Clay Tabor

Department of Earth Sciences	Research Website
University of Connecticut	Google Scholar
clay.tabor@uconn.edu	Paper Repository

Appointments

Assistant Professor, Department of Earth Sciences, University of Connecticut	2018-present
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 / Mathematics Minor, University of North Carolina-Asheville	2009

In Review Publications

- Oster, J., Macarewich, S., Lofverstrom, M., de Wet, C, Montanez, I., Lora, J., Skinner, C., **Tabor, C.R.**North Atlantic meltwater during Heinrich Events drives wetter climate with more atmospheric rivers in western North America. *Science Advances*. (in revision)
- Liu, Z., Bao, Y., Thompson, L., Mosely-Thompson, E., **Tabor, C.R.**, Zhang, G., Lofverstrom, M., Montanez, I., Oster, J. Tropical Mountain Ice Core δ18O Detecting Deglacial Temperature Variability in Upper Troposphere. *Science Advances*. (in revision)

Publications (37 peer reviewed works; h-index of 19 based on Google Scholar)

- Wolf, A., Ersek, V., Braun, T., French, A., McGee, D., Bernasconi, S., Skiba, V., Griffiths, M., Johnson, K., Fohlmeister, J., Breitenbach, S., Paustata, F., **Tabor, C.R.**, Longman, J., Roberts, W., Chandan, D., Peltier, W., Salzmann, U., Limbert, D., Trinh, D. Drivers of Southeast Asian monsoon variability during the Holocene. *Nature Communications*. (accepted)
- 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 isotopeenabled 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 δ¹⁸O 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 $\delta 180$ 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 icevolume 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 (\$1.82 million awarded to UConn as part of \$7.5 million in total funding)

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

Unfunded Collaborations

NSF Biomarker perspectives on the sensitivity of western North American precipitation to climate change (OCE #2237502)	2022
NSF Postdoc Fellowship Hydroclimate response of the southwestern US to past and future AMOC weakening (AGS #2131749)	2021
NSF Unravelling the signals in Tropical Pacific lake archives: towards improved Holocene hydroclimate reconstructions (AGS #2002419)	2020
NSF Quantifying Holocene climate variations through data assimilation using proxies and general circulation models (GCMs) output (AGS #1903377)	2020
NERC Solar irradiance and vegetation dynamics at the K/Pg boundary	2019
Computing Grants (192 million CPU hours awarded)	
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)	2022
NCAR Large University Allocation: Simulating the end-Cretaceous mass extinction - (18 million CPU hours)	2021
NCAR Large University Allocation: Simulation of the South American monsoon during the Miocene Climate Optimum (co-written with graduate student Hamida Ngoma Nadoya) - (8.4 million CPU hours + 6.8 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

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

- 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 δ^{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.

Presentations (* denotes advisee)

- *Schnaubelt, J., **Tabor, C.R.**: Constraining Last Interglacial Antarctic proxy signals through Earth System Modeling, *Annual CESM Workshop*, 2023.
- Tiwari, S., Pausata, F.S., LeGrande, A.N., Griffiths, M.L., Beltrami, H., de Vernal, A., **Tabor, C.R.**, Litchmore, D., Chandan, D. Peltier, W.R.: Reduction in ENSO variability during the mid-Holocene: a multi-model perspective, *European Geosciences Union General Assembly*, 2023.
- Griffiths, M., Zhang, H., **Tabor, C.R.**, Xue, S., Huang, J., Cheng, H., Ning, Y., Xie, S.: Orbital controls on East Asian hydroclimate during the Pleistocene, *American Geophysical Union Fall Meeting*, 2022.
- *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.
- Tiwari, S., Ramos, R., Pausata, F., LeGrande, A., Michael L., Beltrami, H., Wainer, I., Litchmore, D., de Vernal, A., Chandan, D., **Tabor, C.R.**: Influence of the mid-Holocene Green Sahara on South American climate, *American Geophysical Union Fall Meeting*, 2022.
- Oster, J., Macarawich, S., **Tabor, C.R.**, Lofverstrom, M., Montanez, I.: North Atlantic freshwater flux during Heinrich Events drives wetter climate in Western US, *Geological Society of America Annual Meeting*, 2022.
- Otto-Bliesner, B., Zhu, J., Tierney, J., Feng, R., **Tabor, C.R.**, Nusbaumer, J., Walters, A., Brady, E., Sun, C.: Modeling the mid-Pliocene at high resolution, *Copernicus Meetings*, 2022.
- Wolf, A., Ersek, V., Braun, T., French, A., McGee, D., Bernasconi, S., Skiba, V., Griffiths, M., Johnson, K., Fohlmeister, J., Breitenbach, S., Pausata, F., **Tabor, C.R.**, Longman, J., Roberts, W., Chandan, D., Peltier, W., Salzmann, U., Limbert, D., Trinh., D.: Drivers of Southeast Asian monsoon variability during the Holocene, *KR9*, 2022.
- Griffiths, M., Zhang, H., **Tabor, C.R.**, Xue, S., Huang, J., Cheng, H., Xie, S.: Orbital controls on East Asian hydroclimate during Marine Isotope Stage 6, *KR9*, 2022.

