

Chuixiang Yi

School of Earth and Environmental Sciences
Queens College, City University of New York
65-30 Kissena Blvd
Flushing, New York 11367

Tel: (718) 997-3366
Email: cyi@qc.cuny.edu
<http://qcpages.qc.cuny.edu/~cyi/>
<http://qcpages.qc.cuny.edu/~cyi/Yi-lab-1.htm>

Education

Ph.D. Atmospheric Science, Nanjing University, China, 1991
M.S. Theoretical physics, Northeast Normal University, China, 1984
B.S. Physics, Liaoning Normal University, China, 1982

Professional Experience

Queens College, CUNY, School of Earth and Environmental Sciences, 2007-present

Assistant Professor of Meteorology. **Research** focuses on: (1) Measuring and modeling difficult conditions for eddy flux measurements; (2) Upscaling U.S. CO₂ flux from tower to satellite scales; (3) Improving land surface parameterization of mesoscale models. **Teaching:** GEOL-011 Survey of Atmospheric Science; GEOL-383 Topics: Meteorology; GEOL 520: Meteorology; GEOL 799.3 Extreme Weather and Megacities; ENSCI 112: Our Changing Planet; ENSCI 111: Introduction to Environmental Sciences.

University of Colorado, Department of Ecology and Evolutionary Biology, 2003-2007

Research Associate (DOE supported) ---Studied the advection issues (called difficult conditions) in flux measurements over complex terrain in the Rocky Mountains of Colorado by combining 3-D flux measurements (4 towers), SF₆ diffusion experiments, and leaf area density observations with dynamic and numerical models. I developed the canopy momentum transfer theory (Yi, 2008) and derived analytical solutions of canopy flow and Reynolds stress that are defined by topography and canopy structure (Yi et al, 2005). We developed a super stable layer theory that can be used to explain conditions of canopy flow separation at night. These analytical models and theory have been tested not only by observations, but also by numerical simulations of thermally-driven fluid flows. The robust agreement between the theoretical predictions and observations indicate that the nature of momentum transfer within canopies can be well understood by my momentum transfer theory (Yi, 2008; and Yi et al., 2005)

The Pennsylvania State University, Department of Meteorology, 2000-2003

Research Associate (DOE and NOAA supported) ---Examined the CO₂ rectifier effect by combining simple dynamic equations with observations from flux towers, boundary layer profiling radars, aircraft, and balloons (Yi et al., 2004a); Conducted synthetic analysis of Ameriflux data with statistical models to study what climate and biological factors are important for controlling terrestrial carbon exchange and atmospheric CO₂ variability (Yi et al., 2006a); Developed a partitioning daytime NEE model by a nonparametric statistical method (Yi et al., 2004b).

University of Minnesota, Department of Soil, Water, and Climate, 1998-2000

Postdoctoral Research Associate (DOE and NOAA supported) ---Developed a prediction model for the planetary boundary layer depth by combining boundary layer budget equations with observations from flux towers, boundary layer profiling radars, aircraft, balloons (Yi et al.,

2001b); Examined morning advection fluxes using vertical flux divergences from the 447 m-tall tower measurements (Yi et al., 2000).

University of California at Berkeley, Department of ESPM, 1996-1998

Postdoctoral Research Associate---Developed a carbon-climate feedback model (Yi et al., 2001a)

Beijing Normal University, China, Department of Geography, 1992-present

Associate Professor, (Research supported by China NSF & National Basic and Applied Research Grant) --- Examined the impacts of climate change on China land surface processes by data analysis and modeling (e. g. Yi et al., 1996b; 1996c); Advised four students for their master degrees (T. Zhou, S. Wang, D. Guo, Q. Mu); Taught courses *Climate Change and Climate Models* (graduate) and *Nonlinear Sciences and Their Applications to Geosciences* (senior undergraduate and graduate).

Beijing Normal University, Department of Geography, China, 1991-1992

Assistant Professor (Research supported by China NSF & National Basic and Applied Research Grant) ---Developed natural disaster models (Yi, 1995c; Yi and Shi, 1995d); Studied nonlinear dynamics of climate system (Yi and Wu, 1994a, 1992); Taught courses *Climate Change and Climate Models* (graduate).

