Clay Tabor

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Research Website
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Appointments

Associate Professor, Department of Earth Sciences, University of Connecticut	2024-present
Assistant Professor, Department of Earth Sciences, University of Connecticut	2018-2024
Advanced Study Program Postdoc, National Center for Atmospheric Research	2016-2017
Research and Teaching Assistant, University of Michigan	2010-2015

Education

Ph.D. Earth and Environmental Sciences, University of Michigan	2015
B.S. Atmospheric Sciences / Minor Mathematics, University of North Carolina-Asheville	2009

Publications

In Review (* denotes advisee)

Otto-Bliesner, B. L., Zhu, J., Feng, R., **Tabor, C. R.**, Brady, E. C., Macarewich, S., Nusbaumer, J., & Tierney, J. E. paleoWeather: A suite of high-resolution, water-isotope-enabled simulations with the coupled Community Earth System Model. *Scientific Data*. (in review)

Duong, H. E., Ford, H. L., Sun, Y., Tindall, J., Haywood, A., Deneau, T., **Tabor, C. R.**, Feng, R., Burls, N., Ho, S. L., McClymont, E. L., Greene, S. E., Vervoort, P., Abell, J. T., Alonso-Garcia, M., Anand, P., Berke, M., Crocker, A., de Graaf, F., … Voelker, A. H. Evaluating Late Pliocene Atlantic Meridional Overturning Circulation dynamics through biogeochemical proxy–model comparison. *Climate of the Past*. (in review)

*Deneau, T., **Tabor, C. R.**, Holden, P. B., Feng, R., & Wilkinson, R. A Gaussian process emulator for transient Pliocene climate and water isotope reconstructions. *Scientific Data*. (in review)

Di Carlo, I. A., von der Heydt, A. S., Zhu, J., Macarewich, S., **Tabor, C. R.**, Otto-Bliesner, B. L., Baatsen, M., & Brady, E. C. (n.d.). Resolution may hold the key to a weaker and shallower glacial Atlantic overturning. *Geophysical Research Letters*. (in review)

Burls, N. J., Wright, N. M., Acosta, R. P., Bradshaw, C. D., Gasson, E., Stap, L. B., Ramstein, G., Halberstadt, A. R. W., De Boer, A. M., Akgün, F., Cantrill, D. J., Casas-Gallego, M., Doláková, N., Erdei, B., Farnsworth, A., Feakins, S., Feng, R., Fletcher, T., Fluteau, F., Green, J. A. M., … Zhao, Y. MioMIP2: Experimental design for Phase 1 & 2 of the Miocene component of the CMIP7/PMIP7 Deep-time Model Intercomparison Project (DeepMIP-Miocene). *Climate of the Past*. (in review)

*Hu, S., **Tabor, C. R.**, Bardeen, C., Toon, O., Wolbach, W., Coupe, J., Harrison, C., Lovenduski, N., MacLeod, K., Markwick, P., Mitra, S., Sepulveda, J., Kelleher, R., & Wheatley, R. Evidence for

origins of soot emissions from the Chicxulub asteroid impact at the Cretaceous–Paleogene boundary. *Communications Earth & Environment*. (in review)

Bao, Y., Liu, Z., Thompson, L., Mosley-Thompson, E., Wan, L., Jing, Z., **Tabor, C. R.**, & Zhu, J. Forcing-dependent climate signals in tropical ice-core $\delta^{18}O$ records over the last 20,000 years. *Communications Earth & Environment*. (in review)

*Schnaubelt, J., **Tabor, C. R.**, Feng, R., Carter, A., Aarons, S., Sutter, J., & Golledge, N. West Antarctic Ice Sheet collapse and Southern Ocean warming explain Last Interglacial Antarctic water isotopes. *Science Advances*. (in revision)

*Nadoya, H. N., **Tabor, C. R.**, Feng, R., Liu, X., Ibarra, D. E., Reichgelt, T., & Laskos, A. (2026). Simulation of climate during the Miocene Climatic Optimum under different CO 2 forcings. *Climate of the Past*. (in revision)

Atwood, A., Pauly, R., Chiang, J., & **Tabor, C.R.** Reconciling Proxy-Model Discrepancies in Tropical Pacific Climate Change during the Mid-Holocene. *Paleoclimatology and Paleoceanography*. (in revision)

Coupe, J., Lovenduski, N. S., Bardeen, C., *Hu, S., Krumhardt, K. M., Harrison, C. S., Tessler, M., **Tabor, C. R.**, Gleason, L., MacLeod, K., Sepúlveda, J., Mitra, S., Lindsay, K., Levy, M. N., & Toon, O. B. Ultraviolet radiation exacerbates marine phytoplankton mortality following the Chicxulub asteroid impact. *Paleoceanography and Paleoclimatology*. (in revision)

Osman, M., Tierney, J., Lofverstrom, M., *Schnaubelt, J., **Tabor, C.R.**, Markle, B., & Aquino-Lopez, M. Last Interglacial global warming, ocean expansion, and Greenland ice decay. *Science Advances*. (in review)

Wang, Z., Hren, M., **Tabor, C. R.**, Montañez, I., Oster, J., Atekwana, E., & Bowen, G. AMOC weakening linked to wildfires and ecosystem collapse in California. *Nature Geoscience*. (in review)

Albright, M.G., Feng, R., Bhattacharya, T., Zarzycki, C., Molina, M., **Tabor, C.R.**, Zhu, J., Otto-Bliesner, B., Rosenbloom, N., Sun, C.: Greater North American Monsoon Precipitation Brought by Enhanced Storm Activity in a Warm Climate. *Nature Communications.* (in revision)

