

CV: Sara C. Pryor

Provost Professor of Atmospheric Science

Atmospheric Science Program, Dept of Geography, and Center for Research in Environmental Science

College of Arts and Sciences, Indiana University, Bloomington, IN 47405, USA

Fax: 1-812-855-1661. Tel: 1-812-855-5155. e-mail: spryor@indiana.edu

Also Adjunct Professor, School of Public and Environmental Affairs and the Anthropological Center for Training and Research on Global Environmental Change both at Indiana University

Also Senior Scientist, Wind Energy and Atmospheric Physics, Risø National Laboratory, Denmark

EDUCATION

<i>Date degree conferred</i>	<i>Degree conferred</i>	<i>Location/Thesis</i>
1992 (dissertation accepted) 1993 (degree ceremony)	Ph. D.	School of Environmental Sciences, University of East Anglia, U.K. Thesis: <i>Sub-synoptic scale influences on air quality in the southwestern United States of America.</i>
1989	B.Sc. (Hons) First class	School of Environmental Sciences, University of East Anglia, U.K. Thesis: <i>The Sahel drought and sea-surface temperatures - the search for teleconnections.</i>

PROFESSIONAL EXPERIENCE

<i>Dates</i>	<i>Position</i>
2005 on	Professor , Atmospheric Science Program, Department of Geography, Indiana University, Bloomington, IN
2009-2011	Visiting Distinguished Professor , Atmospheric Environment Institute, University of Aarhus, Denmark
1999 on	Visiting Senior Scientist , Department of Wind Energy and Atmospheric Physics, Risø National Laboratory, Dk 4000 Roskilde, Denmark
1999-05	Associate Professor , Atmospheric Science Program, Department of Geography, Indiana University, Bloomington, IN
1995-99	Assistant Professor , Atmospheric Science Program, Department of Geography, Indiana University, Bloomington, IN
1993-95	Post-Doctoral Research Fellow , Atmospheric Science Programme, Dept. of Geography, University of British Columbia, Vancouver, B.C., Canada
1992-94	Adjunct Research Meteorologist , Energy and Environmental Engineering Center, Desert Research Institute, Reno, NV
1989-92	Ph.D. student , University of East Anglia, U.K.
1990-92	Research Associate , Energy and Environmental Engineering Center, Desert Research Institute, University of Nevada, Reno, NV
1988	Research Associate , School of Environmental Sciences and Climatic Research Unit, University of East Anglia, U.K.

RESEARCH INTERESTS

- Physical climatology/climate change and variability: Climate downscaling. Regional manifestations of climate change and variability. Climate impacts on the energy and agricultural sectors.
- Atmospheric chemistry and biogeochemical cycling: Atmosphere-surface exchange of reactive gases and particles. Particle formation, dynamics and deposition processes. Numerical modeling.

AWARDS AND HONORS: Sara C. Pryor

Awards/honors

Year	Description
2010	Provost Professor. Distinguished rank bestowed in 2010 by Indiana University
2009-2010	Fellow of the Academic Leadership Program (ALP) sponsored by the Committee on Institutional Cooperation (CIC). <i>ALP offers professional development opportunities for those who may wish to pursue administrative careers or other positions of academic leadership. The CIC is a consortium of the Big Ten (public) Universities.</i>
2009-2010	Contributing author to IPCC report: Special Report on Renewable Energy Sources and Climate Change Mitigation (SRREN) (Chapter 'Wind Energy')
2010-2012	Editor: Journal of Geophysical Research – Atmospheres
2009	Associate Editor: Journal of Geophysical Research – Atmospheres
2008	Indiana University Presidents Award in recognition of outstanding teaching, research and service: Presented at Founders Day celebration. March 2008.
2007-2009	Founder and Chair of the Midwestern Assessment Group for Investigations of Climate (MAGIC). A consortium of scientists from 10 Universities across the Midwest.
2003	Indiana University: Teaching Excellence Recognition Award: Teaching during 2002
1999	Indiana University: Teaching Excellence Recognition Award: Teaching during 1998
1998	Russian Aerosol Society Award: Best paper at the 4 th International Aerosol Symposium. †
1998	Indiana University: Teaching Excellence Recognition Award: Teaching during 1997

† The Albert Mirlesse award (\$500) is offered at the International Aerosol Symposium held every second year and sponsored by the Russian Physical Society, American Physical Society, Russian Aerosol Society, American Association for Aerosol Research, US Army, Aerosol Technology Ltd and TSI Inc. IAS-4 included over 200 presentations from scientists from Russia, Ukraine, Belorussia, USA, Germany, UK, Denmark, Italy, Spain, France, Poland, Israel, Korea, Japan, Austria, Australia, Turkey, Yugoslavia, Rumania, Mexico, India, Azerbaijan, Greece and Canada. The award procedure is as follows:

- At the end of each technical session the chair and audience select the best presentation.
- During a plenary session at the end of each day the session chair summarizes each session and the best session presentation is given by the author.
- The best two presentations from each day are then selected by the session chairs in secret ballot. On the final conference day the best papers from each day are presented again and ranked by the conference committee. The first prize winning presentation is awarded the Albert Mirlesse award.

Plenary presentations

Year	Description
2008	The impact of climate change on wind energy resources. Invited plenary presentation at the World Renewable Energy Congress-X, Glasgow, Scotland. July 2008
2008	Regional manifestations of climate change. Distinguished faculty lecture, University of Buffalo, SUNY. February 2008.
2005	Keynote speaker (Particle fluxes to forests) at the ACCENT: BIAFLUX flux workshop, Denmark. April 2005.
2002	Keynote speaker (Particles and visibility) at 16 th International Clean Air and Environment Conference, Christchurch, NZ. August 2002.

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

<i>Date</i>	<i>P.I.</i>	<i>Title</i>	<i>Agency</i>	<i>Amount</i>
2010-2014	Pryor, Barthelmie, Schoof	Climate change impacts on regional wind climates	National Science Foundation	\$290,000 (to IU)
2008-2010	Barthelmie & Pryor	Wake measurements with lidars	BP Alternative Energy	\$26,000
2008-2010	Barthelmie & Pryor	Quantifying wind farm power losses due to wind turbine wakes	National Science Foundation: Engineering	\$90,000
2008-2010	Pryor & Hopke	Supplemental award to grant NSF ATM 0544745 for enhancement of field experiment	National Science Foundation, Atmospheric Chemistry	\$95,000
2007-2010	Schoof & Pryor	Collaborative research: Development of 21 st century precipitation scenarios using probabilistic downscaling techniques	National Science Foundation, Geography & Regional Science	\$68,000 (IU total, additional funds to SIU)
2007-2010	Snorrason et al.	Climate and Energy Systems: Risks, potential, adaptation.	Nordic Energy Research.	10 million NOK (3 years).
2006-2010	Pryor, Barthelmie & Takle	Collaborative research: Development and evaluation of downscaling techniques for near-surface wind climates	National Science Foundation, Geography & Regional Science	\$144,720 (IU total, additional funds to ISU)
2007-2011	Kulmala et al. SP lead from Risø National Laboratory	EUCAARI: European Integrated project on Aerosol Cloud Climate and Air Quality interactions	European Union, Integrated Project	20 million EURO
2006-2010	Pryor, Barthelmie, Mauldin & Westberg	Particle nucleation events in the Ohio River Valley	National Science Foundation, Atmospheric Chemistry	\$499,720
2004-2005	Schwab (SP named as collaborator)	Ambient gaseous ammonia: Evaluation of continuous measurement methods suitable for routine deployment	New York State Energy Research and Development Authority	\$100,000 (<i>approx. \$10,000 to SP for participation in instrument inter-comparison</i>)
2004-2005	Pryor	Modeling a PM climatology for the Fraser Valley.	Environment Canada and the Clean Air Research Fund of the Fraser Valley.	\$85,000
2003-2007	Pryor, Barthelmie & Binkowski	Improved models of particle dry deposition.	National Science Foundation, Atmospheric Chemistry Division.	\$325,000
2002-2007	Kulmala. SP named participant	Center for Excellence in Particle Research: BACCI: Biosphere-Aerosol-Cloud-Climate Interactions.	Nordic Research Councils	DKK 20,000,000

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2002-2003	Pryor	Modeling of PM in the Columbia Gorge.	US EPA via Oregon Department of Environmental Quality	\$25,000
2002-2003	Frandsen, Højstrup, Larsen, Barthelmie & Pryor	Identification of optimal distances between large wind farms at sea - prestudy.	Danish Energy Ministry	DKK 1,586,000
2001-2003	Barthelmie, Sørensen, Pryor & Bilde	Motor vehicle nitrogen emissions and their impact on coastal waters	Denmarks National Research Council	DKK 380,000
2001-2004	McRobbie et al. One of 17 named senior investigators	Creation of the AVIDD data facility: A distributed facility for managing, analyzing and visualizing instrument-driven data	Major Research Instrumentation, National Science Foundation	\$2,000,000
2001-2002	Pryor	Ammonia measurements during Pacific'2001	Fraser Valley Air Quality Commission and Environment Canada	\$55,000
2000-2001	Bottenheim, Makar, Boundries, Thomson, Belzer, McLaren, Pryor & Barthelmie	Canopy modeling of biogenic hydrocarbons	Environment Canada	\$90,000 (IU sub-contract \$34,000)
1999-2002	Jickells et al. Named participant	Marine Effects of Atmospheric Deposition (MEAD)	European Union: 5 th Framework	ECU 1,400,000
1999-2003	Pryor & Barthelmie	Acquisition and development of instrumentation to quantify atmospheric deposition pathways	Major Research Instrumentation, National Science Foundation	\$260,000 (incl. IU match)
1999-2003	Pryor, Barthelmie & Carreiro	Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest	National Institute for Global Environmental Change, Midwestern Regional Center	\$136,000 (yr1) \$128,000 (yr2) \$140,000 (yr3)
1998-1999	Pryor & Barthelmie	Modelling NHx deposition to different surface types	Environment Canada	\$40,000
1998-2003	Barthelmie & Pryor	Understanding the role of vehicle emissions in the formation of secondary organic aerosols	Ford Europe	\$40,000
1998	Geernaert & Pryor	Aerosol measurements and interpretation of aerosol data	Danish Research Council	DKK 100,000
1997-2001	Barthelmie & Pryor	Parameterizing the chemistry of atmospheric aerosols	National Science Foundation, Atmospheric Chemistry Division	\$258,000
1997-	Pryor &	REVEAL II: Characterizing	Fraser Valley	\$37,500

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

1998	Barthelmie	aerosols in the Fraser Valley Part II	Regional District of British Columbia	
1997-1998	Pryor & Barthelmie	Aerosol dynamics in the ISOPART model	Environment Canada	\$82,500
1997	Pryor	Participation in EUROTRAC field campaign - Aerosols in the marine atmosphere	American-Scandinavian Foundation	\$3,000
1996-1999	Grimmond, Schmid, Barthelmie & Pryor	Measurements of fluxes and concentrations of CO ₂ in and over a deciduous forest in the Midwest.	National Institute for Global Environmental Change, Midwestern Regional Center	\$340,000 (yr1) \$315,000 (yr2) \$280,000 (yr3)
1996-1997	Barthelmie & Pryor	Extension of the ACDEP model	Environment Canada	\$50,000
1995-1996	Pryor & Barthelmie	Application of an aerosol model to the Lower Fraser Valley	Environment Canada	\$40,000
1995-1996	Pryor & Barthelmie	Analysis of aerosol and visibility data from REVEAL II	Fraser-Cheam Regional District of British Columbia	\$30,000
1994-1995	Pryor & Steyn	Application of analytical techniques for source apportionment and related visibility impacts of the REVEAL fine particulate, optical and scene data	B.C. Ministry of Environment, Lands and Parks	\$40,000
1993-1994	Pryor & Steyn	Review of visibility related data collected during Pacific 93/REVEAL field measurement program	B.C. Ministry of Environment, Lands and Parks	\$7,500
1993	Steyn & Pryor	PACIFIC 93: Lower Fraser Valley Intensive Field Study - Visibility component	B.C. Ministry of Environment, Lands and Parks	\$40,000

OTHER FINANCIAL SUPPORT: Sara C. Pryor

Internal (Indiana University) research grants				
Date	P.I.	Title	Source	Amount
2010-2011	Pryor	Funding for a workshop on: Climate change impacts, vulnerability and adaptation in the Midwest	Center for Research in Environmental Science, Indiana University	\$15,800
2007-2009	Pryor	Climate change research in the Midwestern USA (workshop & book)	Indiana University, College of Arts and Sciences	\$15,000
1997	Pryor	Atmospheric particles in the marine atmosphere	Grant-In-Aid of Research, Indiana University	\$2,500
1996	Pryor	Continuing existing and forging new research collaboration with scientists in Scandinavia	International Projects and Activities Grant Indiana University	\$1,500
1996	Pryor	College of Arts and Sciences Summer Faculty Fellowship	College of Arts and Sciences, Indiana University	\$5,500
Internal (Indiana University) other funding				
Date	P.I.	Title	Source	Amount
2010	Barthelmie, Pryor, Rupp, Mastalerz	The grand energy challenge	Indiana University, OVPR	\$4,500
2010	Pryor & Glomm	Funding for a lecture series 'Climate Change: Scientific basis, adaptation options and mitigation strategies'	Indiana University, College of Arts and Sciences	\$7,000
2010	Barthelmie, Pryor, Rupp, Mastalerz	Funding for a lecture series 'The grand energy challenge'	Indiana University, College of Arts and Sciences	\$7,000
2010	Pryor & Barthelmie	Patten lecture nominee: Professor Jean Palutikof	Patten lecture foundation, Indiana University	\$15,000

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External research/travel grants			
<i>Date</i>	<i>Title/purpose</i>	<i>Agency</i>	<i>Amount</i>
2010	Special services contract. Topic: Climate change – extremes and critical energy infrastructure	International Atomic Energy Authority	5,000 Euro
2009	Invited presenter and panelist: AWEA workshop on wind resource estimation, Orlando, Florida	American Wind Energy Association	\$500
2009-2010	Visiting Distinguished Professorship, University of Aarhus, Denmark	University of Aarhus, Denmark	300,000 DK
2009	Invited presenter: Femern Sund-Bælt: workshop on climate scenarios. Ringsted, Denmark	Femern Sund-Bælt A/S	4,500 Euro
2008	Invited presenter and panelist: AWEA workshop on wind characterization, Portland Oregon	American Wind Energy Association	\$800
2008	Invited presenter ‘Growing the Bioeconomy’, Ames, Iowa	NOAA and Iowa State University	\$600
2008	Invited participant in Workshop on Wind Resource Characterization: Research needs for wind energy, Denver, Colorado	Department of Energy: Office of Science	\$500
2007	Travel stipendium to present at the Workshop on application of climate scenarios in local Arctic climate impact assessment	Arctic Monitoring and Assessment Programme, Norwegian Meteorological Office	\$1,500
2006	Travel stipendium to present research to Arctic weather extremes workshop, Bergen, Norway	Norwegian Meteorological Office	\$1,000
2005	Travel stipendium to present overview of particle fluxes at ACCENT BIAFLUX workshop, Denmark.	EU-ACCENT project	\$1,300
2004	Travel stipendium to attend ONR sponsored workshop: Towards a universal sea spray source function. University of Leeds.	Office of Naval Research	\$250
2003	Personal service contract. Team-leader at "NCAR Biogeosciences workshop: Development of a science plan for integrated studies of coupled biosphere-atmosphere carbon and nitrogen cycles". NCAR Boulder, CO, November.	NCAR.	\$1,000
2001-2002	Visiting senior research scholar.	University of Bayreuth, Germany.	\$10,000
2001	Personal service contract. Attendance at "Columbia River Gorge Visibility impairment" planning meeting. Oregon, March.	Oregon Department of Environmental Quality.	\$1,000
1999	Personal service contract. Attendance at “Pacific 2001” planning meeting. Toronto. December.	Environment Canada.	\$1,500
1999	Funding for "Workshop on Nitrogen deposition to and cycling in forest ecosystems and linkages to carbon sequestration." October.	National Institute for Global Environmental Change, Midwestern Regional Center.	\$3,000
1998	Support for attendance at the European Aerosol	Overseas conference	\$650

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1998	Conference, Prague, Czech Republic. Personal service contract. Attendance at “Atmospheric ammonia” working group meeting. Environment Canada, Edmonton. May.	fund. Indiana University Environment Canada	\$1,500
1996	Personal service contract. Attendance at “Aerosol modelling in Canada. Meeting to derive modelling strategies and priorities.” Environment Canada, Toronto. June.	Environment Canada	\$650
1994-1995	Author of the Environmental Levels chapter for the Environment Canada Particulate matter <10µm Review Document.	Environment Canada.	\$4,000
1989-1992	Ph.D. Studentship.	Natural Environment Research Council of Great Britain.	

Published (92 in total 1992-2010)

- Pryor S.C., Spaulding A.M., Barthelmie R.J. (2010): New particle formation in the Midwestern USA: Event characteristics, meteorological context and vertical profiles. *Atmospheric Environment* **44** 4413-4425.
- Barthelmie R.J., Pryor S.C., Frandsen S.T., Schepers K.S., Rados K., Schlez W., Neubert A., Jensen L.E., Neckelmann S. (2010): Quantifying the impact of wind turbine wakes on power output at offshore wind farms. *Journal of Atmospheric and Oceanic Technology* **27** 1302-1317.
- Schoof J.T., Pryor S.C., Suprenant J. (2010): Development of daily precipitation projections for the United States based on probabilistic downscaling. *Journal of Geophysical Research* **115** D13106 doi:10.1029/2009JD013030.
- Pryor S.C. and Schoof J.T. (2010): Importance of the SRES in projections of climate change impacts on near-surface wind regimes *Meteorologische Zeitschrift* **19** 267-274 (*Special issue from 2nd International RCM conference, Lund*).
- Pryor S.C. and Ledolter J. (2010): Addendum to: Wind speed trends over the contiguous USA. *Journal of Geophysical Research* **115** D10103 doi:10.1029/2009JD013281.
- Barthelmie R.J., Sempreviva A.M., Pryor S.C. (2010): The influence of humidity fluxes on offshore wind speed profiles. *Annals Geophysicae* **28** 1043-1062.
- Pryor S.C. and Barthelmie R.J. (2010) Climate change impacts on wind energy: A review. *Renewable and Sustainable Energy Reviews* **14** 430-437.
- Hensen A., Nemitz E., Flynn M., Blatter A., Jones S., Sørensen L.L., Hensen B., Pryor S.C., Jensen B., Otjes R.P., Cobussen J., Loubet B., Erismann J.W., Gallagher M.W., Neftel A., and Sutton M.A. (2009): Inter-comparison of ammonia fluxes obtained using the Relaxed Eddy Accumulation technique. *Biogeosciences* **6** 2575-2588.
- Fowler D., Pilegaard K., Sutton M.A., Ambus P., Raivonen M., Duyzer J., Simpson D., Fagerli H., Fuzzi S., Schjoerring J.K., Granier C., Neftel A., Isaksen I.S.A., Laj P., Maione M., Monks P.S., Burkhardt J., Daemmgen U., Neirynck J., Personne E., Wichink-Kruit R., Butterbach-Bahl K., Flechard C., Tuovinen J.P., Coyle M., Gerosa G., Loubet B., Altimir N., Gruenhage L., Ammann C., Cieslik S., Paoletti E., Mikkelsen T.N., Ro-Poulsen H., Cellier P., Cape J.N., Horváth L., Loreto F., Niinemets Ü., Palmer P. I., Rinne, P. Misztal, Nemitz E., Nilsson D., Pryor S., Gallagher M.W., Vesala T., Skiba U., Brüeggemann N., Zechmeister-Boltenstern S., Williams J., O'Dowd C., Facchini M. C., de Leeuw G., Flossman A., Chaumerliac N., Erismann J.W. (2009): Atmospheric Composition Change: Ecosystems - Atmosphere interactions. *Atmospheric Environment* **43** 5193-5267.
- Pryor S.C., Barthelmie R.J., Spaulding A.M., Larsen S.E., Petroff A. (2009): Size-resolved aerosol particle fluxes over forests. *Journal of Geophysical Research – Atmospheres* **114** D18212 doi:10.1029/2009JD012248.
- *Pryor S.C., Barthelmie R.J., Young D.T., Takle E.S., Arritt R.W., Flory D., Gutowski Jr W.J., Nunes A., Road J. (2009): Wind speed trends over the contiguous USA. *Journal of Geophysical Research – Atmospheres* **114** D14105 doi:10.1029/2008JD011416.
- *This article has been featured in numerous articles in the popular press including an article in Scientific American: Moyer M. (2009): The way the wind blows, Scientific American October, 27-28.**
- Petroff A., Zhang L., Pryor S.C. and Belot Y. (2009): Modeling aerosol dry deposition on leaf canopies. *Journal of Aerosol Science* **40** 218-240.
- Pryor S.C., Howe J.A. and Kunkel K.E. (2009): How spatially coherent and statistically robust are temporal changes in extreme precipitation across the contiguous USA. *International Journal of Climatology* **29** 31-45.
- Sempreviva A.M., Barthelmie R.J., and Pryor S.C. (2008): Offshore wind resource assessment. *Surveys in Geophysics* **29** 471-497.
- Pryor S.C. and Schoof J.T. (2008): Changes in the seasonality of precipitation over the contiguous USA. *Journal of Geophysical Research* **113**, D21108, doi:10.1029/2008JD010251.
- Schoof J.T. and Pryor S.C. (2008): On the proper order of Markov chain model for daily precipitation

- occurrence in the contiguous United States. *Journal of Applied Meteorology and Climatology* **47**, 2477-2486.
- Pryor S.C., Barthelmie R.J., Larsen S.E., Sørensen L.L., Sempreviva A.M., Grönholm T., Kulmala M., Rannik Ü. and Vesala T. (2008): Upward particle number fluxes over forest: Where, when, why? *Tellus* **60B** 372-380.
- Kulmala M., Kerminen V.-M., Laaksonen A., Riipinen I., Sipilä M., Ruuskanen T.M., Sogacheva L., Hari P., Bäck J., Lehtinen K.E.J., Viisanen Y., Bilde M., Svenningsson B., Lazaridis M., Torseth K., Tunved P., Nilsson E.D., Pryor S.C., Sørensen L.L., Hörrak U., Winkler P.M., Swietlicki E., Riekkola, M., Krejci R., Hoyle C., Hov Ø. and Myhre G. Hansson H.C. (2008): Studies on Biosphere-Aerosol-Cloud-Climate Interactions within BACCI *Tellus* **60B** 300-317.
- Pryor S.C., Larsen S.E., Sørensen L.L. and Barthelmie R.J. (2008): Particle fluxes above forests: Observations, methodological considerations and method comparisons. *Environmental Pollution (special issue)* **152/3** 667-678 (doi: 10.1016/j.envpol.2007.06.068).
- Barthelmie R.J., Murray F. and Pryor S.C. (2008): The economic benefit of short-term forecasting for wind energy in the UK electricity market. *Energy Policy* **36** 1687-1696.
- Pryor S.C., Gallagher M., Sievering H., Larsen S., Barthelmie R.J., Birsan F., Nemitz E., Kulmala M., Rinne J., Grönholm T., Taipale R. and Vesala T. (2008): A review of measurement and modelling tools for quantifying particle atmosphere-surface exchange. *Tellus* **60B** 42-75.
- Pryor S.C., Barthelmie R.J., Schoof J.T., Binkowski F.S., Delle Monache L., Stull R. (2008): Modeling the impact of sea-spray on particle concentrations in a coastal city. *Science of the Total Environment*. **391** 132-142. (doi:10.1016/j.scitotenv.2007.10.059).
- Barthelmie R.J., Badger J., Pryor S.C., Hasager C.B., Christiansen M.B. and Joergensen B.H. (2007): Offshore coastal wind speed gradients: Issues for the design and development of large offshore wind farms. *Wind Engineering* **31** 369-382.
- Schwab J.J., Li Y., Bae M.S., Demerjian K.L., Hou J., Zhou X., Jensen B., Pryor S.C. (2007): A laboratory intercomparison of real-time gaseous ammonia measurement methods. *Environmental Science and Technology* **41** 8412-8419.
- Barthelmie R.J., Frandsen S.T., Nielsen N.M., Pryor S.C., Rethore P.E. and Jørgensen H.E. (2007): Modelling and measurements of power losses and turbulence intensity in wind turbine wakes at Middelgrunden offshore wind farm. *Wind Energy* **10** 517-528.
- Pryor S.C., Larsen S.E., Sørensen L.L., Barthelmie R.J., Grönholm T., Kulmala M., Launiainen S., Rannik Ü. and Vesala T. (2007): Particle fluxes over forests: Analyses of flux methods and functional dependencies. *Journal of Geophysical Research – Atmospheres* **112** D07205 doi:10.1029/2006JD008066.
- Schoof J.T., Pryor S.C. and Robeson S.M. (2007): Downscaling daily maximum and minimum temperature in the Midwestern USA: A hybrid empirical approach. *International Journal of Climatology* **27** 439-454.
- Pryor S.C., Spaulding A.M. and Rauwolf, H.M. (2007): Evolution of the concentration of inorganic ions during the initial stages of precipitation events. *Water, Air and Soil Pollution* **180** 3-10.
- Barthelmie R.J. and Pryor S.C. (2006): Challenges in predicting power output from offshore wind farms. *Journal of Energy Engineering (special issue on sustainable energy systems)* **132** 91-103 (invited).
- Pryor S.C. (2006): Size resolved particle deposition velocities of sub-100 nm diameter particles over a forest. *Atmospheric Environment* **40** 6192-6200.
- Barthelmie R.J., Folkerts L., Rados K., Larsen G., Pryor S.C., Frandsen S., Lange B., Schepers G., and Ormel F. (2006): Comparison of wake model simulations with offshore wind turbine wake profiles measured by sodar. *Journal of Atmospheric and Oceanic Technology* **23** 888-901.
- Pryor S.C., Schoof J.T., Barthelmie R.J. (2006): Winds of Change? Projections of near-surface winds under climate change scenarios. *Geophysical Research Letters* **33** L11702 doi:10.1029/2006GL026000.
- Kvale K. and Pryor S.C. (2006): Precipitation composition in the Ohio River Valley: Spatial variability

