

## Curriculum Vitæ

### Dana Elizabeth Veron (née Lane)

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College Earth, Ocean, & Environment  
University of Delaware  
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#### EMPLOYMENT

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##### UNIVERSITY OF DELAWARE, NEWARK, DE

- 2016-present Associate Professor with tenure, (1.0 FTE) Department of Geography and School of Marine, Science and Policy
- 2014-present *Affiliate*, DENIN
- 2013-2016 Associate Professor, tenure-track, (1.0 FTE) Department of Geography and School of Marine, Science and Policy
- 2012-2013 Associate Research Professor, (0.75 FTE – 0.37 research, 0.38 teaching), School of Marine, Science and Policy and Department of Geography
- 2012-2013 Joint Associate Research Professor, Department of Geography
- 2008-present *Founding Member*, Center for Carbon-free Power Integration
- 2007-2012 Joint Assistant Research Professor, Department of Geography
- 2006-2012 Assistant Research Professor, (0.5 FTE – 0.3 research, 0.2 teaching), College of Marine Studies

##### RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, NEW BRUNSWICK, NJ

- 2005-2008 Affiliate Research Faculty, Department of Environmental Sciences
- 2004-2008 *Member*, Graduate Program in Oceanography
- 2003-2008 *Member*, Institute for Marine and Coastal Studies
- 2002-2008 *Member*, Graduate Program in Environmental Sciences
- 2001-2005 *Member*, Center for Environmental Prediction
- 2001-2005 Assistant Professor, Department of Environmental Sciences

##### COOPERATIVE INSTITUTE FOR RESEARCH IN THE ENVIRONMENTAL SCIENCES, BOULDER, CO

- 2000-2001 Visiting Fellow, University of Colorado, Boulder and National Oceanic and Atmospheric Administration

##### SCRIPPS INSTITUTION OF OCEANOGRAPHY, UNIVERSITY OF CALIFORNIA, SAN DIEGO, CA

- 2000 Post-Doctoral Fellow, Climate Research Division
- 1996-2000 Graduate Research Assistant, Climate Research Division
- 1995-1996 Graduate Research Assistant, Applied Ocean Science Division

#### RESEARCH INTERESTS

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Climate modeling, regional modeling in Arctic/Antarctic, Arctic energy budget, polar boundary layers, cloud forcing, mixed-phase clouds, cloud/sea-ice feedbacks, NAO/cloud feedbacks, shortwave radiative transfer through complex media, clouds and climate, cloud-aerosol-radiation interactions, regional coastal climate change, boundary layer clouds, sea breeze, wind resource assessment and modeling, climate impacts of wind power

## EDUCATION

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2000 Ph. D. Oceanography Scripps Institution of Oceanography, UC San Diego  
1995 B. A. Physics State University of New York, College at Geneseo

## GRADUATE AND POST-GRADUATE ADVISORS

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Post-doctoral Advisors: Chris Fairall, Judith Curry, Graham Feingold, Richard Somerville.  
PhD. Committee: Richard C. J. Somerville (chair), David P. Rogers (co-chair), Nelson Byrne, V. Ramanathan, Gerald Pomraning (deceased), Randolph Bank, C. Roberto Mechoso.  
Additional graduate advisors: Francisco Valero, Grant Deane.

## AWARDS

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Travel Grant UK Polar Network meeting in Leeds on Polar Climate Change (2010)  
Cooperative Institute of Research in Environmental Science Fellow (2000-2001)  
Office of Naval Research AASERT Fellowship (1998-2000)  
American Meteorological Society Global Change Symposium Travel Grant (1999,2000)  
American Meteorological Society Industry Fellowship (1995-1996)

## PROFESSIONAL MEMBERSHIPS

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American Geophysical Union (1996-present)  
American Meteorological Society (1995-present)

## Student Teaching and Advising

### GRADUATE ADVISING (Advisor)

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**Eric Allen** (MS, Fall 2018 - present, UD) – Status: Started in Fall 2018.

Topic: TBD

**Daniel Moore** (MS, Fall 2017 – Summer 2019, UD) – Status: Graduated. Currently PhD student at Princeton University in Civil & Environmental Engineering (Atmospheric Chemistry)

Topic: Detection and Analysis of Sea Breeze and Sea Breeze Enhanced Rainfall

Awards: CEOE Mentoring Program, UD Professional Development Award (2018, 2019), Department of Geography Outstanding Teaching Assistant (2018)

**Shanru Tian** (PhD Fall 2017 – Spring 2019, UD) – Status: Started in Fall 2017, co-advised with Sara Rauscher. Pursuing a PhD at University of Texas

Topic: Characterizing water resource sensitivity to climate change

**Matt Brianik** (MS Fall 2015-2017, UD) – Status: Graduated. Currently at Liberty Environmental in Liberty, PA.

Topic: Conceptualizing Wind Variability in Delaware

**Will Goldman** (MS Fall 2015-2017, UD), Status: Graduated, co-advised with Paul Jackson. Currently PhD student at University of Tennessee, Knoxville in Geography.

Topic: Social Dimensions of Urban Heat Island Mitigation Using Community Gardens

Awards: 2016-2017, Mather Graduate Fellows Research Fund  
2017, AAG Student Paper Award

**Alex Schroth** (MS Fall 2014-2016, UD) – Status: Graduated.

Topic: Simulation of the energy budget over Dome C, Antarctica

Awards: UD Travel Grant

**Michaela King** (MS Fall 2014-2016, UD) – Status: Graduated. Currently enrolled in a PhD graduate program at Ohio State

Topic: Impact of advected moisture on energetic surface fluxes in the Beaufort Sea

Awards: UD Travel Grant

**Joe Brodie** (MS Fall 2011, PhD Bypass Fall 2013, PhD 2013-2016) – Currently Director of Atmospheric Research with the Center for Ocean Observing Leadership at Rutgers, the State University of New Jersey.

Topic: Characterization of small scale variability of low-level winds using observations and modeling

Awards: 2013-2014, UD Graduate Fellow

2011-2012, POSE Program Fellowship (2011-2012)

2015, NASA JPL Center for Climate Sciences Summer School

Accomplishments: 3 articles in preparation, 5 conference presentations

**Justin Gilchrist** (MS, 2011-2013) – Status: Graduated. Currently Resource Modeling Analyst at NextEra Energy Resources / Windlogics

Topic: Synoptic descriptions of low-level winds and surface currents outside the Delaware Bay mouth for use in ecosystem studies and hazard response planning

Awards: Marian R. Okie Fellowship (2011-2012)

Accomplishments: 1 article in preparation

**Chris Hughes** (MS, 2009-2011) – Status: Completed. Continuing for PhD at UD (2011-present). Currently technician at the Delaware Environmental Observing System

PhD Topic: Impact of urban coastal development of coastal breezes

MS Thesis: *The Climatology of the Delaware Bay/Sea Breeze*

Awards: 2013-2014, UD Dissertation Fellowship

2009-2010, Marian R. Okie Fellowship

Accomplishments: 3 articles in preparation, 4 conference presentations

**Neil Barton** (PhD 2006-2010, UD) – Status: Graduated. Currently Naval Research Laboratory, Monterey, California.

Dissertation: *Investigating Arctic Cloud and Radiative Properties Associated with the Large-Scale Climate Variability in Observational Data and Meso-Scale Modeling*

Awards: 2010 AAG's Climate Specialty Group Student Paper Competition, 3<sup>rd</sup> place

2009-2010 UD Graduate Fellow

2006, 2008, 2009 UD Graduate College Travel Grant

2006, 2008, 2009 Department of Geography Travel Grant

Accomplishments: 1 peer-reviewed papers accepted, 2 peer-reviewed article in print, 1 in preparation, 14 presentations

**Jaelyn Secora** (PhD, 2005-2008) – Status: not completed, Currently Research Project Coordinator at Rutgers University

Topic: Characterization of low-level clouds using ground-based and satellite remote sensing

Awards: 2005-2006, Global Change Education Program (GCEP) Graduate Research Environmental Fellow

Accomplishments: 1 publication in preparation, 9 conference presentations

**Michael Foster** (MS 2003-2006, PhD 2006-2008) – Status: Graduated, Currently Assistant Researcher at the Cooperative Institute for Meteorological Satellite Studies at the University of Wisconsin – Madison

Dissertation: *Effect of Cloud Macroscale Properties on Climate Forecasting in the Tropics*

Awards: 2006, participant in “The Art of Climate Modeling” program – NCAR

2005, accepted and funded to attend Gordon Research Conference on Radiation and Climate

Accomplishments: 5 peer-reviewed publications, 15 conference presentations

**Michael Previdi** (PhD 2002- 2005) – Status: Graduated, Currently Lamont Assistant Research Professor at Lamont-Doherty Earth Observatory

Dissertation: *A Regional View of the North Atlantic Oscillation*

Awards: 2004, Invited Participant, 3<sup>rd</sup> International NCCR Climate Summer School, Ticino, Switzerland

2003, American Meteorological Society Global Change Symposium Travel Grant

Accomplishments: 3 peer-reviewed articles, 6 presentations

**Koushby Majagah** (MS, 2002-2003) – Status: Graduated, Currently Computer Software Consultant at TCS

Topic: *An Analysis of the Environmental Impact of “Dirty” Bombs*

## **GRADUATE STUDENT ADVISORY COMMITTEES**

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Maryam Golbazi (PhD, 2019-present, UD)

Gwen Larson (PhD, 2018-present, UD)

John Callahan (PhD, 2016-present, UD)

Emily Aiken (MS, 2016-present, UD)

Melanie Fuoco (MS, 2016-2018, DSU)

Shengbai Xie (PhD, 2013-2015, UD)

Joanna Huxster (PhD, 2013, UD)

Patricia Lawson (MS, 2012; PhD, 2012-present, UD)

Carly Phelps (MS, 2012; PhD, 2012-2016, UD)

Andre Schweinwald (MS, 2011-present, UD)

Laura McGowan (MS, 2011-2013, UD)

Tiana Bogart (PhD, 2010-2013, UD)

Elsa Nickl (PhD, 2009-2012, UD)

Weihan Chan (MS, 2007-2008; PhD 2010-2014, UD)

Haibin Li (PhD, 2005, RU)

Thomas Atkins (MS, 2004-2006, RU)

Ann-Marie Carlton (PhD, 2003-2006, RU)

Chaochao Gao (PhD, 2003-2004, RU)

Stephanie Weber (MS 2003-2004, RU)

Linong Wang (MS 2003, RU)

Matt Georgescu (MS, 2002, RU)

Lori Thompson (MS, 2001, RU)

## UNDERGRADUATE ADVISING & STUDENT INTERNS

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Environmental Science and Studies major advisor (2012-present, 45 advisees per year, UD)  
 Alexis DeSanti (Undergraduate Intern, 2018-2019, UD)  
 Kristie Arlotta (Undergraduate Intern, 2018, UD)  
 Margaret Orr (Undergraduate Intern, 2018, UD)  
 Eric Allen (Undergraduate Intern, 2016-2018, UD)  
 Megan Messick (Undergraduate Intern, 2016, UD)  
 Robert Beecher III (undergraduate intern, 2015, UD)  
 Conor Tully (undergraduate intern, 2015, UD)  
 William Goldman (UD Summer Scholar, 2014, UD)  
 William Facciolo (UD Honors Student, 2014, UD)  
 John Lodise (undergraduate intern, 2013-2014, UD)  
 Theresa Pignatella (spring intern, 2012, UD)  
 Matthieu de Maillard (summer intern 2010, UD)  
 Justin Gilchrist (summer intern 2009, UD)  
 Erik Weidner (summer intern 2008, UD)  
 Ashley Satinsky (summer intern, UD)  
 Joe Brodie (Honors thesis 2004-2006, RU)  
 David Porter (Honors thesis, 2006, Committee member, RU)  
 Megan Jenkins (Honors Thesis 2002-2003, RU)  
 Freshman advisor (2002-2005, 17-28 advisees per year, RU)  
 Meteorology major advisor (2003-2005, 28 advisees per year, RU)

## UNDERGRADUATE & GRADUATE COURSES

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<i>Semester</i>	<i>Course number</i>	<i>Credits*</i>	<i>Students</i>	<i>Course Title &amp; Notes</i>	<i>Location</i>
F 2019	ENSC/ENVR 101	3(1.5)	55	Introduction to the Environment	UD
	GEOG 458/658	3 (1.5)	30	Paleoclimatology	UD
	ENSC/ENVR464	3 (3)	4	Internship	UD
	MAST610	3	6	Coupling Human-Natl Systems (1 lec)	
	GEOG120	3	275	World Regional Geography (1 lec)	
Su 2019	ENSC/ENVR464	3	6	Internship	UD
S 2019	MAST 428/628	3 (1.5)	29	Offshore Wind Power	UD
	GEOG667	1 (.3)	4	Climatology Readings	UD
	ENSC/ENVR464	3 (3)	8	Internship	UD
F 2018	MAST/GEOG/GEOL 341	3(3)	40	Climate and Climate Change	UD
	ENSC/ENVR 101	3(1.5)	51	Introduction to the Environment	UD
	GEOG609	3 (3)	5	Oceans and Climate Variability	UD
	ENSC/ENVR464	3(3)	3	Internship	UD
Su 2018	ARCS300	3	50	(1 lec)	UD
	ENSC/ENVR464	3(3)	10	Internship	UD
S 2018	GEOG366	3(3)	1	Independent Study	UD
	GEOG421	3(3)	10	Physical Meteorology	UD
	GEOG473/673	1 (1)	6	MATLAB For Environ. App	UD
	GEOG 657	3 (.12)	6	Climate Dynamics	UD

