

## Dien Wu

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### Education

University of Utah	Ph.D. (Atmospheric Sciences)	Expected 2019	Salt Lake City, UT, USA
University of Utah	M.S. (Atmospheric Sciences)	2014 – 2016	Salt Lake City, UT, USA
Florida State University (joint with NUIST)		2012 – 2014	Tallahassee, FL, USA
Nanjing University of Information Science and Technology (NUIST)	B.S. (Meteorology)	2010 – 2012	Nanjing, Jiangsu, China

### Employment

Graduate Research Assistant, Dept. of Atmospheric Sciences, University of Utah, 2014 – present

### Peer-Reviewed Publications

1. **Wu, D.**, Lin, J. C., Fasoli, B., Oda, T., Ye, X., Lauvaux, T., Yang, E. G., and Kort, E. A.: A Lagrangian approach towards extracting signals of urban CO<sub>2</sub> emissions from satellite observations of atmospheric column CO<sub>2</sub> (XCO<sub>2</sub>): X-Stochastic Time-Inverted Lagrangian Transport model ("X-STILT v1"), *Geosci. Model Dev.*, 11, 4843-4871, <https://doi.org/10.5194/gmd-11-4843-2018>, 2018.
2. Ye, X., Lauvaux, T., Kort, E. A., Oda, T., Feng, S., Lin, J. C., Yang, E., and **Wu, D.**: Constraining fossil fuel CO<sub>2</sub> emissions from urban area using OCO-2 observations of total column CO<sub>2</sub>, *Atmos. Chem. Phys. Discuss.*, <https://doi.org/10.5194/acp-2017-1022>, in review, 2017.
3. Hernandez, A.J., L.A. Morales-Rincon, **D. Wu**, D. Mallia, J.C. Lin, and R. Jimenez, Transboundary transport of biomass burning aerosols and photochemical pollution in the Orinoco river basin, *Atmospheric Environment*, In Review.
4. Mallia, D.V., A. Kochanski, **D. Wu**, C. Pennell, W. Oswald, and J.C. Lin, 2017: Wind-Blown Dust Modeling Using a Backward-Lagrangian Particle Dispersion Model. *J. Appl. Meteor. Climatol.*, 56, 2845–2867, <https://doi.org/10.1175/JAMC-D-16-0351.1>.
5. Lin, J. C., Mallia, D. V., **Wu, D.**, and Stephens, B. B.: How can mountaintop CO<sub>2</sub> observations be used to constrain regional carbon fluxes?, *Atmos. Chem. Phys.*, 17, 5561-5581, <https://doi.org/10.5194/acp-17-5561-2017>, 2017.

### Conference presentations

**Wu, D.**, J. C. Lin, Oda, T., Ye, X., Lauvaux, T., Yang, E., and Kort, E. A. (2017), Towards Interpreting the Signal of CO<sub>2</sub> Emissions from Megacities by Applying a Lagrangian Receptor-oriented Model to OCO-2 XCO<sub>2</sub> data, *2017 AGU Fall Meeting*, New Orleans, LA, 11-15 Dec.

Mallia, D. V., A. Kochanski, **D. Wu**, S. Urbanski, and J. C. Lin (2016), Integrating wildfire plume rises within atmospheric transport models, *2016 AGU Fall meeting*, San Francisco, CA, 12-16 Dec.

**Wu, D.**, D. V. Mallia, S. P. Urbanski, J. C. Lin (2016), Top-down Constraints on CO Emissions from Wildfire Inventories Using a Receptor-oriented Lagrangian Particle Dispersion Model, *AMS Third Conference on Biogeoscience*, 20-25 June, Salt Lake City, UT.

Mallia, D. V., J. C. Lin, **D. Wu**, and B. Stephens (2016), How can mountaintop CO<sub>2</sub> observations be used to constrain regional carbon fluxes?, *32nd Conference on Agricultural and Forest Meteorology*, 20-25 June, Salt Lake City, UT.

Lin, J. C., B. B. Stephens, D. V. Mallia, **D. Wu**, H. Duarte, S. Urbanski, and J. Ehleringer (2015), How can we constrain regional carbon fluxes in the American Rockies from atmospheric measurements?, *5th NCAP and AmeriFlux Joint Meeting*, 26-29 January, Washington, D.C.

Lin, J. C., D. V. Mallia, **D. Wu**, S. Urbanski, and B. B. Stephens (2014), Quantifying the influence of biomass burning on measurements site in the western U.S., *AGU Fall Meeting 2014*, 15-19 Dec, San Francisco, CA.

### **Scholarships and Honors**

- Pass the Graduate Qualifying Exam with distinction, University of Utah, 05/2015
- Graduate with Magna cum laude, Florida State University, 05/2014
- Dean's List, Florida State University, Fall 2012, Spring 2013, Fall 2013, Spring 2014
- Prize for being one of the excellent class leaders, NUIST, 06/2012
- Second tier scholarship (top 10%), NUIST, 2010, 2011

### **Computer skills**

Programming languages: R, Fortran, GrADS graphics, MATLAB, C (beginner), LaTeX

Operating systems: Linux, Mac OS

Modeling experience: WRF-ARW, STILT

### **Languages**

English, Chinese