

# Daniel M. Gilford, PhD

POSTDOCTORAL ASSOCIATE AT RUTGERS UNIVERSITY

71 Dudley Road, Suite 205, New Brunswick, NJ 08901

✉ daniel.gilford@rutgers.edu | 🌐 danielgilford.com | 🐦 @danielgilford

## Education

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### Massachusetts Institute of Technology

DOCTOR OF PHILOSOPHY (PH.D.), ATMOSPHERIC SCIENCE

Thesis: [The Tropopause Region Thermal Structure and Tropical Cyclones](#)

Cambridge, MA

2018

### The Florida State University

BACHELOR OF SCIENCE (B.S.), METEOROLOGY

Minor in Applied Mathematics; Graduated Summa Cum Laude; Cumulative GPA: 4.0

Tallahassee, FL

2012

## Professional & Teaching Experience

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2018-now	<b>Postdoctoral Associate</b> , Rutgers University, Department of Earth and Planetary Science	New Brunswick, NJ
2020-now	<b>Sea-level Scientist (part-time)</b> , Climate Central	Princeton, NJ
Spr. 2016	<b>Teaching Assistant</b> , Global Warming Science - 12.340x   MITx - EAPS Department	Cambridge, MA
Fall 2014	<b>Teaching Assistant</b> , Discover Earth Atmospheric and Planetary Sciences   MIT - EAPS Department	Cambridge, MA
2013-2015	<b>Lecturer</b> , Climate Change Science   MIT IAP - Joint Program the Science & Policy of Global Change	Cambridge, MA
Sum. 2011	<b>Hollings Scholarship Summer Intern</b> , NOAA's National Climatic Data Center (NCDC)	Asheville, NC
2010-2012	<b>Undergraduate Research Assistant</b> , Center for Ocean Atmospheric Prediction Studies	Tallahassee, FL

## Publications

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- Gilford, D. M.**, 2020: pyPI (v1.3): Tropical Cyclone Potential Intensity Calculations in Python. *Geosci. Model Dev.*, submitted Aug. 2020.
- Gilford, D. M.**, E. L. Ashe, R. E. Kopp, R. M. DeConto, D. Pollard, A. Rovere, 2019: Could the Last Interglacial Constrain Projections of Future Antarctic Ice Mass Loss and Sea-level Rise? *JGR-Earth Surface*, in press Sept. 2020.
- Hamlington, B. D., (and the NASA Sea Level Change Science Team, including **D. M. Gilford**), 2020: Understanding of Contemporary Regional Sea-level Change and the Implications for the Future. *Rev. Geophys.*, **58**, e2019RG000672.
- Shields, S., A. A. Wing, and **D. M. Gilford**, 2019: A Global Analysis of Interannual Variability of Potential and Actual Tropical Cyclone Intensities. *Geophys. Res. Lett.*, **47**, e2020GL089512.
- DeConto, R. M., Pollard, D., Alley, R. B., Velicogna, I., Gasson, E., and **D. M. Gilford**, 2019: The Paris Climate Agreement and Future Sea Level Rise from Antarctica. *Nat. Clim. Change*, in review May 2020.
- Gilford, D. M.**, S. Solomon, and K. A. Emanuel, 2019: Seasonal Cycles of Along-Track Tropical Cyclone Maximum Intensity. *Mon. Wea. Rev.*, **147**, 2417–2432.
- Gilford, D. M.**, S. Solomon, and K. A. Emanuel, 2017: On the Seasonal Cycles of Tropical Cyclone Potential Intensity. *J. Climate*, **30**, 6085–6096.
- Zickfield, K., S. Solomon, and **D. M. Gilford**, 2017: Centuries of Thermal Sea Level Rise Due to Anthropogenic Emissions of Short-Lived Greenhouse Gases. *PNAS*, **114**, 657–662.
- Gilford, D. M.**, and S. Solomon, 2016: Radiative Effects of Stratospheric Seasonal Cycles in the Tropical Upper Troposphere and Lower Stratosphere. *J. Climate*, **30**, 2769–2783.
- Gilford, D. M.**, S. Solomon, and R. W. Portmann, 2016: Radiative Impacts of the 2011 Abrupt Drops in Water Vapor and Ozone in the Tropical Tropopause Layer. *J. Climate*, **29**, 595–612.
- Gilford, D. M.**, S. R. Smith, M. L. Griffin, and A. Arguez, 2013: Southeastern United States Daily Temperature Ranges Associated with the El Niño–Southern Oscillation, *J. Appl. Meteor. and Climatol.*, **52**, 2434–2449.

## Honors & Awards

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| 2014-2016 | <b>Earth and Space Science Fellowship</b> , National Aeronautics and Space Administration             |
| 2012      | <b>AMS Graduate Fellowship</b> , American Meteorological Society                                      |
| 2010      | <b>Ernest F. Hollings Undergraduate Scholarship</b> , National Oceanic and Atmospheric Administration |

A list of scientific service, public presentations, and professional skills and training is available upon request.