

CV: Sara C. Pryor

Provost Professor of Atmospheric Science

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EDUCATION

<i>Date</i>	<i>Degree conferred</i>	<i>Institution</i>
1993-1995	Post Doctoral Fellow	University of British Columbia, Vancouver, Canada
1989-1992	Ph. D.	University of East Anglia, Norwich, U.K. <i>Sub-synoptic scale influences on air quality in the southwestern United States of America.</i>
1986-1989	B.Sc. (Hons) 1st class	University of East Anglia, Norwich, U.K. <i>The Sahel drought and sea-surface temperatures - the search for teleconnections.</i>

PROFESSIONAL EXPERIENCE

<i>Dates</i>	<i>Position</i>
2011-2014	Associate Vice Provost for Faculty and Academic Affairs, Indiana University
2005 on	Professor , Indiana University, Bloomington, IN Rank of Provost Professor bestowed in 2010. Indiana University Presidents Award in recognition of outstanding teaching, research and service bestowed 2008.
1999-2005	Associate Professor , Indiana University, Bloomington, IN
1995-1999	Assistant Professor , Indiana University, Bloomington, IN
2009-2011	Visiting Distinguished Professor , University of Aarhus, Denmark
1999 on	Visiting Senior Scientist , DTU Risø, Dk 4000 Roskilde, Denmark
1992-94	Adjunct Research Meteorologist , Desert Research Institute, Reno, NV
1990-92	Research Associate , Desert Research Institute, University of Nevada, Reno, NV
1988	Research Associate , University of East Anglia, U.K.

EXAMPLE RECENT AWARDS/HONORS

<i>Year</i>	<i>Description</i>
2011-2013	Federal Advisory Committee for the National Climate Assessment and Development Committee (NCADAC), convened by the U.S. Department of Commerce's National Oceanic and Atmospheric Administration
2011-2013	Convening Lead Author for the Midwest Region for the National Climate Assessment
2012	Invited participant and lead author. Workshop on Climate extremes. Panel for preparation of the National Climate Assessment. Asheville NC. Jan 2012.
2010	Invited participant: Planning meeting for the National Climate Assessment: Downscaling projections workshop, Washington DC. Dec 2010.
2010-2014	Editor: Journal of Geophysical Research – Atmospheres
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.</i>
2009-2011	Contributing author to IPCC report: Special Report on Renewable Energy Sources and Climate Change Mitigation (SRREN) (Chapter 'Wind Energy')
2009	Associate Editor: Journal of Geophysical Research – Atmospheres

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

Grants that are currently active are shown in bold (where project involves multiple institutions, only the amount to IU is denoted).

<i>Date</i>	<i>P.I.</i>	<i>Title</i>	<i>Agency</i>	<i>Amount</i>
2011-2014	Barthelmie, Pryor, Alexander, Matthiesen, Calhoun, Hasager & Marzocca	An integrated approach to offshore wind energy assessment: Great Lakes 3D Wind Experiment	Department of Energy	\$420,000 (to IU)
2011-2014	Pryor & Katul	Up-scaling from leaf to canopy the aerosol-sized particle collection mechanism within a non-uniform canopy medium	National Science Foundation	\$560,000 (to IU)
2011-2015	Madsen et al. (Barthelmie & Pryor participants from IU) FP7-ENERGY-2011-1	Design Tools for Offshore Wind Farm Cluster (Offshore Cluster)	European Commission	\$25,000 (to IU as OTC partner)
2011-2014	Pratt et al. (Pryor named Senior Personnel/Consultant)	Understanding methane sources/sinks in Greenland	NASA	\$2.4 million
2011-2012	Barthelmie & Pryor	Wake measurements of FDWT (Mixer-Ejector Wind Turbine)	Department of Energy	\$49,374
2011-2014	Barthelmie & Pryor	Multiple wake interactions in large wind farms	National Science Foundation	\$300,000
2010-2014	Pryor, Barthelmie & Schoof	Climate change impacts on regional wind climates	National Science Foundation	\$194,000 (to IU)
2008-2011	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	\$90,000
2008-2011	Pryor & Hopke	Supplemental award to grant NSF ATM 0544745 for enhancement of field experiment	National Science Foundation	\$95,000
2007-2010	Schoof & Pryor	Collaborative research: Development of 21 st century precipitation scenarios using probabilistic downscaling techniques	National Science Foundation	\$68,000 (to IU)

