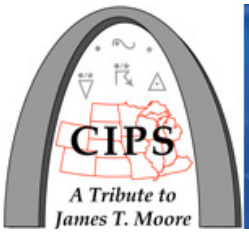

Cooperative Institute for Precipitation Systems

This Period in CIPS: July – September 2005

Conferences and Presentations

Dr. Moore and Dr. Graves traveled to Washington, D.C. in August for the 21st Conference on Weather Analysis and Forecasting. The following talks were presented:

Moore, J. T., and C. E. Graves, 2005: COMET's influence on meteorological education and research within universities: The Saint Louis University experience. Preprints, 21st Conf. on Weather Analysis and Forecasting, Washington, D.C., Amer. Meteor. Soc., 2A.4.

Moore, J. T., S. Ng, and C. E. Graves, 2005: The role of conveyor belts in organizing processes associated with heavy banded snowfall. Preprints, 21st Conf. on Weather Analysis and Forecasting, Washington, D.C., Amer. Meteor. Soc., 10A.1.

Martin Baxter volunteered at the Hydrometeorological Prediction Center over the month of July. At the end of his stay, the following talk was presented:

Operational Methods for Forecasting Snow to Liquid Ratio: Martin Baxter

Upcoming Conferences and Presentations

CIPS team members are preparing abstracts for the National Weather Association Annual Meeting, October 15th-20th 2005, St. Louis, MO:

Effective Partnerships to Infuse Research into Training for Operational Meteorologists: James T. Moore

Airstream Analysis Conducive to Production of Heavy Banded Snowfall: A Numerical Simulation of the 26-27 November 2001 Snowstorm: Sam Ng, James T. Moore, and Charles E. Graves

A Case Study of A Surprise Elevated Convection Event Over Eastern Missouri: 24-25 July 2004: Martin A. Baxter, Michelle L. Keast-Nachtrab, and James T. Moore

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

Meteorological and Warning Issues Associated with the Kansas Turnpike Flash Flood of 30 August 2003: Jeffrey D. Vitale and James T. Moore

Submitted Articles

The following article has recently been published in Weather and Forecasting:

Baxter, M. A., C. E. Graves, and J. T. Moore, 2005: A climatology of snow-to-liquid ratio for the contiguous United States. Wea. Forecasting, **20**, 729–744.

The following article has been accepted to the National Weather Digest:

Baxter, M. A., C. E. Graves, and J. T. Moore, 2006: The Use of Climatology to Construct a Physically-Based Method for Diagnosing Snow to Liquid Ratio. Natl. Wea. Dig., **30**, 29-44.

CIPS Team Notes

Dr. Moore and Dr. Graves are serving as co-chairs for the 2005 National Weather Association Annual Meeting at the Adam's Mark Hotel in Downtown St. Louis. The meeting will take place from October 15th through the 20th.

Dr. Moore, Dr. Graves, and Marty Baxter will be the Session Chairs at the National Weather Association Meeting in October for the following sessions: Professional Development, Remote Sensing Applications, and Cold Season Weather, respectively. CIPS has purchased a new laptop, which will make its debut at the 2005 National Weather Association Annual Meeting.

The CIPS team has begun loading numerous case studies for the Weather Event Simulation software and will begin to develop guided case studies for use by forecasters and students.

The department is currently hiring for one position: department chair. This position will likely be filled before summer.

The CIPS team is still preparing to host the 2005 National Weather Association Annual Meeting at the Adam's Mark Hotel in Downtown St. Louis. The meeting will take place in October 2005.

Drs. Moore and Graves are very busy sorting through abstracts and preparing the agenda for the National Weather Association Meeting.

Marty Baxter was offered and accepted a full-time instructor position for one year in the meteorology department at Saint Louis University. Congratulations Marty!

The collaboration between CIPS team members with Wes Junker, an HPC contractor, and Matt Kelsch of UCAR/COMET is continuing their investigation of the Kansas turnpike flash flood case of August 30-31 2004. CIPS Research Assistant Jeff Vitale is assisting with this project.

Dr. Moore has become the advisor for several other graduate students in the meteorology department. Those students are: Emily Eisenacher, Kelly Kubinski, and Doug Tilly. Their studies are discussed below.

CIPS Team News

Marty Baxter is now professing what he has learned as a full-time instructor in the meteorology department at Saint Louis University. This is a one year position. He is teaching introductory courses. Marty continues working on his Ph.D. His work involves the role of convection in winter storms and the predictability of such systems.

Jaime Poole is continuing work on modeling elevated thunderstorms to identify factors that determine how far north of the boundary storms will initiate, as well as their subsequent propagation. She has completed her prospectus and is preparing for her Ph.D. written exam at the beginning of October.

Sam Ng has graduated with his Ph.D. The title of his dissertation is "Development of a Dynamical Conceptual Model of Processes Producing Heavy Banded Snowfall Utilizing Numerical Simulation". Sam has accepted a full-time Assistant Professor position at Metropolitan State College of Denver. This is a one year appointment. He is teaching Synoptic meteorology and introductory courses. Congratulations Sam!

Mike Paddock continues to work with Ron Przybylinski (SOO, St. Louis NWS) on cases involving very narrow snow bands. He is beginning his Ph.D. studies.

Adam Pasch continues to work on model simulations of mini-snowbands. He is also beginning his Ph.D. studies.

Jeff Vitale is continuing work on the August 30-31, 2004 Kansas turnpike flash flood case. He is also investigating other low-echo centroid storms to better understand their mesoscale environment.

Chad Gravelle is the newest member to CIPS. Welcome Chad! He is begining to investigate snow null events. Chad will begin preparing for his Master's qualifying exam in the spring. Good Luck!

Emily Eisenacher is a teaching assistant. She has passed her Master's qualifying exam and is beginning to investigate radar characteristics and the environment in which snow bands grow and propagate. She anticipates graduating in May 2006.

Kelly Kubinski is a teaching assistant. She has passed her Master's qualifying exam and has begun to investigate applications of Corfidi vectors under a spectrum of Mesoscale Convective System types. Kelly anticipates graduating in May 2006.

Doug Tilly is employed by the National Weather Service in the Student Career Experience Program (SCEP). Doug has also passed his Master's qualifying exam and begun using the MM5 to determine how convection in the warm sector disrupts or enhances precipitation downstream. He is anticipating a May 2006 graduation.