Minmin Fu

Information

Contact Yale University

Dept. Earth and Planetary Sciences

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210 Whitney Ave. New Haven, CT 06511

Current Yale University

Sept 2022 – Present

Position Flint Postdoctoral Fellow

Research interests: Climate Dynamics, Climate Change, Numerical Modeling,

Paleoclimate, & El Niño

Faculty Host: Prof. Alexey Fedorov

Education Harvard University

Sept 2016 – May 2022

Ph.D., Earth and Planetary Sciences Advisor: Prof. Eli Tziperman

University of California, Davis

B.A. Physics, B.A. Mathematics Sept 2013 – May 2016

GPA: 3.95, Highest Honors

Awards 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 2016 Saxon Patten Prize for Physics, UC Davis Physics Department

Publications

Koepnick, K., Fu, M., & Tziperman, E. (2024). Investigating the surface mass balance of the Laurentide Ice Sheet during the Last Deglaciation using iTraCE. (in prep)

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. (in revision)

Fu, M. & Fedorov, A. (2023) Impacts of an active Pacific Meridional Overturning Circulation on the Pliocene climate and hydrological cycle. (in revision)

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

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 Hydrologic Changes Across Climatic Boundaries in the Recent Past" 2023 New Haven Science Fair Volunteer 2020 National Collegiate Research Conference Judge

2019 Harvard Clima Tea Seminar Organizer 2017 Cambridge Science Fair Moderator

Review Peer Review for:

Service Geophysical Research Letters

Communications Earth & Environment Geological Society of America Bulletin

Climate Dynamics