## JONATHAN M. WINTER

#### CONTACT INFORMATION

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#### **EDUCATION**

Ph.D. Massachusetts Institute of Technology, Cambridge, MA

Civil and Environmental Engineering, 2010

M.S. Massachusetts Institute of Technology, Cambridge, MA

Civil and Environmental Engineering, 2006

B.S. SUNY College of Environmental Science and Forestry, Syracuse, NY

Environmental Resources Engineering, 2003

### APPOINTMENTS

07/2013-Present	Dartmouth College, Department of Geography Assistant Professor	Hanover, NH
09/2014-Present	Dartmouth College, Department of Earth Sciences Adjunct Assistant Professor	Hanover, NH
03/2012 – 06/2013	Columbia University Earth Institute Associate Research Scientist	New York, NY
03/2010 – 02/2012	NASA Goddard Institute for Space Studies Postdoctoral Fellow, Advisor: Cynthia E. Rosenzweig	New York, NY

# Publications (¶undergraduate, \*graduate, §postdoctoral advisee)

- 30. **J.M.** Winter, H. Huang\*, E.C. Osterberg, and J.S. Mankin. Anthropogenic Impacts on the Exceptional Precipitation of 2018 in the Mid-Atlantic United States. *Bulletin of the American Meteorological Society*, in press.
- 29. H. Huang\*, **J.M. Winter**, E.C. Osterberg, J. Hanrahan, C.L. Bruyère, P.J. Clemins, and B. Beckage: Simulating precipitation and temperature in the Lake Champlain Basin using a regional climate model: limitations and uncertainties. *Climate Dynamics*, in press, doi.org/10.1007/s00382-019-04987-8.

- 28. T.F. Partridge\*, **J.M. Winter**, L. Liu, A.D. Kendall, B. Basso, and D.W. Hyndman, 2019: Mid-20<sup>th</sup> century warming hole boosts US maize yields. *Environmental Research Letters*, 14, 114008.
- 27. D. Wallace, V. Ratti, A. Kodali, **J.M. Winter**, M.P. Ayres, J.W. Chipman, C.F. Aoki, E.C. Osterberg, C. Silvanic, T.F. Partridge\*, and M.J. Webb<sup>¶</sup>, 2019: Effect of Rising Temperature on Lyme Disease: *Ixodes scapularis* Population Dynamics and *Borrelia burgdorferi* Transmission and Prevalence. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 9817930, 1-15.
- 26. E.D. Coffel<sup>§</sup>, R.M. Horton, **J.M. Winter**, and J.S. Mankin, 2019: Nonlinear increases in extreme temperatures paradoxically dampen increases in extreme humid-heat. *Environmental Research Letters*, 14, 084003.
- 25. P.J. Clemins, G. Bucini, **J.M. Winter**, B. Beckage, E. Towler, A. Betts, R. Cummings, and H.C. Queiroz, 2019: An Analog Approach for Weather Estimation Using Climate Change Projections and Reanalysis Data. *Journal of Applied Meteorology and Climatology*, 58, 1763-1777.
- 24. **J.M. Winter**, F.L. Bowen, T.F. Partridge, and J.W. Chipman, 2019: Future Extreme Event Risk in the Rural Northeastern United States. *Annals of the American Association of Geographers*, 109, 1110-1130.
- 23. S.A. Spera<sup>§</sup>, **J.M. Winter**, and J.W. Chipman, 2018: Evaluation of Agricultural Land Cover Representations on Regional Climate Model Simulations in the Brazilian Cerrado. *Journal of Geophysical Research Atmospheres*, 123, 5163-5176.
- 22. H. Huang\*, J.M. Winter, and E.C. Osterberg, 2018: Mechanisms of Abrupt Extreme Precipitation Change Over the Northeastern United States. *Journal of Geophysical Research Atmospheres*, 123, 7179-7192.
- 21. V.K. Mehta, C. Young, S.R. Bresney, D.S. Spivak, and **J.M. Winter**, 2018: How can we support the development of robust groundwater sustainability plans? *California Agriculture*, 72, 54-64.
- 20. T.F. Partridge\*, **J.M. Winter**, E.C. Osterberg, D.W. Hyndman, A.D. Kendall, and F.J. Magilligan, 2018: Spatially Distinct Seasonal Patterns and Forcings of the U.S. Warming Hole. *Geophysical Research Letters*, 45, 2055-2063.
- 19. B. Beckage, L.J. Gross, K. Lacasse, E. Carr, S.S. Metcalf, **J.M. Winter**, P.D. Howe, N. Fefferman, A. Zia, T. Frank, A. Kinzig, and F.M. Hoffman, 2018: Linking models of human behaviour and climate alters projected climate change. *Nature Climate Change*, 8, 79-84.
- 18. R.E. Alter<sup>§</sup>, H.C. Douglas, **J.M. Winter**, and E.A.B. Eltahir, 2018: Twentieth Century Regional Climate Change During the Summer in the Central United States Attributed to Agricultural Intensification. *Geophysical Research Letters*, 45, 1586-1594.
- 17. S. McDermid and **J.M. Winter**, 2017: Anthropogenic forcings on the climate of the Aral Sea: A regional modeling perspective. *Anthropocene*, 20, 48-60.
- 16. **J.M. Winter**, C.A. Young, V.K. Mehta, A.C. Ruane, M. Azarderakhsh, A. Davitt, K. McDonald, V.R. Haden, and C. Rosenzweig, 2017: Integrating water supply constraints into irrigated agricultural simulations of California. *Environmental Modelling and Software*, 96, 335-346.