Published (* denotes advisee)

Tabor, C. R., Hu, X., & MacLeod, K. (2026). The Cretaceous: An iconic warm period. In Reference Module in Earth Systems and Environmental Sciences. Elsevier. https://doi.org/10.1016/B978-0-443-15748-6.00026-5

Gorenstein, I., Wainer, Pausata, F.S., LeGrande, A.N., Griffiths, M.L., Wainer, I., Beltrami, H., de Vernal, A., **Tabor, C.R.**, Chandan, D., Peltier, W. (2026). The Atlantic Ocean's Decadal Variability in mid-Holocene Simulations using Shannon's Entropy. *Geoscientific Model Development.* https://doi.org/10.5194/egusphere-2025-921

Carter, A. J., Aarons, S. M., *Schnaubelt, J. C., **Tabor, C. R.**, Higgins, J. A., Shackleton, S. A., ... & Davidge, L. (2026). Diminished Ross Ice Shelf and West Antarctic Ice Sheet during Last Interglacial warming. *Nature Geoscience*, 1-8.

*Schnaubelt, J. C., **Tabor, C. R.**, Otto-Bliesner, B. L., & Lora, J. M. (2025). Atmospheric river impacts on the Greenland ice sheet through the Last Interglacial. *AGU Advances*, *6*(5), e2025AV001653. https://doi.org/10.1029/2025AV001653 (EOS highlight)

Coupe, J., Lovenduski, N. S., Gleason, L. S., Levy, M. N., Krumhardt, K., Lindsay, K., **Tabor, C.R.**... & Sepúlveda, J. (2025). Sunburned plankton: ultraviolet radiation inhibition of phytoplankton

photosynthesis in the Community Earth System Model version 2. *Geoscientific Model Development*. https://doi.org/10.5194/gmd-2024-94

Tiwari, S., Pausata, F. S., LeGrande, A. N., Griffiths, M., Wainer, I., Beltrami, H., ... & Richard Peltier, W. (2025). Mid-Holocene El Niño Southern Oscillation variability reduced by northern African vegetation changes in climate models. *Communications Earth & Environment.* https://doi.org/10.1038/s43247-025-02639-w

MacLeod, K. G., Huber, B. T., Tabor, C., Mitra, S., Wheatley, R., Harrison, C., ... & Hu, S. (2025). Isotopic evidence from a Brazos River (Texas, USA) Cretaceous/Paleogene boundary section consistent with a pulse of greenhouse warming shortly after the Chicxulub impact. *Global and Planetary Change*. https://doi.org/10.1016/j.gloplacha.2025.104924

George, S. W. M., Carrapa, B., DeCelles, P. G., Jepson, G., *Nadoya, H., **Tabor, C.R.**, ... & Schoenbohm, L. (2025). Increased moisture availability in the Central Andes during the Miocene Climatic Optimum. *Palaeogeography, Palaeoclimatology, Palaeoecology*. https://doi.org/10.1016/j.palaeo.2025.112732

Oster, J. L., Macarewich, S., Lofverstrom, M., de Wet, C., Montañez, I., Lora, J. M., ... & **Tabor, C.R.** (2023). North Atlantic meltwater during Heinrich Stadial 1 drives wetter climate with more atmospheric rivers in western North America. *Science Advances.* https://doi.org/10.1126/sciadv.adj2225

Liu, Z., Bao, Y., Thompson, L. G., Mosley-Thompson, E., **Tabor, C.R.**, Zhang, G. J., ... & Oster, J. (2023). Tropical mountain ice core δ18O: A Goldilocks indicator for global temperature change. *Science Advances.* https://doi.org/10.1126/sciadv.adi6725

Wolf, A., Ersek, V., Braun, T., French, A. D., McGee, D., Bernasconi, S. M., ... **Tabor, C.R.**, …& Trinh, A. D. (2023). Deciphering local and regional hydroclimate resolves contradicting evidence on the Asian monsoon evolution. *Nature Communications. https://doi.org/10.1038/s41467-023-41373-9*

Tiwari, S., Ramos, R., Pausata, F., LeGrande, A., Griffiths, M., Beltrami, H., Wainer, I., de Vernal, A., Litchmore, D., Chandan, D., Peltier, R., **Tabor, C.R.** (2023). Influence of the mid-Holocene Green Sahara on South American hydroclimate. *Geophysical Research Letters*. https://doi.org/10.1029/2022GL101974

Lopez-Maldonadoa, R., Ellis, A., Bader, N., Ramirez, P., Bateman, J., Jesmok, G., Upadhyay, D., Mitsunaga, B., Elliott, B, Lora, J., **Tabor, C.R.**, Tripati, A. (2023). Paleoclimate changes in the Pacific northwest over the past 36,000 years from clumped isotope measurements and isotope-enabled model analysis. *Paleoceanography and Paleoclimatology*. https://doi.org/10.1029/2021PA004266

Wright, K., Johnson, K., Marks, G.S., McGee, D., Bhattacharya, T., Goldsmith, G., **Tabor, C.R.**, Lacaille-Muzquiz, J-L., Lum, G., Bermendi-Orosco, L. (2023). Precipitation in Mexico dominated by changes in Atlantic Meridional Overturning Circulation. *Nature Communications.* https://doi.org/10.1038/s41467-023-37700-9

Skinner, C., Lora J., **Tabor C.R.**, Zhu J. (2023). Atmospheric river contributions to ice sheet hydroclimate at the Last Glacial Maximum. *Geophysical Research Letters*. https://doi.org/10.1029/2022GL101750

