

IN THIS SECTION:

PEOPLE

[Complete Listing](#)

[Faculty](#)

[Adjunct Faculty](#)

[Emeritus Faculty](#)

[Administrative Staff](#)

[Research Staff](#)

[Graduate Students](#)

[Advisory Council](#)

[Cornellians of Note](#)



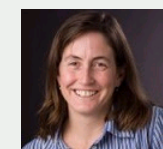
[Group Members](#)

NEWS:



[Mahowald elected Fellow of the American Geophysical Union](#)

[Union](#)



[Mahowald receives Guggenheim award](#)

[Home](#) ▶ [People](#) ▶ Profile

NATALIE M MAHOWALD

Biography

Professor Mahowald has undergraduate degrees in German and Physics from Washington University, a Master's degree in Natural Resource Policy from University of Michigan and a PhD from MIT in meteorology. She conducted her postdoc at Stockholm University in Sweden, before returning to a faculty position at UCSB. She then moved to NCAR, before becoming a faculty member at Cornell in 2007.

Research Interests

My research group is focused on understanding global and regional scale atmospheric transport of biogeochemically important species such as desert dust. We are interested in how humans are perturbing the natural environment, especially through biogeochemical feedbacks. We look at these issues through a combination of 3-dimensional global transport and climate models, as well as analysis of satellite and in situ data.

Teaching Interests

Climate change, atmospheric biogeochemi

Selected Publications

- ▶ Rothenberg, Daniel, Natalie M. Mahowald, Scott, Moore Keith, Peter Thornton. 2013. "Climate and biogeochemistry in a coupled Earth System Dynamics 3: 121-136.
- ▶ Mahowald, Natalie M. 2013. "Atmospheric

Encyclopedia of Sustainability Science &

- ▶ Meng, Lei, Peter Hess, Natalie M. Mahowald, Zack Subin, David Lawrence, Seiichi Fukui. 2012. "[Sensitivity of wetland methane emissions to climate change: application and model testing using observations.](#)" *Biogeosciences* 9: 2793-2805.
- ▶ Heavens, Nicholas, Natalie M. Mahowald. "Sensitivity of A Deep Time Climate Simulation to CO₂ Prescription." *Journal of Advances in Modeling Earth Systems* 2013.
- ▶ Kloster, S., Natalie M. Mahowald, J. T. Moore. 2012. "The impacts of climate, land use change, and CO₂ emissions during the 21st century simulated by CCSM." *Journal of Geophysical Research* 117: 509-525.

[see more publications](#)

Selected Awards and Honors

- ▶ Fellow (American Meteorological Society) 2013
- ▶ Henry G. Houghton Award (American Meteorological Society) 2013
- ▶ Fellow (American Geophysical Union) 2013
- ▶ Fellow (Guggenheim Foundation) 2013
- ▶ City of Paris Research Fellowship 2013

Websites

- ▶ [Research website](#)

Education