Liaoning Normal University, China, Department of Physics, 1985-1988

Lecturer--- Taught general physics for undergraduate and nonequilibrium statistical physics for graduate students.

Publications

BOOKS:

Yi, C., *Nonlinear Sciences and Their Applications to the Geosciences*, Meteorological Press, Beijing, 1995. (In Chinese)

Yi, C, *Climate Change and Climate Models*, Ocean Publishing House, Beijing, 1993. (In Chinese)

REFEREED PAPERS:

Papers published in refereed journals:

Senior Author

Yi, C., Instability analysis of terrain-induced canopy flows, *Journal of the Atmospheric Sciences*, 2009 (In press)

Yi, C., Momentum transfer within canopies, *Journal of Applied Meteorology and Climatology*, 47, 262-275, doi:10.1175/2007JAMC1667.1, 2008

- Yi, C.**, D. E. Anderson, A. A. Turnipseed, S. P. Burns, and J. Sparks, D. Stannard, and K. R. Monson, The contribution of advective fluxes to net ecosystem CO₂ exchange in a high-elevation, subalpine forest ecosystem, *Ecological Applications*, 18 (6), 1379-1390. 2008.
- Yi, C.**, R. K. Monson, Z. Zhai, D. E. Anderson, B. Lamb, G. Allwine, A. A. Turnipseed, and S. P. Burns, Modeling and measuring the nocturnal drainage flow in a high-elevation, subalpine forest with complex terrain, *Journal of Geographical Research*, 110, D22303, doi:10.1029/2005JD006282, 2005
- Yi, C.**, R. Li, P. S. Bakwin, A. Desai, D. M. Ricciuto, S. P. Burns, A. A. Turnipseed, S. C. Wofsy, J. W. Munger, K. Wilson, and R. K. Monson, A nonparametric method for separating photosynthesis and respiration components in CO₂ flux measurements, *Geophysical Research Letters*, 31, L17107, doi:10.1029/2004GL020490, 2004b.
- Yi, C.**, K. J. Davis, P. S. Bakwin, A.S. Denning, N. Zhang, A. Desai, J. C. Lin, and C. Gerbig, The observed covariance between ecosystem carbon exchange and atmospheric boundary layer dynamics at a site in northern Wisconsin, *Journal of Geophysical Research*, 109, D08302, doi:10.1029/2003JD004164, 2004a.
- Yi, C.**, K. J. Davis, B. W. Berger, P. S. Bakwin, Long-term observations of the dynamics of the continental planetary boundary layer, *Journal of the Atmospheric Science*, 58, 1288-1299, 2001b.
- Yi, C.**, P. Gong, M. Xu , and Y. Qi , The effects of buffer and temperature feedback on the oceanic uptake of CO₂, *Geophysical Research Letter*, 28, 751-754, 2001a.
- Yi, C.**, K. J. Davis, P. S. Bakwin, B. W. Berger, and L. Marr, The influence of advection on measurements of the net ecosystem-atmosphere exchange of CO₂ from a very tall tower, *Journal of Geophysical Research*, 105, 9991-9999, 2000.

Co-author

- Zhou, T. , **C. Yi**, P. S. Bakwin, and L. Zhu, Links between global CO₂ variability and climate anomalies of biomes, *Sciences in China, Ser D-Earth Sci.*, 51, 740-747, 2008.
- Wang W., K J. Davis, B. D. Cook, **C. Yi**, M. P. Butler, D. M. Ricciuto, and P. S. Bakwin, Estimating daytime CO₂ fluxes over a mixed forest from tall tower mixing ratio measurements, *Journal of Geophysical Research*, 112, D10308, doi:10.1029/2006JD007770, 2007.
- Wang W., K J. Davis, **C. Yi**, E. G. Patton, M. P. Butler, D. M. Ricciuto, and P. S. Bakwin, A note on the top-down and bottom-up gradient functions over a forested site, *Boundary-Layer Meteorology*, 305-314 2007.
- Denning, A.S., N. Zhang, **C. Yi**, M. Branson, K. Davis, J. Kleist, and P. Bakwin, Evaluation of modeled atmospheric boundary layer depth at the WLEF Tower, *Agricultural and Forest Meteorology*, 148, 206-215. 2008.