Chiang, J., Atwood, A., Nicknish, P., Roberts, W., **Tabor, C.R.**, Broccoli, T. (2022). Two distinct annual cycles of the Pacific cold tongue under orbital precession. *Nature.* https://doi.org/10.1038/s41586-022-05240-9

Yasuhara M., May Huang, H-HM., Reuter, M., Tian, S., Cybulski, J., O'Dea, A., Mamo, B., Cotton, L., Martino, E., Feng, R., **Tabor, C.R.** et al. (2022). Hotspots of Cenozoic tropical marine biodiversity. *Oceanography and Marine Biology-An Annual Review*. https://doi.org/10.1201/9781003288602-5

Huang, X., Zhang, H., Griffiths, M., Zhao, B., Pausata, F., **Tabor, C.R**., Shu, J., Zhao, H., Xie, S. (2022). Holocene forcing of East Asian hydroclimate recorded in a subtropical peatland from southeastern China. *Climate Dynamics*. https://doi.org/10.1007/s00382-022-06333-x

Wortham, B., Montañez, I., Swart, P., Vonhof, H., **Tabor, C.R.** (2022). A record of effective moisture using inclusion fluid δ18O and δ2H in a central Sierra Nevada stalagmite (CA). *Quaternary Science Reviews.* https://doi.org/10.1016/j.quascirev.2022.107399

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C. (2021). Drivers of δ18O and hydroclimate change in the Western US at the LGM. *Quaternary Science Reviews.* https://doi.org/10.1016/j.quascirev.2021.107255

*Goddard, P., **Tabor, C.R.**, Jones, T. (2021) Utilizing ice core and climate model data to understand West Antarctic variability. *Journal of Climate*. https://doi.org/10.1175/JCLI-D-20-0822.1

Jepson, G., Carrapa, B., Gillespie, J., Feng, R., DeCelles, P., **Tabor, C.R.**, Zhu, J. (2021). Climate as the Great Equalizer of Continental-Scale Erosion. *Geophysical Research Letters.* https://doi.org/10.1029/2021GL095008

Chang, Q., Hren, M., Lin, A.T., **Tabor, C.R.**, Yu, S., Yvette, E., Harris, G. (2021). The biomarker stable isotope record for the late Quaternary climate change in Southwestern Taiwan. *American Journal of Science*. https://doi.org/10.2475/04.2021.01

Thompson, A., **Tabor, C.R**., Poulsen, C., Skinner, C. (2021). Interpreting the leaf wax δD signal: A model-proxy case study in the mid-Holocene Green Sahara. *Earth and Planetary Science Letters.* https://doi.org/10.1016/j.epsl.2020.116677

Tabor, C.R., Otto-Bliesner, B., Liu, Z. (2020). Speleothems of South American and Asian monsoons influenced by a Green Sahara. *Geophysical Research Letters.* https://doi.org/10.1029/2020GL089695

Tierney, J., Poulsen, C., Montañez, I.P., Bhattacharya, T., Feng, R., Ford, H.L., Hönisch, B., Inglis, G.N., Petersen, S.V., Sagoo, N., **Tabor, C.R.** et al. (2020). Past climates inform our future. *Science.* https://doi.org/10.1126/science.aay3701

Ladant, J., Poulsen, C., Fluteau, F., **Tabor, C.R.**, MacLeod, K., Martin, E., Haynes, S. (2020) Paleogeographic controls on the evolution of Late Cretaceous ocean circulation. *Climate of the Past.* https://doi.org/10.5194/cp-16-973-2020

Yasuhara, M., Wei, C., Kucera, M., Costello, M., Tittensor, D., Kiessling, W., Bonebrake, T., **Tabor, C.R.**, Feng, R., Baselga, A., Kretschmer, K., Kusumoto, B., Kubota, Y. (2020). Past and future decline of tropical pelagic biodiversity. *Proceedings of the National Academy of Science*. https://doi.org/10.1073/pnas.1916923117

Tabor, C.R., Bardeen, C., Otto-Bliesner, B., Garcia, R., Toon, O. (2020). Causes and climatic consequences of the impact winter at the Cretaceous-Paleogene boundary. *Geophysical Research Letters.* https://doi.org/10.1029/2019GL085572

Liu, Z., Horton, D., **Tabor, C.R.**, Sageman, B., Percival, L., Gill, B., Selby, D. (2019). Assessing the contributions of comet impact and volcanism towards the climate perturbations of the Paleocene-Eocene Thermal Maximum. *Geophysical Research Letters*. https://doi.org/10.1029/2019GL084818

Hu, J., Emile-Geay, J., **Tabor, C.R.**, Nusbaumer, J., Partin, J., Adkins, J (2019). Deciphering Chinese speleothems with an isotope-enabled climate model. *Paleoceanography and Paleoclimatology*. https://doi.org/10.1029/2019PA003741

Stevenson, S., Otto-Bliesner, B., Brady, E., Nusbaumer, J., **Tabor, C.R.**, Tomas, R., Noone, D., Liu, Z. (2019). Volcanic eruption signatures in the isotope-enabled last millennium ensemble. *Paleoceanography and Paleoclimatology*. https://doi.org/10.1029/2019PA003625

Brady, E., Stevenson, S., Baily, D., Liu, Z., Noone, D., Nusbaumer, J., Otto-Blienser, B., **Tabor, C.R.**, Tomas, R., Wong, T., Zhang, J., Zhu, J. (2019). The connected isotopic water cycle in the Community Earth System Model. *Journal of Advances in Modeling Earth Systems*. https://doi.org/10.1029/2019MS001663