- 15. H. Huang\*, **J.M. Winter**, E.C. Osterberg, R.M. Horton, and B. Beckage, 2017: Total and Extreme Precipitation Changes over the Northeastern United States. *Journal of Hydrometeorology*, 18, 1783-1798.
- 14. **J.M. Winter**, J.R. Lopez<sup>§</sup>, A.C. Ruane, C.A. Young, B.R. Scanlon, and C. Rosenzweig, 2017: Representing water scarcity in future agricultural assessments. *Anthropocene*, 18, 15-26.
- 13. J.R. Lopez<sup>§</sup>, **J.M.Winter**, J. Elliott, A.C. Ruane, C. Porter, and G. Hoogenboom, 2017: Integrating growth stage deficit irrigation into a process based crop model. *Agricultural and Forest Meteorology*, 243, 84-92.
- 12. A. Zia, A. Bomblies, A.W. Schroth, C. Koliba, P.D.F. Isles, Y. Tsai, I.N. Mohammed, G. Bucini, P.J. Clemins, S. Turnbull, M. Rodgers, A. Hamed, B. Beckage, **J.M. Winter**, C. Adair, G.L. Galford, D. Rizzo, and J. Van Houten, 2016: Coupled impacts of climate and land use change across a river-lake continuum: insights from an integrated assessment model of Lake Champlain's Missisquoi Basin, 2000-2040. *Environmental Research Letters*, 11, 114026.
- 11. **J.M. Winter**, B. Beckage, G. Bucini, R.M. Horton, and P.J. Clemins, 2016: Development and Evaluation of High-Resolution Climate Simulations over the Mountainous Northeastern United States. *Journal of Hydrometeorology*, 17, 881-896.
- 10. R.M. Horton, E.D. Coffel, **J.M. Winter**, and D.A. Bader, 2015: Projected changes in extreme temperature events based on the NARCCAP model suite. *Geophysical Research Letters*, 42, 7722-7731.
- 9. **J.M.** Winter, P.J.F. Yeh, X. Fu, and E.A.B. Eltahir, 2015: Uncertainty in modeled and observed climate change impacts on American Midwest hydrology. *Water Resources Research*, 51, 3635-3646.
- 8. A.C. Ruane, **J.M. Winter**, S. McDermid, and N.I. Hudson, 2015: "AgMIP Climate Data and Scenarios for Integrated Assessment", in *Handbook of Climate Change and Agroecosystems: The Agricultural Model Intercomparison and Improvement Project (AgMIP) Integrated Crop and Economic Assessments.* C. Rosenzweig and D. Hillel, Eds., Imperial College Press.
- 7. J. Guilbert, B. Beckage, **J.M. Winter**, R.M. Horton, T. Perkins, and A. Bomblies, 2014: Impacts of Projected Climate Change over the Lake Champlain Basin in Vermont. *Journal of Applied Meteorology and Climatology*, 53, 1861-1875.
- 6. C. Rosenzweig, J.W. Jones, J.L. Hatfield, A.C. Ruane, K.J. Boote, P. Thorburn, J.M. Antle, G.C. Nelson, C. Porter, S. Janssen, S. Asseng, B. Basso, F. Ewert, D. Wallach, G. Baigorria, and J.M. Winter, 2013: The Agricultural Model Intercomparison and Improvement Project (AgMIP): Protocols and pilot studies. *Agricultural and Forest Meteorology*, 170, 166-182.
- 5. **J.M.** Winter and E.A.B. Eltahir, 2012: Modeling the hydroclimatology of the midwestern United States. Part 1: current climate. *Climate Dynamics*, 38, 573-593.
- 4. **J.M. Winter** and E.A.B. Eltahir, 2012: Modeling the hydroclimatology of the midwestern United States. Part 2: future climate. *Climate Dynamics*, 38, 595-611.
- 3. **J.M. Winter** and E.A.B. Eltahir, 2010: The Sensitivity of Latent Heat Flux to Changes in the Radiative Forcing: A Framework for Comparing Models and Observations. *Journal of Climate*, 23, 2345-2356.

