Jill C. Trepanier
Associate Professor
Department of Geography and Anthropology
Louisiana State University
Curriculum Vitae – PS36 Format
Last Updated 5 November 2024

Jill C. Trepanier
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Employment History

Associate Professor, Geography and Anthropology, Louisiana State University, August 2018–Present.

Director of Graduate Studies, Geography and Anthropology, Louisiana State University, May 2021–Present.

Assistant Professor, Geography and Anthropology, Louisiana State University, August 2012–July 2018.

Education

Ph.D. Geography (2012) Florida State University
Dissertation: *Quantifying extreme hurricane risk in the North Atlantic and Gulf of Mexico*

M.S. Geography (2009) Florida State University
Thesis: *Pre-landfall intensity as predictor of economic loss from Florida hurricanes, 1900 – 2007*

B.A. Geography (2007) University of Wisconsin-Oshkosh

1. Documentation

1.1. History of Assignments:

A report prepared by the chair describing assignments for teaching, scholarship, and service.

1.2 Teaching:

1.2.1 Documentation of teaching activities.

1.2.1.1 Teaching Evaluations: results of student evaluations of teaching.

Louisiana State University

These evaluations are based on a 1 to 5 point scale, where 5 is excellent and 1 is poor.

Course Number	Semester	Rating	N
GEOG2050 (LSU Online)	Fall 2023	4.9	8
GEOG2050.1	Fall 2023	4.9	92
GEOG2050.4	Fall 2023	4.9	15
GEOG4017.1	Fall 2023	5.0	4
GEOG2050(LSU Online)	Spring 2023	4.8	15
GEOG 3013	Spring 2023	5.0	4
GEOG2050 (LSU Online)	Fall 2022	4.8	10
GEOG2050.1	Fall 2022	4.8	54
GEOG2050.4	Fall 2022	4.9	11
GEOG4221	Fall 2022	5.0	8
HSS1000.60	Fall 2022	4.5	2

HSS1000.61	Fall 2022	5.0	3
HSS1000.62	Fall 2022	5.0	1
GEOG2050(LSU Online)	Spring 2022	4.9	17
GEOG 3013	Spring 2022	5.0	10
GEOG2050	Fall 2021	4.9	137
GEOG4017	Fall 2021	4.9	8
HSS1000.57	Fall 2021	5.0	1
HSS1000.58	Fall 2021	5.0	2
HSS1000.42	Fall 2021	5.0	2
GEOG2050 (LSUOnline)	Fall 2021	4.9	22
GEOG 2050 (LSUONLINE)	Spring 2021	5.0	12
GEOG 2050	Spring 2021	4.9	45
GEOG 3013	Spring 2021	5.0	2
GEOG 2050	Fall 2020	4.9	139
GEOG 4221	Fall 2020	4.6	13
GEOG 2050 (LSUONLINE)	Fall 2020	4.9	23
HSS 1000 (3 sections)	Fall 2020	4.8, 5.0, 4.8	5, 6, 5
GEOG 2050	Summer 2020	4.4	11
GEOG 2050	Spring 2020	4.9	118
GEOG 3013	Spring 2020	4.9	12
GEOG 2050	Fall 2019	4.8	160
GEOG 7917	Fall 2019	4.0	1
HSS 1000	Fall 2019	4.9	12
GEOG 2050	Summer 2019	4.8	12
GEOG 2050	Spring 2019	4.8	103
GEOG 4221	Spring 2019	4.9	9
GEOG 2050	Spring 2018	4.63	109
GEOG 3013	Spring 2018	4.75	5
Post-tenure Sabbatical	Fall 2018	NA	NA
GEOG 2050	Fall 2017	4.69	144
GEOG 4997	Fall 2017	4.83	6
GEOG 2050	Spring 2017	4.57	127
GEOG 4221	Spring 2017	4.88	7
GEOG 2050	Fall 2016	4.42	130
GEOG 3013	Fall 2016	4.51	8
GEOG 2050	Spring 2016	4.57	145
GEOG 7917	Spring 2016	4.72	14

3-yr Teaching Release	Fall 2015	NA	NA
GEOG 2050	Spring 2015	4.82	66
GEOG 4221	Spring 2015	4.77	6
GEOG 4013	Fall 2014	4.71	14
GEOG 2050	Fall 2014	4.66	30
GEOG 2050	Spring 2014	4.8	23
GEOG 2050	Spring 2014	4.73	65
GEOG 4997	Spring 2014	4.81	7
GEOG 2050	Spring 2013	4.75	92
GEOG 4221	Spring 2013	4.82	11
GEOG 2050	Fall 2012	4.45	74
GEOG 4013	Fall 2012	4.49	15

1.2.1.2 Teaching history

Louisiana State University

Course Number	Course Name	Semester	Enrollment
GEOG2050 (LSU Online)	Physical Geography of the Atmosphere	Spring 2024	
GEOG3013*	Meteorology	Spring 2024	
GEOG2050 (LSU Online)	Physical Geography of the Atmosphere	Fall 2023	49
GEOG2050.1	Physical Geography of the Atmosphere	Fall 2023	334
GEOG2050.4	Physical Geography of the Atmosphere	Fall 2023	36
GEOG4017	Hurricane Climatology	Fall 2023	10
GEOG2050 (LSU Online)	Physical Geography of the Atmosphere	Spring 2023	50
GEOG3013*	Meteorology	Spring 2023	25
GEOG2050 (LSU Online)	Physical Geography of the Atmosphere	Fall 2022	47
GEOG2050.1	Physical Geography of the Atmosphere	Fall 2022	333
GEOG2050.4	Physical Geography of the Atmosphere	Fall 2022	39
GEOG4221	Tropical Atmospheres	Fall 2022	23
HSS1000.60	Introduction to Research	Fall 2022	17
HSS1000.61	Introduction to Research	Fall 2022	18
HSS1000.62	Introduction to Research	Fall 2022	14
GEOG3013*	Meteorology	Spring 2022	24
GEOG2050 (LSUOnline)	Physical Geography of the Atmosphere	Spring 2022	47

GEOG2050	Physical Geography of the Atmosphere	Fall 2021	307
GEOG4017	Hurricane Climatology	Fall 2021	12
HSS1000.57	Introduction to Research	Fall 2021	12
HSS1000.58	Introduction to Research	Fall 2021	16
HSS1000.42	Introduction to Research	Fall 2021	19
GEOG2050 (LSUOnline)	Physical Geography of the Atmosphere	Fall 2021	47
GEOG 2050 (LSUOnline)	Geography of the Atmosphere	Spring 2021	50
GEOG 2050	Geography of the Atmosphere	Spring 2021	150
GEOG 3013*	Meteorology	Spring 2021	10
GEOG 2050	Geography of the Atmosphere	Fall 2020	350
GEOG 4221	Tropical Atmospheres	Fall 2020	26
GEOG 2050 (LSUOnline)	Geography of the Atmosphere	Fall 2020	35
HSS 1000	Introduction to Humanities and Social Sciences (3 sections)	Fall 2020	15/20/14
GEOG 2050	Geography of the Atmosphere	Summer 2020	64
GEOG 2050	Geography of the Atmosphere	Spring 2020	349
GEOG 3013*	Meteorology	Spring 2020	18
HSS 1000	Introduction to Humanities and Social Sciences (2 sections)	Fall 2019	19/20
GEOG 2050	Geography of the Atmosphere	Fall 2019	347
GEOG 7917	Hurricane Climatology	Fall 2019	4
GEOG 2050	Geography of the Atmosphere	Summer 2019	59
GEOG 2050	Geography of the Atmosphere	Spring 2019	340
GEOG 4221	Tropical Atmospheres	Spring 2019	19
GEOG 2050	Geography of the Atmosphere	Spring 2018	358
GEOG 3013*	Meteorology	Spring 2018	9
GEOG 2050	Geography of the Atmosphere	Fall 2017	248
GEOG 4997	Hurricane Climatology	Fall 2017	11
GEOG 2050	Geography of the Atmosphere	Spring 2017	375
GEOG 4221	Tropical Atmospheres	Spring 2017	28
GEOG 2050	Geography of the Atmosphere	Fall 2016	350
GEOG 3013*	Meteorology	Fall 2016	25
GEOG 2050	Geography of the Atmosphere	Spring 2016	350
GEOG 7917	Hurricane Climatology	Spring 2016	10
GEOG 2050	Geography of the Atmosphere	Spring 2015	282
GEOG 2050	Geography of the Atmosphere	Fall 2014	35
GEOG 4013	Meteorology	Fall 2014	19
GEOG 4997	Hurricane Climatology	Spring 2014	9
GEOG 2050.1	Geography of the Atmosphere	Spring 2014	116
GEOG 2050.3	Geography of the Atmosphere	Spring 2014	33
GEOG 4221	Tropical Atmospheres	Spring 2013	13

