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Research Interests

Aerosol and Climate Modeling
Remote Sensing and Satellite Retrievals
Aerosol and Environmental Impacts
Radiative Forcing of Aerosols and Clouds
Air Quality

Education

Ph.D, in progress, **Atmospheric Sciences**, University of Colorado at Boulder, Aug. 2005 to present.
M.S., **Atmospheric Physics and Environment**, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China, July 2000.
B.S., **Meteorology**, Nanjing Institute of Meteorology (NIM), Nanjing, China, June 1997.

Professional Experience

Graduate Research Assistant, Laboratory for Atmospheric and Space Physics (LASP), University of Colorado at Boulder, U.S.A, January 2006 to Present.
Tutor for student-athletes, *Weather and the Atmosphere*, and *Weather and the Atmosphere Laboratory*, University of Colorado at Boulder, January 2008 to May 2008.
Teaching Assistant, Department of Atmospheric and Oceanic Sciences (ATOC), University of Colorado at Boulder, U.S.A, August 2005 to May 2006.
Intensive International Graduate Teacher Workshops, University of Colorado at Boulder, U.S.A, August 2005.
Graduate Research Assistant, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China. September 1998 to January 2002.
Synoptic Practices in the Meteorological Observatory of NIM, Nanjing, China. Summer 1994.

Computer Skills

Linux/Unix and Windows Operating Systems
Computer Languages: Fortran77, Fortran90, C, NCL, IDL, MATLAB, EXCEL, HTML
-Experience in designing and implementing functions in FORTRAN77/FORTRAN90 and C with Linux/Unix system.
-Working knowledge of graphical and statistical package such as NCL, IDL, and MATLAB.
-Knowledge of web design development.

Selected Publications and Conferences

Lin Su and Owen B. Toon (December 2010), Similarities and differences between Asian and Saharan dust from models, satellite- and ground-based data, *to be presented at the American Geophysical Union fall meeting*, San Francisco, California, USA.

Lin Su and Owen B. Toon (October 2010), Saharan and Asian dust: similarities and differences determined by CALIPSO, AERONET, and a coupled climate-aerosol microphysical model, *to be presented at the International A-Train Science Symposium*, New Orleans, Louisiana, USA.

Su, L., and O. B. Toon (2010), A Satellite View of the Optical Properties of Asian Dust and its Comparison to the Climate/Microphysical Sectional Model, *to be submitted to Atmospheric Chemistry and Physics (ACP) Journal*.

Su, L., and O. B. Toon (2010), Modeling the Effect of Asian Dust Aerosols on Precipitation and Radiation Budget over Asia and the Pacific using the Climate/Microphysical Sectional Model, *in preparation for the Journal of Geophysical Research-Atmospheres*

Lin Su and Owen B. Toon (December 2009), New Discoveries and Insights from Comparisons between Saharan and Asian Dust Using Satellites and a Coupled Climate/Microphysical Model, *poster presented at the American Geophysical Union fall meeting*, San Francisco, California, USA.

Lin Su and Owen B. Toon (December, 2009), Trends in the Vertical Distribution of Saharan and Asian Dust Using Satellites and a Coupled Climate/Microphysical Model, *Atmospheric and Oceanic Sciences student poster conference*, University of Colorado at Boulder, Colorado, USA.

Lin Su and Owen B. Toon (June 2009), Comparison of Asian Dust Optical Properties between Satellite Observations and the CAM/CARMA Simulations, *be presenting at 14th Annual Workshop of Community Climate System Model (CCSM)*, Breckenridge, Colorado, USA.

Su, L., and O. B. Toon (2009), Numerical Simulations of Asian Dust Storms Using a Coupled Climate-Aerosol Microphysical Model, *J. Geophys. Res.*, 114, D14202, doi:10.1029/2008JD010956.

Lin Su and Owen B. Toon (December 2008), Comparison of the Optical Properties of Asian Dust between Satellites and the CAM/CARMA Sectional Model, *poster presented at the American Geophysical Union fall meeting*, San Francisco, California, USA.

