Minmin Fu

Contact Information

Yale University
Dept. Earth and Planetary Sciences
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Experience

Yale University Sept 2022 – Present
Flint Postdoctoral Fellow
Research interests: Climate Dynamics, Paleoclimate, and El Niño
Faculty Host: Prof. Alexey Fedorov

Education

Harvard University Sept 2016 – May 2022
Ph.D., Earth and Planetary Sciences
Advisor: 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 Graduate Aid Fund in Environmental Studies, Harvard University
2016 Saxon Patten Prize for Physics, UC Davis Physics Department
2016 Distinguished Graduate, UC Davis Physics Department
2015 Robert Lewis Wasser Memorial Prize, UC Davis Mathematics

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)

Publications

Fu, M. & Fedorov, A. (2023) Influence of an active Pacific Meridional Overturning Circulation on the mid-Pliocene climate and hydrological cycle *(in prep)*

Fu, M., Abbot, D., Koeberl, C., & Fedorov, A. (2023) Impact-induced initiation of Snowball Earth: A model study *(under review, Science Advances)*

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

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

Community Service

2023 Yale Atmosphere Ocean Climate Dynamics Seminar Organizer
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:
Geophysical Research Letters
Communications Earth & Environment
Geological Society of America Bulletin

Skills

Python, Julia, Matlab, Fortran, CESM, Parallel Computing (e.g., MPI)