GEOG 2050	Geography of the Atmosphere	Spring 2013	234
GEOG 2050	Geography of the Atmosphere	Fall 2012	146
GEOG 4013	Meteorology	Fall 2012	20

*Geography 3013 is certified as a Communication Across the Curriculum course in the spoken and written modes of communication.

Florida State University

Course Number	Course Name	Semester	Enrollment
GEOG 2200	Physical Geography	Fall 2011 *online*	50
GEOG 2200	Physical Geography	Spring 2010	30
GEOG 1330	Environmental Science	Summer 2009	30
GEOG 1330	Environmental Science	Fall 2009	125
GEOG 1330	Environmental Science	Summer 2008	125

* Graduate committees

1. Georgia Davis, M.S., LSU, **major advisor,** current
2. Emily Fisher, M.S., LSU, **major advisor,** current
3. Jordan Fazio, M.S., LSU, **major advisor,** current
4. Reilly Corkran, M.S., LSU, **major advisor,** current
5. Gabriella Boodhoo, M.S., LSU, member, current
6. Kylie Palmer, Ph.D., LSU, member, current
7. Derek Thompson, Ph.D. LSU, member, current
8. Marisa Karpinski, Ph.D., LSU, member, current
9. Musa Dankaz, Ph.D. (Political Science), LSU, Dean's Rep, current
10. Samantha Camarda, M.S., LSU, **major advisor,** graduated (2023)
11. Kathleen Benedetto, Ph.D., LSU, **major advisor**, graduated (2023)
12. Stephen Potts, Ph.D. (Biology) LSU, member, graduated (2022)
13. Michael Broussard, M.S., LSU, **major advisor,** graduated (2022)
14. Chance Bryant, M.S. LSU, **major advisor**, graduated (2021)
15. Marisa Karpinski, M. S. LSU, member, graduated (2020)
16. Clay Tucker, Ph.D., LSU, **major advisor**, graduated (2020)
17. Deirdre Smith, Ph.D., LSU, **major advisor**, graduated (2020)
18. Rupsa Bhowmick, Ph.D., LSU, **major advisor**, graduated (2020)
19. Jian'guo Yuan, M.S., LSU, **major advisor**, graduated (2018)
20. Deirdre Smith, M.S., LSU, **major advisor**, graduated (2016)
21. Nazla Bushra, M.S., LSU, **major advisor**, graduated (2016)
22. Clay Tucker, M.S., LSU, **major advisor**, graduated (2016)
23. Nicholas Grondin, M.S. LSU, member, graduated
24. Steve Caparotta, Ph.D., LSU, member, graduated
25. Rudy Bartels, Ph.D., LSU, member, graduated
26. Derek Thompson, M.S., LSU, member, graduated
27. Josh Gilliland, Ph.D., LSU, member, graduated
28. Emily Powell, Ph.D. LSU, member, graduated

29. Harold F. Needham, Ph.D. LSU, member, graduated
30. Amanda Billiot, M.S., LSU, member, graduated
31. Jordan Pino, M.S., LSU, member, graduated
32. Victoria Ford, M.S., LSU (DOCS), member, graduated
33. Daniel Alt, Ph.D., LSU (Civil and Env. Engineering), Dean's Rep, graduated
34. Crawford White, M.S., LSU (Geology), Dean's Rep, graduated
35. Maria Wallace, Ph.D., LSU (C&I-Edu), Dean's Rep, graduated
36. Brenda Rudd, Ph.D., LSU (Music), Dean's Rep, graduated

* Undergraduate committees
    1. Nadia Alzoqari, HSS Aspire Student, LSU, **major advisor (Fall 2022 – Spring 2023)**
    2. Ryleigh Choplin, HSS Aspire Student, LSU, **major advisor (Spring 2023-Fall 2023)**
    3. Chelsea Taylor, Honors B.S., Longwood University, member, graduated (2012)

1.2.2 Listing of publications concerning instruction

1.2.2.1 Textbooks

1.2.2.2 Shorter Works

1.2.2.3 Edited books with scholarly introductions or notes by the editor

1.2.2.4 Recordings

1.2.2.5 Instructional material--multimedia, electronic, etc.

1.2.2.6 Miscellaneous

1.2.3 Listing of publications concerning instruction accepted for publication but not yet published.

1.2.4 Participation in:

1.2.4.1 Professional Meetings, Symposia, Workshops, and Conferences on teaching (other than artistic performances).

1. **Trepanier, J. C. (keynote)** 2018: Understanding Extreme Hurricane Behavior Using Quantitative Geography. Research Council on Mathematics Learning Conference, Baton Rouge, LA.
2. Communication Across the Curriculum Faculty Summer Institute, Louisiana State University, Summer 2016
3. National Association for Geoscience Teachers. On the Cutting Edge-Professional Development for Geoscience Faculty, Teaching Introductory Geoscience Courses in the 21st Century. Workshop Title: Getting the Most Out of Your Introductory Courses. Virtual. March 2014.

1.2.4.2 Local instructional activities (guest lectures, etc.)

1. Advise LSU students through internships with the local news station, WAFB, and the chief meteorologist, Jay Grymes, Spring 2015, Fall 2016, Summer 2017, Fall 2017.
2. "The Louisiana Flood of August 2016" presentation for the Residential College Students on LSU Campus, September 2016.
3. Guest speaker at the LSU Laboratory's School's Discovery Camp with kindergartners through 8th grade students. June 2016.
4. "R Tutorial" presentation at the National Weather Service Office in Slidell, Louisiana, December 2014
5. "Crash Course in Atmospheric Physics" presentation at Juban Parc Junior High School, Denham Springs, LA, December 2014 (4 different student groups)
6. "The Sense and Nonsense of Global Warming" presentation at the LSU Global Residential College, November 2014.
7. "The Sense and Nonsense of Global Warming" presentation at the LSU Global Residential College, April 2014.
8. "The Sense and Nonsense of Global Warming" presentation at the LSU Global Residential College, April 2013.