- and temporal trends. *Water, Air and Soil Pollution* **170** 143-160.
- Spokes L., Jickells T., Weston K., Gustafsson B., Johnsson B., Lijebldh B., Geernaert G., Hertel O., Jensen B., Lundsgaard C., Markager S., Martinsen W., Moller B., Pedersen B., Sauerberg K., Sørensen L., Hasager C., Sempreviva A., Pryor S.C., Lund S., Larsen S., Tjernstrom M., Svensson G. Zagar M. (2006): MEAD – An interdisciplinary study of the marine effects of atmospheric deposition in the Kattegat. *Environmental Pollution* **140** 453-462.
- Pryor S.C., Barthelmie R.J. and Schoof J.T. (2006): Inter-annual variability of wind indices over Europe. *Wind Energy* **9** 27-38.
- Hasager C.B., Barthelmie R.J., Christiansen M.B., Nielsen M. and Pryor S.C. (2006): Quantifying offshore wind resources from satellite wind maps: Study area the North Sea. *Wind Energy* **9** 63-74.
- Frandsen S.T., Barthelmie R.J., Pryor S.C., Rathmann O., Larsen S. and Højstrup J. (2006): Analytical modelling of wind speed deficits in large offshore wind farms. *Wind Energy* **9** 39-53.
- Schoof J.T. and Pryor S.C. (2006): An evaluation of two GCMs: Simulation of North American teleconnection indices and synoptic phenomena. *International Journal of Climatology* **26**, 267-282.
- Pryor S.C., Schoof J.T. and Barthelmie R.J. (2005): Potential climate change impacts on wind speeds and wind energy density in northern Europe: Results from empirical downscaling of multiple AOGCMs. *Climate Research* **29** 183-198.
- Pryor S.C., Schoof J.T. and Barthelmie R.J. (2005): Empirical downscaling of wind speed probability distributions. *Journal of Geophysical Research – Atmosphere* **110** D19109 doi: 10.1029/2005JD005899.
- Pryor S.C., Barthelmie R.J. and Kjellström E. (2005): Analyses of the potential climate change impact on wind energy resources in northern Europe using output from a Regional Climate Model. *Climate Dynamics* **25** 815 – 835.
- Sørensen L.L., Pryor S.C., de Leeuw G. and Schulz M. (2005): Flux divergence of nitric acid in the marine atmospheric surface layer. *Journal of Geophysical Research-Atmosphere* **110** D15 doi: 10.1029/2004JD005403.
- Pryor S.C. and Barthelmie R.J. (2005): Liquid and chemical fluxes in precipitation, throughfall and stemflow: Observations from a deciduous forest in the midwestern USA. *Water, Air and Soil Pollution* **163** 203-227.
- Pryor S.C., Barthelmie R.J. and Schoof J.T. (2005): The impact of non-stationarities in the climate system on the definition of ‘a normal wind year’: A case study from the Baltic. *International Journal of Climatology* **25** 735-752.
- Hasager C.B., Nielsen M., Astrup P., Barthelmie R., Dellwik E., Jensen N.O., Jorgensen B., Pryor S.C., Rathmann O. and Furevik B. (2005): Offshore wind resource assessed from satellite SAR wind field maps. *Wind Energy* **8** 403-419.
- Barthelmie R.J., Hansen O., Enevoldsen K., Højstrup J., Frandsen S., Pryor S.C., Larsen S., Motta M., and Sanderhoff P. (2005): Ten years of meteorological measurements for offshore wind farms. *Journal of Solar Energy Engineering* **127** 170-176.
- Foltescu V.L., Pryor S.C. and Bennet C. (2005): Sea salt generation, dispersion and removal on the continental scale. *Atmospheric Environment* **39** 2123-2133.
- Pryor S.C., Barthelmie R.J., Prip H. and Sørensen L.L. (2005): Observations of ultra-fine particles above a deciduous forest. *Geophysical Research Letters* **32** L06804 doi: 10.1029/2004GL022261.
- Pryor S.C. and Binkowski F.S. (2004): An analysis of the time scales associated with aerosol processes during dry deposition. *Aerosol Science and Technology* **38** 1091-1098.
- Polderman N.J. and Pryor S.C. (2004): Linking synoptic-scale climate phenomena to lake-level variability in the Lake Michigan-Huron Basin. *Journal of Great Lakes Research* **30** 419-434.
- Pryor S.C., Anlauf K., Boudries H., Hayden K., Schiller C. and Wiebe A. (2004): Spatial and temporal variability of high resolution reduced nitrogen concentrations in the Fraser Valley. *Atmospheric Environment* **38** 5825-5836.

- Boudries H., Canagaratna M., Jayne J., Alfarra R., Allan J., Bower, K., Coe H., Pryor S.C., Jimenez J., Brook J., Li S. and Worsnop D. (2004): Chemical and physical processes controlling the distribution of aerosols in the Lower Fraser Valley, Canada during the PACIFIC 2001 field campaign. *Atmospheric Environment* **38** 5759-5774.
- Barthelmie R., Larsen G., Pryor S., Jørgensen H., Bergström H., Schlez W., Rados K., Lange B., Necklemann S., Schepers G., Hegberg T., Folkerts L., and Magnusson M. (2004): ENDOW (Efficient Development of Offshore Windfarms): modelling wake and boundary-layer interactions. *Wind Energy* **7** 225-245.
- Pryor S.C., Nielsen, N.M., Barthelmie R.J. and Mann J. (2004): Can satellite sampling of offshore wind speeds realistically represent wind speed distributions? Part II Quantifying uncertainties associated with sampling strategy and distribution fitting methods. *Journal of Applied Meteorology* **43** 739-750.
- Pryor S.C. and Klemm O. (2004): Experimentally derived estimates of nitric acid dry deposition velocity and quasi-laminar boundary layer resistance at a conifer forest. *Atmospheric Environment* **38** 2769-2777.
- Schoof J.T. and Pryor S.C. (2003): Evaluation of the NCEP/NCAR reanalysis in terms of synoptic scale phenomena: A case study from the Midwestern USA. *International Journal of Climatology* **23** 1725-1741.
- Pryor S.C. and Barthelmie R.J. (2003): Long term variability of flow over the Baltic. *International Journal of Climatology* **23** 271-289.
- Barthelmie R.J. and Pryor S.C. (2003): Can satellite sampling of offshore wind speeds realistically represent wind speed distributions? *Journal of Applied Meteorology* **42** 83-94.
- Pryor S.C., Barthelmie R.J., Jensen B., Jensen N.O. and Sørensen L.L. (2002): HNO₃ fluxes to a deciduous forest derived using gradient and REA methods. *Atmospheric Environment* **36** 5993-5999.
- Pryor S.C. and Sørensen L.L. (2002): Dry deposition of reactive nitrogen to marine environments: Recent advances and remaining uncertainties. *Marine Pollution Bulletin* **44** 1177-1181.
- Pryor S.C. and Barthelmie R.J. (2002): Comparison of potential power production at on- and off- shore sites. *Wind Energy* **2001** 173-181.
- Pryor S.C. and Barthelmie R.J. (2002): Statistical analysis of flow in the coastal zone. *Journal of Wind Engineering and Industrial Aerodynamics* **90** 201-221.
- Barthelmie R.J. and Pryor S.C. (2002): A review of the economics of offshore wind farms. *Wind Engineering* **25** 203-213.
- Pryor S.C., Barthelmie R.J., Carreiro M., Davis M., Hartley A., Jensen B., Oliphant A., Randolph J., Schoof J. (2001): Nitrogen deposition to and cycling in a deciduous forest. *TheScientificWorld* **1(S2)** 245-254.
- Pryor S.C., Barthelmie R.J. Schoof J.T., Sørensen L.L. and Erickson D.J. (2001): Implications of heterogeneous chemistry of nitric acid for nitrogen deposition to marine ecosystems: Observations and modeling. *Journal of Water, Air and Soil Pollution: Focus* **1** 99-107.
- Pryor S.C., Barthelmie R.J., Sørensen L. and Jensen B. (2001): Ammonia concentrations and fluxes over a forest in the Midwestern USA. *Atmospheric Environment* **35** 5645-5656.
- Schoof J.T. and Pryor S.C. (2001): Downscaling of temperature and precipitation: A comparison of regression based methods and artificial neural networks. *International Journal of Climatology* **21** 773-790.
- Hertel O., De Leeuw, F., Raaschou-Nielsen O., Jensen S., Gee D., Herbarth O., Pryor S., Palmgren F. and Olsen E. (2001): Human exposure to outdoor air pollution. *Journal of Pure and Applied Chemistry* **73** 933-958.
- Pryor S.C. and Barthelmie R.J. (2000): Particle dry deposition to water surfaces: Processes and consequences. *Marine Pollution Bulletin* **41** 220-231.
- Pottier J.L., Deuel H.P. and Pryor S.C. (2000): Application of the UAM-V and use of indicator species to assess control strategies for ozone reduction in the Lower Fraser Valley of British Columbia.

- Environmental Monitoring and Assessment* **65** 459-467.
- Pryor S.C. and Barthelmie R.J. (2000): REVEAL II: Seasonality and spatial variability of particle and visibility conditions in the Fraser Valley. *The Science of the Total Environment* **257** 95-110.
- Pryor S.C. and Sørensen L.L. (2000): Nitric acid – sea salt reactions: Implications for nitrogen deposition to water surfaces. *Journal of Applied Meteorology* **39** 725-731.
- Barthelmie R.J. and Pryor S.C. (1999): A model mechanism to describe oxidation of monoterpenes leading to secondary organic aerosols -1. α -pinene and β -pinene. *Journal of Geophysical Research-Atmosphere* **104** 23657-23671.
- Pryor S.C., Barthelmie R.J. and Jensen B. (1999): Nitrogen dry deposition at an AmeriFlux site in a hardwood forest in the MidWest. *Geophysical Research Letters* **26** 691-694.
- Pryor S.C., Barthelmie R.J., Geernaert L.L.S., Ellermann T. and Perry K. (1999): Speciated particle dry deposition to the sea surface: Results from ASEPS '97. *Atmospheric Environment* **33** 2045-2058.
- Pryor S.C. and Barthelmie R.J. (1998): Analysis of the effect of the coastal discontinuity on near-surface flow. *Annales Geophysicae* **16** 882-888.
- Barthelmie R.J., and Pryor S.C. (1998): Implications of ammonia emissions for fine aerosol formation and visibility impairment - A case study from the Lower Fraser Valley, British Columbia. *Atmospheric Environment* **32** 345-352.
- Pryor S.C. (1998): A case study of emission changes and ozone responses. *Atmospheric Environment* **32** 123-131.
- Pryor S.C. and Kurzthal T. (1998): A tornado climatology for Indiana. *Physical Geography* **18** 525-543.
- Barthelmie R.J., and Pryor S.C. (1997): Secondary organic aerosols: Formation potential and ambient data. *The Science of the Total Environment* **205** 167-178.
- Pryor S.C., Barthelmie R.J., Hoff R., Sakiyama S., Simpson R., and Steyn D. (1997): REVEAL: Characterizing fine aerosols in the Fraser Valley, B.C.. *Atmosphere-Ocean* **35** 209-227.
- Pottier J., Pryor S.C., and Banta R. (1997): Synoptic variability related to boundary layer and surface features observed during Pacific '93. *Atmospheric Environment* **31** 2163-2173.
- Pryor S. C., Simpson R., Guise-Bagley L., Hoff R., and Sakiyama S. (1997): Visibility and aerosol composition in the Fraser Valley during REVEAL. *Journal of the Air and Waste Management Association* **41** 147-156.
- Barthelmie R.J., Grisogono B., and Pryor S.C. (1996): Editors correction to Observations and simulations of near-surface diurnal cycles of wind speeds over land and sea. *Journal of Geophysical Research-Atmosphere* **101** 29605.
- Barthelmie R.J., Grisogono B., and Pryor S.C. (1996): Observations and simulations of near-surface diurnal cycles of wind speeds over land and sea. *Journal of Geophysical Research-Atmosphere* **101** 21327-21337.
- Pryor S. C. (1996): Assessing public perception of visibility for standard setting exercises. *Atmospheric Environment* **30** 2705-2716.
- Pryor S.C., and Barthelmie R. J. (1996): PM₁₀ in Canada. *Science of the Total Environment* **177** 57-71.
- Pryor S. C., Davies T. D., Hoffer T. E., and Richman M. B. (1995): The influence of synoptic scale meteorology on transport of urban air to remote locations in the southwestern United States of America. *Atmospheric Environment* **29A** 1609-1618.
- Pryor S. C., McKendry I. G., and Steyn D. G. (1995): Synoptic-scale meteorological variability and ozone concentrations in Vancouver, B.C. *Journal of Applied Meteorology* **34** 1824-1833.
- Pryor S. C., and Steyn D. G. (1995): Hebdomadal and diurnal cycles within ozone time series from the Lower Fraser Valley, B.C. *Atmospheric Environment* **29A** 1007-1019.
- Pryor S. C., Steyn D. G., and Rogak S. N. (1994): Source apportionment of visibility degrading aerosols in the Lower Fraser Valley, B.C. *Atmosphere-Ocean* **32** 663-683.
- Grisogono B., Pryor S. C., and Keislar R. E. (1993): Mountain wave drag over double bell-shaped orography (a scientific note). *Quarterly Journal of the Royal Meteorological Society* **119** 199-206.

REFEREED JOURNAL ARTICLES: Sara C. Pryor

Pryor S. C., and Hoffer T. E. (1992): A case study of pollutant transport from Los Angeles to the desert southwest. *Atmospheric Environment* **26A** 243-250.

Copies of recent publications are available from: <http://php.indiana.edu/~spryor>.

Books:

- Pryor S.C. (Ed) (2009): Understanding climate change: Climate variability, predictability and change in the Midwestern US. *A 24 chapter volume synthesizing the state-of-the-art regarding knowledge of historical and projected future changes to the physical climate.* Indiana University Press, Bloomington, Indiana, USA, 312pp. ISBN: 978-0-253-35344-3.
- Oliver J.E. (2009): Indiana's Weather and Climate. *SP is contributor to the book, and reviewed page proofs of the book after the untimely passing of John Oliver.* Indiana University Press, Bloomington, Indiana, USA, 192pp. ISBN-13: 978-0-253-22056-1.
-

Book chapters and monographs:

- Pryor S.C. and Barthelmie R.J. (2010): Assessing the vulnerability of wind energy to climate change and extreme events. Chapter in IAEA volume Extreme weather and the energy sector. 66 pp (in review).
- Barthelmie R.J. and Pryor S.C. (2010): Meteorology and wind resource assessment. Chapter 1 in Wind energy systems. Optimising design and construction for safe and reliable operation. Eds. J. Dalsgaard Sørensen, J. Nørkær Sørensen. Woodhead Publishing Limited, Cambridge, 37pp (in press).
- Pryor S.C. and Takle G.S. (2009): Climate variability, predictability and change: An introduction. Chapter 1 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p1-18. ISBN: 978-0-253-35344-3.
- Pan Z.T. and Pryor S.C. (2009): Overview: Hydrologic regimes Chapter 8 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p88-99. ISBN: 978-0-253-35344-3.
- Pryor S.C., Kunkel K.E. and Schoof J.T. (2009): Did precipitation regimes change during the twentieth century? Chapter 9 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p100-112. ISBN: 978-0-253-35344-3.
- Pryor S.C. and Barthelmie R.J. (2009): Historical trends in near-surface wind speeds. Chapter 15 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p169-183. ISBN: 978-0-253-35344-3.
- Schoof J.T. and Pryor S.C. (2009): Teleconnection and circulation patterns in the Midwestern United States. Chapter 17 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p196-206. ISBN: 978-0-253-35344-3.
- Takle G.S. and Pryor S.C. (2009): Where is climate science in the Midwest going? Chapter 23 in: Understanding climate change: Climate variability, predictability and change in the Midwestern US. Ed. S.C. Pryor, Indiana University Press, p265-276. ISBN: 978-0-253-35344-3.
- Pryor S.C. (2009): A tornado climatology of Indiana. Book section in Indiana's Weather and Climate John E. Oliver, Indiana University Press ISBN-13: 978-0-253-22056-1
- Pryor S.C. and Spaulding A.M. (2009): Air quality in Indiana. Book section in Indiana's Weather and Climate John E. Oliver, Indiana University Press ISBN-13: 978-0-253-22056-1
- Howe J.A. and Pryor S.C. (2009): Extreme precipitation. Book section in Indiana's Weather and Climate John E. Oliver, Indiana University Press ISBN-13: 978-0-253-22056-1
- Barthelmie R.J., Pryor S.C. and Frandsen S.T. (2009): Climatological and meteorological aspects of predicting offshore wind energy. Chapter 4 Offshore Wind Energy Ed. Twidell and Gaudiosi. Published by Multi-Science Publishing Co, Brentwood, UK. pp. 43-69. ISBN 978-0906522.
- Claussen N.E., Barthelmie R.J., Holttinen H., Laakso T., Lundsager P. and Pryor S.C. (2007): Wind power. Chapter 7 in 'Impacts of climate change on renewable energy sources: Their role in the Nordic energy system.' Ed. Jes Fenger. Published by the Nordic Council of Ministers, Copenhagen, Denmark, ISBN 978-92-893-1465-7 p105-128.
- Barthelmie R.J., Sempreviva A.M. and Pryor S.C. (2007): The influence of humidity fluxes on offshore

- wind speed profiles. <<http://ejournal.windeng.net/9/>> e-WindEng (005). pp. 01-11. ISSN 1901-9181.
- Sørensen L., Pryor S.C., Spokes L. and Sempreviva A. (2003): Air-sea fluxes of nitrogen compounds. CAPMAN: Coastal Air Pollution Meteorology and Air-Sea Nutrient Exchange. Final Report. International Scientific Secretariat, GSF – National Research Center for Environment and Health, Munchen. p111-123.
- Barthelmie R.J. and Pryor S.C. (2002): Modeling emissions and chemistry of monoterpenes for regional models. Atmospheric Modeling: IMA Volume 130 in Mathematics and Its Applications, Springer-Verlag, New York p309-332.
- Pearson B. and Pryor S.C. (2002): Re-evaluating latent ethanol production. Renewable Energy: Trends and Prospects edited by S.K. Majumdar, E.W. Miller and A.I. Panah. Pennsylvania Academy of Science. Chapter 21 p365-375.
- Hertel O., de Leeuw F., Schwartz S., Gee D., Raaschou-Nielsen O., Herbarth O., Pryor S.C., Jensen S., Palmgren F. and Olsen E. (2001): Human exposure to outdoor air pollution. Commission on Toxicology and Commission on Atmospheric Chemistry, International Union for Pure and Applied Chemistry.
- Pryor S.C. and Barthelmie R.J. (2000): Particle dry deposition to water surfaces: Processes and consequences. Chapter 121 in 'Seas at the Millennium' edited by C. Sheppard. Elsevier Science Volume III p197-209 (*invited contribution*).
- Barthelmie R.J., Bryden I., Coelingh J. and Pryor S.C. (2000): Energy from the oceans - Wind, wave and tidal. Chapter 129 in 'Seas at the Millennium' edited by C. Sheppard. Elsevier Science Volume III p 303-321.
-

2009

- Petaja T., Mauldin III R.L., McGrath J., Kosciuch E. and Pryor S. (2009): Sulfuric acid in a deciduous forest during NIFTy project. *Proceedings of the European Aerosol Conference*, 4pp.
- Pryor S., Barthelmie R.J., Clausen N.E., Nielsen N.M., Kjellström E. and Drew M. (2009): Will climate change influence extreme wind speeds? *Proceedings of the Offshore wind and other marine renewable energies in Mediterranean and European Seas conference in Brindisi*. p 21-28.
- Clausen N.E., Pryor S.C., Larsen X.G., Hyvonen R., Venalainen A., Suvilampi E., Kjellstrom E., Barthelmie R.J. (2009): Are we facing increasing extreme winds in the future? *Proceedings of European Wind Energy Conference and Exhibition 2009*, 10 pp.
- Pryor S., Barthelmie R.J., Clausen N.E., Nielsen N.M., Kjellström E. and Drew M. (2009): Climate change impacts on extreme wind speeds. *21st Century Challenges in Regional-scale Climate Modelling Workshop. Proceedings of the Regional Climate Models 2009 conference in Lund*, p 271-272. *Int. Baltex Secretariat. Publication #41. ISSN 1681-6471*.
- Takle E.S., Pryor S.C., Barthelmie R.J., Andersen T. and the NARCCAP Team (2009): Characteristics of wind speeds over the US from 1982-2004 as simulated by regional climate models. *Proceedings of American Meteorological Society 21st Climate Variability and Change Conference, January 2009*.

2008

- Pryor S., Leung R., Koracin D., Nakafuji N. (2008): Improved Quantification of Future Changes in the Mean and Variability of Wind Climates/Resources Chapter 14 p86-92 of *U.S. Department of Energy Workshop Report: Research Needs for Wind Resource Characterization Technical Report NREL/TP-500-43521 June 2008*. <http://www.nrel.gov/docs/fy08osti/43521.pdf>
- Leung R., Freedman J., Koracin D., Takle G. and Pryor S. (2008): Improved Quantification and Identify Causes of Historical Change and Variability of Wind Resources Chapter 13 p78-85 of *U.S. Department of Energy Workshop Report: Research Needs for Wind Resource Characterization Technical Report NREL/TP-500-43521 June 2008*. <http://www.nrel.gov/docs/fy08osti/43521.pdf>
- Pryor S.C., Barthelmie R.J., Takle G.S. and Andersen T. (2008): The impact of climate change on wind energy resources. *Proceedings of the World Renewable Energy Congress-X*, 6 pp.
- Pryor S.C. and Barthelmie R.J. (2008): Long-term trends of wind speeds in the USA. *Proceedings of the American Wind Energy Association Conference 2008*.