- 2. **J.M. Winter**, J.S. Pal, and E.A.B. Eltahir, 2009: Coupling of Integrated Biosphere Simulator to Regional Climate Model Version 3. *Journal of Climate*, 22, 2743-2757.
- 1. J.S. Pal, F. Giorgi, X. Bi, N. Elguindi, F. Solmon, X. Gao, S.A. Rauscher, R. Francisco, A. Zakey, **J.M. Winter**, M. Ashfaq, F.S. Syed, J.L. Bell, N.S. Diffenbaugh, J. Karmacharya, A. Konaré, D. Martinez, R.P. Da Rocha, L.C. Sloan, and A.L. Steiner, 2007: Regional Climate Modeling for the Developing World: The ICTP RegCM3 and RegCNET. *Bulletin of the American Meteorological Society*, 88, 1395-1409.

FUNDING 06/2019 - 05/2024CAREER: Predicting Climate Impacts on Irrigated Agriculture in the United States through Integrated Modeling and Remote Sensing NSF BCS 1848018, Principal Investigator 07/2018 - 06/2023INFEWS/T1: Developing Pathways Toward Sustainable Irrigation across the United States Using Process-based Systems Models (SIRUS) NSF/USDA NIFA 2018-67003-27406, Co-Principal Investigator EPSCoR RII Track-1: Lake Champlain Basin Resilience to Extreme Events 07/2016-06/2021NSF OIA 1556770, Co-Principal Investigator 03/2015 - 02/2020Developing and Promoting Water-, Nutrient-, and Climate-Smart Technologies to Help Agricultural Systems Adapt to Climate and Societal Changes USDA NIFA 2015-68007-23133, Co-Principal Investigator Evaluating the Sustainability of Irrigated Agricultural Production in the United 06/2018 - 12/2019Rockefeller Faculty Research Grant, Principal Investigator 09/2016 - 12/2018Expansion of Lyme Disease in the Northeast: Climate, Land Use, and Ticks Neukom CompX Faculty Grant, Principal Investigator 06/2012 - 09/2016Adaptation Planning for Climate Change Impacts using Advanced Decision Support and Remote Sensing: Irrigated Agriculture in California's Central Valley NASA NNH11ZDA001N-WATER, Co-Principal Investigator 12/2014 - 08/2016Research on Adaptation to Climate Change in the Lake Champlain Basin: New Understanding through Complex Systems Modeling NSF EPS 1101317, Co-Principal Investigator 01/2013 - 06/2014The Agricultural Productivity Indicator Analysis System (APIAS): Tracking the Agricultural Impacts of Climate Variability and Change NASA NNH12ZDA001N-INCA, Participant Columbia University Support to Vermont EPSCoR - Building Statistical and 06/2012 - 05/2014Dynamical Downscaling Capacity at the University of Vermont University of Vermont, Principal Investigator

02/2013-04/2013 AgMIP-ERS Workshop: Integrating Water Scarcity into Future Agricultural Assessments
USDA-ERS, Co-Principal Investigator

03/2012-02/2013 A Proposal to the Department of the Interior to Establish the Northeast Climate Science Center (NECSC)
DOI G11AS20014, Participant

03/2010-02/2012 Climate Change and Agriculture: Predicting the Impacts of Precipitation and Temperature Extremes
NASA Postdoctoral Program, Principal Investigator

#### TEACHING

# GEOG 9 Climate Change and the Future of Agriculture WI14, WI15, WI16, WI17, WI18, WI19

Mid-level course on the global agricultural system under changing climate. Integrates the use of a simple statistical crop production model to explore climate impacts on yields. Average enrollment: 35

#### GEOG 5 Global Climate Change SP14, SP15, SP16, SP18, SP19

Mid-level course surveying the physical science of global climate change. Incorporates analysis of global climate model data and greenhouse gas emissions reduction simulations to assess Earth's changing climate and potential adaptation and mitigation strategies. Average enrollment: 35

#### GEOG 7 Thirsty Planet WI16, WI18, WI19

First-year writing seminar that introduces water scarcity and management through the reading of scientific and popular press, and writing of a review article suitable for publication in a scientific journal and an opinion editorial. Average enrollment: 16

#### MENTORING

#### Undergraduate Sonia Eckstein 11/2019-Present

Predicting Climate Impacts on US Irrigated Agriculture Research Assistant, WISP Intern

## Abigail Chamberlin 06/2019-Present

Climate Change Impacts on Midwestern US Agriculture Research Assistant

Madeline Kroot 09/2018–06/2019

Trees, Towers, and Energy Transitions: A Political Ecology of the Northern Pass Project