1.2.5 Other instructional activities or other contributions to the profession:

1.2.5.1 Membership in professional organizations;

1.2.5.2 Administrative duties;

1.2.5.3 New teaching methods/material developed, etc.

1.2.6 Awards, lectureships, or prizes that show recognition of teaching achievement.

1. Louisiana State University Tiger Athletic Foundation Undergraduate Teaching Award, May 2020
2. Louisiana State University Tiger Athletic Foundation Undergraduate Teaching Award, April 2014
3. Robert Udick Distinguished Undergraduate Teaching Award, April 2015

1.2.7 Research Support/Grant Activities aimed at advancing one's ability to teach:

1. College of Humanities and Social Sciences Instructional Impact Committee Grant. Submitted October 2016. Accepted. Aimed at adding resources [a Magic Planet] to the department. $34,227.
2. Board of Regents Traditional Enhancement Grant. Submitted October 2014. Accepted. Aimed at developing a physical geography laboratory facility to assist in the teaching of physical geography courses. $76,413. Start Date 08/14. End date 07/15.
3. Student Technology Fee Monies. Submitted October 2014. Denied but then funded by the Dean of Humanities and Social Sciences. Purpose is to purchase handheld instruments to aid in the instruction of physical geography courses.

$4,969.

1.3 Scholarship:

1.3.1 Listing of research publications

1.3.1.1 Books and Monographs: include place, publisher, and date of publication.

1.3.1.2 Shorter Works

1. J. Trepanier, 2020: Imagine if We Listened to Scientists Before the Hurricane. *The New York Times* Opinion Education Article. https://www.nytimes.com/2020/09/08/opinion/hurricanes-scientists-damage.html
2. J. Trepanier, 2020: Hurricanes 100 years later, it isn't all about the number. *The Hill* Opinion Education Article. https://thehill.com/opinion/energy-environment/520593-hurricanes-100-years-later-it-isnt-all-about-the-number

Refereed Journal Articles

1. Bhowmick, R. and **J. Trepanier** (in preparation), Extreme typhoon winds. *Journal of International Climatology*.
2. Corkran, R., Trepanier, J., & Brown, V. (2024). Spatiotemporal Climatology of Georgia Tropical Cyclones and Associated Rainfall. *Journal of Marine Science and Engineering*, *12*(10), 1693. doi:10.3390/jmse12101693
3. Trepanier, J. C., Nielsen-Gammon, J., Brown, V. M., Thompson, D. T., & Keim, B. D. (2024). Stalling North Atlantic Tropical Cyclones. *Journal of Applied Meteorology and Climatology*. doi:10.1175/jamc-d-23-0229.1
4. Dias de Souza Moraes, F., C. Ramseyer, P. Miller, and J. C. Trepanier (2024), Advances in Tropical Climatology – A Review, *Physical Geography,* DOI: 10.1080/02723646.2024.2313778
5. Bhowmick, J. C. Trepanier, and A. M. Haberlie (2023), Classification analysis of southwest Pacific tropical cyclone intensity changes prior to landfall. *Atmosphere*, 14, https://doi.org/10.3390/atmos14020253.
6. Stein, M., M. Leitner, **J. C. Trepanier**, and K. Konsoer (2022), A dataset of dropout rates and other school-level variables in Louisiana public high schools. *Data,* 7, https://doi.org/10.3390/data7040048.
7. Bhowmick, R., **J. C. Trepanier**, and A. M. Haberlie, (2022), Southwest Pacific Tropical Cyclone Development Classification Utilizing Machine Learning and Synoptic Composites. *International Journal of Climatology*, https://doi.org/10.1002/joc.7457.
8. Miller, P. W. and **J. C. Trepanier***,* (2021) Predicting the 2020 Gulf of Mexico Hurricane Season with 500-hPa Temperature. *Geophysical Research Letters,* https://doi.org/10.1029/2021GL094741.
9. Smith, D., **J. C. Trepanier**, S. Alnussirat, M. Cherry, M. Legault, and D. Pleshinger. (2021). Thunderstorms producing sferic-geolocated gamma-ray flashes detected by TETRA-II, *Journal of Geophysical Research - Atmospheres. http://dx.doi.org/10.1029/2020JD033765.*

10. Tucker, C. S., **J. C. Trepanier**, P. Blanchard, E. Bush, J. Jordan, J. A. Nyman, and M. Schafer. (2021). Using Tree-Ring Research to Introduce Students to Geoscience Fieldwork, *Bulletin of the American Meteorological Society.* https://doi.org/10.1175/BAMS-D-20-0096.1.
11. **Trepanier, J. C.** (2020), North Atlantic Hurricane Winds in Warmer than Normal Seas. *Atmosphere*, 11, 293.
12. Benedetto, K. M. and J. C. **Trepanier (**2020), Climatology and Spatiotemporal Analysis of North Atlantic Rapidly Intensifying Hurricanes (1851–2017). *Atmosphere*, 11, 291.
13. Pleshinger, D. J., S. T. Alnussirat, J. Arias, S. Bai, Y. Banadaki, M. L. Cherry, J. Hoffman, E. Khosravi, M. Legault, R. Rodriguez, D. Smith, E. Toro, **J. C. Trepanier,** and A. Sunda-Meya (2019), Gamma ray flashes produced by lightning observed at ground level by TETRA-II. Journal of Geophysical Research: Space Physics, 124. https://doi.org/10.1029/2019JA026820
14. Bushra, N., **J. C. Trepanier**, R. Rohli, (2019), Joint Probability Risk Modeling of Storm Surge and Cyclone Wind along the Coast of Bay of Bengal using a Statistical Copula. *International Journal of Climatology*.
15. **Trepanier, J. C.** and C. S. Tucker, (2018), Event-Based Climatology of Tropical Cyclone Rainfall in Houston, Texas and Miami, Florida. *Atmosphere*, **9**, 170, doi:10.3390/atmos9050170, 19pp.
16. **Trepanier, J. C.,** H. F. Needham, and K. N. Ellis, (2018), Understanding the relationship between hurricane storm surge and rainfall near New Orleans, Louisiana. *Journal of Coastal Research*, **34,** 559-572.
17. **Trepanier, J.C.,** J. Yuan, and T. H. Jagger, (2017), The combined risk of extreme tropical cyclone winds and storm surges along the U.S. Gulf of Mexico Coast. *Journal of Geophysical Research-Atmospheres,* DOI: 10.1002/2016JD026180
18. Tucker, C. S., **J. C. Trepanier,** K. L. DeLong, and G. L. Harley, (2017), Recording Tropical Cyclone Activity from 1909 to 2014 along the Northern Gulf of Mexico using Maritime Slash Pine Trees (*Pinus elliottii* var. *elliottii* Engelm.). *Journal of Coastal Research,* https://doi.org/10.2112/JCOASTRES-D-16-00177.1.
19. Pino, J. V., R. V. Rohli, K. L. DeLong, G. L. Harley, and **J. C. Trepanier**, (2016), Using proxy records to document Gulf of Mexico tropical cyclones from 1820–1915. *PLoS ONE,* 11(11): e0167482. doi:10.1371/journal.pone.0167482.
20. Ellis, K. N., **J. C. Trepanier** and R. E Hodges (2016), Using synthetic tropical cyclones to characterize extreme hurricanes affecting Charleston, South Carolina. *Journal of Applied Meteorology and Climatology*, **55**, 883–892.
21. **Trepanier, J. C.**, M. J. Roberts, and B. D. Keim (2015), Trends and spatial variability in dry spells across the South-Central United States. *Journal of Applied Meteorology and Climatology*, **54**, 2261–2272.
22. **Trepanier, J. C.**, K. N. Ellis, and C. S. Tucker (2015), Hurricane risk variability along the Gulf of Mexico coastline, *PLoS ONE*, **10**, e0118196.
23. Ellis, K. N., L. M. Sylvester, and **J. C. Trepanier** (2015), Spatiotemporal

patterns of extreme hurricanes impacting U.S. coastal cities, *Natural Hazards,* **75,** 2733-2749.