2007

- Pryor S.C. (2007): Extreme precipitation over the USA: Did it change during the C20th? *Papers of the Applied Geography Conferences, volume 30*, 354-361 (reviewed)
- Barthelmie R.J. and Pryor S.C. (2007): Wind speed trends over the contiguous USA. *Papers of the Applied Geography Conferences, volume 30*, 344-353 (reviewed)
- Hasager C.B., Astrup P., Nielsen M., Christiansen M.B., Badger J., Nielsen P., Sørensen P.B., Barthelmie R.J., Pryor S.C. and Bergström H. (2007): SAT-WIND project. Final report. Risø-R-1586(EN) (2007) 131 pp (available for download from: <http://www.risoe.dk/rispubl/reports/ris-r-1586.pdf>.)
- Pryor S.C. and Barthelmie R.J. (2007): Observations of winter-time nucleation and particle growth over/in a forest. *Proceedings of 17th International Conference on Nucleation and Atmospheric Aerosols (on CD)*. Also published in proceedings edited by O'Dowd and Wagner p933-937.
- Pryor S.C., Barthelmie R.J., Sørensen L.L. and Larsen S.E. (2007): Upward fluxes of particles over forests: When, where, why? *Proceedings of 17th International Conference on Nucleation and Atmospheric Aerosols (on CD)*. Also published in proceedings edited by O'Dowd and Wagner p928-932.
- Birsan F. and Pryor S.C. (2007): Dry deposition fluxes and timescales of turbulent deposition over tall vegetative canopies. *Proceedings of 17th International Conference on Nucleation and Atmospheric Aerosols (on CD)*. Also published in proceedings edited by O'Dowd and Wagner p669-673.
- Pryor S.C., Barthelmie R.J. and Riley E.S. (2007): Historical evolution of wind climates in the USA. *Proceedings of Science of making torque from wind*, 8 pp, published in the *Journal of Physics*:

Conference Series.

2006

- Pryor S.C., Barthelmie R.J., Schoof J.T. (2006): Developing robust projections of wind energy resources under climate change. *Proceedings of European Conference on Impacts of Climate Change on Renewable Energy Sources*, 4 pp.
- Pryor S.C., Larsen S.E., Sørensen L.L. and Barthelmie R.J. (2006): Measurement of particle fluxes: Methodological considerations, corrections and method comparisons. *Proceedings of BACCI activities 2005 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science, Finnish Association for Aerosol Research, Helsinki.*
- Pryor S.C., Gallagher M., Sievering H., Larsen S., Barthelmie R.J., Birsan F., Nemitz E., Kulmala M., Rinne J., Grönholm T., Taipale R. and Vesala T. (2006): Particle flux dependencies: A synthesis study. *Proceedings of BACCI activities 2005 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science, Finnish Association for Aerosol Research, Helsinki.*
- Pryor S.C., Larsen S.E., Sørensen L.L. and Barthelmie R.J. (2006): Particle flux dependencies: A case study. *Proceedings of BACCI activities 2005 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science, Finnish Association for Aerosol Research, Helsinki.*
- Barthelmie R.J., Frandsen S.T., Rethore P.-E., Mechali M., Pryor S.C., Jensen L., and Sørensen P. (2006): Modelling and measurements of offshore wakes. *Proceedings of Offshore Wind Energy in Mediterranean and Other European Seas (OWEMES) April 2006. 13 pp.*

2005

- Hasager C., Nielsen M., Astrup P., Barthelmie R.J. and Pryor S. (2005): Remote sensing for wind energy applications. *Proceedings of 31st International symposium on Remote Sensing of Environment, Russian Federation, June 2005. In press.*
- Larsen S., Sorensen L. and Pryor S.C. (2005): Spectral estimation of fluxes for homogeneous and heterogeneous conditions. *BACCI 2005 conference, Kuopio, Finland, June 2005 6 pp.*
- Pryor S., Barthelmie R.J. (2005): Particle measurements in and over a Beech forest. *BACCI 2005 conference, Kuopio, Finland, June 2005 2 pp.*
- Barthelmie R.J., Frandsen S., Pryor S. and Landberg L. (2005): Wakes within and downwind of large offshore wind farms. *Proceedings of American Wind Energy Conference, Denver, May 2005.*
- Pryor S., Barthelmie R. and Kjellstrom E. (2005): Climate change impacts on wind energy resources in northern Europe. *Proceedings of Risoe International Energy Conference, Denmark, 2005, May 2005, 272-278.*
- Pryor S.C., Sørensen L., Barthelmie R., Larsen S.E., Gronholm T., Vesala T., Martensson M. and Nielsen E.D. (2005) Summary of particle flux workshop. *Proceedings of BACCI activities 2004 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science No 71, Finnish Association for Aerosol Research, Helsinki (ISBN 952-5027-54-6) 63-64.*
- Barthelmie R., Pryor S.C., Sørensen L. (2005) The contribution of ammonia emissions from traffic to deposition in the Øresund. *Proceedings of BACCI activities 2004 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science No 71, Finnish Association for Aerosol Research, Helsinki (ISBN 952-5027-54-6) 78-79.*
- Barthelmie R., Pryor S.C. (2005) A chemical mechanism for modeling d-limonene oxidation. *Proceedings of BACCI activities 2004 Ed. Kulmala and Ruuskanen. Report Series in Aerosol Science No 71, Finnish Association for Aerosol Research, Helsinki (ISBN 952-5027-54-6) 80-81.*

2004

- Nielsen, M., Astrup, P., Hasager, C.B., Barthelmie, R., and Pryor S. (2004): Satellite information for wind energy applications. *Risoe Research report (RISO-R-1479, ISBN: 87-550-3374-1), 56 pp (available from: www.risoe.dk/rispubl/VEA/veapdf/ris-r-1479.pdf)*
- Pryor S., Barthelmie R. and Schoof J. (2004): How coherent is inter-annual variability of wind energy indices over Europe and what are the implications for large scale penetration by wind energy of electricity markets? *Proceedings of European Wind Energy Conference, London, November*

2004.

- Frandsen S.T., Barthelmie R.J., Pryor S.C., Rathmann O., Larsen S. and Højstrup J. (2004): Analytical modelling of wind speed deficits in large offshore wind farms. *Proceedings of European Wind Energy Conference, London, November 2004*.
- Barthelmie R., Giebel G., Jorgensen B., Badger J., Pryor S.C. and Hasager C. (2004): Comparison of corrections to site wind speeds in the offshore environment: value for short-term forecasting. *Proceedings of European Wind Energy Conference, London, November 2004*.
- Hasager C.B., Barthelmie R., Christiansen M. Nielsen M. and Pryor S.C. (2004): Quantifying offshore wind resources from satellite wind maps: study area North Sea. *Proceedings of European Wind Energy Conference, London, November 2004*.
- Frandsen S., Barthelmie R., Pryor S., Rathmann O., Larsen S., Højstrup J., Nielsen P., Thøgersen M. (2004): The necessary distance between large wind farms offshore – study. *Risoe Research Report to PSO, 29 pp*.
- Pryor S.C. and Barthelmie R.J. (2004): Use of RCM simulations to assess the impact of climate change on wind energy availability. *Risoe Research report (RISO-R-1477, ISBN 87-550-3368-7), 111 pp (available from: www.risoe.dk/rispubl/VEA/veapdf/ris-r-1477.pdf)*
- Pryor S.C., Barthelmie R.J. and Binkowski F.S. (2004): Numerical simulations of aerosol flux divergence during dry deposition to forest canopies. *Proceedings of BACCI 2004 conference, Lund, Sweden, June 2004 6pp*.
- Pryor S.C., Barthelmie R.J., Sørensen L.L., Andersson K., Pripp H. and Larsen S. (2004): Observations of aerosol flux divergence during dry deposition to forest canopies. *Proceedings of BACCI 2004 conference, Lund, Sweden, June 2004 2pp*.
- Pryor S.C., Barthelmie R.J. and Schoof J.T. (2004): Wind energy prognoses for the Baltic region. *Proceedings for the 4th study conference on BALTEX. Bornholm, Denmark, May 2004. 2pp*.
- Pryor S.C. (2004): Influence of sea spray source formulation on heterogeneous chemistry and deposition. *Proceedings of ONR sponsored workshop: Towards a universal sea spray source function. University of Leeds, May 2004 (in press)*.
- Pryor S.C. and Barthelmie R.J. (2004): Past and future wind climates: Flow regimes in a non-stationary climate. *Proceedings of The science of making torque from wind - EWEA special topic conference, Delft, Apr. 2004 10pp (refereed)*.
- Barthelmie R.J., Hansen O.F., Enevoldsen K., Frandsen S., Pryor S., Højstrup J., Larsen S., Motta M. and Sanderhoff P. (2004): Ten years of measurements of offshore wind resources - what have we learnt and where are the uncertainties? *Proceedings of The science of making torque from wind - EWEA special topic conference, Delft, Apr. 2004 10pp (refereed)*.
- Barthelmie R., Pryor S., Frandsen S., and Larsen S. (2004): Analytical modelling of large wind farm clusters. *Proceedings of The science of making torque from wind - EWEA special topic conference, Delft, Apr. 2004 10pp (refereed)*.
- Pryor S.C., Schoof J.T. and Barthelmie R.J. (2004): Near-surface flow regimes: Recent changes and tools for prognoses. *Proceedings of 15th AMS Symposium on Global Change and Climate Variations. Seattle, Wa, Jan. 2004 Poster 2.16, 10pp*.
- Schoof J.T. and Pryor S.C. (2004): An evaluation of two GCMs: North American teleconnections and synoptic phenomena. *Proceedings of 15th AMS Symposium on Global Change and Climate Variations. Seattle, Wa, Jan. 2004 Paper 4.8, 12pp*.
- Barthelmie R.J., Pryor S.C., Badger J., Motta M. and Landberg L. (2004): Danish offshore wind resource estimates. *Confidential report to Dong from Risoe National Laboratory, Nov 2003, 32pp*.

2003

- Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2003): Phase partitioning and fluxes of nitrogen in the marine boundary layer. *Proceedings of BACCI Workshop on Modeling and Parameterization, Roskilde, Nov. 2003 36-37*.
- Pryor S.C., Klemm O. and Barthelmie R.J. (2003): An investigation of the magnitude of resistance terms in dry deposition fluxes to a conifer forest. *Proceedings of BACCI Workshop on Modeling and*

- Parameterization, Roskilde, Nov. 2003* 38-42.
- Barthelmie R.J. and Pryor S.C. (2003): A chemical mechanism for modelling d-limonene oxidation. *Proceedings of BACCI Workshop on Modeling and Parameterization, Roskilde, Nov. 2003* 7-8.
- Barthelmie R.J., Pryor S.C. and Sørensen L.L. (2003): The contribution of ammonia emissions from traffic to deposition in the Øresund. *Proceedings of BACCI Workshop on Modeling and Parameterization, Roskilde, Nov. 2003* 9-10.
- Sempreviva A., Pryor S.C. and Sørensen L.L. (2003): The role of sea spray in sensible and latent heat transfer in the marine surface layer. *Proceedings of BACCI Workshop on Modeling and Parameterization, Roskilde, Nov. 2003* 46.
- Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2003): Phase partitioning and fluxes of nitrogen in the marine boundary layer. *Proceedings of Nordic Aerosol Society Annual Meeting, Copenhagen, Nov. 2003*, 2pp.
- Barthelmie R.J. and Pryor S.C. (2003): A chemical mechanism for modelling d-limonene oxidation. *Proceedings of Nordic Aerosol Society Annual Meeting, Copenhagen, Nov. 2003*, 2pp.
- Barthelmie R.J., Pryor S.C. and Sørensen L.L. (2003): The contribution of ammonia emissions from traffic to deposition in the Øresund. *Proceedings of Nordic Aerosol Society Annual Meeting, Copenhagen, Nov. 2003*, 2pp.
- Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2003): Fluxes of reactive nitrogen in the coastal zone. *Integrated Land Ecosystem – Atmosphere Process Study (ILEAPS), IGBP conference 2003 in Helsinki proceedings*, 6 pp.
- Barthelmie R.J. and Pryor S.C. (2003): Long-term trends in near-surface flow over the Baltic. *Proceedings of Results of the BALTEX/BRIDGE Period 1999-2002 A workshop prior to the 15th BALTEX SSG Meeting, Risø National Laboratory, Roskilde*, 2pp.
- Hasager C.B., Rathmann O., Nielsen M., Barthelmie R.J., Pryor S., Højstrup J., Badger J., Nørgård P., Lundsager P. (2003): Wind energy calculated from SAR and scatterometer satellite data. *ESA workshop and renewable energy, Frascati (IT), 23-24 Jun 2003. Unpublished. PowerPoint presentation available.*
- Pryor S.C., Barthelmie R.J., Mann J. and Nielsen, N.M. Errors introduced by satellite sampling of offshore wind speeds. *Proceedings CD-ROM. CD 2. European wind energy conference and exhibition 2003 (EWEC 2003), Madrid, June 2003. (European Wind Energy Association, Brussels, 2003)* 12pp.
- Barthelmie R., Larsen G., Pryor S., Bergström H., Magnusson M., Schlez W., Rados K., Lange B., Vølund P., Neckelmann S., Mogensen S., Schepers G., Hegberg T., and Folkerts L. (2003): ENDOW: Efficient Development of Offshore Windfarms: modelling wake and boundary-layer interactions. *Proceedings CD-ROM. CD 2. European wind energy conference and exhibition 2003 (EWEC 2003), Madrid, June 2003. (European Wind Energy Association, Brussels, 2003)* 11pp.
- Hasager C.B., Rathmann O., Nielsen M., Barthelmie R.J., Pryor S.C., Dellwik E. and Furevik B.R., (2003): Offshore wind resource assessment based on satellite wind field maps. *Proceedings CD-ROM. CD 2. European wind energy conference and exhibition 2003 (EWEC 2003), Madrid, June 2003. (European Wind Energy Association, Brussels, 2003)* 11 pp.
- Sørensen L.L., Pryor S.C. and Larsen, S. (2003): Particles and particle fluxes in the MEAD project. *Proceedings of BACCI Workshop on Modeling and Parameterization, Oslo, May 2003* 1pp.
- Furevik B., Hasager C.B., Barthelmie R.J., Espedal E., Joergensen B.H., Rathmann O., Sandven S., Gaudiosi G., Christensen L.C., Pryor S., Johannesen O., (2003): Satellite-based wind maps - are they useful for siting of offshore wind farms? *Proceedings of Offshore Wind Energy in Mediterranean and Other European Seas (OWEMES) 2003, Naples, April 2003*, 177-186.
- Pryor S.C., Barthelmie R.J., Mann J. and Nielsen M. (2003): Quantifying errors associated with satellite sampling of offshore wind speeds. *Proceedings of Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Naples, April 2003*, 143-157.
- Barthelmie R.J., Pryor S.C. and Schoof J. (2003): Evidence of trends in near-surface wind speeds over the Baltic. *Proceedings of Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Naples, April 2003*, 35-49.

-
- Barthelmie R.J., Larsen G., Pryor S., Rados K., Bergstrom H., Magnusson, Schelz W., Neckelmann S., Mogensen S., Schepers G and Hegberg T. (2003): ENDOW: Efficient Development of Offshore Windfarms. *Proceedings of Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Naples, April 2003*, 161-175.
- Barthelmie R., Larsen G., Pryor S., Bergstrom H., Magnusson M., Schelz W., Rados K., Lange B., Vølund P., Neckelmann S., Mogensen S., Schepers G., Hegberg T., and Folkerts L. (2003): Efficient Development of Offshore Windfarms (ENDOW). *Risø-R-1407(EN)*, 30 pp.
<http://www.risoe.dk/rispubl/VEA/ris-r-1407.htm>
- Barthelmie R., Larsen G., Pryor S., Bergstrom H., Magnusson M., Schelz W., Rados K., Lange B., Vølund P., Neckelmann S., Mogensen S., Schepers G., Hegberg T., and Folkerts L. (2003): Efficient Development of Offshore Windfarms (ENDOW). *Final report to the European Commission, April 2003. (On CD, Executive report 29 pp)*
- Barthelmie R., Larsen G., Pryor S., Bergstrom H., Magnusson M., Schelz W., Rados K., Lange B., Vølund P., Neckelmann S., Mogensen S., Schepers G., Hegberg T., and Folkerts L. (2003): Efficient Development of Offshore Windfarms (ENDOW): Evaluation of the ENDOW tools. *Report to the European Commission, April 2003. 42pp.*
-

2002

- Hasager C.B., Furevik B., Pryor S.C. and Barthelmie R.J. (2002): Offshore wind resources quantified from satellite SAR: methodology and technical aspects. *Proceedings. 1st International symposium on recent advances in quantitative remote sensing, Torrent (ES), 16-20 Sep 2002. Sobrino, J.A. (ed.), (Publicacions de la Universitat de Valencia, Valencia, 2002) p. 778-782.*
- Pryor S. (2002): Particles and visibility. *Proceedings of 16th International Clean Air and Environment Conference* 6 pp. Also published in *Clean Air and Environmental Quality* **36**, 35-39.
- Pryor S.C. (2002): Particle dry deposition: Processes and parameterizations in regional models. *EMEP report on a Workshop on implementation of dynamic aerosol models for large scale applications. 7 pp.*
- Stratmann, F., Pirjola, L., Pryor S., Schell B., Uhrner U., Vignati E. and Wolke E. (2002): Facilitating the implementation of aerosol dynamics in modal models. *EMEP report on a Workshop on implementation of dynamic aerosol models for large scale applications. 8 pp.*
- Pryor S.C. and Sørensen L. (2002): An evaluation of sea spray emission source functions. *Proceedings of EUROTRAC-2 Symposium* 4 pp.
- Sørensen L, Pryor S., Sempreviva A., Spokes, L. (2002): Air-Sea fluxes of nitrogen compounds. *EUROTRAC-2 Symposium* 4 pp.
- Pryor S., Barthelmie R., and Hasager C. (2002): Can satellite sampling of offshore wind represent wind speed distributions? *Proceedings of Global Windpower conference. Proceedings on CD-ROM P_GWP_06, European Wind Energy Association, Brussels, 6 pp.*
- Jorgensen B., Furevik B., Hasager C., Astrup P., Rathmann O., Barthelmie R., and Pryor S. (2002): Developments in mesoscale modeling and satellite imaging of offshore wind maps *Proceedings of Global Windpower conference. Proceedings on CD-ROM O_GWP_050, European Wind Energy Association, Brussels, 6 pp.*
-

2001

- Pryor S.C. and Barthelmie R.J. (2001): Persistence of offshore wind speeds: implications for power quality offshore. *Proceedings of 2001 European Wind Energy Conference and Exhibition* 717-720.
- Pryor S., Barthelmie R., Carreiro M, Davis M., Hartley A., Jensen B., Oliphant A., Randolph J., Schoof J. (2001): Nitrogen Deposition To A Mid-Latitude Deciduous Forest And Ecosystem Response. *Proceedings of 2nd International Nitrogen Conference, ESA.*
- Pryor S. and Barthelmie R. (2001): Atmosphere-surface exchange of particles: Experimentally and numerically determined deposition velocities. *Proceedings of NOSA Aerosol Symposium 2001, 2pp.*
- Barthelmie, R.J. and Pryor, S.C. (2001): Total organic aerosol concentrations: relative contributions of

biogenic and anthropogenic and primary and secondary aerosol. *Proceedings of NOSA Aerosol Symposium 2001*, 2pp.

Barthelmie R.J. and Pryor S.C. (2001): Total organic aerosol concentrations: relative contributions of biogenic and anthropogenic and primary and secondary aerosol. *Journal of Aerosol Science Vol 32 Sup. 1* S957-958.

Pryor S.C., Barthelmie R.J., Jensen B., Davis M.L., Hirzy K.C., Schoof J.T. and Sørensen L. (2001): Bidirectionality of ammonia fluxes: Observations over a deciduous forest. *Proceeding of the 6th International Conference on Atmosphere-Surface Exchange, CEH, Edinburgh* 36-41.

2000

Pryor S.C., Barthelmie R.J. Schoof J.T., Sørensen L.L. and Erickson D.J. (2000): Modeling heterogeneous chemistry of nitrogen gases in/on sea spray. *Journal of Aerosol Science Supplement. Proceedings of European Aerosol Conference* 1033-1034.

Barthelmie R.J. and Pryor S.C. (2000): The influence of speciating monoterpene emissions and chemistry on modelled secondary organic aerosol concentrations and composition. *Journal of Aerosol Science Supplement. Proceedings of European Aerosol Conference* 58-59.

Schoof J. and Pryor S.C. (2000): Synoptic circulation classification and downscaling for the Midwestern USA. *Proceedings of 15th Conference on Probability and Statistics in the Atmospheric Sciences, American Meteorological Society* J4-J7.

Pryor S.C. and Barthelmie R.J. (2000): Flow characteristics in the coastal zone. *Proceedings of OWEMES - 2000 "Offshore Wind Energy in Mediterranean and other European Seas". Sicily, April 2000, ATENA, Rome*, 29-43.

1999

Pryor S.C. (1999): Nitrogen deposition to water surfaces. *3rd AMS Conference on Coastal Atmospheric and Oceanic Prediction and Processes. Preprint volume*, 169-172.

Pryor S.C., Barthelmie R.J., Geernaert L.L.S., Jensen B. and Ellermann T. (1999): Aerosol dry deposition: The contribution to nitrogen flux in the western Baltic. *Journal of Aerosol Science* 30 S1 91-92.

Barthelmie R.J. and Pryor S.C. (1999): Assessing the relative importance of biogenic and anthropogenic sources to primary and secondary aerosols in the Fraser Valley during the summertime. *Journal of Aerosol Science* 30 S1 191-192.

CEPA/FPAC Working Group (S. Pryor, co-author) (1999): *National Ambient Air Quality Objectives for Particulate Matter*. Part 1: Science Document. Published by Health Canada and Environment Canada, ISBN 0-662-26715-X. Cat # H46-2/98-220-1E. Available from: Director, Environmental Health Directorate, Health Canada, Ottawa, Ontario, K1A 0L2 (*refereed*).

1998

Pryor S.C. and Barthelmie R.J. (1998): Trace nitrogen compounds: Ambient concentrations over and dry deposition to a deciduous forest. *1998 AGU Fall Meeting. Abstract volume published as a supplement to EOS* 79 #45 p F376.

Barthelmie R.J. and Pryor S.C. (1998): Modeling secondary organic aerosol formation: A new monoterpene mechanism. *1998 AGU Fall Meeting Abstract volume published as a supplement to EOS* 79 #45 p F85.

Pryor S.C., Barthelmie R.J., Geernaert L.L.S., Ellermann T. and Perry K. (1998): Aerosols in the western Baltic: Results from ASEPS '97. *Journal of Aerosol Science* 29 S1 S21-S22.

Barthelmie R.J. and Pryor S.C. (1998): A new mechanism for modeling secondary organic aerosol formation from monoterpenes. *Journal of Aerosol Science* 29 S1 S1119-S1120.

Pryor S.C., Barthelmie R.J., Jensen B., and Offerle B. (1998): Nitrogen dry deposition at an AmeriFlux site. *23rd AMS Conference on Agriculture and Forest Meteorology. Preprint volume*, 341-344.

