

Cory R. Martin

PhD Candidate

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Professional Preparation

Ph. D. Atmospheric and Oceanic Science, University of Maryland (Expected Dec. 2018)
M.S. Atmospheric and Oceanic Science, University of Maryland, May 2016
B.S. Atmospheric Science, The Ohio State University, May 2013

Appointments

July 2015 – Present Guest Researcher, National Institute of Standards and Technology
Sep 2013 – Present Graduate Research Assistant, University of Maryland
Sep 2013 – May 2014 Graduate Teaching Assistant, University of Maryland

Teaching

Jan 2016 – May 2016 Volunteer Teaching Assistant, AOSC 684: Climate System Modeling
Sep 2015 – Dec 2015 Volunteer Teaching Assistant, AOSC 431: Atmospheric Physics and Thermodynamics
Jan 2014 – May 2014 Discussion Instructor/Teaching Assistant, AOSC 200: Weather and Climate, University of Maryland
Jan 2014 – May 2014 Instructor, AOSC 201: Weather and Climate Laboratory, University of Maryland
Sep 2013 – Dec 2013 Discussion Instructor/Teaching Assistant, AOSC 200: Weather and Climate, University of Maryland
Sep 2013 – Dec 2013 Instructor, AOSC 201: Weather and Climate Laboratory, University of Maryland

Peer-Reviewed Publications

- Mueller, K., V. Yadav, I. Lopez-Coto, A. Karion, S. Gourdji, C. **Martin**, and J. Whetstone: *Siting background towers to represent incoming air for urban GHG estimation: a case study in the Washington DC/Baltimore Area*, Journal of Geophysical Research – Atmospheres, submitted, 2017.
- **Martin, C. R.**, Zeng, N., Karion, A., Dickerson, R. R., Ren, X., Turpie, B. N., and Weber, K. J.: *Evaluation and environmental correction of ambient CO₂ measurements from a low-cost NDIR sensor*, Atmos. Meas. Tech., 10, 2383-2395, <https://doi.org/10.5194/amt-10-2383-2017>, 2017.

Other Publications

Conference and Workshop Presentations

- **Martin, Cory**, N. Zeng, A. Karion, R. Dickerson, X. Ren, 2017: *Evaluating a low-cost NDIR CO₂ sensor for use in urban greenhouse gas monitoring*. 2017 Joint NACP and AmeriFlux PI Meeting, Bethesda, MD.

- Karion, Anna, K. Mueller, K. Prasad, T. Wong, R. Dickerson, **C. Martin**, C. Sloop, I. Lopez-Coto, B. Callahan, S. Ghosh, S. Prinzievalli, and J. Whetstone, 2017: *The North-East Corridor Project: Baltimore-Washington DC*. 2017 Joint NACP and AmeriFlux PI Meeting, Bethesda, MD.
- Arcomano, Troy J., **C. R. Martin**, D. T. Kleist, G. M. Mazzuca, and T. C. Sluka, 2017: *Evaluation of Real-Time WRF Forecasts Over the Mid-Atlantic*. 97th meeting of the American Meteorological Society, Seattle, WA.
- **Martin, Cory R.** and N. Zeng, 2016: *Implementation and evaluation of near real-time WRF-CO₂ modeling in the Baltimore / Washington area*. 17th Annual WRF Users Workshop, Boulder, CO.
- **Martin, Cory R.**, N. Zeng, K. Weber, W. Tribett, T. Kelly, R. Dickerson, X. Ren and B. Turpie, 2016: *Implementing Environmental Corrections to Increase the Accuracy of a Low-Cost CO₂ Sensor*. 96th meeting of the American Meteorological Society, New Orleans, LA.
- **Martin, Cory R.**, N. Zeng, K. Weber, W. Tribett, T. Kelly, R. Dickerson, X. Ren and B. Turpie, 2015: *Calibration and Initial Measurements with a Low-Cost and Moderate-Precision CO₂ Sensor*. 5th meeting of the North American Carbon Program Principal Investigators Meeting.
- **Martin, Cory R.**, N. Zeng, K. Weber, W. Tribett, T. Kelly, R. Dickerson, X. Ren and B. Turpie, 2015: *Calibration and Initial Measurements with a Low-Cost and Moderate-Precision CO₂ Sensor*. 95th meeting of the American Meteorological Society.
- Zeng, N., **C. Martin** and D. Kirk-Davidoff, 2014: *Evaluation of Wind Resources and Wind Farm Layout Optimization*. Maryland Offshore Wind Energy Research (MOWER) Briefing.

