

# Minmin Fu

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<b>Contact Information</b>	University of Southampton School of Ocean and Earth Science Waterfront Campus National Oceanography Centre Southampton SO14 3ZE	M.J.Fu@soton.ac.uk minminfu.github.io
<b>Current Position</b>	<b>University of Southampton</b> <i>Lecturer in Climate Science</i> Research interests: Climate Dynamics, Climate Change, Numerical Modeling, Paleoclimate, & El Niño <b>Yale University</b> <i>Flint Postdoctoral Fellow</i> Faculty Host: Prof. Alexey Fedorov	May 2025 - Present    Sept 2022 – May 2025
<b>Education</b>	<b>Harvard University</b> Ph.D., Earth and Planetary Sciences Advisor: Prof. Eli Tziperman <b>University of California, Davis</b> B.A. Physics, B.A. Mathematics GPA: 3.95, <i>Highest Honors</i>	Sept 2016 – May 2022    Sept 2013 – May 2016
<b>Awards</b>	2022 Flint Postdoctoral Fellowship, Yale University 2019 Harvard University Certificate of Distinction in Teaching, Bok Center 2016 William Benjamin and Jill Kowal Award, Harvard University	
<b>Publications</b>	Koepnick, K., Fu, M., & Tziperman, E. (2025). Comparing the surface mass balance of the Laurentide Ice Sheet during the last deglaciation with geophysical reconstructions. ( <i>in revision</i> )  Stuivenvolt-Allen, J., Fedorov, A., Fu, M., & Heede, U. (2024). Widening of wind-stress anomalies amplifies ENSO in a warming climate. <i>Journal of Climate</i> , 38(2) 497-512.  Borreggine, M., Powell, E.M., Fu, M., Yang, X., Weeks, E., Zhang, B., Wilkinson, K., Mitrovica, J.X., Tryon, C., & Meadow, R. (2024). Combining Paleocurrents and Sea Level in a Least-Cost Pathway Model of Human Dispersal from Sunda to Sahul, 65–45,000 Years Ago. ( <i>in revision</i> )  Fu, M. & Fedorov, A. (2024) Impacts of an active Pacific Meridional Overturning Circulation on the Pliocene climate and hydrological cycle. <i>Earth and Planetary Science Letters</i> , 642, 118878.	

Fu, M., Abbot, D. S., Koeberl, C., & Fedorov, A. (2024). Impact-induced initiation of Snowball Earth: A model study. *Science Advances*, 10(6), eadk5489.

Smith, A. J., Ito, E., Burls, N., Clarke, L., Donders, T., Hatfield, R., ... & PlioWest Working Consortium (2023). Workshop report: PlioWest—drilling Pliocene lakes in western North America. *Sci. Dril.*, 32, 61–72

Fu, M. & Fedorov, A. (2023) The role of Bjerknes and shortwave feedbacks in the tropical Pacific SST response to global warming. *Geophysical Research Letters*, 50:e2023GL105061.

Fu, M. (2022). Revisiting western United States hydroclimate during the last deglaciation. *Geophysical Research Letters*, 50(3):e2022GL101997.

Baum, M. & Fu, M. (2022). Simple Stochastic Modeling of Snowball Probability Throughout Earth History. *Geochemistry, Geophysics, Geosystems*, 23(11):e2022GC010611.

Bhattacharya, T., Feng, R., Tierney, J.E., Knapp, S., Burls, N.J., & Fu, M. (2022). Expansion and intensification of the North American Monsoon during the Pliocene. *AGU Advances*, 3(6):e2022AV000757.

Baum, M, Fu, M., & Bourguet, S. (2022). Sensitive dependence of global climate to continental geometry. *Geophysical Research Letters*, e2022GL098843.

Fu, M., Cane, M.A., Molnar, P., & Tziperman, E. (2022). Warmer Pliocene upwelling site SST leads to wetter subtropical coastal areas: a positive feedback on SST. *Paleoceanography*, 37(2):e2021PA004357.

Fu, M., Cane, M.A., Molnar, P., & Tziperman, E. (2021). Wetter Subtropics Lead to Reduced Pliocene Coastal Upwelling. *Paleoceanography*, 36(10):e2021PA004243.

Fu, M. & Tziperman, E. (2021). A model study of the role of convection in the dynamics of westerly wind bursts. *Journal of Climate*, 34(15):6235–6246

Fu, M. & Tziperman, E. (2019). Essential ingredients to the dynamics of westerly wind bursts. *Journal of Climate*, 32(17):5549–5565

## **Book Chapters**

Fu, M. & Tziperman, E. (2022). “Clouds”, Global Warming Science. *Princeton University Press*

## **Invited Talks**

University of Southampton SOES seminar (July 2024)  
WHOI Climate and Paleo Seminar (May 2024)  
Harvard Earth and Planetary Sciences ClimaTea seminar (April 2024)  
MIT Earth Atmospheric and Planetary Sciences Sack Lunch Seminar (April 2023)

Yale Atmosphere, Oceans, Climate Dynamics Seminar (November 2022)  
Brown Climate and Environment Group Lunch Bunch (October 2022)  
University of Chicago Geophysical Sciences Special Seminar (December 2021)  
ICDP PlioWest Workshop (September 2021)

**Community  
Service**

2023–2024 Yale Atmosphere Ocean Climate Dynamics Seminar Organizer  
2023 Session Convener: AGU Fall Meeting “Reconstructing Regional Hydro-  
logic Changes Across Climatic Boundaries in the Recent Past”  
2023 New Haven Science Fair Volunteer  
2020 National Collegiate Research Conference Judge  
2019 Harvard ClimaTea Seminar Organizer  
2017 Cambridge Science Fair Moderator

**Review  
Service**

Peer Review for:  
Israel Science Foundation  
Paleoceanography and Paleoclimatology  
Journal of Climate  
Geophysical Research Letters  
Communications Earth & Environment  
Geological Society of America Bulletin  
Climate Dynamics