Ellermann T., Geernaert L.L.S., Pryor S.C. and Barthelmie R.J. (1998): Impact of heterogeneous chemical reactions on fluxes of nitric acid in coastal areas. *Abstract from 6th FECS (Federation of European Chemical Societies) conference on chemistry in the environment. Published in*

- Environmental Science and Pollution Research* 5, 3, p183.
- Pryor S.C., Barthelmie R.J., Geernaert, L.L.S., Ellerman T. and Perry K. (1998): The role of aerosols in dry deposition to coastal waters. *Abstract volume 4th International Aerosol Symposium, St. Petersburg* p177-178.
- Barthelmie R.J. and Pryor S.C. (1998): DMS oxidation in a non-remote location. *Abstract volume 4th International Aerosol Symposium, St. Petersburg* p178-179.
- Pryor S.C. and Barthelmie R.J. (1998): ISOPART: Development and application of a lagrangian gas-aerosol model. *PM_{2.5} A fine particle standard*. Ed. J. Chow and P. Koutrakis. A&WMA, Pittsburgh. p725-736.
- Barthelmie R.J. and Pryor S.C. (1998): Modeled biogenic aerosol production during a summer time episode in southwestern British Columbia. *PM_{2.5} A fine particle standard*. Ed. J. Chow and P. Koutrakis. A&WMA, Pittsburgh. p793-804.
- Pryor S.C. and Barthelmie R.J. (1998): Evaluation of an aerosol model: Responses to meteorology and emission scenarios. *Proceedings of the 22nd International Technical Meeting on Air Pollution Modelling and its Applications, Clermont-Ferrand*. Published by American Meteorological Society. *and Air Pollution Modeling and its Application XII* Ed. Gryning and Chermaliac. Published by Plenum Press, New York. p37-42.

1997

- Pryor S.C., Hoff R.M., Barthelmie R.J. and McKendry I.G. (1997): Vertical and horizontal heterogeneity of aerosol loadings: Observations and modeling. *Visual air quality, aerosols, the global radiation balance*. Ed. Tombach. A&WMA, Pittsburgh p516-528.
- Barthelmie R.J. and Pryor S.C. (1997): Influence of monoterpene chemistry on modeled aerosol and ozone concentrations - Implications for visibility impairment in the Fraser Valley. *Visual air quality, aerosols, the global radiation balance*. Ed. Tombach. A&WMA, Pittsburgh. p447-458.
- Pryor S.C. (1997): *Visibility impacts*. Chapter in Atmospheric Science Expert Panel Report on Sulphur in Gasoline and Diesel Fuels. Joint Industry/Government Study. Environment Canada, Toronto (*refereed*).

1996

- Pryor S.C., and Barthelmie R.J. (1996): Application of an aerosol model to the Lower Fraser Valley. *Proceedings of PNWIS A&WMA Annual Meeting SS-V-5 (12 pages)*.
- Pryor S.C., and Barthelmie R.J. (1996): Using the REVEAL and REVEAL II data sets to examine the causes, frequency and severity of visibility degradation. *Proceedings of PNWIS A&WMA Annual Meeting SS-VI-4 (12 pages)*.
- Pryor S. C., Barthelmie R. J., and Hertel O. (1996): Visibility episodes in southwestern British Columbia - evaluation of a gas-to-particle scheme using the REVEAL data set. *Proceedings of the 21st International Technical Meeting on Air Pollution Modelling and its Applications, Baltimore*. Published by American Meteorological Society. *and Air Pollution Modeling and its Application XI* Ed. Gryning and Schiermeier. Published by Plenum Press, New York p529-537.
- Pryor S.C., Barthelmie R.J., King T., Bohme S., McLaren R., Dann T., and Suzuki N.M. (1996): Quantifying the impact of precursor variability on ozone concentrations. *Proceedings of 89th A&WMA Annual Meeting # 96-WP62B.04 (16 pages) (refereed)*.
- Barthelmie R.J., and Pryor S.C. (1996): Assessing limits on inorganic aerosol formation. *Proceedings of the 89th A&WMA Annual Meeting # 96-MP1A.02 (16 pages) (refereed)*.
- Pryor S. C., Barthelmie R. J., and Hertel O. (1996): Modelling fine aerosol concentrations in the Lower Fraser Valley, British Columbia. *Preprints of the 12th AMS Biometeorology and Aerobiology Conference* p456-459.
- Barthelmie R.J., Grisogono B., and Pryor S.C. (1996): Diurnal variability of wind speeds over land and sea - Observations and simulations. *Preprints of the 76th AMS Annual Meeting* p395-396.
- Pryor S. C., and Barthelmie R. J. (1996): Investigation of the causes of visibility degradation in the Fraser Valley, British Columbia. *Proceedings of 88th A&WMA Annual Meeting # 95-WA76.01 (16 pages) (refereed)*.

1995

- Pryor S. C. (1995): Long term and weekday/weekend variations of ozone in the Lower Fraser Valley. *Oxidant concentrations in the Pacific Northwest: What we need to know. Proceedings of a PSAPCA and A&WMA co-sponsored international meeting. Published by the PSAPCA, Oct. 1995 p48-53.*
- McKendry I., Pryor S. C., and Steyn D. G. (1995): Synoptic circulation and summertime ground level ozone concentrations at Vancouver, British Columbia. *Oxidant concentrations in the Pacific Northwest: What we need to know. Proceedings of a PSAPCA and A&WMA co-sponsored international meeting. Published by the PSAPCA, Oct. 1995 p44-47.*
- Pryor S. C. (1995): PM₁₀ in Canada. *Department of Geography Discussion Papers and Reports #39, University of British Columbia, Vancouver, September 1995.*
- Pryor S. C., Simpson R., Guise-Bagley L., Hoff R., Sakiyama S., and Steyn D. (1995): Examination of the spatial variability of visibility in the Lower Fraser Valley, B.C. *Aerosols and Atmospheric Optics: Radiative balance and visual air quality. A&WMA International Specialty Conf. (VIP-41) p113-124.*
- Pryor S. C., Stephens K., and Steyn D. G. (1995): *Visibility perception in the Lower Fraser Valley.* B.C. Ministry of Environment, Lands and Parks, Victoria. Catalogue #: TD883.7.C32B743 1995.
- Pryor S. C., and Steyn D. G. (1995): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 3. Further analysis of visibility data and fine aerosols collected during REVEAL.* B.C. Ministry of Environment, Lands and Parks, Victoria. Catalogue #: TD883.7.C32B742 1995.
- Pryor S. C., and Steyn D. G. (1995): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 2. An extension of the source apportionment of ambient aerosols during REVEAL.* B.C. Ministry of Environment, Lands and Parks, Victoria. Catalogue #: TD883.7.C32B74 1995.
-

1994

- Pryor S. C., and Steyn D. G. (1994): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 1. Application of analytical techniques for source apportionment and related visibility impacts of the REVEAL fine particulate, optical and scene data.* B.C. Ministry of Environment, Lands and Parks, Victoria. Catalogue #: TD883.7.C32P79 1994.
-

PUBLISHED REVIEWS: Sara C. Pryor

All published in: <i>Current Reviews for Academic Libraries. Science and Technology</i>			
Year	Review of:	Vol	#
In press	Nitrous oxide and climate change. Ed Keith Smith. Earthscan Publications 232pp.		
2010	Global sources of local pollution: an assessment of long-range transport of key air pollutants to and from the United States. By National Research Council. The National Academies Press, Washington 234pp.	47	7
2010	Climate change: the point of no return. By Latif. Haus Publishing 205 pp.	47	4
2009	Energy and Climate Change: Creating a sustainable future. By Coley. Wiley. 672 pp	46	5
2008	Principles of environmental physics. By Monteith and Unsworth. Elsevier 418 pp	46	4
2008	Climate variability and the global harvest: impacts of El Nino and other oscillations on agroecosystems. By Rosenzweig and Hillel. Oxford 259pp.	45	11
2008	The Global circulation of the atmosphere: Ed. by Tapio Schneider and Adam H. Sobel. 385pp.	45	6
2007	Extreme Weather Sourcebook WWW site (http://www.sip.ucar.edu/sourcebook/)	44	12
2007	Earth system Research Laboratory: Climate Analysis Branch WWW site (http://www.cdc.noaa.gov)	44	12
2007	EdGCM: Climate modeling for research and education (http://edgcm.columbia.edu)	44	7
2006	Stratosphere ozone WWW site (http://www.ozonelayer.noaa.gov)	44	1
2006	Atmospheric optics WWW site (http://www.atoptics.co.uk/phen800.htm)	44	1
2006	Ozone depletion and climate change: constructing a global response. Hoffmann, State University of New York. 259 pp.	43	7
2005	Air quality management in the United States. National Research Council. National Academy of Sciences. 401 pp.	42	9
2005	Boiling point: How politicians, big oil and coal, journalists, and activists are fueling the climate crises – and what we can do to avert disaster. Gelbspan. Basic Books. 254pp.	42	7
2005	Climate change: five years after Kyoto. Ed. Grover. Science Publishers 455pp	42	5
2005	Hard choices: Climate change in Canada. Coward and Weaver. Wilfrid Laurier 273pp	42	5
2004	The Maunder Minimum and the variable sun-earth connection. Soon and Yaskell. World Scientific 278 pp.	42	2
2004	Global carbon cycle and climate change. Springer-Verlag/Praxis, Berlin 368 pp	41	10
2004	WWW site: International Research Institute for Climate Prediction.	41	5
2003	WWW site: Global climate change student guide	41	4
2003	Protecting the ozone layer: science and strategy. Parson, Oxford University Press 377 pp	40	11
2003	WWW site: Pew Center on Global Climate Change	40	10
2003	Global climate: Current research and uncertainties in the climate system. Ed. Rodo and Comin, Springer-Verlag 286 pp	40	9
2003	Atmospheric pollution: History, Science and regulation. Jacobson, Cambridge University Press 399 pp	40	8
2003	WWW site: Global climate change: research explorer – the exploratorium.	40	5
2002	The physics of atmospheres. Houghton, Cambridge University Press 320 pp.	40	2

PUBLISHED REVIEWS: Sara C. Pryor

2002	Exploring Environmental Challenges: Global Climate Change. E.d. Spray and McGlothlin. Rowman and Littlefield.	39	11
2001	Currents of Change: Impacts of El Niño and La Niña on climate and society. Glantz. Cambridge University Press 252 pp.	38	11
2001	Understanding past climates: Modelling ancient weather. Valdes et al. Interactive CD. Gordon and Breach Science Publishers.	38	4
2001	Ice ages and astronomical causes: Data, spectral analysis and mechanisms. Muller and MacDonald. Springer/Praxis. 318pp.	38	3
2000	Absolute zero and the conquest of cold. Shachtman. Houghton Mifflin Company. 261pp	38	1
2000	Chemistry of the upper and lower atmosphere. Findlayson-Pitts and Pitts. Academic Press. 969pp.	37	10
2000	Clear the Air: The real story of the war on air pollution. Goklany. Cato Institute. 187pp	37	8
1999	Emissions and air quality. Lenz and Cozzarini. Society of Automotive Engineers 125pp.	37	4
1999	Air Apparent: How meteorologists learned to map, predict and dramatize weather. Monmonier. The University of Chicago Press 309pp.	37	1
1999	Natural Environmental Change. Mannion. Routledge: Introductions to Environment Series 192pp.	36	11/12
1999	WWW site: Extreme weather sourcebook.	36	11/12
1999	Historical perspectives on Climate Change. Fleming. Oxford University Press 194pp.	36	9
1999	Atmospheric Processes and Systems. Thompson. Routledge: Introductions to Environment Series 194pp	36	8
1999	The Heat is on: The climate crisis, the cover-up, the prescription. Gelbspan. Perseus Books. 278 pp.	36	6
1999	WWW site: Climate change – methane and other greenhouse gases.	36	5
1998	WWW site: Virtual Library of Meteorology.	35	10
1998	Climate Trend Atlas of Europe Based on Observations 1891-1990. Schonwiese and Rapp. 1997. Kluwer Academic Publishers 228pp.	35	8
1998	WWW site: MGA on the Web.	35	7
1998	WWW site: Weather world 2010.	35	5
1997	WWW site: The Daily Planet.	35	4
1997	WWW site: WeatherPost: Historical weather data.	35	2

GRANT/CONTRACT REPORTS: Sara C. Pryor

- Schoof J.T. and Pryor S.C. (2010): *Development of 21st century precipitation scenarios using probabilistic downscaling techniques*. Final report to National Science Foundation, Geography and Regional Science.
- Pryor S.C., Barthelmie R.J., Westberg H. and Mauldin L. (2010): *Particle nucleation events in the Ohio River Valley*. 4th Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Takle G.S. (2010): *Development and evaluation of tools for downscaling wind climates*. Final report to National Science Foundation, Geography and Spatial Science. 32 pp. Available from: http://php.indiana.edu/~spryor/Downscaling/USA/Finalreport_0618364.pdf
- Barthelmie R.J. and Pryor (2009): *Quantifying wind farm power losses due to wind turbine wakes*. Annual Report to National Science Foundation, Energy for Sustainability.
- Pryor S.C., Barthelmie R.J. and Takle G.S. (2009): *Development and evaluation of tools for downscaling wind climates*. 3rd Annual report to National Science Foundation, Geography and Regional Science.
- Schoof J.T. and Pryor S.C. (2009): *Development of 21st century precipitation scenarios using probabilistic downscaling techniques*. 2nd Annual report to National Science Foundation, Geography and Regional Science.
- Pryor S.C., Barthelmie R.J., Westberg H. and Mauldin L. (2009): *Particle nucleation events in the Ohio River Valley*. 3rd Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Takle G.S. (2008): *Development and evaluation of tools for downscaling wind climates*. 2nd Annual report to National Science Foundation, Geography and Regional Science.
- Schoof J.T. and Pryor S.C. (2008): *Development of 21st century precipitation scenarios using probabilistic downscaling techniques*. 1st Annual report to National Science Foundation, Geography and Regional Science.
- Pryor S.C., Barthelmie R.J., Westberg H. and Mauldin L. (2008): *Particle nucleation events in the Ohio River Valley*. 2nd Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Binkowski F. (2008): *Improved models of particle deposition*. Final report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Takle G.S. (2007): *Development and evaluation of tools for downscaling wind climates*. 1st Annual report to National Science Foundation, Geography and Regional Science.
- Pryor S.C., Barthelmie R.J., Westberg H. and Mauldin L. (2007): *Particle nucleation events in the Ohio River Valley*. 1st Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Binkowski F. (2006): *Improved models of particle deposition*. 3rd Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Binkowski F. (2005): *Improved models of particle deposition*. 2nd Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C. (2005): *Modeling a PM climatology for the Fraser Valley*. Final report to Environment Canada and the Clean Air Research Fund. 33 p.
- Frandsen S., Barthelmie R., Pryor S., Rathmann O., Larsen S., Højstrup J., Nielsen P., Thøgersen M. (2005): The necessary distance between large wind farms offshore – study. Risø-R-1518(EN) (2005) 29 p. **Electronic format only.** <http://www.risoe.dk/rispubl/VEA/ris-r-1518.htm>.
- Hasager C.B., Astrup P., Nielsen M., Barthelmie R.J., Christiansen M.B., Pryor S.C., Nielsen P., Sørensen P.B. (2005): *SAT-WIND project*. Risø-I-2294 (EN).
- Pryor S.C., Barthelmie R.J. and Binkowski F. (2004): *Improved models of particle deposition*. 1st Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Carreiro M. (2004): *Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest*. Final report to National Institute for Global Environmental Change, Midwestern Regional Center.
- Pryor S.C. and Barthelmie R.J. (2003): *Acquisition and development of instrumentation to quantify*

GRANT/CONTRACT REPORTS: Sara C. Pryor

- atmospheric deposition pathways*. Final report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C. (2003): *Application of the ISOPART model to the Columbia River Gorge*. Final report to the Oregon Department of Environmental Quality. 37 pp.
- Pryor S.C. (2003): *Ammonia measurements during Pacific'2001: Final report*. Fraser Valley Air Quality Commission and Environment Canada.
- Pryor S.C., Barthelmie R.J. and Carreiro M. (2002): *Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
- Pryor S.C. (2002): *Ammonia measurements during Pacific'2001: Q4 report*. Fraser Valley Air Quality Commission and Environment Canada.
- Pryor S.C. and Barthelmie R.J. (2001): *Acquisition and development of instrumentation to quantify atmospheric deposition pathways*. Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Carreiro M. (2001): *Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
- Barthelmie R.J. and Pryor S.C. (2001): *Parameterizing the chemistry of atmospheric aerosols*. Final report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C. (2001): *Ammonia measurements during Pacific'2001: Q3 report*. Fraser Valley Air Quality Commission and Environment Canada.
- Pryor S.C. (2001): *Ammonia measurements during Pacific'2001: Q2 report*. Fraser Valley Air Quality Commission and Environment Canada.
- Pryor S.C. and Barthelmie R.J. (2000): *Acquisition and development of instrumentation to quantify atmospheric deposition pathways*. Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., Barthelmie R.J. and Carreiro M. (2000): *Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
- Barthelmie R.J. and Pryor S.C. (2000): *Parameterizing the chemistry of atmospheric aerosols*. Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Sørensen, L., Geernaert, G., Pryor, S.C., Plate, E., de Leeuw, G., Smedsen, A. (1999): *Air-Sea fluxes of nitric acid and nitrate: A Process study*. Final report on ASEPS contribution to BASYS. European Union.
- Pryor S.C., and Barthelmie R.J. (1999): *NH_x deposition to different surface types: Final report*. Environment Canada: Prairie and Northern Region, Alberta.
- Geernaert L., Barthelmie R., Hertel O., Jensen B., Pryor S. and Vignati E. (1999): *ASEPS: Air Sea Exchange Process Studies '96-'97*. National Environmental Research Institute, Denmark.
- Pryor S.C. (1999): *Application of the ISOPART model to assess vehicle emission control measures*. Alchemy Consultants and B.C. Ministry of Environment, Lands and Parks.
- Grimmond C., Schmid H., Barthelmie R., Pryor S. (1999): *Measurements of fluxes and concentrations of CO₂ in and over a deciduous forest in the Midwest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
- Pryor S.C. and Barthelmie R.J. (1999): *Application of modal dynamics in the ISOPART model*. Atmospheric Environment Service, Environment Canada, Vancouver.
- Barthelmie R.J. and Pryor S.C. (1999): *Parameterizing the chemistry of atmospheric aerosols*. Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C., and Barthelmie R.J. (1999): *NH_x deposition to different surface types: Interim report*. Environment Canada: Prairie and Northern Region, Alberta.
- Pryor S.C., and Barthelmie R.J. (1999): *REVEAL II: Characterizing fine aerosols in the Lower Fraser*

- Valley. Final report. Fraser Cheam Regional District, Chilliwack.
- Pryor S.C., and Barthelmie R.J. (1998): *REVEAL II: Characterizing fine aerosols in the Lower Fraser Valley*. Interim report describing Phase II of data analysis. Fraser Cheam Regional District, Chilliwack.
- Barthelmie R.J. and Pryor S.C. (1998): *Extension and application of the ISOPART model*. Atmospheric Environment Service, Environment Canada, Vancouver.
- Grimmond C., Schmid H., Barthelmie R., Pryor S. (1998): *Measurements of fluxes and concentrations of CO₂ in and over a deciduous forest in the Midwest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
<http://nigec.ucdavis.edu/publications/annual98/Midwestern/project7.html>.
- Barthelmie R.J. and Pryor S.C. (1998): *Parameterizing the chemistry of atmospheric aerosols*. Annual report to National Science Foundation, Atmospheric Chemistry Division.
- Pryor S.C. (1997): *Atmospheric particles in the marine atmosphere*. Report to American-Scandinavian Foundation and Indiana University.
- Pryor S.C. (1997): *Visibility impacts*. Chapter in Atmospheric Science Expert Panel Report on Sulphur in Gasoline and Diesel Fuels. Joint Industry/Government Study. Environment Canada, Toronto.
- Barthelmie R.J. and Pryor S.C. (1997): *Application of the ISOPART model to the Fraser Valley: New chemical and meteorological parameterizations*. Atmospheric Environment Service, Environment Canada, Vancouver.
- Grimmond C., Schmid H., Barthelmie R., Pryor S. (1997): *Measurements of fluxes and concentrations of CO₂ in and over a deciduous forest in the Midwest*. Annual report to National Institute for Global Environmental Change, Midwestern Regional Center.
<http://nigec.ucdavis.edu/publications/annual97/midwestern/project29.html>
- Pryor S.C., and Barthelmie R.J. (1996): *REVEAL II: Characterizing fine aerosols in the Lower Fraser Valley*. Final report and database. Fraser Cheam Regional District, Chilliwack.
- Pryor S.C., and Barthelmie R.J. (1996): *REVEAL II: Characterizing fine aerosols in the Lower Fraser Valley - Non-technical summary*. Fraser Cheam Regional District, Chilliwack.
- Pryor S.C., and Barthelmie R.J. (1996): *Application of an aerosol model to the Lower Fraser Valley*. Draft report submitted to Atmospheric Environment Service, Environment Canada, Vancouver. March 1996. Final report submitted August 1996.
- Pryor S.C., and Barthelmie R.J. (1996): *REVEAL II: Characterizing fine aerosols in the Lower Fraser Valley*. Interim report and database. Fraser Cheam Regional District, Chilliwack.
- Barthelmie R.J., and Pryor S.C. (1995): *Assessment of the 1985 emissions inventories for the Lower Fraser Valley*. Report compiled under a grant from the National Science and Environmental Research Council of Canada.
- Pryor S.C. (1995): *Environmental Levels*. Chapter. Particulate matter <10 µm Review Document. Environment Canada, Toronto.
- Pryor S. C., and Steyn D. G. (1995): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 3. Further analysis of visibility data and fine aerosols collected during REVEAL*. B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., Stephens K., and Steyn D. G. (1995): *Visibility perception in the Lower Fraser Valley*. B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., and Steyn D. G. (1994): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 2. An extension of the source apportionment of ambient aerosols during REVEAL*. B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., and Steyn D. G. (1994): *Visibility and ambient aerosols in southwestern British Columbia during REVEAL: Part 1. Application of analytical techniques for source apportionment and related visibility impacts of the REVEAL fine particulate, optical and scene data*. B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., and Steyn D. G. (1994): *Review of visibility related data collected during the*

GRANT/CONTRACT REPORTS: Sara C. Pryor

- REVEAL/Pacific '93 summer field measurement programs.* B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., and Steyn D. G. (1994): *Development and validation of a methodology for assessing visibility perception in the Lower Fraser Valley.* B.C. Ministry of Environment, Lands and Parks, Victoria.
- Pryor S. C., and Steyn D. G. (1993): *Assessing temporal variability of visual air quality in the Lower Fraser Valley.* B.C. Ministry of Environment, Lands and Parks, Victoria.
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(Underlined = presenter)

2010

- Pryor S.C., Barthelmie R.J., Schoof J.T., Claussen N.E., and Drews M. (2010): Quantifying possible changes in extreme and intense wind speeds, *American Wind Energy Conference*, Dallas, May 2010.
- Barthelmie R.J., Pryor S.C. and Rowley S. (2010): Power losses due to turbine wakes in large, irregularly spaced wind farms, *American Wind Energy Conference*, Dallas, May 2010.
- Pryor S.C., Barthelmie R.J., Schoof J.T., Clausen N.E., Kjellstrom E. and Drews M. (2010): Intense and extreme wind speeds over the Nordic countries. Proceedings of the *International meeting on Climate and Energy Systems*, 2pp.
- Pryor S.C. And Barthelmie R.J. (2010): Wind energy, climate change and extreme events. *IU-Purdue Wind Energy Research Workshop*, Bloomington. April 2010.
- Pryor S.C. (2010): Assessing the vulnerability of the wind energy industry to climate extremes. *Special IAEA workshop on Vulnerability of Energy Systems to Climate Change and Extreme Events*, Trieste, Italy, April 2010.
- Pryor S.C., Barthelmie R.J., Schoof J.T., Claussen N.E., and Drews M. (2010): Changes in extreme and intense wind speeds, *European Wind Energy Conference*, Warsaw, March 2010
- Barthelmie R.J., Pryor S.C. and Rowley S. (2010): Quantifying power losses from wind turbine wakes in large, irregularly spaced wind farms, *European Wind Energy Conference*, Warsaw, March 2010.
- Pryor S.C. (2010): Panelist: The future of human-environment interactions. *Human-Environment Interactions Workshop*, Indiana University, Feb 2010.

