

# Jane W. Baldwin

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## EDUCATION

**Princeton University**, Princeton, NJ

Ph.D. in Atmospheric and Oceanic Sciences (AOS)

2012 – 2018

Doctoral Advisor: Gabriel A. Vecchi

Dissertation title: Orographic Controls on Asian Hydroclimate, and an Examination of Heat Wave Temporal Compounding

**Harvard University**, Cambridge, MA

B.A. in Earth and Planetary Sciences

2007 – 2012

*Summa Cum Laude*. Cumulative GPA: 3.94.

Thesis Advisor: Peter Huybers

Thesis title: The Interactions of Precipitation and Temperature in Determining the Equilibrium of Glaciers (*awarded highest departmental honors*)

Secondary Field in East Asian Studies, Language Citation in Mandarin Chinese

## RESEARCH

### APPOINTMENTS

**Assistant Professor of Earth System Science, University of California Irvine** *Start date Jul 2021*

**Postdoctoral Fellow, Lamont-Doherty Earth Observatory, Columbia University**

*Sep 2019 –*

Examining tropical cyclone wind-related risks to developing nations, supervised by Profs. Suzana Camargo and Adam Sobel. Collaborating with the World Bank's disaster risk team to merge their damage model and Columbia's tropical cyclone hazard model.

**Postdoctoral Research Associate, Princeton Environmental Institute**

*Sep 2018 – Jul 2019*

Associated with Prof. Gabriel Vecchi's group in the Department of Geosciences and Prof. Michael Oppenheimer's group in the Woodrow Wilson School of Public and International Affairs. Researched implications of heat wave temporal structure for human health outcomes, and controls on tropical cyclone genesis.

**Applied Scientist Intern, Descartes Labs**

*Jun 2018 – Sep 2018*

Tech start-up spun off from Los Alamos National Labs developing innovative applications of geospatial data using machine learning. Worked to develop a wildfire early detection system based on GOES-16 weather satellite data.

**Graduate Research Assistant, Princeton Climate Dynamics Group and NOAA Geophysical Fluid Dynamics Laboratory**

*2012 – 2018*

Advisor: Gabriel Vecchi (Professor of Geosciences and the Princeton Environmental Institute)

Committee Members: Thomas Delworth, Isaac Held, P.C.D. Milly, Michael Oppenheimer

Junior paper student co-advised: James Tralie, Princeton Class of 2019

Research focused on running and analyzing GFDL's atmosphere-ocean coupled general circulation models (GCMs) paired with observations to understand the physical mechanisms behind various climatic phenomena. Designed and set up experiments varying model topography, resolution, and forcing. Research topics included monsoons, atmosphere-ocean coupling, tropical cyclones, temperature and precipitation extremes, and aridity.

**PEI-STEP Fellow, Princeton University, Woodrow Wilson School**

*2015 – 2018*

Advisor: Michael Oppenheimer (Professor of Geosciences and International Affairs)

Senior Thesis Student Co-Advised: Jay Dessy, Princeton Class of 2016

Competitive fellowship to allow science graduate students to take three policy/economics classes and do a policy-related research project. Evaluated temporal structure of heat waves and their projected future change using both GCM data and idealized statistical models, and assessed implications for heat wave disaster preparedness and warning systems.

**Undergraduate Research Assistant, Harvard Climate Dynamics Group**

*2010 – 2012*

Advisor: Peter Huybers (Professor of Earth and Planetary Sciences)

Developed process-based analytic prototype models of mountain glaciers to elucidate the climatic controls on mountain glaciers and explain the discrepancy between Last Glacial Maximum sea-surface temperature estimates and snowlines.

## PUBLICATIONS

*\*Denotes undergraduate advisee.*

**Baldwin, J.**, A. Atwood, G. Vecchi, and D. Battisti. "Outsize Influence of Central American Topography on Global Climate." *AGU Advances*. *Accepted*.

Ebi, K., J. Vanos, **J. Baldwin**, J. Bell, D. Hondula, N. Errett, K. Hayes, C. Reid, S. Saha, S. Spector, P. Berry. "Extreme weather and climate change: population health and health system implications." *Annual Review of Public Health*. *Accepted*.