F 2017	ENSC/ENVR 101	3(3)	37	Introduction to the Environment	UD
	MAST 428/628	3 (1)	20	Offshore Wind Power	UD
	GEOG 458/658	3 (1)	16	Paleoclimatology	UD
Su 2017	ENSC/ENVR464	3(3)	8	Internship	UD
F 2016	MAST/GEOG/GEOL 341	3(3)	41	Climate and Climate Change	UD
	ENSC/ENVR 101	3(2.5)	40	Introduction to the Environment	UD
	UNIV267	3(1.5)	15	Global Climate Encounter	UD
	GEOG466	1(1)	1	Independent Study	UD
	GEOG468	2(2)	1	Data Analysis and Assimilation	UD
Su 2016	ENSC464	3(3)	7	Internship	UD
	ENVR464	3(3)	1	Internship	UD
S 2016	GEOG421	3(3)	13	Physical Meteorology	UD
F 2015	GEOG/MAST 409/609	3 (3)	20	Oceans and Climate Variability	UD
	ARSC 390-087	3 (3)	22	Honors colloquia	UD
Su 2015	ENSC 464	3 (3)	1	Environmental Internship	UD
S 2015	GEOG/MAST 408/608	3 (3)	15	Heat and Light in Nature	UD
	MAST 628	3 (1.5)	12	Offshore Wind Power	UD
	GEOG 657	3 (.12)	7	Climate Dynamics	UD
	GEOG 466	3 (3)	1	Independent Research	UD
F 2014	GEOG 458/658	3 (1.5)	19	Paleoclimatology	UD
	GEOG 466	3 (3)	1	Independent Research	UD
	MAST/GEOG/GEOL 215	3 (3)	9	Full of Hot Air: Und. Clim. Chg.	UD
	MAST 402/602	3	18	Int. Physical Ocean. (3 lec)	UD
	MAST 100	2	29	Marine Science Colloq. I (1 lec)	UD
S 2014	MAST/GEOG/GEOL 341	3 (3)	29	Climate and Climate Change	UD
	GEOG 667	1 (.3)	9	Seminar on IPCC 5	UD
	GEOG 866	5 (5)	1	Special Problem – Sea Breeze	UD
	GEOG 969	4 (4)	1	Doctoral Dissertation	UD
F 2013	MAST/GEOG/GEOL 215	3 (3)	22	Full of Hot Air: Und. Clim. Chg.	UD
	GEOG 866	4 (4)	1	Special Problem – Sea Breeze	UD
	GEOG 969	5 (5)	1	Doctoral Dissertation	UD
	MAST 409/609	3 (3)	9	Oceans and Climate Variability	UD
	MAST 628	3 (1)	7	Offshore Wind Power	UD
	MAST 402/602	3	10	Int. Physical Ocean. (1 lec)	UD
S 2013	GEOG 657	3 (.12)	5	Climate Dynamics (5 lecs)	UD
	GEOG 868	3 (3)	1	Research	UD
	MAST 866	3-6 (3)	3	Special Prob – Wind Prediction	UD
	MAST 869	6 (6)	1	Master’s Thesis	UD
	MAST 468	2 (2)	2	Undergraduate Research	UD
F 2012	MAST 467/667	3 (3)	8	Rad. Transfer Atmos. & Ocean	UD
	GEOG 964	4 (4)	1	Pre-candidacy Study	UD
	GEOG 458/658	3 (1)	18	Paleoclimatology	UD
	MAST 402/602	3	12	Int. Physical Ocean. (1 lec)	UD
S 2012	ARSC 295-080	1 (1)	12	Our Changing Coastlines	UD

	GEOG 964	4 (4)	1	Pre-candidacy Study	UD
	GEOG 667	1 (.5)	4	Community Earth System Model	UD
	MAST/GEOG 868	4 (4)	2	Research	UD
	MAST 468	3 (3)	1	Undergraduate Research	UD
	MAST 628	3 (1)	17	Offshore Wind Power	UD
	MAST 606	1	1	Remote Sensing (1 lec)	UD
F 2011	MAST 100	1	17	Marine Science Coll I (1 lec)	UD
	MAST 868	2 (2)	1	Research	UD
S 2011	MAST 809, GEOG 658/458	3 (3)	8	Oceans and Climate Variability	UD
	GEOG 657	3 (.12)	3	Climate Dynamics (4 lecs)	UD
	MAST 869	6 (6)	1	Master's Thesis	UD
	MAST 866	1-3 (1.5)	4	Special Problem – Wind Power	UD
	MAST 866	1 (.5)	1	Special Problem – Carbon Flux	UD
F 2010	MAST 628	3 (1)	17	Offshore Wind Power	UD
	GEOG 458/658	3 (1)	14	Paleoclimatology	UD
	MAST 869	2 (2)	1	Master's Thesis	UD
S 2010	GEOG 969	9 (9)	1	Dissertation Research	UD
	MAST 868	5 (5)	1	Research	UD
F 2009	MAST 868	2 (2)	1	Research	UD
S 2009	MAST 882	1 (.5)	5	POSE Seminar	UD
	GEOG 657	3 (.1)	3	Climate Dynamics (3 lecs)	UD
	GEOG 969	9 (9)	1	Dissertation Research	UD
	MAST 868	2 (2)	1	Research	UD
F 2008	MAST/GEOG/GEOL 367	3 (3)	7	Climate & Climate Change	UD
	MAST/GEOG 667	3 (3)	4	Rad. Transfer Atmos. & Ocean	UD
	MAST 628	3 (1)	16	Offshore Wind Power	UD
	UNIV 111	1 (1)	21	Water, water, everywhere	UD
	MAST 868	9 (9)	1	Research	UD
F 2007	MAST 868	2 (2)	1	Research	UD
S 2007	MAST/GEOG 667	2 (2)	11	Polar Met. & Oceanography	UD
F 2006	MAST 628	3 (1)	9	Offshore Wind Power	UD
	MAST 868	2-3 (2-3)	2	Research	UD
	11:375:701	9 (9)	1	Research	RU
S 2006	11:375:702	9 (9)	1	Research	RU
F 2005	11:375:701	1-3(1-3)	2	Research	RU
S 2005	11:670:431	3 (3)	12	Physical Meteorology	RU
	11:375:702	3-6 (3-6)	3	Research	RU
	11:095:498	6 (6)	1	Undergrad. Honors	RU
	11:375:451/16:712:552	3	12	Rem Sens Ocean & Atmos (2 lec)	RU
F 2004	11:375:701	3-9 (3-9)	2	Research	RU
	11:095:497	6 (6)	1	Undergrad. Honors	RU
S 2004	11:375:702	3-4 (3-4)	2	Research	RU
	11:095:390	1 (1)	1	Undergrad. Honors	RU
F 2003	16:375:532	3 (3)	9	Atmospheric Physics	RU

	11:375:701	3-4 (3-4)2	Research	RU
S 2003	11:670:431	3 (3) 20	Physical Meteorology	RU
	11:375:451/16:712:552	3 (1) 21	Rem. Sens. Ocean & Atmos.	RU
	11:670:626	1 (1) 4	Polar Met. & Oceanography	RU
	16:375:203	3 25	Phys. Prin. Env. Science (4 lecs.)	RU
	11:375:702	3 (3) 1	Research	RU
F 2002	16:375:539	3 (3) 8	Rad. Transfer Atmos. & Ocean	RU
	11:375:701	4 (4) 1	Research	RU
Su 2002	11:375:701	3 (3) 1	Research	RU
S 2002	16:375:203	3 (1) 47	Phys. Prin. Env. Science	RU
	11:375:702	1 (1) 1	Research	RU
F 2001	11:670:323	3 15	Atmos. Thermodynamics (2 lecs)	RU

\*Indicates number of credits taught.

### SUMMER CAMP TEACHING (High School Rising Sophomores-Seniors)

Sum 2018	TIDE Camp	16 students	camp coordinator, 2 lectures plus field trips
Sum 2017	TIDE Camp	10 students	camp coordinator, 2 lectures plus field trips
Sum 2016	TIDE Camp	15 students	academic coordinator, 2 lectures plus field trips
Sum 2014	TIDE Camp	12 students	academic coordinator, 4 lectures plus field trips
Sum 2013	TIDE Camp	18 students	academic coordinator, 3 lectures plus field trips
Sum 2012	TIDE Camp	17 students	academic coordinator, 3 lectures plus field trips
Sum 2011	TIDE Camp	16 students	academic coordinator, 3 lectures plus field trips
Sum 2010	TIDE Camp	17 students	academic coordinator, 3 lectures plus field trips
Sum 2009	TIDE Camp	14 students	academic coordinator, 3 lectures plus field trips
Sum 2008	TIDE Camp	10 students	academic coordinator, 3 lectures plus field trips
Sum 2007	Env. Oceanography	20 students	20 lectures plus field trips

### Scholarly activities\*

#### REFEREED PUBLICATIONS

- Hughes, C., and **D. E. Veron**, 2018: A Characterization of the Delaware Sea and Bay Breeze using Observations and Modeling, *Journal of Applied Meteorology and Climatology*, doi: 10.1175/JAMC-D-17-0186.1.
- Veron, D. E.**, J. Brodie, Y. Shirazi, and J. Gilchrist, 2018: Modeling the electrical grid impact of wind ramp-up forecasting error offshore in the Mid-Atlantic region. *Journal of Renewable and Sustainable Energy*, 10(1), 013308, doi: 10.1063/1.4990684.
- Firestone, J. , M. Burt, J. A. Madsen, **D. E. Veron**, and R. Bowers, 2017: Tall Towers, Long Blades and Manifest Destiny: The Migration of Land-based Wind from the Great Plains to the Thirteen Colonies, *Applied Energy*, 487-497, doi: 10.1016/j.apenergy.2017.08.178.
- Archer, C. L., B. A. Colle, **D. L. Veron**, F. Veron, and M. J. Sienkiewicz, 2016: On the predominance of unstable atmospheric conditions in the marine boundary layer offshore of the U.S. northeastern coast, *Journal of Geophysical Research – Atmospheres*, 121(15), 8869-8885.

\*underline indicates a student advised by D. Veron



- Colle, B. A., M. J. Sienkiewicz, C. Archer, **D. Veron**, F. Veron, W. Kempton, and J. E. Mak, 2015: Meteorological Observations for U.S. East Coast Offshore Wind Power: Improving the Mapping and Prediction of Offshore Wind Resources (IMPOWR), *Bull. Amer. Met. Soc.*, 97(8), 1377-1390. ([pdf](#))
- Veron, D. E.**, Marbach-Ad, G., with J. Wolfson and G. Ozbay, 2015: Assessing climate literacy content in higher education science courses: Distribution, Challenges and Needs. *Journal of College Science Teaching*, 45 (6), 43-50. ([pdf](#))
- Firestone, J., C. L. Archer, M. P. Gardner, J. A. Madsen, A. K. Prasad, and **D. E. Veron**, 2015: Ten Years After the Energy Policy Act: Why is there no US Offshore Wind Power?, *Proceedings of the National Academy of Science*, 112(39), pp.11985-11988. ([pdf](#))
- Hughes, C., and **D. E. Veron**, 2015: Characterization of Low-level Winds of Southern and Coastal Delaware, *Journal of Applied Meteorology and Climatology*, 54, 77-93. ([pdf](#))
- Archer, C., B. A. Colle, L. Delle Monache, M. J. Dvorak, J. Lundquist, B. H. Bailey, P. Beaucage, M. J. Churchfield, A. C. Fitch, B. Kosovic, S. Lee, P. J. Moriarty, H. Simao, R. J. A. M. Stevens, **D. Veron**, and J. Zack, 2014: Meteorology for Coastal/Offshore Wind Energy in the United States, *Bull. Amer. Met. Soc.*, 95, 515-519, doi: 10.1175/BAMS-D-13-00108.1. ([pdf](#))
- Budischak, C., D. Sewell, H. Thompson, L. Mach, W. Kempton, and **D. E. Veron**, 2013: Cost-minimized combinations of wind power, solar power and electrochemical storage, powering the grid up to 99.9% of the time, *Journal of Power Sources*, **225**, 60-74. ([pdf](#))
- Kassianov, E., **D. E. Lane-Veron**, L. Berg, M. Ovchinnikov, and P. Kollias, 2012: Markovian Approach and its Applications in a Cloudy Atmosphere, *Light Scattering Reviews 7*, Springer-Praxis Books, 69-107, DOI 10.1007/978-3-642-21907-8\_3. ([pdf](#))
- Barton, N. P., and **D. E. Veron**, 2012: Investigating Cloud-Ice Feedbacks over the Laptev Sea using a Regional Atmospheric Model, *Climate Research*, 54, 69–84 doi: 10.3354/cr01101. ([pdf](#))
- Muscarella, P., N. Barton, B. L. Lipphardt, Jr., **D. E. Veron**, and A. D. Kirwan, Jr., 2011: Surface Currents and Winds at the Delaware Bay Mouth, *Continental Shelf Research*, 31, 1282–1293. ([pdf](#))
- Kassianov, E. and **D. Veron**, 2011: Stochastic Radiative Transfer in Markovian Mixtures: Past, Present and Future Events, *Journal of Quantitative Spectroscopy and Radiative Transfer*, 112, 566-576. ([pdf](#))
- Kempton, W., Pimenta, F., **Veron, D. E.**, and B. Colle, 2010: Electric power from offshore wind via synoptic-scale interconnection, *Proc. of the National Academy of Science*, 107(16), 7240-7245, doi: 10.1073/pnas.0909075107. ([pdf](#))
- Foster, M., and **D. E. Veron**, 2010: Employing Cluster Analysis for Identifying Cloud Scenes with Significant 3D RT Effects, *Journal of Atmospheric Sciences*, 67(7), 2226-2239. ([pdf](#))
- Veron, D. E.**, C. P. Weaver, F. Veron and M. Foster, 2009: Stochastic Radiative Transfer on Modeled Cloud Fields. *IEEE Geoscience and Remote Sensing Letters*, 6(2), 184-188. ([pdf](#))
- Francis, J. A., W. Chan, D. J. Leathers, J. R. Miller and **D. E. Veron**, 2009: Winter Northern Hemisphere Weather Patterns Remember Summer Arctic Sea-Ice Extent, *Geophysical Research Letters*, 36, L07503, doi:10.1029/2009GL037274. ([pdf](#))
- Morrison, H. et al, 2009: Intercomparison of model simulations of mixed-phase clouds observed during the ARM Mixed-Phase Arctic Cloud Experiment, Part II: Multi-layered cloud. *Quarterly Journal of the Royal Meteorological Society*, 135, 1003-1019. ([pdf](#))
- Klein et al., 2009: Intercomparison of model simulations of mixed-phase clouds observed during the ARM Mixed-Phase Arctic Cloud Experiment. Part I: Single layer cloud. *Quarterly Journal of the Royal Meteorological Society*, 135, 979-1002. ([pdf](#))

