

# Gregory N. Seroka

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## EDUCATION:

- Ph.D. Candidate**, Physical Oceanography, Rutgers University 2011—  
Institute of Marine and Coastal Sciences, Advisor: *Dr. Scott Glenn*
- M.S.**, Atmospheric Sciences, Texas A&M University May 2011  
Advisor: *Dr. Richard Orville*, Overall GPA: 4.0
- B.S. (Honors)**, Meteorology, Pennsylvania State University, Schreyer Honors College May 2008  
Minor in Global Business Strategies; Overall GPA: 3.82, Magna Cum Laude

## RESEARCH EXPERIENCE:

- Coastal Ocean Observation Lab**, Rutgers University, *Graduate Research Assistant* 2011—  
Coupled atmosphere-ocean modeling, offshore wind resource analysis, hurricane prediction research  
Supervisor: *Dr. Scott Glenn*
- Deepwater Horizon Oil Spill**, Texas A&M University, *Project Assistant* June 2010  
Launched radiosondes using ultra-portable upper air system aboard R/V Brooks McCall in support of NWS  
Supervisor: *Dr. Don Conlee*
- Department of Atmospheric Sciences**, Texas A&M University, *Graduate Research Assistant* 2008-2010  
Lightning prediction and detection, weather radar analysis, forecast verification  
Supervisor: *Dr. Richard Orville*
- NOAA Earth System Research Lab**, *Research Intern* Summer 2007  
Arctic mixed-phase clouds research in Arctic Research Group, Physical Sciences Division  
Supervisor: *Dr. Matthew Shupe*
- Department of Meteorology**, Pennsylvania State University, *Undergraduate Research Assistant* 2006—2008  
Microphysical and dynamic properties of arctic mixed-phase clouds over Barrow, AK  
Supervisor: *Dr. Hans Verlinde*

## TEACHING EXPERIENCE:

- Physical Oceanography**, *Teaching Assistant* Fall 2012  
Graduate Program in Oceanography, Rutgers University (undergraduate/graduate level: 9 students)  
Supervisors: *Drs. Bob Chant and Dale Haidvogel*
- Practical Weather Forecasting**, *Teaching Assistant, Lecturer* Spring 2010  
Department of Atmospheric Sciences, Texas A&M University (advanced undergraduate level: 25 students)  
Supervisor: *Dr. Don Conlee*
- Atmospheric Science Laboratory**, *Course Instructor* Spring 2009  
Department of Atmospheric Sciences, Texas A&M University (undergraduate level: 3 sections, 85 students)

## PROFESSIONAL EXPERIENCE:

- Impact Weather**, Houston, TX, *Intern* December 2010  
Practical Training Experience (PTE) program, gained experience in private sector meteorology
- Houston Lightning Detection and Ranging (LDAR) II Network**, *Manager* 2008—2010  
Resurrected and operated a real-time VHF total lightning detection network for the city of Houston
- The New York Times, The Weather Page**, *Intern* 2007—2008  
Domestic and international forecasting, writing and graphics work

**Campus Weather Service**, Pennsylvania State University, *President* 2007—2008  
Directed 150-member student-run group that forecast for student newspaper, Pennsylvania radio & public cable television clients

**Campus Weather Service**, Pennsylvania State University, *Vice President of Newspaper Operations* 2006—2007

**USATODAY.com**, Weather, *Intern* Summer 2006  
Online and print article preparation, public inquiry response, photo gallery publishing, website updating

## PEER-REVIEWED PUBLICATIONS:

Seroka, Gregory N., Richard E. Orville, Courtney Schumacher, 2012: Radar Nowcasting of Total Lightning over the Kennedy Space Center. *Wea. Forecasting*, **27**, 189–204. doi:10.1175/WAF-D-11-00035.1

## INVITED TALKS:

- Nov 2012 **Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS): 2012 Annual Meeting**, Baltimore, MD  
“RU-COOL Advanced Modeling System in Support of Offshore Wind Energy Development and Operational Applications: Investigating the NJ Sea/Land Breeze,” Invited speaker at Offshore Wind Energy session, Greg Seroka, Rich Dunk, Scott Glenn, Louis Bowers, John Kerfoot, Michael Crowley, Hugh Roarty, Laura Palamara.
- July 2012 **Atmospheric and Oceanic Sciences, Princeton University**, Princeton, NJ  
“Exploring offshore wind energy and Hurricane Irene,” Invited speaker for Atmospheric and Oceanic Sciences graduate student seminar.
- July 2012 **NJ Governor’s School of Engineering and Technology**, Rutgers University, New Brunswick, NJ  
“Exploring offshore wind energy: Why is it important and what is being done at Rutgers?” Invited Lecturer for *Energy and Sustainability Course, NJ Gov. School*, NSF IGERT Grant.
- Aug. 2011 **Atmospheric and Oceanic Sciences, Princeton University**, Princeton, NJ  
“Radar nowcasting of total lightning over the Kennedy Space Center,” Invited speaker for Atmospheric and Oceanic Sciences graduate student seminar.

