

Hurricane Harvey Research Bibliography

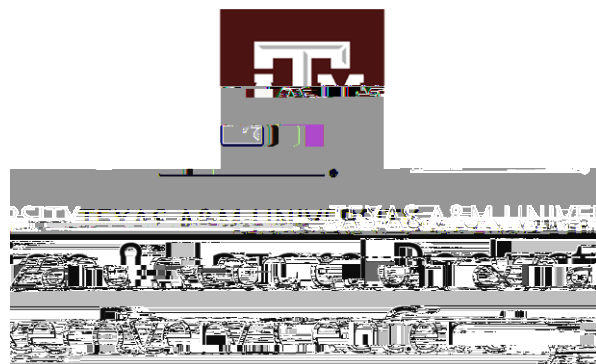


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Introduction

This research bibliography includes reference information for book chapters, editorial pieces, journal articles, and reports that reflect the research and studies pertaining to Hurricane Harvey. The sources were collected using multiple journals and databases including: EBSCO, MDPI, Science Direct, SAGE Journals, International Journal of Environmental Research and Public Health, Journal of American Medical Association, and many others. The majority of the sources were gathered from [7 H \[D V \\$ 0 8 Q L Y H U V I t a B a s e . / L E U D U L H V ¶](#)

Hurricane Harvey was a Category 4 hurricane; it made landfall in Rockport, Texas on August 25, 2017. After the initial landfall, the storm stalled over Houston, Texas for a week, resulting in massive amounts of rainfall and flooding. This resulted in 27 trillion gallons of rain and \$125 billion in damage.

Hurricane Harvey had a huge impact on Texas and provides valuable evidence for other states that may be affected by similar events in the future. We believe that scientific research can support communities, states, and the nation better mitigate and recovery from such disasters. This bibliography supports our mission to share scientific knowledge about hazards and disasters with scholars, students, policy-makers, and the public. Graduate students and faculty from the [Hazard572.38 k\(2o ow0 0 1 R G \[\(Environ \) - 9 \(g \) u \) - 6 \(ric \) 5 \(\(s \) \) \(mouhp2 790Tfeia\)4\(rd57n-3\(c\)4\(. \)ETQq0.0000](#)

trauma. *Journal of Early Childhood Teacher Education*, 4(1), 19.

<https://www.tandfonline.com/doi/full/10.1080/10901027.2019.1578309>

Cook, Glenn. (2017). Lone Star Strong: Texas schools rebuild after Hurricane Harvey blast.

American School Board Journal, 204, 14. <https://www.nsba.org/newsroom/american-school-board->

- Long-García, J. D. (2018). One Year After Harvey. *America*, 21(5), 26.
<https://www.americamagazine.org/politics-society/2018/08/21/how-city-and-church-texas-are-rebuilding-one-year-after-hurricane>
- Marshall, William P. (2018). Does the First Amendment Prevent or Allow FEMA to Provide Disaster Aid to Churches? *Public Health Reports*, 133, 119-122.
<https://journals.sagepub.com/doi/full/10.1177/0033354917742128>
- Milligan, Susan. (2018). The Forecast for Recovery. *U.S. News The Report* C1.
<https://www.usnews.com/news/the-report/articles/2018-09-21/hurricanes-hit-everyone-but-the-poor-have-the-hardest-time-recovering>

Climate Change

- Emanuel, Kerry. (2017). Assessing the present and future probability of Hurricane Harvey's rainfall. *Proceedings of the National Academy of Sciences of the United States of America*, 114(48), 12681-12684. <https://www.pnas.org/content/114/48/12681.short>
- Jan van Oldenborgh, Geert, Karin van der Wiel, Antonia Sebastian, Roop Singh, Julie Arrighi, Friederike Otto, Karsten Haustein, Sihan Li, Gabriel Vecchi, Heidi Cullen. (2018). Attribution of extreme rainfall from Hurricane Harvey, August 2017. *Environmental Research Letters*, 13. <https://iopscience.iop.org/article/10.1088/1748-9326/aa9ef2>
- Kossin, James P. (2018). A global slowdown of tropical-cyclone translation speed. *Nature*, 558(7708), 12. <https://www.nature.com/articles/s41586-018-0158-3>
- Le Page, Michael. (2017). Life after the storm. *New Scientist*, 235(144), 22-23.
<https://www.sciencedirect.com/science/article/pii/S0262407917318687>
- Miller, Elizabeth C. (2018). Climate Change and Victorian Studies: Introduction. *Victorian Studies*, 60(4), 537-542.
https://www.jstor.org/stable/10.2979/victorianstudies.60.4.01?seq=1#page_scan_tab_contents
- Pacheco, Susan E. (2018). H m.EtnBTw.3fa RG[TQ EMC /Span AMCID 19BDC q0.00000912 0 612 792 reW*