24. **Trepanier, J. C.**, H. F. Needham, J. B. Elsner, and T. H. Jagger (2015), Combining surge and wind risk from hurricanes using a copula model: An example from Galveston, Texas, *The Professional Geographer*, **67**, 52–61. Online version: **DOI:**10.1080/00330124.2013.866437.
25. **Trepanier, J. C.** and K. N. Scheitlin (2014), Hurricane wind risk in Louisiana, *Natural Hazards,* **70,** 1181–1195.
26. **Trepanier, J. C.** (2014), Hurricane winds over the North Atlantic: spatial analysis and sensitivity to ocean temperature. *Natural Hazards*, **71**, 1733–1747.
27. Strazzo, S. E., J. B. Elsner, **J. C. Trepanier**, K. Emanuel (2013), Frequency, intensity, and sensitivity to sea-surface temperature of North Atlantic TCs in best-track and simulated data, *Journal of Advances in Modeling Earth Systems*, **5**, 1–10.
28. Elsner, J. B., **J. C. Trepanier**, S. E. Strazzo, and T. H. Jagger (2012), Sensitivity of limiting hurricane intensity to ocean warmth, *Geophysical Research Letters*, **39**, L17702, doi:10.1029/2012GL053002.
29. Scheitlin, K. N., J. B. Elsner, S. W. Lewers, **J. C. Malmstadt** and T. H. Jagger (2011), Risk assessment of hurricane winds for Eglin Air Force Base in northwestern Florida, USA, *Theoretical and Applied Climatology*, **105**, 287–296.
30. Elsner, J. B., S. W. Lewers, **J. C. Malmstadt**, and T. H. Jagger, (2011), Estimating contemporary and future wind-damage losses from hurricanes affecting Eglin Air Force Base, Florida, *Journal of Applied Meteorology and Climatology*, **50**, 1514–1526.
31. **Malmstadt, J. C.**, J. B. Elsner, and T. H. Jagger, (2010), Risk of strong hurricane winds to Florida cities*, Journal of Applied Meteorology and Climatology*, **49**, 2121-2132.
32. Scheitlin, K. N., J. B. Elsner, **J. C. Malmstadt**, R. E. Hodges, and T. H. Jagger, (2010), Toward increased utilization of historical hurricane chronologies, *Journal of Geophysical Research*, **115**, D03108, doi:10.1029/2009JD012424.
33. **Malmstadt, J. C.**, K. N. Scheitlin, J. B. Elsner, (2009), Florida hurricanes and damage costs, *Southeastern Geographer*, **49**, 108–131.

Book Chapters

1. Bhowmick, R. and **J. C. Trepanier**, (2019), Impact of Aerosols and Ocean Temperature on Tropical Cyclone Days near Australia. *Hurricanes and Climate Change, Volume 4*, Springer.
2. **Malmstadt, J. C.**, J. B. Elsner, and T. H. Jagger, (2010), Frequency and intensity of hurricanes within Florida's threat zone. *Hurricanes and Climate Change, Volume 2*, J. B. Elsner, R. E. Hodges, J. C. Malmstadt, and K. N. Scheitlin, Eds., Springer Netherlands, 191–203.

1.3.1.3 Edited books

1. Elsner, J. B., R. E. Hodges, **J. C. Malmstadt**, and K. N. Scheitlin (Eds), (2010), *Hurricanes and Climate Change, Volume 2*.

1.3.1.4 Collections of previously unpublished material, correspondence and diaries

1.3.1.5 Recordings

1.3.1.6 Miscellaneous

1.3.1.7 Electronic dissemination of research.

1.3.2 Listing of other publications accepted for publication but not yet published.
1.3.2.1 Listing of other publications currently in review

1.3.3 Other creative and artistic contributions.

1.3.3.1 Original works presented: plays, poetry, musical compositions, art, designs, completed projects (interior design, architecture, landscape architecture, etc.)

1.3.3.2 Other creative activities: contributions to theatrical productions, guest artist in solo or collaborative presentations in juried competitions.

1.3.4 Participation in Other Professional Meetings, Symposia, Workshops, and Conferences

Presentations at Professional Meetings

1. **J. C. Trepanier (keynote)**, 2023: Climate Threats to Stakeholders – Using GIS to Bridge the Gap. National States Geographic Information Council Annual Meeting, New Orleans, LA.
2. S. Camarda and **J. C. Trepanier,** 2023: Translation Speed Influence on Tropical Cyclone Storm Surge Generation Along the Gulf of Mexico Coast. Association of American Geographers Annual Meeting, Denver, CO.
3. N. Alzoqari and **J. C. Trepanier,** 2023: Extreme Tornado Distribution in Louisiana. Association of American Geographers Annual Meeting, Denver, CO.
4. **J. C. Trepanier**, C. S. Tucker, P. Blanchard, M. Schafer, J. Jordan, J. A. Nyman, E. Bush, 2022: Using Tree-Ring Research to Introduce Students to Geoscience Fieldwork. American Meteorological Association Annual Meeting, Virtual.
5. **J. C. Trepanier**, C. S. Tucker, P. Blanchard, M. Schafer, J. Jordan, J. A. Nyman, E. Bush, 2021: Using Tree-Ring Research to Introduce Students to Geoscience

Fieldwork. American Meteorological Association Student Conference/Annual Meeting, Virtual.

6. Cherry, M. L., S. Alnussirat, D. Brewster, C. Derrickson, D. J. Pleshinger, D. Smith, and **J. C. Trepanier**, 2020: Characteristics of TETRA-II TGFs and their Associated Lightning Activity. American Geophysical Union Annual Meeting, Virtual.
7. Tucker, C. S., **J. C. Trepanier**, P. Blanchard, M. Schafer, J. Jordan, J. A. Nyman, E. Bush, 2020: Improving K-12 Instruction of Coastal Climatology and Tree Ring Science with Louisiana Sea Grant. American Meteorological Association Annual Meeting, Boston, MA.
8. Tucker, C. S., **J. C. Trepanier**, P. Blanchard, M. Schafer, J. Jordan, J. A. Nyman, E. Bush, 2019: Gathering Climate and Tree-Ring Data with Environmental Science Students. North American Association of Environmental Educators, Lexington, KY.
9. Benedetto, K. and **J. C. Trepanier**, 2019: Climatology and Spatiotemporal Analysis of Rapidly Intensifying Hurricanes, Southwestern Association of American Geographers, Fort Worth, TX.
10. **Trepanier, J.C.** and C. S. Tucker, 2019: Event-based climatology of tropical cyclone rainfall in Houston, Texas and Miami, Florida. American Association of Geographers, Washington, D. C.
11. Benedetto, K. and **J. C. Trepanier**, 2019: Climatology and Spatiotemporal Analysis of Rapidly Intensifying Hurricanes, American Association of Geographers, Washington, D. C.
12. Bhowmick. R, **J. C. Trepanier**, and A. M. Haberlie, 2019: A Machine Learning Approach for Identifying the Influence of Aerosol and Geophysical Parameters on Tropical Cyclone Development. American Association of Geographers Annual Meeting, Washington DC.
13. Bhowmick. R, **J. C. Trepanier**, and A. M. Haberlie, 2019: A Machine Learning, and Data Mining Approach for Identifying the Influence of Aerosol and Geophysical Parameters on Tropical Cyclone Development. 99th American Meteorological Society Annual Meeting, Phoenix, AZ.
14. **Trepanier, J. C.**, 2018: North Atlantic Hurricane Winds in Warmer Seas. Southwestern Association of American Geographer's Meeting, Baton Rouge, LA.
15. **Trepanier, J. C.**, 2018: North Atlantic Hurricane Winds in Warmer Seas. American Meteorological Society 33rd Conference on Hurricanes and Tropical Meteorology, Ponte Vedra Beach, FL.
16. Tucker, C. S. and **J. C. Trepanier**, 2018: Communicating the Expected Frequency of Extreme Floods to the Public: Insights from Recent Events in the Gulf of Mexico Region. Annual Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA.
17. Tucker, C. S. and **J. C. Trepanier,** 2018: Event-based climatology of tropical cyclone rainfall in Houston, Texas and Miami, Florida. Southwestern Division of the American Association of Geographers, Baton Rouge, LA.
18. Tucker, C. S., and **J. C. Trepanier**, G. L. Harley, K. L. DeLong, 2018: Climate Response from Maritime Taxodium spp. Along the Northern Gulf of Mexico Coast, American Association of Geographers, New Orleans, LA.
19. **Trepanier, J. C.**, 2018: North Atlantic Hurricane Winds in Warmer Seas. Annual Meeting, Association of American Geographers, New Orleans, LA.

