Katherine Dagon, PhD

ASP Postdoctoral Fellow, National Center for Atmospheric Research
P.O. Box 3000, Boulder, CO 80307
kdagon@ucar.edu ◆ (860) 338-3448
https://katiedagon.github.io

RESEARCH APPOINTMENTS

National Center for Atmospheric Research — Boulder, CO
ASP Postdoctoral Fellow, Climate and Global Dynamics — 2017 – present

EDUCATION

Harvard University — Cambridge, MA
Ph.D., Earth and Planetary Sciences — 2017
A.M., Earth and Planetary Sciences — 2015
Harvard Graduate Consortium on Energy and Environment — 2012 – 2015

- Completed coursework in climate science, energy technology and energy policy.

Brown University — Providence, RI
B.S., Mathematics-Physics, graduation with Honors — 2010

RESEARCH EXPERIENCE

Harvard University — Cambridge, MA
Ph.D. Researcher, Department of Earth and Planetary Sciences — 2011 – 2017

- Ph.D. Thesis: Exploring the Climate Impacts of Solar Geoengineering on Land-Atmosphere Interactions
- *Advisor: Daniel Schrag, Department of Earth and Planetary Sciences*

Brown University — Providence, RI
Undergraduate Researcher, Department of Physics — 2009 – 2010

- Undergraduate Thesis: Statistics of a Solar Tachocline Model with Stochastic Forcing
- *Advisor: Brad Marston, Department of Physics*

TEACHING EXPERIENCE

Harvard University — Cambridge, MA
Teaching Fellow, Department of Earth and Planetary Sciences — 2013 –2016

- Taught and facilitated discussion sections and labs in climate science and energy at both the undergraduate and graduate student level.
  The Consequences of Energy Systems (graduate level, Fall 2015 and Fall 2016)
  The Climate-Energy Challenge (undergraduate level, Fall 2014, Fall 2015 and Fall 2016)
  The Fluid Earth (undergraduate level, Spring 2013)

Active Learning in the Sciences, Bok Center Teaching Seminar — 2015

Brown University — Providence, RI
Teaching Assistant, Department of Mathematics — 2009

- Graded problem sets and exams for Introductory Calculus.
- Helped implement online grade sharing system for multiple course sections.

Math Peer Tutor, Brown University Tutoring Program — 2008

- Tutored undergraduate students in Math and Applied Math courses.

PROFESSIONAL EMPLOYMENT

State of Connecticut Department of Energy and Environmental Protection Hartford, CT
Seasonal Resource Assistant September 2010 – June 2011,
Solid Waste and Recycling Program and Summer 2007, 2008

UTC Power South Windsor, CT
Intern, NASA-UTC Internship Program Summer 2010

PEER-REVIEWED PUBLICATIONS

Dagon, K., and D. P. Schrag (2017), Regional Climate Variability under Model Simulations of Solar Geoengineering. *Journal of Geophysical Research: Atmospheres*, 122, 12106-12121, http://dx.doi.org/10.1002/2017JD027110.

Dagon, K., and D. P. Schrag (2016), Exploring the Effects of Solar Radiation Management on Water Cycling in a Coupled Land-Atmosphere Model. *Journal of Climate*, 29, 2635-2650, http://dx.doi.org/10.1175/JCLI-D-15-0472.1.

Tobias, S. M., **K. Dagon**, and J. B. Marston (2011), Astrophysical Fluid Dynamics via Direct Statistical Simulation. *The Astrophysical Journal*, 727, 127, http://dx.doi.org/10.1088/0004-637X/727/2/127.

SELECTED CONFERENCE PRESENTATIONS

Dagon, K., and D. P. Schrag, Effects of Solar Geoengineering on Vegetation: Implications for Biodiversity and Conservation. *American Geophysical Union Fall Meeting*, New Orleans, LA, oral presentation, December 2017.

Dagon, K., and D. P. Schrag, Regional Climate Variability under Model Simulations of Solar Geoengineering. *Gordon Research Conference: Climate Engineering*, Newry, ME, poster presentation, July 2017.

Dagon, K., Soil Moisture-Climate Coupling under Model Simulations of Solar Geoengineering. *21st Annual CESM Workshop,* Breckenridge, CO, oral presentation, June 2016.