- Wang, W., K.J. Davis, B.D. Cook, P. Bakwin, **C. Yi**, D. Ricciuto, and M. Butler, Surface layer CO₂ budget and advective contributions to measurements of net ecosystem-atmosphere exchange of CO₂, *Agriculture and Forest Meteorology*, 2005, 135, 202-214.
- Bakwin, P.S., K.J. Davis, **C. Yi**, S.C. Wofsy, J.W. Munger, L. Haszpra and Z. Barcza, Regional carbon dioxide fluxes from mixing ratio data, *Tellus* 56B, 301-311, 2004.
- Cook, B.D., K.J. Davis, W. Wang, **C. Yi**, B.W. Berger, P.V. Bolstad, P. Bakwin, J.G. Isebrands, and R.M. Teclaw, Annual pattern of carbon exchange and evapotranspiration of an upland hardwood forest in northern Wisconsin, *Agriculture and Forest Meteorology*, 126, 271-295, 2004.
- Hurwitz, M.D., D.M. Ricciuto, P.S. Bakwin, K.J. Davis, W. Wang, **C. Yi**, and M.P. Butler, Transport of Carbon Dioxide in the Presence of Storm Systems over a Northern Wisconsin Forest, *Journal of the Atmospheric Sciences*, 61, 607-618, 2004.
- Werner, C., K.J. Davis, P. Bakwin, **C. Yi**, D. Hurst, and L. Lock, Interannual variability of methane exchange over a temperate-boreal lowland and wetland forest, *Global Change Biology*, 9, 1251-1261, 2003.
- Davis, K.J., P.S. Bakwin, **C. Yi**, B.W. Berger, C. Zhao, R.M. Teclaw and J.G. Isebrands, Long-term carbon dioxide fluxes from a very tall tower in a northern forest: Annual cycle of CO₂ exchange, *Global Change Biology*, 9, 1278-1293, 2003.
- Berger, B. W., K. J. Davis, **C. Yi**, P. S. Bakwin, and C. Zhao, Long-term carbon dioxide fluxes from a very tall tower in a northern forest: Part I. Flux measurement methodology, *Journal of Atmospheric and Oceanic Technology*, 18, 529-542, 2001.
- Zhou T., **C. Yi**, P. Shi, Relationship between NDVI and climatic factors under different drought conditions, *Acta Geographica Sinica*, 58, 512-518, 2003. (In Chinese)
- Zhou T., **C. Yi**, P. Shi, and J. Luo, Research on the feedback mechanism between terrestrial carbon cycle and temperature, *Geographical Research*, 21, 53-59, 2002. (In Chinese)
- Yi, C.**, K. Liu, and T. Zhou, Research on a formula of rainfall interception by vegetation, *Journal of Soil Erosion and Soil and Water Conservation*, 2, 77-79, 1996a. (In Chinese)
- Yi, C.**, K. Liu, and T. Zhou, A model for calculating soil moisture fields in the monsoon region of the eastern part of China, *Journal of Soil Erosion and Soil and Water Conservation*, 2, 80-85, 1996b. (In Chinese)
- Yi, C.**, K. Lui, and T. Li, Research on relations of soil zonal distributions with climate in the monsoon region of the eastern part of China, *Acta Pedologica Sinica*, 32, 385-390, 1996c. (In Chinese)
- Yi, C.** and T. Zhou, On zonal relation of effective atmospheric emissivity with water vapor and carbon dioxide, *Journal of Beijing Normal University*, Natural Science Ed., 32, 278-280, 1996d. (In Chinese)

Yi, C., On land surface dynamics, *Chinese Journal of Applied Ecology*, 6, 212-219, 1995a. (In Chinese)