- Fairall, C., T. Uttal, D. Hazen, J. Hare, M. Cronin, N. Bond and **D. E. Veron**, 2008: Observations of Clouds, Radiation, and Surface Forcing in the Equatorial Eastern Pacific, *Journal of Climate*, 21, 655-673. ([pdf](#))
- Foster, M., and **D. E. Veron**, 2008: Investigating the Shortwave Radiative Effects of Cloud Field Geometry in the Tropical Western Pacific, *Journal of Geophysical Research*, 113, D22205, doi:10.1029/2007JD009581. ([pdf](#))
- Previdi, M., and **D. E. Veron**, 2007: North Atlantic Cloud Cover Response to the North Atlantic Oscillation and Relationship to Surface Temperature Changes, *Journal of Geophysical Research*, 112(D7), DOI 10.1029/2006JD007516. ([pdf](#))
- Previdi, M., and **D. E. Veron**, 2005: North Atlantic Oscillation-related climate variability in a regional atmospheric model, *Journal of Geophysical Research*, 110, D16106, doi:10.1029/2005JD005764. ([pdf](#))
- Lane-Veron, D. E.**, and R. C. J. Somerville, 2004: Stochastic Theory of Radiative Transfer Through Generalized Cloud Fields, *Journal of Geophysical Research*, 109, doi:10.1029/2004JD004524. ([pdf](#))
- Feingold, G., W. L. Eberhard, **D. E. Veron**, and M. Previdi, 2003: First measurement of the Twomey indirect effect using ground-based remote sensors. *Geophysical Research Letters*, 30(6), 1287. ([pdf](#))
- Lane, D. E.**, K. Goris, R. C. J. Somerville, 2002: Radiative transfer through broken cloud fields: Observations and model validation. *Journal of Climate*, 15(20), 2921-2933. ([pdf](#))
- Lane, D. E.**, R. C. J. Somerville, and S. F. Iacobellis, 2000: Sensitivity of cloud and radiation parameterizations to changes in vertical resolution, *Journal of Climate*. 13(5), 915-922. ([pdf](#))

## MANUSCRIPTS IN REVIEW

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- King, M., **D. E. Veron**, and H. Huntley, 2020: Seasonal Arctic sea ice volume loss influenced by spring and early-summer cloud radiative conditions. *J. Climate*, in revision.
- Brianik, M. C., **D. E. Veron**, and D. R. Legates, 2020: Characterizing wind variability in Delaware, USA, *International Journal of Climatology*, in revision with some additional data analysis.
- Veron, D. E.**, J. P. Brodie, and Barton, N. P.: 2020: Modeling DWSR Transfer through Arctic Mixed-Phase Clouds Using Stochastic Techniques, *Journal of Geophysical Research*, in revision. ([pdf](#))
- Goldman, W., **D. E. Veron**, and P. Jackson, 2019: Using community gardens to promote thermal comfort within an urban heat island, *Landscape and Urban Planning*, submitted.
- Moore, D. P., **D. E. Veron**, and S. Rauscher, 2019: Characterization of Sea Breeze Enhanced Rainfall in South Florida, *Journal of Applied Meteorology and Climatology*, in revision.
- Orr, M., **D. E. Veron**, and M. Rogers, 2019: Communicating about climate change through AMS student chapter activities. *Bulletin of the American Meteorological Society*, in review.
- Ricaud, P., M. del Guasta, E. Bazile, N. Azouz, A. Lupi, P. Durand, J.-L. Attié, **D. E. Veron**, V. Guidard, and P. Grigioni, 2019: Supercooled Liquid Water Clouds observed and analysed at the Top Height of the Planetary Boundary Layer above Dome C, Antarctica. *Atmospheric Chemistry and Physics*, in review.

## MANUSCRIPTS IN PREPARATION

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- Allen, E. A., and **D. E. Veron**, 2019: Improving sea breeze prediction in the Delaware Bay by assimilating ferry and station data. *Journal of Applied Meteorology and Climatology*, in preparation.
- Bazile, E., F. Couvreur, P. Le Moigne, W. Angevine, P. Baas, A. Cheng, J. Edwards, H. Gallee, C. Genthon, J. Huang, M.A. Jimenez, M.P. Lefebvre, W. Maurel, Q. Rodier, W. De Rooy, I. Sandu ),

- A. Schroth, G.J. Steeneveld, **D. Veron**, E. Vignon, A. Zadra, W. Zheng, F. Favot, A.A.M. Holtslag, V. Guidard, G. Svensson, and O. Traulle, 2019: The GABLS4 experiment :an intercomparison of single column model of the Antarctic boundary layer challenged by very stable stratification, in preparation.
- Brodie, J. F. and **D. E. Veron**, 2019: Quantifying offshore wind farm power output using wind climatology and the WRF model. *Monthly Weather Review*, in preparation.
- Buxton, C., B. Hanson, B., **D. E. Veron**, and S. A. Rauscher, 2019: Effects of PDO Regime on Winter Precipitation in the Cascades Using a Mixed-Physics WRF Ensemble. *Journal of Climate*, in preparation.
- Hughes, C., and **D. E. Veron**, 2019: Observations of the fine-scale structure of the Delaware Sea Breeze. *Journal of Applied Meteorology and Climatology*, in preparation.
- Moore, D. P., and **D. E. Veron**, 2019: Automated detection algorithm for sea breeze fronts using ground-based radar, *Journal of Atmospheric and Oceanic Technology*, in preparation.
- Veron, D. E.** and J. R. Gilchrist, 2019: Characterization of the Delaware Sea Breeze using Weather Radar and Satellite Sea Surface Temperature, *Journal of Applied Meteorology and Climatology*, final editing before submission.
- Veron, D. E.** and J. Lodise, 2019: Sea surface controls on sea breezes on the Delaware Coast, *Geophysical Research Letters*, final editing before submission.
- Barton, N. P., and **D. E. Veron**, 2020: Cloud Radiative Forcing in ERA-40 and the Relation to Changes in Sea Ice Concentrations, *International Journal of Climatology*, in revision and requires additional data analysis.
- Veron, D. E.**, G. Ad-Marbach, J. Wolfson, G. Ozbay, A. Sezen, R. Fox-Lykens and M. Rogers, 2020: Pre-service teacher professional development techniques for teaching climate change in the classroom, *Journal of College Science Teaching*, in preparation.
- Veron, D. E.**, M. Foster and J. Secora, 2020: Development of a stochastic cloud-radiation parameterization from cloud climatologies for the ARM CART Sites, *Journal of Climate*, in revision and requires additional data analysis.

## CONFERENCE PROCEEDINGS

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- Veron, D.**, G. Ad-Marbach, R. Fox-Lykens, G. Ozbay, A. Sezen-Barrie, and Jane Wolfson, 2017: Pre-service teacher professional development on climate change: assessment of workshop success and influence of prior knowledge, *EOS Trans. American Geophysical Union*, Abstract ED31B-0287, New Orleans, LA, USA.
- Veron, D.**, C. Genthon, A. Schroth, and E. Vignon, 2017: Exploring uncertainty in the radiative budget of the Antarctic atmospheric boundary layer at Dome C, *EOS Trans. American Geophysical Union*, Abstract C21D-1152, New Orleans, LA, USA.
- Veron, D.**, M. Rogers, J. Wolfson, A. Sezen-Barrie, G. Ozbay and R. Fox-Lykens, 2016: Offering climate change education to pre-service teachers outside the higher ed classroom, *EOS Trans. American Geophysical Union*, Abstract ED32A-04, San Francisco, CA, USA.
- Veron, D.**, G. Ad-Marbach, J. Wolfson, G. Ozbay, H. Mead, J. Merrill, A. Sezen, R. Fox-Lykens, and MADE-CLEAR : Maryland and Delaware Climate Change Education Assessment and Research 2014: Developing Climate Literate, Pre-service, Middle- and High-school Teachers, *EOS Trans. American Geophysical Union*, Abstract ED13C-3469, San Francisco, CA, USA.
- Brodie, J., **D. E. Veron**, C. L. Archer and F. Veron, 2014: Regional Offshore Wind Farm Optimization Using Wind Climatology and the Weather Research and Forecasting Model, *EOS Trans. American Geophysical Union*, Abstract A11G-3082, San Francisco, CA, USA.

- Veron, D. E.,** C. Hughes, J. Gilchrist, J. Lodise and W. Goldman, 2014: Land- and sea-surface impacts on local coastal breezes, *EOS Trans. American Geophysical Union*, Abstract A43B-3262, San Francisco, CA, USA.
- Veron, D. E.,** J. Wolfson, G. Ozbay, R. Fox-Lykens, S. Benson, N. M. Targett, N. Brickhouse, N. Shapiro, and D. Boesch, 2013: Improving Climate Literacy for Students and Faculty in Higher Education in Maryland and Delaware, *EOS Trans. American Geophysical Union*, Abstract ED31E-08, San Francisco, CA, USA.
- Griswold, M., C. Stylinski, N. Shea, **D. E. Veron,** and J. Z. Merrill, 2013: Meeting in the Middle: Building Off Regional Policies to Promote Climate Education Partnerships on and off Campus. *EOS Trans. American Geophysical Union*, Abstract ED13G-05, San Francisco, CA, USA.
- Veron, D. E.,** F. Newton, F. Veron, A. Trembanis and D. Miller, 2012: Exploring Marine Science through the University of Delaware's TIDE camp, *EOS Trans. American Geophysical Union*, Abstract ED22C-02, San Francisco, CA, USA.
- Veron, D. E.** and C. Hughes, 2011: Detection and Prediction of the Delaware Summertime Sea/Bay Breeze, *EOS Trans. American Geophysical Union*, Abstract A54A-07, San Francisco, CA, USA.
- Hughes, C. P. and **D. E. Veron,** 2010: The Impact of Coastal Development on the Delaware Bay/Sea Breeze. *Proceedings from the 17th Conference on Air-Sea Interaction and 9th Conference on Coastal Atmospheric and Oceanic Prediction and Processes*, Annapolis, MD, USA.
- Kassianov, E. and **D. E. Veron,** 2009: Markovian Approach: From Ising Model to Stochastic Radiative Transfer. *Computational Methods & Reactor Physics (M&C 2009)*, Saratoga Springs, New York, on CD-ROM, American Nuclear Society, LaGrange Park, IL, USA
- Veron, D. E.,** 2007: Stochastic Correction of the Downwelling Shortwave Radiation in Tropical, Broken Cloud Fields and Mixed-phase Arctic Layer Clouds, ARM Science Team Meeting, Monterey, CA, USA.
- Foster, M., and **D. E. Veron,** 2007: Investigating the Shortwave Radiative Effects of Cloud Field Geometry in the Tropical Western Pacific. *EOS Trans. American Geophysical Union*, 88(52), Fall Meet. Suppl., Abstract A41B-0433, San Francisco, CA, USA.
- Veron, D. E.,** and M. Foster, 2006: Linking cloud-radiation parameterization performance to large-scale dynamics. *Proceedings from the 2065 ARM Science Team Meeting*, Atmospheric Radiation Measurement Program, Albuquerque, NM, USA.
- Foster, M., and **D. E. Veron,** 2006: Using a Statistical Description of Cloud Field Geometry for Radiative Transfer Calculations. *EOS Trans. American Geophysical Union*, 87(52), Fall Meet. Suppl., Abstract A13B-0920, San Francisco, CA, USA.
- Veron, D. E.,** J. F. Brodie, and N. P. Barton, 2006: Application of stochastic techniques to radiative transfer through mixed-phased clouds. *EOS Trans. American Geophysical Union*, 87(52), Fall Meet. Suppl., Abstract A13B-0906, San Francisco, CA, USA.
- Veron, D. E.,** M. Foster and J. M. Secora, 2006: Evaluating a stochastic shortwave radiation routine using a single-column model, *Preprint from the 18<sup>th</sup> Conference on Climate Variability and Climate Change*, Atlanta, GA, available electronically.
- Previdi, M. and **D. E. Veron,** 2005: NAO-related Variability in Arctic Storm Activity and its Effect on Cloud Cover. *EOS Trans. American Geophysical Union*, 86(52), Fall Meet. Suppl., Abstract A43G-04. San Francisco, CA, USA.
- Veron, D. E.,** J. Secora, M. Foster, C. Weaver and F. Veron, 2005: Application of stochastic techniques to the ARM cloud-radiation parameterization problem, *Proceedings from the 2005 ARM Science Team Meeting*, Daytona Beach, FL, USA.