- Tiwari, S., Ramos, R., Pausata, F., LeGrande, A., Griffiths, M., Chandan, D., de Vernal, A., Litchmore, D., Peltier, R., **Tabor, C.R.**: Model performance in simulating the mid-Holocene Green Sahara, *ICP*, 2022.
- Tiwari, S., Ramos, R., Pausata, F., LeGrande, A., Griffiths, M., Chandan, D., de Vernal, A., Litchmore, D., Peltier, R., Tabor, C.R.: Model performance in simulating the mid-Holocene Green Sahara, *European Geosciences Union General Assembly*, 2022.
- Wortham, B., **Tabor**, **C.R.**: Predicting drip-water δ18O using machine learning methods, *Goldschmidt*, 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.
- Wolf, A., Ersek, V., Bernasconi, S., Braun, T., Breitenbach, S., French, A., Griffiths, M., Johnson, K., Limbert, D., Longman, J., McGee, D., Pausata, F., Roberts, W., Salzmann, U., **Tabor, C.R.**, Trinh, D.: Varying drivers of Holocene Southeast Asian summer and winter monsoon variability, *American Geophysical Union Fall Meeting*, 2021.
- Terrazas, A., Kowler, A., Arnold, A.J., Marshall, K.R., Santi, L., Goeman-Shulsky, S., Lee, H.I., Ajoku, O., **Tabor, C.R.**, Tripati, A.E.: Clumped isotope constraints on changes in hydroclimate since the Last Glacial Maximum in Willcox Basin: Lake Cochise, Arizona. *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.
- Wortham, B., Montañez, I., Swart, P., Vonhof, H., **Tabor, C.R.**: An integrated approach to understand disequilibrium effects in a stalagmite record from a central Sierra Nevada cave, *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.
- Jepson, G., Carrapa, B., Gillespie, J., Feng, R., DeCelles, P., **Tabor, C.R.**, Zhu, J. Climate as the great equalizer of continental-scale erosion, *European Geosciences Union General Assembly*, 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.
- Oster, J., **Tabor, C.R.**, Lofverstrom, M., Wortham, B., de Wet, C., Montanez, I.: Estimating deglacial precipitation change in western North America from speleothem records and isotope-enabled model simulations, *KROnline*, 2021.
- Chang, Q., Hren, M., Lin, A.T., **Tabor, C.R.**, Yu, S., Yvette, E., Harris, G.: Climatic and geomorphic controls on isotope geochemical signatures of fluvial sedimentary archives in gaoping source-to-sink system, Southwest Taiwan, *Northeast Geological Society of America*, 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.
- De Wet, C., **Tabor, C.R.**, Lofverstrom, M., Wortham, B., Montanez, B., He, C., Liu, Z., Oster, J.: Towards a mechanistic understanding of precipitation isotopic changes in the Western US since the LGM, *SISAL* 4th workshop, 2019.