Yi, C., Approach on applying the nonlinear theories to formulate a synthetical theory of environment and ecology, *Advance in Earth Science*, 10, 164-168, 1995b. (In Chinese)

Yi, C., A catastrophe model of debris flow, *Journal of Nature Disasters*, 4, 53-57, 1995c. (In Chinese)

Yi, C., P. Shi, On the natural disaster model, *Journal of Nature Disasters*, 4, 6-8, 1995d. (In Chinese)

Gong, D., C. Yi, Fractal analysis of climatic proxy, *Journal of Beijing Normal University*, Natural Science Ed., 31, 400-403, 1995e. (In Chinese)

Yi, C., and P. Shi, Entropy Production and Natural Hazards, *Journal of Beijing Normal University*, Natural Science Ed., 30, 276-280, 1994b. (In Chinese)

Yi, C. and R. Wu, A Self-Organization Climate Model, *Chinese Journal of Atmospheric Science*, 18, 129-140, 1994a.

CONFERENCE PROCEEDINGS, PRESENTATIONS (* indicates invited talk)

*Yi, C., Summer Graduate Course on Land-Atmosphere Interaction and Climate Change. Invited Speaker, School of Applied Meteorology, NUIST, Nanjing, China, June 15-20, 2009.

*Yi, C., Analytical Approach to Canopy Flows over Complex Terrain, Atmospheric Science Research Center, University at Albany, SUNY, April 21, 2008.

*Yi, C., Advection measurements and the superstable layer, Advection workshop and ADVEX final conference, Gembloux, Belgium, 30 June & 1 July, 2008.
<http://www.fsagx.ac.be/ph/ADVEX/ADVEX%20conference.htm>

*Yi, C., Measuring and modeling NEE over complex terrain, International Symposium on CO₂ Flux Monitoring, Sitou, Taiwan, December 15-19, 2008.

Monson, R. K A. A. Turnipseed, J. Sun, D. E. Anderson, C.Yi, S. P. Burns, and B. Lamb, Measurement of Landscape-scale Fluxes in the Complex Terrain of a Rocky Mountain Subalpine Forest, Fall meeting of the American Geophysical Union, December 10-14, San Francisco, California, 2007.

Yi, C., Instability analysis on drainage flow over a complex terrain. Fall meeting of the American Geophysical Union, December 10-14, San Francisco, California, 2007.

Yi, C., R. K. Monson, Z. Zhai, D. E. Anderson, B. Lamb, A. A. Turnipseed, and S. P. Burns, Modelling canopy turbulent flow over complex terrain, Presentation at 17th Symposium on Boundary Layers and Turbulence and 27th Conference on Agricultural and Forest

Meteorology, San Diego, CA, USA, May 21-25, 2006.