- Brodie, J. F., and **D. E. Veron**, 2005: Application of a stochastic cloud model to mixed phase arctic clouds: an overview. *Preprint from the Eighth Conference on Polar Meteorology and Oceanography*, San Diego, CA, USA.
- Previdi, M., and **D. E. Veron**, 2005: Investigating the climatic effects of the NAO over Greenland using Polar MM5. *Preprint from the Sixteenth Symposium on Global Change and Climate Variations*, San Diego, CA, USA.
- Veron, D. E.**, J. Secora and M. Foster, 2005: Investigation of shortwave radiative transfer at the arm cart sites using a multiple layer stochastic model. *Preprint from the Sixteenth Symposium on Global Change and Climate Variations*, San Diego, CA, USA.
- Previdi, M. and **D. E. Veron**, 2004: Investigating the Climatic Effects of the NAO Over Greenland Using Polar MM5, *EOS Trans. American Geophysical Union*, 85(47), Fall Meet. Suppl., Abstract A41B-10, San Francisco, CA, USA.
- Brodie, J. and **D. E. Veron**, 2004: Stochastic Radiative Transfer in Polar Mixed Phase Clouds, *EOS Trans. American Geophysical Union*, 85(47), Fall Meet. Suppl., Abstract GC51D-1070, San Francisco, CA, USA.
- Veron, D. E.**, M. Foster and J. Secora, 2004: Development and Evaluation of a Stochastic Cloud-radiation Parameterization, *EOS Trans. American Geophysical Union*, 85(47), Fall Meet. Suppl., Abstract GC51D-1071. San Francisco, CA, USA.
- Secora, J., and **D. E. Veron**, 2004: Observations and Stochastic Modeling of Shortwave Radiative Transfer at the ARM CART Sites, *Proceedings from the 2004 ARM Science Team Meeting*, Albuquerque, NM, USA.
- Lane-Veron, D. E.**, and J. Secora, 2004: Observations and stochastic modeling of shortwave radiative transfer at the ARM CART sites, *Preprint from the Fifteenth Symposium on Global Change and Climate Variations*, Seattle, WA, USA.
- Veron, D. E.**, J. Brodie, J. O. Pinto, and J. A. Curry: Evaluation of AGCM Radiation Parameterizations in the Arctic, Conference presentation. *Preprint from the Fifteenth Symposium on Global Change and Climate Variations*, Seattle, WA, USA.
- Lane-Veron, D. E.**, J. Secora and R. C. J. Somerville, 2003: Observations and Stochastic Modeling of Shortwave Radiative Transfer at the ARM CART Sites, *Eos Trans. American Geophysical Union*, 84(46), Fall Meet. Suppl., Abstract A31E-0097, San Francisco, CA, USA.
- Feingold, G., M. Previdi, and **D. E. Veron**, 2003: Analysis of Measurement Requirements for the Aerosol Indirect Effect: A Synthesis of Observations and Modeling, *Eos Trans. American Geophysical Union*, 84(46), Fall Meet. Suppl., Abstract A32C-02, San Francisco, CA, USA.
- Previdi, M., G. Feingold, **D. E. Veron**, and W. Eberhard, 2003: Ground Based Remote Sensing of the First Aerosol Indirect Effect: An Update, *Eos Trans. American Geophysical Union*, 84(46), Fall Meet. Suppl., Abstract A12F-01, San Francisco, CA, USA.
- Lane-Veron, D.E.** and J. Secora, 2003: Development of a cloud climatology for use in stochastic cloud-radiation modeling, *Proceedings from the 2003 ARM Science Team Meeting*, Broomfield, CO, USA.
- Lane, D. E.**, R. C. J. Somerville and S. F. Iacobellis, 2003: Development of a Stochastic Cloud Parameterization. *Preprint from the Fourteenth Symposium on Global Change and Climate Variations*, Long Beach, CA, USA.
- Feingold, G., W. Eberhard, **D. E. Lane** and M. Previdi, 2002: First measurements of the indirect effect using ground-based remote sensors, *Eos Trans. American Geophysical Union*, 83(47), Fall Meet. Suppl., Abstract A22E-11. San Francisco, CA, USA.

- Lane, D. E.**, R. C. J. Somerville and S. F. Iacobellis, 2002: Development of a Stochastic Cloud Parameterization, *Eos Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract A61C-0109, San Francisco, CA, USA.
- Lane, D. E.**, J. O. Pinto, and J. A. Curry, 2002: Evaluation of AGCM Radiation Parameterizations in the Arctic. *Proceedings of the Pan-GEWEX Cloud System Studies Workshop*, Kananaskis, Alberta, Canada.
- Lane, D. E.**, C. Fairall, E. Westwater, D. Hazen, and B. Orr, 2001: Investigation of Liquid Water Path Retrieval Techniques Using Ship-Based Microwave Radiometers, *Eos Trans. American Geophysical Union*, 82(47), Fall Meet. Suppl., Abstract A51C-0074, San Francisco, CA, USA.
- Lane, D. E.**, R. C. J. Somerville, and S. F. Iacobellis, 2001: Simulation of radiative transfer through broken cloud fields using a stochastic approach. *Preprint from the Twelfth Symposium on Global Change Studies*, Albuquerque, NM, USA.
- Lane, D. E.**, J. O. Pinto, and J. A. Curry, 2001: Evaluation of GCM radiation codes using SHEBA data. *Preprint from the Sixth Conference on Polar Meteorology and Oceanography*, San Diego, CA, USA.
- Lane, D. E.**, C. W. Fairall, D. Hazen, and B. Orr, 2001: Comparison of Measurements of Liquid Water Path, *Proceedings from the 2001 ARM Science Team Meeting*, Atmospheric Radiation Measurement Program, Atlanta, GA, USA.
- Lane, D. E.**, J. O. Pinto, and J. A. Curry, 2001: Evaluation of GCM radiation codes using SHEBA data, *Proceedings from the 2001 ARM Science Team Meeting*, Atmospheric Radiation Measurement Program, Atlanta, GA, USA.
- Lane, D. E.**, R. C. J. Somerville, and S. F. Iacobellis, 2001: Evaluating Stochastic Radiative Transfer, *Proceedings from the 2001 ARM Science Team Meeting*, Atmospheric Radiation Measurement Program, Atlanta, GA, USA.
- Lane, D. E.**, R. C. J. Somerville, and S. F. Iacobellis, 2000: Evaluating Stochastic Radiative Transfer, *Eos Trans. American Geophysical Union*, 81 (48), Fall Meet. Suppl., Abstract A22A-02, San Francisco, CA, USA.
- Lane, D. E.**, R. C. J. Somerville and S. F. Iacobellis, 2000: Evaluation of a stochastic radiative transfer model using ground-based measurements. *IRS 2000 – Current Problems in Atmospheric Radiation*, Deepark Publishing, St. Petersburg, Russia.
- Iacobellis, S. F., R. C. J. Somerville, and **D. E. Lane**, 2000: SCM sensitivity to microphysics, radiation and convection algorithms. *Proceedings of the Tenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, San Antonio, TX, USA.
- Lane, D. E.**, R. C. J. Somerville, and S. F. Iacobellis, 2000: Validation of a stochastic radiative transfer model. *Preprint from the Eleventh Symposium on Global Change Studies*, Long Beach, CA, USA.
- Lane, D. E.**, R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1999: Investigations of cloud-radiation interactions. *Preprint from the Tenth Symposium on Global Change Studies*, Dallas, TX, USA.
- Iacobellis, S. F., R. C. J. Somerville, **D. E. Lane**, and J. Bérque, 1999: Sensitivity of cloud-radiation interactions to various cloud parameterizations using a single-column model and observations from the atmospheric radiation measurement program. *Preprint from the Tenth Symposium on Global Change Studies*, Dallas, TX, USA.
- Somerville, R. C. J., S. F. Iacobellis, and **D. E. Lane**, 1999: Testing Cloud-Radiation Schemes with Single-Column Models and ARM Observations. *Ninth ARM Science Team Meeting Proceedings*, San Antonio, TX, USA.

- Lane, D. E.,** R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1998: Sensitivity of single-column model results to horizontal and vertical resolution. *Preprint from the Ninth Symposium on Global Change Studies*, American Meteorological Society, Phoenix, AZ, USA.
- Iacobellis, S. F., **D. E. Lane,** and R. C. J. Somerville, 1998: Single-column modeling, general circulation model parameterizations, and Atmospheric Radiation Measurement data. *Proceedings of the Seventh Atmospheric Radiation Measurement (ARM) Science Team Meeting*, San Antonio, Texas, USA.
- Lane, D. E.,** R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1998: Single-column model sensitivity to changes in horizontal and vertical resolution. *Proceedings of the Eighth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, Tucson, AZ, USA.

## INVITED PRESENTATIONS

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- Veron, D.E.,** 2019: Living and Working on the East Antarctic Plateau – a travelog, Delaware Natural History Museum, October 2019.
- Veron, D.E.,** 2019: Living and Working on the East Antarctic Plateau – a travelog, Coast Day Lecture series, October 2019.
- Veron, D.E.,** 2019: Living and Working on the East Antarctic Plateau – a travelog, University of Delaware, Department of Geography, September 2019.
- Veron, D.E.,** 2019: Improving forecasting through observations at the coldest place on Earth, University of Delaware, Ocean Currents Lecture Series, May 2019.
- Veron, D.E.,** 2018: Work-life balance in academia. AMS Student Conference, AMS Annual Meeting, Austin, TX, January 2018.
- Veron, D. E.,** 2017: Characterizing the Atmospheric Boundary Layer over the Western Antarctic Plateau using Observations and Modeling, University of Delaware, Environmental Engineering program, Newark, DE, October 2017.
- Veron, D. E.,** 2017: Climate Studies on the Southern Continent, SUNY Geneseo, Physics and Astronomy Colloquium, Geneseo, NY, October 2017.
- Veron, D.E.,** 2016: The Climate is Changing...now what? Women in Science Forum, Towson University, February 2016.
- Veron, D. E.,** 2014: Exploring the impact of climate change on the DelMarVa peninsula. Delaware State University.
- Veron, D. E.,** 2014: Simulation of low-level winds along the Delaware coastline using a mesoscale atmospheric model (WRF). Ecole Nationale Supérieure de Chimie et de Physique de Bordeaux. Bordeaux, France.
- Veron, D. E.,** 2014: Characterizing Variability in Low-level Winds along Delaware's Coastline, University of Maryland- Baltimore County, MD.
- Veron, D. E.,** 2014: Coastal Climate Change: Characterizing low-level winds along Delaware's coastline, Climate Change Lecture Series. Delaware State University, Dover, DE.
- Veron, D. E.,** 2013. Climate Change and Climate Literacy, DSU Faculty Training Workshop in Integration of Climate Studies and Sustainability in Science Education and STEM courses. Dover, DE.
- Veron, D. E.,** 2013: Climate Literacy Principles and the MADE CLEAR Grant, MADE CLEAR Faculty Workshop, Towson University, Towson, MD.
- Veron, D.E.,** 2013: Sensitivity of the Sea Breeze Circulation to changes in surface properties. Division of Ocean and Climate Physics (DOCP) at Lamont-Doherty Earth Observatory (LDEO) of Columbia University, NY.
- Veron, D. E.,** 2013: Improvement of Offshore Wind Resource Modeling in the Mid-Atlantic Bight, University of Delaware's Wind Energy Symposium, Newark, DE.
- Veron, D. E.,** 2012: Wind Power: past, present, and future. Tatnall School, Wilmington, DE.