Tabor, C.R., Feng, R., Otto-Bliesner, B.L. (2019). Climate responses to the splitting of a supercontinent: Implications for the breakup of Pangea. *Geophysical Research Letters.* https://doi.org/10.1029/2018GL081510

Thibodeau, B., Not, C., Zhu, J., Schmittner, A., Noone, D., **Tabor, C.R.**, Zhang, J., Liu, Z. (2018). Last century warming over the Canadian Atlantic shelves linked to weak Atlantic Meridional Overturning circulation. *Geophysical Research Letters*. https://doi.org/10.1029/2018GL080083

Tabor, C.R., Otto-Bliesner, B.L., Brady, E., Nusbaumer, J., Zhu, J., Erb, M. Wong, A., Liu, Z., Noone, D. (2018). Interpreting precession driven $\delta^{18}O$ variability in the South Asian monsoon region. *Journal of Geophysical Research: Atmospheres*. https://doi.org/10.1029/2018JD028424

Super, J. R., Chin, K., Pagani, M., Li, H., **Tabor, C.R.**, Harwood, D., Hull, P. (2018). Late Cretaceous climate in the Canadian Arctic: multi-proxy constraints from Devon Island. *Palaeogeography, Palaeoclimatology, Palaeoecology*. https://doi.org/10.1016/j.palaeo.2018.03.004

Zhu, J., Liu, Z., Brady, E., Otto-Bliesner, B., Zhang, J., Noone, D., **Tabor, C.R.** (2017). Reduced ENSO variability at the LGM revealed by an isotope-enabled Earth system model. *Geophysical Research Letters*. https://doi.org/10.1002/2017GL073406

Feng, R., Otto-Bliesner, B., Fletcher, T., **Tabor, C.R.**, Ballantyne, A., Brady, E. (2017). Amplified Late Pliocene terrestrial warmth in northern high latitudes from greater radiative forcing and closed Arctic Ocean gateways. *Earth and Planetary Science Letters*. https://doi.org/10.1016/j.epsl.2017.03.006

Lunt, D.J., Huber, M., Anagnostou, E., Baatsen, M., Caballero, R., DeConto, R., Dijkstra, H., Donnadieu, Y., Evans, D., Feng, R. Foster, G. et al. (2017). The DeepMIP contribution to PMIP4: experimental design for model simulations of the EECO, PETM, and pre-PETM. *Geoscientific Model Development*. https://doi.org/10.5194/gmd-10-889-2017

Tabor, C.R., Poulsen, C., Lunt, D., Rosenbloom, N., Otto-Bliesner, B., Markwick, P., Feng, R. (2016). The cause of Late Cretaceous cooling: A multimodel-proxy comparison. *Geology*. https://doi.org/10.1130/G38363.1

Petersen, S., **Tabor, C.R.**, Lohmann, K., Poulsen, C., Meyer, K., Carpenter, S., Sheldon, N. (2016). Temperature and salinity of the Late Cretaceous Western Interior Seaway. *Geology*. https://doi.org/10.1130/G38311.1

Tabor, C.R., Poulsen, C. (2016). Simulating the mid-Pleistocene transition through regolith removal. *Earth and Planetary Science Letters*. https://doi.org/10.1016/j.epsl.2015.11.034

Poulsen, C., **Tabor, C.R.**, White, J. (2015). Long-term climate forcing by atmospheric oxygen concentrations. *Science*. https://doi.org/10.1126/science.1260670

-Poulsen, C., **Tabor, C.R.**, White, J. (2016). Response to Comment on "Long-term climate forcing by atmospheric oxygen concentrations". *Science*. https://doi.org/10.1126/science.aad8550

Fiorella, R., Poulsen, C., Pillco Zolá, R., Barnes, J., **Tabor, C.R.**, Ehlers, T. (2015). Spatiotemporal variability of modern precipitation δ18O in the central Andes and implications for paleoclimate and paleoaltimetry estimates. *Journal of Geophysical Research: Atmospheres*. https://doi.org/10.1002/2014JD022893

Tabor, C.R., Poulsen, C., Pollard, D. (2015). How obliquity cycles powered early Pleistocene global ice-volume variability. *Geophysical Research Letters*. https://doi.org/10.1002/2015GL063322

Tabor, C.R., Poulsen, C., Pollard, D. (2014). Mending Milankovitch's theory: obliquity amplification by surface feedbacks. *Climate of the Past*. https://doi.org/10.5194/cp-10-41-2014

Grants

NSF Building a bridge to understand high waters: integrating floodplain sediments and climate models to investigate hydrologic intensity in the early Eocene- (co-PI; $ 365,373 to Tabor; Pending)	2026
NSF Evaluating Hemispheric Asymmetry and Climate Gradients during the Mid-Cretaceous Greenhouse Using Paired Paleosol Proxies and Climate Models - (co-PI; $375,689 to Tabor; Pending)	2026
NSF Unravelling the Holocene Temperature Conundrum: Global Constraints on Magnitudes and Mechanisms from Ice Cores - (co-PI; $307,470 to Tabor; $1,111,902 total; Pending)	2026
NSF Defining CA's paleoclimate-fire relationship across temporal scales through integrated monitoring, stalagmite studies, and proxy system forward modeling - (co-I; $18,280 to Tabor; $2,277,350 total; EAR #2202881)	2022
NSF CAREER Deconvolution of marine oxygen isotopic variability with an Earth system model to constrain sea level across the Pliocene - (sole PI; $659,173 to Tabor; OCE #2047525)	2021
NSF Peripheral East Antarctic ice as a unique recorder of climate variability during the Last Interglacial - (co-PI; $289,433 to Tabor; $652,694 total; OPP #2035637)	2021
NSF Evaluating climate change and kill mechanisms associated with the End-Cretaceous mass extinction: A model-data comparison approach - (lead PI; $507,650 to Tabor; $2,430,116 total; EAR #2021686)	2020
NSF Rapid climate change during the Miocene Climate Optimum: a proxy-model comparison - (co-PI; $199,146 to Tabor; $665,840 total; EAR #2002440)	2020
NSF Multi-time-scale climate dynamics in California: an integrated multi-proxy stalagmite, monitoring, and modeling approach - (co-PI; $135,459 to Tabor; $818,245 total; AGS #1804747)	2018
NCAR Advanced Study Program fellowship - (sole PI; $124,000 to Tabor)	2015