20. Grondin, N.S**., J.C. Trepanier**, and B.D. Keim, 2018: Influence of ENSO on Tropical Cyclone Tracks along the Mexican Riviera. 2018 Annual Meeting of the American Association of Geographers*,* New Orleans, LA.
21. Grondin, N.S., **J.C. Trepanier,** and B.D. Keim, 2018: Influence of ENSO on Tropical Cyclone Tracks along the Mexican Riviera. 15th Annual Southeastern Coastal and Atmospheric Processes Symposium*,* Mobile, AL.
22. Deirdre Smith**, J.C. Trepanier**, S. Al-Nussirat, M. Cherry, D. J. Pleshinger, 2018: The TETRA-II Experiment to Observe Terrestrial Gamma Flashes at Ground Level – Analysis of Nearby Thunderstorm Activity and Comparison with Lightning Data. Annual Meeting, Southwestern American Association of Geographers, Baton Rouge, LA.
23. Bhowmick, R. and **J. C. Trepanier**, 2018: Impact of Aerosols and Ocean Temperature on Tropical Cyclone Days near Australia. Southwest Division of the American Association of Geographers. Baton Rouge, LA.
24. Bhowmick, R., and **J. C. Trepanier**, 2018: Causality Analysis of Aerosol Influence on Thermodynamic and Dynamic Parameters Required for Tropical Cyclone Genesis over the Tropical Southwest Pacific Ocean. American Association of Geographers. New Orleans, LA.
25. Bhowmick, R. and **J. C. Trepanier**, 2017: Impact of Aerosols and Ocean Temperature on Tropical Cyclone Days near Australia. American Geophysical Union Fall Meeting. New Orleans, LA.
26. Bhowmick, R. and **J. C. Trepanier**, 2017: Influence of Atmospheric Dust on Tropical Cyclone Frequency over Eastern Australia/ Southwest Pacific Ocean. 6th International Summit on Hurricanes and Climate Change: From Hazards to Impacts. Aegean Conference. Heraklion, Greece.
27. **Trepanier, J. C.,** 2017: Estimating the Risk of Tropical Cyclone Characteristics Along the United States Gulf of Mexico Coastline Using Different Statistical Approaches, American Geophysical Union Annual Meeting, New Orleans, LA.
28. Cherry, M. L., C. Adams, S. Al-Nussirat, S. Bai, H. Christian, S. B. Ellison, D. Granger, J. Hoffman, E. Khosravi, M. D. Legault, M. Orang, D. J. Pleshinger, R. Rodriguez, D. Smith, D. Smith, M. Stewart, A. Sunda-Meya, T. Thomas, **J. C. Trepanier**, and A. Ward, 2017: The TETRA-II Experiment to Observe Terrestrial Gamma Flashes at Ground Level-Preliminary Results, Electrodynamics and energetics of the middle atmosphere exploration with ground and space experiments of the IAPSO-IAMAS-IAGA General Assembly "Good Hope for Earth Sciences", Cape Town, South Africa.
29. **Trepanier, J. C.,** J. Yuan, and T. H. Jagger, 2017: Tropical cyclone 18-hour wind and storm surge extreme value copula for twenty-two United States Gulf of Mexico Coastal Cities. Annual Meeting, Association of American Geographers, Boston, MA.
30. Tucker, C., K. Konsoer, and **J. C. Trepanier**, 2017: Communicating Return Periods of Extreme Flood Events: Insights from the 2016 Louisiana Flood, Association of American Geographer's Annual Meeting, Boston, MA.
31. Yuan, J. and **J. C. Trepanier**, 2017: Spatial and Temporal Variability of Tropical Cyclone Strikes in Japan, Association of American Geographer's Annual Meeting, Boston, MA.
32. Smith, D., **J.C. Trepanier**, 2017: Lightning Flash Rate in the Lake Maracaibo Basin, Venezuela Related to Sea Surface - Temperature and Tropospheric Air Flow. American Association of Geographers Annual Meeting, Boston, MA.

33. Smith, D., **J. C. Trepanier**, and Á. Muñoz, 2017: Lightning Flash Rate in the Lower Maracaibo Basin, Venezuela Related to Sea Surface Temperatures and Tropospheric Air Flow. American Meteorological Society Annual Meeting, Seattle, WA.
34. Smith, D. and **J. C. Trepanier**, 2016: Assessing Relationships Between Lightning Flash-Rate Density in Northwestern Venezuela, Upper-Level Wind-Flow and Sea Surface temperatures. American Association of Geographers Annual Meeting, San Francisco, CA.
35. Cherry, M. L., C. Adams, S. Al-Nussirat, S. Bai, H. Christian, S. B. Ellison, D. Granger, J. Hoffman, E. Khosravi, M. D. Legault, M. Orang, D. J. Pleshinger, R. Rodriguez, D. Smith, D. Smith, M. Stewart, A. Sunda-Meya, T. Thomas, **J. C. Trepanier**, and A. Ward, 2016: Terrestrial Gamma Flashes at Ground Level – TETRA II. Annual Meeting, American Geophysical Union, San Francisco, CA.
36. Tucker, C. S., **J. C. Trepanier**, G. L. Harley, and K. L. DeLong, 2016: Exposing Ecotone Enervation: Coastal Pine Tree Growth Records Climate. Annual Meeting, South Central Geological Society of America, Baton Rouge, LA.
37. Tucker C. S., **J. C. Trepanier**, G. L. Harley, and K. L. DeLong, 2016: Dendrochronology Reveals Response of Coastal Pine Trees to Various Climate Parameters in Grand Bay National Estuarine Research Reserve, Mississippi, U.S.A. Annual Meeting, Association of American Geographers, San Francisco, CA.
38. Bushra, N. and **J. C. Trepanier**, 2016: Modeling Tropical Cyclone Storm Surge and Wind Induced Risk along the Bay of Bengal Coastline Using a Statistical Copula, Dean's Meeting Hall, Faculty of Earth and Environmental Science, University of Dhaka, Bangladesh.
39. **Trepanier, J. C.**, 2015: Hurricane risk in the North Atlantic. *Colloquium Talk at the University of Alabama*, Tuscaloosa, AL.
40. **Trepanier, J. C.**, M. J. Roberts, and B. D. Keim, 2015: Trends and spatial variability in dry spells across the South-Central United States. Annual *Southeastern Division of the American Association of Geographers* meeting, Pensacola, FL.
41. Ellis, K. N., **J. C. Trepanier**, and L. M. Sylvester, 2015: Decadal clusters of extreme hurricane wind events. 5th International Summit on Hurricanes and Climate Change. Chania, Greece.
42. **Trepanier, J. C.** and K. N. Scheitlin, 2014: Hurricane wind risk in Louisiana. Annual Meeting, Association of American Geographers, Tampa, Florida.
43. Ellis, K. N., **J. C. Trepanier** and R. E. Hodges, 2014: Using synthetic tropical cyclones to characterize extreme hurricanes for Charleston, South Carolina. The University of Tennessee Department of Geography Research Symposium, Knoxville, Tennessee.
44. Scheitlin, K. N., **J. C. Trepanier** and R. E. Hodges, 2013: On the spatial patterns of extreme tropical cyclones: A case study of Charleston, South Carolina. 4th International Summit on Hurricanes and Climate Change, Kos, Greece.
45. **Trepanier, J. C**., 2013: Spatial risk of hurricane winds over the Gulf of Mexico and North Atlantic, Annual Meeting, Association of American Geographers, Los Angeles, California.
46. **Malmstadt, J. C.**, J. B. Elsner, H. F. Needham, and T. H. Jagger, 2012: A statistical model for combining surge and wind speed from hurricanes: Case studies from three regions along the northern Gulf of Mexico coastline. Annual Meeting, Association of