2009

- Pryor S.C. (2009): Wind climate: Variability and change. *AWEA Fall conference on wind resource estimation*. Orlando, Florida, November 2009 (invited presentation).
- Petaja T., Mauldin III R.L., McGrath J., Kosciuch E. and Pryor S. (2009): Sulfuric acid in a deciduous forest during NIFTY project. *European Aerosol Conference*, September 2009.
- Barthelmie R.J., Frandsen S.T., Pryor S.C (2009): Energy dynamics of an infinitely large offshore wind farm. *European Offshore Conference 2009*, Stockholm, 14-16 September 2009
- Barthelmie R.J., Pryor S.C., Frandsen S.T., Hansen K., Schepers J.G., Rados K., Schlez W., Neubert A., Jensen L.E. and Neckelmann S. (2009): Improved modelling of power output in large offshore wind farms based on data from Nysted and Horns Rev. *European Offshore Conference 2009*, Stockholm, 14-16 September 2009
- Pryor S., Barthelmie R.J., Clausen N.E., Nielsen N.M., Kjellström E. and Drew M. (2009): Will climate change influence extreme wind speeds? *Offshore wind and other marine renewable energies in Mediterranean and European Seas conference in Brindisi, Italy*, May 2009.
- Pryor S.C., Barthelmie R.J., Claussen N.E., Nielsen N.M., Kjellström E. and Drew M. (2009): Climate change impacts on extreme wind speeds. *21st Century Challenges in Regional-scale Climate Modelling Workshop Regional Climate Models 2009 conference in Lund Sweden*, May 2009.
- Pryor S.C., Barthelmie R.J. and Takle G.S. (2009): Trends in wind climates over the contiguous US: Implications for the wind energy resource. *Climate Change: Global Risks, Challenges and Decisions*, Copenhagen, Denmark, March 2009.

2008

- Pryor S.C., Barthelmie R.J., Spauldign A.M., Rossner A., Jobson T., Petroff A. (2008): Particle nucleation over and in a forest: How important is the canopy? *AGU: Fall meeting, San Francisco*, December 2008 (invited).
- Pryor S.C., R.J. Barthelmie and G.S. Takle (2008): Trends in wind climates over the contiguous US: Implications for the wind energy resource. *AGU: Fall meeting, San Francisco*, December 2008 (invited).
- Pryor S.C., Barthelmie R.J., Rossner A., Crimmins B., Hopke P.K., Mauldin L., Jobson T. and Petaja T. (2008): Particle nucleation during the NIFTY experiment. *AGU: Fall meeting, San Francisco*,

December 2008.

- Rossner A., Crimmins B., Hopke P.K., Pryor S.C. (2008): Measurement of SOA precursor compounds in the Nucleation In ForesTs (NIFTy) campaign. *AGU: Fall meeting, San Francisco, December 2008 (poster)*.
- Jobson B.T., Wallace W., Westberg H., Hamilton H., Pryor S.C., Barthelmie R. (2008): Abundance of biogenic and anthropogenic SOA tracer compounds in fine particles during the Nucleation In ForesTs experiment (NIFTy). *AGU: Fall meeting, San Francisco, December 2008 (poster)*.
- Valyou D., Butler J., Zito E., Hull W., Hoffman J., Mazocca P., Dhaniyala S., Hopke P.K., Barthelmie R.J., Scott S., Pryor S.C. (2008): Measurement of particle concentrations above a forest and surrounding farmland. *AGU: Fall meeting, San Francisco, December 2008 (poster)*.
- Petäjä T., Mauldin III R.L., McGrath J., Kosciuch E., Kulmala M., Pryor S. (2008): Sulfuric acid concentrations during the NIFTy campaign. *AGU: Fall meeting, San Francisco, December 2008*
- McGrath J.A., Mauldin L., Petaja T., Pryor S. (2008): A total OH loss rate measurement technique using select ion chemical ionization mass spectrometry (SICIMS). *AGU: Fall meeting, San Francisco, December 2008 (poster)*
- Griffith S., Hansen R., Dusanter S., Stevens P., Galloway M., Hottle J., Kammrath A., Keutsch F., Mielke L., Alaghmand M., Shepson P., Zhang N., Zhou X., Bertman S., Carroll M., Pryor S., Dragoni D. (2008): Hydroxyl and Hydroperoxy Radical Measurements in a Forested Environment During the PROPHET 2008 and NIFTy Field Campaigns. *AGU: Fall meeting, San Francisco, December 2008 (poster)*.
- Hansen R., Dusanter S., Griffith S., Stevens P., Mielke L., Alaghmand M., Shepson P.B., Hottle J., Keutsch F., Carroll M.A., Bertman S., Pryor S.C., Dragoni D. (2008): measurements of total hydroxyl radical reactivity in forested environments with a turbulent-flow reactor. *AGU: Fall meeting, San Francisco, December 2008 (poster)*.
- Takle E.S., Pryor S.C., Barthelmie R.J., Rabideau S., Arritt R.W., Gutowski W.J., Flory D. and the NARCCAP team (2008): Preliminary analysis of wind speed simulations over the US produced by Regional Climate Models. *AGU: Fall meeting, San Francisco, December 2008*.
- Pryor S.C., R.J. Barthelmie, A.M. Spaulding, A. Rossner, B. Crimmins, P.K. Hopke, L. Mauldin, T. Jobson (2008): Nucleation and growth in/over a deciduous forest: How important are the trees? *American Aerosol Association Annual Conference, Orlando, October 2008*.
- R.J. Barthelmie and S.C. Pryor (2008): The role of the breakdown of the nocturnal boundary layer in particle nucleation. *American Aerosol Association Annual Conference, Orlando, October 2008*.
- A.M. Spaulding, S.C. Pryor, R.J. Barthelmie (2008): Synoptic scale meteorological controls on particle nucleation. *American Aerosol Association Annual Conference, Orlando, October 2008 (poster)*.
- Pryor S.C. (2008): Changes in the seasonality of precipitation. *Growing the Bioeconomy, Ames, Iowa, Sept 2008*.
- Pryor S.C., Barthelmie R.J., Takle G.S. and Andersen T. (2008): The impact of climate change on wind energy resources. *World Renewable Energy Congress-X, Glasgow, July 2008 (plenary)*.
- Pryor S.C. and Barthelmie R.J. (2008): Wind climate of the Midwest. *WIndiana conference '08, Indianapolis, IN, June 2008 (poster)*.
- Barthelmie R.J., Pryor S.C. and Young D.T. (2008): Use of lidar for wind energy applications. *WIndiana conference '08, Indianapolis, IN, June 2008 (poster)*.
- Pryor S.C. and Barthelmie R.J. (2008): Long-term trends of wind speeds in the USA. *American Wind Energy Association Conference, Austin, Texas, June 2008*.
- Pryor S.C., R.J. Barthelmie and Takle G.S. (2008): Historical trends in wind speeds from observational data, reanalysis output and Regional Climate Model simulations over the continental USA. *EGU General Assembly, Vienna, Apr 2008 (poster)*.
- Schoof J.T. and Pryor S.C. (2008): On the proper order of Markov chain for precipitation occurrence. *88th AMS annual meeting, New Orleans, LA, Jan 2008*.

2007

- Takle E.S., Pryor S.C., Barthelmie R.J., Anderson T.K., Correia J., Flory D., Arritt R.W. and Gutowski

CONFERENCE PRESENTATIONS: Sara C. Pryor

- W.J. (2007): Trends in US surface winds over the last quarter of the 20C: Observations and model results. *American Geophysical Union, San Francisco, Dec 2007*.
- Sørensen L.L., Larsen S.E., Pryor S.C. and Kristensen T. (2007): Measurement of primary marine aerosols using the dissipation technique. *Nordic Aerosol Society Annual Meeting, Helsingør, Nov. 2007*
- Pryor S.C. (2007): Extreme precipitation over the USA: Did it change during the C20th? *30th Annual Applied Geography Conference, Indianapolis, USA Oct 2007*.
- Barthelmie R.J. and Pryor S.C. (2007): Wind speed trends over the contiguous USA. *30th Annual Applied Geography Conference, Indianapolis, USA Oct 2007*.
- Pryor S.C. (2007): Extreme precipitation in the Midwest. *Workshop on Midwestern Climate variability, predictability and change. Bloomington, October 2007*.
- Pryor S.C. and Barthelmie R.J. (2007): Wind climates over the past 30-years. *Workshop on Midwestern Climate variability, predictability and change. Bloomington, October 2007*
- Pryor S.C., Barthelmie R.J., Rahman F. and Cordova V. 2007: Nucleation and particle growth over/in a forest. *American Aerosol Association Annual Conference, Reno, September 2007*.
- Barthelmie R.J., Pryor S.C., Sørensen L.L. and Larsen S.E. 2007: Investigating apparent particle emission fluxes over forests. *American Aerosol Association Annual Conference, Reno, September 2007*.
- Pryor S.C., Barthelmie R.J. and Riley E.S. (2007): Historical evolution of wind climates in the Midwestern USA. *Science of making torque from wind. Copenhagen, Denmark, Aug. 2007*.
- Pryor S.C. and Barthelmie R.J. (2007): Observations of winter-time nucleation and particle growth over/in a forest. *17th International Conference on Nucleation and Atmospheric Aerosols, Galway, Ireland, Aug. 2007*.
- Pryor S.C., Barthelmie R.J., Sørensen L.L. and Larsen S.E. (2007): Upward fluxes of particles over forests: When, where, why? *17th International Conference on Nucleation and Atmospheric Aerosols, Galway, Ireland, Aug. 2007*.
- Birsan F. and Pryor S.C. (2007): Dry deposition fluxes and timescales of turbulent deposition over tall vegetative canopies. *17th International Conference on Nucleation and Atmospheric Aerosols, Galway, Ireland, Aug. 2007*.
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2006

- Pryor S.C. and Binkowski F.S. (2006): Modeling the consequences of different particle deposition algorithms over different land cover types, *International Aerosol Conference, Minneapolis, Sept. 2006*.
- Birsan F. and Pryor S.C. (2006): A new model for particle deposition to forests, *International Aerosol Conference, Minneapolis, Sept. 2006*.
- Pryor S.C., Barthelmie R.J., Larsen S.E. and Sørensen L.L. (2006): Dependence of deposition fluxes on particle size and friction velocity, *International Aerosol Conference, Minneapolis, Sept. 2006*.
- Pryor S.C., Barthelmie R.J., Schoof J.T. (2006): Developing robust projections of wind energy resources under climate change. *European Conference on Impacts of Climate Change on Renewable Energy Sources, Reykjavik, Iceland, June 2006*.
- Pryor S.C., Spaulding A.M., Rauwolf H. and Barthelmie R.J. (2006): Enrichment of inorganic ions during the initial stages of precipitation events, *The Seventh Informal Conference on Atmospheric and Molecular Science: Nitrogen Compounds in the Environment, Helsingør, Denmark, 9-10 June 2006*.
- Barthelmie R.J., Pryor S.C., Tveito O.E., Roald L.A. and Hisdal H. (2006): Wind speed and runoff of the recent past: are variations of hydropower and wind power linked by atmospheric circulation patterns? *European Conference on Impacts of Climate Change on Renewable Energy Sources, Reykjavik, Iceland, June 2006*.
- Clausen N.E., Barthelmie R.J., Gryning S.E., Pryor S.C., Tarp-Johansen N.J., Holttinen H., Gregow E., Ólafsson H., Lundsager P., Tammelin B. (2006): Impact from Climate Change on the Wind Energy Potential in the Nordic region, *European Conference on Impacts of Climate Change on Renewable Energy Sources, Reykjavik, Iceland, June 2006*.

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- Pryor S.C. and Barthelmie R.J. (2006): Extreme wind speeds in the Arctic: Quantifying historical trends and developing projections under future climates. *Workshop on the changing climate of extreme weather in the Northeast Atlantic, Bergen, Norway, June 2006 (invited)*.
- Barthelmie R.J., Sempreviva A.M., Pryor S.C. (2006): Influence of humidity fluxes on stability calculations offshore, *EGS, Vienna, Apr. 2006*
- Pryor S.C., Barthelmie R.J., Schoof J.T. (2006): Projections of near-surface winds under climate change scenarios for use in the wind energy industry, *EGS, Vienna, Apr. 2006*
- Barthelmie R.J., Frandsen S.T., Rethore P.-E., Mechali M., Pryor S.C., Jensen L., and Sørensen P. (2006): Modelling and measurements of offshore wakes. *Proceedings of Offshore Wind Energy in Mediterranean and Other European Seas (OWEMES) April 2006*.
- Pryor S.C., Larsen S.E., Sørensen L.L. and Barthelmie R.J. (2006): Quantifying particle fluxes above forests. *1st iLEAPS conference, Boulder, CO, Jan. 2006*.
- Sørensen L.L., Pryor S.C., Sempreviva A.M., Lund S.W. and Jensen B. (2006): Fluxes of reactive gases to the marine surface. *1st iLEAPS conference, Boulder, CO, Jan. 2006*.
- Sempreviva A.M., Sørensen L.L., Pryor S.C., Larsen S.E. (2006): Heat transfer during high wind in the surface layer. *1st iLEAPS conference, Boulder, CO, Jan. 2006*.
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2005

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- Clausen N.E., Barthelmie R., Gryning S., Lundsager, P., Pryor S.C., Tarp-Johansen, N., Larsen, X., Gregow, E., Holttinen, H., Bergström, Ólafsson, H. (2005): Impact from climate change on extreme winds and icing conditions in the Baltic region. *Copenhagen Offshore Wind Conference, Oct. 2005*.
- Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2005): Observations of ultra-fine particles over a forest. *AAAR annual meeting, Austin, TX, Oct. 2005*.
- Pryor S.C., Sørensen L.L. and Larsen S.E. (2005): Particle flux divergence due to particle dynamics: Is there a spectral signature? *AAAR annual meeting, Austin, TX, Oct. 2005*.
- Birsan F. and Pryor S.C. (2005): A new analytical model for particle deposition to forests. *AAAR annual meeting, Austin, TX, Oct. 2005*.
- Sørensen L.L., Pryor S.C., Jensen, B., Lund, S. and Sempreviva, A. (2005): Fluxes of reactive gases to the marine surface. *First ACCENT Symposium: 'The Changing Chemical Climate of the Atmosphere', Urbino, Italy, Sept. 2005*.
- Hasager C., Nielsen M., Astrup P., Barthelmie R.J. and Pryor S. (2005): Remote sensing for wind energy applications. *31st International symposium on Remote Sensing of Environment, Russian Federation, June 2005*.
- Pryor S., Barthelmie R.J., Larsen S., Lund S., Sørensen L. (2005): Particle measurements in and over a Beech forest. *BACCI 2005 conference, Kuopio, Finland, June 2004*.
- Larsen S., Sørensen L. and Pryor S. (2005): Spectral estimation of fluxes for homogeneous and heterogeneous conditions. *BACCI 2005 conference, Kuopio, Finland, June 2004*.
- Barthelmie R.J., Frandsen S., Pryor S. and Landberg L. (2005): Wakes within and downwind of large offshore wind farms. *American Wind Energy Conference, Denver, May 2005*.
- Pryor S., Barthelmie R. and Kjellström E. (2005): Climate change impacts on wind energy resources in northern Europe. *Risø International Energy Conference 2005, Roskilde, May 2005*.
- Barthelmie, R.J., Frandsen S., Pryor S.C., and Mann J. (2005): Wakes within and downwind of offshore large wind farms. *EGS Annual Meeting, Vienna, Apr. 2005 (poster)*.
- Pryor S.C., Barthelmie R., Kjellström E., and Mann J. (2005): Potential climate change impact on wind energy resources in northern Europe. *EGS Annual Meeting, Vienna, Apr. 2005 (poster)*.
- Sempreviva A.M., Sørensen L.L. and Pryor S.C. (2005): Heat transfer during high wind episodes in the marine boundary layer. *ACCENT: BIAFLUX flux workshop, Denmark Apr. 2005 (poster)*.
- Sørensen L.L., Pryor S.C. and Larsen S.E. (2005): Use of spectra in flux estimation of trace chemicals. *ACCENT: BIAFLUX flux workshop, Denmark Apr. 2005*.
- Pryor S.C. (2005): Particle fluxes to forests. *Invited presentation, ACCENT: BIAFLUX flux workshop, Denmark Apr. 2005*.

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- Pryor S.C., Barthelmie R., Schoof J., Kjellström E., and Roeckner E. (2005): Developing wind climate projections. *IPCC Workshop, Hawaii, Mar. 2005*.
- Barthelmie R., Pryor S.C., Prip H. and Sørensen L.L. (2005): Observations of ultra-fine particles above a Beech forest. *ACCENT workshop on particle nucleation, Villigen, Switzerland, Jan. 2005*.
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2004

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- Pryor S., Barthelmie R. and Schoof J. (2004): How coherent is inter-annual variability of wind energy indices over Europe and what are the implications for large scale penetration by wind energy of electricity markets? *European Wind Energy Conference, London, Nov. 2004*.
- Frandsen S.T., Barthelmie R.J., Pryor S.C., Rathmann O., Larsen S. and Højstrup J. (2004): Analytical modelling of wind speed deficit in large offshore wind farms. *European Wind Energy Conference, London, Nov. 2004*.
- Barthelmie R., Giebel G., Jorgensen B., Badger J., Pryor S.C. and Hasager C. (2004): Comparison of corrections to site wind speeds in the offshore environment: value for short-term forecasting. *European Wind Energy Conference, London, Nov. 2004*.
- Hasager C.B., Barthelmie R., Christiansen M. Nielsen M. and Pryor S.C. (2004): Quantifying offshore wind resources from satellite wind maps: study area North Sea. *European Wind Energy Conference, London, Nov. 2004*.
- Clausen N.E., Barthelmie R.J., Gryning S.E., Lundsager P., Pryor S.C., Tarp-Johansen N.J., Tammelin B., Holttinen H., Bergström H. and Ólafsson H. (2004): Impact from Climate Change on the Wind Energy Potential in the Nordic Region. *European Wind Energy Conference, London, Nov. 2004*.
- Pryor S.C., Barthelmie R.J. and Binkowski F.S. (2004): Numerical simulations of aerosol flux divergence during dry deposition to forest canopies. *BACCI 2004 conference, Lund, Sweden, June 2004*.
- Pryor S.C., Barthelmie R.J., Sørensen L.L., Andersson K., Prip H. and Larsen S. (2004): Observations of aerosol flux divergence during dry deposition to forest canopies. *BACCI 2004 conference, Lund, Sweden, June 2004*.
- Barthelmie R., Frandsen S., Pryor S. and Larsen S. (2004): Flow within and downwind of large wind farm clusters. *Nato Advanced Study Institute: Flow And Transport Processes In Complex Obstructed Geometries: From Cities And Vegetative Canopies To Industrial Problems, Kiev, May 2004 (poster)*.
- Pryor S.C., Barthelmie R.J. and Schoof J.T. (2004): Wind energy prognoses for the Baltic region. *4th study conference on BALTEX. Bornholm, Denmark, May 2004*.
- Pryor S.C. (2004): Influence of sea spray source formulation on heterogeneous chemistry and deposition. *ONR sponsored workshop: Towards a universal sea spray source function. University of Leeds, May 2004*.
- Barthelmie R., Frandsen S., Pryor S. and Larsen S. (2004): Flow within and downwind of large wind farm clusters. *Nato Advanced Study Institute: Flow And Transport Processes In Complex Obstructed Geometries: From Cities And Vegetative Canopies To Industrial Problems, Kiev, May 2004 (poster)*.
- Barthelmie R., Frandsen S., Pryor S., Larsen S. and Mann J. (2004): Analytical modelling of large wind farm clusters. *European Geophysical Union Meeting, Nice, Apr. 2004 (poster)*.
- Hasager C., Nielsen, M. Pryor S.C. (2004): Wind resource estimation from SAR: Uncertainties and prospects. *European Geophysical Union, Nice, Apr. 2004*.
- Pryor S.C. and Barthelmie R.J. Past and future wind climates: Flow regimes in a non-stationary climate. *The science of making torque from wind - EWEA special topic conference, Delft, Apr. 2004*.
- Barthelmie R.J., Hansen O.F., Enevoldsen K., Frandsen S., Pryor S., Højstrup J., Larsen S., Motta M. and Sanderhoff P. Ten years of measurements of offshore wind resources - what have we learnt and where are the uncertainties? *The science of making torque from wind - EWEA special topic conference, Delft, Apr. 2004*
- Frandsen S., Barthelmie R., Pryor S. and Larsen S. Analytical modelling of large wind farm clusters. *The science of making torque from wind – EWEA special topic conference, Delft, Apr. 2004*

CONFERENCE PRESENTATIONS: Sara C. Pryor

Pryor S.C., Schoof J.T. and Barthelmie R.J. Near-surface flow regimes: Recent changes and tools for prognoses. *15th AMS Symposium on Global Change and Climate Variations*. Seattle, Wa, Jan. 2004.

Schoof J.T. and Pryor S.C. An evaluation of two GCMs: North American teleconnections and synoptic phenomena. *15th AMS Symposium on Global Change and Climate Variations*. Seattle, Wa, Jan. 2004.

2003

Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2003): Phase partitioning and fluxes of nitrogen in the marine boundary layer. *BACCI Workshop on Modeling and Parameterization*, Roskilde, Nov. 2003.

Pryor S.C., Klemm O. and Barthelmie R.J. (2003): An investigation of the magnitude of resistance terms in dry deposition fluxes to a conifer forest. *BACCI Workshop on Modeling and Parameterization*, Roskilde, Nov. 2003.

Barthelmie R.J. and Pryor S.C. (2003): A chemical mechanism for modelling d-limonene oxidation. *BACCI Workshop on Modeling and Parameterization*, Roskilde, Nov. 2003.

Barthelmie R.J., Pryor S.C. and Sørensen L.L. (2003): The contribution of ammonia emissions from traffic to deposition in the Øresund. *BACCI Workshop on Modeling and Parameterization*, Roskilde, Nov. 2003.

Pryor S.C., Barthelmie R.J. and Sørensen L.L. (2003): Phase partitioning and fluxes of nitrogen in the marine boundary layer. *Nordic Aerosol Society Annual Meeting*, Copenhagen, Nov. 2003.

Barthelmie R.J. and Pryor S.C. (2003): A chemical mechanism for modelling d-limonene oxidation. *Nordic Aerosol Society Annual Meeting*, Copenhagen, Nov. 2003.

Barthelmie R.J., Pryor S.C. and Sørensen L.L. (2003): The contribution of ammonia emissions from traffic to deposition in the Øresund. *Nordic Aerosol Society Annual Meeting*, Copenhagen, Nov. 2003.

Pryor S.C. and Sorensen L. Partitioning and fluxes of oxidized nitrogen in the marine boundary layer. *AAAR annual meeting*, Los Angeles, Ca, Oct 2003.

Binkowski F.S. and Pryor S.C. An analysis of the time scales associated with aerosol processes during dry deposition *AAAR annual meeting*, Los Angeles, Ca, Oct 2003.

Makar P.A., Pryor S.C., Boudries H., K. Hayden, K. Anlauf. Inorganic Particle Formation in Polluted Coastal Regions: Comparisons between Measurements and Models During Pacific2001 *AAAR annual meeting*, Los Angeles, Ca, Oct 2003.

Barthelmie R.J., Pryor S.C. and Sorensen L. The role of ammonia emissions from traffic in urban aerosol burdens. *AAAR annual meeting*, Los Angeles, Ca, Oct 2003.

Pryor S.C., Barthelmie R.J. and Sørensen L.L. Fluxes of reactive nitrogen in the coastal zone. *Integrated Land Ecosystem – Atmosphere Process Study (ILEAPS)*, IGBP conference, Helsinki, Sep-Oct 2003.

Barthelmie R.J. and Pryor S.C. Long-term trends in near-surface flow over the Baltic. *Results of the BALTEX/BRIDGE Period 1999-2002 A workshop prior to the 15th BALTEX SSG Meeting*, Risø National Laboratory, Roskilde, Sep, 2003.

Hasager C.B., Rathmann O., Nielsen M., Barthelmie R.J., Pryor S., Højstrup J., Badger J., Nørgård P., Lundsager P. Wind energy calculated from SAR and scatterometer satellite data. *ESA workshop and renewable energy*, Frascati (IT), 23-24 Jun 2003.