Senior Honors Thesis Committee

Climate, Glaciers, and Agriculture in Chile's Aconcagua River Basin Climate Effects on Lyme Disease Expansion in New England Presidential Scholar, Senior Honors Thesis Advisor Eliza Dekker 06/2017 - 06/2018Climate Effects on Lyme Disease Expansion in New England Junior Research Scholar Fiona Bowen 01/2015 - 12/2017CMIP5 Projections of Climate Change over the Northeastern US WISP Intern, Sophomore Research Scholar, Presidential Scholar Jessica Jones 07/2016-12/2017Climate Change Impacts on Midwestern US Agriculture Research Assistant Andrew Crutchfield 07/2016-06/2017Climate Change Impacts on Midwestern US Agriculture Research Assistant Eliza Hoffman 07/2016 - 03/2017Improving Crop Model Simulations of Plant Water Use Research Assistant Nathan Lin 09/2015-12/2016Climate Change Impacts on Agriculture over Central America Research Assistant Evan Curhan 09/2013-06/2014CMIP5 Projections of Climate Change over the Northeastern US Research Assistant Graduate Charlotte Cockburn, Expected M.S. 2021 09/2019-Present Advisor, Climate Change in the Northeastern US Trevor Partridge, Expected Ph.D. 2021 09/2016-Present Advisor, Climate Impacts on Central US Agriculture 09/2014 - 08/2019Huanping Huang, Ph.D. 2019 Advisor, Precipitation Change in the Northeastern US Catherine Nikiel, Expected Ph.D. 2021 09/2018-Present Committee, Massachusetts Institute of Technology Colin Raymond, Ph.D. 2019 09/2018-06/2019Committee, Columbia University Postdoctoral Ethan Coffel 09/2018-Present Extreme Event Impacts on Society, Neukom Fellow Stephanie Spera 09/2016-12/2018Landuse Effects on Climate over Brazil, Neukom Fellow

09/2016-06/2018

Mariana Webb

Jose Lopez 01/2016 - 05/2018

Water Supply Constraints on US Irrigated Agriculture

Ross Alter 09/2014 - 08/2016

Impacts of Agriculture on Midwestern US Climate

#### Honors and Awards

2019	NSF CAREER	
2019	AAG John Russell Mather Paper of the Year	
2017	UN Climate Change Conference Observer Delegation	
2010 – 2012	NASA Postdoctoral Program Fellowship	
2005	Martin Family Fellowship	
2004, 2005	International Centre for Theoretical Physics Fellowship	
2003-2004	Linden Earth Systems Fellowship	
2003	SUNY-ESF Valedictorian, Class of 2003	

#### SERVICE AND OUTREACH

Article Reviewer Hydrological Processes, Geophysical Research Letters, Nature Communications,

Anthropocene, Nature, Physical Geography, Advances in Atmospheric Sciences, Climate Dynamics, Climatic Change, Hydrology and Earth System Sciences, Journal of Geophysical Research - Atmospheres, Journal of Hydrometeorology, Meteorology and Atmospheric Physics, Journal of Hydrology: Regional Studies

Session Convener American Geophysical Union Fall Meeting: 12 December 2018, 13 December

> 2017, 16 December 2016, 14 December 2015, 19 December 2014, 16 December 2014, 12 December 2013, 11 December 2013, 4 December 2012, 5 December 2011, 15 December 2010; American Association of Geographers Annual Meet-

ing: 3 April 2019, 10 April 2018, 7 April 2017

Proposal Reviewer NSF Geography: 26–27 September 2019, NSF Environmental Sustainability:

2 April 2018, NSF Hydrological Sciences: 7 January 2018, NSF Geography: 12 April 2017, NSF Geography: 29 October 2015, NASA New Investigator

Program Terrestrial: 12–13 February 2014

American Association of Geographers, American Geophysical Union, American Society Member

Meteorological Society, American Society of Agronomy, American Association

for the Advancement of Science

Dartmouth Lead development of Climate Change Science Minor (2018–Present)

Council on Computing (2016–2019)

Participated in Irving Institute for Energy and Society discussions (2015–2016) Contributed to Dartmouth's University Corporation for Atmospheric Research

membership application (2014–2015)

Geography Assist with Geography Major redesign (2018–Present)

Co-organized departmental seminar (2017–2018)

Global Change Assistant Professor search committee (2016–2017)

Co-led Visiting Assistant Professor search (2015–2016)

Physical Geography Postdoctoral Scholar search committee (2014–2015)

Speaker/Lecturer

Geisel Physicians for Human Rights Conference: 12 January 2019 Office of Sustainability - A Deeper Shade of Green: 8 February 2018 Dartmouth Political Times Climate Change Panel: 1 November 2017

Salt Hill Science Pub: 26 October 2017

Osher/Montshire Climate Science and Implications Course: 16 October 2017

Big Green Dreams Renewable Energy Forum: 15 April 2016

New Hampshire Association of Conservation Districts: 1 December 2014

Institute for Lifelong Education at Dartmouth: 9 April 2014 Dartmouth Council on Climate Change: 14 October 2014