American Geographers, New York, New York.
47. **Malmstadt, J. C.**, J. B. Elsner, and T. H. Jagger, 2010: The risk of strong hurricane winds to Florida cities. 29th Conference on Hurricanes and Tropical Meteorology, Tucson, Arizona.
48. **Malmstadt, J. C.** and K. N. Scheitlin, 2010: Hurricanes and pollution: Human affecting or human affected? Environmental Action Research Symposium, Florida State University, Tallahassee, Florida.
49. **Malmstadt, J. C.**, J. B. Elsner and T. H. Jagger, 2010: Risk of strong hurricane winds to Florida cities. Annual Meeting, Southeast Division of the Association of American Geographers, Birmingham, Alabama.
50. **Malmstadt, J. C.** and J. B. Elsner, 2009: Intensity and frequency of hurricanes within Florida's threat zone. 2nd International Summit on Hurricanes and Climate Change, Corfu, Greece.
51. **Malmstadt, J. C.**, 2009: Pre-landfall intensity as predictor of economic loss from Florida hurricanes, 1900-2007. Annual Meeting, Association of American Geographers, Las Vegas, Nevada.
52. Scheitlin, K. N., **J. C. Malmstadt**, R. Hodges, J. B. Elsner and T. H. Jagger, 2009: Toward increased utilization of historical hurricane chronologies. 2nd International Summit on Hurricanes and Climate Change, Corfu, Greece.
53. Scheitlin, K. N., **J. C. Malmstadt**, R. Hodges, J. B. Elsner and T. H. Jagger, 2009: Toward increased utilization of historical hurricane chronologies. 105th Annual Meeting, Association of American Geographers, Las Vegas, Nevada.
54. **Malmstadt, J. C.**, K. N. Scheitlin and J. B. Elsner, 2008: Minimum pressure as a predictor of hurricane losses in Florida. Annual Meeting, Southeast Division of the Association of American Geographers. Greensboro, North Carolina.
55. Scheitlin, K. N., **J. C. Malmstadt,** and J. B. Elsner, 2008: Increased losses from Florida hurricanes. Annual Meeting, Southeast Division of the Association of American Geographers. Greensboro, North Carolina.
56. **Malmstadt, J. C.**, 2007: An examination of tornado vulnerability in Wisconsin. Remote Sensing and Geospatial Technologies Conference. Tallahassee, FL.

Participation in Professional Workshops Related to Research

1. Louisiana State University Office of Research and Economic Development Summer Research Institute, Virtual, May 2020.
2. Gulf Research Program Research Fellows Collaborative Research Workshop, New Orleans, LA, February 2017.
3. The National Integrated Heat Health Information System Workshop: Developing Integrated Heat-Health Information for Long-Term Resilience and Early Warning, for the El Paso-Juarez-Las Cruces Region, El Paso, TX, July 2016.
4. Annual South Central Climate Science Center Research Workshop, Fort Worth, TX, November 2015.
5. Annual South Central Climate Science Center Research Workshop, Grapevine, TX, November 2014.
6. Observing and Modeling Climate Variability in the Intra-Americas Seas and Impacts on the Continental Americas and the Caribbean, Virtual Workshop, US Climate

Variability and Predictability Program (US CLIVAR), September 2015. Poster Presentation.

Invited Talks

1. University of Wisconsin-Oshkosh, Warner Geiger Memorial Lecture, 2016, Understanding Louisiana Hurricanes as a Geographer (from the Great White North). Oshkosh, Wisconsin.
2. Weber State University, Utility and Beauty of Mathematics Lecture Series, 2018, Understanding Extreme Hurricane Behavior Using Quantitative Geography. Ogden, Utah.

1.3.5 Other scholarly or creative activities or other contributions to the profession:

1.3.5.1 Membership in professional organizations

1. Association of American Geographers
2. American Meteorological Society
3. American Geophysical Union
4. Southwestern Division of the Association of American Geographers

1.3.5.2 Administrative duties

1. Chair, Hurricane I: Climatology and Meteorology session, Association of American Geographers Annual Meeting, April 2014, Tampa, FL
2. Chair, Hurricane I: Climatology and Meteorology session, Association of American Geographers Annual Meeting, April 2015, Chicago, IL

1.3.5.3 New standard testing methods, new design of equipment, etc.

1.3.6 Other awards, lectureships, or prizes that show recognition of scholarly or artistic achievement.

1. Louisiana State University Alumni Association Faculty Excellence Award Recipient, May 2019.
2. Louisiana State University Alumni Association Rising Faculty Research Award Recipient, May 2017.
3. National Academies of Sciences, Engineering, and Medicine, Gulf Research Program Fellow. Duration: September 2016–August 2018, $76,000.

3.3.7 Other research Support/Grant Activities:

Pending

Accepted

1. U.S. Geological Survey, National Climate Adaptation Science Center and Regional Climate Adaptation Science Centers: Stuart Nolan, Kristine DeLong, Jayur Mehta,

Jill Trepanier, Stephen Midway, Tegan Hanson, Kimberly S. Walden, Sherry Pinell, and Travis Haas. Coastal Indigenous Fisheries Assessment (CIFA) using Archaeological and Ecological Perspectives. Accepted. $404,953. Start date: 08/01/2023.