Computing Grants

NCAR Advanced Scientific Discovery: DinoWeather: Weather Extremes during the Cretaceous Thermal Maximum (led by Bette Otto-Bliesner) - **(37 million CPU hours)**	2025
NCAR Advanced Scientific Discovery: Extreme weather events under a wide range of climates in high-resolution coupled CESM (led by Bette Otto-Bliesner) - **(39 million CPU hours)**	2023
NCAR Large University Allocation: Antarctic ice sheet extent and regional Antarctic climate during the Penultimate Deglaciation and Last Interglacial (led by graduate student Joseph Schnaubelt) - **(13 million CPU hours)**	2022
NCAR Large University Allocation: Emulating the Pliocene (co-written with graduate student Taylor Deneau) - **(45 million CPU hours + 16 million CPU hours supplement)**	2022
NCAR Large University Allocation: Simulating the end-Cretaceous mass extinction - **(18 million CPU hours + 7 million CPU hours supplement)**	2021
NCAR Large University Allocation: Simulation of the South American monsoon during the Miocene Climate Optimum (co-written with graduate student Hamida Ngoma Nadoya) - **(8 million CPU hours + 7 million CPU hours supplement)**	2020
NCAR Large University Allocation: High resolution simulations of the last deglaciation for understanding abrupt hydroclimate change in Southwest North America - **(16 million CPU hours)**	2019
Blue Waters Dear Colleague Letter: Multi-time-scale climate dynamics in California: an integrated multi-proxy stalagmite, monitoring, and modeling approach - **(21 million CPU hours)**	2019
NCAR Large University Allocation: California megadroughts in context: integrating high resolution speleothem records with isotope-enabled climate models - **(10 million CPU hours)**	2018
NCAR Strategic Capability Allocation - **(15 million CPU hours)**	2016

First Author Invited Talks

Using an Earth System Model to Evaluate Kill Mechanisms Associated with the End-Cretaceous Mass Extinction. *Geological Society of America Annual Meeting*, Pardee Keynote. 2025.

Exploring changes in hydroclimate during Heinrich Stadial 1 with high resolution simulations. *American Geophysical Union Fall Meeting*, 2023.

Hydrologic changes in the Western United States during the deglaciation, *University of Tübingen*, 2023.

Simulating changes in tropical cyclone activity during the deglaciation, *European Geosciences Union General Assembly*, 2023.

Investigating the End-Cretaceous mass extinction with an Earth system model, *Central Connecticut State University*, 2023.

Using an Earth system model to explore kill mechanisms associated with the end-Cretaceous mass extinction, *Stony Brook University*, 2022.

Hydrologic and isotopic changes in the Western United States at the Last Glacial Maximum, *PMIP 30th Anniversary Meeting*, 2021.

Speleothems of South American and Asian monsoons influenced by a Green Sahara, *Woods Hole Oceanographic Institution*, 2021.

Climate change and kill mechanisms associated with the End-Cretaceous mass extinction: a model-data comparison approach, *National Center for Atmospheric Research*, 2021.

Earth system responses to the asteroid impact at the end of the Cretaceous, *Department of Geology, University of Puerto Rico*, 2020.

Far field isotopic signatures of a Green Sahara, *Department of Geosciences, UConn*, 2020.

Earth system responses to the Chicxulub impact, *Department of Earth and Planetary Sciences, Northwestern University*, 2020. (Cancelled due to COVID)

The global significance of a vegetated Sahara in the mid-Holocene, *Department of Earth and Environmental Sciences, Vanderbilt University*, 2020. (Cancelled due to COVID)

Abrupt climate change at the end-Cretaceous, *Department of Earth and Environmental Sciences, Wesleyan University*, 2019.

Regional paleoclimate, *The Future of Past Climate, Aspen Global Change Institute*, 2019.

Mechanisms for an impact winter, *Department of Environmental Sciences, Rutgers University*, 2019.

Drivers and consequences of the end-Cretaceous impact winter, *Institute of Atmospheric Physics, Chinese Academy of Sciences*, 2018.

Changes in the South Asian monsoon region on orbital timescales, *Department of Geography, UConn*, 2018.

Understanding orbitally driven $\delta^{18}O$ variability in the South Asian monsoon region, *Department of Physics, UConn*, 2018.

Paleoclimate at NCAR, *NSF Geosciences Division Review of the National Center for Atmospheric Research*, 2017.

Reconstructing Late Cretaceous climate evolution with Earth system models, *Department of Earth Sciences, University of Hong Kong*, 2017.

Reconstructing Late Cretaceous climate evolution with Earth system models, *Center for Integrative Geosciences, UConn*, 2017.

Reconstructing Late Cretaceous climate evolution with Earth system models, *Center for Climate Physics, Institute for Basic Science*, 2017.

Exploring the K-Pg with CESM*, Deep Time Workshop*, 2016.