March 20, 2019

Hunt, Harold D., & Lasey, Clare. (2018). Still Sparkling After Harvey. *Tierra Grande*, 25(2), 14-19. <https://assets.recenter.tamu.edu/Documents/Articles/2194.pdf>

Klotzbach, Philip J., Bowen, Steven G., Pielke, Roger, Jr., & Bell, Michael. (2018). Continental U.S. Hurricane Landfall Frequency and Associated Damage: Observations and Future Risks.

Hard-Clam Production. *Journal of Coastal Research* 36-126.
<https://www.jcronline.org/doi/full/10.2112/SI78-010.1>

Goff, John A., Swartz, John M., Gulick, Sean P. S., Dawson, Clint N., & de Alegria-Arzaburu, Amaia Ruiz. (2019). An outflow event on the left side of Hurricane Harvey: Erosion of barrier sand and seaward transport through Aransas Pass, Texas. *Geomorphology*, 334 44-57. <https://www.sciencedirect.com/science/article/pii/S0169555X19300807>

Horney, Jennifer A., Gaston A.

Exciton

- Federal Emergency Management Agency. (2018). 2017 Hurricane Season FEMA After Action Report Retrieved from <https://www.fema.gov/media-library-data/1531743865541-d16794d43d3082544435e1471da07880/2017FEMAHurricaneAAR.pdf>
- Federal Emergency Management Agency. (2018). Hurricane Harvey 6 Months Later Retrieved from <https://www.fema.gov/media-library-data/1519758737023-e405f4a9920205df46319668b002e878/6MonthTexasHarveyRecoveryGuide.pdf>
- Federal Emergency Management Agency. (2018). Hurricane Harvey One Year Later Retrieved from <https://www.fema.gov/media-library-data/1535741330175-f46e9a841bb61e25547685f69bbeccda/1 Year Texas Harvey Recovery Guide.pdf>
- Federal Emergency Management Agency. (2018). Public Assistance: Contracting Requirements Checklist Retrieved from <https://www.fema.gov/media-library-data/1539701833605-15a87654b6d098cf7cff4739ba37f827/PAContractingRequirementsChecklist.final.10.10.18.pdf>
- Long, Brock. (2017). Business Continuity And Preparedness Developing a Plan to Safeguard Your Enterprise Retrieved from https://www.fema.gov/media-library-data/1512659181535-8b616d1c4dc1253a83b7d06076f69a26/Business_Continuity_and_Preparedness_final_D R-4332-TX_508c_12.06.17.pdf

Health and Health Care

- Banerjee, D., T. Fletcher-Davies, D. Persse, J. Schulte, B. Yang, W. Bryant, K. Short, R. Jones, & S. L. Williams. (2018). Medical and Nursing Needs in a Mass Shelter After Hurricane Harvey. *Texas Public Health Journal* 702 332.9T Q q 0.00000912 0 612 792 re H0e W* n BT

March 20, 2019

Burkle, Frederick M., Mark Kleim, Leann Liu, Aisha Haynie, Sherry Jin, Ana Zangeneh, & et.
al

