lee, A. Pazmany, and C. C. Weiss, 2005: The evolution of a tornado: Ground-Based Velocity Track Display (GBVTD) analysis of mobile, W-band Doppler radar data on 15 May 1999 near Stockton, Kansas. *32nd Conf. on Radar Meteorology*, Albuquerque, New Mexico, American Meteorological Society, P15R.13.
107. **Tanamachi, R. L.**, H. B. Bluestein, C. C. Weiss, M. Bell, W.-C. Lee, and A. L. Pazmany, 2004: The structure of a tornado: Ground-based velocity track display (GBVTD) analysis of mobile, W-band, Doppler radar data on 15 May 1999 near Stockton, Kansas. *22nd Conf. on Severe Local Storms*, Hyannis, Massachusetts, American Meteorological Society, P11.15.
108. **Tanamachi, R. L.**, H. B. Bluestein, S. S. Moore, R. P. Madding, and C. R. Alexander, 2004: Infrared thermal imagery of cloud base in tornadic supercells. *22nd Conf. on Severe Local Storms*, Hyannis, Massachusetts, American Meteorological Society, 14.14a.
109. **Tanamachi, R. L.**, and W. F. Feltz, 2004: Real-time nowcasting with the Atmospheric Emitted Radiance Interferometer (AERI). *84th AMS Annual Meeting*, Seattle, Washington, American Meteorological Society, P1.4.
110. Knuteson, R. O., D. H. Deslover, A. M. Larar, B. Osborne, H. E. Revercomb, J. F. Short, W. L. Smith, and **R. Tanamachi**, 2003: Infrared land surface remote sensing using high spectral resolution observations. *SPIE*, 24-35.
111. Bluestein, H. B., C. C. Weiss, M. M. French, E. M. Holthaus, **R. L. Tanamachi**, S. J. Frasier, and A. L. Pazmany, 2002: High-resolution structure of tornadoes in south-central Kansas on 12 May 2004: Analysis of mobile Doppler radar data. *23rd Conf. on Severe Local Storms*, St. Louis, Missouri, American Meteorological Society, 15.13.
112. **Tanamachi, R. L.**, V. P. Walden, S. A. Ackerman, H. E. Revercomb, and R. O. Knuteson, 2001: Progress towards a high-quality data set of infrared spectra from the Interferometric Monitor for Greenhouse Gases (IMG). *5th Symp. on Integrated Observing Systems*, Albuquerque, New Mexico, American Meteorological Society, P1.2.
113. **Tanamachi, R. L.**, V. P. Walden, S. A. Ackerman, and R. O. Knuteson, 2001: Quality control and preliminary data analysis of the Interferometric Monitor for Greenhouse Gases (IMG) data set. *11th Conf. on Satellite Meteorology and Oceanography*, Madison, Wisconsin, American Meteorological Society, P.5.61.

#### **HONORS AND AWARDS:**

- 2021 **Award for Exceptional Teaching and Instructional Support during the COVID-19 Pandemic**, Teaching Academy and Office of the Provost, Purdue University
- 2019 **Engagement Award**, Department of Earth, Atmospheric, and Planetary Sciences
- 2016 **Violet B. Haas Fellowship**, Colleges of Science and Engineering, Purdue University
- 2015-2021 **Teaching Honor Roll**, Department of Earth, Atmospheric, and Planetary Sciences, Purdue University.

2012-2014 **National Research Council Postdoctoral Fellowship**, NOAA National Severe Storms Laboratory, Norman, Oklahoma.

**MEMBERSHIPS AND SERVICE:**

**Professional societies:**

Member, **American Meteorological Society** (2003 – present)  
Board on Higher Education (term of service: 2022 – 2025)  
Battan K-12 Book Award committee member (2022)  
Instructor, virtual short course, “Starting a ‘Storm Chasing’ Course at your College or University” (2022)  
Program committee and session chair, *40<sup>th</sup> Conf. on Radar Meteorology*, Minneapolis, Minnesota.  
Radar Meteorology Committee (term of service: 2013 – 2019)  
Session chair, *39<sup>th</sup> Int. Conf. on Radar Meteorology*, Nara, Japan (2019).  
Program committee and session chair, *28<sup>th</sup> Conf. on Severe Local Storms*, Portland, Oregon (2016).  
Session chair, *37<sup>th</sup> Conf. on Radar Meteorology*, Norman, Oklahoma (2015)  
Program committee and session chair, *27<sup>th</sup> Conf. on Severe Local Storms*, Madison, Wisconsin (2014).

**Refereed publications and funding agencies:**

**Associate Editor**, *Monthly Weather Review* (2015 – 2022).

**Reviewer** for *Journal of Atmospheric Science*, *Electronic Journal of Severe Storms Meteorology*, *Journal of Geophysical Research – Atmospheres*, *Electronic Journal of Operational Meteorology*, *Journal of Applied Meteorology and Climatology*, *Weather and Forecasting*, *Bulletin of the American Meteorological Society*, *Journal of Geoscience Education*.

