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Education

Ph.D. Physics, 1992, *Technical University of Munich (TUM)*, Munich, Germany M.S. Physics, 1989, *University of São Paulo (USP)*, São Paulo, Brazil B.S. Physics, 1986, *University of São Paulo (USP)*, São Paulo, Brazil

Professional Experience

1 Toressionar	Experience
2007 -	Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY
	Marie Tharp Lamont Research Professor (2019 - present)
	Lamont Research Professor (2013 - 2019)
	Lamont Associate Research Professor (2010 - 2013)
	Doherty Research Scientist (2009 - 2010)
	Doherty Associate Research Scientist (2008 - 2009)
	Associate Research Scientist (2007 - 2008)
2019 -	Department of Earth and Environmental Sciences, Columbia University, New York, NY
	Adjunct Professor
2018 -	The Earth Institute, Columbia University, New York, NY
	Associate Faculty Member
2018 -	Master of Science in Sustainability Science, Columbia University, New York, NY
	Lecturer
2015 -	Initiative on Extreme Weather and Climate, Columbia University, New York, NY
	Executive Director
1999 - 2007	International Research Institute for Climate and Society (IRI), Columbia University, Palisades, NY
	Associate Research Scientist (2003 - 2007)
	Senior Staff Associate (1999 - 2003)
1996 -1999	São Paulo State University (UNESP), Guaratinguetá School of Engineering, Guaratinguetá, Brazil
	Associate Professor
1993 - 1996	Max-Planck Institute for Plasma Physics (IPP), Garching, Germany
	Post-doctoral Research Scientist

Publications

H index: 50 (8,068 citations) - *Google Scholar*; 42 (5,517 citations) - *Web of Science Core Collection*; 02/05/2020 Undergraduate students[†], graduate students^o, post-docs* mentored or co-mentored.

- 139. M. Bieli°, A.H. Sobel, **S.J. Camargo**, and M.K. Tippett, 2020. A statistical model to predict the extratropical transition of tropical cyclones. *Wea. Forecasting*, early online, doi: 10.1175/WAF-D-19-0045.1.
- 138. T. Knutson, S.J. Camargo, J.C.L. Chan, K. Emanuel, C.-H. Ho, J. Kossin, M. Mohaprata, M. Satoh, M. Sugi, K. Walsh, and L. Wu, 2020. Tropical cyclones and climate change assessment: Part II: Projected response to anthropogenic warming. *Bull. Amer. Meteorol. Soc.*, early online, doi: 10.1175/BAMS-D-18-0194.1.
- 137. Y. Moon, D. Kim, **S.J. Camargo**, A.A. Wing, A.H. Sobel, H. Murakami, K.A. Reed, E. Scoccimarro, G.A. Vecchi, M. Wehner, C. Zarzycki, and M. Zhao, 2020. Wind and thermodynamic structures of tropical cyclones in global climate model simulations and their sensitivity to horizontal resolution. *J. Climate*, **33**, 1575-1595, doi: 10.1175/JCLI-D-19-0172.1.
- 136. S.S. Bell, S.S. Chand, **S.J. Camargo**, K.J. Tory, C. Turville, 2019. Western North Pacific tropical cyclone tracks in CMIP5 models: Statistical assessment using a model-independent detection and tracking scheme. *J. Climate*, **32**, 7191–7208, doi: 10.1175/JCLI-D-18-0785.1.
- 135. M. Bieli°, **S.J. Camargo**, A.H. Sobel, J.L. Evans, and T. Hall, 2019. A global climatology of extratropical transition I: Characteristics across basins. *J. Climate*, **32**, 3557-3582, doi: 10.1175/JCLI-D-17-0518.1.

- 134. M. Bieli°, **S.J. Camargo**, A.H. Sobel, J.L. Evans, and T. Hall, 2019. A global climatology of extratropical transition II: Statistical performance of the cyclone phase space. *J. Climate*, **32**, 3583-3597, doi: 10.1175/JCLI-D-18-0052.1.
- 133. **S.J. Camargo** and L.M. Polvani, 2019. Little evidence of reduced global tropical cyclone activity following recent volcanic eruptions. *npj Clim. Atmos. Sci.*, **2**, 14, 10.1038/s41612-019-0070-z.
- 132. **S.J. Camargo**, J. Camp, R.L. Elsberry, P.A. Gregory, P.J. Klotzbach, C.J. Schreck, A.H. Sobel, M.J. Ventrice, F. Vitart, Z. Wang, M.C. Wheeler, M. Yamaguchi, and R. Zhan, 2019. Tropical cyclone prediction on subseasonal time-scales. *Trop. Cyclone Res. Rev.*, **8**, 150-165, doi: 10.1016/j.tcrr.2019.10.004.
- 131. T. Knutson, **S.J. Camargo**, J.C.L. Chan, K. Emanuel, C.-H. Ho, J. Kossin, M. Mohaprata, M. Satoh, M. Sugi, K. Walsh, and L. Wu, 2019. Tropical cyclones and climate change assessment: Part I: Detection and attribution. *Bull. Amer. Meteorol. Soc.*, **100**, 1987-2007, doi: 10.1175/BAMS-D-18-0189.1.
- 130. E.D. Maloney, D. Barrie, A. Gettelman, A. Mariotti, Y. Ming, J.D. Neelin, C.-C. Chen, D.R.B. Coleman, Y.-H. Kuo, B. Singh, A. Berg, J.F. Booth, **S.J. Camargo**, A. Dai, A. Gonzalez, X. Jiang, X. Jing, D. Kim, Y. Moon, C.M. Naud, A.H. Sobel, K. Suzuki, F. Wang, J. Wang, A.A. Wing, and X. Xu, 2019. Process-oriented evaluation of climate and weather forecasting models. *Bull. Amer. Meteorol. Soc.*, **100**, 1665-1686, doi: 10.1175/BAMS-D-18-0042.1.
- 129. F.S.R. Pausata and **S.J. Camargo**, 2019. Tropical cyclone activity affected by volcanically induced ITCZ shifts. *Proc. Natl. Acad. Sci.*, **16**, 7732-7737, 10.1073/pnas.1900777116.
- 128. A. Seth, A. Giannini, M. Rojas, S.A. Rauscher, S. Bordoni, D. Singh, and **S.J. Camargo**, 2019. Monsoon responses to climate changes Connecting past, present and future. *Curr. Clim. Change Rep.*, **5**, 63-79, doi:10.1007/s40641-019-00125-y.
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- 123. L. Trenary, T. DelSole, **S.J. Camargo**, and M.K. Tippett, 2019. Are mid-20th century forced changes in North Atlantic hurricane potential intensity detectable? *Geophys. Res. Lett.* **46**, 3378-3386, doi:10.1029/2018GL081725. *Research Spotlight:* Role of humans in past hurricane potential intensity is unclear, EOS, 100, doi: 10.1029/2019EO125003, published June (2019).
- 122. K.J.E. Walsh, **S.J. Camargo**, T.R. Knutson, J. Kossin, T.-C. Lee, H. Murakami, and C. Patricola, 2020. Tropical cyclones and climate change. *Trop. Cyclone Res. Rev.*, **8**, 240-250, doi: 10.6057/2019TCRR04.04.
- 121. A.A. Wing, **S.J. Camargo**, A.H. Sobel, D. Kim, Y. Moon, H. Murakami, K.A. Reed, G.A. Vecchi, M.F. Wehner, C. Zarzycki, and M. Zhao, 2019. Moist static energy budget analysis of tropical cyclone formation and intensification in high-resolution climate models. *J. Climate*, **32**, 6071-6095, doi:10.1175/JCLI-D-18-0599.1.
- 120. A.S. Daloz and **S.J. Camargo**, 2018. Is the poleward migration of tropical cyclone maximum intensity associated with a poleward migration of tropical cyclone genesis? *Clim. Dyn.*, **50** 705-715, doi:10.1007/s00382.
- 119. <u>L. Gualtieri</u>*, **S.J. Camargo**, S. Pascale, F.M.E. Pons, and G. Ekström, 2018. The persistent signature of tropical cyclones in ambient seismic noise. *Earth Planet. Sci. Lett.*, **484**, 287-294, doi: 10.1016/j.epsl.2017.12.026.
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- 112. E.A. Soares, H.A. Camargo, **S.J. Camargo**, and D.F. Leite, 2018. Incremental Gaussian granular fuzzy modeling applied to hurricane tracking forecasting. *IEEE International Conference Fuzzy Systems, IEEE World Congress on Computational Intelligence*, FUZZ-IEEE, 8-13 July 2018, Rio de Janeiro, Brazil, doi: 10.1109/FUZZ-IEEE.2018. 8491587
- 111. M. Boudreault, L.-P. Caron, and **S.J. Camargo**, 2017. Reanalysis of climate influences on Atlantic tropical cyclone activity using cluster analysis. *J. Geophys. Res.*, **122**, 4258-4280 doi: 10.1002/2016JD026103.
- 110. J.P. Duvel, **S.J. Camargo**, and A.H. Sobel, 2017. Role of convection scheme in modeling initiation and intensification of tropical depressions over the North Atlantic. *Mon. Wea. Rev.*, **145** 1495-1509, doi:10.1175/MWR-D-16-0201.1
- 109. J. Nakamura, S.J. Camargo, A.H. Sobel, N. Henderson, K.A. Emanuel, A. Kumar, T.E. LaRow, H. Murakami, M.J. Roberts, E. Scoccimarro, P.L. Vidale, H. Wang, M.F. Wehner, and M. Zhao, 2017. Western North Pacific tropical cyclone model tracks in present and future climates. *J. Geophys. Res.*, 122, 9721-9744, doi: 10.1002/2017JD027007.
- 108. Y. Sun, Z. Zhong, T. Li, L. Yi, **S.J. Camargo**, Y. Hu, K. Liu, H. Chen, Q. Liao, and J. Shi, 2017. Impact of ocean warming on tropical cyclone track over the western North Pacific: A numerical investigation based on two case studies. *J. Geophys. Res.*, **122**, 8617-8630, doi: 10.1002/2017JD026959.
- 107. **S.J. Camargo** and A. Seth, 2016. Hottest summers the new normal. *Env. Res. Lett*, **11**, 081001, doi: 10.1088/1748-9326/11/8/081001.
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- 105. **S.J. Camargo** and A.A. Wing*, 2016. Tropical cyclones in climate models. *WIREs Clim. Change*, **7**, 211-237, doi: 10.1002/wcc373.
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- 98. A.H. Sobel, **S.J. Camargo**, A.G. Barnston, and M.K. Tippett, 2016. Northern hemisphere tropical cyclones during the quasi-El Niño of late 2014. *Nat. Hazards*, **83**, 1717-1729, doi: 10.1007/s11069-016-2389-7.