Lin Su and Owen B. Toon (October 2008), Asian Dust Outflow Retrieved by Satellites and a Coupled Sectional Model, *Atmospheric and Oceanic Sciences student poster conference*, University of Colorado at Boulder, Colorado, USA.

Lin Su and Owen B. Toon (June 2008), Numerical Simulations of Asian Dust Storms Using a Coupled Climate/Microphysical Model, *poster presented at 13th Annual Workshop of Community Climate System Model (CCSM)*, Breckenridge, Colorado, USA.

Lin Su and Owen B. Toon (February 2008), Modeling the Emission, Transport and Optical Properties of Asian Dust Storms Using Coupled CAM/CARMA Dust Model, *talk presented at the National Center for Atmospheric Research (NCAR) CCSM Atmospheric Model Working Group Meeting*, Boulder, Colorado, USA.

Lin Su and Owen B. Toon (December 2007), impact of Asian Dust Storms on Downwind Regions as Simulated by the CAM/CARMA Dust Model, *poster presented at the American*

Geophysical Union fall meeting, San Francisco, California, USA.

Lin Su and Owen B. Toon (October 2007), Asian Dust Storm Simulations by the CAM/CARMA Dust Model, *Atmospheric and Oceanic Sciences student poster conference*, University of Colorado at Boulder, Colorado, USA.

Tao Zhang, Guoxiong Wu, Yufu Guo, and **Lin Su** (2006), A Comparison between Two Versions of the GOALS Model in an Atmospheric Energy Cycle Diagnosis, *Chinese J. Atmos. Sci., Vol. 30, No.2, 195-216.*

Lin Su and Fei Hu (2000), The Flux-Variance Relations of Temperature and Humidity Determined by Eddy Correlation, *Collection of Papers Presented at the Sixth Chinese Youth's Conference on Atmospheric Sciences*, Zhang Jiajie, China.

Shaohou Qu, Fei Hu, Yaqiu Li, and **Lin Su** (2000), Some Characteristics of Air-Sea Exchange for the SCS Summer Monsoon during the SCSMEX in 1998, *Climatic and Environmental Research*, 5, 434-445.

Field Experience

Field campaign: the Turbulent Characteristic in the Surface Layer over Dune at Naiman in Inner Mongolia, China, summer 2000.

Honors and Awards

NASA Earth and Space Science Fellowship (NESSF) Awards, 2009-2012

Invitation to attend CCSM-AMWG Climate Modeling Tutorial, July 2009

Travel Awards, NCAR 14th Annual CCSM Workshop, Breckenridge, CO, June 2009.

Advanced Study Program, NCAR, Boulder, CO, Summer 2008.

Travel Awards, NCAR 13th Annual CCSM Workshop, Breckenridge, CO, June 2008.

Nominated by Dean (since Feb. 2008) sponsored AAAS/Science membership for Excellence in Science.

Travel Awards, NCAR 12th Annual CCSM Workshop, Breckenridge, CO, June 2007.

Outstanding Student Institute Scholarship, Nanjing Institute of Meteorology (NIM), Nanjing, China, 1993-1997.

Academic Excellence Awards, Nanjing Institute of Meteorology (NIM), Nanjing, China, 1993-1997.

Professional Affiliations

American Association for the Advancement of Science (AAAS), January 2008 to present

American Meteorological Society (AMS), February 2008 to Present

American Geophysical Union (AGU), 2006 to Present

Chinese-American Oceanic and Atmospheric Association (COAA), 2002 to 2003

Professional/Volunteer Service

Reviews

Peer review of manuscripts for scientific journals:

**Science of the Total Environment (STOTEN)
Theoretical and Applied Climatology (TAAC)**

Volunteer Service

Environment Colorado Membership, 2008 to present

ATOC Poster Conference Volunteer, University of Colorado at Boulder, CO, 2008

ATOC Poster Conference Volunteer, University of Colorado at Boulder, CO, 2007

Graduate Representative, Space Committee, Department of Atmospheric and Oceanic Sciences, University of Colorado at Boulder, CO, 2006.

7th International Carbon Dioxide Conference Volunteer, Broomfield & Boulder, CO, 2005.