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

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	\$144,720 (to IU)
2007-2010	Kulmala et al. SP lead from Risø National Laboratory	EUCAARI: European Integrated project on Aerosol Cloud Climate and Air Quality interactions	European Commission	20 million EURO
2006-2011	Pryor, Barthelmie, Mauldin & Westberg	Particle nucleation events in the Ohio River Valley	National Science Foundation	\$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	\$10,000 (to IU)
2004-2005	Pryor	Modeling a PM climatology for the Fraser Valley.	Environment Canada	\$85,000
2003-2007	Pryor, Barthelmie & Binkowski	Improved models of particle dry deposition.	National Science Foundation	\$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
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-	McRobbie et al. One of	Creation of the AVIDD	National	\$2,000,000

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

2004	17 named senior investigators	data facility: A distributed facility for managing, analyzing and visualizing instrument-driven data	Science Foundation	
2001-2002	Pryor	Ammonia measurements during Pacific'2001	Environment Canada	\$55,000
2000-2001	Bottenheim, Makar, Boundries, Thomson, Belzer, McLaren, Pryor & Barthelmie	Canopy modeling of biogenic hydrocarbons	Environment Canada	\$34,000 (to IU)
1999-2002	Jickells et al. Named participant	Marine Effects of Atmospheric Deposition (MEAD)	European Commission	ECU 1,400,000
1999-2003	Pryor & Barthelmie	Acquisition and development of instrumentation to quantify atmospheric deposition pathways	National Science Foundation	\$260,000
1999-2003	Pryor, Barthelmie & Carreiro	Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest	Department of Energy	\$404,000
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	\$258,000
1997-1998	Pryor & Barthelmie	REVEAL II: Characterizing aerosols in the Fraser Valley Part II	Fraser Valley Regional District of British Columbia	\$37,500
1997-1998	Pryor & Barthelmie	Aerosol dynamics in the ISOPART model	Environment Canada	\$82,500
1997	Pryor	Participation in EUROTRAC field campaign - Aerosols in the	American-Scandinavian Foundation	\$3,000

GRANTS AND RESEARCH AWARDS: Sara C. Pryor

		marine atmosphere		
1996-1999	Grimmond, Schmid, Barthelmie & Pryor	Measurements of fluxes and concentrations of CO ₂ in and over a deciduous forest in the Midwest.	Department of Energy	\$935,000
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	Amount
2011-2012	Filippelli & Pryor	Coupling atmospheric chemistry with human health: A novel approach to investigating the source of chronic childhood lead poisoning	\$54,122
2010-2012	Pryor	Funding for a workshop on: Climate change impacts, vulnerability and adaptation in the Midwest (workshop & book)	\$15,800
2007-2009	Pryor	Climate change research in the Midwestern USA (workshop & book)	\$15,000
1997	Pryor	Field measurements of atmospheric particles in the marine atmosphere	\$2,500
1996	Pryor	Continuing existing and forging new research collaboration with scientists in Scandinavia: Particle dynamics	\$1,500
1996	Pryor	College of Arts and Sciences Summer Faculty Fellowship	\$5,500

INTERNAL (INDIANA UNIVERSITY): OTHER FUNDING

Date	P.I.	Title	Amount
2010	Pryor & Glomm	Funding for a lecture series ‘Climate Change: Scientific basis, adaptation options and mitigation strategies’.	\$14,000
2010	Barthelmie, Pryor, Rupp, Mastalerz	Funding for a lecture series ‘The grand energy challenge’.	\$4,500
2010	Barthelmie, Pryor, Rupp, Mastalerz	Funding for a lecture series ‘The grand energy challenge’.	\$7,000
2010	Pryor & Barthelmie	Patten lecture. Nominee: Professor Jean Palutikof.	\$15,000