Vanos, J., **J. Baldwin**, O. Jay, K. Ebi. "Simplicity lacks robustness when projecting heat-health outcomes in a changing climate." *Nature Communications*, November 27, 2020. doi:10.1038/s41467-020-19994-1

Vecchi, G., T. Delworth, H. Murakami, S. Underwood, A. Wittenberg, F. Zeng, W. Zhang, **J. Baldwin**, K. Bhatia, W. Cooke, J. He, S. Kapnick, T. Knutson, G. Villarini, K. van der Wiel, W. Anderson, V. Balaji, J. Chen, K. Dixon, R. Gudgel, L. Harris, L. Jia, N. Johnson, S. Lin, M. Liu, C. Ng, A. Rosati, J. Smith, X. Yang. "Tropical cyclone sensitivities to CO<sub>2</sub> doubling: roles of atmospheric resolution, synoptic variability and background climate changes." *Climate Dynamics*, August 13, 2019. doi:10.1007/s00382-019-04913-y. p1-35.

Lutsko, N., **J. Baldwin**, and T. Cronin. "The Impact of Large-Scale Orography on Northern Hemisphere Winter Synoptic Temperature Variability." *Journal of Climate*, August 13, 2019.

**Baldwin, J.**, J. Dessy\*, G. Vecchi, and M. Oppenheimer. "Temporally Compound Heat Wave Events and Global Warming: An Emerging Hazard." *Earth's Future*, April 20, 2019. doi:10.1029/2018EF000989. p411-427.

**Baldwin, J.**, G. Vecchi, and S. Bordoni. "The Direct and Ocean-Mediated Influence of Asian Orography on Tropical Precipitation and Cyclones." *Climate Dynamics*, January 29, 2019. doi:10.1007/s00382-019-04615-5. p1-20.

Liao, W., X. Liu, D. Li, M. Luo, D. Wang, S. Wang, **J. Baldwin**, L. Lin, X. Li, K. Feng, K. Hubacek, and X. Yang. "Stronger Contributions of Urbanization to Heat Wave Trends in Wet Climates." *Geophysical Research Letters*, October 5, 2018. doi:10.1029/2018GL079679. p1-8.

L. Zhao, M. Oppenheimer, Q. Zhu, **J. Baldwin**, K. Ebi, E. Bou-zeid, K. Guan., and X. Liu. "Interactions Between Urban Heat Islands and Heat Waves." *Environmental Research Letters*, December 16, 2017. doi: 10.1088/1748-9326/aa9f73. p1-11.

**Baldwin, J.** and G. Vecchi. "Influence of the Tian Shan Mountains on Arid Extratropical Asia." *Journal of Climate*, July 27, 2016. doi:10.1175/JCLI-D-15-0490.1. p5741-5762.

Chou, C., J. Jhaveri, **J. Baldwin**, P. Hannam, K. Keller, W. Peng, S. Rabin, A. Ravikumar, A. Trierweiler, X. Wang, and R. Socolow. "Fusion Energy vis Magnetic Confinement: An Energy Technology Distillate." *Andlinger Center for Energy and the Environment*, Princeton University, May 13, 2016. p1-34.

PUBLICATIONS SUBMITTED OR IN PREP **Baldwin, J.** and P. Huybers. "Interactions Between Precipitation and Temperature in Determining the Equilibrium of Glaciers." *In prep*.

**Baldwin, J.**, J. Tralie\*, and G. Vecchi. "Does the Tehuantepec Gap Increase Tropical Pacific Cyclogenesis? Examination with an Atmosphere-Ocean Coupled Global Climate Model." *In prep*.

