



# Cooperative Institute for Precipitation Systems

## **This Period in CIPS: July – September 2006**

### **Upcoming Conferences and Presentations**

Presentations are being prepared for the National Weather Association's 31st Annual Meeting in Cleveland, OH from 14-19 October 2006.

A Conceptual Model Depicting Processes Important for the Generation of Meso-beta Scale Snow Bands (Poster): Michael J. Paddock, Charles E. Graves, and James T. Moore

A Diagnostic Analysis of Mesoscale Snow Bands, Which Occurred on 26 February 2003 (Poster): Michael J. Paddock, James T. Moore, and Charles E. Graves

The GFS Model in a Busted Snow Event: 15-16 January 2003 (Poster): Chad M. Gravelle, Fred H. Glass, James T. Moore, and Charles E. Graves

Cold-Season Coupled Upper-Level Jet Streaks in the Northeastern U.S. Part I: Weak Dynamic Cases (Poster): Scott M. Rochette, Chad M. Gravelle, and Thomas A. Niziol

Cold-Season Coupled Upper-Level Jet Streaks in the Northeastern U.S. Part II: Strong Dynamic Cases (Poster): Scott M. Rochette, Chad M. Gravelle, and Thomas A. Niziol

An Investigation of the Radar Characteristics and the Environment of a Mesoscale Snowband that Formed on 15 March 2004 (Poster): Emily B. Eisenacher, James T. Moore, and Charles E. Graves

Marty Baxter is preparing a presentation for the 23rd Conference on Severe Local Storms, which will meet in St. Louis, MO from 6-10 November 2006:

Baxter, M. A., and C. E. Graves, 2006: A case example of the role of warn-sector convection in the development of mesoscale banded snowfall: 2003 November 22-24. Preprints, 23rd Conf. on Severe Local Storms, St. Louis, MO, Amer. Meteor. Soc., 4.6.

### **Submitted Articles**

Using work performed under a COMET Partners grant, the following article is being revised for publication in the National Weather Digest:

Graves, C. E., R. A. Wolf, J. T. Moore, J. A. Zogg, and B. L. Mickelson, 2007: Analysis of the 3-4 June 2002 extreme rainfall event over Iowa and Illinois. *Natl. Wea. Dig.*, **31**, 83-102.

## **CIPS Team Notes**

Saint Louis University held a memorial service for Dr. James T. Moore on 22 September in DuBourg Hall, room 157 on the SLU campus. The service started at 2:00 pm with a social gathering followed by bagpipes at 2:30 pm to officially begin the remembrance. A welcome and introduction talk was conducted by the Department of Earth and Atmospheric Sciences Chairman, Dr. William Dannevik. Touching tributes followed:

- Saint Louis University Tribute (Dr. Donald Brennan, Dean of the Graduate School and Arts and Sciences)
- Earth and Atmospheric Sciences Tribute (Dr. Frank Lin, professor emeritus)
- National Weather Service Tribute (Joe Schaefer, Director of the Storm Prediction Center, standing in for Ron Przybylinski)
- National Weather Association Tribute (Kevin Lavin, Executive Director)
- Student Tributes (Dr. Pat Market, University of Missouri, and Dr. Scott Rochette, SUNY Brockport)
- "Death is Nothing at All" (Read by Benjamin Abell, EAS professor)
- Final Thoughts (Dr. Charles Graves, EAS professor).
- The tributes were followed by Jim's favorite concoction, chocolate cake and ice-cold Coke. The services wrapped up around 4:30 pm.

During the NWA tribute, Kevin Lavin presented the Lifetime Achievement Award to Dr. James Moore.

A booklet of tributes (in pdf form) and a series of photographs collected for the memorial service are available online.

The Department of Earth and Atmospheric Sciences has completed the move from Macelwane Hall to O'Neil Hall. O'Neil Hall is located at 3642 Lindell Blvd. So, if you are ever in town check out the new building.

The department is currently hiring for one position: Assistant Professor of Meteorology. This position will likely be filled before summer.

## **CIPS Team News**

Adam Pasch and Mike Paddock are teaming up to publish an article. The topic is related to their Master's research, meso-beta scale snow bands. A diagnostic analysis and model simulation will be presented on one case study.

Adam Pasch is working on an article for publication. The article involves a diagnostic analysis of a heavy rainfall event: 18-19 May 2004 Kansas City flash flood.

Mike Paddock is nearing the completion of an article, which will be submitted to an electronic journal. The article is a case study of a meso-beta scale snow band event, which occurred on 26 January 2003.

Emily Eisenacher is also working on an article for publication. This article is a reflection of her Master's thesis research.

CIPS team members are continuing to collaborate with Wes Junker, an HPC contractor, and Matt Kelsch of UCAR/COMET with the investigation of the Kansas turnpike flash flood case of August 30-31 2004. A paper will culminate from this collaboration in the near future.

Marty Baxter graduated with his Ph.D. in July. Marty's work involves the role of convection in winter storms and the predictability of such systems. His dissertation title is: The Role of Warm Sector Convection in the Development of Mesoscale Banded Snowfall. Marty is now a full-time Assistant Professor at Central Michigan University. Congratulations and Good Luck Marty!

Jaime Poole continues to work toward the completion of her Ph.D. She is preparing for her oral exam. Currently she is using the Weather Research and Forecasting (WRF) model to run simulations of elevated thunderstorm events. The focus of her research is to investigate numerous cases, each representing a different distance between the area of elevated convection and the associated surface boundary, in order to identify possible initiation and propagation characteristics of elevated storm systems.

Mike Paddock is beginning his Ph.D. studies with emphasis on heavy rainfall proximity soundings with preliminary results, utilizing test cases, expected by spring. He continues to work with Ron Przybylinski (SOO, St. Louis NWS) and Gary Schmocker (Forecaster, St. Louis NWS) on cases involving very narrow snow bands. Mike is also preparation for the written portion of the Ph.D. exam, which will be in either the late fall or early spring semester.

Adam Pasch is beginning his Ph.D. studies with emphasis on precipitation verification. Adam has been in contact with Beth Ebert (Bureau of Met. Research Centre, Melbourne Australia), Barbara Brown (NCAR), Steve Weiss (SPC/NSSL), and Mike Baldwin (Purdue University) to obtain various data sets and code for his precipitation verification studies. He is also preparing for his written exam.

Emily Eisenacher has just begun her first year in the Ph.D. program. She will be presenting her Master's thesis research at the NWA Annual Meeting. Emily is also the President of the Saint Louis University Chapter of the American Meteorological Society. Way to go Emily!

Chad Gravelle is investigating snow null events and is going to present one case at the NWA Annual Meeting. He is working closely with Fred Glass (Lead Forecaster, St. Louis NWS) on one of these null events. Chad is also helping Ron Przybylinski (SOO, St. Louis NWS) with the Greater St. Louis AMS meetings. He continues to work with Scott Rochette (Associate Professor at State University of New York, College at Brockport) and Thomas Niziol (MIC, Buffalo NWS) on the dynamics of coupled upper-level jet streaks (two posters will be presented at the NWA Annual Meeting).

Erin Snavelly is a new member to CIPS. She passed her Master's qualifying exam last spring and is just starting to investigate possible research topics. Stephen Rodriguez is another new member to CIPS. He also passed his Master's qualifying exam last spring. Stephen is currently employed by the National Weather Service in the Student Career Experience Program (SCEP). He is beginning to investigate possible research topics as well.