EXTERNAL RESEARCH/TRAVEL GRANTS

Date	Title/purpose	Agency	Amount
2011-2014	Participant in COST Action ES1002 “WIRE” (Short-Term High Resolution Wind and Solar Energy Production Forecasts)	European Commission	Travel support
2010-2011	Special services contract. Topic: Climate change – extremes and critical energy infrastructure	International Atomic Energy Authority	6,000 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,	American Wind Energy Association	\$800

OTHER FINANCIAL SUPPORT: Sara C. Pryor

2008	Portland Oregon 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	\$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.	Department of Energy	\$3,000
1998	Support for attendance at the European Aerosol Conference, Prague, Czech Republic.	Overseas conference fund. Indiana University	\$650
1998	Personal service contract. Attendance at "Atmospheric ammonia" working group meeting. Environment Canada, Edmonton. May.	Environment Canada	\$1,500
1996	Personal service contract. Attendance at	Environment Canada	\$650

OTHER FINANCIAL SUPPORT: Sara C. Pryor

1994- 1995	“Aerosol modelling in Canada. Meeting to derive modelling strategies and priorities.” Environment Canada, Toronto. June. 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.	

In press

- Barthelmie R.J., Hanson K., Pryor S.C. Meteorological controls on wind turbine wakes. *Proceedings of the Institute of Electrical and Electronics Engineers (Manuscript # 0176-SIP-2011-PIEEE)*.
- Pryor S.C., Nikulin G., Jones C. Influence of spatial resolution on Regional Climate Model derived wind climates. *Journal of Geophysical Research (Manuscript # 2011JD016822)*.

Published (97 in total 1992-2012)

- Pryor S.C., Barthelmie R.J., Clausen N.E., Drew M., MacKellar I., Kjellström E. (2012): Analyses of possible changes in intense and extreme wind speeds over northern Europe under climate change scenarios. *Climate Dynamics* **38** 189-208
- Kulmala M., Asmi A., Lappalainen H. K., Baltensperger U., Brenguier J.-L., Facchini M. C., Hansson H.-C., Hov Ø., O'Dowd C. D., Poschl U., Wiedensohler A., Boers R., Boucher O., de Leeuw G., Denier van den Gon H., Feichter J., Krejci R., Laj P., Lihavainen H., Lohmann U., McFiggans G., Mentel T., Pilinis C., Riipinen I., Schulz M., Stohl A., Swietlicki E., Vignati E., Amann M., Ammann C., Alves C., Arabas S., Artaxo P., Beddows D. C. S., Bergstrom R., Beukes J. P., Bilde M., Burkhardt J. F., Canonaco F., Clegg S., Coe H., Crumeyrolle S., D'Anna B., Decesari S., Gilardoni S., Fischer M., Fjæraa A. M., Fountoukis C., George C., Gomes L., Halloran P., Hamburger T., Harrison R. M., Herrmann H., Hoffmann T., Hoose C., Hu M., Horrak U., Iinuma Y., Iversen T., Josipovic M., Kanakidou M., Kiendler-Scharr A., Kirkevåg A., Kiss G., Klimont Z., Kolmonen P., Komppula M., Kristjansson J.-E., Laakso L., Laaksonen A., Labonnote L., Lanz V., Lehtinen K. E. J., Makkonen R., McMeeking G., Merikanto J., Minikin A., Mirme S., Morgan W. T., Nemitz E., O'Donnell D., Panwar T. S., Pawlowska H., Petzold A., Pienaar J. J., Pio C., Plass-Duelmer C., Prevot A. S. H., Pryor S., Reddington C. L., Roberts G., Rosenfeld D., Schwarz J., Seland Ø., Sellegri K., Shen X. J., Siebert H., Sierau B., Simpson D., Sun J. Y., Topping D., Tunved P., Vaattovaara P., Vakkari V., Veefkind J. P., Visschedijk A., Vuollekoski H., Vuolo R., Wehner B., Wildt J., Woodward S., Worsnop D. R., van Zadelhoff G.-J., Zardini A. A., Zhang K., van Zyl P. G., Kerminen V.-M., Carslaw K. S., Pandis S. N. (2011): General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) – integrating aerosol research from nano to global scales. *Atmospheric Chemistry and Physics Discussions* **11** 17941-18160.
- Pryor S.C., Barthelmie R.J. (2011): Assessing climate change impacts on the near-term stability of the wind energy resource over the USA. *Proceedings of the National Academy of Sciences* **108** 8167-8171 doi: 10.1073/pnas.1019388108.
- Pryor S.C., Barthelmie R.J., Sørensen L.L., McGrath J.G., Hopke P., Petäjä T. (2011): Spatial and vertical extent of nucleation events in the Midwestern USA: Insights from the Nucleation In ForesTs (NIFTy) experiment. *Atmospheric Chemistry and Physics Discussions* **10** 23287–23344. Final paper published in *Atmospheric Chemistry and Physics* **11** 1641-1657
- 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*