2. Provost Fund for Innovation in Research, Louisiana State University: Trepanier (PI). Coastal Extreme Weather Monitoring Network. Accepted. $10,000. Start Date: 01/01/2023.
3. United States Geological Survey South Central Climate Adaptations Science Center: Franzen (PI), Trepanier, et al. Assessing the Needs and Adaptation Practices of Small-Holding and Minority Farmers Facing Extreme Weather Events in Louisiana. Accepted. $297,277. Start Date: 01/31/2023.
4. Institute of Museum and Library Services: Benoit (PI), Trepanier, Vanos. PROTECCT-GLAM: Providing risk of the environment's changing climate threats for galleries, libraries, archives and museums. Accepted. $473,243. Start Date: 08/31/2022.
5. United States Geological Survey South Central Climate Adaptations Science Center: Konsoer (PI), Trepanier, et al., Mitigating climate change and sea-level rise impacts to Native American archaeological sites within coastal Louisiana through cultural resource management. Accepted, $293,297. Start Date: 08/01/2022.
6. Louisiana Board of Regents: DeLong (PI) and Trepanier, Investigating Cloud and Hurricane Water Isotopic Process for Research and Student Education. Accepted. $110,126. Start Date: 08/01/2021; End Date: 07/31/2023.
7. Louisiana State University College of Humanities and Social Science Manship Award. Trepanier (PI). Risk of extreme typhoon winds in the North Pacific. Accepted, $5000. Summer 2021.
8. National Oceanic and Atmospheric Administration - Louisiana Sea Grant: Trepanier (PI), M. Schafer, P. Blanchard, E. Bush, J. Nyman. Educating Louisiana's Future: Improving K-12 Instruction of Coastal Environments. Accepted. $200,000. Start Date: 02/01/18. End Date: 01/31/20.
9. National Academies of Sciences, Engineering, and Medicine: Trepanier (PI). Assessing hurricane risk at oil infrastructure across the Gulf of Mexico Coast. Accepted. $76,000. Start Date 09/01/16. End Date 08/31/18.
10. EPSCOR/NASA: Cherry (PI), Gregory (Co-PI), Trepanier (Co-PI). TETRA-II: An Experiment to Study Terrestrial Gamma Flashes and the Role of Energetic Particle Acceleration in Lightning and Severe Weather Events. Accepted. $1,395,000. Start Date 07/01/15. End Date 06/30/18.
11. Board of Regents Research Competitiveness Subgroup Grant: J. Trepanier (PI), with Harold Needham. Estimating the combined risk of hurricane wind and storm surge along the U.S. Gulf Coast. Accepted. $197,409. Start Date 06/01/15. End Date 05/31/18.
12. Louisiana State University College of Humanities and Social Science Manship Award. Louisiana hurricane winds: spatial analysis and sensitivity to sea surface temperature. Accepted, $7500. Summer 2014
13. Louisiana State University Council on Research Summer Stipend Grant: Risk of Extreme Hurricane Winds in Coastal Louisiana. Accepted, $5000. Summer 2013

Denied

1. Louisiana Sea Grant IR&E: Trepanier (PI), S. Midway, A. Hollander. Fishing for Disaster: Educating Coastal Students on Extreme Weather Impacts to Louisiana Fisheries. Denied. $370,000. Submitted June 2021.
2. National Science Foundation: Trepanier (PI), K. Smiley, B. Mitchell: Utilizing a trauma narrative paradigm to engage socially vulnerable stakeholders affected by hurricane hazards along the Gulf Coast: A community engagement study. Denied. $282,370. Submitted August 2020.
3. Louisiana Board of Regents Industrial Ties Research Subprogram: Ozdemir (PI), Farasat (Co-PI), Marvasti (Co-PI), and Trepanier (Co-PI). A data-driven approach for enhancing electric power grid resilience against flood-induced hazards. Rejected. $250,000. 2019.
4. Louisiana Sea Grant: Trepanier (PI) and Konsoer (Co-PI). Quantifying the links between storm winds and wave erosion in Louisiana wetland lakes. Denied. $185,849. 2019.
5. National Science Foundation: Bentley (PI), Trepanier (Co-PI). LSU Coastal Geopaths. Denied. $349,995. 2018.
6. Bureau of Ocean Energy Management: Bentley (PI), Trepanier (Co-PI). Submarine Landslides on the Mississippi River Delta Front and the Critical Need for Next Generation Hazard Assessment; Task 2: time-series coring, mapping, and modeling. Denied. $21,055,946. 2018
7. National Academies of Sciences, Engineering, and Medicine: Trepanier (PI), Wanyun Shao (Co-PI). Do you see what I see? Understanding individuals' judgments on hurricane risks. Denied. $52,368. 2018
8. National Oceanic and Atmospheric Administration: Mitchell (PI), Trepanier (Co-PI). Game Boards to Game Plans: preparing coastal youth for climate adaptation and community resilience through interactive game-play. Denied, $495,000. 2018
9. National Aeronautics and Space Administration (NASA): Trepanier (PI). Influence of atmospheric dust on the spatiotemporal variability of tropical cyclone activity over the Eastern Australia/Southwest Pacific Ocean. Denied. $45,000. 2017
10. National Academies of Sciences, Engineering, and Medicine: Trepanier (PI). Linking temperature extremes and air quality to human health and illnesses in Gulf of Mexico Coastal States. Denied. $64,632. 2018
11. The Water Institute of the Gulf: Trepanier (PI). Estimating the statistical risk of hurricane storm surge to United States coastal locations in current and future climatic conditions. Denied. $60,480. 2017
12. Bureau of Ocean Energy Management (BOEM): Jackson (PI), DeLong (Co-PI), Nolan (Co-PI), Meyer (Co-PI), Saunders (Co-PI), Trepanier (Co-PI). History and perceptions of at-risk cultural resources along the Louisiana coast. Funding Call Removed. $585,191.
13. Department of Interior: Trepanier (PI). Assessing multiple disturbance regimes of maritime pine savannas in a changing climate. Denied. $24,100.
14. National Fish and Wildlife Foundation: Trepanier (PI), DeLong (Co-PI), Watson (Co-PI), Brody (Co-PI). An Assessment of Native American Cultural Resources at Risk of Climate Change in Coastal Louisiana: Training the Next Generation of Conservationists. Denied. $170,000.

15. National Science Foundation GSS: Trepanier (PI), Ellis (Co-PI). Extreme variability and stagnation in daily weather conditions in the Southeast United States: trends, spatial patterns, and effects on human health. Denied. $300,000.
16. Joint Fire Science Program, Bureau of Land Management: Trepanier (PI), Harley (Co-PI), Platt (Co-PI), Huffman (Co-PI). Assessing the resiliency of maritime pine savannas to multiple disturbance regimes in a changing climate. Denied. $300,000.
17. NASA NSPIRES Research Grant: Legault (PI), Barghouty (Co-PI), Cherry (Co-PI), Jimenez (Co-PI), Medin (Co-PI), Miranda (Co-PI), Sola (Co-PI), Stacy (Co-PI), Trepanier (Co-PI). Energetic particles, lightning, and terrestrial gamma flashes in tropical thunderstorms. Denied. $1,750,000.
18. Board of Regents Research Competitiveness Subgroup Grant: J. Trepanier (PI), with Harold Needham. Estimating the combined risk of hurricane wind and storm surge along the U.S. Gulf Coast. Denied. $189,052.
19. Board of Regents Research Competitiveness Subgroup Grant: Estimating the combined risk of hurricane wind and storm surge along the U.S. Gulf Coast. Denied. $107,832

1.3.8 Theses/dissertations directed.

1. Kathleen Benedetto, Ph.D., LSU, May 2023. Rapid Intensification as a Crucial Hurricane Hazard: Educating and Empowering Young Stakeholders affected by Hurricanes on the Gulf Coast.
2. Michael Broussard, M.S. LSU, May 2022. Shocking: Using machine learning techniques to nowcast lightning strikes from station level data.
3. Chance Bryant, M.S. LSU, December 2021. Examining the effectiveness of "Turn Around Don't Drown".
4. Rupsa Bhowmick, Ph.D., LSU, August 2020. Southwest Pacific Tropical Cyclone Frequency and Intensity Related to Observed and Modeled Geophysical and Aerosol Variables.
5. Deirdre Smith, Ph.D., LSU, May 2020. An Atmospheric and Spatiotemporal Examination of Lightning-Initiated Terrestrial Gamma-ray Flashes Detected by the Fermi Satellite and TETRA II.
6. Clay Tucker, Ph.D., LSU, May 2020, Analyzing Climate Risk to Maritime Cypress Swamps and Pine Savannas of the Gulf of Mexico Coastal Plain.
7. Jian'guo Yuan, M.S., LSU, May 2017. Spatial and temporal variability of tropical cyclone strikes in Japan.
8. Deidre Smith, M.S., LSU, December 2016. Lightning Flash Rate in the Lake Maracaibo Basin, Venezuela Related to Sea Surface Temperatures and Tropospheric Air Flow.
9. Nazla Bushra, M.S., LSU, May 2016. Modeling tropical cyclone storm surge and wind induced risk along the Bay of Bengal coastline using a statistical copula.
10. Clay Tucker, M.S., LSU, December 2015. Dendrotempestology: Identifying the statistical relationship between hurricanes and tree growth in the pine savannas of coastal Mississippi.