- 97. A.H. Sobel, **S.J. Camargo**, T.M. Hall, <u>C.-Y. Lee</u>*, M.K. Tippett, and <u>A.A. Wing</u>*, 2016. Human influence on tropical cyclone intensity. *Science*, **353**, 242-246, doi: 10.1126/science.aaf6574.
- 96. K.J.E. Walsh, J.L. McBride, P.J. Klotzbach, Balachandran, S.J. Camargo, G. Holland, T.R. Knutson, J. Kossin, T.-C. Lee, A. Sobel, M. Sugi, 2016. Tropical cyclones and climate change, *WIREs Clim. Change*, 7, 65-89, doi: 10.1002/wcc371.
- 95. A.A. Wing*, **S.J. Camargo**, and A.H. Sobel, 2016. Role of radiative-convective feedbacks in spontaneous tropical cyclogenesis in idealized numerical simulations. *J. Atmos. Sci.*, **73**, 2633-2642, doi: 10.1175/JAS-D-15-0380.1.
- 94. J. Yoo, J. Galewsky, **S.J. Camargo**, R. Korty, and R. Zamora, 2016. Dynamical downscaling of tropical cyclones from CCSM4 simulations of the Last Glacial Maximum. *J. Adv. Model. Earth Sys.*, **8**, 1229-1247, doi: 10.1002/2016MS000685.
- 93. L.-P. Caron, M. Boudreault, and **S.J. Camargo**, 2015. On the variability and predictability of eastern North Pacific tropical cyclone activity. *J. Climate*, **28**, 9678-9696, doi: 10.1175/JCLI-D-15-0377.1.
- 92. A.S. Daloz, **S.J. Camargo**, J.P. Kossin, K. Emanuel, M. Horn, J.A. Jonas, D. Kim, T. LaRow, Y.-K. Lim, C.M. Patricola, M. Roberts, E. Scoccimarro, <u>D. Shaevitz</u>°, P.L. Vidale, H. Wang, M. Wehner, and M. Zhao, 2015. Cluster analysis of explicitly and downscaled simulated North Atlantic tropical cyclone track, *J. Climate*, **28**, 1333-1361, doi: 10.1175/JCLI-D-13-00646.1.
- 91. J.G. Dwyer°, S.J. Camargo, A.H. Sobel, M. Biasutti, K.A. Emanuel, G.A. Vecchi, M. Zhao, and M.K. Tippett, 2015. Projected 21st century changes in the length of the tropical cyclone season, *J. Climate*, 28, 6181-6192, doi: 10.1175/JCLI-D-14-00686.1.
- 90. <u>C.-Y. Lee</u>*, M.K. Tippett, **S.J. Camargo**, and A.H. Sobel, 2015. Probabilistic prediction of tropical cyclone intensity from a multiple-linear regression model, *Mon. Wea. Rev*, **143**, 933-954, doi: 10.1175/MWR-D-14-000171.1.
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- 88. M. Ting, **S.J. Camargo**, C. Li, and Y. Kushnir, 2015. Natural and forced North Atlantic hurricane potential intensity changes in CMIP5 models, *J. Climate*, **28**, 3926-3942, doi: 10.1175/JCLI-D-14-00520.1.
- 87. K.J.E. Walsh, **S.J. Camargo**, G.A. Vecchi. A.S. Daloz, J. Elsner, K. Emanuel, M. Horn, Y.-K. Lim, M. Roberts, C. Patricola, E. Scoccimarro, A.H. Sobel, S. Strazzo, G. Villarini, M. Wehner, M. Zhao, J. Kossin, T. LaRow, K. Oouchi, S. Schubert, H. Wang, J. Bacmeister, P. Chang, F. Chauvin, C. Jablonowski, H. Murakami, T. Ose, K.A. Reed, R. Saravanan, Y. Yamada, C.M. Zarzycki, P.L. Vidale, J.A. Jonas, and N. Henderson, 2015. Hurricanes and climate: the U.S. CLIVAR Working Group on hurricanes. *Bull. Amer. Meteor. Soc.*, **96**, 997-1017, doi: 10.1175/BAMS-D-13-00242.1. Erratum, *Bull. Amer. Meteor. Soc.*, **96**, 1440, doi: 10.1175/BAMS-D-15-00232.1.
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- 85. M. Horn, K. Walsh, M. Zhao, **S.J. Camargo**, E. Scoccimarro, H. Murakami, H. Wang, A. Kumar, <u>D.A. Shaevitz</u>°, J.A. Jonas, K. Oouchi, 2014. Tracking scheme dependence of simulated tropical cyclone response to idealized climate simulations. *J. Climate* **27**, 9197-9213, doi: 10.1175/JCLI-D-14-00200.1.
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- 75. J. Sheffield, **S.J. Camargo**, R. Fu, Q. Hu, X. Jiang, K.B. Karnauskas, S.T. Kim, J. Kinter, S. Kumar, B. Langenbrunner, E.D. Maloney, A. Mariotti, J.E. Meyerson, N. Johnson, J.D. Neelin, S. Nigam, Z. Pan, A. Ruiz-Barradas, R. Seager, Y.L. Serra, D.-Z. Sun, C. Wang, S.-P. Xie, J.-Y. Yu, T. Zhang, M. Zhao, 2013. North American climate in CMIP5 experiments. Part II: Evaluation of 20th century intra-seasonal to decadal variability, *J. Climate*, **26**, 9247-9290, doi:10.1175/JCLI-D-12-00593.
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- 59. **S.J. Camargo** and A.G. Barnston, 2009. Experimental seasonal dynamical forecasts of tropical cyclone activity at IRI, *Wea. Forecasting*, **24**, 472-491.
- 58. **S.J. Camargo**, M.C. Wheeler, and A.H. Sobel, 2009. Diagnosis of the MJO modulation of tropical cyclogenesis using an empirical index, *J. Atmos. Sci.*, **66**, 3061-3074.
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- 51. **S.J. Camargo**, H. Li, and L. Sun, 2007. Feasibility study for downscaling seasonal tropical cyclone activity using the Regional Spectral Model, *Int. J. Climatol.* **27**, 311-325.
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- 29. D. Biskamp, **S.J. Camargo**, and B.D. Scott, 1994. Spectral properties and statistics of resistive drift-wave turbulence, *Phys. Letters A* **186**, 239-244.
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- 27. H. Tasso and S.J. Camargo, 1992. On the nonlinear stability of dissipative fluids, N. Cimento B 107, 733-740.
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- 25. S.J. Camargo and H. Tasso, 1990. Self-similar statistics in MHD turbulence, Z. Naturforsch. 45a, 603-608.

State of the Climate contributions (peer reviewed)

- 24. **S.J. Camargo**, 2019. Tropical Cyclones, Western North Pacific Basin, in *State of the Climate in 2018*, J. Blunden and D.S. Arndt (editors), *Bull. Amer. Meteor. Soc.*, **100**, S124-S127.
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- 13. **S.J. Camargo**, 2009. Tropical Cyclones, Western North Pacific Basin, (pp. S85-S88), in *State of the Climate in 2008*, T.C. Peterson, and M.O. Baringer (editors), *Bull. Amer. Meteor. Soc.* **90**, S1-S196.
- 12. **S.J. Camargo**, 2008. Tropical Cyclones, Western North Pacific Basin (pp. S74-S76), in State of the Climate in 2007, D.H. Levinson and J.H. Lawrimore, (editors), *Bull. Amer. Meteor. Soc.* **89**, S1-S179.
- 11. **S.J. Camargo**, 2007. Tropical Cyclones, Western North Pacific Basin (pp.S54-S56), in State of the Climate in 2006, A. Arguez (editor), *Bull. Amer. Meteor. Soc.* **88**, S1-S135.
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- 8. **S.J. Camargo**, 2004. Western North Pacific typhoon season (pp. S25-S27), in *State of the Climate in 2003*, D.H. Levinson and A.M. Waple (editors), *Bull. Amer. Meteor. Soc.* **85**, S1-S72.
- 7. **S.J. Camargo**, 2003. Western North Pacific typhoon season (pp. S26-S28), in *State of the Climate in 2002*, A.M. Waple and J.H. Lawrimore (editors), *Bull. Amer. Meteor. Soc.* **84**, S1-S68.
- A.M. Waple, J.H. Lawrimore, M.S. Halpert, G.D. Bell, W. Higgins, B. Lyon, M.J. Menne, K.L. Gleason, R.C. Schnell, J.R. Christy, W. Thiaw, W.J. Wright, M.J. Salinger, L. Alexander, R.S. Stone, and S.J. Camargo, 2002. Climate Assessment for 2001, *Bull. Amer. Meteor. Soc.* 83, S1-S62.

Book Chapters

- 5. I-I Lin, **S.J. Camargo**, C. Patricola, J. Boucharel, S. Chand, P. Klotzbach, J. Chan, B. Wang, P. Chang, T. Li, and F.F. Jin, 2020. ENSO and tropical cyclones, in *ENSO in a changing climate*, AGU Monograph, in press.
- 4. **S.J. Camargo** and S.M. Hsiang, 2015. Tropical Cyclones: From the influence of climate to their socio-economic impacts, in *Extreme Events: Observations, Modeling and Economics*, M. Chaves, M. Ghil and J. Urrutia-Fucugauchi, editors, AGU Monograph, Chapter 18, pp. 303-342, Willey-Blackwell, ISBN: 978-1-119-15701-4.
- 3. **S.J. Camargo**, A.H. Sobel, A.G. Barnston, and P.J. Klotzbach, 2010. *The influence of natural climate variability, and seasonal forecasts of tropical cyclone activity*, Chapter 11, pp. 325-360, in Global Perspectives on Tropical Cyclones, from Science to Mitigation, 2nd edition, World Scientific Series on Earth System Science in Asia, vol. 4, J.C.L. Chan and J.D. Kepert, editors, ISBN 978-981-4293-47-1.
- 2. M.K. Tippett, **S.J. Camargo**, and I.L. Caldas, 1998. Modal and nonmodal linear stability of electromagnetic drift-waves, in *Topics in Theoretical Physics* **vol. II**, *Festschrift for Abraham Hirsz Zimerman*, edited by Henrik Aratyn, Luiz Agostinho Ferreira and José Francisco Gomes, pp. 47-50, Theoretical Physics Institute, São Paulo State University (Unesp), São Paulo, Brazil.
- 1. I.L. Caldas, M.V.A.P. Heller, **S.J. Camargo**, and M.C.R. Andrade, 1990. The trajectories of magnetic field lines in tokamaks with helical windings, in *Condensed Matter Theories* **Vol. 5**, V.C. Aguilera-Navarro, editor, pp. 217-224, Springer, Boston, MA, ISBN: 978-1-4613-0605-4, doi: 10.1007/978-1-4613-0605-4-4-24

Workshop Summaries

- 1. **S.J. Camargo** and A.H. Sobel, 2007. Workshop on Tropical Cyclones and Climate, *Bull. Amer. Meteor. Soc.* **88** (Meeting Summaries), 289-291.
- 2. A. Sobel, **S.J. Camargo**, W. Debucquoy, G. Deodatis, M. Gerrard, T. Hall, R. Hallman, J. Keenan, U. Lall, M.A. Levy, B. Orlove, C. Rosenzweig, R. Seager, J. Shaman, and M. Tippett, 2016. Extreme weather and climate: Workshop report. *J. Extreme Events*, **3**, 1671001, doi: 10.1142/S2345737616710019.
- 3. A. Robertson, **S.J. Camargo**, A. Sobel, F. Vitart, and S. Wang, 2017. Summary of workshop on sub-seasonal to seasonal predictability of extreme weather and climate. *npj Climate and Atmospheric Science*, **1**, 8, doi: 10.1038/s41612-017-0009-1.