Pryor S.C., Barthelmie R.J., Mann J. and Nielsen, N.M. Errors introduced by satellite sampling of offshore wind speeds. *European Wind Energy Conference 2003*, Madrid, Spain, June 2003.

Barthelmie R., Larsen G., Pryor S., Bergström H., Magnusson M., Schlez W., Rados K., Lange B., Vølund P., Neckelmann S., Mogensen S., Schepers G., Hegberg T., and Folkerts L. (2003): ENDOW: Efficient Development of Offshore Windfarms: modelling wake and boundary-layer interactions. *European wind energy conference and exhibition 2003 (EWEC 2003)*, Madrid, June 2003.

Hasager C.B., Rathmann O., Nielsen M., Barthelmie R.J., Pryor S.C., Dellwik E. and Furevik B.R., (2003): Offshore wind resource assessment based on satellite wind field maps. *European wind*

CONFERENCE PRESENTATIONS: Sara C. Pryor

- energy conference and exhibition 2003 (EWEC 2003), Madrid, June 2003.*
- Barthelmie R., Frandsen S., Pryor S., Højstrup J., Larsen S., Hansen O., Enevoldsen K., Sanderhoff P. and Landberg L. 2003: Measurements related to modelling of large offshore wind farms: ten years experience. *American Wind Energy Conference, Austin, USA, May 2003.*
- Pryor S.C. and Barthelmie R.J. Nutrient Fluxes In Precipitation, Throughfall And Stemflow: Observations From A Deciduous Forest. *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Pryor S.C., Klemm, O. and Sørensen, L. Observations of nitric acid fluxes to forests using the REA technique. *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Pryor S.C., Barthelmie R.J. and Schoof J.T. Observed and predicted flow variability over the Baltic Region: Implications of Climate Change for wind energy viability *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Pryor S.C. and Sørensen L. Partitioning and fluxes of oxidized nitrogen in the marine boundary layer. *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Sørensen L., Pryor S.C. and Pedersen B. Air sea exchange of ammonia. *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Sørensen L.L., Barthelmie R.J., Pryor S.C., Bilde M. and Ingemasson O. Input of nitrogen to coastal waters. *AGU/EGS Joint Assembly, Nice, France, April 2003 (poster).*
- Sempreviva A., Pryor S.C. and Sørensen L. Latent and sensible heat fluxes in oceanic environments – the role of sea spray. *AGU/EGS Joint Assembly, Nice, France, April 2003 (poster).*
- Barthelmie R.J., Pryor S.C. and Fransen S. Statistical and physical modelling of large wind farm clusters. *AGU/EGS Joint Assembly, Nice, France, April 2003*
- Furevik B., Hasager, C.B., Barthelmie, R.J., Pryor, S., Espedal, Joergensen, B.H., Rathmann, O., Sandven, S., Gaudiosi, G., Christensen, L.C. Johannesen, O. Satellite-based wind maps - are they useful for siting of offshore wind farms? *Offshore Wind Energy in Mediterranean and Other European Seas (OWEMES). Naples, April 2003.*
- Pryor S.C., Barthelmie R.J., Mann J. and Nielsen M. Quantifying errors associated with satellite sampling of offshore wind speeds. *Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Sicily, April 2003.*
- Barthelmie R.J., Pryor S.C. and Schoof J. Evidence of trends in near-surface wind speeds over the Baltic. *Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Sicily, April 2003.*
- Barthelmie R.J., Larsen G., Pryor S., Rados K., Bergstrom H., Magnusson, Schelz W., Necklemann S., Mogensen S., Schepers G and Hegberg T. ENDOW: Efficient Development of Offshore Windfarms. *Offshore Wind Energy in the Mediterranean and other European Seas (OWEMES) 2003, Sicily, April 2003.*
-

2002

- Pryor S.C., Anlauf K., Hayden K., Schiller C., Wiebe A., Barthelmie R.J., Davis M.L., and Jensen B. Assessing spatial and temporal variability and source attribution of ammonia during Pacific2001. *AGU, Fall meeting, San Francisco Dec. 2002 (poster).*
- Pryor S.C., Hertel O., Skjoth C., Zagar M., Sørensen L., Frohn L., Svensen G. Sempreviva L. Process level transect modeling of nitrogen chemistry in the marine boundary layer. *American Association for Aerosol Research (AAAR) Annual Conference. Charlotte. Oct. 2002.*
- Barthelmie R.J., Pryor S.C., Makar, P. and Schell B. A new chemical mechanism for modeling d-limonene oxidation. *American Association for Aerosol Research (AAAR) Annual Conference. Charlotte. Oct. 2002.*
- Hasager C.B., Furevik B., Pryor S.C. and Barthelmie R.J. Offshore wind resources quantified from satellite SAR: methodology and technical aspects. *1st International Symposium on Recent Advances in Quantitative Remote Sensing, Sept 2002, Valencia, Spain.*
- Pryor S. Particles and visibility. *Keynote address at 16th International Clean Air and Environment Conference, Christchurch, NZ, Aug 2002.*
- Pryor S.C., Jensen B. and Davis M. 2002: Measurements of reduced nitrogen compounds during

CONFERENCE PRESENTATIONS: Sara C. Pryor

- Pacific'2001. *Canadian Society for Chemistry Annual conference, Vancouver, Jun 2002.*
- Pryor S.C., Jensen B. and Davis M. 2002: Measurements of aged reactive nitrogen compounds during Pacific'2001. *Pacific'2001 workshop, Vancouver, May 2002.*
- Barthelmie R., Pryor S. and Hasager C. 2002: Can satellite sampling of offshore wind represent wind speed distributions? *Global Windpower, Paris, Apr 2002.*
- Pryor S.C. and Sørensen L. An evaluation of sea spray emission source functions. *EUROTRAC-2 Symposium, Germany, Mar 2002 (poster).*
- Sørensen L., Pryor S.C., Sempreviva A., Spokes, L. Air-Sea fluxes of nitrogen compounds. *EUROTRAC-2 Symposium, Germany, Mar 2002 (poster).*
- Hasager C.B., Sørensen L., Pryor S., Spokes L. Gustafsson B., Carstensen J. and Conley D. Linking chlorophyll mapped by SeaWiFS satellite data to atmospheric nitrogen deposition in the Kattegat Sea between Denmark and Sweden. *Operational Oceanography and Remote Sensing, WARP, Nova Scotia, Feb 2002.*
- Pryor S.C. Particle dry deposition for regional models. *EMEP Meeting on Implementation of dynamic aerosol models for large scale applications, Helsinki, Finland, Jan. 2002 (invited presentation).*
-

2001

- Jørgensen B.H., Furevik B., Hasager C.B., Astrup P., Rathmann O., Barthelmie R.J. and Pryor S.C. Satellite images used in offshore wind resource assessment, *EWEA Offshore Wind Energy Special Topic Conference, Brussels, Dec.2001.*
- Barthelmie R.J., Frandsen S., Pryor S., Morgan C., Henderson A., Sørensen H.C., Garcia C, Lemonis G., Hendriks B. and Gallachóir B. Offshore wind potential in Europe and review of offshore resource modelling techniques, *EWEA Offshore Wind Energy Special Topic Conference, Brussels, Dec. 2001.*
- Pryor S., Barthelmie R., Carreiro M, Davis M., Hartley A., Jensen B., Oliphant A., Randolph J., Schoof J. Forest canopy uptake of atmospheric nitrogen at a midwestern US mixed hardwood site and possible implications for carbon storage. *American Geophysical Union, San Francisco. Dec. 2001.*
- Sørensen L., Hasager C., Pryor S. Sempreviva A. Marine Effects from Atmospheric Deposition (MEAD). *Danish Society for Atmospheric Research Annual Meeting, Copenhagen. Nov. 2001.*
- Pryor S. and Barthelmie R. Atmosphere-surface exchange of particles: Experimentally and numerically determined deposition velocities. *Nordic Aerosol Symposium, Lund. Nov 2001.*
- Barthelmie, R.J. and Pryor, S.C. Total organic aerosol concentrations: relative contributions of biogenic and anthropogenic and primary and secondary aerosol, *Nordic Aerosol Symposium, Lund. Nov 2001.*
- Pryor S., Barthelmie R. Particle deposition to forests. *American Association for Aerosol Research (AAAR) Annual Conference. Portland. Oct. 2001.*
- Pryor S., Barthelmie R., A-M. Sempreviva, L.L. Sørensen, Quantifying the source strength of sea spray fluxes. *American Association for Aerosol Research (AAAR) Annual Conference. Portland. Oct. 2001.*
- Pryor S., Barthelmie R., Carreiro M, Davis M., Hartley A., Jensen B., Oliphant A., Randolph J., Schoof J. Nitrogen Deposition To A Mid-Latitude Deciduous Forest And Ecosystem Response. 2nd *International Nitrogen Conference. Washington, D.C. Oct. 2001.*
- Sørensen L.L., Pedersen B., Pryor S., Spokes L, Sempreviva, A. Atmospheric Nitrogen Deposition Effecting The Marine Water. 2nd *International Nitrogen Conference. Washington, D.C. Oct. 2001.*
- Pryor S.C., Barthelmie R.J. and Sørensen L. CHEM-COAST: Modeling the impact of heterogeneous reaction of nitric acid on nitrogen deposition to marine environments. *Challenges of a Changing Earth: Scientific Conference of the International Global Atmospheric Chemistry Project, Amsterdam, Jul. 2001 (poster).*
- Pryor S.C. and Barthelmie R.J. Heterogeneous reaction of nitric acid in marine environments: Implications and uncertainties. *Second Informal Conference on Reaction Kinetics and*

CONFERENCE PRESENTATIONS: Sara C. Pryor

Atmospheric Chemistry, Nordic Network for Chemical Kinetics, Helsingør, Denmark, June 2001 (poster).

Barthelmie R.J. and Pryor S.C. Modelling biogenic aerosol-- the effect of speciating monoterpene emissions and chemistry. *Second Informal Conference on Reaction Kinetics and Atmospheric Chemistry, Nordic Network for Chemical Kinetics, Helsingør, Denmark, June 2001.*

Pryor S.C., Barthelmie R.J., Davis M.L., Schoof J.T., Hirzy K.C., Hartley A., Carreiro M. and Jensen B. Nitrogen deposition to and cycling in a forest ecosystem. *American Association of Geographers, New York, Feb-Mar. 2001.*

2000

Pryor S.C., Barthelmie R.J., Schoof J. and Erickson D. Modeling heterogeneous chemistry on sea spray: implications for nitrogen deposition. *American Association for Aerosol Research (AAAR) Annual Conference. St Louis. Nov. 2000.*

Pryor S.C., Barthelmie R.J., Jensen B., Hirzy K., Schoof J. and Davis M. An investigation of the role of particles in observations of the bidirectionality of ammonia fluxes. *American Association for Aerosol Research (AAAR) Annual Conference. St Louis. Nov. 2000 (poster).*

Barthelmie R.J. and Pryor S.C. Speciating monoterpene emissions and chemistry for regional atmospheric chemistry models. *American Association for Aerosol Research (AAAR) Annual Conference. St Louis. Nov. 2000.*

Pryor S.C., Barthelmie R.J., Schoof J., and Erickson D. Modeling heterogeneous chemistry in sea salt droplets. *European Aerosol Conference. Dublin, Sept. 2000. (invited).*

Barthelmie R.J. and Pryor S.C. The influence of speciating monoterpene emissions and chemistry on modelled secondary organic aerosol concentrations and composition. *European Aerosol Conference. Dublin, Sept. 2000. (invited).*

Pryor S.C., Barthelmie R.J., Hirzy K., Sørensen L.L. and Jensen B. Bidirectionality of ammonia fluxes: Observations over a deciduous forest. *6th International Conference on Atmosphere-Surface Exchange of Gases and Particles, Edinburgh, July 2000 (poster).*

Pryor S.C., Barthelmie R.J., Schoof J., Sørensen L.L. and Erickson D. Implications of heterogeneous chemistry for nitrogen deposition to marine ecosystems: observations and modeling. *6th International Conference on Atmosphere-Surface Exchange of Gases and Particles, Edinburgh, July 2000.*

Schoof J. and Pryor S.C. Synoptic circulation classification and downscaling for the Midwestern USA. *15th Conference on Probability and Statistics in the Atmospheric Sciences, American Meteorological Society, Asheville, North Carolina, May 2000.*

Pryor S.C. and Barthelmie R.J. Flow characteristics in the coastal zone. *OWEMES 2000, Sicily, April 2000.*

1999

Pryor S.C. Nitrogen deposition to water surfaces. *6th International AMS Conference on estuarine and coastal modeling. New Orleans. Nov. 1999.*

Sørensen L.L., Geernaert G.L. de Leeuw G. Plate E., Pryor S. and Smedman A.S. Surface fluxes process study in BASYS. *BASYS project meeting, Warnemuender, Nov. 1999.*

Pryor S.C. Nitrogen deposition estimates and uncertainties. *Workshop on Nitrogen deposition to and cycling in forest ecosystems and linkages to carbon sequestration. Indiana University, Bloomington Oct. 1999.*

Barthelmie R.J. and Pryor S.C. Modeling secondary organic aerosol concentrations: Comparison of aerosol yield with mechanistic approaches. *AAAR Annual Conference. Tacoma, Oct. 1999.*

Pryor S.C., Barthelmie R.J., and Jensen B. Aerosol characteristics and contribution to nitrogen dry deposition at an AmeriFlux site. *6th Scientific Conference of the International Global Atmospheric Chemistry Project, Bologna, Sept. 1999 (poster).*

Barthelmie R.J. and Pryor S.C. Modeling the biogenic contribution to total aerosol concentrations. *6th Scientific Conference of the International Global Atmospheric Chemistry Project, Bologna, Sept. 1999 (poster).*

CONFERENCE PRESENTATIONS: Sara C. Pryor

-
- Barthelmie R.J. and Pryor S.C. Assessing the relative importance of biogenic and anthropogenic sources to primary and secondary aerosols in the Fraser Valley during the summertime. *European Aerosol Conference, Prague, Sept. 1999 (poster)*.
- Ellermann T., Geernaert, L.L.S., Pryor S.C., and Barthelmie R.J. Effekt af heterogene kemiske reaktioner på salpetersyrefluxe i kystområder (Impact of heterogeneous chemical reactions on fluxes of nitric acid in coastal areas). *Dansk Miljøforskning konferencen, Roskilde, Aug. 1999 (poster)*.
- Hertel O., Palmgren F., de Leeuw F., Gee D., Herbarth O., Raaschou-Nielsen O., Pryor S., Jensen S. and Olsen E. Human exposure to outdoor air pollution. *International Union of Pure and Applied Chemistry General Assembly, Berlin, August 1999*.
- Schoof J. and Pryor S.C. Synoptic circulation classification and downscaling for the Midwestern USA. *American Geophysical Union, Boston, June 1999 (poster)*.
- Pryor S.C. and Barthelmie R.J. Nitrogen deposition to forest ecosystems: Observations and implications for carbon sequestration. *U.S. Department of Energy Joint Science Meeting (TCP, PER & NIGEC), Indianapolis, June 1999 (poster)*.
- Pryor S.C. and Barthelmie R.J. NH_x deposition to different surface types. *European Geophysical Union, Le Hague, April 1999 (poster)*.
- Barthelmie R.J. and Pryor S.C. Oxidation pathways of monoterpenes leading to aerosol formation: A model mechanism. *European Geophysical Union, Le Hague, April 1999*.
-

1998

-
- Pryor S.C. and Barthelmie R.J. Trace nitrogen compounds: Ambient concentrations over and dry deposition to a deciduous forest. *1998 AGU Fall Meeting San Francisco, C.A. Dec. 1998*.
- Barthelmie R.J. and Pryor S.C. Modeling secondary organic aerosol formation: A new monoterpene mechanism. *1998 AGU Fall Meeting San Francisco, C.A. Dec. 1998 (poster)*.
- Pryor S.C., Barthelmie R.J., Jensen B., and Offerle B. Nitrogen dry deposition at an AmeriFlux site. *23rd AMS Conference on Agriculture and Forest Meteorology, Albuquerque, N.M., Nov. 1998*.
- Pryor S.C., Barthelmie R.J., Geernaert L.L.S., Ellermann T. and Perry K. Aerosols in the western Baltic: Results from ASEPS '97. *5th International Aerosol Conference, Edinburgh, Sept. 1998*.
- Barthelmie R.J. and Pryor S.C. A new mechanism for modeling secondary organic aerosol formation from monoterpenes. *5th International Aerosol Conference, Edinburgh, Sept. 1998*.
- Ellermann T., Geernaert L.L.S., Pryor S.C. and Barthelmie R.J. Impact of heterogeneous chemical reactions on fluxes of nitric acid in coastal areas. *6th FECS (Federation of European Chemical Societies) conference on chemistry in the environment Copenhagen, Aug. 1998 (poster)*.
- Pryor S.C., Barthelmie R.J., Geernaert L.L.S., Ellerman T. and Perry K. The role of aerosols in dry deposition to coastal waters. *4th International Aerosol Symposium, St. Petersburg, July 1998*.
- Barthelmie R.J. and Pryor S.C. DMS oxidation in a non-remote location. *4th International Aerosol Symposium, St. Petersburg, July 1998*.
- Grimmond C.S.B., Schmid H.P., Pryor S.C., Barthelmie R.J., Shurpali N.S., Offerle B. and Jensen B. Energy, mass and momentum exchange above a Midwestern hardwood forest. *GCIP Mississippi River Climate Conference, St Louis, M.O. June 1998 (poster)*.
- Grimmond C.S.B., Schmid H.P., Pryor S.C., Barthelmie R.J., Shurpali N.S., Offerle B. and Jensen B. Energy, mass and momentum exchange above a Midwestern hardwood forest. *FLUXNET Workshop, Polson, M.N., June 1998 (poster)*.
- Schmid H., Barthelmie R., Curtis P., Grimmond S., Pryor S. and Teeri J. CO₂ exchange in mixed hardwood forests in the midwestern United States: Two AMERIFLUX projects. *EGS, Nice, Apr 1998*.
- Pryor S.C., and Barthelmie R.J. Atmospheric aerosols during ASEPS '97. *AAG Annual Meeting, Boston, M.A. Mar. 1998*.
- Pryor S.C., Hoff R.M., and Barthelmie R.J. Remote sensing and numerical modeling of aerosol concentrations. *AAG Annual Meeting, Boston, M.A. Mar. 1998*.
- Pryor S.C. and Barthelmie R.J. ISOPART: Development and application of a lagrangian coupled gas-

CONFERENCE PRESENTATIONS: Sara C. Pryor

aerosol model. *A&WMA Speciality Conference PM_{2.5}: A fine particle standard, Long Beach, C.A.. Jan. 1998 (invited).*

Barthelmie R.J. and Pryor S.C. Modeled biogenic aerosol production during a summertime episode in southwestern British Columbia. *A&WMA Speciality Conference PM_{2.5}: A fine particle standard, Long Beach, C.A. Jan. 1998.*

1997

Pryor S.C., Hoff R.M., and Barthelmie R.J. Lagrangian modelling of aerosol layers and spatial patterns. *PNWIS A&WMA Annual Meeting, Vancouver, Nov. 1997 (invited).*

Barthelmie R.J. and Pryor S.C. Modeling secondary organic aerosols in the Lower Fraser Valley. *PNWIS A&WMA Annual Meeting, Vancouver, Nov. 1997 (invited).*

Barthelmie R.J. and Pryor S.C. Determining the biogenic contribution to secondary organic aerosol concentrations in the Fraser Valley. *AAAR Annual Conference. Denver, Oct. 1997.*

Pryor S.C., Hoff R.M., Barthelmie R.J. and McKendry I.G. Vertical and horizontal heterogeneity of aerosol loadings: Observations and modeling. *A&WMA Specialty Conference: Visual air quality, aerosols, the global radiation balance. Bartlett, N.H. Sep. 1997.*

Barthelmie R.J. and Pryor S.C. Influence of monoterpene chemistry on modeled aerosol and ozone concentrations - Implications for visibility impairment in the Fraser Valley. *A&WMA Specialty Conference: Visual air quality, aerosols, the global radiation balance. Bartlett, N.H. Sep. 1997.*

Pryor S.C. and Barthelmie R.J. Evaluation of an aerosol model: Responses to meteorology and emission scenarios. *22nd International Technical Meeting on Air Pollution Modelling and its Applications, Clermont-Ferrand, France. Jun. 1997.*

Hoff R.M., Guise-Bagley L., Moran M., McDonald K., Nejedly Z., Campbell I., Pryor S., Golestani Y., and Malm W. Recent visibility measurements in Canada. *90th A&WMA Annual Meeting, Toronto. Jun. 1997.*

1996

Pryor S.C. and Barthelmie R.J. Application of an aerosol model to the Lower Fraser Valley. *PNWIS A&WMA Annual Meeting, Seattle, W.A. Dec. 1996 (invited).*

Pryor S.C. and Barthelmie R.J. Using the REVEAL and REVEAL II data sets to examine the causes, frequency and severity of visibility degradation. *PNWIS A&WMA Annual Meeting, Seattle, W.A. Dec. 1996 (invited).*

Pryor S.C., Barthelmie R.J., King T., Bohme S., McLaren R., Dann T., and Suzuki N.M. Quantifying the impact of precursor variability on ozone concentrations. *89th A&WMA Annual Meeting, Nashville, T.N. Jun. 1996 (invited).*

Barthelmie R.J., and Pryor S.C. Assessing limits on inorganic aerosol formation. *89th A&WMA Annual Meeting, Nashville, T.N. Jun. 1996 (invited).*

Pryor S.C. and Barthelmie R.J. Modeling secondary inorganic aerosols. *13th Rocky Mountain Regional Atmospheric Chemistry Symposium, Denver, C.O. Jun. 1996.*

Pryor S.C. and Barthelmie R.J. Emission scenarios - aerosol responses. *Midwest Association for Cloud and Aerosol Physics (MACAP) Meeting. St. Louis, M.O. May 1996.*

Pryor S.C. Public perception of visual air quality. *AAG Annual Meeting, Charlotte, N.C. Apr. 1996.*

Barthelmie R.J., Grisogono B., and Pryor S.C. The influence of surface characteristics on diurnal cycles of near-surface wind-speeds. *AAG Annual Meeting, Charlotte, N.C. Apr. 1996.*

Pryor S.C., Barthelmie R. J., and Hertel O. Modelling fine aerosol concentrations in the Lower Fraser Valley, British Columbia. *12th AMS Biometeorology and Aerobiology Conference, Atlanta, G.A. Jan.-Feb. 1996.*

Barthelmie R.J., Grisogono B., and Pryor S.C. Diurnal variability of wind speeds over land and sea - Observations and simulations. *76th AMS Annual Meeting, Atlanta, G.A. Jan.-Feb. 1996.*

1995

Pryor S.C., Barthelmie R.J., and Hertel O. Visibility episodes in southwestern British Columbia - evaluation of a gas-to-particle scheme using the REVEAL data set. *21st International Technical*

CONFERENCE PRESENTATIONS: Sara C. Pryor

- Meeting on Air Pollution Modelling and its Applications, Baltimore, M.D. Nov. 1995.*
Barthelmie R.J., and Pryor S.C. The role of ammonia in fine aerosol formation and visibility impairment.
Second Circular International Conference on Atmospheric Ammonia, Oxford, U.K.. Oct. 1995.
Pryor S. C., and Barthelmie R. J. Investigation of the causes of visibility degradation in the Fraser Valley, British Columbia. *84th A&WMA Annual Meeting, San Antonio, T.X. Jun. 1995. (invited).*
Pryor S.C., and Pottier J. Predicting surface ozone concentrations in southwestern British Columbia based on readily available meteorological parameters. *CMOS Ann. Meeting, Kelowna, Canada. May 1995.*
Steyn D.G., Suzuki N.M., Cai X-M., Pryor S.C., and Barthelmie R.J. Combined meteorological and photochemical modelling of ozone episodes in the Lower Fraser Valley, B.C. *CMOS Annual Meeting, Kelowna, Canada. May 1995.*
-

1994

- Pryor S.C., Simpson R., Guise-Bagley L., Hoff R., Sakiyama S., and Steyn D. Visibility and ambient aerosols in the Fraser Valley, B.C. *AGU Fall Meeting, San Francisco, C.A. Dec. 1994.*
Steyn D.G., Suzuki N.M., Pryor S.C., and Cai X-M. Application of the Urban Airshed Model to the Lower Fraser Valley, British Columbia. *AGU Fall Meeting, San Francisco, C.A. Dec. 1994.*
Pryor S.C., Simpson R., Guise-Bagley L., Hoff R., Sakiyama S., and Steyn D. Examination of the spatial variability of visibility in the Lower Fraser Valley, B.C. *A&WMA/AGU Conference "Aerosols and Atmospheric Optics", Salt Lake City, U.T. Sep. 1994.*
Pryor S.C., and Steyn D.G. Temporal and spatial variability of hebdomadal cycles in ozone time series from the Lower Fraser Valley B.C. *CMOS Annual Meeting, Ottawa, Canada. May 1994.*
-

1993

- Pryor S.C., McKendry I.G., and Steyn D.G. Assessment of the influence of synoptic-scale meteorological variability on ozone concentrations in Vancouver, B.C. *A&WMA Conference "Regional Photochemical Measurement and Modeling Studies", San Diego, C.A. Nov. 1993.*
Sakiyama S., Bennett R., Tanaka T., Reid P., Rother P., Matsumara B., Dietrich D., Tree R., Ciarniello D., and Pryor S. REgional Visibility Experimental Assessment in the Lower Fraser Valley (REVEAL). *PNWIS/A&WMA Annual Conference, Victoria, Canada. Nov. 1993*
-

INVITED PRESENTATIONS: Sara C. Pryor

2010

Pryor S.C. Will global climate change impact the wind energy industry? Energy Center, Purdue University, April 2010.

