

DANIEL CUSWORTH

4800 Oak Grove Drive, Pasadena, CA

(805) 405 - 6515 ♦ daniel.cusworth@jpl.nasa.gov ♦ github.com/dcusworth

EDUCATION

Harvard University

September 2013 - June 2018

Ph.D: Atmospheric Chemistry, minor in Computer Science

S.M: Applied Mathematics

University of California, Los Angeles

March 2012

B.S: Mathematics and Atmospheric & Oceanic Sciences

RESEARCH EXPERIENCE

NASA Jet Propulsion Laboratory

September 2018 - Present

JPL Postdoctoral Scholar

Pasadena, CA

Harvard School of Engineering and Applied Sciences

Summer 2018

Postdoctoral Research Fellow

Cambridge, MA

Harvard Department of Earth & Planetary Sciences

July 2013 - May 2018

Graduate Student Research Fellow

Cambridge, MA

Legendary Entertainment Applied Analytics

September 2016 - May 2017

Data Science Intern

Boston, MA

The Cadmus Group, Inc.

October 2012 - July 2013

Research Analyst

Waltham, MA

Jet Propulsion Laboratory

January 2012 - August 2012

NASA DEVELOP Researcher

Pasadena, CA

UCLA Joint Institute for Regional Earth System Science and Engineering (JIFRESSE)

August 2011 - March 2012

Research Assistant

Los Angeles, CA

PUBLICATIONS

Cusworth, D. H., Duren, R. M., Thorpe, A. K., Tseng, E., Thompson, D., Guha, A., Newman, S., and C.E. Miller, *Using remote sensing to detect, validate, and quantify methane emissions from California solid waste operations.*, In preparation

Cusworth, D. H., Duren, R. M., Yadav V., Thorpe, A. K., Verhulst K., Sander S., Hopkins, F., Rafiq, T., and C.E. Miller, *Synthesis of methane observations across scales: Strategies for deploying a multi-tiered observing network.*, submitted to Geophysical Research Letters

Cusworth, D. H., Jacob, D. J., Varon, D. J., Chan Miller, C., Liu, X., Chance, K., Thorpe, A. K., Duren, R. M., Miller, C. E., Thompson, D. R., Frankenberg, C., Guanter, L., and C.A. Randles (2019), *Potential of next-generation imaging spectrometers to detect and quantify methane point sources from space*, Atmos. Meas. Tech.

Cusworth, D. H., Jacob, D. J., Sheng, J.-X., Benmergui, J., Turner, A. J., Brandman, J., White, L., and C.A. Randles (2018), *Detecting high-emitting methane sources in oil/gas fields using satellite observations*, Atmos. Chem. Phys.

Cusworth, D.H., Mickley, L.J., Sulprizio, M.P., Liu, T., Marlier, M.E., and R.S. DeFries (2018), *Quantifying the influence of agricultural fires in northwest India on urban air pollution in Delhi, India*, Environ. Res. Lett.

Liu, T., Marlier, M.E., DeFries, R.S., Westervelt, D.M., Xia, K.R., Fiore, A.M., Mickley, L.J., Cusworth, D.H., and G. Milley (2018), *Contributions of agricultural burning to air pollution in three Indian cities: Delhi, Bengaluru, and Pune*, Atmos. Environ.

Cusworth, D.H., L.J. Mickley, E.M. Leibensperger, and M.J. Iacono (2017), *Aerosol trends as a potential driver of regional climate in the central United States: Evidence from observations*, Atmos. Chem. Phys.

PRESENTATIONS

- 2019 CO2-Urban Synthesis and Analysis Workshop, Boston University
- 2019 15th International Workshop on Greenhouse Gas Measurements from Space, Hokkaido University, Japan
- 2018 AGU Fall meeting, Washington D.C.
- 2018 14th International Workshop on Greenhouse Gas Measurements from Space, University of Toronto, Canada
- 2017 AGU Fall meeting, New Orleans, LA
- 2017 Sensor Location in Distributed Parameter Systems, IMA, University of Minnesota
- 2017 8th International GEOS-Chem meeting, Harvard University
- 2015 AGU Fall Meeting, San Francisco, CA
- 2015 7th International GEOS-Chem meeting, Harvard University
- 2012 NASA Develop Closeout Presentation Session, Washington D.C.

TECHNICAL SKILLS

Programming: R, Python, MATLAB, Unix

Design/Video: Photoshop, Illustrator, InDesign, Premiere, After Effects

Languages: Portuguese (professional proficiency), Spanish (limited proficiency)

TEACHING AND RESEARCH FELLOWSHIPS

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| • Teaching Fellow, Great Papers in Earth Sciences - Harvard University | <i>Spring 2017</i> |
| • Teaching Fellow, Environmental Modeling - Harvard University | <i>Fall 2014</i> |
| • NSF Graduate Research Fellowship Program - Honorable Mention | <i>2015</i> |
| • Alan Howard Foundation Fellowship | <i>2013 - 2014</i> |

ACTIVITIES

- Member, American Geophysical Union
- Member, European Geophysical Union
- Reviewer, Journal of Geophysical Research: Atmospheres
- Reviewer, Atmospheric Chemistry and Physics
- Reviewer, Scientific Reports - Nature