Using an Earth system model to better understand ice sheet variability through the Pleistocene, *American Geophysical Union Fall Meeting*, 2015.

Modeling the Pleistocene glacial cycles, *Department of Earth and Planetary Sciences, Johns Hopkins University*, 2015.

Implementation of GIS for the NWS and other regional decision makers, 30th Anniversary Symposium, *Department of Atmospheric Sciences, University of North Carolina at Asheville*, 2009.

GIS and atmospheric sciences: bridging the gap, *National Environmental Modeling and Analysis Center*, 2008.

First Author and Advisee Presentations (* denotes advisee)

*Hu, S., **Tabor, C. R.**, & Bardeen, C. (2024). Simulating the Effects of Emissions from Meteor Impacts. AGU24.

*Schnaubelt, J., **Tabor, C. R.**, & Feng, R. (2024). Constraining Antarctic ice sheet stability through the Penultimate Glacial Cycle with an isotope-enabled Earth System Model. AGU24.

*Nadoya, H. N., & **Tabor, C. R.** (2024). The Influence of Tethys and Central American Seaways on Climate During the Miocene Climatic Optimum. AGU24.

*Deneau, T., & **Tabor, C. R.** (2024). Modeling the Variability of Pliocene Antarctic Ice Volume and Climate. AGU24.

*Deneau, T., & **Tabor, C. R.** (2023). Proxy-Model Comparison of Temperature and δ 18 O Values During the Pliocene. AGU23.

*Nadoya, H. N., & **Tabor, C. R.** (2023). Simulation of the Miocene Climatic Optimum by an isotope enabled Earth system model. AGU23.

*Schnaubelt, J., **Tabor, C. R.**, Carter, A., & Aarons, S. M. (2023). Decoding past Antarctic ice sheet stability using climate modeling and mineral dust. AGU23.

*Schnaubelt, J., **Tabor, C. R.**, & Otto-Bliesner, B. L. (2023). The evolution of Greenland atmospheric river climatology during the Last Interglacial. AGU23.

*Hu, S., **Tabor, C. R.**, & Bardeen, C. (2023). Exploring the Effects of Organic Coating on Soot Emission at the Cretaceous-Paleogene Mass Extinction Event. AGU23.

*Schnaubelt, J., **Tabor, C.R.**: Constraining Last Interglacial Antarctic proxy signals through Earth System Modeling, *Annual CESM Workshop*, 2023.

*Hu, S., **Tabor, C.R.**, Bardeen, C.: Emission uncertainties of soot from an asteroid impact at Cretaceous-Paleogene mass extinction event, *American Geophysical Union Fall Meeting*, 2022.

*Nadoya, H., **Tabor, C.R.**: Investigation of the South American Monsoon during the Miocene Climate Optimum, *American Geophysical Union Fall Meeting*, 2022.

*Deneau, T., **Tabor, C.R.**: Emulating climate and δ18O of precipitation over the Antarctic ice sheet during the Pliocene, *American Geophysical Union Fall Meeting*, 2022.

*Schnaubelt, J., **Tabor, C.R.**, Zhu, J., Otto-Bliesner, B.: Investigating Last Interglacial Antarctic proxy signals through Earth system modeling, *American Geophysical Union Fall Meeting*, 2022.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Zarzycki, C.: Simulation of tropical cyclone Activity at the LGM, *American Geophysical Union Fall Meeting*, 2021.

Tabor, C.R., Bardeen, C., Coupe, J., Garza, V., Harrison, C., Krumhardt, K., Levy, M., Lovenduski, N., MacLeod, K., Mitra, S., Sepúlveda, J.: Insights into K-Pg extinction mechanisms using an Earth system model, *Geological Society of America Annual Meeting*, 2021.

Tabor, C.R., Lofverstrom, M., Oster, J., Wortham, B., de Wet, C., Montanez, I.: Storminess and isotopic changes in the Western United States at the Last Glacial Maximum, *Annual CESM Workshop*, 2021.

Tabor, C.R., Otto-Bliesner, B., Liu, Z.: Speleothems of South American and Asian monsoons influenced by a Green Sahara, *European Geosciences Union General Assembly*, 2021.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: Using iCESM to understand hydroclimate in southwest North America at the LGM, *CESM Paleoclimate Working Group Winter Workshop*, 2020.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: High-resolution simulations for understanding the climate of Southwest North America at the Last Glacial Maximum, *American Geophysical Union Fall Meeting*, 2019.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: Using iCESM to explore climate change in Southwest North America during the last deglaciation, *Water Isotopes and Climate Workshop*, 2019.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: Simulating hydrological changes in the Western US at the LGM with CESM, *Annual CESM Workshop*, 2019.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: High resolution modeling of the last glacial maximum, *NCSA Blue Waters Symposium*, 2019.

Tabor, C.R., Lofverstrom, M., Montanez, I., Oster, J., Wortham, B., de Wet, C.: A mechanistic understanding of precipitation isotopic changes in the Western United States since the LGM, *European Geosciences Union General Assembly*, 2019.

Tabor, C.R., Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B.: Comparing the causes of end-Cretaceous impact winter with an Earth system model, *American Geophysical Union Fall Meeting*, 2018.

*Goddard, P., **Tabor, C.R.**: The atmospheric drivers of the Amundsen Sea Low variability and the resultant influence on stable water isotopic records in West Antarctic: a study of observations and simulations, *American Geophysical Union Fall Meeting*, 2018.

Tabor, C.R., CESM isotope tracer development group: far field isotopic signatures of a Green Sahara, *Goldschmidt*, 2018.