- Veron, D. E.**, 2012: Modeling and Observations of Coastal Winds along the Atlantic Coast, Atlantic Wind Consortium Meteorology Meeting, Newark, DE.
- Veron, D. E.**, 2012: Characterizing coastal winds using observations and modeling: the summertime sea breeze and offshore wind, Physical Ocean Science and Engineering Seminar Series, University of Delaware, Newark, DE.
- Veron, D. E.**, 2011: Characterizing coastal winds using observations and modeling : the summer sea breeze and offshore wind, Millersville University, Millersville, PA.
- Veron, D. E.**, 2011: Modélisation des flux radiatifs: interactions entre la radiation, les nuages, les aérosols, et la surface, Laboratoire de Glaciologie et Géophysique de l'Environnement, Université Joseph Fourier, Grenoble, France.
- Veron, D. E.**, 2006: Use of cluster analysis to diagnose cloud radiation parameterization performance, Woods Hole Oceanographic Institute, Woods Hole, MA.
- Veron, D. E.**, 2005: Modeling interactions between radiation and clouds using stochastic transfer theory, Gordon Research Conference on Radiation and Climate, Colby College, Waterville, ME.
- Veron, D. E.**, 2005: Improving the representation of cloud-radiation interactions in climate models, University of Delaware, Newark, DE.
- Veron, D. E.**, 2003: Cloud-aerosol-radiation interactions and their impact on climate. State University of New York, College at Geneseo, Geneseo, NY.
- Veron, D. E.**, 2002: Development of a stochastic cloud-radiation parameterization. Geophysical Fluid Dynamics Laboratory, National Oceanic and Atmospheric Administration, Princeton, NJ.
- Lane, D. E.**, 2002: Development of shortwave stochastic cloud-radiation parameterization. Institute for Marine and Coastal Studies, Rutgers University, New Brunswick, NJ.
- Lane, D. E.**, 2000: Evaluation of a stochastic radiative transfer model using ground-based observations. Department of Atmospheric Science, University of California, Los Angeles, CA.
- Lane, D. E.**, 2000: Evaluation of a stochastic radiative transfer model using ground-based observations. Department of Atmospheric Science, University of California, Los Angeles, CA.
- Lane, D. E.**, 2000: Evaluation of a stochastic radiative transfer model using ground-based observations. Institute Atmospheric Physics, Tuscon, AZ.
- Lane, D. E.**, 2000: Evaluation of a stochastic radiative transfer model using ground-based observations. Environmental Technology Laboratory, National Oceanic and Atmospheric Administration, Boulder, CO.

## PRESENTATIONS

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- Brodie, J. B., B. P. Frei, T. N. Miles, **D. E. Veron**, and E. Allen, 2020: Investigating the role of coastal upwelling in the prediction of wind ramp events, American Geophysical Union Ocean Sciences Meeting, San Diego, CA, USA.
- Veron, D. E.**, C. Genthon, M. del Guasta, P. Ricaud, P. Grigioni, E. Bazile and H. Gallée, 2019: Observations and simulation of boundary layer clouds and fog over Dome C, Antarctica during the YOPP, Annual American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Veron, D. E.**, C. Genthon, M. del Guasta, P. Ricaud, P. Grigioni, E. Bazile and H. Gallée, 2019: Characterizing the atmospheric boundary layer at Dome C, International Union of Geodesy and Geophysics general assembly meeting, Montreal, Canada.
- Ricaud, P., M. del Guasta, E. Bazile, N. Azouz, A. Lupi, and **D. E. Veron**, 2019, 2019: Liquid Water Clouds Observed and Analysed at the Top of the Planetary Boundary Layer above Dome C, Antarctica, International Union of Geodesy and Geophysics general assembly meeting, Montreal, Canada.



- Allen, E., and **D. E. Veron**, 2019: Improving Sea Breeze Forecasting through the Assimilation of Coastal Observations, American Meteorological Society's 23<sup>rd</sup> Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 99<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Moore, D., and **D. E. Veron**, 2019: Automated Detection of Sea Breeze Circulations: A Climatology of Sea Breeze-Initiated Precipitation, American Meteorological Society's 23<sup>rd</sup> Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 99<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Veron, D. E.**, J. Brodie, T. Miles, B. Frei and E. Allen, 2019: Utilizing Climatological Analysis to Improve Forecasting of Offshore Wind Ramps, American Meteorological Society's 10th Conference on Weather, Climate, and the New Energy Economy, 99<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Tian, S., S. Rauscher, and **D. E. Veron**, 2019: Recent Change of North American Monsoon Revealed by Multiple Monsoon Indexes, American Meteorological Society's Session on Tropical Cyclones and Extreme Monsoon Precipitation: Prediction, Impacts, and Communication, 99<sup>th</sup> Annual Meeting, Phoenix, AZ, USA
- Veron, D.**, M. King, and H. Huntley, 2018: Examining the role of Arctic clouds in sea ice volume loss using satellite observational and modeled data, American Geophysical Union Fall Meeting, Washington, DC, USA.
- Veron, D.**, M. Orr, and M. Rogers, 2018: Leveraging local networks and student outreach to enhance climate change education in the K-16 classroom, American Geophysical Union Fall Meeting, Washington, DC, USA.
- Moore, D., D. Veron, and S. Rauscher, 2018: Characterizing sea breeze circulations and associated precipitation utilizing multiple observational data sources. Middle States Conference of the Association of American Geographers. Montclair, NJ, USA.
- Moore, D., D. Veron, 2018: Characterization of Sea Breeze Related Precipitation on the DelMarVa Peninsula, Annual Meeting of the Association of American Geographers, New Orleans, LA, USA.
- Brodie, J., **D. Veron**, T. Miles, S. Glenn, and R. Dunk, 2018: Utilizing Mesoscale Atmospheric Modeling to Evaluate Forecasting Skill of Wind Ramp Events, International Offshore Wind Partnering Forum, Princeton, NJ, USA.
- Allen, E., and **D. E. Veron**, 2018: Improving Coastal Wind Forecasting in the Delaware Bay American Meteorological Society's 16th Symposium on the Coastal Environment, 98th Annual Meeting, Austin, TX, USA.
- Veron, D.**, G. Ad-Marbach, R. Fox-Lykens, G. Ozbay, A. Sezen-Barrie, and Jane Wolfson, 2017: Pre-service teacher professional development on climate change: assessment of workshop success and influence of prior knowledge, American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- Veron, D.**, C. Genthon, A. Schroth, and E. Vignon, 2017: Exploring uncertainty in the radiative budget of the Antarctic atmospheric boundary layer at Dome C, American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- Goldman, W., P. Jackson and **D. Veron**, 2017: Social Dimensions of Urban Heat Island Mitigation Using Community Gardens. American Association of Geographer Annual Meeting, Boston, MA, USA.
- Veron, D.**, M. Rogers, J. Wolfson, A. Sezen-Barrie, G. Ozbay and R. Fox-Lykens, 2016: Offering climate change education to pre-service teachers outside the higher ed classroom, ED32A-04. American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.

- Ozbay, G., R. Fox-Lykens, M. J. Fuoco, L. Phalen, P. Harcourt, **D. E. Veron**, M. Rogers, M., and J. Merrill, 2016. Climate change education for general education faculty. American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Schroth, A., and **D. Veron**, 2016: Developing a Model Summer Climatology of Dome C, Antarctica Using a Regional Climate Model, American Meteorological Society 22<sup>nd</sup> Symposium on Boundary Layers and Turbulence, Salt Lake City, UT, USA.
- Fuoco, M., **D. Veron**, C. Leithren, and G. Ozbay, 2016: Outreach Efforts through Creating Climate Literacy Video Resources For Teachers. NSF at DESU day, Dover, DE, USA.
- Fuoco, M., **D. Veron**, C. Leithren, and G. Ozbay, 2016: Improving Climate Literacy in Middle School and High School Pre-Service Teachers by Providing Resources and Interactive Teaching Tool. AERS Conference, Virginia Beach, VA, USA.
- Sezen-Barrie, A., J. Wolfson, **D. E. Veron**, G. Ozbay, and R. Fox-Lykens, 2016: Professional development across communities of practice: Using lessons from k-12 classrooms to facilitate preservice teachers' learning to teach climate. Annual Meeting of the American Educational Research Association, April, Washington, DC, USA
- Veron, D.**, and G. Marbach-Ad, 2016: Developing understanding of pre-service teacher exposure to climate literacy content in higher education science courses, A53. National Association for Research in Science Teaching Annual International meeting, Baltimore, MD, USA
- Veron, D.**, J. Brodie, Y. Shirazi and J. Gilchrist, 2016: Exploring the impacts of wind forecasting error in the Mid-Atlantic on the PJM electrical grid for a theoretical wind farm. American Meteorological Society 96<sup>th</sup> Annual Meeting, New Orleans, LA, USA.
- Brodie, J., and **D. Veron**, 2016: Using Climatology and Modeling for Regional Offshore Wind Farm Optimization. American Meteorological Society 96<sup>th</sup> Annual Meeting, New Orleans, LA, USA.
- Ozbay, G., R. Fox-Lykens, **D. E. Veron**, M. Rogers, J. Merrill, P. Harcourt, P., and H. Mead, 2015: Minority pre-service teachers' and faculty training on climate change education in Delaware State University. American Geophysical Union Fall Meeting, December, San Francisco, CA, USA.
- King, M., and **D. Veron**, 2015: Investigating the Sensitivity of Arctic Sea Ice to Variability in Early Summer Cloud Radiative Effect. American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Brodie, J., Y. Shirazi and **D. Veron**, 2015: Improved Analysis Framework of Wind Forecasting Errors for Grid Integration of Offshore Wind Farms. American Wind Energy Association, Baltimore, MD, USA.
- Brodie, J., and **D. Veron**, 2015. Regional Modeling of Offshore Wind Farms to Optimize Power Production. American Wind Energy Association, Baltimore, MD, USA.
- Colle, B., M. Sienkiewicz, C. Archer and **D. Veron**, 2015: The IMPOWR (Improving the Mapping and Prediction of Offshore Wind Resources) project: Evaluation of WRF PBL Schemes. North American Wind Energy Academy 2015 Symposium, Blacksburg, VA, USA.
- W. Angevine, **D. Veron**, and A. Schroth, 2015: GABLS4 WRF setup and preliminary results, Joint Dice and GABLS4 Workshop. Toulouse, France.
- Veron, D.**, C. Hughes, J. Gilchrist, and J. Lodise 2015: Observing, modeling, and predicting the Delaware Sea Breeze, 13<sup>th</sup> Symposium on the Coastal Environment, American Meteorological Society 95<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Veron, D.**, G. Ad-Marbach, J. Wolfson, G. Ozbay, H. Mead, J. Merrill, A. Sezen, R. Fox-Lykens, and MADE-CLEAR : Maryland and Delaware Climate Change Education Assessment and Research 2014: Developing Climate Literate, Pre-service, Middle- and High-school Teachers, American Geophysical Union Fall Meeting, San Francisco, CA, USA.

- Brodie, J., **D. E. Veron**, C. L. Archer and F. Veron, 2014: Regional Offshore Wind Farm Optimization Using Wind Climatology and the Weather Research and Forecasting Model, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Veron, D. E.**, C. Hughes, J. Gilchrist, J. Lodise and W. Goldman, 2014: Land- and sea-surface impacts on local coastal breezes, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Veron, D.**, J. Gilchrist, J. Lodise and C. Hughes, 2014: Sensitivity of Mid-Atlantic Coastal Breezes to Surface Variability, European Meteorological Society Annual Meeting, Prague, Czech Republic.
- Brodie, J., **D. E. Veron**, C. Archer and F. Veron, 2014: Optimizing Turbine Layout in Offshore Wind Farms Using Regional Modeling and Wind Climatology, American Wind Energy Association, Atlantic City, NJ, USA.
- Brodie, J., Y. Shirazi, and J. Gilchrist, and **D. Veron**, 2014: Examining the Cost of Forecasting Inaccuracies for Delaware Offshore Wind Power, American Wind Energy Association, Atlantic City, NJ, USA.
- Brodie, J., **D. Veron**, C. Archer and F. Veron, 2014: How can wind farm layout impact the power output? Coast Day, Lewes, DE, USA.
- Veron, D.**, J. Brodie, J. Sharp, J. Lodise, W.-J. Cai, J. Cohen, J. Brodeur, A. Joesoef, A. Wickline, 2014: Taking the pulse of the Delaware Bay with ferry monitoring. Coast Day, Lewes, DE, USA.
- Hughes, C., B. Facciolo, and **D. Veron**, 2014: The Impact of small-scale variability in land and sea surface properties on the Delaware Sea Breeze. Coast Day, Lewes, DE, USA.
- Goldman, W., D. Hitchings, J. Gilchrist and D. Veron, 2014: Local land use and climatic shifts on Delaware shores. Coast Day, Lewes, DE, USA.
- Merrill, J., M. Rogers, C. Petrone, **D. E. Veron** and N. Shea, 2014: MADE CLEAR: Systemic, sustainable climate change science education. American Geophysical Union Science Policy Conference, 16-18 June 2014, Washington, DC., USA.
- Newton, F. and **D. Veron**, 2014: High School Students Experience Marine Science through the University of Delaware's TIDE Camp, American Geophysical Union Ocean Sciences Meeting, 23-28 February 2014, Honolulu, HI, USA.
- Brodie, J., **D. Veron**, C. Archer and F. Veron, 2014: Modeling Offshore Wind Farm Configurations in a Mesoscale Atmospheric Model to Optimize Power Production, American Geophysical Union Ocean Sciences Meeting, 23-28 February 2014, Honolulu, HI, USA.
- Griswold, M., C. Stylinski, N. Shea, **D. E. Veron**, and J. Z. Merrill, 2013: Meeting in the Middle: Building Off Regional Policies to Promote Climate Education Partnerships on and off Campus. American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Brodie, J., and **D. E. Veron**, 2012: Investigation of turbine spacing on turbulence and surface fluxes using a mesoscale atmospheric model, American Wind Energy Association, Virginia Beach, VA, USA.
- Brodie, J., **D. Veron**, C. Archer and F. Veron, 2012: How Can Wind Farm Layout Impact the Power Output. Coast Day, Lewes, DE, USA.
- Barton, N. P., and **D. E. Veron**, 2012: Investigating the Cloud Response to Altering Sea Ice Concentrations over the Laptev Sea using a Regional Model, American Association of Geographers Annual Meeting, New York, NY, USA.
- Veron, D. E.**, and C. Hughes, 2011: Detection and Prediction of the Delaware Summertime Sea/Bay Breeze, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Hughes, C., and **D. Veron**, 2011: Predicted Influence of the Sea Breeze on Delaware's Offshore Wind Resource. Coast Day, Lewes, DE, USA.