Additional publications

- 1. Editors' Highlights, "Understanding tropical rainfall projections under climate change", EOS, February 11, 2020.
- 2. H. Rajaram, N. Diffenbaugh, S. Camargo et. al., 2019. Thank you to our 2018 peer reviewers. *Geophysical Research Letters*, **46**, 12608-12636, doi: 10.1029/2019GL084031.
- 3. Editors' Highlights, "Examining the Structure of Tropical Cyclones' Upper Levels", EOS, November 12, 2019.
- 4. Editors' Highlights, "Vertical Shear and Tropical Cyclone Generated Gravity Waves", EOS, May 14, 2019.
- 5. Editors' Highlights, "Can Coastal Surface Currents Improve Hurricane Forecasts?", EOS, October 18, 2018.
- 6. A.H. Sobel, **S.J. Camargo**, K.A. Emanuel, and M. Previdi, 2018. Aerosols vs. greenhouse gas influences on tropical cyclone intensity. Presented at the 31st Conference on Climate Variability and Change, 7–11 January 2018, Austin, Texas. In *Nowcast, Conference Notebook*, in *Bull. Amer. Meteor. Soc.*, **99**, 1517-1518.
- 7. **S.J. Camargo**, 2013. Tropical cyclones in high-resolution climate models. *U.S. CLIVAR Variations*, Vol. 11, No. 3, 4-11.
- 8. K. Walsh, M. Horn, S. Camargo, H. Murakami, H. Wang, E. Scoccimarro, 2013. Changes in future southern hemisphere tropical cyclone numbers. *U.S. CLIVAR Variations*, Vol. 11, No. 3, 1-4.
- M. Zhao, I.M. Held, G. Vecchi, E. Scoccimarro, H. Wang, M. Wehner, Y.-K. Lim, T. LaRow, S.J. Camargo, K. Walsh, S. Gualdi, A. Kumar, S. Schubert, K.A. Reed, 2013. Robust direct effect of increasing atmospheric CO₂ concentration on global tropical cyclone frequency A multi-model inter-comparison. U.S. CLIVAR Variations, Vol. 11, No. 3, 12-17.
- 10. U.S. CLIVAR Hurricane Working Group, 2013. U.S. CLIVAR Hurricane Workshop Report 2013-5, U.S. CLIVAR Project Office, Washington, DC 20005, 18pp.

. Publications in Review

- 1. Z. Aarons[†], S.J. Camargo, J.D.O. Strong^{*}, and H. Murakami, 2020. Tropical cyclone characteristics in the MERRA-2 Reanalysis and AMIP simulations. *Earth and Space Sciences*, submitted February (2020).
- 2. M. Bieli°, A.H. Sobel, **S.J. Camargo**, H. Murakami, and G.A. Vecchi, 2020. Application of the cyclone phase space to extratropical transition in a global climate model. *Journal of Advances in Modeling Earth Systems*, submitted August (2019), revised January (2020).
- 3. **S.J. Camargo**, 2020. Tropical Cyclones, Western North Pacific Basin, in "State of the Climate in 2019", submitted January (2020).
- 4. **S.J. Camargo**, C.F. Giulivi, A.H. Sobel, A.A. Wing, D. Kim, Y. Moon, J.D.O. Strong*, A.D. Del Genio, M. Kelley, H. Murakami, K.A. Reed, E. Scoccimarro, G.A. Vecchi, M.F. Wehner, C. Zarzycki, and M. Zhao, 2020. Characteristics of model tropical cyclone climatology and the large-scale environment. *Journal of Climate*, submitted July (2019), revised December (2019).
- 5. P. Hassanzadeh, C.-Y. Lee, E. Nabizadeh, **S.J. Camargo**, D. Ma and L. Yeung, 2020. Effects of climate change on the movement of future landfalling Texas tropical cyclones, submitted January (2020).

- 6. C.-Y. Lee, **S.J. Camargo**, A.H. Sobel, and M.K. Tippett, 2020. Statistical-dynamical donwscaling projections of tropical cyclone activity in a warming climate: Two diverging genesis scenarios. *Journal of Climate*, submitted June (2019), revised December (2019).
- 7. C.-Y. Lee, **S.J. Camargo**, F. Vitart, A.H. Sobel, J. Camp, S. Wang, and M.K. Tippett, 2020. Subseasonal predictions of tropical cyclone occurrence and ACE in the S2S dataset. *Weather and Forecasting*, submitted October (2019).
- 8. D. Ma, S. Wang, **S.J. Camargo**, A.H. Sobel, and J. Nie, 2020. Flavors of tracked intraseasonal convection anomalies. *Geophysical Research Letters*, submitted August (2019).
- 9. Y. Moon, D. Kim, **S.J. Camargo**, A.A. Wing, K.A. Reed, M.F. Wehner, and M. Zhao, 2020. A horizontal resolution-dependent wind speed adjustment factor for tropical cyclones in climate model resolutions. *Geophysical Research Letters*, submitted February (2020).
- C. Raymond, R.M. Horton, J. Zscheischler, O. Martius, A. AghaKoucha, J. Balch, S.G. Bowen, S.J. Camargo, J. Hess, K. Kornhuber, M. Oppenheimer, A.C. Ruane, T. Wahl, K. White, 2020. Understanding and managing connected extreme events. *Nature Climate Change*, submitted November (2019), revised February (2020).
- 11. A.W. Robertson, F. Vitart, and **S.J. Camargo**, 2020. Sub-seasonal to seasonal prediction of weather to climate with application to tropical cyclones. *Journal of Geophysical Research*, submitted September (2019), revised January (2020).

Scholarships and Awards

American Meteorological Society (AMS), Scientific and Technological Activities Commission Distinguished Scientific Technological Accomplishment Award, AMS Committee on Climate Variability and Change, 2020

12th Severo Ochoa Mobility Program, Barcelona Supercomputing Center, Barcelona, Spain, 2019

2019 Editor's Award, Journal of Climate, American Meteorological Society

2010 Editor's Citation for Excellence in Refereeing, Geophysical Research Letters, American Geophysical Union

Young Researchers in Developing Centers Fellowship, The State of São Paulo Research Foundation (FAPESP), São Paulo State University, Brazil, 1996-1998

Ph.D. Scholarship, German Academic Exchange Service (DAAD), Max-Planck Institute for Plasma Physics, Garching, Germany, 1989-1991

Ph.D. Scholarship, The State of São Paulo Research Foundation (FAPESP), São Paulo University, Brazil, 1989

M.Sc. Scholarship, The State of São Paulo Research Foundation (FAPESP), São Paulo University, Brazil, 1987-1989

Scientific Initiation Scholarship, The State of São Paulo Research Foundation (FAPESP), São Paulo University, Brazil, 1985-1986

Mentoring

Jane Baldwin, Lamont postdoctoral fellow, co-mentor Adam Sobel, September 2019 - present.

Ishan Datt, Columbia Engineering School, undergraduate student, co-mentor Adam Sobel, May 2019 - present.

Iris Liu, Barnard College undergraduate student, co-mentor Adam Sobel, February 2019 - present.

Jeffrey Strong, postdoctoral research scientist, co-mentor Adam Sobel, December 2017 - December 2019.

Melanie Bieli, APAM graduate student, co-mentor Adam Sobel, September 2015 - August 2019.

Zoe Aarons, Bowdoin College, LDEO Summer Internship Program fellow, June - August 2018.

Helena V. Rios, Columbia College undergraduate student, co-mentor Adam Sobel, January - August 2018.

June Yang, APAM undergraduate student, co-mentor Adam Sobel, June 2017 - May 2018.

Xinran Wang, graduate student in the Data Science Masters program, July - September 2016, currently data analyst, Yale Program on Climate Change Communication.

- Allison Wing, NSF postdoctoral research fellow, co-mentor Adam Sobel, October 2014 December 2016, currently Assistant Professor, Florida State University.
- *Chia-Ying Lee*, postdoctoral researcher, co-mentors Adam Sobel and Michael Tippett, October 2013 September 2016, currently Lamont Assistant Research Professor, Lamont-Doherty Earth Observatory, Columbia University.
- Yun Lu, graduate student in the Climate and Society Masters Program, September 2013 August 2014, currently forecaster at Ningbo Meteorological Bureau, China.
- *Daniel Shaevitz*, Research Assistant, April August 2012; APAM graduate student, co-mentor Adam Sobel, September 2012 January 2014.
- *Kathryn Jordan*, Authentic Research Program, Toms River High School South, Toms River, NJ, October 2011 June 2012.
- Ken Zhao, APAM graduate student, co-mentor Adam Sobel, July 2011 August 2012.
- *Hui Shi*, graduate student in the Master of Science in Climate and Society program, co-mentor Adam Sobel, September 2011 May 2012.
- *Hamish Ramsay*, NASA GISS post-doctoral fellow 2009-2011, co-mentor, main mentor Adam Sobel, currently CSIRO scientist, Australia.
- *Brenden Moses*, Authentic Science Research Program, Byram Hills High School, Armonk, NY, July August 2010, co-mentors Andrew Robertson (IRI, main mentor), and Bradfield Lyon (IRI).
- *Earle Wilson*, APAM undergraduate, January May 2010, co-mentor Adam Sobel (main mentor) and Michael Tippett, currently graduate student, University of Washington.
- Gino Chen, graduate student in the Climate and Society Masters Program, May August 2009, currently graduate student, University of Miami.
- Allison Wing, Cornell University, undergraduate summer intern, June August 2007, co-mentors Adam Sobel and Lorenzo Polvani, currently assistant professor, Florida State University.
- Allison Wing, Cornell University, LDEO Summer Internship Program fellow, May August 2006, co-mentor Adam Sobel, currently assistant professor, Florida State University.
- Michelle Hoffner, Ossining High School, Science Research Program, Ossining, NY, October 2005 June 2006.
- Colby Blitz, Earth Institute research assistant, Fall 2004, co-mentors Alessandra Giannini (IRI, main mentor) and Beate Liepert (LDEO).
- *Colby Blitz*, Earth Institute Summer Intern Program, June August 2004, co-mentors Alessandra Giannini (main mentor) and Beate Liepert.