**Reviewer** for National Science Foundation: *ad hoc* for grant proposals (2014 – present), NCAR review panel (2016)

**Reviewer** for National Oceanic and Atmospheric Administration: *ad hoc* for LOIs and grant proposals (2021 – present)

**Reviewer** for Deutsche Forschungsgemeinschaft (DFG) “Polarimetric Radar Observations Meet Atmospheric Modeling (PROM)” priority programme panel (2021)

**Department service:**

2023 – present	Faculty Senate	EAPS
2022 – present	PAC member for two assistant professors	EAPS
2022 – 2023	Terrestrial Climate Drivers search committee	EAPS
2022	College of Science Faculty Council	EAPS
2022	Undergrad academic adviser search committee	EAPS
2021 – 2022	Seminar committee	EAPS
2019 – 2020	Large-Scale Dynamics faculty search committee	EAPS
2015 – present	Field committee (chair, Fall 2022 only)	EAPS
2015 – 2018	Undergraduate committee	EAPS
2016 – 2018	Outreach and recruitment committee	EAPS

**Thesis committees:**

2022 – present	Chair	Jacob Bruss	M. S.	EAPS
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2022 – present	Member	Archana Choudhari	Ph. D.	AAE
2022 – present	Member	Hamid Syed	Ph. D.	EAPS
2020 – present	Member	Qin Jiang	Ph. D.	EAPS
2020 – 2022	Member	Geeta Nain	M. S.	EAPS
2020 – 2021	Member	Connor Belak	M. S.	EAPS
2019 – 2021	Chair	Susan Beveridge	M. S.	EAPS
2019 – 2020	Member	Joan Villalonga	M. S.	TSC, UPC (Spain)
2019 – 2022	Member	Kuan-Yu Lu	Ph. D.	EAPS
2019 – 2021	Member	Marcus Terrell	M. S.	EAPS
2019 – 2021	Member	Funing Li	Ph. D.	EAPS
2018 – present	Chair	Allison LaFleur	Ph. D.	EAPS
2017 – 2022	Chair	Milind Sharma	Ph. D.	EAPS
2017 – 2020	Member	Feixiong Huang	Ph. D.	AAE
2016 – 2018	Chair	Allison LaFleur	M. S.	EAPS
2016 – 2018	Chair	Patrick Saunders	M. S.	EAPS
2016 – 2018	Member	Brandon Sells	M. S.	AAE
2016 – 2018	Member	Daniel Dietz	M. S.	EAPS
2016 – 2018	Member	Jessica Bozell	M. S.	EAPS
2017 – 2018	Member	Mingyang Guo	M. S.	EAPS

#### **Undergraduate mentees:**

2023	Danielle Harr	EAPS
2023	Julian Navarrete Urrego	UREP-C
2023	Marco Monrouzeau	EAPS
2022	McKenna Eichenauer	EAPS
2022 – 2023	Emma Miller	EAPS
2022	Ryan Navarre	EAPS
2021 – 2022	Matthew Graber	EAPS
2021	Jefferson Hughes	EAPS
2020 – 2022	Jacob Bruss	EAPS
2019 – 2020	Lauren Warner	EAPS
2019 – 2020	Matthew Asel	EAPS
2019	Grant Dennany	CS
2019	Raychel Nelson	EAPS
2017 – 2018	Derrek Dalman	EAPS
2016 – 2017	Matthew Seedorf	EAPS

#### **Additional service projects:**

2022	Member	UCAR Membership Committee
2022 – present	Member Rep.	UCAR from Purdue University
2016 – 2021	Member	VORTEX-Southeast Physical Sciences Working Group
2015 – 2020	Member	VORTEX-Southeast Scientific Steering Committee