- Gilchrist, J., C. Hughes and **D. Veron**, 2011: Influence of High Resolution Sea Surface Temperature on Modeled Sea/bay Breeze Front. Coast Day, Lewes, DE, USA.
- Barton, N. P., and **D. E. Veron**, 2011: Analyzing cloud radiative variability with sea ice variability in the ERA-40 reanalysis and polar-WRF, 11th Conference on Polar Meteorology and Oceanography, Boston, MA, USA.
- Hughes, C., and **D. E. Veron**, 2010: Prediction of the Delaware Bay Sea Breeze, Coast Day, Lewes, DE, USA.
- Hughes, C. P., and **D. E. Veron**, 2010: The Impact of Coastal Development on the Delaware Bay/Sea Breeze, 17th Conference on Air–Sea Interaction and 9<sup>th</sup> Conference on Coastal Atmospheric and Oceanic Prediction and Processes, Annapolis, MD, USA.
- Barton, N. P., and **D. E. Veron**, 2010: Variability in Arctic Clouds; large-scale dynamics and local forcing, Association of American Geographers Annual Conference, Washington, D.C., USA.
- Barton, N. P., and **D. E. Veron**, 2010: A Study of Arctic Cloud Data and Arctic Cloud Variability, American Meteorological Society’s 90<sup>th</sup> Annual Meeting, Atlanta, GA, USA.
- Barton, N. P., and **D. E. Veron**, 2009: Climate Change and Arctic Clouds, Coast Day. Lewes, DE, USA.
- Hughes, C., and **D. E. Veron**, 2009: The Climatology of the Delaware Bay Sea Breeze, Coast Day. Lewes, DE, USA.
- Kassianov, E. and **D. E. Veron**, 2009: Markovian Approach: From Ising Model to Stochastic Radiative Transfer, International Conference on Mathematics, Computational Methods & Reactor Physics (M&C 2009), Saratoga Springs, NY, USA.
- Barton, N. P., and **D. E. Veron**, 2009: Large scale variability in the Arctic cloud and Radiative climatology, American Meteorological Society’s 89<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Muscarella, P. A., N. P. Barton, B. L. Lipphardt, Jr., **D. E. Veron**, K. C. Wong, and A. D. Kirwan, Jr. 2009: A synoptic description of surface currents and winds at the Delaware Bay mouth, American Meteorological Society’s 89<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Veron, D. E.**, N. P. Barton, A. Satinsky, and E. Geiger, 2009: Observational Analysis and simulation of the Delaware Sea/Bay Breeze, American Meteorological Society’s 89<sup>th</sup> Annual Meeting, Phoenix, AZ, USA.
- Barton, N. P., and **D. E. Veron**, 2008: Development of a mixed-phase cloud-radiation parameterization using SHEBA data, 4<sup>th</sup> PAN-GCSS (Pan-GEWEX Cloud System Study) Meeting, 'Advances in Modeling and Observing Clouds and Convection, Toulouse, France.
- Veron, D. E.**, and M. Foster, 2008: Application of a stochastic cloud-radiation parameterization in tropical cloud fields, 4<sup>th</sup> PAN-GCSS (Pan-GEWEX Cloud System Study) Meeting, 'Advances in Modeling and Observing Clouds and Convection' Toulouse, France.
- Barton, N. P., A. Satinsky, and **D. E. Veron**, 2008: Analysis of Winds over Delaware Bay using Observations and Modeling, Association of American Geographers Annual Conference, Boston, MA, USA.
- Veron, D. E.**, M. Foster, and N. P. Barton, 2008: Parameterizing the Stochastic Cloud-Radiation Approach: Modification and Evaluation, Atmospheric Radiation Measurement Program’s Science Team Meeting, Norfolk, VA, USA.
- Veron, D. E.** and N. P. Barton, 2007: MX-STOC - Stochastic RT through Mixed-phase Layer Clouds in the Arctic, Atmospheric Radiation Measurement Program’s Cloud Properties and Cloud Modeling Joint Meeting, Annapolis, MD, USA.
- Foster, M., and **D. E. Veron**, 2007: Investigating the Shortwave Radiative Effects of Cloud Field Geometry in the Tropical Western Pacific, American Geophysical Union Fall Meeting, San Francisco, CA, USA.

- Veron, D. E.,** and **M. Foster,** 2007: Stochastic Representation of Cloud-Field Geometry Radiative Effects at TWP, Atmospheric Radiation Measurement Program's Cloud Properties and Cloud Modeling Joint Meeting, Annapolis, MD, USA.
- Veron, D. E.,** and **N. P. Barton,** 2007: Parameterizing the impacts of mixed-phase layer clouds on shortwave radiation, CMO-CGU-AMS Congress 2007, St. John's, Newfoundland, Canada.
- Veron, D. E., M. Foster,** and **N. P. Barton,** 2007: Stochastic Correction of the Downwelling Shortwave Radiation in Tropical, Broken Cloud Fields and Mixed-phase Arctic Layer Clouds, Atmospheric Radiation Measurement Program's Science Team Meeting, Monterey, CA, USA.
- Trzaska (Secora), J., J. Francis** and **D. E. Veron,** 2007: GPS radio occultations of arctic temperature profiles, 19th Conference on Climate Variability and Change, American Meteorological Society's Annual Meeting, San Antonio, TX, USA.
- Veron, D. E.,** and **M. Foster,** 2006: Linking cloud-radiation parameterization performance to large-scale dynamics, Atmospheric Radiation Measurement Program's Science Team Meeting, Albuquerque, NM, USA.
- Foster, M.,** and **D. E. Veron,** 2006: Using a Statistical Description of Cloud Field Geometry for Radiative Transfer Calculations. American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Veron, D. E., J. F. Brodie,** and **N. P. Barton,** 2006: Application of stochastic techniques to radiative transfer through mixed-phased clouds, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Foster, M.,** and **D. E. Veron,** 2006: Linking Cloud-radiation Parameterization Performance to Large-scale Dynamics, Atmospheric Radiation Measurement Program's Science Team Meeting, Albuquerque, NM, USA.
- Veron, D. E., M. Foster,** and **J. M. Secora,** 2006: Evaluating a stochastic shortwave radiation routine using a single-column model, 18<sup>th</sup> Conference on Climate Variability and Climate Change, 86<sup>th</sup> American Meteorological Society's Annual Meeting, Atlanta, GA, USA.
- Previdi, M.,** and **D. E. Veron,** 2005: NAO-related Variability in Arctic Storm Activity and its Effect on Cloud Cover, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Foster, M., D. E. Veron,** and **J. Secora,** 2005: A Cloud Shortwave Parameterization Developed Using a Stochastic Model, Gordon Research Conference on Radiation and Climate, Colby College, Waterville, ME, USA.
- Veron, D. E., J. Secora, M. Foster,** C. Weaver and F. Veron, 2005: Application of stochastic techniques to the ARM cloud-radiation parameterization problem, Atmospheric Radiation Measurement Program's Science Team Meeting, Daytona Beach, FL, USA.
- Brodie, J. F.,** and **D. E. Veron,** 2005: Application of a stochastic cloud model to mixed phase arctic clouds: an overview, Eighth Conference on Polar Meteorology and Oceanography, San Diego, CA, USA.
- Previdi, M.,** and **D. E. Veron,** 2005: Investigating the climatic effects of the NAO over Greenland using Polar MM5, Sixteenth Symposium on Global Change and Climate Variations, American Meteorological Society, San Diego, CA, USA.
- Veron, D. E., J. Secora,** and **M. Foster,** 2005: Investigation of shortwave radiative transfer at the ARM CART sites using a multiple layer stochastic model, Sixteenth Symposium on Global Change and Climate Variations, San Diego, CA, USA.
- Foster, M.,** and **D. E. Veron,** 2005: Modeling interactions between radiation and cloud using stochastic transfer theory, Atmospheric Radiation Measurement Program's Cloud Parameterization Meeting, Stony Brook, NY, USA.

- Foster M., and **D. E. Veron**, 2005: A Cloud Shortwave Parameterization Developed Using a Stochastic Model, Gordon Research Conference on Radiation and Climate, Colby College, ME, USA.
- Veron, D. E.**, J. Brodie, J. O. Pinto and J. Curry, 2004: Evaluation of AGCM Radiation Parameterizations in the Arctic, Fifteenth Symposium on Global Change and Climate Variations, Seattle, WA, USA.
- Lane-Veron, D. E.**, and J. Secora, 2004: Observations and stochastic modeling of shortwave radiative transfer at the ARM CART sites, Fifteenth Symposium on Global Change and Climate Variations, Seattle, WA, USA.
- Secora, J., and **D. E. Veron**, 2004: Observations and Stochastic Modeling of Shortwave Radiative Transfer at the ARM CART Sites, Atmospheric Radiation Measurement Program's Science Team Meeting, Albuquerque, NM, USA.
- Brodie, J., and **D. E. Veron**, 2004: Stochastic Radiative Transfer in Polar Mixed Phase Clouds, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Previdi, M., and **D. E. Veron**, 2004: Investigating the Climatic Effects of the NAO Over Greenland Using Polar MM5, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Veron, D. E.**, M. Foster, and J. Secora, 2004: Development and Evaluation of a Stochastic Cloud-radiation Parameterization, American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- Lane, D. E.**, R. C. J. Somerville and S. F. Iacobellis, 2003: Development of a Stochastic Cloud Parameterization. Fourteenth Symposium on Global Change and Climate Variations, Long Beach, CA, USA.
- Lane-Veron, D.E.** and J. Secora, 2003: Development of a cloud climatology for use in stochastic cloud-radiation modeling, Atmospheric Radiation Measurement Program's Science Team Meeting, Broomfield, CO, USA.
- Lane-Veron, D. E.**, J. O. Pinto, and J. A. Curry, 2003: Comparison and evaluation of AGCM Radiation Parameterizations in the Arctic, Seventh Conference on Polar Meteorology and Oceanography, Hyannis, MA.
- Lane-Veron, D. E.**, J. Secora, and R. C. J. Somerville, 2003: Observations and Stochastic Modeling of Shortwave Radiative Transfer at the ARM CART Sites, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Feingold, G., M. Previdi, and **D. E. Veron**, 2003: Analysis of Measurement Requirements for the Aerosol Indirect Effect: A Synthesis of Observations and Modeling, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Previdi, M., G. Feingold, **D. E. Veron**, and W. Eberhard, 2003: Ground Based Remote Sensing of the First Aerosol Indirect Effect: An Update, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Feingold, G., W. Eberhard, **D. E. Lane**, and M. Previdi, 2002: First measurements of the indirect effect using ground-based remote sensors, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Lane, D. E.**, R. C. J. Somerville and S. F. Iacobellis, 2002: Development of a Stochastic Cloud Parameterization, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Lane, D. E.**, J. O. Pinto, and J. A. Curry, 2002: Evaluation of AGCM Radiation Parameterizations in the Arctic, Conference Presentation, Pan-GEWEX Cloud System Studies Workshop, Kananaskis, Alberta, Canada.
- Lane, D. E.**, 2002: Development of a Stochastic Cloud Parameterization, Atmospheric Radiation Measurement Program's Science Team Meeting, St. Petersburg, FL, USA.