Memberships

American Association for the Advancement of Science, since 2020

American Geophysical Union, since 2000

American Meteorological Society, since 1999

European Geophysical Union, since 2020

External Committees and Community Service

Member, *President's Advisory Committee on University Relations - PACUR*, University Coorporation for Atmospheric Research - UCAR, October 2019 - present.

Secretary, Natural Hazards Section, American Geophysical Union, 2019-2020.

Editor Geophysical Research Letters, December 2017 - present.

Associate Editor, Journal of Climate, August 2016 - present.

Member of the NOAA Model Diagnostics Task Force Phase 2, October 2018 - present.

- Member of the WMO Task Team on Climate Change Impacts on Tropical Cyclones, May 2017 present.
- Member of the NOAA Subseasonal to Seasonal (S2S) Task Force, September 2016 present.
- Reviewer, Connecticut Physical Climate Assessment Report (PCSAR), September 2018.
- Member of the NOAA Model Diagnostics Task Force, September 2015 August 2018.
- International Workshop on Tropical Cyclones, IWTC-IX, rapporteur for topic "Tropical cyclone prediction in subseasonal timescale and the S2S database", contributing author for topics "Tropical cyclones and climate change" (rapporteur: Kevin Walsh and "Extratropical transition" (rapporteurs: Ron McTaggart-Cowen and Clark Evans). World Meteorological Organization, World Meteorological Program, Honolulu, Hawaii, December 2018.
- American Geophysical Union Hurricanes Expert for Media contact, 2016- present.
- *Contributor* to the annual *State of the Climate* article published in the *Bulletin of the American Meteorological Socieity*, as an author of the western North Pacific typhoon season summary since 2001.
- International Workshop on Tropical Cyclones, IWTC VIII, contributing author, Working Group 5.2: Tropical cyclones seasonal forecasts (rapporteur F. Vitart) and Working Group 5.1: tropical cyclones interaction with climate change (rapporteurs J. McBride and K. Walsh), World Meteorological Organization, World Meteorological Program, Jeju Island, Korea, December, 2014.
- Section co-Editor: Current Climate Change Reports special issue on extreme events, 2014-2015, 2015-2016.
- Reviewer for the National Research Council Research Associateship Programs, National Academy of Sciences, 2013 2016.
- Member of Earth System Prediction Capability (ESPC) science team for "Seasonal Prediction of Tropical Cyclone (TC) Threats", May 2012 2013. Team Leader: Melinda Peng (Naval Research Laboratory).
- *Member of NOAA MAPP CMIP5 Task Force*, November 2011 October 2014. Leader: Jim Kinter (COLA), Co-leaders: Justin Sheffield (University of Princeton) and Eric Maloney (Colorado State University).
- Co-chair: US-CLIVAR Hurricanes and climate working group, January 2011 December 2014. Other co-chairs: Kevin Walsh and Gabriel Vecchi.
- Member NSF Graduate Research Fellowship Program Geosciences 2 panel, January 2014, January 2015 (off-site, online).
- Member 2012 NSF Graduate Research Fellowship Program Geosciences 2 panel, January 11-13, 2012, Washington, D.C.
- Member of the CLIVAR Atlantic Implementation Panel, October 2008 December 2012.
- Participation in the *RMS* (*Risk Management Solutions*) elicitation process for expected Atlantic hurricane activity for the next 5 years as an expert, 2006 (New York, NY), 2007 and 2008 (Miami, FL).
- Coordinator of the WMO (World Meteorological Organization) committee on seasonal tropical cyclone forecasts 2006-2013; overall coordinator Johnny Chan (City University of Hong Kong), http://www.wmo.int/pages/prog/arep/wwrp/tmr/tc-web/IWTC-VI-fp.html
- Topic Section chair Topic 3 for the International Workshop on Tropical Cyclones VII (IWTC-VII); Topic 3: Tropical Cyclone activity from Intraseasonal to Climate Time Scales. Working group member subtopic 2.3 for IWTC-VII, Topic 2: Tropical cyclone formation and extratropical transition, subtopic 2.3: Tropical cyclone formation forecasting. Member of Recommendations Committee. IWTC-VII, 14-20 November 2010, La Reunion.
- *Rapporteur* for the International Workshop on Tropical Cyclones VI, 21-30 November 2006 in San José, Costa Rica; sub-topic 4.3: Short-term climate (seasonal and intraseasonal) predictions of tropical cyclone activity/intensity; topic chair Christopher Landsea (NOAA).
- Proposal Reviewer for: NOAA, NSF, NASA, various international funding agencies.

Scientific Visits

European Centre for Medium-Range Weather Forecasts, Reading, United Kingdom, October 2019, host: Dr. Fréderic Vitart.

Barcelona Super Computing Center, Earth Sciences Department, Barcelona, Spain, September - November, 2019, hosts: Dr. Francisco Doblas-Reyes, Dr. Louis-Philippe Caron.

European Centre for Medium-Range Weather Forecasts, Reading, United Kingdom, November 2018, host: Dr. Fréderic Vitart.

University of Melbourne, Melbourne, Australia, January 2016, host: Prof. Kevin Walsh

Swiss Federal Institute of Technology (ETH), Zürich, Switzerland, August 2015, host: Prof. Tapio Schneider

Dynamic Meteorology Laboratory, École Normale Supérieure, Paris, France, March 2015, host: Prof. Jean-Philippe Duvel

Colloquia and Seminars

Swiss Federal Institute of Technology (ETH), Zürich, Switzerland, November 11, 2019.

Barcelona Supercomputing Center, Barcelona, Spain, October 29, 2019.

Barcelona Supercomputing Center, Barcelona, Spain, September 19, 2019.

National Autonomous University of Mexico, Mexico City, Mexico, August 13, 2019.

National Center for Disaster Preparednes, Earth Institute, Columbia University, New York, NY, April 25, 2019.

University of Oklahoma, Norman, Oklahoma, April 22, 2019.

Geodynamics Seminar Series, Woods Hole Oceanographic Institution, Woods Hole, MA, April 2, 2019.

Rutgers University, New Brunswick, NJ, January 29, 2019.

ECMWF, Reading, United Kingdom, November 16, 2018.

University of Reading, Reading, United Kingdom, November 9, 2018.

U.K. Met Office, Exeter, United Kingdom, November 7, 2018.

University of Exeter, Exeter, United Kingdom, November 6, 2018.

NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ, October 25, 2018.

Purdue University, West Lafayette, IN, October 16, 2018.

Indiana University, Bloomington, IN, October 15, 2018.

University of Connecticut, Storrs, CT, October 12, 2018.

Lawrence Berkeley National Laboratory, Berkeley, CA, March 12, 2018.

Brown Bag Seminar, Stanford University, Stanford, CA, March 9, 2018.

Center for Weather Forecasting and Climatic Studies, Cachoeira Paulista, Brazil, January 30, 2018.

Stevens Institute of Technology, Hoboken, NJ, November 13, 2017

University of Illinois Urbana-Champaign, Urbana, IL, November 7, 2017

University of Stockholm, Stockholm, Sweden, March 3, 2017

Bureau of Meteorology, Melbourne, Australia, January 28, 2016

University of Melbourne, Melbourne, Australia, January 27, 2016

Monash University, Clayton, Australia, January 21, 2016

Physics Institute, São Paulo University, São Paulo, Brazil, October 16, 2015

NASA Goddard Institute of Space Studies (GISS), New York, NY, September 4, 2015

Swiss Federal Institute of Technology (ETH), Zürich, Switzerland, August 20, 2015

Massachusetts Institute of Technology (MIT), Cambridge, MA, May, 4, 2015

Texas A&M University, College Station, TX, September 30, 2014

Stanford University, Stanford, CA, November 9, 2011

Stony Brook University, Stony Brook, NY, April 7, 2010

Lamont-Doherty Observatory, Columbia University, April 10, 2009

Rutgers University, New Brunswick, NJ, March 25, 2009

National Taiwan University, Taipei, Taiwan, March 10, 2009

Central Weather Bureau, Taipei, Taiwan, March 9, 2009

Meteorological Research Institute, Tsukuba, Japan, February 17, 2009

University of Wisconsin-Madison, Madison, WI, November 17, 2008

North Carolina State University, Raleigh, NC, August 22, 2008

Institute of Astronomy, Geophysics and Atmospheric Sciences, São Paulo University, São Paulo, Brazil, February 15, 2008

State University of New York at Albany, Albany, NY, November 5, 2007

National Center for Atmospheric Research (NCAR), Boulder, CO, July 25, 2007

Disaster and Development Brown Bag Seminar, School of International and Public Affairs (SIPA), Columbia University, New York, NY, May 2, 2007

NASA Goddard Institute of Space Studies (GISS), New York, NY, November 3, 2006

Columbia SIAM (Society for Industrial and Applied Mathematics) Chapter Lecture, Columbia University, New York, NY, November 9, 2005

Lamont-Doherty Observatory, Columbia University, February 18, 2005

Department of Applied Physics and Applied Mathematics, Columbia University, New York, NY, October 10, 2002

Institute of Astronomy, Geophysics and Atmospheric Sciences, São Paulo University, São Paulo, Brazil, August 14, 2002

International Research Institute for Climate and Society, Palisades, NY, September 28, 2000

Max-Planck Institute for Plasma Physics, Garching, Germany, July 1998

São Paulo State University, Guaratinguetá, Brazil, June 1998

Physics Institute, São Paulo University, São Paulo, Brazil, March 1998

National Institute of Spatial Research (INPE), São José dos Campos, Brazil, December 1996

University of Maryland, College Park, MD, August 1996

Physics Institute, São Paulo University, São Paulo, Brazil, June 1996

Max-Planck Institute for Plasma Physics, Garching, Germany, June 1994

Physics Institute, São Paulo University, São Paulo, Brazil, January 1994

Physics Institute, São Paulo University, São Paulo, Brazil, January 1993

Max-Planck Institute for Plasma Physics, Garching, Germany, December 1992

Free University of Brussels, Brussels, Belgium, October 1992

Max-Planck Institute for Plasma Physics, Garching, Germany, July 1992

Max-Planck Institute for Plasma Physics, Garching, Germany, December 1991

Max-Planck Institute for Plasma Physics, Garching, Germany, March 1990

Invited Talks in Conferences and Workshops

European Geophysical Union General Assembly 2020, Vienna, Austria, May 3-8, 2020 (scheduled).

Reinsurance Association of America's Catastrophe Modeling Conference "Forward Looking Catastrophe Risk Management", Orlando, FL, February 25-27, 2020 (scheduled).

