

## Clay Tabor

National Center for Atmospheric Research  
1850 Table Mesa Dr., Boulder, CO 80305  
(919) 698-3740 - crtabor@ucar.edu

### Current

Postdoc, Advanced Study Program Fellow, National Center for Atmospheric Research 2016-Current

### Education

PhD, Earth and Environmental Sciences - Paleoclimatology, University of Michigan Winter 2015

BS, Atmospheric Sciences with Minor in Mathematics, University of North Carolina at Asheville Fall 2009

### Professional Experience

Graduate Student Research Assistant, University of Michigan, Ann Arbor, MI Fall 2010-Winter 2015

Visiting Researcher, National Center for Atmospheric Research, Boulder, CO Fall 2013

Community Earth System Model Tutorial, National Center for Atmospheric Research, Boulder, CO Summer 2012

National Climatic Data Center Internship, Asheville, NC Summer 09-Summer 10

National Environmental Modeling and Analysis Center Intern, Asheville, NC Fall 08-Summer 09

Undergraduate Research Assistant, University of North Carolina at Asheville, Asheville, NC Fall 08-Spring 09

### Teaching Experience

Physical Oceanography, University of Michigan Fall 2014

Introductory Environmental Science in the Rockies at the University of Michigan Summer 2014  
Camp Davis Field Station in Jackson, WY

Introductory Environmental Science in the Rockies at the University of Michigan Summer 2012  
Camp Davis Field Station in Jackson, WY

Global Change 1, University of Michigan Fall 2011

Geology of National Parks, University of Michigan Fall 2010

### Publications

Feng, R., Otto-Bliesner, B.L., **Tabor, C.R.**, Fletcher, T., Ballantyne, A., Brady, E.C.: Contributions to Pliocene Arctic terrestrial warmth from radiative forcing and Arctic Ocean gateway closure. *Earth and Planetary Science Letters*, 2016 (in review)

The DeepMIP Model and Data Community: DeepMIP: experimental design for model simulations of the EECO, PETM, and pre-PETM. *Geoscientific Model Development*, 2017. doi:10.5194/gmd-2016-127

**Tabor, C.R.**, Poulsen, C.J., Lunt, D.J., Otto-Bliesner, B.L., Rosenbloom, N., Brady, E.C., Markwick, P., Farnsworth, A., and Feng, R.: The cause of the Late Cretaceous cooling: a multi-model / proxy comparison, *Geology*, 2016. doi:10.1130/G38363.1

Peterson, S.V., **Tabor, C.R.**, Lohmann, K.C., Poulsen, C.J., Meyer, K.W., Carpenter, S.J., Matsunaga, K., Smith, S.Y., and Sheldon, N.D.: Temperature and salinity of the Late Cretaceous Western Interior Seaway, *Geology*, 2016. doi:10.1130/G38311.1

- Tabor, C.R.** and Poulsen, C.J.: Simulating the mid-Pleistocene transition through regolith removal, *Earth and Planetary Science Letters*, 2016. doi:10.1016/j.epsl.2015.11.034
- Poulsen, C.J., **Tabor, C.R.**, and White, J.D.: Long-term climate forcing by atmospheric oxygen concentrations, *Science*, 2015. doi:10.1126/science.1260670
- Poulsen, C.J., **Tabor, C.R.**, and White, J.D.: Response to comment on “Long-term climate forcing by atmospheric oxygen concentrations”, *Science*, 2016. <http://dx.doi.org/10.1126/science.aad8550>
- Fiorella, R.P., Poulsen, C.J., Pilco-Zolá R., Barnes, J., **Tabor, C.R.**, and Ehlers, T.: Spatiotemporal variability of modern Precipitation  $\delta^{18}O$  in the Central Andes and Implications for Paleoclimate and Paleohydrology Estimates, *Journal of Geophysical Research-Atmospheres*, 2015. doi:10.1002/2014JD022893
- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: How obliquity cycles powered early Pleistocene global ice-volume variability, *Geophysical Research Letters*, 2015. doi:10.1002/2015GL063322
- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: Mending Milankovitch’s theory: obliquity amplification by surface feedbacks, *Climate of the Past*, 2014. doi:10.5194/cp-10-41-2014

### **Invited Talks**

- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: Using an Earth system model to better understand ice sheet variability through the Pleistocene, American Geophysical Union Fall Meeting, 2015.
- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: Modeling the Pleistocene glacial cycles, Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, MD, 2015.
- Tabor, C.R.** and Dobson, G.: Implementation of GIS for the NWS and other regional decision makers, 30th Anniversary Symposium, Department of Atmospheric Sciences, University of North Carolina at Asheville, Asheville, NC, 2009.
- Tabor, C.R.**: GIS and atmospheric sciences: bridging the gap, National Environmental Modeling and Analysis Center, Asheville, NC, 2008.