GRANTS & FELLOWSHIPS Title: The Impact of Extreme Heat on Childrens Health in Africa Project  
Period: Jun 2020 – May 2022  
Principal Investigators: L. Stanberry and L. Saiman  
Co-Investigators: J. Baldwin, R.M. Parks, P. LaRussa, W. James, J. Patterson, S. Marquez, and three African CHAMP collaborators  
Sponsor: Columbia University - Presidents Global Innovation Fund  
Obligated Amount \$45,000

Title: Cooperative Institute for Modeling the Earth System - Task III Urban impacts on compound heatwaves  
Period: Sep 2019 – Aug 2020  
Principal Investigators: J. Baldwin, M. Oppenheimer, and G. Vecchi  
Sponsor: U.S. DOC - National Oceanic & Atmospheric Administration  
Obligated Amount \$76,764

Lamont-Doherty Earth Observatory Postdoctoral Fellowship ( 2019 – 2022 )

National Science Foundation Graduate Research Fellowship ( 2014 – 2018 )

Princeton Environmental Institute- Science Technology Environmental Policy (PEI-STEP) Perkins Fellowship ( 2015 – 2018 )

ThinkSwiss Travel Grant ( 2013 )

*To attend the 2013 NCCR climate summer school “From Climate Reconstructions to Climate Predictions” in Grindelwald, Switzerland.*

Princeton University Centennial Fellowship ( 2012 – 2016 )

Harvard Program for Research in Science and Engineering (PRISE) Summer Research Grant ( 2010 )

Fung Foundation Scholarship ( 2009 )

*Grant for summer Chinese language study abroad.*

National Merit Scholarship ( 2007 )

#### AWARDS

Carbon Mitigation Initiative Best Paper Award for Postdoctoral Fellows ( 2020 )

*For Baldwin et al 2019 “Temporally Compound Heat Wave Events and Global Warming: An Emerging Hazard”.*

Finalist for University of California President’s Postdoctoral Fellowship Program ( 2019 )

Outstanding Student Presentation Award, AGU Fall Meeting ( 2017 )

Top Student Paper Award, AMS 97<sup>th</sup> Annual Meeting, Eighth Conference on Environment and Health ( 2016 )

Summa Cum Laude ( 2012 )

*Highest honors for both overall coursework and research within concentration (Earth and Planetary Sciences).*

John Wood Prize ( 2012 )

*Awarded to top science student in Adams House (residential college) at Harvard.*

Phi Beta Kappa ( 2011 )

*Elected fall of senior year, in recognition of being in top 5% of graduating class at Harvard.*

#### TEACHING EXPERIENCE

##### **Guest Lecturer, Princeton University**

*2017 – present*

Courses: GEO 425 Introduction to Ocean Physics for Climate ( 2017, 2018 ), ENV 316 Climate Science and Communications ( 2018, 2019, 2020, 2021 ), Geo 368 Climate and Weather: Order in the Chaos ( 2018, 2019 ), FRS 118 “Life on Mars - Or Maybe Not” freshman seminar on science journalism ( 2017 ).

##### **Outreach Presentations**

*2014 – present*

AMS Board of Environment and Health Public Webinar, Princeton Plasma Physics Laboratory Young Women’s Conference, Conference for Undergraduate Women in Physics, Princeton Public Library, Princeton radio station WPRB “These Vibes are Too Cosmic” show, Princeton Institute for Computational Science & Engineering Research Computing Day, Rockefeller College at Princeton University, Princeton Day School, Hopkins School.

#### ADVISING & MENTORING

##### **Supervising research projects**

Katy Wilson (masters Columbia) research assistantship ( 2020 – 2021 )

Sophia Lacambra (undergrad. Barnard) senior thesis ( 2020 – 2021 )

· Co-advised w/ Robbie M. Parks.

Samuel Bartusek (undergrad. Princeton) fall and spring junior papers ( 2018 – 2019 )

· Co-advised w/ Gabriel Vecchi.

· Now PhD student at Columbia University.

James Tralie (undergrad. Princeton) fall and spring junior papers ( 2017 – 2018 )

· Co-advised w/ Gabriel Vecchi.

· Presented related poster at AGU fall meeting 2018.

Casey Ivanovich (undergrad. Princeton), summer research intern ( 2017 )

· Co-advised w/ Gabriel Vecchi and Àngel Muñoz.

· Now PhD student at Columbia University.

Jay Dessy (undergrad. Princeton) senior thesis ( 2016 – 2017 )

· Co-advised w/ Michael Oppenheimer.