100th American Meteorological Society Annual Meeting, Boston, MA, January 12-16, 2020 (invited talk and invited participation in panel).

Analytics Insights Conference, Chicago, IL, July 10-11, 2019.

Fourth Trans Re/Alleghany 2019 Global Emerging Risk Forum, New York, NY, May 2, 2019.

MIT Global Change Forum - Global Change: Risks and Opportunities, Cambridge, MA, March 27-29, 2019.

9th International Workshop on Tropical Cyclones (IWTC-9), Honolulu, Hawaii, 3-7, December 2018.

Workshop on Tropical Cyclones Seasonal Forecasting, Barcelona, Spain, 2 November 2018.

Urban Floods: Interdisciplinary Perspectives, New York, NY, 12-13 April, 2018.

2017 AGU Fall Meeting, New Orleans, LA, 11-15 December 2017.

6th International Summit on Hurricanes and Climate Change: From Hazard to Impact, Heraklion, Creete, Greece, June 4-9, 2017

Fourth Santa Fe Conference on Global & Regional Climate Change, Santa Fe, NM, February 5-10, 2017

Columbia University-ETH Zürich Workshop, Extreme environmental risks: Statistical modeling and insurability, Zurich, Switzerland, 14-15 March 2016

2015 AGU Fall Meeting, San Francisco, CA, 14-18 December 2015

Asia-Pacific Economic Cooperation (APEC) Climate Center Climate Symposium 2015, keynote speaker, Manila, Philippines, 2-4 November, 2015

Extreme Weather and Climate: Hazards, Impacts, Actions, Initiative on Extreme Weather and Climate, Columbia University, New York, NY, May 6, 2015

The World Weather Open Science Conference (WWOSC) 2014, Montreal, Canada, 16-21 August 2014

Workshop on Impacts of Extreme Climate Events on Urban Coasts, Stevens Institute of Technology, Hoboken, NJ, 25-26 June, 2012

Risk Prediction Initiative (RPI) Research Update 2009 Workshop, Hamilton, Bermuda, October 8, 2009

High resolution Climate Modeling Workshop, Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, August 10-14, 2009

Abrupt Climate Change in a Warming World, Lamont Campus, Columbia University, Palisades, NY, July 8-10, 2009

Workshop on Retrospective Simulation and Analysis of Changing SE Asian High-Resolution Typhoon Wind and Wave Statistics, keynote presentation, Tainan, Taiwan, March 11-12, 2009

International Workshop on Global Change Projection: Modeling, Intercomparison, and Impact Assessment jointly with 2nd International Workshop on KAKUSHIN Program, Yokohama, Japan, February 18-20, 2009

2008 AGU Fall Meeting, San Francisco, CA, 15-19 December 2008

2006 RMS Hurricane Eyewall Symposium, Atlantic Hurricane Hazard Science Forecasting Beyond the Horizon, New York, NY, October 12, 2006

Global Risk Identification Programme (GRIP), Risk Sub-Program Planning Workshop, January 4-6, 2006, Lamont Campus, Columbia University, Palisades, NY

Forecast Forum, Central Weather Bureau, Taipei, Taiwan, October 27, 2003

International Workshop on Monthly-to-Seasonal Climate Prediction, Taipei, Taiwan, October 25-26, 2003

XII Seminar on Applied and Computational Mathematics, Guaratinguetá, Brazil, October 1996

Workshop on Turbulent Transport in Tokamak Plasmas, Garching, Germany, October 1996

School of qualitative aspects and applications of nonlinear evolution equations, International Center for Theoretical Physics (ICTP), Trieste, Italy, October 1990

Contributing Participation in Conferences, Workshops, Webinars

AGU Fall Meeting, San Francisco, December 9-13, 2019.

19th Cyclone Workshop, Seeon, Germany, September 29 - October 4, 2019.

9th Northeast Tropical Workshop, Dedham, MA, June 2-5, 2019.

Workshop on Correlated Extreme Events, New York, NY, May 28-31, 2019.

99th AMS Annual Meeting, Phoenix, AZ, January 6-10, 2019.

2018 AGU Fall Meeting, Washington, DC, December 10-14, 2018.

2nd International Conference on Subseasonal to Seasonal Prediction (S2S), Boulder, CO, September 17-21, 2018.

8th GEWEX Science Conference, Canmore, Canada, May 6-11, 2018

33rd AMS Conference on Hurricanes and Tropical Meteorology, Ponte Vedra, FL, April 16-20, 2018

18th Cyclone Workshop, Sainte Adéle, Québec, Canada, October 1-6, 2017

8th Northeast Tropical Meteorology Workshop, Rensselaerville, NY, 20-23 June 2017

2016 AGU Fall Meeting, San Francisco, CA, 12-16 December, 2016

Workshop on Sub-Seasonal to Seasonal Predictability of Extreme Weather and Climate, Lamont Campus, Columbia University, December 6-7, 2016

32nd AMS Conference on Hurricanes and Tropical Meteorology San Juan, Puerto Rico, 17-22 April, 2016

7th Northeast Tropical Workshop, 9-12 June, 2015, Dedham, MA

NOAA CPO MAPP Program Webinar, September 9, 2014

31st AMS Conference on Hurricanes and Tropical Meteorology, San Diego, CA, March 30 - April 4, 2014

8th International Workshop on Tropical Cyclones, IWTC - VIII, Jeju Island, Korea, November, 2014

2014 AGU Fall Meeting, San Francisco, CA, 14-18 December, 2014

2014 U.S. CLIVAR Summit, Denver, CO, 8-11 July 2014

94th American Meteorological Society Annual Meeting, Atlanta, GA, 2-6 February, 2014

2013 AGU Fall Meeting, San Francisco, CA, 9-13 December, 2013

2013 U.S. CLIVAR Summit, Annapolis, MD 9-11 July 2013

2nd U.S. CLIVAR Hurricane Workshop, Geophysical Fluid Dynamics Laboratory, Princeton, NJ, 5-7 June, 2013

6th Northeast Tropical Workshop, Rensselaerville, NY, 29-31 May 2013

2012 AGU Fall Meeting, San Francisco, CA, 3-7 December, 2012

Earth Prediction Capability Demonstrations Coordinating Workshop, Earth Systems Research Laboratory, NOAA, Boulder, CO, 13-15 November 2012

Atlantic Sector Climate Variability over the Last Millennium and the Near-Term Future Workshop, Lamont Campus, Columbia University, Palisades, NY, October 17, 2012

2012 U.S. CLIVAR Summit, Newport Beach, CA, 17-20 July 2012

30th Conference on Hurricanes and Tropical Meteorology, Ponte Vedra Beach, FL, 15-20 April, 2012

NOAA CPO MAPP Program Webinar, April 10, 2012

1st US CLIVAR Hurricane and Climate Working Group Workshop, New Orleans, LA, January 27-28, 2012

92nd AMS Annual Meeting New Orleans, LA, 22-26 January 2012

2011 U.S. CLIVAR Summit, Woods Hole, MA, 19-21 July 2011

5th Northeast Tropical Workshop, Dedham, MA, 17-19 May 2011

11th CLIVAR Atlantic Implementation Panel Meeting, Miami, FL, 25-26 March 2011

7th WMO International Workshop on Tropical Cyclones, IWTC-VII, La Réunion, France, 15-20, November 2010

29th AMS Tropical Meteorology and Hurricanes Conference, Tucson, AZ, May 2010

10th CLIVAR Atlantic Implementation Panel Meeting, Miami, FL, 28 February - 2 March 2010

Fourth Northeast Tropical Workshop, Rensselaerville, NY, June 23-26, 2009

17th AMS Conference on Atmospheric and Oceanic Fluid Dynamics, Stowe, VT, June 8-12, 2009

Third Workshop on High-Resolution and Cloud Modeling - Tropical Cyclones and Climate, University of Hawaii at Manoa, Honolulu, HI, December 2 - 4, 2008

6th Annual NCAR Early Career Scientist Assembly (ECSA) Junior Faculty Forum (JFF), Boulder, CO, 8-10 July, 2008

28th AMS Tropical Meteorology and Hurricanes Conference, Orlando, FL, 28 April - 2 May, 2008

Third Northeast Tropical Workshop, Dedham, MA, June 18-20, 2007

Small Scales and Extreme Events: The Hurricane, Institute of Pure and Applied Mathematics, University of Califonia, Los Angeles, February 12-16, 2007

6th WMO International Workshop on Tropical Cyclones (IWTC - VI), San José, Costa Rica, November, 2006

27th AMS Conference on Hurricanes and Tropical Meteorology, Monterey, CA, 24-28 April 2006

Tropical Cyclones and Climate Workshop, Lamont Campus, Columbia University, Palisades, NY, 27-29 March, 2006

30th Annual Climate Diagnostics and Prediction Workshop, State College, PA, 24-28 October, 2005

6th International RSM Workshop, Lamont Campus, Columbia University, Palisades, NY, 11-15 July, 2005

2nd Northeast Tropical Workshop, Rensselaerville, NY, 7-9 June, 2005

29th Annual Climate Diagnostics and Prediction Workshop, Maddison, Wisconsin, 18-22 October, 2004

26th AMS Conference on Hurricanes and Tropical Meteorology, Miami, FL, 3-7 May, 2004

28th Annual Climate Diagnostics and Prediction Workshop, Reno, NV, 20-23 October, 2003

1st Northeast Tropical Workshop, Rhineback, NY, 2-3 June 2003

25th AMS Conference on Hurricanes and Tropical Meteorology, San Diego, CA, 29 April - 3 May, 2002

27th Annual Climate Diagnostics and Prediction Workshop, Fairfax, VA, 21-25 October, 2002

26th Annual Annual Climate Diagnostics and Prediction Workshop, San Diego, CA, 22-26 October, 2001

Fifth Annual CCSM Workshop 2000, Breckenridge, CO, 27-29 June, 2000

5th Brazilian Congress on Plasma Physics, Águas de Lindóia, Brazil, December, 1998

VII Latin American Workshop on Plasma Physics, Tandil, Argentina, November 1998

1998 International Conference on Plasma Physics & 25th EPS Conference on Controlled Fusion and Plasma Physics, Prague, Czech Republic, June-July 1998

4th Brazilian Congress on Plasma Physics, Águas de Lindóia, Brazil, September 1996

21st EPS - European Conference on Controlled Fusion and Plasma Physics, Montpellier, France, June 1994

Ringberg Theory Meeting, Ringberg Castle, Tegernsee, Germany, July 1992

1st Symposium on Plasma Dynamics: Theory and Applications, Trieste University, Trieste, Italy, June 1991

17th EPS - European Conference on Controlled Fusion and Plasma Physics, Amsterdam, Holland, June, 1990

Dynamics Days, Düsseldorf, Germany, June, 1990

II French-Brazilian Symposium on Calculations of Electric and Magnetic Fields, São Paulo, Brazil, 1989

40th Meeting of the Brazilian Society for the Progress of Science, São Paulo, Brazil, 1988

Public Lectures, Panels

New City Library, New City, NY, February 26, 2020 (scheduled).

