Michael F. Wehner

Publications

In Review:

Michael Wehner (2021) Simulated changes in tropical cyclone size, accumulated cyclone energy and power dissipation index in a warmer climate. Submitted to special issue of *Oceans*.

Qing Dong, Kenneth E. Kunkel, Weiguang Wang, Boyin Huang, Jiazhong Zheng, Michael F. Wehner (2021) Sub-Daily Precipitation Extremes in China under Paris Warming Limits. To be submitted soon.

Savin S. Chand, Kevin J. E. Walsh, Suzana J. Camargo, James Kossin, Kevin J. Tory, Michael F. Wehner, Johnny C. L. Chan, Philip J. Klotzbach, Andrew J. Dowdy, Samuel S. Bell, Hamish A. Ramsay, Hiroyuki Murakami (2021) Declining numbers of tropical cyclones and global warming. Submitted to *Nature Climate Change*.

Mark D. Risser, Daniel R. Feldman, Michael F. Wehner,David W. Pierce, Daniel R. Cayan, Jeffrey R. Arnold (2021) Improving resilience to localized extreme daily precipitation events using optimized return value estimates. Submitted to the *Journal of Hydrometeorology*

T. A. O'Brien, M. F. Wehner, A. E. Payne, C. A. Shields, J. J. Rutz, L.-R. Leung, F. M. Ralph, A. Collow, B. Guan, J. M. Lora, E. McClenny, K. M. Nardi, A. M. Ramos, R. Tom´, C. Sarangi, E. Shearer, P. A. Ullrich, C. Zarzycki, B. Loring, H. Huang, H. A. Inda-D´ıaz, A. M. Rhoades, Y. Zhou (2021) Increases in Future AR Count and Size: Overview of the ARTMIP Tier 2 CMIP5/6 Experiment. In revision for *Geophysical Research Letters*

Kevin T. Smiley, Ilan Noy, Michael Wehner, Dave Frame, Christopher Sampson (2021) Inequalities in Climate Change-Fueled Flooding during Hurricane Harvey in Harris County, Texas: A climate change attribution study. Paper submitted to *2021 American Sociological Association Annual Meeting.*

Geert Jan van Oldenborgh, Robert Vautard, Friederike Otto, Sonia I. Seneviratne, Michael Wehner, Peter Stott, Gabi Hegerl, Sjoukje Philip, Sarah Kew (2020) 1 Attributing and projecting heatwaves is hard. Submitted to *Nature Climate Change*.

J. Jacob A. Huff, Kevin A. Reed, Julio B. Bacmeister and Michael F. Wehner (2020) Evaluating the Influence of CAM5 Aerosol Configuration on Simulated Tropical Cyclones in the North Atlantic. Submitted to *Advances in Atmospheric Sciences*.

Michael F. Wehner, Margaret L. Duffy, Mark Risser, Christopher J. Paciorek, Dáithí A. Stone, Pardeep Pall, Hari Krishnan (2020) On the uncertainty of long-period return

values of extreme daily precipitation. Submitted to *Advances in Statistical Climatology, Meteorology and Oceanography*.

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Federico Castillo, Armando Sanchez Vargas, J.Keith Gilless, Michael Wehner, (2021) The impact of heat waves on agricultural productivity and output. Chapter 2 in "Extreme Events and Climate Change: A Multidisciplinary Approach, Federico Castillo, Michael Wehner, Daithi Stone, editors. Wiley & Sons. ISBN: 978-1-119-41362-2

Federico Castillo, Michael Wehner, Daithi Stone, editors (2021) Extreme Events and Climate Change: A Multidisciplinary Approach. Wiley & Sons. 240 pages. ISBN: 978-1-119-41362-2

Mayur Mudigonda, Prabhat, Karthik Kashinath, Evan Racah, Ankur Mahesh, Yunjie Liu, Christopher Beckham, Jim Biard, Thorsten Kurth, Sookyung Kim, Samira Kahou, Tegan Maharaj, Burlen Loring, Christopher Pal, Travis O'Brien, Ken Kunkel, Michael F. Wehner, William D. Collins (2021) Deep Learning for Detecting Extreme Weather Patterns. In Deep Learning for the Earth Sciences. Editors: Gustau Camps-Valls, Xiang Zhu, Devis Tuia, Markus Reichstein, pp 163-185. Wiley & Sons. ISBN: 9781119646143. Expected date of publication: September 2021

Michael Wehner and Christopher Sampson (2021) Attributable human-induced changes in the magnitude of flooding in the Houston, Texas region during Hurricane Harvey. To appear in *Climatic Change.*

Alan Rhoades, Mark D Risser, Daithi A Stone, Michael F Wehner, Andrew D Jones (2021) Implications of warming on western United States landfalling atmospheric rivers and their flood damages. *Weather and Climate Extremes* 100326. https://doi.org/10.1016/j.wace.2021.100326

Chao Li, Francis Zwiers, Xuebin Zhang, Guilong Li, Ying Sun, Michael Wehner (2021) Changes in temperature and precipitation extremes in the new-generation CMIP6 models. *Journal of Climate*, , 1-61. https://journals.ametsoc.org/view/journals/clim/aop/JCLI-D-19-1013.1/JCLI-D-19-1013.1.xml

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K. A. Reed, M. F. Wehner, A. M. Stansfield and C. M. Zarzycki (2021), Anthropogenic Influence on Hurricane Dorian's Extreme Rainfall, [in "Explaining Extremes of 2019 from a Climate Perspective"]. Bull. Amer. Meteor. Soc., 102 (1), S9–S15, doi:https://doi.org/10.1175/BAMS-D-20-0160.1.

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Alan Rhoades, Andrew D. Jones, Abhishekh Srivastava, Huanping Huang, Travis A. O'Brien, Christina M. Patricola, Paul A. Ullrich, Michael Wehner, Yang Zhou (2020). The shifting scales of western U.S. landfalling atmospheric rivers under climate change. *Geophysical Research Letters*, 47, e2020GL089096. https://doi.org/10.1029/2020GL089096

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