· Co-author on related publication in journal *Earth’s Future*.

**Resident graduate student, Rockefeller College** 2013 – 2018

Served as mentor to Princeton undergraduates, and assisted with academic programming for the community. Organized weeklong senior thesis boot camps, providing undergraduates with a focused environment and guidance to succeed in their independent research. Organized dinner discussion series for undergraduates studying science, aimed particularly at supporting young women in science.

**Co-founder, Princeton Day School Energy and Climate Scholars** 2015 – 2016

Outreach program to local high school where Princeton graduate students present monthly to motivated high school students on key issues related to energy, climate, and sustainability, followed by dinner and discussion.

**Member, Princeton University Residential College Task Force** 2014 – 2016

Part of university-wide team appointed by Princeton University President Eisgruber to develop long-term vision for Princeton's residential colleges.

SYNERGISTIC  
ACTIVITIES

**Journal Refereeing:** *Climatic Change, Climate Dynamics, Communications Earth & Environment, Environmental Research Letters, GeoHealth, Geophysical Research Letters, Global and Planetary Change, Journal of Applied Meteorology and Climatology, Journal of Climate, Natural Hazards, Nature Communications, Proceedings of the National Academy of Sciences, Weather and Climate Extremes.*

**Academic Associations:** American Geophysical Union (AGU), American Meteorological Society (AMS), International Society of Biometeorology.

**Member, UNCDF Climate Insurance Linked Infrastructure Finance** 2020 –

Cross-industry working group brought together to collaborate on a comprehensive climate insurance product for stakeholders in developing countries.

**Co-convenor, AGU Fall Meeting sessions**

Session titles and years: “Climate Drivers of Infectious Disease: Past, Present, and Future” ( 2017 ), “Mountains, Weather, and Climate: Advances from Observations, Theories, and Models” ( 2019 ), Exploring the “Hidden Burden” of Climate Change and Pollution on Mental Health and Conflict ( 2020 ).

**Co-convenor, AMS Fall Meeting sessions**

Session titles: “Interventions for Urban-Scale Heat Risk Reduction and Long-Term Mitigation” ( 2019 ), “Too Hot Too Handle: Multidisciplinary Perspectives on Extreme Heat as Disaster” ( 2019 ), “On the Shoulders of Giants: Formative Moments for Environment and Health Research” ( 2020 ).

**Student Member, AMS Board on Environment and Health** 2017 – 2019

Help organize and direct the Board's portion of the AMS Annual Meeting.

**Member, Climate-Disease Research Group at Princeton University** 2018 – 2019

Active participant in group meetings seeking to apply climate science to prediction of disease dynamics between Profs. Jess Metcalf, Bryan Grenfell, and Gabriel Vecchi's groups.

**Scientist representative, Climate Science Day on Capitol Hill** Mar 2017

Selected to represent AGU for Congressional Visit Day. Discussed the importance of climate science and developed relationships with New Jersey congressional offices.

**Selected member, Princeton Energy and Climate Scholars** 2014 – 2016

Forum for interdisciplinary projects, seminars, and discussions. Co-authored report with Professor Robert Socolow regarding the present state of development and prospects for fusion energy.

**Co-organizer, Inaugural AOS Program Workshop** 2013

3-day long workshop with invited scientists, entitled “Using Diverse Observations in Climate Modeling Research” funded by Isaac Held's BBVA Frontiers of Knowledge Award.

**Organizer, Princeton AOS journal club** 2017

Weekly reading group for climate dynamics attended by faculty, postdocs, and students.

**Co-organizer, Statistical methods for atmospheric sciences tutorial group** 2014 – 2015

**Organizer, Graduate student reading group on arid climates** 2013 – 2014

**Board member, Harvard Environmental Action Committee** 2009 – 2012

PRESENTATIONS \*Denotes undergraduate advisee.

**Baldwin, J.**, Feb 2021: “Outsize Influence of Central American Orography on Global Climate.” UT Austin, Water, Climate, and Environment Seminar. *INVITED SEMINAR.*

**Baldwin, J.**, Jan 2021: “Understanding Tropical Cyclone Risk: From Mountain Drivers to Economic Impacts.” CalTech, Environmental Science and Engineering Seminar. *INVITED SEMINAR*.