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- 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., Erisman 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.
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- 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* **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* **114** D14105 doi:10.1029/2008JD011416.
- 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., Semperviva 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.
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- 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.scitoenv.2007.10.059).
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- 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* **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.

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

EDITED BOOKS

- Pryor S.C. (Ed) (forthcoming): *Climate Change in the Midwest: Impacts, Risks, Vulnerability and Adaptation. Book in copy-editing stage, under contract:* Indiana University Press, Bloomington, Indiana, USA.
- Pryor S.C. (Ed) (2009): *Understanding climate change: Climate variability, predictability and change in the Midwestern United States. 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.
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BOOK CHAPTERS/MONOGRAPHS

- Mearns L., Bukovsky M., Magaña Rueda V., Pryor S.C. (2012): *Downscaling of climate information. Climate Change in North America.* Ed. George Ohring To be published by Springer-Verlag (in review).
- Pryor S.C., Barthelmie R.J. (2012): *Renewable Energy Resources- Ocean Energy: Wind/Wave/Tidal/Sea currents.* Chapter 3.11 in 'Climate Vulnerability' Ed. R. Pielke. To be published by Elsevier (in review).
- Pryor S.C. (2012): *Climate change impacts, risk and vulnerability in the Midwest: An introduction.* Chapter 1 in 'Climate Change in the Midwest: Impacts, Risks, Vulnerability and Adaptation.' Ed. S.C. Pryor. To be published by Indiana University Press.
- Pryor S.C., Barthelmie R. (2012): *The Midwestern USA: Socio-economic context and physical climate.* Chapter 2 in 'Climate Change in the Midwest: Impacts, Risks, Vulnerability and Adaptation.' Ed. S.C. Pryor. To be published by Indiana University Press.
- Gotham D.J., Angel J.R. and Pryor S.C. (2012): *Vulnerability of the electricity and water sectors to climate change in the Midwest.* Chapter 12 in 'Climate Change in the Midwest: Impacts, Risks, Vulnerability and Adaptation.' Ed. S.C. Pryor. To be published by Indiana University Press.
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- Pryor S.C., Barthelmie R. (2012): *Climate change impacts, risk and vulnerability in the Midwest: What next?* Chapter 17 in 'Climate Change in the Midwest: Impacts, Risks, Vulnerability and Adaptation.' Ed. S.C. Pryor. To be published by Indiana University Press.
- Lawrence D. Barthelmie R., Crochet P., Lindström G., Kolcova T., Kriauciunienė J., Larsen S., Pryor S., Reihan A., Roald L., Tietäväinen H., Wilson D. (2011): *Analyses of historical hydroclimatological timeseries for the Nordic and Baltic regions* Chapter 2 in 'Climate and the energy sector.' Published by the Nordic Council of Ministers, Copenhagen, Denmark
- Clausen N.E., Larsen X.G., Pryor S.C., Nielsen M. Drews M. (2011): *Wind Power* Chapter 7 in 'Climate and the energy sector.' Published by the Nordic Council of Ministers, Copenhagen, Denmark.
- Barthelmie, R.J. and Pryor, S.C. (2010): *Meteorology and wind resource assessment for wind farm development.* Chapter 1 in *Wind energy systems (37 pp). Optimising design and construction for safe and reliable operation.* Eds: J. Dalsgaard Sørensen, J. Nørkær

OTHER PUBLICATIONS: Sara C. Pryor

- Sørensen. Woodhead Publishing Limited, Cambridge, 640 pp. ISBN 1 84569 580 1.
- 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 in *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.
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OTHER PUBLICATIONS: Sara C. Pryor

- 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.
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- 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 in *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.
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UNREFEREED REPORTS/CONFERENCE PAPERS: Total number = 122.