Nyack Library, Nyack, NY, July 31st, 2019.

When Science Meets History Lecture Series, Bird Homestead & Meeting House Conservancy, Rye, NY, April 27, 2019.

Symposium on Science Policy, Women in Science at Columbia & Columbia Engineering Energy Club, Columbia University, New York, NY, March 13, 2019, invited speaker and panelist.

Rockland Center for the Arts, West Nyack, NY, Climate Change communication panel, May 12, 2018.

Dominican Convent, Sparkill, NY, February 20, 2018.

International Women's Forum, invited panelist, Houston, TX, October 25, 2017

Lamont Open House 2016, Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, October 9, 2016

Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, Brazilian delegation from program "Ciência Sem Fronteira", August 14, 2015

Panel participant, Energy and Environment Conference, School of International and Public Affairs, Columbia University, September 2013

Lecture to Seniors of Rockland County, AARP Meeting, Jewish Community Center, West Nyack, NY, May 22, 2013

Keynote Speaker Nyack High School Science Symposium, Nyack, NY, April 25, 2012

Lamont Open House 2012, Lamont-Doherty Earth Observatory, Palisades, NY, October 10, 2012

Lecture to the Nyack Boat Club, in Nyack, NY, January 19, 2012 Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY,

Lamont summer interns 2011 lecture, July 12, 2011

Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, Visit of the Pan American High School November 4, 2011

Panel discussion, Lamont Open House 2011, Lamont-Doherty Earth Observatory, Palisades, NY, October 11, 2011

Career Day at Nyack Middle School, Nyack, NY, March, 4, 2010 and March, 31, 2011

Lamont Open House 2010, Lamont-Doherty Earth Observatory, Palisades, NY, October 2, 2010

Lamont Leadership Forum, June 4, 2009, Lamont Campus, Columbia University, Palisades, NY

Tipping Point Workshop, organized by the British Council, the Institute for Sustainable Cities of the City University of New York and The Earth Institute of Columbia University, December 6-7, 2009, Palisades, NY.

Lamont Open House 2008, Lamont-Doherty Earth Observatory, Palisades, NY, October 4, 2008

Various presentations on climate, hurricanes, El Niño, climate change, and being a scientist for K-5 students at the Upper Nyack Elementary School, Nyack, NY, 2000 - 2007

Global Roundtable on Climate Change, Fall 2005 Conference, Technology and Economics: Moving Toward Solutions, invited panelist, Columbia University, November 15, 2005

Lamont Open House 2005, Lamont-Doherty Earth Observatory, Palisades, NY, October 1, 2005

Understanding Katrina: Examining the Science, Physical Vulnerabilities, and Social Consequences, Earth Institute Seminars on Sustainable Development, The Earth Institute at Columbia University and Columbia University School of International and Public Affairs (SIPA), November 11, 2005, Columbia University, NY (invited panelist)

Lamont Open House 2004, Lamont-Doherty Earth Observatory, Palisades, NY, October 9, 2004

Discussion with High School Students about Science Careers, 92nd Street Young Men's and Young Women's Hebrew Association, New York, NY, March 4, 2003

Lamont Open House 2002, Lamont-Doherty Earth Observatory, Palisades, NY, October 5, 2002

Lamont Open House 2001, Lamont-Doherty Earth Observatory, Palisades, NY, October 6, 2001

Invited Lectures

- Climate Change and its Impact on Health and the Environment class, Weill Cornell Medicine, Healthcare Policy and Research, Cornell University, March 9, 2020 (invited by Prof. Madelon L. Finkel, scheduled).
- *Tropical Meteorology* class, School of Meteorology, University of Oklahoma, April 23, 2019 (invited by Prof. Naoko Sakaeda).
- *Environmental Science for Sustainable Development* class, Guest Lecture, School of International and Public Affairs, Columbia University, September 25, 2018, (invited by Prof. John Mutter).
- *Earth Institute Practicum* class, Guest Lecture, Columbia University, September 25, 2018 (invited by Prof. Arthur Lerner-Lam).
- Extreme Weather, Guest Lecture, Earth Institute Practicum class, Columbia University, October 10, 2017 (invited by Prof. Arthur Lerner-Lam).
- Discussion on hurricanes and climate change, Guest Lecture, Environmental Science for Sustainable Development class, School of International and Public Affairs, Columbia University, September 26, 2017 (invited by Prof. John Mutter).
- Extreme events, hurricanes and climate change', Guest Lecture, Environmental Science for Sustainable Development class, School of International and Public Affairs, Columbia University, September 24, 2017 (invited by Prof. John Mutter).
- Extreme events, hurricanes and climate change', Guest Lecture, Environmental Science for Sustainable Development class, School of International and Public Affairs, Columbia University, October 3, 2016 (invited by Prof. John Mutter).
- New York University Girls' Science, Technology, Engineering and Mathematics Summer Program (NYU GSTEM) lecture: "Hurricanes and Climate Change". New York University, New York, NY, August 4, 2014 (invited by Dr. Rebecca Stern).
- *Lamont summer interns 2013 lecture:* "Hurricanes and Climate Change". Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, July 25, 2013 (invited by Dr. Dallas Abbott).
- *Tropical cyclones and climate change*, Guest Lecture, Course: "Hurricane Sandy: Science, impacts, response", Department of Earth and Environmental Sciences, Columbia University, New York, NY, April 23, 2013 (invited by Prof. Adam Sobel).
- Global tropical cyclone climatology and variability, Guest Lecture, Course: "Hurricane Sandy: Science, impacts, response", Department of Earth and Environmental Sciences, Columbia University, New York, NY, April 16, 2013 (invited by Prof. Adam Sobel).
- Hurricanes and Extreme Weather Events, Guest Lecture, Course: "Public Health Impacts of Climate Change", Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, February 16, 2012 (invited by Prof. Patrick L. Kinney).
- *Hurricanes and climate change*, Earth2Class workshop for teachers, Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, February 11, 2012 (invited by Michael Passow).
- Earth Institute Fall Practicum: Lamont climate modeling and analysis research: understanding our climate at a time of change, The Earth Institute and the School of International and Public Affairs MPA, Columbia University, New York, NY, November, 30, 2010 (organizers: Louise Rosen and Dr. Yochanan Kushnir, speakers: Drs. M. Biasutti, S. Camargo, B. Cook, R. Seager, J. Smerdon).
- Earth Institute Fall Practicum: Climate Forecasting How science can influence policy, The Earth Institute and the School of International and Public Affairs MPA, Columbia University, New York, NY, September, 15, 2009 (organizers: Louise Rosen and Dr. Yochanan Kushnir, speakers: Drs. M. Biasutti, S. Camargo, R. Seager, J. Smerdon, and M. Ting).

- Hurricanes and Extreme Weather Events, Guest Lecture, Course: "Public Health Impacts of Climate Change", Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, April 3, 2009, (invited by Dr. Perry Sheffield and Prof. Patrick L. Kinney).
- Hurricanes and Climate, Guest Lecture, School of International and Public Affairs at Columbia University (SIPA), Master of Public Policy and Administration (MPA) in "Environmental Science and Policy", Palisades, NY, June 30, 2008 (invited by Dr. Yochanan Kushnir, LDEO).
- Hurricanes and Extreme Weather Events, Guest Lecture, Course: "Public Health Impacts of Climate Change", Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, March 27, 2008, (invited by Dr. Perry Sheffield and Prof. Patrick L. Kinney).
- Research on Hurricanes and Climate, Guest Lecture, Department of Applied Physics and Applied Mathematics (APAM), Columbia University, Course: "Applied Mathematics Seminar for Undergraduate Majors", New York, NY, November 26, 2007 (invited by Prof. Chris Wiggins, APAM).
- Hurricanes and Climate, Guest Lecture, School of International and Public Affairs at Columbia University (SIPA), Master of Public Policy and Administration (MPA) in "Environmental Science and Policy", Palisades, NY, July 9, 2007 (invited by Dr. Yochanan Kushnir, LDEO).
- *Hurricanes, Typhoons, and Climate*, Guest Lecture, Course: "Weather, Climate and Environment", Department of Geography, University of Connecticut, Storrs, CT, March 27, 2007, (invited by Prof. Anji Seth).
- Hurricanes and Extreme Weather Events, Guest Lecture, Course: "Public Health Impacts of Climate Change", Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, February 8, 2007, (invited by Dr. Kim Knowlton and Prof. Patrick L. Kinney).
- *Impacts of El Niño on hurricanes*, Guest Lecture, Courant Institute of Mathematical Sciences, New York University (NYU), November 8, 2006, New York, NY (invited by Prof. Olivier Pauluis).
- *Tropical Cyclones and Climate*, Guest Lecture, School of International and Public Affairs at Columbia University (SIPA), Master of Public Policy and Administration (MPA) in "Environmental Science and Policy", Palisades, NY, July 24, 2006 (invited by Dr. Yochanan Kushnir, LDEO).
- *Hurricanes, Typhoons, and Climate*, Guest Lecture, Course: "Weather, Climate and Environment", Department of Geography, University of Connecticut, Storrs, CT, April 12, 2006, (invited by Prof. Anji Seth).
- Hurricanes and Extreme Weather Events, Guest Lecture, Course: "Public Health Impacts of Climate Change", Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, April 6, 2006, (invited by Dr. Kim Knowlton and Prof. Patrick L. Kinney).

