

Wenbin Wang

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Education

1998 Ph.D. in Atmospheric and Space Sciences, University of Michigan, Ann Arbor.
1987 M.S. in Space Physics, Institute of Space Physics, Chinese Academy Sciences, Beijing.
1984 B.S. in Solid State Physics, NanKai University, TianJin.

Appointments

Project Scientist I, High Altitude Observatory, NCAR, 2000-Present
Research Fellow, University of Michigan, 1998-2000
Research Assistant, Center for Space Science and Applied Research, 1987-1992

Research Summary

Dr. Wang is a Project Scientist at the High Altitude Observatory, NCAR. He has developed a high-resolution thermosphere ionosphere nested grid (TING) model to study mesoscale processes in the upper atmosphere. His current research interest includes theoretical study and data analyses of the magnetosphere, ionosphere and thermosphere coupling, and real-time space weather predictions. Beginning in 2002, Dr. Wang has been involved with the National Science Foundation Center for Integrated Space Weather Modeling (CISM) project. He has been a major contributor to the development of the Coupled Magnetosphere, Ionosphere and Thermosphere (CMIT) model and the application of the CMIT model to studies of magnetosphere-ionosphere coupling.

Selected Publications

- Wang, W., T. L. Killeen, A. G. Burns, and R. G. Roble, A high-resolution, three-dimensional, time dependent, nested grid model of the coupled thermosphere-ionosphere, *Journal of Atmospheric and Solar-Terrestrial Physics*, 61, 385-397, 1999.
- Wang, W., T. L. Killeen, A. G. Burns, and B. W. Reinisch, A real-time model-observation comparison of F2 peak electron densities during the Upper Atmospheric Research Collaboratory campaign of October 1997, *Journal Geophysical Research*, 106, 21,077-21,082, 2001.
- Wang, W., M. Wiltberger, A. G. Burns, S. C. Solomon, T. L. Killeen, N. Maruyama, and J. G. Lyon, Initial results from the coupled magnetosphere ionosphere thermosphere model: thermosphere-ionosphere responses, *Journal of Atmospheric and Solar-Terrestrial Physics*, 66, 1425, 2004.
- Wang, W., A. G. Burns, S. Solomon, and T. J. Killeen, High resolution coupled thermosphere-ionosphere models for space weather applications, *Advances in Space Research*, in press, 2005.
- Burns, A. G., T. L. Killeen, W. Wang, and R. G. Roble, The solar-cycle-dependent response of the thermosphere to geomagnetic storms, *J. Atmos. Sol. Terr. Phys.*, 66, 1-14, 2004.