**REVIEW PUBLISHED IN CURRENT REVIEWS FOR ACADEMIC LIBRARIES,
SCIENCE AND TECHNOLOGY:** Total number = 50.

OTHER GRANT/CONTRACT REPORTS: Total number = 62.

CONFERENCE PRESENTATIONS: Total number = 226.

INVITED PRESENTATIONS: Total number = 73.

CONSULTANCY: 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 <i>Application of the ISOPART model to assess vehicle emissions control measures</i> Appendix in: <i>Assessment of motor vehicle emission control measures</i>.
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 <i>Environmental Levels</i> chapter <i>Particulate matter <10µm</i> 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 Geophysical Union

TEACHING EXPERIENCE: Sara C. Pryor

**INDIANA UNIVERSITY
FORMAL COURSES**

<i>Semester</i>	<i>Course</i>	<i>Students</i>
Fall 2011	G304/G532 Physical Meteorology & Climatology	34
Spring 2011	G434/G534 Air Pollution Meteorology	12
Fall 2010	G440/G602 Seminar: Climate Change: Scientific Basis, Adaptation and Mitigation Strategies	14
Fall 2010	G304/G532 Physical Meteorology & Climatology	27
Spring 2010	G501 Research Methods II	7
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

TEACHING EXPERIENCE: Sara C. Pryor

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
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.

INDIVIDUAL/GROUP GRADUATE READINGS/RESEARCH COURSES: Total number = 32.

SUPERVISION OF INTERNSHIPS: Total number = 19

TEACHING-RELATED INVITED PRESENTATIONS: Total number = 20.

TEACHING PUBLICATIONS: 9 editions of laboratory manual for G107 Physical Systems of the Environment

UNIVERSITY OF BRITISH COLUMBIA.

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

SIMON FRASER UNIVERSITY.

Semester	Course
Fall 1993	G201 Introduction to Climatology

UNIVERSITY OF EAST ANGLIA. TEACHING ASSISTANT. 1991-92

Semester	Course
Multiple	ENV101 Introductory Meteorology and Climatology

SUPERVISION: Sara C. Pryor

P.D.F. Supervisor

<i>Beginning</i>	<i>Ending</i>	<i>Individual</i>
Jan 2012	Ongoing	Karen Hornsby
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>Dissertation title</i>
Aug 2009	Ongoing	Paola Crippa	
Sep 2005	Ongoing	Fredi Birsan	
Jan 2004	Oct 2008	Jennifer Hutton	In canopy isoprene oxidation
Jan 2000	Sep 2004	Justin Schoof	Generating regional climate change scenarios using general circulation models and empirical downscaling
Jan 1997	Dec 1999	Brooks Pearson	An estimation of potential production of agri-based ethanol and its contribution to transportation emissions.

M.S. Supervisor.

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Thesis title</i>
Aug 2010	Ongoing	Mark Belding	
Aug 2007	Apr 2010	Andrea Spaulding	Meteorological influences on particle nucleation over a deciduous forest in the Midwest
Aug 2005	Apr 2008	Jessica Howe	Analysis of extreme precipitation across the Midwest during the twentieth century.** **Winner of the Stephen Visser award for an outstanding paper in Climatology, Indiana University
Jan 2004	Oct 2005	Fredi Birsan	Particle dry deposition to a forest canopy: A flux based analytical model
Aug 2000	Dec 2002	Nathan Polderman	Linking synoptic climate to historical lake level variability in the Lake Michigan-Huron basin.
Aug 1997	Dec 1999	Justin Schoof	Synoptic circulation classification and downscaling for the Midwestern United States*. *Awarded the Esther L. Kinsley thesis award, Indiana University for best Masters thesis.
Aug 1997	May 2000	Sean Potter	Characterizing air quality in Indianapolis, Indiana.

Ph.D. Committee member.