1.3.9 Major areas of research interest.

1. Hurricanes, climate extremes, statistics

1.4 Service:

1.4.1 Student organizations advised.

1. Faculty Advisor for the Geography and Anthropology Undergraduate Society. November 2012 – August 2021.
2. Faculty Advisor for Gamma Theta Upsilon. January 2013 – August 2021.

1.4.2 Recruitment of students and faculty.

1. Benefits of Becoming a Geographer, Recruitment Presentation, 5 undergraduate classrooms LSU Geography and Anthropology Department, Fall 2015.
2. Benefits of Becoming a Geographer, Recruitment Presentation, incoming freshman LSU College of Humanities and Social Sciences, Fall 2015.
3. Summer and Fall Orientation Fairs, LSU Campus, Summer/Fall 2015, 2016, 2017

1.4.3 University service: department, college, university, and Faculty Senate committees.

1. Director of Graduate Studies and Chair of the Departmental Graduate Committee, May 2021 – Present.
2. Serve on the University Council on Gender Equity, Fall 2021–Present.
3. Serve on the Departmental Graduate Committee, Fall 2019–Spring 2021.
4. Serve on the Communication Across the Curriculum Faculty Awards Committee, Spring 2017.
5. Chair the Course Assessment Committee, LSU, Spring 2017–August 2021
6. Serve on the Information Technology Committee, LSU, Fall 2012, Spring 2014, Fall 2015-Spring 2016
7. Serve on the Display Committee, LSU, Fall 2012 – Spring 2013
8. Serve on the Research and Scholarship Committee, LSU, Fall 2013 – Spring 2014
9. Serve on the Course Assessment Committee, LSU, Fall 2013 – Fall 2016

1.4.4 Professional service:

1.4.4.1 Advisory boards, commissions, or agencies.

1. Associate Editor, *Earth Interactions*, September 2016–Present.
2. Chair, Status of Women in Geography Committee of the American Association of Geographers, July 2020–Present.

1.4.4.2 Journals edited, manuscripts refereed, books and proposals reviewed.

Manuscripts Refereed

1. Weather, Climate, and Society
    1. 2022 Review
2. Climate Dynamics
3. Nature Geoscience
    1. 2020 Review
4. Nature Communications
    1. 2022 Review

2. “Changes in Atlantic Major Hurricane Frequency Since the Late-19th Century” February 2021

5. Earth Interactions
    1. 2020 Review
    2. “Northern Hemisphere Jet Stream Position Indices as Diagnostic Tools for Climate and Ecosystem Dynamics” March 2017
    3. “The centennial variation of El Niño Impact on Atlantic Tropical Cyclones” August 2017
6. Atmosphere
    1. “Changes in means and extreme events of sea surface temperature in the East China Seas based on satellite data from 1982 to 2015” November 2018
    2. “Interdecadal changes in the rainfall of the Philippines during December” October 2018
    3. “The impact of extreme weather and climate change on inland waterways transport: A Yangtze River case” June 2018
    4. “Comparing the spatial patterns of rainfall and atmospheric moisture among tropical cyclones having a track similar to hurricane Irene” August 2017
7. Geophysical Research Letters
    1. “Assessing sensitivities in algorithmic detection of tropical cyclones in climate data” November 2016
8. Journal of Atmospheric and Solar-Terrestrial Physics
    1. “The role of natural factors on major climate variability in Northern Winter.” December 2014
9. International Summit on Hurricanes and Climate Change, Vol. 4
    1. “Typhoon/Hurricane Disaster Prediction and Prevention for Coastal, Offshore, and Nuclear Power plants Infrastructure” September 2015
10. Geomatics, Natural Hazards and Risk
    1. "Predicting Hurricane Wind Damage by Claim Payout Based on Hurricane Ike in Texas." July 2015
11. Geomatics, Natural Hazards and Risk
    1. "Predicting Hurricane Wind Damage by Claim Payout Based on Hurricane Ike in Texas." June 2015
12. The Professional Geographer:
    1. “An Investigation of the Tropical Cyclogenesis of Arlene (2005) Using the ERA-Interim Reanalysis and the WRF Model Simulation.” March 2014
13. Journal of Emergency Management:
    1. “Scenario based decision making: How Florida’s statewide regional evacuation studies are providing more flexibility with information for county emergency management.” March 2014
14. Natural Hazards:
    1. 2020 Review
    2. “The sun-hurricane connection: Diagnosing the solar impacts on hurricane frequency over the North Atlantic basin using a space-time model” December 2013
    3. “Characteristics of the western North Pacific tropical cyclone and its potential destructiveness evaluation based on tracks clustering” June 2016

4. "Changes in the U.S. Hurricane Disaster Landscape: The Relationship between Risk and Exposure" January 2017

15. Cartography and Geographic Information Society:
    1. "What's the best way to communicate climate change? Public perceptions of spatial analogs for climate change." November 2012

1.4.5 Other external service:

1.4.5.1 Art shows/science fairs judged.

1. Judge for the Louisiana State Geography Bee, March 2016
2. National Geographic State Geography Bee Coordinator, October 2017 to 2020.

1.4.6.1. Media Outreach

1. Live interview with Scripps News, 2023
2. Live interview with ABC Nightline, 2022
3. Live interview with Fox 8 New Orleans, 2021
4. Live TV Interview with the Australian Broadcasting Corporation News in Sydney Australia with presenter Ros Childs, 2020.
5. Interview with Roland Pease, Broadcaster, *BBC Science Radio*, 2020, https://www.bbc.co.uk/programmes/w3cszh0t.
6. Interview with Samual Oakford, Journalist, *Global News*, 2020.
7. Interview with Marina Schauffler, Writer, *Sea Change Column*, Natural Choices LLC, 2020.
8. Interview with Gabrielle Gurley, Deputy Editor, *The American Prospect*, 2020, https://prospect.org/politics/like-southwest-louisiana-fema-is-worn-down/.
9. Interview with Aylin Woodward, Reporter, *Business Insider*, 2020.
10. Interview with Xander Peters, Contributing Writer, *Scalawag Magazine,* 2020,
11. Interview with Drew Costly, Staff Writer, *OneZero*, 2020.
12. Interview with Serenity Martin, LSU Tiger TV News Reporter, *Tiger TV*, 2020.
13. Interview with Abigail Hendren, LSU Tiger TV News Reporter, *Tiger TV*, 2020.
14. Interview with Ella Aiges, Student at Sarah Lawrence College, 2020.
15. Interviews with various morning shows across Canada, *Canadian Broadcasting Corporation* Radio Syndication Unit, 2019.

2. Supporting Material (see attached portfolio)