Tabor, C.R.: Variability of the South Asian Monsoon on orbital timescales. *Avery Point Modeling Workshop*, 2018.

Tabor, C.R., Otto-Bliesner, B.L., Brady, E.C., Feng, R., Nusbaumer, J., Zhu, J., the iCESM Project Members: Understanding the δ18O Response to Precession in the South Asian Monsoon Region, *American Geophysical Union Fall Meeting*, 2017.

Tabor, C.R., Otto-Bliesner, B.L., Brady, E.C., Feng, R., Nusbaumer, J., Zhu, J., the iCESM Project Members: Interpreting Speleothem Records from the Asian Monsoon Region with iCESM, *Annual CESM Workshop*, 2017.

Tabor, C.R., Otto-Bliesner, B.L., Brady, E.C., Feng, R., Nusbaumer, J., Zhu, J., the iCESM Project Members: Understanding δ18O variability in monsoon regions using an earth system model, *5th PAGES Open Science Meeting*, 2017.

Tabor, C.R., Otto-Bliesner, B.L., Brady, E.C., Feng, R., Nusbaumer, J., Zhu, J., the iCESM Project Members: The large scale responses of water isotopes to changes in earth's orbit, *3rd PAGES Young Scientists Meeting*, 2017.

Tabor, C.R., Otto-Bliesner, B.L., Brady, E.C., Erb, M.P.: The role of orbital variability on the distribution of water isotopes in the Quaternary, *American Geophysical Union Fall Meeting*, 2016.

Tabor, C.R. the iCESM Project Members: Oxygen-18 and deuterium isotopes in CESM, *Deep Time Workshop*, 2016.

Tabor, C.R., Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B., Poulsen, C.J.: Simulating the K-Pg with an Earth system model, *Geological Society of America Annual Meeting*, 2016.

Tabor, C.R., Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B., Poulsen, C.J.: The large scale climate responses to the Chicxulub impact, *Annual CESM Workshop*, 2016.

Tabor, C.R., Poulsen, C.J.: The role of paleogeography and CO_2 in Late Cretaceous ocean circulation, *American Geophysical Union Fall Meeting*, 2015.

Tabor, C.R., Poulsen, C.J., Lunt, D.J., Otto-Bliesner, B.L., Rosenbloom, N., Markwick, P.J.: Simulating climate response to changes in paleogeography through the Cretaceous, *Annual CESM Workshop*, 2015.

Tabor, C.R., Poulsen, C.J., Pollard, D.: Regolith as a mechanism for the mid-Pleistocene transition, *Michigan Geophysical Union*, 2015.

Tabor, C.R., Poulsen, C.J., Pollard, D.: The potential role of regolith in the mid-Pleistocene transition, *American Geophysical Union Fall Meeting*, 2014.

Tabor, C.R., Poulsen, C.J., Lunt, D.J., Otto-Bliesner, B.L., Rosenbloom, N., Markwick, P.J.: Simulating Cenomanian climate with the Community Earth System Model, *Geological Society of America Annual Meeting*, 2014.

Tabor, C.R., Poulsen, C.J., Pollard, D.: Surface feedbacks mend Milankovitch theory, *Michigan Geophysical Union*, 2013.

Tabor, C.R., Poulsen, C.J., Pollard, D.: Using a complex earth system model to replicate the ice volume signal of the early Pleistocene, *American Geophysical Union Fall Meeting*, 2013.

Tabor, C.R., Poulsen, C.J., Pollard, D.: Modeling the North American ice sheet response to changes in precession and obliquity, *American Geophysical Union Fall Meeting*, 2012.

Tabor, C.R. Dobson, G.; Creating geospatial decision support tools for regional decision makers, *North Carolina Geographic Information Systems Conference*, 2009.

Advisees

Postdoctoral Scholars

Sophia Macarewich (UC-Davis)	2022
Paul Goddard (UConn)	2018-2019

Graduate Students: Primary Advisor

Joseph Schnaubelt (UConn) - PhD primary advisor	2022-2026
Shixiong Hu (UConn) - PhD primary advisor	2021-present
Hamida Ngoma Nadoya (UConn) - PhD primary advisor	2021-present
Taylor Deneau (UConn) - PhD primary advisor	2021-present
Sean Jones (UConn) - MS primary advisor	2020-2021

Graduate Students: Committee Member

Indi-Anna Richardson (Columbia) – Summer internship	Summer 2026
David Luffman (UConn) - MS associate advisor	2025-2026
Noah Kravette (UConn) - PhD associate advisor	2025-present
Mary Grace Albright (UConn) - PhD associate advisor	2022-2026
Monica Garity (UConn Marine Sciences) - PhD associate advisor	2020-2026
Sarah Brisson (UConn; graduated) - PhD external member	2023
Laura Lapham (UConn; graduated) - MS associate advisor	2023-2024
Dylan Jones (UConn) - PhD associate advisor	2023-2024
Chris Sparacio (UConn) - PhD associate advisor	2022-2024
Theodor Mayer (UConn; graduated) - MS associate advisor	2022-2023
Alec Shub (UConn Marine Sciences; graduated) - MS associate advisor	2020
Cameron de Wet (Vanderbilt; graduated) - PhD associate advisor	2019-2023
Rebecca Vanderleest (UConn; graduated) - PhD associate advisor	2018