Upper Valley Sierra Club: 12 November 2013

Climate Science Day Representative: 27 February 2013

Press

Seed Today: 15 November 2019; Climatewire: 17 May 2019; UNDRR PreventionWeb: 15 May 2019; NBC 5: 18 September 2018; VPR: 16 August 2018; Valley News: 6 August 2018; NHPR: 2 August 2018; The New York Times: 16 March 2018; WOJB: 28 February 2018; Forbes: 20 February 2018; Winnipeg Free Press: 18 February 2018; Science: 16 February 2018; Los Angeles Times: 15 February 2018; McClatchy: 15 February 2018; The Briefing Powered by Dartmouth: 20 September 2017; NHPR: 7 September 2017; The Briefing Powered by Dartmouth: 24 July 2017; The Times Argus: 3 June 2017; Valley News: 21 June 2017; Associated Press: 21 June 2017; NHPR: 30 May 2017; Concord Monitor: 29 May 2017; Union Leader: 25 May 2017; NECN: 24 May 2017; WUWM: 19 May 2015

## Presentations (¶undergraduate, \*graduate, §postdoctoral advisee)

- 67. **J.M. Winter** and T.F. Partridge\* (Invited): Spatially Distinct Seasonal Patterns and Forcings of the US Warming Hole. Northern Vermont University-Lyndon, Lyndon, USA, 24 October 2019.
- 66. J.M. Winter, H. Huang\*, and E.C. Osterberg (Invited): Mechanisms of Extreme Precipitation Change Over the Northeast. NOAA Climate Services and the Northeast Regional Climate Center, Webinar, 10 September 2019.
- 65. **J.M. Winter**, H. Huang\*, and B. Beckage: Climate Contribution to Basin Resilience to Extreme Events Research. Vermont EPSCoR NSF Site Visit, Burlington, USA, 4 September 2019.
- 64. **J.M. Winter**, B. Beckage, P.J. Clemins, J. Hanrahan, M. Holthuijzen, H. Huang\*, and C. Crossett: Climate Team Overview and Progress. Vermont EPSCoR Annual Meeting, Burlington, USA, 4 June 2019.
- 63. **J.M. Winter**, T.F. Partridge\*, J.W. Chipman, and F.L. Bowen¶ (Invited): Future Extreme Event Risk in the Rural Northeastern United States. American Association of Geographers Annual Meeting, Washington, DC, USA, 4 April 2019.

- 62. S.A. Spera<sup>§</sup> and **J.M. Winter**: Tradeoffs Between Land-Management and Regional Climate in the Brazilian Cerrado. American Association of Geographers Annual Meeting, Washington, DC, USA, 3 April 2019.
- 61. **J.M. Winter**, H. Huang\*, and E.C. Osterberg: Mechanisms of Abrupt Extreme Precipitation Change Over the Northeastern United States. American Association of Geographers Annual Meeting, Washington, DC, USA, 3 April 2019.
- 60. **J.M. Winter**, H. Huang\*, E.C. Osterberg, B. Beckage, and J. Hanrahan (Invited): Simulating Future Climate in the Lake Champlain Basin: Methods, Limitations, and Uncertainties. International Joint Commission Climate Risk Workshop, Montreal, Canada, 19 March 2019.
- 59. H. Huang\*, **J.M. Winter**, and E.C. Osterberg (Invited): Assessing Extreme Precipitation Changes and Mechanisms over the Northeastern United States. Lawrence Berkeley National Laboratory, Berkeley, USA, 15 January 2019.
- 58. T.F. Partridge\*, **J.M. Winter**, E.C. Osterberg, D.W. Hyndman, B. Basso, and A.D. Kendall: The Impacts of the U.S. Warming Hole on Agricultural Yields. American Geophysical Union Fall Meeting, Washington, DC, USA, 14 December 2018.
- 57. **J.M. Winter**, T.F. Partridge\*, D. Wallace, E.R. Dekker<sup>¶</sup>, J.W. Chipman, and M.P. Ayres: The Sensitivity of Lyme Disease to Climate and Land Cover in the Northeastern United States. American Geophysical Union Fall Meeting, Washington, DC, USA, 11 December 2018.
- 56. J.A. Langlois, L.A. Cornell, J. Hanrahan, **J.M. Winter**, H. Huang\*, and C.L. Bruyère: Examining the Impact of Great Lakes' Temperature Perturbations on Simulated Downwind Precipitation. American Geophysical Union Fall Meeting, Washington, DC, USA, 11 December 2018.
- 55. S.A. Spera<sup>§</sup> and **J.M. Winter**: Tradeoffs Between Land-Management and Regional Climate in the Brazilian Cerrado. American Geophysical Union Fall Meeting, Washington, DC, USA, 11 December 2018.
- 54. F.M. Hoffman, B. Beckage, L.J. Gross, K. Lacasse, E. Carr, S.S. Metcalf, **J.M. Winter**, P.D. Howe, N. Fefferman, T. Frank, A. Zia, and A. Kinzig: Linking models of human behavior and climate alters projected climate change. American Geophysical Union Fall Meeting, Washington, DC, USA, 11 December 2018.
- 53. E. Coffel<sup>§</sup>, J.S. Mankin, **J.M. Winter**, and R.M. Horton: Future hottest day per year poses a humid-heat stress risk despite being amplified by land surface drying. American Geophysical Union Fall Meeting, Washington, DC, USA, 10 December 2018.
- 52. H. Huang\*, J.M. Winter, J. Hanrahan, C.L. Bruyère, P.J. Clemins, and B. Beckage: Simulating Extreme Precipitation in the Lake Champlain Basin using a Regional Climate Model: Limitations and Uncertainties. American Geophysical Union Fall Meeting, Washington, DC, USA, 11 December 2018.
- 51. S.A. Spera<sup>§</sup> and **J.M. Winter** (Invited): Setting Up a Regional Climate Model over Brazil: Practices and Pitfalls. Northern Vermont University, Lyndon, USA, 25 October 2018.
- 50. **J.M.** Winter, B. Beckage, P. Clemins, J. Hanrahan, M. Holthuijzen, H. Huang\*, and C. Crossett: Climate Team Overview and Progress. Vermont EPSCoR Annual Meeting, Burlington, USA, 12 June 2018.