- American Journal of Obstetrics & Gynecology, 2016-S467.
[https://www.ajog.org/article/S0002-9378\(18\)31752-6/abstract](https://www.ajog.org/article/S0002-9378(18)31752-6/abstract)
- Mendez-Figueroa, Hector, Mary Tolcher, Alireza Abdollah Shamshirsaz, Ryan M. Pace, Derrick M. Chu, & Kjersti Aagaard. (2019). Increase in maternal and neonatal infections following Hurricane Harvey. American Journal of Obstetrics and Gynecology, 220 S420-S421. <https://insights.ovid.com/american-obstetrics-gynecology/ajog/2019/01/001/increase-maternal-neonatal-infections-following/635/00000447>
- Mendez-Figueroa, Hector, Mary Tolcher, Alireza Abdollah Shamshirsaz, Ryan M. Pace, Derrick M. Chu, & Kjersti Aagaard. (2019). Impact of severe stress after a major natural disaster on perinatal outcomes. American Journal of Obstetrics and Gynecology, 220 S13-S14. [https://www.ajog.org/article/S0002-9378\(18\)31040-8/fulltext](https://www.ajog.org/article/S0002-9378(18)31040-8/fulltext)
- Mobley, James A., & Clara L. Rieder. (2018). San Patricio County Department of Public Health in Hurricane Harvey: Challenges and Lessons Learned. Texas Public Health Journal, 70(1), 5-6.
- Morabia, Alfredo, & Georges C. Benjamin. (2018). Preparing and Rebuilding After Natural Disasters: A New Public Health Normal! American Journal of Public Health, 108, 9-10. <https://ajph.aphapublications.org/doi/10.2105/AJPH.2017.304202>
- Morris, Sandra, Mark Miner, Tomas Rodriguez, Richard Stancil, Dana Wiltz-Beckham, & Terence Chorba. (2017). Tuberculosis Control Activities After Hurricane Harvey - Texas, 2017. Morbidity and Mortality Weekly Report, 66(49), 1362-1363. <https://www.cdc.gov/mmwr/volumes/66/wr/mm6649a5.htm>
- Nicole, Wendee. (2018). Wristbands for Research: Using Wearable Sensors to Collect Exposure Data after Hurricane Harvey. Environmental Health Perspectives, 126 1-9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6071742/>
- Olson, D. M., S. Bremault-Phillips, S. King, G. A. S. Metz, S. Montesanti, J. K. Olson, & et. al. (2019). Recent Canadian efforts to develop population-level pregnancy intervention studies to mitigate effects of natural disasters and other tragedies. Journal of developmental origins of health and disease. <https://www.ncbi.nlm.nih.gov/pubmed/30626455>
- Padmanabhan, Divya L., Varun Ayyaswami, & Arpan V. Prabhu. (2018). Harvey, Irma, and Maria-The Dermatologic Risks of Hurricanes and Floods. Jama Dermatology, 154, 187-187. <https://jamanetwork.com/journals/jamadermatology/article-abstract/2671863>
- Pines, Jesse M. (2018). Freestanding emergency department visits and disasters: The case of Hurricane Harvey. American Journal of Emergency Medicine, 36 1513-1515. [https://www.ajemjournal.com/article/S0735-6757\(18\)30016-0/abstract](https://www.ajemjournal.com/article/S0735-6757(18)30016-0/abstract)
- Price, Sean. (2017). A Flood of Problems. Texas medicine, 11(1), 22-35. <https://www.texmed.org/FloodofProblems/>

- Ratnapradipa, Dhitinut, Christine Cardinal, Kendra L. Ratnapradipa, Amanda Scarbrough, & Yue Xie. (2018). Implications of Hurricane Harvey on Environmental Public Health in Harris County, Texas. *Journal of Environmental Health*, **82**(1), 24-32. <https://www.neha.org/node/60201>
- Reed, Brian C., Michael Mac McClendon, Les Becker, & Umair Shah. (2018). Harris County Public Health's Mass Shelter Response during Hurricane Harvey. *Texas Public Health Journal*, **70**(1), 9-10. <https://www.jems.com/articles/print/volume-43/issue-3/features/preparing-for-catastrophe.html>
- Schwartz, Rebecca M., Stephanie Tuminello, Samantha M. Kerath, Janelle Rios, Wil Lieberman-Cribbin, & Emanuela Taioli. (2018). Preliminary Assessment of Hurricane Harvey Exposures and Mental Health Impact. *International Journal Of Environmental Research And Public Health*, **15**(5). <https://www.ncbi.nlm.nih.gov/pubmed/29757262>
- Sen, A., M. Ayad, S. Karanth, S. Patil, K. Luther, & B. Patel. (2018). Hurricane Harvey: Impact on ICU Admission. *American Journal of Respiratory and Critical Care Medicine*, **197**. https://www.atsjournals.org/doi/abs/10.1164/ajrccm-conference.2018.197.1_MeetingAbstracts.A6310

Disaster Medicine and Public Health Preparedness 11,3-5.
<https://www.ncbi.nlm.nih.gov/pubmed/30328403>