Undergraduate Students: Research Advisor

Cameron Smith (UConn) - undergraduate research	Spring 2026-present
Wilson Huang (UConn) - undergraduate research	Fall 2024-2025
Sofia Zharyy (UConn) - undergraduate research	Fall 2024
Amber Laskos (UConn) - undergraduate research	Fall 2024
Nicholas Danese (UConn) - undergraduate research	Summer 2023
Bridget Smith Epaul (UConn) - undergraduate research	Fall 2022-Summer 2023
Morphy Kuffour (UConn) - honors thesis	Fall 2022-Summer 2023
Yuanqing Li (UConn) - summer internship	Summer 2022
Benjamin Arora (UConn) - undergraduate research	Spring 2019

Undergraduate Students: Major Advisor

Polly Shen (UConn) – Environmental Sciences	2026-present
Xavier Vasquez (UConn) – Earth Sciences	2026-present
Jacob Semrow (UConn) – Earth Sciences	2024-present
Zak Knowlton (UConn) – Earth Sciences	2023-2025
Emily Roberge (UConn) – Earth Sciences	2022-2025
Bella McGrath (UConn) – Environmental Sciences	2021
Mackenzie Blanusa (UConn) – Individualized	2018-2021

Honors and Awards

NSF CAREER Award	2021
NCAR Advanced Study Program Fellowship	2015
Undergraduate Research Scholar at the University of North Carolina-Asheville	2009
Academic Excellence in the Department of Atmospheric Sciences at the University of North Carolina-Asheville	2009
Excellence in Research in the Department of Atmospheric Sciences at the University of North Carolina-Asheville	2009
G. Herbert Stout Award for Innovative Student Papers	2009

Chaired Conference Sessions

American Geophysical Union: *Water Isotopes Systematics*	2018
Goldschmidt: *Understanding Past and Present Climate with Water Isotopes*	2018

Professional Experience

Geosciences Diversity Workshop (UConn)	2022
Visiting Professorship (NCAR)	Summer 2019
Grant Writing Workshop (UConn)	2018
Evidence-Based Introduction to Teaching (University of Colorado)	2017
3rd PAGES Young Scientists Meeting (Morillo de Tou, Spain)	2017
Graduate Student Research Assistant (University of Michigan)	2010-2015
Visiting Researcher (NCAR)	2013
Community Earth System Model Tutorial (NCAR)	2012
National Climatic Data Center Internship (Asheville, NC)	2009- 2010
National Environmental Modeling and Analysis Center Intern (Asheville, NC)	2008-2009
Undergraduate Research Assistant (University of North Carolina-Asheville)	2008-2009

Courses at University of Connecticut

Paleoclimate Reading Group (ERTH 5050; Created and taught)	2022-2024
Our Evolving Atmosphere (ERTH 2800; Created and taught)	2020-2025
Dinosaurs, Extinctions, Environmental Catastrophes (ERTH 1010; Taught)	Fall 2019
Paleoclimatology (ERTH 4850 / 5850; Created and taught)	2018-2025

University Service

Harriott Scholarship Committee	2024
Earth Sciences Graduate Committee (Chair 2026)	2023-present
Department of Earth Sciences Faculty Search Committee	23-24; 24-25
Team Terra Curriculum Committee	2023/2024
NSF CAREER Panel Q&A	2023/2025
Earth Sciences Undergraduate Committee	2022-2023
Development and Coordination of Climate Minor	2022-present
McNair STEM seminar	2021
Research Connections - Shared STEM projects with undergraduates	2021-2022
CLAS Research Advisory Committee	2021-2023
NSF CAREER Proposal Advising	2021
McNair Mentor	2021-present
Climate Change 1 Credit Course Contributor	2021
Department of Earth Sciences Website Design and Maintenance	2020-present
Ad-hoc SET+ Earth Sciences Committee	2020-2021
CLAS Data Science MS program	2020-2021
CLAS Data Science Initiative	2020-2022
Earth Sciences Course and Curriculum Committee	2018-2022
Earth Sciences Course and Curriculum Committee (Chair)	2020
Environmental Sciences Advisory Board	2020-present
Institute of the Environment Affiliate Member	2019-present
Center for Environmental Science and Engineering Affiliate Member	2018-present
Atmospheric Sciences Group member	2018-present
UCAR Representative (Guest)	2019
Geography Course and Curriculum Committee	2018-2019
Geography Visiting Assistant Professor Search Committee	2019
Big Data Task Force Committee Member	2019
Open House: Earth Sciences Rep	2018 / 2020-2022
Geography Undergraduate Committee	2018

External Service and Outreach

Editor: Encyclopedia of Climate System Science	2025-present

NSF Review Panel	2024
Development of an Early College Experience Course	2023
BBC Studios Research Enquiry - Chicxulub Impact Winter	2023
Member of the Paleoclimate Advances Webinar Series (PAWS) Steering Committee	2022-2024
CISL High Performance Computing Allocation Panel Member	2017-2023
National Academy of Sciences Paleoclimate Panel Discussion Leader	2021
Earth Science Fair Contributor	2018-2022
Climate of the Past: Guest editor	2017-2018
Arctic Climate Game Jam: Organizer	2017
CESM Tutorial: Student Mentor	2017
NCAR Advanced Study Program: Member of the Postdocs Networking Committee	2016-2017
CESM Tutorial: Presented on CESM Deep-Time Capability	2016
Advised for NCAR's Public Climate Exhibit	2016
American Geophysical Union Fall Meeting OSPA Judge	2016-2019
Undergraduate Leadership Workshop: Careers in Atmospheric Sciences Panel	2016
Michigan Geophysical Union: Member of the Planning Committee	2015
University of Michigan Research Symposium for Graduate Recruiting	2014
Made a Kiosk on Ice Ages for the University of Michigan's Natural History Museum	2014

Memberships

Geological Society of America	2013-present
American Geophysical Union	2012-present