Other Presentations

Honors and Awards

- AMS 18th Conference on Atmospheric Chemistry Outstanding Student Poster Presentation Award, American Meteorological Society Annual Conference, January 2016
- CMNS Dean's Fellowship, University of Maryland College of Computer, Mathematical, and Natural Sciences, Spring 2016
- Service Award, University of Maryland Dept. of Atmospheric and Oceanic Science, 2014
- CMNS Dean's Fellowship, University of Maryland College of Computer, Mathematical, and Natural Sciences, 2013-2014
- Merit Award, University of Maryland, September 2013
- Graduated Magna Cum Laude, The Ohio State University, May 2013
- Graduated with Honors in the Arts and Sciences, The Ohio State University, May 2013

Leadership Roles

- Member, University of Maryland Graduate School Dean Search Committee, Spring 2017
- AOSC Awards Committee Student Representative, University of Maryland, Sep. 2016-May 2017
- AOSC Representative, CMNS Dean's Graduate Advisory Council, University of Maryland College of Computer, Math, and Natural Sciences, 2015-2016 Academic Year
- Co-organizer, Launch UMD – UMD Weather Balloon crowdfunding project, University of Maryland, Sep-Oct 2015
- President, UMD MetroGrads Student Organization, University of Maryland, June 2015-May 2016

- Weekly AOSC Weather Discussion Coordinator, University of Maryland, Sep. 2014 – Jan. 2016
- Project coordinator, UMD Environmental Monitoring Lab, University of Maryland, Nov 2013-Present
- Vice-President, MetoGrads Student Organization, University of Maryland, May 2014-May 2015
- President, Meteorology Club, The Ohio State University, May 2012 – April 2013
- Vice-President, Meteorology Club, The Ohio State University, May 2011 – April 2012

Professional Memberships

American Meteorological Society, 2012 - Present

American Geophysical Union, 2014 – Present

National Weather Association, 2012-2014

Undergraduate Students Advised

Tyler Richman (2017)

Justin Fowler (2017)

Michael Pascone*¹ (2016) (Environmental Science and Policy)

Julia Cavallo¹ (2016)

Alexa Maines¹ (2016)

Bari Turpie¹ (2015)

Tom Kelly¹ (2014)

Walt Tribett¹ (2014)

Kristy Weber¹ (2014)

¹) co-advised with Prof. Ning Zeng

Funded Projects

- “The University of Maryland Micrometeorological Climate Network”, Co-I with T. Canty, MADE CLEAR: Maryland and Delaware Climate Change Education Assessment and Research mini-grants, 2017, \$5,000.

Other Activities

- Volunteer Tutor, AOSC Weekly Tutoring Hours, University of Maryland, Sep. 2015 - Present
- Category Judge, 67th Annual Prince George’s Area Science Fair, Springdale, Maryland March 2015
- Coordinator of the 17th Annual Severe Weather Symposium, Meteorology Club, The Ohio State University, March 2013
- Co-Founder of the Central Ohio Chapter of the National Weather Association, The Ohio State University, January 2013
- Assistant Coordinator of the 16th Annual Severe Weather Symposium, Meteorology Club, The Ohio State University, March 2012

- BuckeyeTV on-air meteorologist, The Ohio State University, September 2011 – December 2012
- WxChallenge Local Manager, The Ohio State University, September 2011-April 2012

Relevant Skills

- Experienced in Python programming, particularly for scientific data visualization
- Experienced with Linux, including some systems administration
- Proficient in Fortran 90, Bash scripting, HTML and PHP
- Working knowledge of MySQL, GrADS, MATLAB, Unidata Local Data Manager and AWIPS

Last Updated: 7/28/2017