
Brian Green

Postdoctoral Scholar
Department of Earth System Science
Stanford University
briangre@stanford.edu

Education

- 2012 – 2018 Massachusetts Institute of Technology
PhD, Climate Science
Advisor: John Marshall
Thesis title: “Coupling of the Intertropical Convergence Zone and the Hadley Cells to the Ocean’s Circulation”
- 2009 – 2012 Rensselaer Polytechnic Institute, Hartford, Connecticut
M.E, Mechanical Engineering
Advisor: David Tew
Master’s project: “Axisymmetric Compressor Flowpath Optimization”
- 2003 – 2007 The University of Michigan
B.S.E, Aerospace Engineering
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Research Experience

- 2020 – Postdoctoral Scholar, Stanford University
- 2018 – 2020 Postdoctoral Research Associate, The Cooperative Institute for Climate, Ocean, and Ecosystem Studies
- 2012 – 2018 Research Assistant, Massachusetts Institute of Technology
- 2008 – 2012 Engineer, Compression System Aerodynamics, Pratt and Whitney
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Awards

- 2019 Rossby Award for Best Doctoral Thesis, Program in Atmospheres, Oceans and Climate, MIT
- 2012 – 2013 Lord Foundation Fellowship
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Teaching Experience

- 2018 Guest Lecture, *ATMS 587*, Fundamentals of Climate Change (lecture topic: climate forcing)
- 2015 Teaching assistant, *MIT 12.800*, Fluid Dynamics of the Atmosphere and Ocean
- 2014 Teaching assistant, *MIT 12.003*, Introduction to Atmosphere, Ocean, and Climate Dynamics
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Research Publications

- 2020 Green, B., L. Kuntz, and D. Battisti. Attributing the shape of tropical latent heating profiles to storm structure and distribution. *In prep.*
- 2019 Lutsko, N. J., J. Marshall, and B. Green. Modulation of Monsoon Circulations by Cross-Equatorial Ocean Heat Transport. *Journal of Climate*, 32, 3471-3485, doi: 10.1175/JCLI-D-18-0623.1.
- 2019 Green, B., J. Marshall, and J.-M. Campin. The ‘sticky’ ITCZ: ocean-moderated ITCZ Shifts. *Climate Dynamics*, 53, 1-19, doi: 10.1007/s00382-019-04623-5.
- 2018 McGee, D., E. Moreno-Chamarro, B. Green, J. Marshall, E. Galbraith, and L. Bradtmiller. Hemispherically asymmetric trade wind changes as signatures of past ITCZ shifts. *Quaternary Science Reviews*, 180, 214-228, doi: 10.1016/j.quascirev.2017.11.020.

- 2017 Green, B., J. Marshall, and A. Donohoe. Twentieth century correlations between extratropical SST variability and ITCZ shifts. *Geophysical Research Letters*, 44, 9039-9047, doi: 10.1002/2017GL075044.
- 2017 Green, B., and J. Marshall. Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts. *Journal of Climate*, 30, 4395-4411, doi: 10.1175/JCLI-D-16-0818.1.
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Invited Talks

- 2020 Stanford University, *Climate, Atmosphere, and Ocean Dynamics Seminar*: Top- versus bottom-heavy tropical latent heating profiles and their attribution to storm structure and distribution
- 2018 University of Colorado, Boulder, *Jennifer Kay Group*: Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts
- 2018 University of Washington, *Atmos & Climate Dynamics Seminar*: Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts
- 2017 University at Albany (SUNY), *Climate Seminar*: Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts
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Conference Presentations

- 2019 Green, B., J. Marshall, and J.-M. Campin. The “sticky” ITCZ: ocean-moderated ITCZ shifts. *European Geosciences Union General Assembly* (oral presentation).
- 2018 Green, B., J. Marshall, D. McGee, and E. Moreno-Chamarro. The damping of ITCZ shifts by the ocean circulation through its coupling to the trade winds. *Ocean Sciences Meeting* (oral presentation).
- 2017 Green, B., J. Marshall, and A. Donohoe. Multi-Decadal Atlantic SST Variability and Shifts in the Inter-Tropical Convergence Zone. *US AMOC Science Team Meeting* (poster presentation).
- 2016 Green, B., and J. Marshall. Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts. *AGU Fall Meeting* (poster presentation).
- 2016 Green, B., and J. Marshall. Coupling of Trade Winds with Ocean Circulation Damps ITCZ Shifts. *Graduate Climate Conference* (poster presentation).
- 2014 Green, B., J. Marshall, and A. Donohoe. Connecting Multi-Decadal Ocean Variability to Shifts in the Inter-Tropical Convergence Zone. *AGU Fall Meeting* (poster presentation).
- 2014 Green, B., J. Marshall, and A. Donohoe. Multi-Decadal Ocean Variability and the Inter-Tropical Convergence Zone. *Graduate Climate Conference* (oral presentation).
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Professional Activities

- 2016 Co-organizer, “Tropical circulations and their sensitivities to changes in climate” session, *AGU Fall Meeting*.
- 2015 Co-organizer in charge of reviewing abstract submissions, *Graduate Climate Conference*.
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