**Baldwin, J.**, S. Camargo, A. Sobel, C.Y. Lee, B. Walsh, and S. Hallegatte, Dec 2020: “Assessment of Tropical Cyclone Wind-Related Risks to Wellbeing in the Philippines.” *American Geophysical Union Fall Meeting*, San Francisco, CA. *ORAL*.

**Baldwin, J.** Oct 2020: “Understanding Tropical Cyclone Risk: From Mountain Drivers to Economic Impacts.” Florida State University, Meteorology Seminar. *INVITED SEMINAR*.

**Baldwin, J.** Aug 2020: “Outsize Influence of Central American Topography on Global Climate.” *Stanford University, Atmosphere, Ocean, and Climate Dynamics Seminar Series*. *INVITED SEMINAR*.

**Baldwin, J.**, K. Ebi, G. Eosco, et al. May 2020: Webinar on Environmental Extreme Events and COVID-19 in 2020. *National Academies*. *INVITED PANELIST*.

**Baldwin, J.** Apr 2020: “Temporally Compound Heat Wave Events and Global Warming: An Emerging Risk.” *International Research Institute for Climate and Society*. *INVITED SEMINAR*.

**Baldwin, J.**, Mar 2020: “Understanding Tropical Cyclone Risk: From Mountain Drivers to Economic Impacts.” University of California, Irvine, Department of Earth System Science. *INVITED SEMINAR*.

**Baldwin, J.**, Mar 2020: “Understanding Tropical Cyclone Risk: From Mountain Drivers to Economic Impacts.” University of Quebec in Montreal Department of Earth and Atmospheric Sciences Research Seminar, Montreal, Canada. *INVITED SEMINAR*.

**Baldwin, J.**, Feb 2020: “Understanding Tropical Cyclone Risk: From Mountain Drivers to Economic Impacts.” University of Washington Department of Atmospheric Sciences Colloquium, Seattle, WA. *INVITED SEMINAR*.

**Baldwin, J.**, Feb 2020: “What Role Do Mountains Play in Shaping Mean and Extreme Hydroclimate? Lessons from a Tropical Cyclone-Permitting AOGCM.” Stony Brook University Topics in Atmospheric and Oceanic Sciences Seminar, Stony Brook, NY. *INVITED SEMINAR*.

**Baldwin, J.**, G. Vecchi, and S. Bordoni, Jan 2019: “The Direct and Ocean-Mediated Influence of Asian Orography on Tropical Precipitation and Cyclones.” *AGU Chapman Conference on Evolution of the Monsoon, Biosphere and Mountain Building in Cenozoic Asia*, Washington, D.C. *ORAL*.

**Baldwin, J.**, G. Vecchi, A. Atwood, and D. Battisti, Dec 2019: “Alternative Assumptions about Topographic Height Improve Global Climate Model Simulation Fidelity.” *American Geophysical Union Fall Meeting*, San Francisco, CA. *POSTER*.

Bartusek, S.\*, G. Vecchi, and **J. Baldwin**, Dec 2019: “The Decadal Behavior of Westerly Wind Events through a Moist Static Energy Framework.” *American Geophysical Union Fall Meeting*, San Francisco, CA. *POSTER*.

**Baldwin, J.**, Dec 2019: MIT Oceanography and Climate Sack Lunch Seminar, Boston, MA. *INVITED SEMINAR*.

**Baldwin, J.**, Nov 2019: “Temporally Compound Heat Wave Events and Global Warming: An Emerging Risk.” *NOAA CPO Earth System Science and Modeling community workshop: Climate Research to Enhance Resilience to Extreme Heat*, Silver Spring, MD. *ORAL*.

**Baldwin, J.**, Oct 2019: McGill Atmospheric and Oceanic Sciences Departmental Seminar, Montreal, Canada. *INVITED SEMINAR*.

**Baldwin, J.** with S. Dee, L. Goddard, B. Strauss, and G. Vecchi, Oct 2019: Panel titled “It’s Getting Hot Out There...Weird Weather and Other Climate Change Anomalies”. *Princeton Environmental Forum*, Princeton, NJ. *INVITED PANELIST*.

