

JOHN P. KRASTING, Ph.D.

Mailing Address:

NOAA/Geophysical Fluid Dynamics Laboratory
Princeton University Forrestal Campus
201 Forrestal Road
Princeton, NJ 08540

Phone: (856) 534-8014

Fax: (609) 987-5063

E-mail: John.Krasting@noaa.gov

EDUCATION:

Ph.D., Atmospheric Science, Rutgers University, October 2008.

*Additional coursework completed at Princeton University

Research Focus: Global atmospheric dynamics and climate change

Dissertation: "Variations in Northern Hemisphere Snowfall: An Analysis of Historical Trends and the Projected Response to Anthropogenic Forcing in the Twenty-First Century"

Advisor: Dr. Anthony J. Broccoli

B.S., Meteorology, Rutgers University. May 2003.

Advisor: Dr. Robert P. Harnack

ACADEMIC AND RESEARCH POSITIONS HELD:

Scientist (HPTi), NOAA/Geophysical Fluid Dynamics Laboratory, April 2009 – Present

Involved in executing simulations using the Earth System Model (ESM) for the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5).

Research Computing Scientist, University of Delaware, September 2008 – April 2009

Performed high-resolution simulations related to wind energy resources along the East Coast with the Weather Research and Forecast Model. Engineered and maintained a distributed-memory computing cluster in the Mac OS X environment, and mentored graduate students in running applications on the cluster.

Doctoral Research, Rutgers University, July 2003 – September 2008

Analyzed both past and future trends in snowfall in the Northern Hemisphere through observations and as simulated by coupled atmosphere-ocean general circulation models (AOGCMs). Conducted test simulations of regional climate using the Weather Research and Forecast (WRF) model. Future work involves the use of WRF to simulate regional scale climate changes and variability for the 21st century.

Technical Consultant, University of Delaware, July 2007 – August 2007

Performed installation of the Weather Research and Forecast model. Provided on-site training on the basic use of the model and answered follow-up questions.

George H. Cook Scholar, Rutgers University, September 2000 – May 2003

Studied thermodynamic and kinematic contributions towards the formation of severe local storms in the Northeastern United States. Analysis involved reconstructions of the synoptic/mesoscale atmospheric conditions based on upper-air rawinsonde observations just prior to the occurrence of severe weather.

TEACHING EXPERIENCE

Teaching Assistant, Dept. Environmental Sciences, Rutgers University, September 2003 – May 2006

Offered lectures, prepared materials, graded assignments, and responded to student questions in the following courses:

1.) Large Scale Weather Systems (Fa. 2003, Fa 2006) 2.) Atmospheric Thermodynamics (Fa. 2004) 3.) Synoptic Forecasting I & II (Fa. 2006 & Sp. 2007) 4.) Introductory Meteorological Analysis (Sp. 2007)

Guest Lecturer, Dept. Environmental Sciences, Rutgers University, Spring 2006

Presented lectures in the following courses: 1.) Synoptic Meteorology 2.) Introductory Meteorological Analysis 3.) Dynamics of the Oceans and Atmosphere

ACADEMIC HONORS

- Recipient, Graduate Assistance in Areas of National Need Fellowship (GAANN)
- George H. Cook Scholar
- Recipient, Phillip Alampi Scholarship
- Recipient, Herbert Estate / Kelly Scholarship
- Recipient, Myron and Rona Solberg Scholarship

PUBLIC SERVICE EVENTS:

- October 2008 – *Invited Speaker* – Delaware Lego Builders League. Wilmington, DE
- October 2007 – *Panelist* – Ecological Change Coalition. New Brunswick, NJ
- October 2007 – *Invited Speaker* - Teacher’s In-service. Millburn Township Public Schools, Millburn, NJ
- April 2007 – *Invited Speaker* – League of Women Voters / Millburn Middle School. Millburn, NJ
- March 2006 – *Invited Speaker* – Academic Decathlon Club. Gateway Regional High School, Woodbury Heights, NJ
- October 2005 – *Invited Speaker* – United States Postal Service. Piscataway, NJ
- October 2002 – *Invited Speaker* – Mantua Lions Club. Mantua, NJ

UNDERGRADUATE STUDENTS SUPERVISED

- Megan Leigh, Internship at NY 1 News, Spring 2007
- Amanda Kamenitz, Internship at News 12 New Jersey, Spring 2007
- John Cifelli, Internship at WMGM-TV NBC 40, Summer 2006
- John Carrol, Internship at News 12 New Jersey, Summer 2005
- Lauren Casey, Internship at WCAU-TV NBC 10, Summer 2005
- Ariana Shah, Internship at WWOR-TV UPN-9, Summer 2005
- Greg Whitaker, Internship at News 12 New Jersey, Spring 2005
- Alan Graziano, Internship at News 12 New Jersey, Fall 2004
- John Carrol, Internship at Twentieth Century Fox, Summer 2004
- James Nichols, Internship at WNYW-TV Fox 5, Spring 2004

PUBLICATIONS IN PREPARATION

Krasting, J.P. and A.J. Broccoli. Snowfall trends in Eastern North America in projections of future climate.

ABSTRACTS AND PRESENTATIONS

Observed and Simulated North American Snowfall Changes for the Late Twentieth Century. 37th Annual Northeast Storms Conference, Springfield, MA, March 2008, with A. J. Broccoli.

Influences of temperature and precipitation changes on model-simulated monthly snowfall trends. American Geophysical Union Fall Meeting, abstract #A44C-04, San Francisco, CA, with A. J. Broccoli

Global warming and simulated snowfall trends in Eastern North America. 85th Annual Meeting of the American Meteorological Society, Seattle WA, January 2005 (also presented at the COSMIC/FORMOSAT-3 Science Camp and Colloquium, Taipei, Taiwan, May 2005), with A. J. Broccoli.

A statistical analysis of thermodynamic and kinematic variables prior to severe thunderstorm events in the Northeastern United States. 11th Symposium for Undergraduate Research, University of Sao Paulo, Brazil, November 2003, with R. P. Harnack.

BROADCASTING EXPERIENCE

- On-Air Meteorologist, WTXF-TV (FOX), Philadelphia, PA, April 2008 - Present
- On-Air Meteorologist, WNYW-TV (FOX), New York, NY, November 2007 – April 2008
- On-Air Meteorologist, WWOR-TV (My Network TV), Secaucus, NJ, March 2006 – April 2008

MEMBERSHIPS IN PROFESSIONAL AND LEARNED SOCIETIES:

- American Meteorological Society
- American Geophysical Union
- American Federation of Television and Radio Artists
- National Weather Association
- Kappa Theta Epsilon