Curriculum Vitae

Shuwen Zhang
Associate Professor

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Lanzhou University
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Personal

Male, born in Henan, China, on Aug. 27, 1966

Research Interests

Land Surface Process and Modeling; Land Data Assimilation; Remote Sensing; CFD

Education

1988 BS: Mechanics, Department of Mechanics, Lanzhou University

1991 MS: Computational Fluid Mechanics, Lanzhou University and Peking University. The tile of my thesis is *Simulation of the Mixed Convection in the porous Layers with the Cubic Spline Method*

2004 PhD: Meteorology, College of Atmospheric Sciences, Lanzhou University. The tile of my thesis is *Study on Estimation of Soil Moisture and Surface Heat Fluxes*

Professional Positions

1991 - 1993: Assistant, Department of Atmospheric Sciences, Lanzhou University, Lanzhou

1994 - 1999: Lecturer, Department of Atmospheric Sciences, Lanzhou University, Lanzhou

2000 - present: Associate Professor, College of Atmospheric Sciences, Lanzhou University, Lanzhou

1998 - 1999: Visiting Scientist at Meteorogisches Institut der Universität Müchen, Munich, Germany

2006-2007: Visiting Scientist at Department of the Atmospheric Sciences of the University of Arizona, U.S.A.

Teaching Experience

Fluid Mechanics, Numerical Analysis, Data Analysis and Assimilation for Environmental Applications, Climate, FORTRAN

Honors and Awards

1. 2005: The Lanzhou Universit Award for the PhD Dissertations of Excellence

2. 2000: The Lanzhou University Award for the Outstanding Young Teachers in Teaching

3. 1996: The Lanzhou University Award for the Outstanding Young Teachers in Teaching

Research Projects

1. Principal Investigator: On the estimation of soil moisture profile from assimilation of microwave remotely sensed data with the ensemble Kalman filter (*Natural Science Foundation of China*)

2. Co-Investigator: Studies on interaction of climate and frozen soil in Qinghai-Tibetan Plateau and their numerical prediction (*Projects of Knowledge Innovation Program at CAS*)

3. Co-Investigator: Study of the influence of blown-sand weather and climate on land desertification and dynamic model (*Natural Science Foundation of China*)

4. Co-Investigator: Development of a land data assimilation system for west China (*Natural Science Foundation of China*)

Publications within Recent Years

1. **Zhang, S. W.**, C. J. Qiu, and W. D. Zhang, 2007: Estimates of surface heat fluxes and near-surface soil moisture using a variational method. *Acta Meteorologica Sinica.* **65**, 440-449. (in Chinese)

2. **Zhang, S. W.**, H. R. Li, W. D. Zhang, C. J. Qiu, and X. Li, 2005: Estimating soil moisture profile by assimilation of near-surface observations with the ensemble Kalman filter (EnKF). *Adv. Atmos. Sci.*, **22**, 936-945.

3. **Zhang, S. W.**, W. D. Zhang, and C. J. Qiu, 2005: Retrieving the soil moisture profile by assimilating near-surface observations: A comparison of two retrieval algorithms. *4th WMO International Symposium on Assimilation of Observations in Meteorology and Oceanography*, Prague, Czech Republic.

4. **Zhang, S. W.**, C. J. Qiu, and Q. Xu, 2004: Estimating soil water contents from soil temperature measurements by using adaptive Kalman Filter. *J. Appl. Meteor.* **43**, 379-389.

5. **Zhang, S. W.**, C. J. Qiu, and W. D. Zhang, 2004: Estimating heat fluxes by merging profile formulae and energy budget with a variational technique. *Adv. Atmos. Sci.*, **21**, 627-636.

6. **Zhang, S. W.**, C. J. Qiu, and W. D. Zhang, 2004: Estimating the bulk transfer coefficients in Huaihe River Basin by using a variational method. *Plateau Meteor.* **23**, 506-511. (in Chinese)

7. **Zhang, S. W.**, and S. G. Wang, 2001: Potential vorticity and its inversion. *Plateau Meteor.* **20**, 468-473. (in Chinese)

8. **Zhang, S. W.**, and A. Pfeiffe, 2000: A numerical study of influence on the climate over Europe due to a doubled CO_2 forcing. *J. Lanzhou Uni.* **36**, 112-117. (in Chinese)

9. Qiu, C. J., and **S. W. Zhang**, 2002: A study of possibility of extracting the mesoscale information from large-scale observations. *Acta Meteorologica Sinica*, **60**, 538-543. (in Chinese)

10. **Zhang, S. W.**, 1999: Some results of the nested regional simulation of climate change over the south of Germany for a doubled CO_2. **BayFORKLIM**'s Report. 6 pp

11. **Zhang, S. W.**, 1998: A study of the mixed convection in the porous layers with the cubic spline method. *Modern Math. Mech.*, **4**, 492-498. (in Chinese)