

Eric M. Holthaus

Objective

Gain further research experience within the atmospheric sciences, particularly with regard to the societal aspects of global climate change and the associated increased risk of weather and climate disasters; prepare for a career in which I can make a significant contribution toward the broad task of mitigating climate change and its impacts on our society.

Education

- 2005–Present** **Columbia University – Earth Institute; New York, NY**
Pursuing M.A. in Climate and Society
Research topic: The Impacts of Climate Change on the Developing World
Anticipated graduation date: October 2006
- 2004–2005** **University of Oklahoma – School of Meteorology; Norman, OK**
Completed one year of graduate study towards M.S. in Meteorology
Advisor: Dr. Howard Bluestein
Research topic: Mobile Radar Observations of Tornadoes
- 1999–2003** **Saint Louis University; St. Louis, MO and Madrid, Spain**
Honors B.S. in Meteorology
Study Abroad Spring Semester 2001
Graduated Magna Cum Laude (3.75 GPA)

Experience & Accomplishments

- Fall 2005–Spring 2006** **Research Assistant – International Research Institute for Climate Prediction – Lamont-Doherty Earth Observatory; Palisades, NY**
- Fall 2004–Summer 2005** **Research Assistant – OU School of Meteorology; Norman, OK**
- Research performed under the direction of Dr. Howard Bluestein on mobile Doppler radar observations of tornadoes using a dual-polarized W-band radar, and SOLO II analysis software.
 - Participated in a special “dream course” on climate change and societal impacts directed by Dr. David Karoly with guest lecturers including Dr. Kevin Trenberth (NCAR), Dr. Suki Manabe (GFDL), Dr. Rosina Bierbaum (UMich), and Dr. Richard Sandor (CCX).
 - Member of the Visiting Students Weekend panel; helped design an event to welcome and introduce potential grad students to the department.
 - Tornado research published in the 32nd AMS Radar Meteorology Conference proceedings entitled: “High-resolution, mobile, W-band Doppler-radar observations of the vertical structure of a tornado near Attica, Kansas on 12 May 2004”.
- Fall 2004–Spring 2005** **National Forecasting Contest – Penn State University**
- Local and National Champion – Week 9 – Buenos Aires, Argentina
 - Local Champion – Week 3 – New Orleans, LA
 - For the season, finished 12th of 63 locally, 109th out of 1110 total forecasters nationally.

- January 2005 Oklahoma Scholar Leadership Enrichment Program; Norman, OK**
- Participated in a special honors intersession course at the National Severe Storms Laboratory led by the director, Dr. James Kimpel; entitled "Using the Science of Weather in Business and Public Policy"
- August 2003–August 2004 Jesuit Volunteer Corps; Woodburn, OR**
- Social Services/Senior Ministry coordinator at St. Luke's Catholic Church.
 - Duties during this AmeriCorps funded year-long volunteer program included operation of a local food pantry, administration of emergency energy and rent assistance to low-income families, and home visitation of senior and disabled parishioners.
 - Lived under the four JVC values of spirituality, community, simplicity, and social justice.
- Summer 2003 National Aeronautics and Space Administration; Goddard Space Flight Center**
- Member of the Student Internship Program, supervised by Dr. Gail Skofronick-Jackson.
 - Developed Fortran-based transfer code for ice microphysical model used in hurricane research, namely microwave remote sensing of Hurricane Erin (2001).
 - Presented poster of related research at the 2004 AMS Student Conference in Seattle, WA.
 - Work published in the 2005 AMS Annual Conference proceedings entitled: "Remote sensing of microphysical particles in hurricanes from aircraft observations".
- Fall 2002 Photography Editor, The University News; St. Louis, MO**
- Elected photo editor for SLU's campus newspaper after 3 years as a staff photographer.
 - Responsibilities included keeping a staff of approximately 10 photographers, setting and meeting deadlines, selection and processing of all photographs for each weekly issue.
- Summer 2002 National Center for Atmospheric Research; Boulder, CO**
- Delegate to the first ever Undergraduate Leadership Workshop.
 - Chosen to represent Saint Louis University among a group of sixteen students from universities across the US and Canada expressing interest in graduate research in the atmospheric sciences.
- Summer 2002 National Aeronautics and Space Administration; Marshall Space Flight Center**
- Member of the Undergraduate Student Research Program, mentored by Dr. William Lapenta.
 - Developed skills in Fortran-90, UNIX, Gempak, and numerical modeling (MM5).
 - Incorporated a simple land-use model into MM5 to study effect on direct thermal circulations.
 - Published NASA Technical Report: "Mesoscale Modeling of a Sea Breeze Circulation on the Gulf Coast".
- Spring 2002 Saint Louis University's Truman Scholarship Nominee**
- Summer 2001 State of North Dakota**
- Provided ground support for the North Dakota Cloud Modification Project in Stanley, ND.
 - Duties included nowcasting and assessment of active storms, direction of project aircraft and associated personnel used in cloud seeding missions (with authority over chemical release), and operation of a WSR-74C weather radar.
- Fall 2000 KTVI-TV Fox 2; St. Louis, MO**
- Fall Semester internship with Chief Meteorologist Dave Murray in a top-20 market station.
- Summer 2000 Chanute Municipal Airport; Chanute, KS**
- Obtained my FAA Private Pilot's License in three weeks while flying a Cessna 182 Skylane.
- Summer 2000 KSNT-TV 27; Topeka, KS**
- Summer internship working with the Chief Meteorologist Bruce Jones of the NBC affiliate.
- Spring 1999 National Weather Service Storm Spotter Certification**
- 1999–Present Member, American Meteorological Society**

Interests & Extracurriculars

My research interests include environmental and science policy, global and local climate change, structure of severe storms, and emergency response to natural disasters. Other interests are aviation, photography, storm chasing, travel (3 continents, 13 countries, 49 states), hiking, amateur astronomy, baseball, and community service.