- Ladant, J., Poulsen, C., **Tabor, C.R.**, Ocean circulation sensitivity to tectonic gateways changes during the latest Cretaceous, *American Geophysical Union Fall Meeting*, 2019.
- Thompson, A., **Tabor, C.R.**, Poulsen, C.J.: Investigating a model-proxy discrepancy between precipitation and hydrogen stable isotopes in mid-Holocene northern Africa, *American Geophysical Union Fall Meeting*, 2019.
- Stevenson, S., Otto-Bliesner, B., Brady, E., Nusbaumer, J., **Tabor, C.R.**, Tomas, R., Noone, D., Liu, Z. Isotopic fingerprints of last millennium volcanic eruptions, American Geophysical Union Fall Meeting, 2019.
- Oster, J., **Tabor, C.R.**, Lofverstrom, M., Montanez, I., Wortham, B., de Wet, C.: Comparing precipitation seasonality during the last deglaciation from speleothem records and isotope-enabled model simulations, *American Geophysical Union Fall Meeting*, 2019.
- **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.
- Thompson, A., **Tabor, C.R.**, Poulsen, C.J.: Model-proxy comparison of precipitation and hydrogen stable isotopes in the global tropics: A case study in mid-Holocene Northern Africa with iCESM, *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.
- Bardeen, C., Garcia, R., **Tabor, C.R.**, Toon, B.: What killed the dinosaurs? Modeling mass extinction and cataclysmic climate change, *NCAR Science and Discovery Day*, 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.
- Atwood, A., Cobb, K., Chiang, J., Grothe, P., **Tabor, C.R.**, Otto-Bliesner, B., Sayani, H., Jones, A., Hitt, N.: Tropical Pacific climate over the last 6,500 years insights from a coral ensemble approach and an isotope enabled GCM, *American Geophysical Union Fall Meeting*, 2018.
- Batemam, J., Jesmok, G., Elliot, B., Lora, J., Mitsunaga, B., Lopez-Maldonado, R., Ellis, A., **Tabor, C.R.**, Bader, N., Upadhyay, D., Ramirez, P., Tripati, A.: Analysis of clumped isotopes in loess-derived calcareous paleosols: The Pacific Northwest climate from LGM to today, *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.

- Hu, J., Emile-Geay, J., **Tabor, C.R**, Nusbaumer, J.: The interpretation of speleothem δ18O in the Asian Monsoon regions: insights from an isotope-enabled model, *American Geophysical Union Fall Meeting*, 2018.
- Wortham, B., Montanez, I., Swart, P., **Tabor, C.R.**: Fossilized drip-water from a Sierra Nevada cave reveals variability in precipitation sources and atmospheric dynamics over the last deglaciation, *American Geophysical Union Fall Meeting*, 2018.
- **Tabor, C.R.**, CESM isotope tracer development group: far field isotopic signatures of a Green Sahara, *Goldschmidt*, 2018.
- Wortham, B., Montanez, I., Swart, P., Mukhopadhyay, S., **Tabor, C.R.**: A multi-proxy approach to understanding hydroclimate in the American Southwest, *Goldschmidt*, 2018.
- **Tabor, C.R.**: Variability of the South Asian Monsoon on orbital timescales. *Avery Point Modeling Workshop*, 2018.
- Wortham, B., Montanez, I., Swart, P., **Tabor, C.R.**: Fossilized drip-water from a Sierra Nevada Cave, USA reveals changing conditions over the North Pacific during the last deglaciation, *European Geosciences Union General Assembly*, 2018.
- Bardeen, C., **Tabor, C.R.**, Otto-Bliesner, B.L., Garcia, R., Toon, B.: Soot deposition following the Chicxulub impact: comparing to data from 66 million years ago, *Whole Atmosphere Working Group Meeting*, 2018.
- Atwood, A., Cobb, K., Chiang, J., Grothe, P., **Tabor, C.R.**, Otto-Bliesner, B., Sayani, H., Jones, A., Hitt, N.: The influence of mean state changes on ENSO during the mid-Holocene: insights from coral records and an isotope-enabled GCM, *Ocean Sciences Meeting*, 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 $\delta 180$ variability in monsoon regions using an earth system model, 5^{th} *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.
- Poulsen C.J. and **Tabor, C.R.**: Late Cretaceous climate evolution from a modeling perspective, *Geological Society of America Annual Meeting*, 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.
- Peterson, S.V., **Tabor, C.R.**, Meyer, K.W., Lohmann, K.C., Poulsen, C.J.: Equator to pole in the Cretaceous: a comparison of clumped isotope data with CESM model runs, *American Geophysical Union Fall Meeting*, 2015
- **Tabor, C.R.**, Poulsen, C.J.: The role of paleogeography and CO₂ in Late Cretaceous ocean circulation, *American Geophysical Union Fall Meeting*, 2015.
- Peterson, S.V., **Tabor, C.R.**, Carpenter, S.J., Meyer, K.W., Lohmann, K.C., Poulsen, C.J.: A fresh look: salinity and temperature of the Western Interior Seaway using the clumped isotope paleothermometer, *Geological Society of America Annual 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.
- Lunt, D.J., Otto-Bliesner, B.L., Poulsen, C.J., Rosenbloom, N., **Tabor, C.R.**: Pre-Pliocene PMIP working group: results so far, and questions for discussion, *Paleoclimate Modeling Intercomparison Project: Second General Meeting*, 2014.
- Rosenbloom, N., Otto-Bliesner, B.L., Brady, E.C., Lunt, D.J., Poulsen, C.J., **Tabor, C.R.**: CESM for deep time paleoclimate, *Paleoclimate Modeling Intercomparison Project: Second General Meeting*, 2014.
- **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.
- Squires, M.F., Baldwin, R., Reid, G., **Tabor, C.R.**, Wilson, A.: Development a GIS snowstorm database, *American Meteorological Society Annual Meeting*, 2009.
- **Tabor, C.R.** Dobson, G.; Creating geospatial decision support tools for regional decision makers, *North Carolina Geographic Information Systems Conference*, 2009.
- Squires, M.F., Lawrimore, J.H., Heim, R.R., Robinson, D.A., Gerbush, M., Estilow, T., **Tabor, C.R.** Wilson, A.: Development of new snowstorm indices and databases at the National Climatic Data Center, *Annual Climate Diagnostics and Prediction Workshop*, 2009.
- Miller, D., Perry, B., Yuter, S., Lee, L., Keighton, S., **Tabor, C.R.**: Snowfall accumulation forecasting challenges for the southern Appalachians, *National Weather Association Annual Meeting*, 2008.