Pryor S.C. Climate science: Key uncertainties. University of Western Ontario, London, Canada. February 2010.

Pryor S.C. Midwest precipitation: Going to extremes? Illinois State Water Survey, University of Illinois, January 2010.

2009

Pryor S.C. Understanding climate change. WFHB Firehouse Broadcasting – Interchange. 1 hour interview. October 2009.

Pryor S.C. Climate variability and change in the Midwestern US: Hydrologic regimes. Department of Geography, Indiana University. October 2009.

Pryor S.C. Sea spray aerosols. National Environmental Research Institute, University of Aarhus, Roskilde, Denmark. August 2009.

2008

Pryor S.C. Regional manifestations of climate change. Distinguished faculty lecture, University of Buffalo, SUNY. February 2008.

2007

Pryor S.C. Empirical downscaling of probability distributions. Arctic Monitoring and Assessment Programme (AMAP) Workshop on application of climate scenarios in local Arctic climate impact assessment, Oslo, Norway, May 2007.

Pryor S.C. Climate change over the last century and next 100 years. Part of Earth Day celebration, organized by the School of Public and Environmental Affairs, Indiana University. April 2007.

Pryor S.C. Towards improved models of particle dry deposition. Center For Air Resources Engineering and Science, Clarkson University, Potsdam. February 2007.

2006

Pryor S.C. Improving regional climate projections. School of the Environment. Macquarie University, Sydney, Australia. December 2006.

Pryor S.C. Particle fluxes: Dependencies and uncertainties. Department of Wind Energy and Atmospheric Physics, Risø National Laboratory, Roskilde, Denmark. May 2006.

2005

Pryor S.C. The 2005 hurricane season and hurricanes in a changing climate. The Weekly Special, WTIU, PBS Television station, Bloomington. October 2005.

Pryor S.C. Nitrogen fluxes to, and cycling in, a deciduous forest. Department of Biological Sciences, University of Illinois, Chicago. January 2005.

2004

Pryor S.C. Dry deposition of particles and reactive gases. Department of Wind Energy and Atmospheric Physics, Risø National Laboratory, Roskilde, Denmark. January 2004.

Pryor S.C. Development and application of the CHEM-DEP model. EMEP, Norwegian Meteorological Office, Oslo, Norway. January 2004.

2003

Pryor S.C. Climate change: A glance backward and a look forward. Continuing Studies, Indiana University. October 2003.

Pryor S.C. Wind speed trends over the Baltic Sea during the twentieth century (and beyond....). Department of Wind Energy and Atmospheric Physics, Risø National Laboratory. May 2003.

2002

Pryor S.C. Satellite sampling of offshore wind speeds: How do we do it and how good are the results? Department of Geography, Indiana University. Nov. 2002.

Pryor S.C. Deposition of nitrogen to forests: Observations and carbon storage implications. University of Bayreuth/BITOK, Bayreuth, Germany, May 2002.

Pryor S.C. Fertilizing forests: Nitrogen fluxes and carbon storage response. Atmospheric Chemistry – COGCI, Department of Chemistry, University of Copenhagen, Denmark, Apr. 2002.

INVITED PRESENTATIONS: Sara C. Pryor

Pryor S.C. Atmosphere-surface fluxes during the MEAD experiment. Department of Meteorology, Stockholm University, Stockholm, Mar. 2002.

Pryor S.C. Particle fluxes in the marine boundary layer. Department of Wind Energy and Atmospheric Physics, Risø National Laboratory, Denmark, Mar 2002.

2001

Pryor S.C. Nitrogen deposition: The key to the missing carbon sink? School of Public and Environmental Affairs, Indiana University. Feb. 2001.

2000

Barthelmie R.J. and Pryor S.C. 2000: Modelling organic aerosols within regional atmospheric models. Atmospheric Chemistry-CoGCI Seminar, H.C. Ørsted Institute, Copenhagen, Dec. 2000.

Pryor S.C. Atmosphere-surface exchange of nitrogen: Ammonia concentrations and fluxes over a Midwestern forest. School of Public and Environmental Affairs, Indiana University. Feb. 2000.

Pryor S.C. Interviewed live on Mark Shaw show: January 11 5:30-6:00 pm. Radio station WGCL-AM-1370. Topic: Winter weather around the world. Jan. 2000.

1999

Pryor S.C. and Barthelmie R.J. 'Summary and insights from REVEAL/ REVEAL II and particle modeling in the Fraser Valley', and 'Measurement capabilities'. Presentations at the Pacific 2001 planning workshop, Toronto, Ontario. Dec. 1999.

Pryor S.C. Nitrogen deposition to forests. Department of Micrometeorology, University of Bayreuth, Bayreuth. Jun. 1999.

Pryor S.C. Numerical modeling of aerosol formation, dynamics and deposition in the ISOPART model. Ford Europe Research Laboratory, Aachen. Jun. 1999.

Pryor S.C. Deposition of aged nitrogen compounds to forests: techniques and considerations. Department of Biology, University of Antwerpen, Antwerp. Jun. 1999.

Pryor S.C. Dry deposition of particles to water surfaces. Environmental Protection Agency, Research Triangle Park, N.C.. Apr. 1999.

Pryor S.C. Numerical modeling of aerosol formation, dynamics and deposition. Modeling workshop, Environment Canada, Vancouver. Mar. 1999.

Pryor S.C. Atmospheric particles: The situation in the Fraser Valley. Fraser Valley Air Quality Advisory Board, Vancouver. Mar. 1999.

Pryor S.C. Aerosol research: Where are we? Air Pollution Discussion Group, Vancouver. Mar 1999.

Pryor S.C. and Barthelmie R.J. Visibility and aerosol conditions in the Fraser Valley. Public forum, Fraser Valley Regional District, Chilliwack. Mar. 1999.

Pryor S.C. Interviewed live on Mark Shaw show: January 21 6:00-6:30 pm. Radio station WMYS AM1430. Topic: Winter Weather. Jan. 1999.

1998

Pryor S.C. Interviewed live on Mark Shaw show: November 23 5:30-6:00 pm. Radio station WMYS AM1430. Topic: Weather for the Christmas Holiday. Dec. 1998.

Pryor S.C. Air-sea exchange of trace chemicals. Department of Geography colloquium series, Indiana University, Bloomington. Dec. 1998.

Pryor S.C. Interviewed live on Mark Shaw show: November 23 6:30-7:00 pm. Radio station WMYS AM1430. Topic: Thanksgiving weather and coming winter season. Nov. 1998.

Pryor S.C. Numerical and statistical modeling of atmospheric pollutants: Addressing key uncertainties. Atmospheric Chemistry Department, Ford Research Division, Dearborn. Nov 1998.

Pryor S.C. Environmental Science in the Department of Geography at Indiana University. Second Annual Environmental Science and Engineering Symposium, Indiana University - Purdue University, Indianapolis. Oct. 1998.

Pryor S.C. and Barthelmie R.J. Atmospheric ammonia and ammonium. Environment Canada, Edmonton, Alberta, Canada. May 1998.

Pryor S.C. Interviewed live on Mark Shaw show: March 13 4:00-4:30 pm. Radio station WGCL-AM-1370. Topic: ENSO update. Mar. 1998.

INVITED PRESENTATIONS: Sara C. Pryor

Pryor S.C. A survey of atmospheric aerosols: Modeling and measurement. Dept. of Chemistry, Indiana University, Bloomington. Feb. 1998.

Pryor S.C. Interviewed live on Mark Shaw show: January 20 3:15-4:00 pm. Radio station WGCL-AM-1370. Topic: Current weather conditions. Jan. 1998.

1997

Pryor S.C. Interviewed for WGCL-AM-1370 on the outcome and implications of the Kyoto Conference. Interview aired Monday 15 December. Segments aired at additional times. Dec. 1997.

Pryor S.C. Interviewed live on Mark Shaw show: December 4 3:15-4:00 pm. Radio station WGCL-AM-1370. Topic: Climate Change. Dec. 1997.

Pryor S.C. Interviewed live on Mark Shaw show: October 22 4:30-5:00 pm. Radio station WGCL-AM-1370. Topic: El Niño. Oct. 1997.

Pryor S.C. Properties, behavior, measurement and modeling of airborne particles. Dept. of Geography, University of Illinois at Urbana-Champaign. Sept. 1997.

Pryor S.C. Particulars of particles: Observations and modeling. School of Public and Environmental Affairs, Indiana University. Mar. 1997.

Pryor S.C. and Barthelmie R.J. New chemical and meteorological parameterizations within ACDEP. Techniques and Problems in Modelling size-distributed aerosol formation and composition workshop. Environment Canada, Downsview, Toronto, Canada. Mar. 1997.

1996

Pryor S.C. and Barthelmie R.J. Application and evaluation of ACDEP in the LFV: Emission scenarios and meteorological/chemical parameterizations. Acidifying emissions seminar. Atmospheric Environment Service, Environment Canada, Downsview, Toronto, Canada. Oct. 1996.

Pryor S.C. Clouds and aerosols: The great unknowns. "Global Climate Change, Scientific Uncertainties and Environmental Implications" workshop. Indiana University, Bloomington. Oct. 1996.

Pryor S.C. The influence of synoptic scale variability on near-surface ozone concentrations. Department of Physical Geography, Lund University, Sweden. Aug. 1996.

Pryor S.C. Observations and simulations of fine aerosol concentration and speciation. Risø National Laboratory, Roskilde, Denmark. Aug. 1996.

Pryor S.C. Analysis of ozone time series: Techniques and Inferences. National Environment Research Institute, Roskilde, Denmark. Aug. 1996.

Pryor S.C. Aerosols in the Fraser Valley. Atmospheric Environment Service, Environment Canada, Downsview, Toronto, Canada. Jun. 1996.

Pryor S.C. and Barthelmie R.J. Aerosol formation: observation and parameterization. Environmental Protection Agency, Research Triangle Park, N.C.. Apr. 1996.

Pryor S.C. Secondary inorganic aerosol concentrations: Observations, impacts and parameterization. National Research Council, Ottawa, Canada. Mar. 1996.

1995

Pryor S.C. Agricultural emissions - air quality in the Fraser Valley. Project Enviro-Health, Abbotsford, Canada. Jun. 1995.

Pryor S.C. Long term and weekday/weekend variations of ozone in the Lower Fraser Valley. A&WMA Co-sponsored symposium on oxidant concentrations in the Pacific Northwest. Bellingham. Apr. 1995.

Pryor S.C. Atmospheric aerosols. College Lecture Series 94/5, UBC in collaboration with Cariboo and Okanagan Colleges, Kamloops, Canada. Mar. 1995.

Pryor S.C. Pollution transport and transformation: A case study of the atmospheric environment of S.W. British Columbia. Department of Geography, Indiana University. Feb. 1995.

Pryor S.C. Sources and impacts of atmospheric aerosols. Lecture series in Occupational Hygiene, University of British Columbia. Feb. 1995.

1994

Pryor S.C. Do you see what I see? Department of Geography, University of British Columbia. Sep. 1994.

Pryor S.C. Tropospheric ozone - identifying and quantifying trends. College Lecture Series 93/4, UBC in

INVITED PRESENTATIONS: Sara C. Pryor

collaboration with Cariboo and Okanagan Colleges, Kelowna, Canada. Jan. 1994.

MEMBERSHIP OF PROFESSIONAL ORGANIZATIONS: Sara C. Pryor

<i>Year</i>	<i>Task</i>
2007	Consultant to Jacques Whitford AXYS Ltd. Proposal to B.C. Ministry of Environment, Lands and Parks A visibility Goal: Exploring Options.
1999	Consultant to Alchemy Consultants and B.C. Ministry of Environment, Lands and Parks Ambient particles and implications for motor vehicle emission control measures. Author of Application of the ISOPART model to assess vehicle emissions control measures Appendix in: Assessment of motor vehicle emission control measures.
1998-99	Consultant to Environment Canada. Assessing public perception of visual air quality
1996-7	Consultant to Environment Canada CEPA/FPAC WG AQOG. Sulphur in fuels multi-agency taskforce Author of Environmental Levels chapter Particulate matter <10µm Review
1995	Consultant to B.H. Levelton and Associates. Setting airshed limits for atmospheric contaminants.
1994	Consultant to B.H. Levelton and Associates. A critique/review of a publication entitled Clean Air Benefits and Costs in the GVRD.
1993	Consultant to SENES Consultants Ltd. An assessment of fine particulates and their potential impacts on visibility in the Fraser Valley

MEMBERSHIP OF PROFESSIONAL ORGANIZATIONS: Sara C. Pryor

Royal Meteorological Society
American Meteorological Society
American Association for Advancement of Science

American Association for Aerosol Research
American Geophysical Union
Founding member: Association for
Environmental Studies and Sciences (AESS)

COURSES ATTENDED: Sara C. Pryor

<i>Year</i>	<i>Course</i>
2005	Community Multiscale Air Quality (CMAQ) Modeling System 2-day training workshop, Carolina Environmental Program, University of North Carolina, North Carolina.
2005	Sparse Matrix Operator Kernel Emissions Modeling System (SMOKE) 3-day training workshop, Carolina Environmental Program, University of North Carolina, North Carolina.
1993	Canadian Institute for Research in Atmospheric Chemistry (CIRAC) Atmospheric Chemistry course. York University, Toronto
1993	Air & Waste Management Association Visibility workshop. Harrison Hot Springs, B.C.

TEACHING EXPERIENCE: Sara C. Pryor

Indiana University - Department of Geography.		
<i>I was on leave: Spring 2009, Spring 2004, Fall 2001-Spring 2002</i>		
Semester	Course	# students
Spring 2010	G501 Research Methods II	7
Spring 2010	G450 Undergraduate Readings & Research	1
Fall 2009	G433/G533 Synoptic Meteorology & Climatology	13
Fall 2009	G304/G532 Physical Meteorology & Climatology	30
Fall 2008	G339 Weather Analysis and Forecasting	18
Spring 2008	G501 Research Methods II	10
Fall 2007	G434/G534 Air Pollution Meteorology	12
Fall 2007	G304/G532 Physical Meteorology & Climatology	33
Spring 2007	G450 Undergraduate Readings & Research - 2 student projects	2
Spring 2007	G339 Weather Analysis and Forecasting*	22
Fall 2006	G602: Graduate Seminar in Atmospheric Science Climate Change	9
Fall 2006	G304 Physical Meteorology & Climatology	36
Spring 2006	G433/G533 Synoptic Meteorology & Climatology	16
Spring 2006	G450 Undergraduate Readings & Research - 3 student projects	3
Fall 2005	G434 Air Pollution Meteorology	19
Fall 2005	G304 Physical Meteorology & Climatology	33
Spring 2005	G107 Physical Systems of the Environment	165
Spring 2005	G450 Undergraduate Readings & Research	1
Fall 2004	G433/G533 Synoptic Meteorology & Climatology	12
Fall 2004	G304 Physical Meteorology & Climatology	23
Fall 2004	G450 Undergraduate Readings & Research	1
Fall 2003	G475/G575 Climate Change	10
Fall 2003	G304 Physical Meteorology & Climatology	22
Fall 2003	G450 Undergraduate Readings & Research	1
Spring 2003	G433 Synoptic Meteorology & Climatology	3
Spring 2003	G304 Physical Meteorology & Climatology	37
Fall 2002	G434/G534 Air Pollution Meteorology	8
Fall 2002	G304 Physical Meteorology & Climatology	16
Fall 2001	G450 Undergraduate Readings & Research	2
Spring 2001	G433/G533 Synoptic Meteorology & Climatology	12
Spring 2001	G304 Physical Meteorology & Climatology	49
Fall 2000	G602: Graduate Seminar in Atmospheric Science Climate Change	9
Fall 2000	G107: Physical Systems for the Environment	180
Fall 2000	G450 Undergraduate Readings & Research	1
Spring 2000	G433 Synoptic Meteorology & Climatology	15
Spring 2000	G107: Physical Systems for the Environment	186
Fall 1999	G434/G534 Air Pollution Meteorology	14
Spring 1999	G475/G575 Climate Change	15
Spring 1999	G107: Physical Systems for the Environment	130
Spring 1999	G450 Undergraduate Readings & Research	1
Fall 1998	G305: Environmental Change: Nature, Causes and Consequences	38
Fall 1998	G107: Physical Systems for the Environment	172
Spring 1998	G433 Synoptic Meteorology & Climatology	13
Spring 1998	G107: Physical Systems for the Environment	137
Fall 1997	G434/G534 Air Pollution Meteorology*	14
Fall 1997	G107: Physical Systems for the Environment	150
Summer 1997	G450 Undergraduate Readings & Research	1
Spring 1997	G475/G575 Climate Change*	11

TEACHING EXPERIENCE: Sara C. Pryor

Spring 1997	G107: Physical Systems for the Environment	120
Fall 1996	G305: Environmental Change: Nature, Causes and Consequences*	58
Fall 1996	G107: Physical Systems for the Environment	113
Fall 1996	G450 Undergraduate Readings & Research	1
Spring 1996	G433 Synoptic Meteorology & Climatology*	17
Spring 1996	G107: Physical Systems for the Environment	101
Fall 1995	G107: Physical Systems for the Environment	74

*indicates course developed by SP.

Indiana University - Department of Geography.

Graduate readings/research courses

<i>Semester</i>	<i>Course</i>	<i>Individual</i>
Fall 2009	G830 Research in aerosol dynamics	P. Crippa (Ph.D. student)
Fall 2009	G840 Research in atmospheric aerosols	A.M. Spaulding (M.S. student)
Fall 2009	G840 Research in atmospheric aerosols	A.M. Spaulding (M.S. student)
Fall 2008	G840 Research in atmospheric aerosols	A.M. Spaulding (M.S. student)
Summer 2008	G830 Research in atmospheric aerosols	A.M. Spaulding (M.S. student)
Summer 2008	G830 Research in atmospheric aerosols	A.M. Spaulding (M.S. student)
Summer 2008	G830 Research in boundary-layer meteorology	D. Young (Ph.D. student)
Summer 2008	G830 Research in boundary-layer meteorology	D. Young (Ph.D. student)
Spring 2008	G860 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Fall 2007	G860 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Summer 2007	G830 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Spring 2007	G860 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Spring 2007	G830 Research in precipitation trends	J. Howe (M.S. candidate)
Fall 2006	G830 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Fall 2006	G830 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Spring 2006	G830 Research in precipitation trends	J. Howe (M.S. candidate)
Fall 2005	G860 Research in precipitation trends	J. Howe (M.S. candidate)
Fall 2005	G860 Research in particle fluxes	F. Birsan (Ph.D. candidate)
Fall 2004	G860 Research in particle dynamics	F. Birsan (M.S. candidate)
Spring 2003	G860 Research in synoptic climatology	J. Schoof (Ph.D. candidate)
Fall 2001	G850 Research in synoptic climatology	J. Schoof (Ph.D. candidate)
Fall 2001	G850 Research in synoptic climatology	N. Polderman (M.S. candidate)
Spring 2001	G830 Research in synoptic climatology	J. Schoof (Ph.D. candidate)
Spring 2000	G830 Research in synoptic climatology	J. Schoof (Ph.D. candidate)
Spring 2000	G840 Research in air quality	S. Potter (M.S. candidate)
Fall 1999	G840 Research in synoptic climatology	J. Schoof (M.S. candidate)
Spring 1998	G840 Research in synoptic climatology	J. Schoof (M.S. candidate)
Spring 1998	G830 Readings in urban air quality	S. Potter (M.S. candidate)
Spring 1998	G830 Fuel cells (w/ Prof. Brabson, Physics)	B. Pearson (Ph.D. candidate)
Fall 1997	G840 Alternative fuels	B. Pearson (Ph.D. candidate)
Spring 1996	G830 Readings in air pollution research	R. Yang (Ph.D. candidate)
Fall 1995	G830: Tropospheric ozone - chemistry, sources & sinks	T. King (Ph.D. candidate)

*Supervision of internships (*all internships were centrally administered 2002-2004)*

<i>Semester</i>	<i>Individual</i>	<i>Location</i>	<i>Dates</i>
Summer 2010	Katherine Smoots	Internship with WISH-TV Indianapolis	July-August 2010
Summer 2010	Kristin Lucero	Internship with WAVY-TV North	June-July 2010

TEACHING EXPERIENCE: Sara C. Pryor

Carolina			
Summer 2009	Greg Bobos	Internship with WISH-TV Indianapolis	July-August 2009
Summer 2008	Maurice Shamell	Internship with WISH-TV Indianapolis	July-August 2008
Summer 2008	Adam Rife	Internship with WSBT, South Bend	July-August 2008
Summer 2007	Zac Schweizer	Internship with WFIE14, Evansville	July-August 2007
Summer 2007	Emily Brooks	Internship with WFIE14, Evansville	May-July 2007
Spring 2007	Holly Rauwolf	Internship with NWS	Feb-Apr 2007
Summer 2006	Jennifer Lewis	Internship with WKRC-TV, Cincinnati	May-Aug 2006
Fall 2005	Mindy Wisher	Internship with NWS	Sept-Dec 2005
Summer 2005	Andrea Lammers	Internship with NWS	May-Aug 2005
Summer 2001	Chris Swan	Internship with Indiana University	May-Aug 2001
Summer 2001	Melissa Davis	Internship with Indiana University	May-Aug 2001
Spring 2000	Melissa Davis	Internship with Indiana University	Jan-May 2000
Fall 1999	Abby Simon	Internship with WLKY-Louisville	Sept-Dec 1999
Summer 1999	Andrew Schwartz	Internship with WISH-TV Indianapolis	Jun-Aug 1999
Summer 1998	Sarah Walters	Internship with WISH-TV Indianapolis	Jun-Aug 1998
Summer 1996	Anita Chow	Internship with TV5 - WNEM, Michigan	May-Aug 1996

University of British Columbia - Department of Geography.

Semester	Course
Fall 1994	G408 Environmental Change
Spring 1993	G402 Air Pollution Meteorology
Spring 1993	G350 Field Course for Physical Geographers

Simon Fraser University - Department of Geography.