- Yi, C.**, R. K. Monson, Z. Zhai, D. E. Anderson, B. Lamb, A. A. Turnipseed, and S. P. Burns, Advective flows and canopy turbulence caused by topography and canopy structure, ***Integrated Land Ecosystem—Atmosphere Processes Study (iLEAPS) Specialist Workshop on Flux Measurements in Difficult Conditions***, 26-28 January 2006, NCAR Center Green Campus, Boulder, Colorado, USA.
- Yi, C.**, R. K. Monson, D. E. Anderson, A. A. Turnipseed, and S. P. Burns, Comparison between aerodynamic and biological corrections to six-year cumulative NEE at the Niwot Ridge Ameriflux site, ***Integrated Land Ecosystem—Atmosphere Processes Study (iLEAPS) Specialist Workshop on Flux Measurements in Difficult Conditions***, 26-28 January 2006, NCAR Center Green Campus, Boulder, Colorado, USA.
- Anderson, D. E., **C. Yi**, R. K. Monson, A. A. Turnipseed, S. P. Burns, and B. Lamb, Five years of CO₂ nighttime advective flux measurements at the Niwot Ridge, Colorado subalpine forest site, ***Integrated Land Ecosystem—Atmosphere Processes Study (iLEAPS) Specialist Workshop on Flux Measurements in Difficult Conditions***, 26-28 January 2006, NCAR Center Green Campus, Boulder, Colorado, USA.
- Burns, S. P., J. Sun, S. P. Oncley, A. A. Turnipseed, **C. Yi**, D. H. Lenschow, and R. K. Monson, An evaluation of in-canopy flux measurements, ***Integrated Land Ecosystem—Atmosphere Processes Study (iLEAPS) Specialist Workshop on Flux Measurements in Difficult Conditions***, 26-28 January 2006, NCAR Center Green Campus, Boulder, Colorado, USA.
- Yi, C.**, R. K. Monson, Z. Zhai, D. E. Anderson, B. Lamb, A. A. Turnipseed, and S. P. Burns, Modelling terrain-induced canopy flows over complex terrain, ***AMERIFLUX Annual Team Meeting***, Boulder, Colorado, October 18-20, 2005.
- Monson, R., **C. Yi**, D. Anderson, J. Sun, B. Lamb, S. Burns, Observational uncertainties in net ecosystem CO₂ exchange: the effect of complex terrain. ***The Ecological Society of America Annual Meeting***, Montreal, Canada, 2005.
- Yi, C.**, Two curves in controlling biosphere-atmosphere exchanges, FL-2, room 1001 at NCAR, 10:30 am-11:30, Wed. March 23, 2005
- Yi, C.**, D. E. Anderson, S. P. Burns, A. A. Turnipseed, and R. K. Monson, Examining advection effects on eddy flux measurements at the Niwot Ridge AmeriFlux site in the Colorado Rocky Mountains, Presentation at the Fall Meeting of the American Geophysical Union, San Francisco, CA, December, 2004.
- Yi, C.**, D. E. Anderson, S. P. Burns, A. A. Turnipseed, and R. K. Monson, Advection at the Niwot Ridge AmeriFlux site, AmeriFlux Annual Science Team Meeting, Boulder Marriott, Boulder, CO, October 5-7, 2004.
- Monson, R., **C. Yi**, D. Bowling, Y. Luo, W. Sacks, D. Schimel, Extracting photosynthetic insight from net ecosystem CO₂ exchange. 13th International Congress on Photosynthesis, Montréal, Quebec, Canada, August 29 to September 3, 2004.

Yi, C., L. Mahrt, K.J. Davis, P. S. Bakwin, Estimates of horizontal advection from WLEF, Chequamegon Ecosystem Atmosphere Study (ChEAS) 2003 Workshop, Kemp Natural Resources Station, Woodruff, WI June 29-July 2, 2003.

Yi, C., T. Zhou, K. J. Davis, P. S. Bakwin, L. Zhu, P. Stackhous, Interannual variability of fluxes, atmospheric CO₂, climate, Chequamegon Ecosystem Atmosphere Study (ChEAS) 2003 Workshop, Kemp Natural Resources Station, Woodruff, WI June 29-July 2, 2003.

Yi, C., K.J. Davis, P. S. Bakwin, Are controlling rules of climate factors on terrestrial CO₂ fluxes different across time scales? Chequamegon Ecosystem Atmosphere Study (ChEAS) 2002 Workshop, Kemp Natural Resources Station, Woodruff, WI August 16-21, 2002.

Davis, K.J., P.S. Bakwin, B.D. Cook, M.D. Hurwitz, D.M. Ricciuto, W. Wang and **C. Yi**, The blobs and other advective horrors of northern Wisconsin. Proceedings of the 15th American Meteorological Society Symposium on Boundary Layers and Turbulence, pages 508-511, Wageningen, The Netherlands, July, 2002.

Davis, K.J., **C. Yi**, M.P. Butler, M.D. Hurwitz, D.M. Ricciuto and P.S. Bakwin, Merging CO₂ flux and mixing ratio observations at synoptic, seasonal and interannual scales. Invited presentation and poster at the Fluxnet synthesis workshop, Orvieto, Italy, 20-22 June, 2002.

Davis, K.J., P.S. Bakwin, M.P. Butler, M.D. Hurwitz, D.M. Ricciuto, and **C. Yi**, Joint analyses of carbon dioxide mixing ratio and flux measurements. Spring meeting of the American Geophysical Union, May 28-31, Washington, D.C., 2002.