#### **MEDIA ACTIVITIES:**

2023 Purdue Exponent: [Chasing the Storm](#). Interview about the XTRRA Radar.



- 2022 [WHIN annual meeting video](#), Interview re: impact of WHIN weather network on EAPS 22700 students
- 2022 Ezra Speaking's [How Do Weather Radars Work?](#) Purdue's XTRRA Radar Tour - Part 2 - Dr. Tanamachi (YouTube video)
- 2022 Clear Skies Ahead podcast, "[Lessons in Storm Chasing with Jana Houser and Robin Tanamachi](#)" by the American Meteorological Society. Interview about meteorology careers in academia and storm chasing.
- 2021 [Vox Unexplainable podcast: The tornado problem](#). Interview about tornado science and severe storm dynamics. An [accompanying article](#) was also written by Brian Resnick.
- 2021 Scientific American film (title TBD) about tornado science and storm chasing. Prof. Tanamachi and students demonstrated a radiosonde launch.
- 2021 WPTA 25, Interview about how weather radar works.
- 2021 Washington Post: [We're underestimating the destructive power of tornadoes, study shows](#) by Jeremy Deaton. 22 March 2021
- 2020 Raytheon Tech: Three short promotional films [[1](#), [2](#), [3](#)] and an [accompanying article](#) featuring the 2019 field activities of Prof. Tanamachi and her students using Raytheon's "Skyler" radar. September 2020
- 2020 EAPS: [How do you teach when everything changes world-wide at once? EAPS professors share how they managed teaching during a pandemic](#).
- 2020 Accuweather: Interview about the status of the NOAA VORTEX-Southeast program.
- 2020 Weather Channel blog: [How Ted Fujita Revolutionized Tornado Science and Made Flying Safer Despite Many Not Believing Him](#) by Bob Henson.
- 2019 Purdue [Superheroes of Science](#) podcast [Episode #23](#), interview about WRRL research. Released 16 December 2019.
- 2019 Two-page spread in [National Geographic Kid's Ultimate Weatherpedia](#) book regarding severe storms research. Published 21 October 2019.
- 2019 Purdue Exponent, [Student storm chasers return from field research](#). 11 June 2019.
- 2019 [Storm Chase 2019](#), blog by author Mary Kay Carson and photographer Tom Uhlman featuring the SPOTTR group's field trip, to publicize their book *The Tornado Scientist*.
- 2019 WLFI 18, [Students prepare for severe weather field study](#). Broadcast 22 May 2019.
- 2019 Purdue Exponent, [Children's book stars Purdue 'tornado scientist.'](#) 21 March 2019.
- 2019 EAPS: [Dr. Tanamachi featured in science book for young readers](#). 19 March 2019.
- 2019 Featured prominently in a children's non-fiction book entitled *The Tornado Scientist (Scientists in the Field Series)* by Mary Kay Carson and Tom Uhlman, published in March 2019.
- 2019 WLFI 18, [Winter weather: Why bridges freeze faster than roads](#). Broadcast 16 January 2019.
- 2018 Inside EAPS, [New EAPS radar provides research opportunities](#). Fall 2018.
- 2018 WLFI 18, [New weather radar helping improve weather data for northwest Indiana](#). Broadcast 29 October 2018
- 2018 EAPS: [EAPS radar images now viewable by public](#). 17 October 2018.
- 2018 College of Science Insights. [Putting us on the radar](#). Fall 2018.
- 2018 EAPS: [EAPS radar captures tornado on first day of operation](#). 17 August 2018.
- 2018 The Atlantic magazine, [Trump Finally Picks a Science Adviser—And People Are Delighted](#), short-fuse interview regarding selection of Dr. Kelvin Droegemeier for OSTP. 1 August 2018.
- 2018 Shot and posted [time-lapse video](#) of X-band weather radar installation on Wang Hall
- 2018 Smithsonian *Air & Space* Magazine, [Road Trip: On the trail of a tornado](#). April 2018.

- 2018 WLFI 18, [Event teaches children natural disaster safety](#). Featuring DOW educational deployment. Broadcast 10 March 2018.
- 2018 Multiple EAPS items related to Doppler on Wheels educational deployment, including a [news story](#), a [video segment](#), and an [article in Inside EAPS newsletter](#).
- 2018 WISH TV (Indianapolis), [Purdue University to install new weather radar](#). Interview, broadcast 28 February 2018.
- 2017 Purdue University, [EAPS to purchase new weather radar](#), 8 November 2017.
- 2016 Blake Naftel, [Stormchasinghistory.net](#), *Storm Chasing Anthology, Vol. 1*. Independent film about storm chasing / chasers. On-camera interview and furnished video.
- 2016 Fox 59 (Indianapolis), [Purdue University meteorology students study severe weather in the Southeast](#). Interview about Purdue participation in VORTEX-Southeast 2016, broadcast 10 May 2016.
- 2016 The Weather Channel, *Weather Underground*. VORTEX-Southeast media day live interview by Mike Bettes, broadcast 29 February 2016.
- 2015 National Geographic Channel, *Inside the Mega-Twister*. Interview about experiences in the 31 May 2013 El Reno, Oklahoma tornado.
- 2013 The Weather Channel, *Weather Caught on Camera*. Dust devil segment.
- 2013 Los Angeles Times. Online interview regarding the Moore, Oklahoma tornado of 20 May 2013.
- 2011 National Public Radio. Radio interview by John Hamilton about tornado safety.
- 2011 ShocknetRadio.com (defunct), *High Instability*. Two-hour interview about tornado research.
- 2009-10 The Weather Channel, *VORTEX2: Target: Tornado* and *VORTEX2: The Great Tornado Hunt*. Multiple on-camera interviews recorded during the field program (some aired live).
- 2009 The Discovery Channel, *Naked Science: Tornadoes* and *Raging Planet II*.
- 2008 Felix Bassous, *66 Jours dans la Tornado Alley*. French independent film about storm chasing / chasers.