Dr. Mohan K. Ramamurthy

Position: Director, Unidata

Unidata is a national facility, funded primarily by the National Science Foundation, with a mission to provide the data services, tools, and cyberinfrastructure leadership that advance Earth system science, enhance educational opportunities, and broaden participation. Unidata serves users in thousands of institutions worldwide, and it has 25 staff members and an annual budget of approximately \$4.6M.

Contact Information

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Education

B.S., Physics University of Poona, India M.S., Physics University of Poona, India

Ph.D., Meteorology University of Oklahoma, Norman, OK

Honors: Fellow, American Meteorological Society

Professional Experience

Director, Unidata, UCAR Office of Programs, UCAR, 2003-present

Associate Professor, Department of Atmospheric Sciences, University of Illinois, 1994 - 2003

Assistant Professor, Department of Atmospheric Sciences, University of Illinois, 1989 - 1994

Visiting Assistant Professor, Department of Atmospheric Sciences, University of Illinois, 1987 - 1989

Post-doctoral Research Assistant, Florida State University, Tallahassee, 1986 – 1987

Relevant Professional Activities

Member, UNIDATA Users Committee, 1989-1991

Chairperson, UNIDATA Users Committee, 1991-1998

Member, AMS Committee on Weather Analysis and Forecasting, 1992-1995

Member, AMS Committee on Intelligent Transportation Systems, 1994-1998

Member, PAGE Executive Board Member, 1997-2000

Member, Unidata Policy Committee, 1999-2002

Member, AMS Board of Higher Education, 2000-2004

Chairperson, DLESE Services Committee, 2000-2003

Associate Editor, Monthly Weather Review, 2001-2002

Member, UCAR University Relations Committee, 2001-2003

Chairperson, AMS Board of Higher Education, 2002-2003

Member, JESSE Editorial Board, 2001-2003

Member, NSF ATM Steering Committee for Cyberinfrastructure for Research and Education, 2002-2004

Vice-chair, ESIP Federation Products and Services Committee, 2004-2007

Member, THORPEX Data Policy and Management Working Group, 2005-2009

Member, NACP Data System Task Force, 2005-present

Member, NRC Committee on Archiving Environmental and Geospatial Data at NOAA, 2006-2008

Chair, AMS Ad-hoc Committee on Data Stewardship, 2008-present

Member, AGU ESSI Executive Committee, 2008-present

Most relevant publications

Ramamurthy, M. K., 2005: Unidata's Blueprint for 2008. Bulletin of the American Meteorological Society: Vol. 86, No. 2, 179–180

- Droegemeier, K. K. and 20 authors, 2005: Service-oriented environments for dynamically interacting with mesoscale weather. Computing in Science and Engineering, 7, No. 6, 12-29.
- Kelleher, K., plus 14 authors, 2005: Project CRAFT: Technical Aspects of a Real-time delivery system for NEXRAD Level II data via the Internet. *Bull. Amer. Meteor. Soc.*, **88**, 1045-1057, 2007.
- Ramamurthy, M. K., 2006: A new generation of cyberinfrastructure and data services for Earth system science education and research. Advances in Geosciences.
- Plale, B., D. Gannon, J. Brotzge, K. Droegemeier, J. Kurose, D. McLaughlin, R. Wilhelmson, S. Graves, M. Ramamurthy, R.D. Clark, S. Yalda, D.A. Reed, E. Joseph, V. Chandrasekar, 2006: CASA and LEAD: Adaptive Cyberinfrastructure for Real-Time Multiscale Weather Forecasting, *Computer special issue on System-Level Science*, *IEEE Computer*, 39, No. 11, pp. 56-63.

Five other publications

- Rauber, R. M., M. Yang, M. K. Ramamurthy, and B. F. Jewett, 2000: Origin, evolution, and fine scale structure of the St. Valentine's Day gravity wave observed during STORM-FEST. Part I: Origin and maintenance. *Mon. Wea. Rev.*, **129**, 198-217.
- Jewett, B. J., R. M. Ramamurthy, and R. M. Rauber, 2003: Origin, maintenance and fine scale structure of the St. Valentine's Day gravity wave observed during STORM-FEST. Part III: MM5 modeling study of gravity wave genesis and evolution. *Mon. Wea. Rev.*., **131**, 617-633.
- Yang, M., R. M. Rauber and M. K. Ramamurthy 2000: Origin, evolution, and fine scale structure of the St. Valentine's Day gravity wave observed during STORM-FEST. Part II: Fine scale structure. *Mon. Wea. Rev.* **129**, 218-236.
- Grim, J. A., R. M. Rauber, M. K. Ramamurthy, B. J. Jewett and M. Han, 2005: High-resolution observations of the trowal and warm frontal regions of two continental winter cyclones. Mon. Wea. Rev., 135, 1647-1670.
- Han, M., R. M. Rauber, M. K. Ramamurthy, B. J. Jewett, and J. Grim, 2005: Mesoscale dynamics of the trowal and warm frontal regions of two continental winter cyclones. *Mon. Wea. Rev.*, 135, 1629-1646.

Ph. D. advisor: Prof. Fred Carr, University of Oklahoma, Norman, OK

Post-doctoral supervisor: Prof. Peter S. Ray, Florida State University, Tallahassee, FL

Graduate students supervised or co-supervised:

<u>Name</u>	<u>Degree</u>	<u>Status</u>
Michael Shields	M Sc.	National Weather Service
Brian Collins	M. Sc.	Private Industry
Meng Li	M. Sc.	Private Industry
David Christensen	M. Sc.	Private Industry
Naresh Malhotra	M.Sc.	Private Industry
Liho Chen	M. Sc.	National Taiwan University
Qizhou Guo	M. Sc.	Private Industry
Taiyi Xu	Ph. D (ABD)	Climate Diagnostics Center, NOAA
Guangming Zhou	Ph.D	Private Industry
Geoffrey Manikin	M. Sc.	National Centers for Environmental Prediction/EMC
Tom Grzelak	M.Sc.	Rutgers University
Steve Hall	M.Sc.	Private Industry
Muqun Yang	Ph.D., Post Doc	NCSA, Univ. of Illinois
Jingjun Shu	M. Sc.	Private Industry
Daniel Bramer	M. Sc.	University of Illinoiis
Scott Olthoff	M.Sc.	Private Industry
Noah Nigg	M. Sc.	Private Industry
Mei Han	Ph. D.	University of Maryland, Baltimore County
Bo Cui	Ph. D.	National Centers for Environmental Prediction