

## **Ki-Hong Min, Ph.D.**

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### **PROFESSIONAL EXPERIENCE**

- 8/2005-Present Dept. of Geography & Meteorology, Valparaiso University, Valparaiso, IN  
**Assistant Professor of Meteorology**
- 1/00-7/05 Dept. of Earth & Atmospheric Sciences, Purdue University, West Lafayette, IN  
**Research & Teaching Assistant**
- Summer 2001 NASA Goddard Space Flight Center, Greenbelt, MD  
**Research Intern**
- 7/99-12/99 Taemin Environment Co., Seoul, Korea  
**Researcher**
- 8/97-8/99 Dept. of Atmospheric Sciences, Seoul National University, Seoul, Korea  
**Research & Teaching Assistant**
- 3/94-6/97 Republic of Korea Air Force, Suwon, Korea  
**Staff Weather Officer**
- 9/92-6/93 Dept. of Astronomy & Meteorology, Kyungpook National University, Daegu, Korea  
**Undergraduate Research Assistant**

### **EDUCATION**

- August 2005 Purdue University, West Lafayette, IN  
**Ph.D.** - Atmospheric Science (Dept. of Earth and Atmospheric Sciences)  
Dissertation: *Coupled Cryosphere Model Development for Regional Climate Study and the Initialization of Purdue Regional Model with the Land Data Assimilation System*
- August 1999 Seoul National University, Seoul, Korea  
**M.S.** - Atmospheric Science (Dept. of Atmospheric Sciences)  
Thesis: *The Effects of the Ocean Roughness Length on the Regional Climate Simulation*
- February 1994 Kyungpook National University, Daegu, Korea  
**B.S.** - Astronomy and Meteorology, (Dept. of Astronomy and Meteorology), cum laude

## LIST OF PUBLICATIONS

### **Books**

- Min, K.-D., and **K.-H. Min**, 2008: Essentials of Meteorology, 5<sup>th</sup> Ed. by C. Ahrens, Translation in Korean, Sigma Press.
- W.-Y. Sun, W.-R. Hsu, J.-D. Chern, S.-H. Chen, C.-C. Wu, K. J. Yang, K. Yeh, M. G. Bosilovich, P. A. Haines, **K.-H. Min**, T.-J. Oh, B. T. MacCall, A. Yildirim, Y.-L. Chang, C.-Z. Chang, and Y.-C. Yu, 2007: Purdue Atmospheric Models and Applications. Book chapter, NTU Press.

### **Peer Reviewed Publications**

- **Min, K.-H.**, and W.-Y. Sun, 2008: The Effects of Cold Land Processes on Regional Climate and the Hydrological Cycle in the Northern Plains. (In preparation)
- **Min, K.-H.**, W.-Y. Sun, M. G. Bosilovich, and J.-D. Chern, 2008: Sensitivity Study of Purdue Regional Model with the Land Data Assimilation System. (In preparation)
- Sun, W.-Y., **K.-H. Min**, and J.-D. Chern, 2008: Numerical Study of 1998 Late Summer Flood in East Asia. *Atmos. Res.* (Partially accepted)
- **Min, K.-H.**, W.-Y. Sun, M. G. Bosilovich, and J.-D. Chern, 2003: Initialization of the Purdue Mesoscale Model with the Land Data Assimilation System, *Eos Trans., AGU*, **84**, No. 46, Fall Meet. Suppl., Abstract A31E-0088.
- Lee, D.-K., H.-S. Kang, and **K.-H. Min**, 2001: "The Role of Ocean Roughness Length in Regional Climate Modeling: 1994 East Asia Summer Monsoon Case". *J. Meteor. Soc. Japan*, **80**, No. 2, 171-189.

### **Other Publications**

- **Min, K.-H.**, and W.-Y. Sun, 2007: Atmosphere-Cryosphere Coupled Model Development and its Application for Regional Climate Studies, Proceedings - 22nd Conference on Weather Analysis and Forecasting/ 18th Conference on Numerical Weather Prediction, Park City, UT, June 25-29.
- **Min, K.-H.**, W.-Y. Sun, M. G. Bosilovich, and J.-D. Chern, 2002: Initialization of Model's Precipitation Forecast with Data Assimilation Techniques, Proceedings - 2002 Kor. Met. Soc. Annual Meeting, 516-519.
- Sun, W.-Y., **K.-H. Min**, and J.-D. Chern, 2001: East Asia flood in summer 1998-Observations vs. simulations, Proceedings- 4th Regional Climate Simulation Workshop, Central Weather Bureau, Taipei, Taiwan, March 12-14.
- Lee, D.-K., co-authors, and **K.-H. Min**, 2000: Research and Development on Basic Technology for Atmospheric Environment in Global Scale - Technology for Climate Change Prediction, Korea Ministry of Science and Technology G7 Project, Annual Report, 245pp.
- Lee, D.-K., co-authors, and **K.-H. Min**, 1999: Development of the Integrated Prediction System with Numerical Weather Prediction II, Republic of Korea Air Force (ROKAF), Annual Report, 121pp.

- Lee, D.-K., **K.-H. Min**, and co-authors, 1998: Development of the Integrated Prediction System with Numerical Weather Prediction I, ROKAF, Annual Report, 154pp.
- **Min, K.-H.**, 1997: Improving Prediction Skills of Airport Forecast using Statistical Methods, ROKAF, Tech. Note Vol. II.

### **AWARDS RECEIVED**

- November, 2006      Equipment Grant from Committee to Enhance Learning and Teaching, VU
- January, 2005        A. H. Ismail Interdisciplinary Doctoral Travel Scholarship
- November, 2004     American Meteorological Society, Global Change Scholarship
- October, 2004        Purdue Graduate Student Government, Travel Grant
- 2000-2001            Purdue Research Foundation, Scholarship
- 1996, 1997           Combined Forces Command / USFK, Certificate of Appreciation
- 1990-1993            Kyungpook National University, Undergraduate Scholarship

### **PROFESSIONAL MEMBERSHIPS**

- American Meteorological Society
- American Geophysical Union
- Korean Meteorological Society

### **MODELING AND COMPUTER SKILLS**

- WRF-ARW, MM5, RegCM2, Purdue Regional Climate Model (PRCM), UNIX/LINUX, FORTRAN, C-Shell Script, MPI, HTML, GrADS, NCAR Graphics, NCL, MathCad, SAS, Super Computing, Networking, PC, MAC, Microsoft Office, and numerous other programs

### **RESEARCH INTERESTS**

- Numerical Weather Prediction and Regional Climate Modeling
- Atmospheric Dynamics and Synoptic Meteorology
- Coupled Atmosphere-Land-Ocean Studies
- Global to Regional Scale Hydrology and Energy Cycle

### **REFERENCES**

Available upon request