Teaching Experience

Columbia University, School of Professional Studies, New York, NY

Sustainability in the face of Natural Hazards - SUSC PS504, Master of Science in Sustainability Science, Spring 2019, Spring 2020, co-instructor Einat Lev

Understanding Extreme Events, Columbia University Girls in STEM Initiative for under-represented high-school girls, high-school summer program, 1 week course, Summer 2017, Miami, FL

São Paulo State University - Unesp, Department of Chemistry and Physics, Guaratinguetá, SP, Brazil

General Physics I undergraduate program in Engineering (1996, 1997, 1998, 1999)

General Physics II undergraduate program in Engineering (1996, 1998)

Classical Mechanics I for undergraduate students in Physics (1998, 1999)

Classical Mechanics II undergraduate program in Physics (1998)

Quantum Mechanics I undergraduate program in Physics (1996, 1997)

Quantum Mechanics II undergraduate program in Physics (1996)

Mathematical Physics II undergraduate program in Physics (1996) (co-teaching)

São Paulo University - USP, Physics Institute, São Paulo, SP, Brazil

Turbulence in Plasmas and Fluids, graduate program in Plasma Physics, 2 weeks course (1995)

Funding History

- SwissRe: "A climate change signal in hurricanes today", co-Investigator. Principal Investigator: Adam H. Sobel. Other co-Investigators: Chia-Ying Lee and Michael K. Tippett.
- Volkswagen Foundation: "Europe and global challenges, impact of intensified weather extremes on Europe's economy": Sub-contract for Columbia University: as collaborator, Adam H. Sobel (co-Investigator). Grant Principal Investigator: Anders Levermann (Potsdam Institute for Climate Impact Research PIK, Germany), other co-Investigators: L. Wenz (PIK, Germany), M. Auffhamer (University of California at Berkeley), M. Lenzen (University of Sydney, Australia).
- NOAA MAPP 2018: Collaborative Research: "Process-oriented diagnosis of tropical cyclone genesis and intensification in high-resolution global models", Principal Investigator (Columbia University). Collaborators from other institutions: Daehyun Kim (University of Washington), Allison Wing (Florida State University).
- NASA MAP 2016: "Tropical Cyclones in the GISS model at high resolution", co-Investigator. Principal Investigator: Adam H. Sobel. Other Co-Investigators: Anthony Del Genio, Maxwell Kelley.
- NYSERDA 2016: "Open-source cyclone risk mdoeling for New York State", co-Investigator. Principal Investigator: Chia-Ying Lee. Other co-investigators: Michael K. Tippett and Adam H. Sobel.
- Columbia University President's Global Innovation Fund 2016: "Storm surge risk to Mumbai: a challenge to urban sustainability in India's largest city", co-Investigator. Principal Investigator: Adam H. Sobel. Other co-Investigators: Kyle Mandli, Michael K. Tippett, Chia-Ying Lee.
- NOAA MAPP FY16: "The relationship of tropical cyclones to MJO and ENSO in the S2S database", as Principal Investigator. Co-Investigators: A.H. Sobel and C.-Y. Lee, international collaborator: F. Vitart.
- NOAA MAPP FY15: "Process oriented diagnostics of tropical cyclones in climate models", as Principal Investigator. Co-Investigators: A.H. Sobel, D. Kim, and A. Del Genio.
- Alliance Program Joint Innovative Research Grant. "Transitioning Atlantic hurricanes in a changing climate: future extreme weather risk for the eastern U.S. and western Europe", as co-investigator. Principal Investigator: Adam Sobel (Columbia University), other co-investigator: Jean Phillipe Duvel (Ecole Normale Supériore, Paris, France).
- AXA Award Research Project: Principal Investigator: Adam Sobel (Columbia University), Co-Investigators: M. Biasutti, S. Camargo, M. Tippett and S. Wang.
- NASA MAP 2012: "Intraseasonal variability and tropical cyclones in the NASA GISS General Circulation Model: Phase 2", as co-investigator. Principal Investigator: Adam Sobel (Columbia University); other co-investigator: Daehyun Kim (LDEO), collaborator: Anthony Del Genio (NASA GISS).
- Research Initiatives in Science and Engineering 2011-2012, Columbia University: "Towards long-range prediction of tornado activity", as co-Investigator. Principal Investigator: Michael K. Tippett, IRI, Columbia University; other co-investigator: Adam H. Sobel, Columbia University.
- Lamont Climate Center 2011: "Mini-conference: Severe convection and climate", as Principal Investigator, co-investigators: M. Tippett (IRI), A. Sobel (Columbia), funded November 2011, \$7,767.
- ONR FY2012 MURI: "Extended-range prediction with low-dimensional, stochastic-dynamics models: A data driven approach", as co-Investigator. Lead Columbia University PI: Michael K. Tippett, lead UCLA PI: Michael Ghil, co-Investigators: M.D. Chekroun and D. Kondrashov (UCLA), S. Camargo, M. Cane, D. Chen, A. Kaplan, Y. Kushnir, N. Naik, A. Robertson, M. Ting, and X. Yuan (Columbia University).
- NSF GEO/ATM Climate and Large Scale Dynamics: "Tropical Cyclones and Climate A Model Intercomparison Project", as Principal Investigator, co-Investigators: Adam Sobel, Daehyun Kim, collaborators: Gabriel Vecchi and Kevin Walsh, funded, period 01/01/12-31/12/14.

- NOAA Climate Program Office FY11, MAPP: "Tropical cyclone tracks in present and future climates", as Principal Investigator, co-Investigators: Adam Sobel, Timothy Hall, Kerry Emanuel and James Kossin, funded, period 09/01/11-08/31/14.
- NSF GEO/ATM Climate and Large Scale Dynamics: "Collaborative research: Tropical cyclones in a warming climate: Lessons from model simulations of the Last Glacial Maximum and Holocene", as co-Investigator. Principal Investigator: Robert Korty, Texas A&M, other co-Investigator: Joseph Galewsky, University of New Mexico, funded, period 04/15/11-03/31/14.
- NOAA Climate Program Office FY10, Climate Change Data and Detection Program: "Understanding and attributting tropical cyclone intensity and frequency changes in the 20th and 21st centuries", as co-Investigator. Principal investigator: Mingfang Ting, other co-Investigator: James P. Kossin (NOAA).
- Australian Research Council (ARC) Research Network for Earth System Sciences: "Tropical cyclone climate model intercomparison data archive", as collaborator. Principal investigator: Kevin Walsh (University of Melbourne).
- NOAA Climate Program Office FY09, Climate Variability and Predictability Program: "Mechanisms and predictability of the global climate impacts of Atlantic multidecadal variability", as co-Investigator. Principal investigator: Mingfang Ting (LDEO), other co-investigors: Yochanan Kushnir (LDEO), and Richard Seager (LDEO), 08/09 07/12.
- NCAR Travel support to participate in the "6th Annual NCAR Early Career Scientist Assembly (ECSA) Junior Faculty Forum (JFF)", in Boulder, CO, 8-10 July 2008.
- NASA Research Opportunities in Space and Earth Sciences (ROSES) 2008, Modeling, Analysis and Prediction Program: "Intraseasonal variability and tropical cyclones in the NASA GISS general circulation model", as co-Investigator. Principal investigator: Adam Sobel (Columbia University); collaborators: Anthony Del Genio (NASA GISS), Ron Miller (NASA GISS), Kevin Walsh (University of Melbourne).
- NOAA Climate Program Office FY08, Climate change data and detection program, Climate change data detection and attribution studies: "Towards a better understanding of the relationship between climate change and tropical cyclones", as Principal investigator. Co-investigators: Adam Sobel (Columbia University), Kerry Emanuel (MIT), Lorenzo Polvani (Columbia University); funded, 07/2008-06/2011.
- The Earth Institute at Columbia University Cross-cutting initiative: "Assessing risk of landslides from increased hurricane activity in the Caribbean: A model linking physical, biological and human processes", as co-investigator, Principal investigator: Maria Uriarte (Columbia University), other co-investigator: Arthur Lerner-Lam (LDEO Columbia University).
- Travel support from University of California, Los Angeles, to participate at the workshop: "Small Scales and Extreme Events: The Hurricane", Institute for Pure and Applied Mathematics, UCLA, Feb. 12-16, 2007.
- NSF Climate and Large-Scale Dynamics, Workshop Support for young investigators: "Tropical Cyclones and Climate Workshop", Lamont Campus of Columbia University in Palisades, NY, on March 27-29, 2006; US\$ 10,000.00, as Principal Investigator. Co-investigator: Adam Sobel (Columbia University).
- ADVANCE at the Earth Institute at Columbia University, Research Workshop Support: "Tropical Cyclones and Climate Workshop" Lamont Campus of Columbia University in Palisades, NY, on March 27-29, 2006; US\$ 19,848.00, as Principal Investigator. Co-investigator (mentor): Kerry Emanuel (MIT).
- NOAA Climate and Global Change Proposal, CLIVAR/Pan American Program, FY2004-FY2007: "Assessing GCM Performance in Simulation of Rainy Season Onset and Demise for Tropical South America", as co-investigator, Principal Investigator: Brant Liebmann (NOAA/CIRES Climate Diagnostic Center, Boulder, CO), other co-investigators: Anji Seth (University of Connecticut), Rong Fu (Georgia Tech. Univ.) José Marengo (CPTEC, Brazil).
- NOAA Climate and Global Change Proposal, CLIVAR/Pan American Program, FY2002-FY2004: "The predictability of onset and character of warm season rains in tropical South America using a Nested Modeling System", as coinvestigator, Principal Investigator: Anji Seth (University of Connecticut, Storrs, CT), other co-investigators: Cintia B. Uvo (Lund University, Sweden), Brant Liebmann (NOAA CIRES Climate Diagnostic Center, Boulder, CO).

- Foundation for the Development of the São Paulo State University Unesp (Fundunesp), Research Grant 420/98-DFP, Program: "International Conference Support", to participate in the *Advanced School on Plasma Physics and VII Latin American Workshop on Plasma Physics*, Tandil, Argentina, November 1998, Principal Investigator.
- São Paulo Research Foundation (FAPESP), Research Grant # 98/0561-8, Research support program "Calculation of auto-consistent equilibrium in an tokamak", as co-investigator, Principal Investigator: M. Célia R. Andrade (INPE National Institute for Spacial Research, São José dos Campos, Brazil), other co-investigator: Gerson O. Ludwig (INPE, Brazil), August 1998 to July 1999.
- São Paulo Research Foundation (FAPESP), Research Grant # 98/1420-1, Program: "International Conference Support", to participate in the 25th EPS Conference on Controlled Fusion and Plasma Physics, Prague, Czech Republic, and the Edge-Plasma Simulation Course, Innsbruck, Austria; and visit the Max Planck Institute for Plasma Physics, Garching, Germany, June July 1998, Principal Investigator.
- Brazilian Innovation Agency for Financing Research and Project (FINEP), Project to Support Excellence Centers (Pronex) 050/97, "Centers of Research in Plasma Physics", as Co-investigator, Principal Investigator: Ricardo M.O. Galvão, December 1997 to November 2001.
- São Paulo Research Foundation (FAPESP), Research Grant # 96/0532-5, Research support program, as Co-investigator, Principal Investigator: Iberê L. Caldas (São Paulo University (USP), São Paulo, Brazil), March 1996 to May 1997.
- German Academic Exchange Service (DAAD), *Conference Support Program* to participate in the 28th Plasma Physics Summer School, Culham Laboratory, Abingdon, England, July 1991.
- International Center for Theoretical Physics (ICTP) *Conference Support Program* to participate in the *School of Qualitative Aspects and Applications of Nonlinear Evolution Equations*, ICTP, Trieste, Italy, September-October 1990.
- Student Support Program from the European Conference on Plasma Physics and Controlled Fusion (EPS) to participate in the *17th EPS* Amsterdam, Holland, July 1990.
- German Academic Exchange Service (DAAD), *Conference Support Program* to participate in the Workshop *Dynamic Days*, Düsseldorf, Germany, June 1990.
- Coordination for Improvement of Personnel of Graduate and Post-Graduate Level (CAPES), travel support (Brazil Germany), Proc. 1070/88, July 1989.

