

# OLIVIA E. CLIFTON

Lamont Doherty Earth Observatory  
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## Education

Columbia University, Earth & Environmental Sciences, Ph.D., expected 2018.

Columbia University, Earth & Environmental Sciences, M. Phil., February 2017.

Columbia University, Earth & Environmental Sciences, M.A., March 2015.

University of Wisconsin-Madison, Mathematics, B.S., December 2012.

## Professional Experience

**Graduate Researcher** with Dr. Arlene Fiore, Columbia University, 2013-present.

**Research Assistant** with Dr. Arlene Fiore, Columbia University, 2013.

**Undergraduate Researcher** with Dr. Tracey Holloway, UW-Madison, 2011-2012.

**Intern** NASA Student Airborne Research Program, 2012.

## Honors and Awards

- MIT Civil & Environmental Engineering Rising Stars, 2017.
- First Place Oral Presentation, Third Conference on Atmospheric Biogeosciences, 2016.
- NSF Graduate Research Fellowship, 2015.
- NSF Graduate Research Fellowship Honorable Mention, 2014.
- UW-Madison Holstrom Environmental Scholarship, 2011.

## Peer-reviewed Publications

1. Clifton, O. E., A. M. Fiore, J. W. Munger, S. Malyshev, L. W. Horowitz, E. Shevliakova, F. Paulot, L. T. Murray, and K. L. Griffin (2017), Interannual variability in ozone removal by a temperate deciduous forest, *Geophysical Research Letters*, 44, doi:10.1002/2016GL070923.
2. Clifton, O. E., A. M. Fiore, G. Correa, L. W. Horowitz, and V. Naik (2014), Twenty-first century reversal of the surface ozone seasonal cycle over the northeastern United States, *Geophysical Research Letters*, 41, doi:10.1002/2014GL061378. *Featured as an AGU EOS Research Spotlight.*
3. Fiore, A. M., J. T. Oberman, M. Y. Lin, L. Zhang, O. E. Clifton, D. J. Jacob, V. Naik, L. W. Horowitz, J. P. Pinto, and G. P. Milly, Estimating North American background ozone in U.S. surface air with two independent global models: Variability, uncertainties, and recommendations, *Atmospheric Environment*, 96, doi:10.1016/j.atmosenv.2014.07.045.

## Professional Activities

**Co-organizer**, Lamont Climate Center Workshop on Ozone Dry Deposition, 2017

**Board Member** Women In Science at Columbia (WISC), 2017-2018

**Organizer** WISC Writing Workshop for NSF Graduate Research Fellowship Applicants, 2017

**Member** Lamont Colloquium Committee, 2014-2016

**Contributing Author** IPCC Working Group 1 Chapter 11, 2013

**Member** American Geophysical Union (since 2012), Earth Science Women's Network (since 2012), Women In Science at Columbia (since 2013), American Meteorological Society (since 2016)

## Conference and Workshop Presentations (P for poster)

- American Geophysical Union Fall Meeting, New Orleans, LA 2017
- Long-term Biosphere-Atmosphere Chemical Flux Workshop, Irvine, CA 2017 *Invited*
- Lamont Climate Center Workshop on Ozone Dry Deposition, Palisades, NY 2017
- 5<sup>th</sup> Integrated Land Ecosystem-Atmosphere Processes Study Science Conference, Oxford, UK 2017
- New York City Metro Area Energy and Air Quality Data Gaps Workshop, Palisades, NY 2017 (P)
- Annual Harvard Forest Ecology Symposium, Petersham, MA 2017 (P)
- International Global Atmospheric Chemistry Science Conference, Breckenridge, CO 2016 (P)
- 3<sup>rd</sup> Conference on Atmospheric Biogeosciences, Salt Lake City, UT 2016
- European Geophysical Union 2016 Conference, Vienna, Austria 2016
- NASA Air Quality Applied Sciences Team 7 Meeting, Cambridge, MA 2014 (P)

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- Global Decadal Hydroclimate Predictability, Variability & Change Meeting, Palisades, NY 2014 *Invited*
- 3<sup>rd</sup> Chemistry-Climate Modeling Initiative Workshop, Lancaster, UK 2014 (P) *Recipient of travel grant*
- First Year Colloquium, Palisades, NY 2014
- American Geophysical Union Fall Meeting, San Francisco, CA 2013 (P)
- New York State Energy Research and Development Authority Environmental Monitoring, Evaluation and Protection in New York: Linking Science and Policy Conference, Albany, NY 2013 (P)
- Columbia University Atmospheric Chemistry Symposium, New York, NY 2013
- American Geophysical Union Fall Meeting, San Francisco, CA 2012 (P)
- NASA Air Quality Applied Sciences Team 3 Meeting, Madison, WI 2012 (P)

## **Teaching and Mentoring Experience at Columbia University**

- Research Mentor, Eleanor Pressman (Columbia College '19), 2017.
- Guest Lecturer, *Introduction to Atmospheric Chemistry*, 2017.
- Teaching Assistant, *Earth's Environmental System: Climate*, 2016.
- Teaching Assistant, *Quantitative Models of Climate-Sensitive Natural and Human Systems*, 2014.
- Teaching Assistant, *Introduction to Atmospheric Chemistry*, 2014.

## **Technical Skills and Training**

- Proficiency with Fortran, NetCDF, Matlab, IDL, UNIX, git
- Configuration of sensitivity simulations in NOAA GFDL models, including development to land model
- Short courses: NCAR Community Land Model 2016 Tutorial, Collaboratory@Columbia Data Science Bootcamp, International Summer School on Atmospheric & Oceanic Sciences: Advanced Programming Techniques for the Earth System Science

## **Outreach Activities**

**Presenter** Lamont Open House, Palisades, NY 10/2014, 10/2016, 10/2017.

**Presenter** Career Day, Public School 180, New York, NY, 5/2017.

**Presenter** Columbia University EESC UN2100 Field Trip to Lamont, Palisades, NY 11/2015, 10/2016.

**Mentor** Lamont Secondary School Field Research Program, Palisades, NY 2014, 2016.

**Presenter** Earth2Class, Air quality-climate-vegetation connections, Palisades, NY 01/2016.

**Panelist** Inspiring Voices: STEAM Working Professionals Panel, Potomac, MD 01/2015.

**Presenter** Pascack Hills High School Girls' Climate Stewards Club, Palisades, NY 11/2014.

**Exhibitor** Princeton Plasma Physics Laboratory Young Women's Conference, Princeton, NJ 03/2014.

**Experimental Leader** Women In Science at Columbia Girls' Science Day, New York, NY 11/2013.

**Presenter** Expand Your Horizons, Madison, WI, 11/2012.