## CONFERENCE PRESENTATIONS:

- Jan. 2013 **92<sup>nd</sup> American Meteorological Society Annual Meeting**, Austin, TX  
“Impact of Ocean Observations on Hurricane Irene Intensity Forecasts,” Oral Presentation at *Special Symposium on the Next Level of Predictions in Tropical Meteorology: Techniques, Usage, Support, and Impacts*, Greg Seroka, Scott Glenn, Oscar Schofield, Josh Kohut, Hugh Roarty, John Kerfoot, Louis Bowers, Michael Crowley, Laura Palamara, Rich Dunk.
- Dec. 2012 **AGU Fall Meeting 2012**, San Francisco, CA  
“Impact of Ocean Observations on Hurricane Irene Intensity Forecasts,” Poster at *Remote Sensing of Tropical Cyclones and Tropical Convective Systems*, Greg Seroka, Scott Glenn, Oscar Schofield, Josh Kohut, Hugh Roarty, John Kerfoot, Louis Bowers, Michael Crowley, Laura Palamara, Rich Dunk.
- Oct 2012 **OCEANS 2012 Marine Technology Society/IEEE Conference**, Virginia Beach, NJ  
“Rutgers University Coastal Ocean Observation Laboratory (RU-COOL) Advanced Modeling System Developed to Cost-Effectively Support Offshore Wind Energy Development and Operational Applications,” Oral presentation at Numerical Modeling and Simulation session, Greg Seroka, Rich Dunk, Scott Glenn, Louis Bowers, John Kerfoot, Michael Crowley, Hugh Roarty, Laura Palamara.
- Feb. 2012 **Institute of Marine and Coastal Sciences**, Rutgers University, New Brunswick, NJ  
“Hurricane Irene: Turbulent mixing and sea surface temperature sensitivity,” Speaker for weekly Departmental Seminar Series.
- Jan. 2011 **91<sup>st</sup> American Meteorological Society Annual Meeting**, Seattle, WA  
“Radar nowcasting of total lightning over the Kennedy Space Center,” Oral presentation at the *Fifth Conference on the Meteorological Applications of Lightning Data*, Greg Seroka and Richard Orville.

- Jan. 2011 **91<sup>st</sup> American Meteorological Society Annual Meeting**, Seattle, WA  
 “Rapid deployment upper air observations for incident meteorological support,” Oral presentation at *IMPACTS: Weather 2010*, Don Conlee, Greg Seroka, Dion Delao, and Kent Prochazka.
- Jan. 2011 **91<sup>st</sup> American Meteorological Society Annual Meeting**, Seattle, WA  
 “Upper air observations over the Gulf oil spill: A student experience of a lifetime,” Poster at the *Tenth Annual Student Conference*, Dion Delao, Greg Seroka and Don Conlee.
- Jan. 2010 **90<sup>th</sup> American Meteorological Society Annual Meeting**, Atlanta, GA  
 “Developing a reliable predictor of lightning initiation and cessation through radar analysis,” Poster at the *Ninth Annual Student Conference*, Greg Seroka and Richard Orville

### AWARDS AND HONORS:

Link Foundation Energy Fellowship, Honorable Mention	2012
Texas A&M College of Geosciences Incentive Scholarship	2009
Phi Beta Kappa	2008
Joel N. and Peggy Myers Scholarship in Meteorology	2007—2008
<i>WxChallenge</i> , weather forecasting competition (>1,100 participants), <i>averaged top 50 over six years</i>	2006—
NOAA Ernest F. Hollings Scholarship	2006—2008
<i>WxChallenge</i> , Final Four finish in year-end tournament bracket	2006—2007
Chi Epsilon Pi, national honor society for outstanding students in meteorology	2005—2008
John and Elizabeth Holmes Teas Scholarship	2005—2008
Charles L. and Anna R. Hosler Scholarship in Meteorology	2005—2006
Penn State Dean’s List	2004—2008
Schreyer Honors College Academic Excellence Scholarship	2004—2008
<i>National Collegiate Wx Forecasting Contest</i> (>1,000 participants), 2nd place in nation, underclassmen	2004—2006
C. Melville, Jr. and Kenneth Barr Scholarship, National Merit Finalist	2004

### PROFESSIONAL AFFILIATIONS:

American Geophysical Union, <i>Student Member</i>	since 2009
American Meteorological Society, <i>Student Member</i>	since 2004
Penn State Branch of the AMS, <i>Member</i>	2004—2008
Penn State Campus Weather Service, <i>Member</i>	2004—2008

### COMMUNITY SERVICE INVOLVEMENT:

Rutgers Oceanography Graduate Student Association, <i>Treasurer</i>	2011—
Northern New Jersey Junior Science Symposium at Rutgers University, <i>Oral Judge, Paper Reviewer</i>	2012
Rutgers Research Internships for Ocean Sciences (REU program), <i>General Mentor</i>	Summer 2011
Rutgers Undergraduate Research Symposium, <i>Judge</i>	2011
Texas A&M Atmospheric Sciences Graduate Council, <i>Treasurer</i>	2009—2010
Texas A&M Atmospheric Sciences Graduate Council, <i>Seminar Coordinator</i>	2009—2010
Texas A&M Atmospheric Sciences, <i>Weather Map Discussion Leader</i>	2009—2010

### SKILLS:

*Programming:* WRF, GrADS, NCL, IDL, MATLAB, Perl, C++  
*Software:* Adobe InDesign, Illustrator, and Photoshop  
*Operating systems:* Linux, Mac OS, Sun Microsystems, Windows