Graduate Students Committees

- *Melanie Bieli*, PhD in Applied Mathematics, Depatment of Applied Physics and Applied Mathematics, Engineering School, Columbia University, PhD committee member as co-advisor, committee members: Adam Sobel (co-advisor), Lorenzo Polvani, and Kyle Mandli, 2015-2019.
- *Denyse Dookie*, PhD in Sustainable Development, May 2019, School of International & Public Affairs, Columbia University, as external committee member, committee members: Daniel Osgood, John Mutter (chair), Doug Almond, Roger Pulwarty.
- Danielle Touma, PhD defense committee, Stanford University, November 2018, as external committee member, committee members: Dustin Schroeder (chair), Noah Diffenbaugh, Rob Jackson, Morgan O'Neill.
- Jhordanne Jones External examiner M. Phil thesis in Physics, University of West Indies, Mona Campus, Jamaica, 2016.
- *Emmi Yonekura*, PhD in Earth and Environmental Sciences, Department of Earth and Environmental Sciences, School of Arts and Sciences, Columbia University, PhD committee member (2008 2013). Other members of the committee: Timothy Hall (NASA GISS) advisor, Anthony del Genio (NASA GISS).

Workshops, Conferences and Sessions Organized

Co-Convener, Sessions: Centennial Overview: Prediction of Extreme Weather Events and Their Impacts as an Interdisciplinary Problem NH13B (posters), NH54A (oral), AGU Fall 2019, San Francisco, CA, 9-13 December, 2019.

- Organizing Committee, *Workshop on Correlated Extremes*, Columbia University, Extremes Initiatiave, New York, NY, 29-31 May 2019.
- Organizing Committee, 2017 Conference on Fire Prediction Across Scales, Columbia University Extremes Initiative, New York, NY, October 2017.
- Organizing Committee, *Workshop on Atlantic Climate Variability Dynamics Prediction and Hurricane Risk*, Columbia University Extremes Initiative, New York, NY, September 2017.
- Organizing Committee, Tropical Cyclone Hazard Intercomparison Workshop, New York, NY, September 2017.
- Organizing Committee, *Cyclones and Storm Surges: Building a Framework for Evaluating the Climate Risk to Mumbai*, Columbia Global Centers, Mumbai, India, January 12, 2017.
- Organizing Committee, *Workshop on sub-seasonal to seasonal predictability of extreme weather and climate*, Columbia University Initiative on Extreme Weather and Climate, Lamont Campus, Palisades, NY, December 6-7, 2016.
- Organizing Committee, *Tropical Cyclone Modeling Workshop*, Columbia University Initiative on Extreme Weather and Climate, New York, NY, May, 2016.
- Organizing Committee, First Science Workshop, Extreme Weather and Climate: Hazards, Impacs, Actions, Columbia University Initiative on Extreme Weather and Climate, New York, NY, May 6, 2015.
- International Organizing Committee, *International Workshop on Tropical Cyclones, IWTC VIII*, World Meteorological Organization, World Meteorological Program, Jeju Island, Korea, December, 2014.
- Program Committee, 31st Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, 30 March 4 April 2014, San Diego, CA.
- Co-organizer, 2nd US CLIVAR Hurricanes and climate working Group workshop, 5-7 June 2013, Princeton, NJ; co-organizers: Kevin Walsh and Gabriel Vecchi.
- Organizing Committee, *Severe Convection and Climate Workshop*, Columbia University, Lamont Campus, Palisades, NY, March 14-15, 2013; co-organizers: Michael K. Tippett and Adam H. Sobel.
- Co-organizer, 1st US CLIVAR Hurricanes and climate working Group workshop, 27-28 January 2012, New Orleans, LA; co-organizers: Kevin Walsh and Gabriel Vecchi.
- Convener and organizer, *Tropical Cyclones and Climate Workshop*, March 2006, Palisades NY; co-organizer Adam Sobel, Tellus A special issue with contributions to the workshop (2007).

Service - Columbia University

- Member, *Diversity Committee*, Department of Earth and Environmental Sciences (DEES), January 2020 present.
- Member, *Climate Education Committee*, Department of Earth and Environmental Sciences (DEES), November 2019 present.
- Member, LDEO Promotion and Careers Committee, November 2019 present.
- Member, Climate Center Committee, May 2019 present.
- Member, Earth Institute Post-doctoral fellows committee, 2017 2019.
- Member, Earth Institute Promotion committee, CIESIN scientist, July December 2019.
- Member, Administrative Assistant OCP Search Committee, May-June 2019.
- Chair, Lamont Assistant Research Professor Search Committee, September December 2018.
- Member, Earth Institute Communications Task Force, 2018 2019.
- Member, Earth Institute Faculty Development and Diversity Committee, 2018 2019.
- Member, Mentoring Award committee, Lamont-Doherty Earth Observatory, 2017 2019.
- Member, Earth Institute Staff Award committee, 2017.

Member, Post-doctoral Hiring Committee, NASA grant, Lamont-Doherty Earth Observatory, 2017.

Member, Columbia University NSF PIRE internal proposal committee, August 2016.

Member, Lamont Professional Leave of Absence committee, Lamont-Doherty Earth Observatory, 2016 - 2017.

Chair, Lamont Research Professor Search Subcomittee, January - June 2016.

Member, Post-doctoral hiring committee, ONR grant, Columbia University, Lamont Campus, 2014.

Member, *Post-doctoral hiring committee*, ONR grant, Columbia University, Lamont Campus, 2013.

Member Lamont Post-doctoral Fellowship Committee, October 2010 - February 2013.

Member Post-Doctoral hiring committee, Arlene Fiore's group, October 2011 - February 2012.

Co-organizer, Lamont Colloquium Series 2010-2011, with Angela Slagle.

Participation in the 2009 University Coorporation for Atmospheric Research Annual Members' Meeting, 13-14 October, 2009, Boulder, Colorado, as Columbia University substitute representant for Lorenzo Polvani.

Member of Ad-hoc Committee, NASA GISS Associate Research Scientist to Research Scientist. Committee chair: Timothy Hall (NASA GISS), 2010.

Outreach

Interview "Politico" about Hurricane and Climate Change, September 2019,

Interview "PBS-NOVA" about Hurricane Doria, September 2019, https://www.pbs.org/wgbh/nova/article/hurricane-dorian-coast.

Interview "Nexus media", August 2019.

The Rye City Review, 19 July 2019 (about talk in Rye).

Interview for Florida Sun-Sentinel, June 2019

Interview for "Science, Health and Wellness Podcast", by Rye High-School student David Lewis, June 2019.

Interview for Palm Beach Post, May 2019.

Interview for New York Times, May 2019.

Interview for Earth Institute blog and NOAA MAPP press release about publication of Scientific Reports paper, May 2019.

Input NOAA MAPP press release, May 2019.

Interview, Earth Institute blog about release of PNAS paper, April 2019.

Interview, Business Insider, November 20, 2018.

Interview, Tumble, Science podcast for kids, November 2, 2018. Podcast released, May 2019.

Interview, CUNY journalism student, October 24, 2018.

Interview, Swedish daily newspaper: Göteborgs-Posten, October 18, 2018.

Interview, FiveThirtyEight, October 11, 2018.

Interview, New York Times, October 10, 2018.

Interview, Earth Institute Blog, September 12, 2018.

Interview, Wall Street Journal, September 12, 2018.

Interview, Washington Post, July 25, 2018.

Interview, Gris Magazine, June, 19, 2018, .

Interview, The Verge, May 24, 2018.

Interview, Earth Institute State of the Planet Blog, January 2018 and NOAA MAPP.

Interview, New Scientist Magazine, November 2017.

Interview, Vox, October, 2017.

Interview, Earth Institute State of the Planet Blog, September, 2017.

Interview, National Geographic on the Montreal Protocol anniversary, September 2017.

TV interview, Globo News, Brazil, September 2017.

Interview, Polifact, September 2017.

Interview, The Verge, September 2017:

Interview Scientific American, September 2017.

Interview CNN, September 2017.

Interview, vice.com, September 2017.

Interview, Liberation, France, September 2017.

Contribution to the WMO Hurricane Expert Statement on Hurricane Harvey, September 2017.

Input on the hurricane season to the AGU Board and AGU Council through Robin Bell (with Adam Sobel), September 2017.

Interview, Earth Institute Blog, September 2017.

Interview, Thomson Reuters, September 2017.

Interview, Mic.com, August 2017.

Op-Ed for Fortune Magazine, with Adam Sobel, August 2017.

Interview, Popular Science, August 2017.

Interview, Earth Institute State of the Planet Blog, August 2017.

Interview, Barclays Bank leadership series article (January 2017).

Interview, New York Times (January 2017).

Interviews about Hurricane Matthew: Forbes, Reuters, ClimateWire, Climate News, Vice Media, Diario El Mercurio (Chile), Tampa Bay Times, Live Science, Climate Central (October 2016).

Interview for Climate Central (September 2016).

Interview for Climate Central on Cyclone Chapala (November 2015).

Interview for Daily Beast on El Niño and Hurricanes (October 2015).

Interview for Climate Central on GFDL paper on Hawaii hurricanes (August 2015).

Interview for Climate Central on tropical cyclone season changes (May 2015).

Interview of Columbia Master of Science Journalism Student Tommy Hawkins on Typhoon Haynan and Tropical Cyclones and Climate (November 2013).

Interview for "WNYU" on effects of climate change on the New York coastline (May 2013).

Phone interview for UN online humanitary news service (October 2009).

Interview for Austrian Broadcasting Corporation - Radio and Television (June 2009).

Interview for Austrian Broadcasting Corporation - Radio and Television (September 2008).

Interview for Brazilian television: TV Globo (July 2007).

Interview for Sierra Club Newsletter (September 2006).

Interview for Brazilian television: Bandeirantes (March 2006).

Interview for Columbia Magazine (March 2006).

Profile for promotional "card deck" for a Worth/Freeman calculus texbook (November 2005) by Nancy Brandwein.

Interview for Columbia Science Journalism student (September 2005), College du Page student (October 2005), Earth Institute Newsletter Portraits (December 2005).

TV interview for the Weather Channel (August 2005).

Phone interviews for the Boston Globe (August 2005), Journal News (August and October 2005), National Geographic Magazine (December 2005), American Museum of Natural History (September 2005), Rochester Democrat and Chronicle (August and October 2005).

Discussion with High School Students about Science career at the 92nd Street Young Men's and Young Women's Hebrew Association, New York, NY (March 2003).