Upton, Lori, Thomas D. Kirsch, Melissa Harvey, & Dan

- Cushman, Ted. (2018). Lifting Slab-On-Grade Homes: Structure meets style in Houston's flood zones. *Journal of Light Construction*, 36(2), 37-43. https://www.jlconline.com/how-to/foundations/lifting-slab-on-grade-homes_o
- Diduch, Mary. (2018). After the Storm: What can last year's hurricanes teach us about preparing properties for natural disasters? *National Real Estate Investor*, 60, 35. <https://www.nreionline.com/national-real-estate-investor-magazine/october-2018-issue>
- Torres, Luis B., & Wesley Miller. (2018). Imperfect Storm. *Tierra Grande*, 26(2), 2-5. <https://www.recenter.tamu.edu/articles/tierra-grande/Imperfect-Storm>

Infra and Urbanization

- Bandaragoda, Christina. (2017). Collaborative RAPID Poster: Building Infrastructure to Prevent Disasters like Hurricane Maria. *HydroShare* <https://www.hydroshare.org/resource/0c9d72302aec43d3afc4d18637670947/>
- Cowley, Robert. (2018). Future cities: renarrating human agency. *Palgrave Communications*, 4(41). <https://www.nature.com/articles/s41599-018-0103-y>
- Crawford, P. Shane, Mohammad A. Al-Zarrad, Andrew J. Graettinger, Alexander M. Hainen, Edward Back, & Lawrence Powell. (2018). Rapid Disaster Data Dissemination and Vulnerability Assessment through Synthesis of a Web-Based Extreme Event Viewer and Deep Learning. *Advances in Civil Engineering* <https://www.hindawi.com/journals/ace/2018/7258156/abs/>
- Dennis, David. (2018). Bubble maker: Weird occurrence in the wake of Hurricane Harvey calls on Texas DOT to investigate, monitor. *Roads & Bridges*, 50(1), 40. <https://www.roadsbridges.com/bubble-maker>
- Sreetharan, Mathini, Brian Batten, & Seth Lawler. (2018). Challenges and Options for Analyzing Combined Occurrences of Storm Surge and Rainfall Runoff. *World Environmental and Water Resources Congress 2018* 501-531. <https://ascelibrary.org/doi/10.1061/9780784481400.049>
- Zhang, Wei, Gabriele Villarini, Gabriel A. Vecchi, & James A. Smith. (2018). Urbanization exacerbated the rainfall and flooding caused by hurricane Harvey in Houston. *Nature International Journal of Science*, 563(4), 384-388. <https://www.nature.com/articles/s41586-018-0676-z>

Mapping and Modeling: Flooding

- Bhandari, Ranjit, Ranjan Parajuli, Gaurav Raj Lamichhane, Ali Alyami, Ajay Kalra, Sajjad Ahmad, & Ritu Gupta. (2018). Utilizing Civil Geo-HECRAS Capabilities for Floodplain

March 20, 2019

Mapping of Colorado River in Texas during Hurricane Harvey. World Environmental and Water Resources Congress, 387-397.
<https://ascelibrary.org/doi/pdf/10.1061/9780784481400.036>

Yang, Di , Anni Yang, Han Qiu, Yao Zhou, Hannah Herrero, Chiung-Shiuan Fu, & et. al. (2019). A Citizen-Contributed GIS Approach for Evaluating the Impacts of Land Use on Hurricane-Harvey-Induced Flooding in Houston Area. *Land*, Vol 8, Iss 2, p 25 (2019), 8(2), 25. <https://www.mdpi.com/2073-445X/8/2/25>

Mapping and Modeling: Precipitation

Cheung, Kevin, Zifeng Yu, Russell L. Elsberry, Jiang Bell, Lee Haiyan, Cheung Tsz, & et. al. (2018). Recent Advances in Research and Forecasting of Tropical Cyclone Rainfall. *Tropical Cyclone Research and Review*, 7(2), 106-127. https://www.researchgate.net/publication/325657419_Recent_Advances_in_Research_and_Forecasting_of_Tropical_Cyclone_Rainfall

Gao, Shang, & Zheng Fang. (2018). Using Storm Transposition to Investigate the Relationships between Hydrologic Responses and Spatial Moments of Catchment Rainfall. *Natural Hazards Review*, 19(1). <https://ascelibrary.org/doi/10.1061/%28ASCE%29NH.1527-6996.0000304>

Kao, Shih-Chieh, Scott T. DeNeale, & David B. Watson., (2019). Hurricane Harvey highlights: Need to assess the adequacy of probable maximum precipitation estimation methods. *Journal of Hydrologic Engineering*, 24(1). <https://ascelibrary.org/doi/full/10.1061/%28ASCE%29HE.1943-5584.0001768>