**Baldwin, J.**, Oct 2019: Lamont-Doherty Earth Observatory Division of Ocean and Climate Physics Seminar. *INVITED SEMINAR*.

**Baldwin, J.** with K. Ebi, H. Jones, and J. Vanos, Jul 2019: Extreme Heat: Understanding and Reducing Human Health Risks. *AMS Webinar Series*. *INVITED ORAL*.

**Baldwin, J.**, J. Tralie\*, G. Vecchi, Jun 2019: Does the Tehuantepec Gap Increase Tropical Pacific Cyclogenesis? Examination with an Atmosphere-Ocean Coupled Global Climate Model. *Northeast Tropical Meteorology Workshop*, Dedham, MA. *ORAL*.

**Baldwin, J.**, R. Young, M. Oppenheimer, G. Vecchi, May 2019: The Impact of Temporally Compound Heat Wave Events on Mortality. *Workshop on Correlated Extreme Events*, New York, NY. *ORAL*.

**Baldwin, J., J. Tralie\*, G. Vecchi**, Mar 2019: Does the Tehuantepec Gap Increase Tropical Pacific Cyclogenesis? Examination with an Atmosphere-Ocean Coupled Global Climate Model. *Advanced Climate Dynamics Course 10-Year Conference*, Rondane, Norway. *ORAL*.

**Baldwin, J., R. Young, M. Oppenheimer, G. Vecchi**, Mar 2019: The Impact of Temporally Compound Heat Wave Events on Mortality. *Science for Decision-Making in a Warmer World: 10 Years of the NPCC*, New York, NY. *POSTER*.

**Baldwin, J., C. Beneke, R. Keisler, H. Zhou, C. Kontgis, and K. A. Mckinnon**, Jan 2019: Automated Early Detection of Wildfires Using GOES-16 Satellite Imagery. *American Meteorological Society 99<sup>th</sup> Annual Meeting, Ninth Symposium on Lidar Atmospheric Applications*, Phoenix, AZ. *POSTER*.

J. Tralie\*, G. Vecchi, **Baldwin, J.**, Dec 2018: Tehuantepec Gap Induced Cyclogenesis Examined with a High Resolution Global Climate Model. *American Geophysical Union Fall Meeting*, Washington, D.C. *POSTER*.

**Baldwin, J., G. Vecchi, and S. Bordoni**, Jul 2018: The Ocean-Mediated Influence of Asian Orography on Tropical Precipitation and Cyclones. *WCRP Grand Challenge on Clouds, Circulation and Climate Sensitivity: 2<sup>nd</sup> Meeting on Monsoons and Tropical Rain Belts*, Trieste, Italy. *ORAL*.

**Baldwin, J. and G. Vecchi**, May 2018: Climate Models for Historical Applications: A General Introduction. *Climate, Archaeology and History in the Eurasian Middle Ages*, Institute for Advanced Study, Princeton, NJ. *INVITED ORAL*.

**Baldwin, J.**, Feb 2018: Temporal Compounding of Heat Waves in the Present and Projected Future. *Conversations about Environment, Responsible Energy and Life (CEREAL)*, Princeton University, Princeton, NJ. *INVITED ORAL*.

**Baldwin, J., G. Vecchi, and S. Bordoni**, Jan 2018: The Ocean-Mediated Influence of Asian Orography on Tropical Precipitation and Cyclones. *American Meteorological Society 98<sup>th</sup> Annual Meeting, Peter J. Webster Symposium*, Austin, TX. *POSTER*.

**Baldwin, J., J. Dessy\*, G. Vecchi, and M. Oppenheimer**, Dec 2017: Temporal Compounding of Heat Waves in the Present and Projected Future. *American Geophysical Union Fall Meeting*, New Orleans, LA. *ORAL*.

**Baldwin, J., J. Dessy\*, G. Vecchi, and M. Oppenheimer**, Sep 2017: Heat Wave Temporal Structure, and its Implications for Heat Stress Vulnerability with Global Warming. *21<sup>st</sup> International Congress of Biometeorology*, Durham, U.K. *ORAL*.