- 49. **J.M.** Winter and J.R. Lopez<sup>§</sup>: Sustainable Water Use Impacts on US Irrigated Agriculture. American Association of Geographers Annual Meeting, New Orleans, USA, 10 April 2018.
- 48. **J.M. Winter**, H. Huang\*, and B. Beckage: Climate Contribution to Basin Resilience to Extreme Events Research. Vermont EPSCoR NSF Reverse Site Visit, Washington DC, USA, 19 March 2018.
- 47. A. Davitt, **J.M. Winter**, K.C. McDonald, V.M. Escobar, and N. Steiner: A blended approach to analyze staple and high-value crops using remote sensing with radiative transfer and crop models. American Geophysical Union Fall Meeting, New Orleans, USA, 14 December 2017.
- 46. J.S. Hecht, A.Zia, B. Beckage, **J.M. Winter**, A.W. Schroth, A. Bomblies, P.J. Clemins, and D.M. Rizzo: Effects of changes in climate variability and extremes on the exceedance of critical algal bloom thresholds. American Geophysical Union Fall Meeting, New Orleans, USA, 14 December 2017.
- 45. T.F. Partridge\*, **J.M. Winter**, E.C. Osterberg, F.J. Magilligan, D.W. Hyndman, and A.D. Kendall: Characterizing the Seasonality and Spatiotemporal Evolution of the U.S. Warming Hole. American Geophysical Union Fall Meeting, New Orleans, USA, 14 December 2017.
- 44. H. Huang\*, **J.M. Winter**, and E.C. Osterberg: Mechanisms of the Extreme Precipitation Jump in the Northeastern United States after 1996. American Geophysical Union Fall Meeting, New Orleans, USA, 14 December 2017.
- 43. J.R. Lopez<sup>§</sup>, **J.M. Winter**, J. Elliott, and A.C. Ruane: Evaluating Gridded Crop Model Simulations of Evapotranspiration and Irrigation Using Survey and Remotely Sensed Data. American Geophysical Union Fall Meeting, New Orleans, USA, 14 December 2017.
- 42. **J.M.** Winter, F.L. Bowen, J.W. Chipman, and T.F. Partridge\*: Future Extreme Event Vulnerability in the Rural Northeastern United States. American Geophysical Union Fall Meeting, New Orleans, USA, 11 December 2017.
- 41. **J.M.** Winter, H. Huang\*, and E.C. Osterberg (Invited): Total and Extreme Precipitation Changes over the Northeastern United States. NOAA NWS Northeast River Forecast Center, Norton, USA, 29 November 2017.
- 40. T.F. Partridge\*, **J.M. Winter**, E.C. Osterberg, F.J. Magilligan, D.W. Hyndman, and A.D. Kendall: Characterizing the Seasonality and Spatiotemporal Evolution of the U.S. Warming Hole. Graduate Climate Conference, Woods Hole, USA, 11 November 2017.
- 39. J.R. Lopez<sup>§</sup>, **J.M. Winter**, J. Elliott, and A.C. Ruane: Understanding the Impact of Sustainable Water Use on US Irrigated Agriculture. ASA, CSSA, SSSA International Annual Meeting, Tampa, USA. 23 October 2017.
- 38. S.A. Spera<sup>§</sup> and **J.M. Winter** (Invited): Sacrifice Zone or Sustainable Agricultural Powerhouse: The Brazilian Cerrado. Bates College, Lewiston, USA, 19 September 2017.
- 37. **J.M.** Winter, B. Beckage, H. Huang\*, and P. Clemins: Climate Change Projections for the Lake Champlain Basin. Vermont EPSCoR Annual Meeting, Burlington, USA, 06 June 2017.
- 36. J.R. Lopez<sup>§</sup> and **J.M. Winter** (Invited): Maximizing Crop Yield in Water Limited Areas through Breeding and Irrigation Scheduling. University of Arizona, Tucson, USA, 15 May 2017.

