YOO-JEONG NOH

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RESEARCH INTERESTS

- Radiative transfer modeling
- Satellite remote sensing and ground validation
- Applications of satellite measurements to weather forecasting and climate research
- Developing retrieval algorithms of precipitation using surface/microwave satellite observations
- Studies on mixed-phase clouds using satellite and aircraft observations

EDUCATION

Ph.D., Meteorology, Florida State University, Tallahassee, FL, USA, April 2006

M.S., Environmental Heat/Fluid Mechanics Program, School of Environmental Engineering, Pohang University of Science and Technology, Korea, Feb. 1999

B.S., Atmospheric Sciences, Yonsei University, Korea, Feb. 1997

EXPERIENCES

Research Scientist (Feb. 2008~), **Postdoctoral Research Fellow** (May 2006 – Jan. 2008), Cooperative Institute for Research in the Atmosphere, Colorado State University,

- Satellite microwave snowfall retrieval based on Bayesian theorem
- Study on mixed phase clouds using satellite and aircraft observations (C3VP/CLEX10)
- CloudSat (a NASA Earth System Science Pathfinder satellite mission) validation
- Radar data assimilation to improve numerical weather prediction systems
- Microwave land surface emissivity

Research Assistant, Dept. of Meteorology, Florida State University, Sept. 2001 – April 2006

- Satellite remote sensing: analysis of surface precipitation (radar/rain gauge), airborne (MIR, APR2, ACR, etc.), and satellite data (GMS satellite data, TRMM data, AMSU-B, AMSR-E, etc.)
- Development of a microwave retrieval algorithm of snowfall

Research Associate, Global Environment Lab., Yonsei University, Oct. 1999 – Aug. 2001

- Numerical modeling using MM5 and WRF model (cloud microphysics) working on the project,

"Development of Next Generation Numerical Weather Prediction Model"

Researcher Associate, Remote Sensing Research Lab., Meteorological Research Institute/Korea Meteorological Administration, April 1999 – Oct. 1999

- Analysis of heavy rain cases using TRMM (NASA Tropical Rainfall Measuring Mission) satellite data and surface observations

JOURNAL PUBLICATIONS

Aonashi, K., T. Muramoto, K. Imaoka, N. Takahashi, G. Liu, and **Noh, Y. J**., 2007: Physical validation of Microwave Properties of Winter Precipitation over Sea of Japan. IEEE Transaction on Geoscience and Remote Sensing (TGARS) - Special issue on Microwave Radiometry and Remote Sensing of Environment. 45, 2247-2258.

Noh, Y. J., G. Liu, E. K. Seo, J. R. Wang, and K. Aonashi, 2006: Development of A Snowfall Retrieval Algorithm at High Microwave Frequencies. *J. Geophys. Res.* 111, D22216, doi:10.1029/2005JD006826.

Noh, Y. J. and G. Liu, 2004: Satellite and Aircraft Observations of Snowfall Signature at Microwave Frequencies. *Rivista Italiana di Telerilevamento (Italian Journal of Remote Sensing),* 30, 101-118.

Noh, Y. J., G. Liu, N. Balas, K. Aonashi, and T. Koike, 2004: Diurnal variations of snow precipitation in Wakasa Bay during winter. *J. Meteor. Soc. Japan*, 82, 1117-1128.

Varma, A. K., G. Liu, and **Y. J. Noh**, 2004: Sub-pixel scale variability of rainfall and its application to mitigate the beam-filling problem. *J. Geophys. Res.* 109, D18210, 10.1029/2004JD004968.

Kim, H. G., **Y. J. Noh**, C. M. Lee, and D.B. Choi, 2003: Numerical simulation of buoyant plume dispersion in a stratified atmosphere using a Lagrangian stochastic model, KSME International Journal, 17 (3), 440-448.

Park, H. S., **Y. J. Noh**, and H. S. Chung, 2000: Examinations of rainfall characteristics using with TRMM/PR Data, *Korean Journal of Remote Sensing*, 16, 55-64.

Kim, H. G., **Y. J. Noh**, and C. M. Lee, 1998: Validation of numerical model for the wind flow over real Terrain, *J. of Korea Air Pollution Res. Assoc.*, 14, 219-228.

BOOK PUBLICATIONS

Noh, Y. J., 2007: Observational Analysis and Retrieval of Falling Snow using Satellite Data at High Microwave Frequencies. ISBN:978-3-8364-2425-7, VDM Verlag Dr. Müller, Saarbrücken, Germany, 104 pp.

CONFERENCE/WORKSHOP/MEETONG PRESENATIONS

Noh, **Y. J.**, J. A. Kankiewicz, S. Q. Kidder, T. H. Vonder Haar, 2008: A study of wintertime mixed-phase clouds over land using satellite and aircraft observations, *Symposium on Recent Developments in Atmospheric Applications of Radar and Lidar/88th AMS Annual Meeting,* Friday, 18 January 2008 - Saturday, 26 January 2008, New Orleans, LA, USA.

Noh, Y. J., S. Q. Kidder, T. H. Vonder Haar, and J. A. Kankiewicz, 2007: Analysis of wintertime mixed-phase clouds using satellite and aircraft measurements, The 4th Workshop of the Canadian CloudSat/CALIPSO validation project, 27-28 November 2007, St. Hubert, Quebec, Canada.

Noh, **Y. J.**, A. S. Jones, and T. H. Vonder Haar, 2007: Snowfall retrievals over land using high frequency microwave satellite data, *2007 EUMETSAT Meteorological Satellite Conference and the 15th AMS Satellite Meteorology and Oceanography Conference*, 24-28 September 2007, Amsterdam, The Netherlands.

Noh, **Y. J.**, 2007: Multisensor observations of snow clouds during CLEX-10, *CloudSat/CALIPSO satellite Joint Science Team Meeting,* 11-14 June 2007, San Francisco, CA, USA.

Noh, Y. J., 2007: Snowfall retrievals over land using high frequency microwave satellite data, CIRA/Colorado State University, 6 February 2007, Fort Collins, CO, USA.

Liu, G, and **Y. J. Noh**, 2006: Measuring snowfall using satellite high frequency microwave observations, *EGU General Assembly 2006*, 2-7 April 2006, Vienna, Austria.

Noh, Y. J., G. Liu, and E.-K. Seo, 2006: Development of a snowfall retrieval algorithm using data at high microwave grequencies, *14th Conf. on Satellite Meteorology and Oceanography/86th AMS Annual Meeting*, 29 January-2 February 2006, Atlanta, GA, USA.

Liu, G., and **Y. J. Noh**, 2004: Satellite measurements of high latitude precipitation, *International Radiation Symposium*, 23-28 August 2004, Busan, Korea.

Noh, Y. J., and Liu, Guosheng, 2003: An investigation of the horizontal variability of precipitations using radar data, *12th Conf. on Satellite Meteorology and Oceanography/83rd AMS Annual Meeting*, 9-13 February 2003, Long Beach, CA, USA.

and more.

MEMBERSHIP OF SOCIETIES

- American Meteorological Society
- American Geosciences Union
- Korean Atmospheric Scientists in America

OTHERS

Reviewers for

- Journal of Applied Meteorology and Climatology
- International Journal of the Korean Meteorological Society