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Dissertation title</i>
Aug 2008	Ongoing	Steve Griffith	Biogenic VOC oxidation and semi-volatile production
Jan 2006	Feb 2008	Nori Sato	Impacts of climatic change and variability on winter-road maintenance on North America
Aug 2005	Dec 2009	Helber Dusan	Crustal composition of neutron stars

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Jan 2003	Jan 2008	Deepali Vimal	Oxidation of biogenic hydrocarbons
Jan 2002	Jun 2004	John Johnson	Geological variability of lake levels in the Great Lakes
Aug. 1998	May 2002	Bao Chuong	Kinetics and mechanisms of OH initiated oxidation of hydrocarbons
Aug. 1996	Sep 1999	Don Cortes	Fluxes of toxic chemicals to the Great Lakes

M.S. Committee member.

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Thesis title</i>
Aug 2010		Hui Wang	Extreme wind phenomena
Aug 2010		Sara Johnson	Wind speed profiles in the atmospheric boundary layer
Aug 2008	Aug 2010	Catherine Brabant	Modeling and observations of wind turbine wakes
Aug 2007	Aug 2009	Jared Deroschers	Analyzing snowfall change and teleconnection relations with a standardized snowfall index
Aug 2005	Jul 2008	Valerie Anderson	Comparability of storage heat flux models: Results from suburban North America
Aug 2003	Aug 2005	Leslie Ensor	Precipitation variability in the Midwest
Aug 1999	Oct. 2001	Heidi Zutter	Convective boundary layer development over a mid-latitude deciduous forest
Jan 1997	Apr. 1998	Karen Spartz	Trends in Indiana
Aug 1994	Dec 1995	Karsten Shein	Wind speed variability in the Midwestern United States 1961-1990

BSES Supervisor

<i>Beginning</i>	<i>Graduation</i>	<i>Individual</i>	<i>Thesis title</i>
2010		Hannah Furbeck	Particle fluxes
2003	2005	Karin Kvale	Precipitation chemistry in the MidWest
2001	2002	Ken Rubel	Spatial and temporal effects of commuting on personal exposure to ozone

Other supervision

<i>Beginning</i>	<i>End</i>	<i>Individual</i>	<i>Purpose</i>
Aug 2010	December 2011	Lian Chen	Ph.D. Student from Nanjing University of Science and Technology funded by the Chinese NSF to study near-surface wind climates at Indiana University under my supervision.

Other graduate students for whom I have provided financial support

<i>Name</i>	<i>Degree sought</i>	<i>Period</i>
Todd Lindley	Ph.D.	Summer 2007
Taka Kobayashi	Ph.D.	Summer 2007, Fall 2007, Spring 2008

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SCIENTIFIC COMMUNITY

Proposal panel member

<i>Year</i>	<i>Agency & topical area</i>
2011	National Science Foundation: Dynamics of Coupled Natural and Human Systems (CNH) (14 proposals)
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>
31	National Science Foundation (Multiple Divisions)
2	NOAA Climate Program Office (CPO) Climate Change Data and Detection (CCDD)
6	Department of Energy, National Institute for Climatic Change Research
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
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)

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1	Scripps Institute of Oceanography (UCSD)
3	Natural Sciences and Engineering Research Council of Canada
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 2010-2013.
- 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. Total number = 187

<i>Total # reviews</i>	<i>Journals for which reviews number ≥4</i>
47	<i>Atmospheric Environment</i>
6	<i>Atmosphere Ocean</i>
4	<i>Climate Dynamics</i>
6	<i>Climate Research</i>
4	<i>Environmental Science and Technology</i>
4	<i>Geophysical Research Letters</i>
7	<i>International Journal of Climatology</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>
31	<i>Journal of Geophysical Research</i>
4	<i>Quarterly Journal of the Royal Meteorological Society</i>
5	<i>Science of the Total Environment</i>
4	<i>Wind Energy</i>

Book review

<i>#</i>	<i>Title</i>	<i>For whom</i>	<i>Year</i>
	<i>Revision to Atmospheric Pollution:</i> Jacobson, Cambridge University Press	Cambridge University Press	2011
	<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>	Brooks/Cole, Thomson	2005