Advisees

Postdoctoral Scholars	
Sophia Macarewich (UC-Davis)	2022
Paul Goddard (UConn)	2018-2019
Graduate Students: Primary Advisor	
Joseph Schnaubelt (UConn) - PhD primary advisor	2022-present
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	
Sarah Brisson (UConn) - PhD external member	2023
Laura Lapham (UConn) - MS associate advisor	2023-present
Dylan Jones (UConn) - PhD associate advisor	2023-present
Chris Sparacio (UConn) - PhD associate advisor	2022-present
Mary Grace Albright (UConn) - PhD associate advisor	2022-present
Theodor Mayer (UConn; graduated) - MS associate advisor	2022-2023
Monica Garity (UConn Marine Sciences) - PhD associate advisor	2020-present
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	
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	
Emily Roberge (UConn) – Earth Sciences	2022-present
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 DEI Workshop (UConn)	2022
Visiting Professorship (NCAR)	Summer 2019
Grant Writing Workshop (UConn)	2018
Evidence-Based Introduction to Teaching (University of Colorado)	2017
3 rd 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 UConn	
Paleoclimate Reading Group (ERTH 5050; Created and taught)	Fall 2023 / Spring 2022-2023
Our Evolving Atmosphere (ERTH 2800; Created and taught)	Fall 2020-2022
Dinosaurs, Extinctions, Environmental Catastrophes (ERTH 1010; Taught)	Fall 2019
Paleoclimatology (ERTH 4850 / 5850; Created and taught)	Fall 2018/ Spring 2018-2022

University Service

NSF CAREER Panel Q&A	2023
Earth Sciences Undergraduate Committee	2022-present
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	
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-present
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

Reviewer: NSF, NERC, PaleoMod, Nature, Nature Geosciences, PNAS, Science Advances, Nature Communications, Earth Science Reviews, Nature Scientific Data, Scientific Reports, Geophysical Research Letters, Geology, Paleoceanography and Paleoclimatology, Quaternary Science Reviews, Journal of Geophysical Research-Earth Surfaces, Journal of Geophysical Research-Atmospheres, Climate Dynamics, Journal of Climate, Climate of the Past, Global and Planetary Change, Advances in Space Research +

Memberships

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