Semester	Course
Fall 1993	G201 Introduction to Climatology

University of East Anglia - School of Environmental Sciences. *Teaching Assistant. 1991-92*

Semester	Course
Multiple	ENV101 Introductory Meteorology and Climatology

TEACHING RELATED INVITED PRESENTATIONS: Sara C. Pryor

<i>Presentation title</i>	<i>Course</i>	<i>Date</i>
Climate change over the last century and next 100 years	G442 Sustainable energy systems	Dec. 2009
Climate change: Global forcing, regional response	G208 Human impact on the Environment	Nov. 2009
Climate change: Risks and adaptation	B462 Law and the Environment	Oct. 2009
Climate variability & change	Making Engaged Art: Response and Intervention on Climate Change	Sep. 2009
Energy use and climate change	G442 Sustainable Energy Systems	Nov. 2008
Mountain meteorology	E396 Intermediate Alpine Ski-ing, HPER, Indiana University*	Dec. 2003
Regional Climate	E162 People and the Environment. SPEA, Indiana University	Sep. 2003
Aerosols and climate	G602 Climate Change: Graduate seminar, Geography, Indiana University	Nov. 2002
The connection between theoretical and applied research	G500 Introduction to Research Methods, Geography, Indiana University	Nov. 2002
The connection between theoretical and applied research.	G500 Introduction to Research Methods, Geography, Indiana University	Oct. 2000
The connection between theoretical and applied research	G500 Introduction to Research Methods, Geography, Indiana University	Oct. 1999
Climate: Causes, variations and change	L473. Ecology. Biological Sciences, Indiana University	Sep. 1999
Air pollution meteorology	E2XY Environmental Science, SPEA, Indiana University	Apr. 1999
Research in atmospheric science: An example.	G235 Introduction to Geographic Methods, Department of Geography, Indiana University	Dec. 1998
Geographical images:	G235 Introduction to Geographic Methods, Department of Geography, Indiana University	Mar. 1998
Meteorological data and synoptic charts		
Research strategies and techniques	G500 Research Problems in Geography, Department of Geography, Indiana University	Oct. 1997

* video of my presentation has been used in all subsequent offerings of this course.

SUPERVISION: Sara C. Pryor

P.D.F. Supervisor		
<i>Beginning</i>	<i>Ending</i>	<i>Individual</i>
Oct 2004	Mar 2005	Justin Schoof
Jul 2000	Jun 2001	Anne Hartley

Ph.D. Supervisor.				
<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Department</i>	<i>Dissertation title</i>
Aug 2009	Ongoing	Paola Crippa	Geography, IUB	
Sep 2005	Ongoing	Fredi Birsan	Geography, IUB	
Jan 2004	Oct 2008	Jennifer Hutton	Geography, IUB	In canopy isoprene oxidation
Jan 2000	Sep 2004	Justin Schoof	Geography, IUB	Generating regional climate change scenarios using general circulation models and empirical downscaling*/**/**

**Awarded Indiana University College of Arts and Sciences Dissertation Year Research Fellowship (2003-04)*

***Selected as the IU nominee for the Council of Graduate Schools and University Microfilm International Distinguished Dissertation Award in the area of the physical sciences (2004-2006).*

****Nominated for the James R. Holton award of the AGU July 2006.*

Jan 1997	Dec 1999	Brooks Pearson	Geography, IUB	An estimation of potential production of agri-based ethanol and its contribution to transportation emissions*.
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**1st prize for a Dissertation in Transportation Geography, American Association of Geographers*

M.S. Supervisor.				
<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Department</i>	<i>Thesis title</i>
Aug 2007	Apr 2010	Andrea Spaulding	Geography, IUB	Meteorological influences on particle nucleation over a deciduous forest in the Midwest
Aug 2005	Apr 2008	Jessica Howe	Geography, IUB	Analysis of extreme precipitation across the Midwest during the twentieth century.** <i>**Winner of the Stephen Visher award for an outstanding paper in Climatology, Indiana University</i>
Jan 2004	Oct 2005	Fredi Birsan	Geography, IUB	Particle dry deposition to a forest canopy: A flux based analytical model
Aug 2000	Dec 2002	Nathan Polderman	Geography, IUB	Linking synoptic climate to historical lake level variability in the Lake Michigan-Huron basin.
Jan 1999	on medical leave	Kurt Hirzy	Geography, IUB	Fluxes of reduced nitrogen to a Midwestern forest.
Aug 1997	Dec 1999	Justin Schoof	Geography, IUB	Synoptic circulation classification and downscaling for the Midwestern United States*. <i>*Awarded the Esther L. Kinsley thesis award, Indiana University for best Masters thesis.</i>
Aug 1997	May 2000	Sean Potter	Geography,	(2 paper option) <u>Paper title (supervised by</u>

SUPERVISION: Sara C. Pryor

IUB	<u>S. Pryor</u>): Characterizing air quality in Indianapolis, Indiana.
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Other graduate students for whom I have provided financial support

Name	Degree sought	Department	Period
Todd Lindley	Ph.D.	Geography, IUB	Summer 2007
Taka Kobayashi	Ph.D.	Geography, IUB	Summer 2007, Fall 2007, Spring 2008

Ph.D. Committee member.

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Department</i>	<i>Dissertation title</i>
Jan 2006	Feb 2008	Nori Sato	Geography, IUB	Impacts of climatic change and variability on winter-road maintenance on North America
Aug 2005	Dec 2009	Helber Dusan	Physics, IUB	Crustal composition of neutron stars
Jan 2003	Jan 2008	Deepali Vimal	SPEA, IUB	Oxidation of biogenic hydrocarbons
Jan 2002	Jun 2004	John Johnson	Geology, IUB	Geological variability of lake levels in the Great Lakes
Aug. 1998	May 2002	Bao Chuong	SPEA, IUB	Kinetics and mechanisms of OH initiated oxidation of hydrocarbons
Aug. 1996	Sep 1999	Don Cortes	SPEA, IUB	Fluxes of toxic chemicals to the Great Lakes

M.S. Committee member.

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Department</i>	<i>Thesis title</i>
Aug 2008	Aug 2010	Catherine Brabant	Geography, IUB	Modeling and observations of wind turbine wakes
Aug 2007	Aug 2009	Jared Deroschers	Geography, IUB	Analyzing snowfall change and teleconnection relations with a standardized snowfall index
Aug 2005	Jul 2008	Valerie Anderson	Geography, IUB	Comparability of storage heat flux models: Results from suburban North America
Aug 2003	Aug 2005	Leslie Ensor	Geography, IUB	Precipitation variability in the Midwest
Aug 1999	Oct. 2001	Heidi Zutter	Geography, IUB	Convective boundary layer development over a mid-latitude deciduous forest
Jan 1997	Apr. 1998	Karen Spartz	Geography, IUB	<u>2 paper option. Paper titles:</u> Income Inequality Trends in Indiana: Adding Insult from the Rich to Injury of the Poor and Psychosocial Resignation at the Bottom of the Gap
Aug 1994	Dec 1995	Karsten Shein	Geography, IUB	Wind speed variability in the Midwestern United States 1961-1990: Implications for wind power assessment

SUPERVISION: Sara C. Pryor

BSES Supervisor			
<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Thesis title</i>
2003	2005	Karin Kvale	Precipitation chemistry in the MidWest
2001	2002	Ken Rubel	Spatial and temporal effects of commuting on personal exposure to ozone

TEACHING AWARDS: Sara C. Pryor

Year	Award	Comments
2003	Indiana University: College of Arts and Science Teaching Excellence Recognition Award	Teaching during 2002
1999	Indiana University: College of Arts and Science Teaching Excellence Recognition Award	Teaching during 1998
1998	Indiana University: College of Arts and Science Teaching Excellence Recognition Award	Teaching during 1997
1998	Honored by FIG 1998-1999 class.	Meet the faculty appreciation evening
1996	Honored by Delta Gamma sorority.	Faculty appreciation evening

TEACHING PUBLICATIONS: Sara C. Pryor

Year	Author	Title	# pp
2004	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 9th Edition.</i> Department of Geography, Indiana University, Bloomington	88
2000	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 8th Edition.</i> Department of Geography, Indiana University, Bloomington	92
2000	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 7th Edition.</i> Department of Geography, Indiana University, Bloomington	92
1999	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 6th Edition.</i> Department of Geography, Indiana University, Bloomington	98
1999	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 5th Edition.</i> Department of Geography, Indiana University, Bloomington	95
1999	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 4th Edition.</i> Department of Geography, Indiana University, Bloomington	99
1998	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 3rd Edition.</i> Department of Geography, Indiana University, Bloomington	98
1998	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises. 2nd Edition.</i> Department of Geography, Indiana University, Bloomington	96
1997	Pryor, S.C.	<i>G107: Physical Systems of the Environment - Manual for laboratory exercises.</i> Department of Geography, Indiana University, Bloomington	85

Scientific Community

Proposal panel member

<i>Year</i>	<i>Agency & topical area</i>
2009	Department of Defense: Strategic Environmental Research and Development Program (SERDP) (9 proposals)
2008	Panelist: National Science Foundation (NSF) and the American Society for Engineering Education (ASEE), 2008 NSF Graduate Research Fellowship Program (GRFP). Subject: Geosciences. (duties: reviewed 43 proposals, attended 3-day panel meeting)
2007	Department of Defense: Strategic Environmental Research and Development Program (SERDP) (6 proposals)
2006-2008	National Science Foundation: Geography and Regional Science Advisory Panel. (duties: review 30-40 proposals per year and attend twice yearly 3 day panel meetings)
2004	European Union 6 th Framework. Global Monitoring for Environment and Security. <i>Integrated Projects</i>
2003	Department of Defense: Strategic Environmental Research and Development Program (SERDP) (5 proposals)
2002	National Science Foundation: Carbon cycling RFP
2001	Department of Defense: Strategic Environmental Research and Development Program (SERDP)
2000	Department of Defense: Strategic Environmental Research and Development Program (SERDP)
1999	NASA: Modeling and Data Analysis (MDAR) (NRA-99-OES-04).
1997-98	Environment Canada: Science review panel member Modeling Atmospheric Aerosols

Proposal/programmatic review

<i>Total # reviews</i>	<i>Agency/topical area</i>
15	National Science Foundation: Atmospheric Chemistry Program
2	National Science Foundation: Division of Chemistry
3	National Science Foundation: Division of Oceanic Sciences
1	National Science Foundation: Antarctic Ocean and Atmospheric Science Program
1	National Science Foundation/NATO Post Doctoral Fellowships
4	National Science Foundation: Spatial Science & Geography Program
1	National Science Foundation: International Programs
1	NCAR-National Science Foundation
1	NOAA Climate Program Office (CPO) Climate Change Data and Detection (CCDD)
1	Midwest Regional Center, National Institute for Climatic Change Research Proposal
5	SouthCentral Regional Center, National Institute for Global Environmental Change Proposals
2	National Oceanic and Atmospheric Administration: Office of Oceanic and Atmospheric Research. SBRI research in Climate Applications for Enhanced Decision-Making
1	The Netherlands Organisation for Scientific Research NWO (the Netherlands' research council). Research proposals for Climate Changes Spatial Planning.
1	U.S. Army Corps of Engineers: Geospatial Research and Engineering (GRE) Business Area Proposals (2008)
1	The Petroleum Research Fund
5	American Women in Science Foundation
1	NASA: Modeling and Data Analysis
1	Cooperative Grants Program (CGP) of the U.S. Civilian Research and Development Foundation (CRDF)
3	Natural Sciences and Engineering Research Council of Canada Application for Strategic

	Proposals
1	Canadian Foundation for Climate and Atmospheric Sciences
1	Swedish Natural Science Research Foundation
N/A	Scientific advisory panel Measuring DMS and DMS oxidation products Environment Canada
N/A	Atmospheric Environment Program, Environment Canada undertaken by Environment Canada and the Treasury Board Secretariat.

Editorial boards

- Editor of Journal of Geophysical Research – Atmospheres 2010-2012.
- Member editorial board. Journal of Geophysical Research - Atmospheres. 2009.
- Member editorial board. Advances in Meteorology. Hindawi Publishing Corporation. 2008→
- Member editorial board. The Open Atmospheric Science Journal. Bentham. 2007→
- Member editorial board. WWW-base scientific journal: WWW.TheScientificWorld.com. 2001→

Manuscript review

<i>Total # reviews</i>	<i>Journal</i>
1	<i>Aerosol Science and Technology</i>
3	<i>Agricultural and Forest Meteorology</i>
1	<i>Annals of the Association of American Geographers</i>
47	<i>Atmospheric Environment</i>
6	<i>Atmosphere Ocean</i>
1	<i>Biogeochemistry</i>
1	<i>Boreal Environment Research</i>
1	<i>Chemosphere</i>
1	<i>China Particuology</i>
1	<i>Clean Air</i>
3	<i>Climatic Change</i>
4	<i>Climate Dynamics</i>
4	<i>Climate Research</i>
4	<i>Environmental Science and Technology</i>
1	<i>EWindEng journal</i>
1	<i>Forest Ecology and Management</i>
1	<i>Geography Compass</i>
3	<i>Geophysical Research Letters</i>
1	<i>Great Lakes Research</i>
2	<i>Hydrological Processes</i>
1	<i>Indian Journal of Radio and Space Physics</i>
7	<i>International Journal of Climatology</i>
2	<i>International Journal of Geographical Information Science</i>
1	<i>Journal of Aerosol Science</i>
7	<i>Journal of Applied Meteorology and Climatology (now Journal of Applied Meteorology)</i>
16	<i>Journal of Air and Waste Management Association</i>
1	<i>Journal of Climate</i>
1	<i>Journal of Environmental Quality</i>
30	<i>Journal of Geophysical Research</i>
1	<i>Journal of Wind Engineering and Industrial Aerodynamics</i>
2	<i>Marine Pollution Bulletin</i>
1	<i>Meteorologische Zeitschrift</i>
2	<i>Professional Geographer</i>

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4	<i>Quarterly Journal of the Royal Meteorological Society</i>
1	<i>Science</i>
5	<i>Science of the Total Environment</i>
1	<i>Tellus</i>
2	<i>The Open Atmospheric Science Journal (also 3 special issue requests)</i>
2	<i>Theoretical and Applied Climatology</i>
2	<i>Water, Air and Soil Pollution</i>
1	<i>Water Research</i>
3	<i>Wind Energy</i>
1	<i>Wind Engineering</i>

Book review

#	Title	For whom	Year
	<i>Weather and Climate (5th Ed):</i> Aguado & Burt, Prentice Hall	Prentice Hall.	2010
	<i>Book proposal: Climate and Global Change</i>	Springer	2006
	<i>Physical Geography:</i> Strahler & Strahler. Wiley	Wiley	2006
	<i>Essential Geosystems:</i> Christopherson. Prentice Hall.	Prentice Hall.	2005
	<i>Meteorology: Understanding the atmosphere:</i> Ackerman and Knox. Brooks/Cole	Brooks/Cole, Thomson Learning	2005
	<i>Climate: Past, present and future:</i> Wyatt and Yang. Cambridge University Press.	Cambridge University Press	2003
	<i>The Theory and Practice of Physical Geography:</i> Butler, Malanson and Walsh. Prentice Hall.	Prentice Hall	2002
35	Books/DVDs/CDs/WWW sites	Choice: Current Reviews for Academic Libraries	1997- to date

External review for tenure/promotion

# cases	Year
1	2010
1	2007
1	2003

Ph.D. Dissertation review (external reviewer)

Department & University	Date
University of Cape Town, Cape Town, South Africa	September 2008
Department of Geography, University of Canterbury, Christchurch, New Zealand.	February 2006
Faculty of Science, Queensland University of Technology, Brisbane, Australia.	November 2003
Department of Geography, University of Auckland, Auckland, New Zealand.	October 2003
Department of Geography, University of Canterbury, Christchurch, New Zealand.	March 2003
School of Environmental Sciences, Griffith University, Brisbane Australia.	August 1997

Science advisory panels/ Administration of Professional Organizations

Year	Position
2007-2010	Chair Midwest Assessment Group for Investigations of Climate (MAGIC). Consortium of 10 Midwest institutions: Indiana University, Michigan State University, Ohio State University, Ball State University, Iowa State University, Illinois State Water Survey (University of Illinois), St Louis University, University of Minnesota, University of Wisconsin.
2005-2006	Chair Membership committee, American Association for Aerosol Research.

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2004-2005	Member Membership committee, American Association for Aerosol Research.
2002-2003	Chair (elected) Atmospheric Aerosols working group, American Association for Aerosol Research.
2001-2002	Vice-Chair (elected) Atmospheric Aerosols working group, American Association for Aerosol Research.
2000-2005	Member American Meteorological Society Committee on Planned and Inadvertent Weather Modification.
2000-2002	Member Organizing committee of Pacific'2001 field experiment.
1999 →	Member Fine Particulate Panel NARSTO Modeling and Chemistry Team.
1999 →	Member of Marine Aerosol working group, European Aerosol Congress.
Nov. 1996 - Mar. 1997	Expert advisor for Visibility issues to the Atmospheric Science Panel and Impacts Panel, on the Sulphur in Gasoline Multi-agency Task-force. Canada.
1995 →	Member of Visibility committee of the Air and Waste Management Association.
1994-1995	Scientific advisor to REVEAL II. Project run by the Fraser-Cheam Regional District.
1994	Scientific advisor to the B.C. Visibility Task Force.

Conference organizer/ session chair

<i>Year</i>	<i>Activity</i>
2009	Conference organizing committee and session chair Offshore Wind Energy in Mediterranean and Other European Seas (OWEMES), Brindisi, May 2009.
2008	Session co-convener and chair: "A28: Biogenic and Anthropogenic Influences on Particle Nucleation and Growth I". Oral session. AGU Fall meeting, San Francisco
2008	Session co-convener and chair: "A28: Biogenic and Anthropogenic Influences on Particle Nucleation and Growth II". Poster session. AGU Fall meeting, San Francisco
2007	Organizer of a workshop on Midwestern Climate variability, predictability and change. Attended by scientists from 10 Universities across the Midwest. Hosted by Indiana University, October 2007.
2005	Session Chair "Particle formation" AAAR Annual Meeting, Austin.
2004	Session co-convener: "The bio-atmospheric N cycle". AGU Fall meeting, San Francisco.
2004	Co-convener and organizer: Workshop on particle fluxes. (part of the BACCI project). Risoe National Laboratory.
2004	Workshop rapporteur: ONR sponsored workshop: Towards a universal sea spray source function. University of Leeds. <i>Report published.</i>
2003	Organizing committee of the annual meeting of the American Association for Aerosol Research. (<i>reviewed 220 abstracts and arranged over 20 sessions</i>)
2003	Session Chair "Atmospheric Modeling II" AAAR Annual Meeting, Los Angeles.
2003	Session Chair "Atmospheric Modeling I" AAAR Annual Meeting, Los Angeles.
2003	Session co-convener: Atmospheric and oceanic processes in air-sea exchange: first results from SOLAS studies AGU/EGS Joint Assembly, Nice, France
2003	Session co-convener: Wind Power Meteorology AGU/EGS Joint Assembly, Nice, France
2002	Session Chair "Marine Aerosols" AAAR Annual Meeting, North Carolina.
2002	Session Chair "Atmospheric Modeling II" AAAR Annual Meeting, North Carolina.
2002	Session Chair "Atmospheric Modeling I" AAAR Annual Meeting, North Carolina.
2001	Session organizer and chair 'Air quality' AAG annual meeting, New York
2000	Session Chair "Marine Aerosols" AAAR Annual Meeting, St Louis, MO.
2000	Moderator. Institute for Applied Mathematics Workshop on Atmospheric Modeling: Atmospheric Chemistry Modeling Session. Minneapolis.
1999	Chair of Panel on modeling perspectives. Pacific 2001 planning meeting, Toronto.
1999	Organizer of Workshop on Nitrogen deposition to and cycling in forest ecosystems and linkages to carbon sequestration. Indiana University, Bloomington on October 21-22, 1999.

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	<i>Workshop sponsors: National Institute for Global Environment Change, Indiana University Interdisciplinary Program for Atmospheric Science and IU Department of Geography.</i>
1998	Session chair AAG Climate Specialty Group, AAG annual meeting, Boston
1996	Organizing committee for Global Climate Change, Scientific Uncertainties and Environmental Implications workshop . Indiana University
1996	Session chair Midwest Association for Cloud and Aerosol Physics (MACAP) Meeting. St. Louis, MO.
1995	Session chair Canadian Meteorological and Oceanographic Society (CMOS) Annual Meeting. Kelowna, B.C.
1994	Rapporteur for “Pacific ‘93 - what did we learn?” workshop Vancouver, B.C.

Indiana University

University at large

<i>Year</i>	<i>Activity</i>
2009 →	Graduate Faculty Council member, Indiana University (<i>elected</i>)
2009 →	Advisory committee to the Dean: Research in the Physical and Life Sciences, The College of Arts and Sciences.
2008 →	Executive committee member of the Indiana University Center for Research in Environmental Science.
2008 →	Executive committee member of the Indiana University Research Preserve.
2008-2009	Strategic Planning committee – Physical and Life Sciences, advisory committee to the Dean
2007 →	Chair of the Advisory Committee of ACT, the Anthropological Center for Training and Research on Global Environmental Change at Indiana University
2006-2007	University Faculty Council (<i>elected</i>)
2006	Reviewer for course comparability across all Indiana high education establishments – Physical geography
2005-2008	IUB Campus Promotion Advisory Committee (PAC) (<i>3 year appointment</i>)
2005-2007	Bloomington Faculty Council (<i>elected</i>)
2005-2007	Bloomington Faculty Council: Co-chair Student Affairs committee (<i>elected</i>)
2005-2009	Planning committee for the Multi-disciplinary Science Building II.
2005	Review committee for the Bachelor of Science in Environmental Science (B.S.E.S) joint degree between the College of Arts and Science and School of Public and Environmental Affairs. Review conducted 1-2 November, report submitted 7 November. Committee members: <i>Sara Pryor (Geography), Maxine Watson (Biological Sciences), Jeff White (School of Public and Environmental Affairs) and Bob Wintsch (Geological Sciences).</i>
2002, 2004, 2006 & 2008	Reviewer for Indiana Junior Academy of Science.
2001	Co-chair committee on Environmental and Atmospheric Science committee for the planned IU Science Building
2000-01	Committee on Centralized Facilities Subcommittee for planned IUB Science Building
2000 & 2004	Member Science Certification Committee
1999	Contributed to proposal to establish a permanent Griffy watershed preserve for use by faculty and students (www.indiana.edu/~pepp/griffy/Griffy_proposal.html)
1998	Evaluator of a new ALERT funding opportunities service for Sponsored Research Services, Indiana University.
1996-97	Member Energy Seminar. Sponsored by Institute for Advanced Study.
1996 →	Member Graduate Faculty, Indiana University.
1996	Evaluator of a new InfoEd funding opportunities service for Sponsored Research

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1996 Services, Indiana University. May-Jun.
Reviewed manuscript samples for proposed book “Forces of Nature” by Michelle Gilder, for Indiana University Press. Feb.

Department of Geography

<i>Year</i>	<i>Activity</i>
2008 -2010	Junior Faculty Mentor: Tony Grubestic
2007 →	Director of Graduate Studies
2005 →	Chair – Atmospheric Science Program.
2005 →	Junior Faculty Mentor: Constance Brown
2002 - 2006	Chair – Colloquium committee
1997 - 2000	Chair – Environmental Program.
1996 - 2000	Chair – Equipment and computer planning committee.
1995 - 2000	Member – Graduate program committee.
1995 - 2000	Member – Undergraduate program committee.
1998	Departmental representative at Second Annual Environmental Science and Engineering Symposium, Indiana University - Purdue University, Indianapolis.
1997, 2001	Member: Departmental Salary committee
2006	
1997	Participant in teaching G501: College Teaching in Geography.
1997	Exhibitor at HASTI (Hoosier Association of Science Teachers).
1996	Representative and designer of publicity materials for the “University Night” (recruiting evening). American Meteorological Society Annual Conference.

October 1, 2010