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Ackerman and Knox. Brooks/Cole <i>Climate: Past, present and future:</i> Wyatt and Yang. Cambridge University Press.	Learning Cambridge University Press	2003
<i>The Theory and Practice of Physical Geography:</i> Butler, Malanson and Walsh. Prentice Hall.	Prentice Hall	2002
52 Books/DVDs/CDs/WWW sites	Choice: Current Reviews for Academic Libraries	1997- to date

Report review

<i>Title</i>	<i>For whom</i>	<i>Year</i>
More Extreme Weather and Our Energy Infrastructure by National Wildlife Federation	National Wildlife Federation	2011
Review of report from Scripps Institute for Oceanography ' Formulation of a Statistical Downscaling Model for California Site Winds, with Application to 21st Century Climate Scenarios ' By David K. Mansbach and Dan Cayan.	Research for the California Energy Commission's Public Interest Energy Research program	2011

External review for habilitation

<i>Year</i>	<i>Title of thesis</i>	<i>University</i>
2011	Extreme European wind storms: diagnostics, downscaling and climate change	University of Cologne, Germany

External review for tenure/promotion

<i># cases</i>	<i>Year</i>
2	2011
1	2010
1	2007
1	2003

Ph.D. Dissertation review (external reviewer)

<i>Department & University</i>	<i>Date</i>
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

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Science advisory panels/ Administration of Professional Organizations	
<i>Year</i>	<i>Position</i>
2012	Member committee to draft an AMS policy statement on energy production and Earth observations, science, and services
2011	Climate Expert on the AGU Climate Q&A service.
2011-	Member Board on Enterprise Economic Development (BEED), Commission on the Weather and Climate Enterprise (CWCE), American Meteorological Society (AMS)
2007-2011	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.
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.
1996-1997	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-convenor and chair: "A28: Biogenic and Anthropogenic Influences on Particle Nucleation and Growth I" . Oral & poster sessions. AGU Fall meeting, San Francisco
2005	Session Chair "Particle formation" AAAR Annual Meeting, Austin.
2004	Session co-convenor: "The bio-atmospheric N cycle" . AGU Fall meeting, San Francisco.
2004	Co-convenor 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

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- Research. (*reviewed 220 abstracts and arranged over 20 sessions*)
- 2003 **Session Chair** “*Atmospheric Modeling II*’ AAAR Annual Meeting, Los Angeles.
Session Chair “*Atmospheric Modeling I*’ AAAR Annual Meeting, Los Angeles.
- 2003 **Session co-convenor: Atmospheric and oceanic processes in air-sea exchange: first results from SOLAS studies** AGU/EGS Joint Assembly, Nice, France
Session co-convenor: Wind Power Meteorology AGU/EGS Joint Assembly, Nice, France
- 2002 **Session Chair** “*Marine Aerosols*’ AAAR Annual Meeting, North Carolina.
Session Chair “*Atmospheric Modeling II*’ AAAR Annual Meeting, North Carolina.
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.
- 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

Year	Activity
2011-2014	Associate Vice-Provost for Faculty and Academic Affairs
2011	Judge for the IU Women in Science Program
2010	Lecturer of the causes and consequences of drought – public forum after presentation of the Grapes of Wrath, Cardinal Stage company.
2009 →	Graduate Faculty Council member, Indiana University (<i>elected</i>)
2008 →	Executive committee member of the Indiana University Center for Research in Environmental Science.
2008 →	Executive committee member of the Indiana University Research Preserve.
2007 -2010	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)
2005-2007	Bloomington Faculty Council (<i>elected</i>)

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

College of Arts and Sciences

<i>Year</i>	<i>Activity</i>
Multiple	Search committee chair faculty positions
Multiple	Junior Faculty Mentor: Tony Grubestic & Constance Brown
2010-2011	Search committee for the Dean of the College of Arts and Sciences
2008-2011	Advisory committee to the Dean: Research in the Physical and Life Sciences, The College of Arts and Sciences.
2007-2011	Director of Graduate Studies
2005 →	Chair – Atmospheric Science Program.
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.
1997, 2001	Member: Departmental Salary committee
2006, 2010	

27 January 2012