- 35. **J.M. Winter**, H. Huang\*, and E.C. Osterberg: Total and Extreme Precipitation Changes over the Northeastern United States. American Association of Geographers Annual Meeting, Boston, USA, 7 April 2017.
- 34. **J.M. Winter**, G. Bucini, P. Clemins, and B. Beckage: Spatially and Physically Consistent Weather Estimation using Bias-Corrected Climate Simulations and Reanalysis Analogs. American Geophysical Union Fall Meeting, San Francisco, USA, 15 December 2016.
- 33. H. Huang\*, **J.M. Winter**, E.C. Osterberg, R.M. Horton, and B. Beckage: Total and Extreme Precipitation Changes over the Northeastern United States. American Geophysical Union Fall Meeting, San Francisco, USA, 12 December 2016.
- 32. J.R. Lopez<sup>§</sup>, **J.M. Winter**, J. Elliott, and A.C. Ruane: Potential of Deficit Irrigation As a Water Conservation Strategy in Water Limited Areas. ASA, CSSA, SSSA International Annual Meeting, San Antonio, USA. 9 November 2016.
- 31. S.A. Spera<sup>§</sup> and **J.M. Winter** (Invited): Land-Use Change and Its Effects on Regional Climate in the Brazilian Cerrado. Lyndon State College, Lyndon, USA, 29 September 2016.
- 30. **J.M. Winter**, B. Beckage, G. Bucini, R.M. Horton, and J. Guilbert: Climate Change Scenarios for Lake Champlain Basin Impacts Assessments. Vermont EPSCoR Annual Meeting, Burlington, USA, 6 February 2016.
- 29. J.M. Winter, C.A. Young, V.K. Mehta, V.R. Haden, A.C. Ruane, and C. Rosenzweig: Climate Impacts on Irrigated Agriculture in California's Central Valley. American Geophysical Union Fall Meeting, San Francisco, USA, 14 December 2015.
- 28. **J.M. Winter**, A.C. Ruane, and C. Rosenzweig (Invited): AgMIP Water: Integrating Water Scarcity into Future Agricultural Assessments. American Society of Agricultural and Biological Engineers 1<sup>st</sup> Climate Change Symposium, Chicago, USA, 05 May 2015.
- 27. J.M. Winter, G. Bucini, and B. Beckage: Very High Resolution Climate Change Projections for Hydrologic Impacts Assessments over the Lake Champlain Basin in Vermont. American Association of Geographers Annual Meeting, Chicago, USA, 23 April 2015.
- 26. J.M. Winter, C. Rosenzweig, A.C. Ruane, D. Purkey, C. Young, D. Yates, V. Mehta, C.J. Vörösmarty, K. McDonald, and M. Azarderakhsh: Adaptation Planning for Climate Change Impacts using Advanced Decision Support and Remote Sensing: Irrigated Agriculture in California's Central Valley. NASA Applied Sciences Program Water Resources Meeting, Greenbelt, USA, 03 March 2015.
- 25. A.C. Ruane, **J.M. Winter**, S. McDermid, R. Valdivia, and D. Cammarano (Invited): Introduction to the Agricultural Model Intercomparison and Improvement Project (AgMIP). AgMIP Global Workshop, Gainesville, USA, 25 February 2015.
- 24. **J.M. Winter**, B. Beckage, and G. Bucini: Very High Resolution Climate Change Projections for Hydrologic Impacts Assessments over the Lake Champlain Basin in Vermont. American Geophysical Union Fall Meeting, San Francisco, USA, 17 December 2014.
- 23. **J.M. Winter**, B. Beckage, G. Bucini, and P. Clemins: Climate Change Projections for the Lake Champlain Basin. Vermont EPSCoR Annual Meeting, Burlington, USA, 05 August 2014.