- Lane, D. E.,** C. Fairall, E. Westwater, D. Hazen, and B. Orr, 2001: Investigation of Liquid Water Path Retrieval Techniques Using Ship-Based Microwave Radiometers, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Lane, D. E.,** J. O. Pinto, and J. A. Curry, 2001: Evaluation of GCM radiation codes using SHEBA data, Sixth Conference on Polar Meteorology and Oceanography, San Diego, CA, USA.
- Lane, D. E.,** C. Fairall, E. Westwater and D. Hazen, 2001: Investigation of liquid water path retrieval techniques using ship-based microwave radiometers, International Association of Meteorology and Atmospheric Sciences, Innsbruck, Austria.
- Lane, D. E.,** C. W. Fairall, D. Hazen, and B. Orr, 2001: Comparison of Measurements of Liquid Water Path, Atmospheric Radiation Measurement Program's Science Team Meeting, Atlanta, GA, USA.
- Lane, D. E.,** J. O. Pinto, and J. A. Curry, 2001: Evaluation of GCM radiation codes using SHEBA data, Atmospheric Radiation Measurement Program's Science Team Meeting, Atlanta, GA, USA.
- Lane, D. E.,** R. C. J. Somerville, and S. F. Iacobellis, 2001: Evaluating Stochastic Radiative Transfer, Atmospheric Radiation Measurement Program's Science Team Meeting, Atlanta, GA, USA.
- Lane, D. E.,** R. C. J. Somerville, and S. F. Iacobellis, 2001: Simulation of radiative transfer through broken cloud fields using a stochastic approach, American Meteorological Society, Albuquerque, NM, USA.
- Lane, D. E.,** R. C. J. Somerville, and S. F. Iacobellis, 2000: Evaluating Stochastic Radiative Transfer, American Geophysical Union Annual Fall Meeting, San Francisco, CA, USA.
- Lane, D. E.,** R. C. J. Somerville and S. F. Iacobellis, 2000: Evaluation of a stochastic radiative transfer model using ground-based measurements, International Radiation Symposium, St. Petersburg, Russia.
- Lane, D. E.,** R. C. J. Somerville, 2000: Evaluation of a Stochastic Radiative Transfer Model Using Ground-Based Measurements, Gordon Research Conference on Solar Radiation & Climate, New London, CT, USA.
- Iacobellis, S. F., R. C. J. Somerville, and **D. E. Lane**, 2000: SCM sensitivity to microphysics, radiation and convection algorithms, Atmospheric Radiation Program's Science Team Meeting, San Antonio, TX, USA.
- Lane, D. E.,** R. C. J. Somerville, and S. F. Iacobellis, 2000: Validation of a stochastic radiative transfer model, American Meteorological Society, Long Beach, CA, USA.
- Lane, D. E.,** R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1999: Investigations of cloud-radiation interactions, American Meteorological Society, Dallas, TX, USA.
- Iacobellis, S. F., R. C. J. Somerville, **D. E. Lane**, and J. Bérque, 1999: Sensitivity of cloud-radiation interactions to various cloud parameterizations using a single-column model and observations from the atmospheric radiation measurement program, American Meteorological Society, Dallas, TX, USA.
- Somerville, R. C. J., S. F. Iacobellis, and **D. E. Lane**, 1999: Testing Cloud-Radiation Schemes with Single-Column Models and ARM Observations, Atmospheric Radiation Measurement Program's Science Team Meeting, San Antonio, TX, USA.
- Lane, D. E.,** R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1998: Sensitivity of single-column model results to horizontal and vertical resolution, Ninth Symposium on Global Change Studies, American Meteorological Society, Phoenix, AZ, USA.
- Iacobellis, S. F., **D. E. Lane**, and R. C. J. Somerville, 1998: Single-column modeling, general circulation model parameterizations, and Atmospheric Radiation Measurement data, Atmospheric Radiation Measurement Program's Science Team Meeting, San Antonio, TX, USA.
- Lane, D. E.,** R. C. J. Somerville, S. F. Iacobellis, and J. Bérque, 1998: Single-column model sensitivity to changes in horizontal and vertical resolution, American Meteorological Society, Tucson, AZ.

## FUNDED GRANTS

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### **An Integrated Evaluation of the Simulated Hydroclimate System of the Continental US.**

9/16-12/19. \$539,424, UD, co-investigator (principal investigator - Sara Rauscher)

*UC Davis/Department of Energy.*

Integrated assessment of how well climate models are able to capture features relevant to the hydrological system using metrics designed in collaboration with stakeholders from select study areas, focus placed on sea breeze and monsoon circulations.

### **Improving Model Parameterization of Energetic Fluxes in the Boundary Layer over Antarctica.**

07/16 - 6/17, \$12,000, UD, principal investigator

*National Science Foundation.*

This funding supplements support from the French International Polar Program to participate in the CALVA observational program for the 2016-2017 field campaign. Observations resulting from this project will yield insight into the physics and dynamics governing the atmospheric boundary layer over the Antarctic plateau in austral summer and will be used to improve our ability to simulate the Antarctic climate on a regional scale.

### **Characterization of the salt flux at the Mouth of the Delaware Bay using the Ferry Monitoring System**

01/16-09/17, \$24,375, UD, principal investigator

*Delaware River and Bay Commission.*

Analysis of the ferry salinity data to assess the temporal and spatial variability of the water properties at the Delaware Bay mouth. Combination of the ferry biochemical and physical data with nearby station measurements from the Cape May and Lewes ferry terminals and from the Brandywine Shoals observation station, and with river flow data from USGS and tidal data from the NOAA Currents and Tides database to look at tidal salt flux on tidal, 15-day, lunar monthly and annual scales.

### **Delaware Bay Monitoring for Coastal Health and Resilience**

02/16-06/18, \$132,834, UD, principal investigator

*National Oceanic and Atmospheric Administration.*

The proposed project seeks to complete the transition and increase the relevance of the ferry monitoring program (supported by the Delaware Sea Grant College Program since 2009) by 1) making sure that the new sensor (pH and pCO<sub>2</sub>) installation and data collection are technically sound via laboratory and field tests, along with developing reliable and practical calibration and validation methods, 2) comparing new CO<sub>2</sub> and pH measurements with historical data to better understand the changes in Bay chemistry, in particular the ecologically important pH value and air-sea exchange fluxes of O<sub>2</sub> and CO<sub>2</sub>, 3) producing real-time data streams that will be used in developing a model for the Delaware Bay, and 4) improving outreach to the public.

### **Tall Towers, Long Blades and Manifest Destiny: The Migration of Land-based Wind from the Great Plains to the First State**

09/15-08/16, \$24,914, UD, co-investigator, (principle investigator – Jeremy Firestone)

*UDEI Innovative Energy Research Grants Program.*

Preliminary analysis of five possible sites in southern Delaware indicated that they may be suitable for installing a land-based wind farm. This research project expands this analysis to include a close look at setbacks, grid interconnection possibilities, and will incorporate analysis of finely resolved wind data (at 1.2 miles) and further review of site geology. Detailed economic analysis and a local benefits



analysis will be performed to examine the strengths and limitations of each site. In addition, interviews with numerous groups of stakeholders, including local citizens, farmers, and policymakers, will be performed.

### **Evolution of Delaware Bay Ferry Automated Environmental Sampling**

02/15-01/16, \$47,583, UD, principal investigator

*National Oceanic and Atmospheric Administration.*

Transition of the ferry monitoring program to new leadership, enhancing the sampling technology by including CO<sub>2</sub> and pH measurements, and producing real-time data streams that will be available to agencies and the public through the well-established Delaware Environmental Observing System (DEOS). It is anticipated that both the water and atmospheric data will be utilized by partners at the Delaware River Basin Authority (DRBA), the National Weather Service, and the Delaware Department of Natural Resources and Environmental Control as well as for regional atmospheric modeling and for investigations of the long term trends and effects of acidification in coastal systems.

### **CCEP II- MADE-CLEAR – Maryland Delaware Climate Education (implementation grant).**

8/12-9/18, \$2,225,000, UD, principal investigator 3/18-9/18, co-investigator 8/12-2/18 (principal investigator – Nancy Targett)

*National Science Foundation.*

Implementation of a developed NSF-supported Climate Change Education Partnership (CCEP) with a regional focus. Identification and development of the current climate education resources in place in Maryland and Delaware. Employment of new climate education and outreach initiatives through new science standards currently under development at the state and federal level. Dr. Veron is a member of the MADE-CLEAR management committee and leads the Higher Education Working Group.

### **Repair and relocation of wind profiler**

6/12-12/12, \$69,355, UD, co-investigator, (principal investigator – Cristina Archer)

*First State Marine Wind, LLC*

Repair and relocation of state-of-the-art wind profiler for use in coastal wind research.

### **Synoptic descriptions of low-level winds and surface currents outside the Delaware Bay mouth for use in ecosystem studies and hazard response planning**

2/12-4/14, \$40,000, principal investigator

*National Oceanic and Atmospheric Administration.*

Development of detailed current and wind climatology along the Delaware coast using weather radar, CODAR and mesoscale modeling. Enhanced modeling of low-level winds using improved SSTs and updated land-surface representations.

### **Improving atmospheric models for offshore wind resource mapping and prediction using LIDAR, aircraft, and in-ocean observations**

10/11-7/15, \$294,255, principal investigator (1/12-7/13)

*SUNY Stony Brook/Department of Energy*

Observational and modeling campaign to improve low-level wind modeling for offshore wind resource assessment. Deployment of numerous instruments including sonic anemometers and a wind LIDAR to characterize planetary boundary layer. Development of improved boundary layer parameterization for use in WRF and application of ensemble modeling.

### **MADE-CLEAR – Maryland Delaware Climate Education (planning grant).**

10/10-9/12, \$347,999, UD, co-investigator, (principal investigator – Nancy Targett)

*National Science Foundation.*

Creation of a NSF-supported Climate Change Education Partnership (CCEP) with a regional focus. Assessment of the current climate education resources in place in Maryland and Delaware and identification of areas of opportunity for improving climate education and outreach in the socially, economically and educationally diverse populations resident in this region. Dr. Veron is a member of the MADE-CLEAR steering committee and participates in the Higher Education and K-12 working groups.

### **Local Urban Growth and Climate Impacts on the Delaware Bay/Sea Breeze**

02/09-01/12, \$112,382, UD, principal investigator

*National Oceanic and Atmospheric Administration.*

Development of a low-level wind climatology using 5 years of surface meteorological stations, including a characterization of the Delaware Bay/Sea Breezes. Simulation with a mesoscale atmospheric model, WRF, to elucidate details in the low-level wind circulation through simulations of 10 summers from 2000-2009. Investigation of the sensitivity of the low-level winds to changes in the land-surface using land classifications from orthophotography over Delaware is the past decade.

### **Application of Stochastic Radiative Transfer Theory to the ARM Cloud-Radiative Parameterization Problem**

07/06-06/08, \$216,267, UD, principal investigator

*Department of Energy*

Identification of radiatively important cloud field configurations using cluster analysis. Creation of a simplistic stochastic parameterization that can be applied in a global climate model. Development of a stochastic, mixed-phase layer cloud-radiation model for use in the Arctic. Continuation of project started at Rutgers.

### **Application of Stochastic Radiative Transfer Theory to the ARM Cloud-Radiation Parameterization Problem**

11/04-10/07, \$279,153, RU, principal investigator

*Department of Energy*

Application of the stochastic approach to radiative transfer to tropical cloud fields in the Western Pacific that have radiatively important geometry using 5 years of continuously sampled data. Simulation of the shortwave domain-averaged fluxes using a stand-alone stochastic model and the shortwave radiation routine from CCM3. Identification of cloud field characteristics that occur when 3D cloud influence on the radiation field has a significant impact on the large-scale fluxes.

### **Statistical Modeling of Mixed-Phase Clouds in the Arctic**

07/04-05/05. \$1500, RU, principal investigator

*Rutgers Undergraduate Research Fellows Program*

Modification of the stochastic model to represent radiative transfer through a Markovian governed mixture of ice and water in an overcast cloud. Performance of sensitivity studies using single-phase and mixed-phase model versions.

### **Intercomparison of Arctic Radiative Transfer Models**

07/03-05/04, \$1500, RU, principal investigator

*Rutgers Undergraduate Research Fellows Program*

Intercomparison of numerous shortwave and longwave cloud and radiation parameterizations employed in modern climate models. Detailed studies of sensitivities inherent in these algorithms related to the representation of albedo and aerosols in the models.

**Impact of regional cloud and aerosol forcing: observations and modeling**

06/03-05/06, \$37,734, RU, principal investigator

*Department of Agriculture*

Development of a local observational program to study the impact of cloud-radiation and cloud-aerosol-radiation reactions on the amount of shortwave radiation reaching the surface. Installation of multi-filter rotating shadowband radiometer at the Cook College observing station at Hort Farm II.

**Stochastic radiative transfer through an inhomogeneous cloud field produced by a 3-D, high-resolution numerical atmospheric model**

06/03-12/04, \$37,709, RU, co-investigator, (principal investigator – Chris Weaver)

*National Science Foundation*

Investigation of the application of the stochastic approach to radiative transfer in a mesoscale atmospheric model, RAMS, where cloud field geometry, and cloud and radiation properties are provided at greater resolution than in a climate model. Analysis of the impact of a resolved 3D cloud field on the domain-averaged radiative fluxes relative to observations.

**Investigation of the Aerosol Indirect Effect at the Southern Great Plains Using Ground-Based Remote Sensors and Modeling,**

7/01-6/04, \$83,992, principal investigator,

*National Oceanic and Atmospheric Administration*

Detection of the aerosol indirect effect using LIDAR, Radar and radiometer data available at the ARM CART site in the Southern Great Plains for numerous case studies selected from several years of data.

**Evaluation and Development of Stochastic Radiative Transfer as an Atmospheric General Circulation Model Parameterization**

11/01-10/04, \$167,286, principal investigator

*Department of Energy*

Development of stochastic model forcing data from long time-series cloud and radiation properties at the three ARM CART sites in the Arctic, tropics and the Southern Great Plains. Modification of the stochastic model to allow multiple cloudy layers with a differing geometrical and optical properties. Application of the stochastic approach to all cloudy scenes without a priori selection. Extension of the stochastic approach beyond low-level broken cloud fields.