Li, Zhiying, Xiao Li, Yue Wang, & Steven M. Quiring. (2019). Impact of climate change on precipitation patterns in Houston, Texas, USA. *Anthropocene*, 25, 00193. <https://www.sciencedirect.com/science/article/pii/S2213305419300049>

Milliner, Chris, Kathryn Materna, Roland Burgmann, Yuning Fu, Angelyn W. Moore, David Bekaert, & et. al. (2018). Tracking the weight of Hurricane Harvey's stormwater using GPS data. *Science Advances*, 4(9). <http://advances.sciencemag.org/content/4/9/eaau2477>

Omranian, E., H. O. Sharif, & A. A. Tavakoly. (2018). How well can Global Precipitation Measurement (GPM) capture hurricanes? Case study: Hurricane harvey. *Remote Sensing*, 10(7). <https://www.mdpi.com/2072-4292/10/7/1150>

Sarkar, Sudipta, Ramesh P. Singh, & Akshansha Chauhan. (2018). Anomalous changes in meteorological parameters along the track of 2017 Hurricane Harvey. *Remote Sensing Letters*, 9(5), 487-496. <https://www.tandfonline.com/doi/abs/10.1080/2150704X.2018.1441562?journalCode=trs120>

Talbot, Craig J., & Mustafa Samad. (2018). Hurricane Harvey Precipitation Totals and Probable Maximum Precipitation Estimates along the US Gulf Coast. *World Environmental and Water Resources Congress 2018: Groundwater, Sustainability, and Hydro*

Yang, Long, James Smith, Maofeng Liu, & Mary Lynn Baeck. (2019). Extreme rainfall from Hurricane Harvey (2017): Empirical intercomparisons of WRF simulations and polarimetric radar fields. *Atmospheric Research*, 223, 4-131.
<https://www.sciencedirect.com/science/article/pii/S0169809518314327>

Mapping, Resarch Mehods Technologyand Watr

Alford, A. Addison, Michael I Biggerstaff, Gordon D Carrie, John L Schroeder, Brian D. Hirth,
&

- King, Valerie. (2017). Geospatial Community Responds to Hurricanes Harvey, Irma, Maria. *Point of Beginning*, 4(3), 10-14. <https://www.pobonline.com/articles/101156-geospatial-community-responds-to-hurricanes-harvey-irma-maria>
- Lin, Lin, & Fuzhong Weng. (2018). Estimation of Hurricane Maximum Wind Speed Using Temperature Anomaly Derived From Advanced Technology Microwave Sounder. *IEEE Geoscience and Remote Sensing Letters*, 15(5), 639-643. <https://ieeexplore.ieee.org/document/8315447>
- Liu, Yi, & Jennifer L. Irish. (2019). Characterization and prediction of tropical cyclone forerunner surge. *Coastal Engineering*, 1474

Media

Khaund, Tuja, Kiran Kumar Bandeli, Muhammad Nihal Hussain, Adewale Obadimu, Samer Al-khateeb, & Nitin Agarwal. (2018). Analyzing Social and Communication Network Structures of Social Bots and Humans <https://www.computer.org/csdl/proceedings>

Swartz, Mimi. (2018). Troubled Waters: A Year After Harvey, Has Houston Learned Anything? Texas Monthly, 46(9), 84. <https://www.texasmonthly.com/news/harvey-anniversary-houston-preparing-next-big-storm/>

Walton, Rod. (2018). Hurricane Forces: Grid Responders Gain Insights Battling Harvey, Irma and Maria. POWERGRID International, 23(1), 18-22. https://www.elp.com/articles/powergrid_international/print/volume-23/issue-1/features/hurricane-forces.html

Winlaw, Manda, Alycia Perkins, & Allaa R. Hilal. (2018). Analysis of Driver Behavior in Times of Crisis <https://ieeexplore.ieee.org/document/8366911>

Preparedness, Response, and Relief

Coast Guard Air Station Cape Cod crew recounts Hurricane Harvey response one year later. (2018). Coast Guard News, 46(3), 52. <https://coastguardnews.com/coast-guard-air-station-cape-cod-crew>

hurricane. *Journal of Agriculture Food Systems and Community Development*, 23-33. <https://www.foodsystemsjournal.org/index.php/fsj/article/view/539>

Pan, Yang, Yan, Chi, & Archer, Cristina L. (2018). Precipitation reduction during Hurricane Harvey with simulated offshore wind farms. *Environmental Research Letters*, 13