- 22. J.M. Winter, C. Young, M. Azarderakhsh, A.C. Ruane, and C. Rosenzweig (Invited): Climate Change Impacts on Water Resources and Irrigated Agriculture in the Central Valley of California. NASA and California Department of Water Resources Remote Sensing for Drought Monitoring and Response Workshop, Sacramento, USA, 25 February 2014.
- 21. **J.M. Winter**, C. Young, M. Azarderakhsh, A.C. Ruane, and C. Rosenzweig: Climate Change Impacts on Water Resources and Irrigated Agriculture in the Central Valley of California. American Geophysical Union Fall Meeting, San Francisco, USA, 12 December 2013.
- 20. **J.M.** Winter, C. Rosenzweig, A.C. Ruane, C. Young, and B.M. Fekete (Invited): AgMIP Water: Integrating Water Scarcity into Future Agricultural Assessments. AgMIP Global Workshop, New York, USA, 28 October 2013.
- 19. J.M. Winter, C. Rosenzweig, A.C. Ruane, D. Purkey, C. Young, D. Yates, C.J. Vörösmarty, K. McDonald, and B.M. Fekete: Adaptation Planning for Climate Change Impacts using Advanced Decision Support and Remote Sensing: Irrigated Agriculture in California's Central Valley. NASA Applied Sciences Program Water Resources Meeting, Lincoln, USA, 24 September 2013.
- 18. J.M. Winter, B. Beckage, J. Guilbert, and G. Bucini: Climate Change Projections for the Lake Champlain Basin. Vermont EPSCoR Annual Meeting, Burlington, USA, 16 May 2013.
- 17. J.M. Winter, B.M. Fekete, A.C. Ruane, and C. Rosenzweig: Adaptation Planning for Climate Change Impacts on Irrigated Agriculture in California. American Geophysical Union Fall Meeting, San Francisco, USA, 06 December 2012.
- 16. J.M. Winter, A.C. Ruane, and C. Rosenzweig (Invited): Climate Information for the Impacts Community: The Agricultural Model Intercomparison and Improvement Project (AgMIP). IS-ENES Workshop on Statistical Downscaling for the Impacts Community, Paris, France, 16 October 2012.
- 15. **J.M. Winter** (Invited): Climate Scenario Generation for the Tempisque River Basin: Mean, Variability, and Extremes. Tempisque Water Sustainability Workshop, Palo Verde, Costa Rica, 25 April 2012.
- 14. **J.M.** Winter, A.C. Ruane, C. Rosenzweig, J.W. Jones, and J.L. Hatfield (Invited): The Agricultural Model Intercomparison and Improvement Project (AgMIP): Progress and Preliminary Results. International Research Institute for Climate and Society Seminar, Palisades, USA, 15 April 2012.
- 13. **J.M. Winter**, A.C. Ruane, and C. Rosenzweig: Predicting the Impacts of Climate Change on Central American Agriculture. American Geophysical Union Fall Meeting, San Francisco, USA, 05 December 2011.
- 12. **J.M. Winter**, A.C. Ruane, and C. Rosenzweig (Invited): The Agricultural Model Intercomparison and Improvement Project (AgMIP): Building a Framework to Assess World Food Security. CORDEX Africa Analysis Workshop, Cape Town, South Africa, 04 July 2011.
- 11. **J.M. Winter**, A.C. Ruane, and C. Rosenzweig (Invited): The Agricultural Model Intercomparison and Improvement Project (AgMIP): Building a Framework to Assess World Food Security. USAID Adaptation Partnerships Workshop, Dakar, Senegal, 29 June 2011.
- 10. **J.M. Winter**, E.A.B. Eltahir, C. Rosenzweig, and A.C. Ruane (Invited): Predicting the Regional Impacts of Climate Change on Agricultural Areas. Boston University, Boston, USA, 14 March 2011.

- 9. **J.M. Winter**, A.C. Ruane, R.M. Horton, and C. Rosenzweig: Integrating NASA Models and Missions into Central American Agricultural Decision Support. American Meteorological Society Annual Meeting, Seattle, USA, 26 January 2011.
- 8. **J.M.** Winter and E.A.B. Eltahir: Modeling the Hydroclimatology of the Midwestern United States: Predicting Soil Moisture Under a Warmer Climate. American Geophysical Union Fall Meeting, San Francisco, USA, 14 December 2010.
- 7. **J.M. Winter** and E.A.B. Eltahir (Invited): Modeling Land Surface Processes of the Midwestern United States: Predicting Soil Moisture Under a Warmer Climate. Fifth ICTP Workshop on the Theory and Use of Regional Climate Models, Trieste, Italy, 09 June 2010.
- 6. **J.M. Winter** and E.A.B. Eltahir: Predicting Summer Dryness Under a Warmer Climate: Modeling Land Surface Processes in the Midwestern United States. American Geophysical Union Fall Meeting. San Francisco, USA, 16 December 2009.
- 5. **J.M. Winter** and E.A.B. Eltahir: Improving the Ability of RegCM3-IBIS to Simulate the Hydroclimatology of the American Midwest. American Geophysical Union Fall Meeting, San Francisco, USA, 19 December 2008.
- 4. **J.M.** Winter and E.A.B. Eltahir: Evaluating RegCM3 over the Midwestern United States. American Geophysical Union Joint Assembly, Fort Lauderdale, USA, 30 May 2008.
- 3. **J.M.** Winter and E.A.B. Eltahir: Simulated Climatology and Sensitivity of Latent Heat Flux over the Midwestern United States. Massachusetts Institute of Technology, Cambridge, USA, 4 April 2008.
- 2. **J.M.** Winter and E.A.B. Eltahir: Coupling of Integrated Biosphere Simulator to Regional Climate Model Version 3. European Geophysical Union General Assembly, Vienna, Austria, 17 April 2007.
- 1. **J.M.** Winter and E.A.B. Eltahir: The Coupling of RegCM3-IBIS, When Models Don't Get Along. Massachusetts Institute of Technology, Cambridge, USA, 14 March 2006.