**Service**

**SERVICE TO THE UNIVERSITY**

<i>Year</i>	<i>Service or committee</i>	<i>Location</i>
2019	University Faculty Success Program Co-coordinator	UD
2019	CEOE Faculty Senator	UD
2019	Co-Chair, Faculty Senate Student and Faculty Honors Committee	UD
2019	University Faculty Success Program Coach	UD
2019	University Faculty Success Program Write-on Site Coordinator	UD
2019	Member, committee to develop graduate certificate in sustainability	UD
2018	Member, Faculty Senate Graduate College Committee	UD
2018	Member, Honors Faculty Review Board Members	UD
2018	Co-Chair, Faculty Senate Student and Faculty Honors Committee	UD
2018	CEOE Faculty Senator	UD
2018	Sustainability Planning Team	UD

2018	University Faculty Success Program Coach and Write-on Site Host	UD
2018	Master Naturalist planning team	UD
2017	Vice Chair, Faculty Senate Student and Faculty Honors Committee	UD
2017	CEOE Faculty Senator	UD
2017	University Faculty Success Program Coach and Write-on Site Host	UD
2017	Sustainability Planning Team	UD
2015	Graduate Student Orientation – panel member	UD
2015	University Student and Faculty Honors Committee	UD
2015	UD Strategic Planning Initiative	UD
	Models for New American Research University	
2015	University Faculty Success Program Coach	UD
2105	Graduate Student Forum – session chair	UD
2014	University Student and Faculty Honors Committee	UD
2014	UD Strategic Planning Initiative	UD
	Models for New American Research University	
2014	University Faculty Success Program Coach	UD
2012	University Honors Committee	UD
2012	University Library Committee	UD
2012	Environmental Science Council	UD
2012	Interim Director of our Environmental Science and Studies Programs	UD
2011	University Library Committee	UD
2010	University Library Committee	UD
2009	International Polar Year Carlson committee	UD
2009	University Library Committee	UD
2008	International Polar Year Carlson committee	UD
2005	University Harassment Advisor	RU
2004	University Harassment Advisor	RU

### **SERVICE TO THE COLLEGE**

<i>Year</i>	<i>Service or committee</i>	<i>Location</i>
2019	Member, Offshore wind modeling postdoc position search	UD
2019	Panel presentation to CEOE majors on opportunities post BA/BS	UD
2019	Advisor to MAST200 students at Newark Charter HS for projects	UD
2019	Visit to AA program in Dover for recruitment	UD
2019	Distinguished Honors recruitment events	UD
2019	Decision Days recruitment events	UD
2019	Chair, Environmental Science and Studies Program	UD
2019	CEOE Academic coordinator for TIDE Camp	UD
2019	CEOE Undergraduate Program Directors Committee	UD
2019	Lindsay Naylor, 4-yr review committee	UD
2019	Geography Academic Council	UD
2018	Outreach to MOT Charter HS students at AGU Meeting	UD
2018	Carbon Cycle and College Outreach at Newark Charter School	UD
2018	CEOE Undergraduate Program Directors Committee	UD

2018	Presentation to Dean's Advisory Council	UD
2018	Blue and Golden Saturday	UD
2018	Chair, Human Geography faculty position search	UD
2018	Member, CEOE Academic Advisor search	UD
2018	Chair, Environmental Science and Studies Program	UD
2018	CEOE Academic coordinator for TIDE Camp	UD
2018	Decision Days recruitment events	UD
2018	SMSP undergraduate program committee	UD
2018	Paul Jackson 4-year review committee	UD
2018	Geography Academic Council	UD
2017	Chair, Environmental Science and Studies Program	UD
2017	CEOE Academic coordinator for TIDE Camp	UD
2017	SMSP Academic Council	UD
2017	Blue and Golden Saturday	UD
2017	Recruitment at AA program Dover and Wilmington campuses	UD
2017	Geography Academic Council	UD
2017	Faculty advisor to the Student Chapter of the AMS	UD
2016	SMSP Academic Council	UD
2016	Chair, Environmental Science and Studies Program	UD
2016	CEOE Academic coordinator for TIDE Camp	UD
2016	Blue and Golden Saturday	UD
2015	Chair, Environmental Science and Studies Program	UD
2015	Blue and Golden Saturday	UD
2015	CEOE Academic coordinator for TIDE Camp	UD
2015	Committee for revising Geography major	UD
2015	Geography 2-yr review committee for A.Clarke-Sather	UD
2015	Majors and Minors on Main	UD
2015	Decision Days	UD
2015	CEOE Academic coordinator for TIDE Camp	UD
2014	Chair, Committee for major and minor in Meteorology & Climatology	UD
2014	CEOE Academic Council	UD
2014	Search Committee for GIS teaching faculty position	UD
2014	CEOE Academic coordinator for TIDE Camp	UD
2013	CEOE Academic Council	UD
2013	Search committee for EPE director	UD
2013	CEOE Academic coordinator for TIDE Camp	UD
2012	Decision Days	UD
2012	Advisory committee for Joanna York	UD
2012	Advisory committee for Helga Huntley	UD
2012	CEOE Academic coordinator for TIDE Camp	UD
2011	Advisory committee for Joanna York	UD
2011	Advisory committee for Helga Huntley	UD
2011	CEOE College Academic Council	UD
2011	CEOE Academic coordinator for TIDE Camp	UD

2010	CMES College transition committee	UD
2010	SMSP School committee for major in Marine Science	UD
2010	POSE curriculum sub-committee	UD
2010	CEOE College Academic Council	UD
2010	CEOE Academic coordinator for TIDE Camp	UD
2009	CMES College transition committee	UD
2009	CMES College strategic planning committee	UD
2009	SMSP School committee for major in Marine Science	UD
2009	POSE curriculum sub-committee	UD
2009	CNES Academic coordinator for TIDE Camp	UD
2008	CMES College strategic planning committee	UD
2008	CMES College minor in Marine Science committee	UD
2008	POSE curriculum sub-committee	UD
2008	Faculty Search committee in Oceanography	UD
2008	Faculty Search committee in POSE	UD
2008	CMES Co-creator and academic coordinator for TIDE Camp	UD
2007	CMES College minor in Marine Science committee	UD
2007	FAME/MERIT/UNITE Engineering College Summer Camp	UD
2006	Minor in Marine Studies committee	
2005	Atmospheric Sciences graduate admissions committee chair	RU
2005	Environmental Sciences Space committee	RU
2005	Environmental Sciences graduate program curriculum committee	RU
2004	Environmental Sciences Space committee	RU
2004	Environmental Sciences graduate program curriculum committee	RU
2003	Environmental Sciences graduate program curriculum committee	RU
2002	Faculty Search committee for Atmospheric Sciences	RU
2002	Environmental Sciences graduate program curriculum committee	RU

### **SERVICE TO THE PROFESSION**

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2018	Tenure dossier reviewer for Lewis and Clark College
2017	Judge, AGU Outstanding Student Paper Award, AGU Annual Meeting
2017	Reviewer, AGU Global Environmental Change (GEC) Focus Group's student travel grants
2015	NSF Review Panel, Office of Polar Programs
2012	Convener and Session Chair, American Geophysical Union, Fall Meeting, San Francisco, CA.
2011	Judge for Outstanding Student Paper Award, American Geophysical Union, Fall Meeting, San Francisco, CA.
2011	Session Synthesizer, "Preparing the Educators", MADE-CLEAR Climate Change Education Summit, Alephi, MD.
2008-11	American Meteorological Society's Atmospheric Radiation Committee
2004	Session Chair, American Geophysical Union Fall Meeting, San Francisco, CA
2003	Session Chair, Short Temporal and/or Small Spatial Scale Processes, American Meteorological Society, Seventh Conference on Polar Meteorology and Oceanography Meeting, Hyannis, MA

Peer review of journal articles (~5/year since 2000), in the following journals

*Journal of Climate,*

*Journal of Geophysical Research - Atmosphere*

*IEEE Transactions on Geoscience and Remote Sensing*

*IEEE Geoscience and Remote Sensing Letters*

*Journal of Applied Meteorology and Climatology*

*Nature Climate Change*

*Journal of Selected Topics in Applied Earth Observations and Remote Sensing*

*Ocean Coastal Management*

*Energies*

Peer review of proposals (~2/year since 2000), for the following agencies

*National Science Foundation*

*National Oceanic and Atmospheric Administration*

*Department of Energy*

Peer review of book chapter for the following book (2011)

*Sustainability: Theory and Practice*, Pearson Education

## **SERVICE TO THE PUBLIC**

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Dinner with a scientist at Newark Charter Intermediate School (2015, 2016, 2018, 2019, UD)

Lecture at Baltimore City 6<sup>th</sup> grade (Fall 2015, UD)

Demonstration and lecture at Newark Charter Intermediate School (2015, 2017, 2019 UD)

Lecture at the Tatnall School (Nov. 2012, UD)

Judge – Coast Day Outstanding Student Paper Competition (2012, 2013, UD)

Guest lecture for visiting Naval Academy cadets (Aug. 2012, UD)

Lecture at the Academy of Lifelong Learning (Sept. 2009, UD)

Co-ordinate marine science education activities for CMES at the UD Early Learning Center (2008-2009)

Coordinator of the TIDE summer camp (2008 – present)

## **In the news:**

“Cape May-Lewes ferry a source of science data”, Delaware Online, 15 August 2015, <http://www.delawareonline.com/story/news/local/2015/08/15/cape-may-lewes-ferry-source-science-data/31803407/> .

“UD research on sea breeze could benefit wind energy development”, 5 August 2015, <http://delawarepublic.org/post/ud-research-sea-breeze-could-benefit-wind-energy-development#stream/0> .

“Ferry research informs wind farm potential”, 1 August 2015, DelmarvaNow, <http://www.delmarvanow.com/story/news/local/delaware/2015/08/01/sea-breeze-study/30984867/> .

“Ship of opportunity: UD researchers monitor conditions in Delaware Bay aboard Cape May-Lewes Ferry”, UDaily, 22 July 2015, <http://www.udel.edu/udaily/2016/jul/research-ferry-072215.html> .

- “TIDE Camp: High school students participate in CEOE's summer camp”, UDaily, 20 August 2014, <http://www.udel.edu/udaily/2015/aug/tide-camp-082014.html> .
- “High school students participate in UD's marine science summer camp”. UDaily, 9 August 2013. <http://www.udel.edu/udaily/2014/aug/tide-camp-080913.html> .
- “Climate experts to address challenges of communicating climate change”, UDaily, 25 October 2013, <http://www.udel.edu/udaily/2014/oct/mather-lecture-climate-102513.html> .
- “High school students experience marine science at a two-week summer camp at UD”, UDaily, 23 August 2012, <http://www.udel.edu/udaily/2013/aug/ceoe-tide-camp-082312.html> .
- Research featured in an American Geophysical Union Fact Sheet on the state of Delaware, 2011
- “Arctic Climate is impacting mid-latitude weather as seen in winter 2009-2010. NOAA Arctic Report Card 2010, <http://www.arctic.noaa.gov/reportcard>, film and p. 15 of report.
- “Florida shivers; Hot Arctic-Cold Continents pattern is back”, 14 Dec 2010, Dr. Jeff Masters, World Weather Post, <http://www.worldweatherpost.com/2010/12/14/florida-shivers-hot-arctic-cold-continents-pattern-is-back/> .
- “Arctic warming pushing cold wave south over Eastern US” , 14 Dec 2010, Climate Signals, <http://climatesignals.org/2010/12/arctic-warming-pushing-cold-wave-south-over-eastern-u-s/> .
- “Arctic sea ice and climate”. In: Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Informant on Coalition, National Council for Science and the Environment). First published in the Encyclopedia of Earth August 3, 2010; Last revised Date October 29, 2010; [http://www.eoearth.org/article/Sea\\_ice\\_and\\_climate](http://www.eoearth.org/article/Sea_ice_and_climate) .
- “Banking on Connections to Spur Offshore Wind”, J. Okray, National Geographic Online, 13 Oct. 2010 <http://news.nationalgeographic.com/news/2010/10/100513-energy-google-interconnection-offshore-wind/> .
- “Is there something in the wind?”, Reporter, Delaware Sea Grant College, 2010 Annual report, Vol. 29 [http://www.deseagrant.org/sites/deseagrant.org/files/attachments/reporter\\_2010.pdf](http://www.deseagrant.org/sites/deseagrant.org/files/attachments/reporter_2010.pdf) .
- “Camp introduces high school students to marine science”, Sea Grant Website, 31 August 2010 <http://www.deseagrant.org/news/camp-introduces-high-school-students-marine-science> .
- “A Grid of Wind Turbines to Pick Up the Slack”, Henry Fountain, New York Times, 12 April 2010 [http://www.nytimes.com/2010/04/13/science/13obwind.html?\\_r=1&pagewanted=print](http://www.nytimes.com/2010/04/13/science/13obwind.html?_r=1&pagewanted=print)
- “Proposed Grid Could Make Offshore Wind Power More Reliable”, Science Daily, 6 April, 2010 <http://www.sciencedaily.com/releases/2010/04/100405152547.htm>
- “Proposed grid to make offshore wind power more reliable”, UDaily, 5 April 2010 <http://www.udel.edu/udaily/2010/apr/pnaswind040510.html> .
- “Summer TIDE – Kids take an interest in estuary”, Southern Delaware, spring 2010, p 41-42. [http://www.udel.edu/ocm/publications/SDG\\_2010.pdf](http://www.udel.edu/ocm/publications/SDG_2010.pdf) , pp.41-42.
- “A slow start to the spring melt season”, National Snow and Ice Data Center, Arctic Sea Ice News and Analysis, 4 May 2009 <http://nsidc.org/arcticseaicenews/2009/050409.html>
- “New summer program to introduce high schoolers to Delaware Bay”, UDaily, 30 May 2008 <http://www.udel.edu/PR/UDaily/2008/may/tide053008.html>