**Baldwin, J., G. Vecchi, and S. Bordoni**, Jun 2017: The Ocean-Mediated Influence of Asian Orography on Tropical Precipitation and Cyclones. *8<sup>th</sup> Northeast Tropical Meteorology Workshop*, Rensselaerville, NY. *ORAL*.

**Baldwin, J., G. Garner, J. Dessy\*, G. Vecchi, and M. Oppenheimer**, May 2017: Assessing Heat Wave Temporal Structure and its Projected Change with Global Warming. *Princeton Environmental Institute Discovery Day*, Princeton University. *POSTER*.

**Baldwin, J., G. Garner, J. Dessy\*, G. Vecchi, and M. Oppenheimer**, May 2017: Assessing Heat Wave Temporal Structure and its Projected Change with Global Warming. *ExxonMobil Longer Range Research Meeting*, Princeton University. *POSTER*.

**Baldwin, J., G. Garner, J. Dessy\*, G. Vecchi, and M. Oppenheimer**, Apr 2017: Quantifying the Risk of Compound Heat Wave Events. *STEP-PEI PhD Seminar*, Princeton University. *ORAL*.

**Baldwin, J., J. Dessy\*, M. Oppenheimer, and G. Vecchi**, Jan 2017: Quantifying the Risk of Compound Heat Wave Events. *American Meteorological Society 97<sup>th</sup> Annual Meeting, Eighth Conference on Environment and Health*, Seattle, WA. *ORAL*.

**Baldwin, J. and G. Vecchi**, Dec 2016: The Tibetan Plateau's Impact on Tropical Cyclones and Implications for the Asian Monsoons. *American Geophysical Union Fall Meeting*, San Francisco, CA. *ORAL*.

**Baldwin, J. and G. Vecchi**, Oct 2016: Crushing Mountains in Global Climate Models. *Princeton Institute for Computational Science & Engineering Research Computing Day*, Princeton University. *ORAL*.

**Baldwin, J. and G. Vecchi**, Jul 2016: Influence of the Tian Shan Mountains on Arid Extropical Asia. *Asia-Oceania Geosciences Society Meeting*, Beijing, China. *ORAL*.

**Baldwin, J.**, Jul 2016. *AOS Program Student Seminar*, Princeton University. *ORAL*.

**Baldwin, J.**, C. Chou, J. Jhaveri, W. Peng, and R. Socolow, May 2016: Discussion on the Fusion Energy Distillate. *Andlinger Center for Energy and the Environment Opening Symposium*, Princeton University. *INVITED PANEL*.

**Baldwin, J.**, Nov 2015. *Princeton Energy and Climate Scholars Seminar*, Princeton University. *ORAL*.

**Baldwin, J.** and G. Vecchi, Dec 2014: The Influence of the Tianshan Mountains on Arid Central Asia. *American Geophysical Union Fall Meeting*, San Francisco, CA. *POSTER*.

**Baldwin, J.** and P. Huybers, Sep 2013: Interactions Between Precipitation and Temperature in Determining the Equilibrium of Glaciers. *NCCR Climate Summer School*, Grindelwald, Switzerland. *POSTER*.

**Baldwin, J.** and P. Huybers, Oct 2013: Tropical Mountain Glacier Change Since the Last Glacial Maximum. *Graduate Climate Conference*, Woods Hole, MA. *POSTER*.

#### RECENT MEDIA

“Tropical storms can sometimes supercharge the storms that follow” – *National Geographic* (Oct 2020)

“The 10 new Physical Sciences faculty” – *UCI Physical Sciences Communications* (Aug 2020)

“A Rude Awakening” [discussing heat wave risk]– *KPFA 94.1* (Jun 2020)

“Summer’s heat waves could get more dangerous in the coming decades, study warns” – *CNN* (Feb 2020)

“Climate and change: As temperatures rise, expect public health problems to soar” – *Montgomery Advertiser* (Sep 2019)

Interview with PBS’s *Peril and Promise* on heat wave risks and emergency management (Jul 2019)