Dagon, K., and D. P. Schrag, Exploring the Effects of Solar Radiation Management on Water Cycling in a Coupled Land-Atmosphere Model. *American Geophysical Union Fall Meeting*, San Francisco, CA, poster presentation, December 2015.

Dagon, K., Exploring the Effects of Solar Radiation Management on Water Cycling in a Coupled Land-Atmosphere Model. *Graduate Climate Conference*, Woods Hole, MA, oral presentation, November 2015.

SCIENCE WRITING

Dagon, K., "Engineering the Earth to Fight Climate Change," *Science in the News Blog*, 25 October 2016, http://sitn.hms.harvard.edu/flash/2016/engineering-earth-fight-climate-change.

Dagon, K., "Climate Change 2016: Make America Hot Again," *Science in the News Blog*, 9 August 2016, http://sitn.hms.harvard.edu/flash/2016/climate-change-2016-make-america-hot.

Dagon, K., "Science by the Pint," *The Plainspoken Scientist*, Student Blog Series, 18 July 2016, http://blogs.agu.org/sciencecommunication/2016/07/18/science-by-the-pint.

Dagon, K., "Pausing to Talk About Climate Change," *Science in the News Blog*, Special Edition on Climate Change, 30 June 2014, http://sitn.hms.harvard.edu/flash/2014/pausing-to-talk-about-climate-change.

HONORS AND AWARDS

NCAR Advanced Study Program Postdoctoral Fellowship	2017
Presidential Management Fellowship Finalist	2017
NCAR CESM Workshop Travel Grant	2016
Certificate of Teaching Excellence, Bok Center for Teaching & Learning	2014, 2016
Duff Family Endowed Graduate Support Fund	2013 – 2014
Graduate Consortium Fellowship, Harvard University Center for the Environment	2012 – 2013
Joseph J. Loferski Award, Brown University Engineering	2010
Brown University Undergraduate Research and Teaching Award	2009

ACADEMIC SERVICE

Reviewer, Atmospheric Chemistry and Physics	2018 – present
NCAR ASP Fellows Networking Committee	2017 – present
Reviewer, Journal of Hydrometeorology	2017 – present
APS Topical Group on the Physics of Climate Program Committee	2017 – present
Plants and Climate Seminar Series Organizer	2015 – 2016
EPS Grad Student Field Trip Organizing Team	2014
EPS Agassiz Visiting Lecturer Committee	2013 – 2014
Harvard Summer School on Geoengineering Organizing Committee	2013
ClimaTea Seminar Series Co-organizer	2012

PUBLIC ENGAGEMENT

USA Science and Engineering Festival Volunteer	2018
PBS Digital Studios Scientific Consultant	2018
Project Bridge Colorado Science Day at the State Capitol	2018
Twin Peaks Charter Academy Guest Scientist	2017
NCAR Super Science Saturday Volunteer	2017
Building a Greener Idaho Radio Show Guest	2017
Harvard GSAS Science Policy Group D.C. Trip	2016
There's a Scientist in My Classroom! Guest Lecturer	2014
ComSciCon-local Communicating Science Workshop	2014
Science in the News Event Organizer and Lecturer	2013 – 2016
Global Climate Coalition at UNFCCC COP15	2009

MENTORING ACTIVITIES

NCAR SOARS Internship Program Community Mentor	2018
Harvard College Women's Center WISTEM Mentor	2016 – 2017
Intel Science Research Program High School Student Mentor	2014 – 2015
EPS Graduate Student Mentee (G1) and Mentor (G3, G4)	2011 – 2015
Harvard Graduate Women in Science and Engineering Mentoring Program	2011 – 2013
Brown University Women's Launch Pad Mentoring Program	2009 – 2010

PROFESSIONAL AFFILIATIONS

American Geophysical Union, American Physical Society, Earth Science Women's Network

TECHNICAL SKILLS

Languages: Unix, Fortran, C, Objective C/C++, HTML, LaTeX
Modeling Tools: NetCDF, HDF4/5, Open MPI, NCAR CESM/CLM
Development Tools: Git/GitHub, Subversion
Scientific Visualization & Analysis: R, NCL/NCO, Python, Matlab, Mathematica