### **Presentations**

- Tabor, C.R.**, Otto-Bliesner, B.L., Brady, E.C., and 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.** et al.: Oxygen-18 and Deuterium Isotopes in CESM, Deep Time Workshop, Santa Cruz, CA, 2016.
- Tabor, C.R.**, Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B., and Poulsen, C.J.: Exploring the K-Pg with CESM, Deep Time Workshop, Santa Cruz, CA, 2016.
- Tabor, C.R.**, Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B., and Poulsen, C.J.: Simulating the K-Pg with an Earth system model, The Geological Society of America Annual Meeting, 2016.
- Press:** Sumner, T. Devastation detectives try to solve dinosaur disappearance. *Science News*, 2017.
- Poulsen C.J. and **Tabor, C.R.**: Late Cretaceous climate evolution from a modeling perspective, The Geological Society of America Annual Meeting, 2016.
- Tabor, C.R.**, Bardeen, C., Otto-Bliesner, B.L., Garcia, R., Toon, B., and Poulsen, C.J.: The large scale climate responses to the Chicxulub impact, CESM Workshop, 2016.
- Tabor, C.R.**, and Poulsen, C.J.: The Role of Paleogeography and CO<sub>2</sub> in Late Cretaceous Ocean Circulation, American Geophysical Union Fall Meeting, 2015.
- Peterson, S.V., **Tabor, C.R.**, Meyer, K.W., Lohmann, K.C., and 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.

- Peterson, S.V., **Tabor, C.R.**, Carpenter, S.J., Meyer, K.W., Lohmann, K.C., and Poulsen, C.J.: A Fresh Look: Salinity and Temperature of the Western Interior Seaway using the Clumped Isotope Paleothermometer, The Geological Society of America Annual Meeting, 2015.
- Tabor, C.R.**, Poulsen, C.J., Lunt, D.J., Otto-Bliesner, B.L., Rosenbloom, N., and Markwick, P.J.: Simulating climate response to changes in paleogeography through the Cretaceous, CESM Workshop, 2015.
- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: Regolith as a mechanism for the mid-Pleistocene transition, Michigan Geophysical Union, 2015.
- Tabor, C.R.**, Poulsen, C.J., and 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., and Markwick, P.J.: Simulating Cenomanian climate with the Community Earth System Model, The Geological Society of America Annual Meeting, 2014.
- Lunt, D.J., Otto-Bliesner, B.L., Poulsen, C.J., Rosenbloom, N., and **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., and **Tabor, C.R.**: CESM for deep time paleoclimate, Paleoclimate Modeling Intercomparison Project: Second General Meeting, 2014.
- Tabor, C.R.**, Poulsen, C.J., and Pollard, D.: Surface feedbacks mend Milankovitch theory, Michigan Geophysical Union, 2013.
- Tabor, C.R.**, Poulsen, C.J., and 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., and 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.**, and Wilson, A.: Development a GIS snowstorm database, American Meteorological Society Annual Meeting, 2009.
- Tabor, C.R.** and 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.** and 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., and **Tabor, C.R.**: Snowfall accumulation forecasting challenges for the southern Appalachians, National Weather Association Annual Meeting, 2008.

### **Honors and Awards**

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

### **Grants**

PAGES Young Scientist Meeting Travel Grant	2017
NCAR Strategic Capability Allocation	2016 / 2017
GSA Travel Grant	2014
Rackham Graduate Student Travel Grant	2012-2015
Community Earth System Model Tutorial Travel Grant	2012

### **Service**

AGU 2016 OSPA Judge

CESM Tutorial: Presented on CESM deep-time capability

Advised for NCAR's public climate exhibit

Undergraduate Leadership Workshop: On the Careers in Atmospheric Sciences panel

Undergraduate Mentoring: Adrian Tasistro-Hart (Princeton)

Reviewer: *Geophysical Research Letters*, *Geology*, *Paleoceanography*, *Journal of Geophysical Research-Earth Surfaces*, *Global and Planetary Change*, *Journal of South American Earth Sciences*

Michigan Geophysical Union: Member of the Planning Committee

NCAR Advanced Study Program: Member of the Postdocs Networking Committee

NCAR Advanced Study Program: Thompson Lecture Series Organizer

Created a kiosk on ice ages for the University of Michigan's Natural History Museum

University of Michigan Research Symposium for Graduate Recruiting: Presented on the orbital forcing

### **Memberships**

American Geophysical Union

Geological Society of America