“Repetitive Heat Waves” – interview with *Radio Ecoshock* (Jun 2019)

“More Back-to-Back Heat Waves Will Come With Climate Change” – *HealthDay* (May 2019)

“Get ready for more back-to-back heat waves, study says” – *Grist* (May 2019)

“Heatwave Warning: Soaring temperatures and extremely hot weather to rise in frequency” – *Express* (May 2019)

“Global warming to raise frequency of heat waves: Study” – *DownToEarth* (May 2019)

“Occurrence of back-to-back heat waves likely to accelerate with climate change” – UN Office of Disaster Risk Reduction *PreventionWeb* via Princeton University press release (May 2019)

“A Precarious Puzzle of Expanding Deserts: How arid Asia has varied over time and the confusion over recent desertification” – authored blog post on *Highwire Earth* (Feb 2016)

#### FIELD EXPERIENCE

The Organization of Tropical East Pacific Convection (OTREC) experiment, Sep 2019, Costa Rica. Tasks: Prepared and launched radiosondes, presented weather briefings, flew in two research flights.

#### WORKSHOPS ATTENDED

“Evolution of the Monsoon, Biosphere and Mountain Building in Cenozoic Asia”, Jan 2020, *AGU Chapman Conference*, Washington, D.C.

“NOAA CPO Earth System Science and Modeling community workshop: Climate Research to Enhance Resilience to Extreme Heat”, Nov 2019, Silver Spring, MD.

“Usable Climate Science and the Uses of History”, Nov 2019, Yale University, New Haven, CT.

“Workshop on Correlated Extreme Events”, May 2019, Columbia University, New York, NY.

“Destiny Studies for a Small Planet: A Symposium for Robert Socolow”, Apr 2019, Princeton, NJ.

“Science for Decision-Making in a Warmer World: 10 Years of the New York Panel on Climate Change”, Mar 2019, New York, NY.

“Understanding and Modeling the Earth’s Climate: A symposium in honor of Isaac Held”, Oct 2018, Princeton University, Princeton, NJ.

“Climate, Archaeology and History in the Eurasian Middle Ages”, May 2018, Institute for Advanced Study, Princeton, NJ.

“The Dynamics of the Seasonal Cycle”, Sep 2017, *Advanced Climate Dynamics Course*, Rondvassbu, Norway.

“Land-atmosphere interactions: coupling between the energy, water and carbon cycles”, Jun 2015, *XXIII Alpine Summer School*, Valsavarenche, Italy.

“Evolution of the Asian Monsoon and its Impact on Landscape, Environment and Society: Using the Past as the Key to the Future”, Jun 2015, *AGU Chapman Conference*, Chinese University of Hong Kong.

“From Climate Reconstructions to Climate Predictions”, Sep 2013, *12th International NCCR Climate Summer School*, Grindelwald, Switzerland.

“Five Controversies in Climate Science: A symposium celebrating the contributions of S. George Philander”, Sep 2012, Princeton University, Princeton, NJ.

OTHER WORK EXPERIENCE	<p><b>Fashion Model</b>, International <span style="float: right;"><i>2010 – 2011</i></span>  Contracts in Athens, Milan, Tokyo, and New York doing editorial photo shoots, runway, and TV commercials.</p>
SKILLS AND LANGUAGES	<p><b>Computers:</b> Python (experienced esp. with numpy, matplotlib, xarray, cartopy, basemap, cdo, netCDF4, shapely), Matlab (experienced), Ferret (experienced), R (proficient), Fortran (beginner); <math>\LaTeX</math>; Unix, Windows, and Mac operating systems; Microsoft Word, Powerpoint, and Excel.</p> <p><b>Mandarin Chinese:</b> Proficient reading, writing, and speaking. 7 years of study, including abroad in Beijing and Inner Mongolia.</p> <p><b>Dance:</b> Extensive training in ballet and modern dance. Performed with and directed the Harvard-Radcliffe Modern Dance Company and performed with the Harvard Ballet Company.</p> <p><b>Winter Sports:</b> Grew up training as a freestyle skier and taught ski school for a winter in Stratton Mountain, Vermont.</p>