Bakwin, P.S., K.J. Davis, M.P. Butler, M. Hurwitz, D. Ricciuto, W. Wang and **C. Yi**, Seasonal and synoptic patterns of CO₂ fluxes and mixing ratios from FLUXNET sites. Presentation at the Fall Meeting of the American Geophysical Union, San Francisco, CA, December, 2001.

Cook, B.D., K.J. Davis, W. Wang, P.S. Bakwin, **C. Yi**, P.V. Bolstad, J.G. Isebrands and R.M. Teclaw, Contributions from a deciduous forest and shrub wetland to regional carbon fluxes in northern Wisconsin. Presentation at the Fall Meeting of the American Geophysical Union, San Francisco, CA, December, 2001.

Davis, K.J., P.S. Bakwin, **C. Yi**, B.D. Cook, W. Wang, A.S. Denning, R. Teclaw and J. Isebrands, Multiple flux footprints, flux divergences and boundary layer mixing ratios: Studies of ecosystem-atmosphere CO₂ exchange using the WLEF tall tower. Invited talk, Spring meeting of the American Geophysical Union, Boston, MA, May 2001.

Yi, C., K.J. Davis, P.S. Bakwin, A.S. Denning, N. Zhang, D. Ricciuto, M. Hurwitz, Boundary layer CO₂ budgets and the rectifier effect. Poster presentation, Spring meeting of the American Geophysical Union, Boston, MA, May 2001.

Yi, C., K.J. Davis, B.W. Berger, and P.S. Bakwin, On development of convective boundary layers, Proceedings of the 14th Symposium on Boundary Layer and Turbulence, Aspen, Colorado, 7-11 August, Amer. Met. Soc., 223-226, 2000.

- Davis, K. J. **C. Yi**, P. S. Bakwin, W.M. Angevine, C. Zhao, J.G. Isebrands and R. Teclaw, Profiles, fluxes and entrainment of carbon dioxide from a very tall tower, Proceedings in Fourth International Symposium on Tropospheric Profiling: Needs and Technologies, Snowmass, Colorado, 1998.
- Davis, K.J., **C. Yi**, B.W. Berger, R.J. Kubesh and P.S. Bakwin, Scalar budgets in the continental boundary layer, Proceedings of the 14th Symposium on Boundary Layer and Turbulence, 7-11 August, American Meteorological Society, Aspen, Colorado, 100-103, 2000.
- Davis K. J., B.W. Berger, B.D. Cook, **C. Yi**, P.S. Bakwin, C. Zhao, J.G. Isebrands, and R. Teclaw, Forging a link between AmeriFlux and GLOBALVIEW-CO2, NOAA, Climate Monitoring & Diagnostics Laboratory Annual Meeting, May 3-4, Boulder, Colorado, 2000.
- Zhang N., S.A. Denning, **C. Yi**, K.J. Davis, P.S. Bakwin, and M. Branson, Covariance of the ecosystem carbon dioxide flux and the PBL depth at the tall tower in northern Wisconsin: Observations and simulations, NOAA, Climate Monitoring & Diagnostics Laboratory Annual Meeting, May 3-4, Boulder, Colorado, 2000.
- Bakwin, P.S., C. Zhao, Davis K. J., B.W. Berger, B.D. Cook, **C. Yi**, J.G. Isebrands, and R. Teclaw, Exchange of carbon dioxide between the atmosphere and a forest in northern Wisconsin, USA, NOAA, Climate Monitoring & Diagnostics Laboratory Annual Meeting, May 3-4, Boulder, Colorado, 2000.
- Wang, W., B.D. Cook, B.W. Berger, K.J. Davis, R.J. Kubesh, **C. Yi**, P.S. Bakwin, J.G. Isebrands, and R.M. Teclaw, Turbulent transport above a forest under light wind conditions, Amer. Met. Soc., Proceedings of the 24th Conference on Agricultural and Forest Meteorology, Davis, California, 14-18 August, 2000.
- Berger, B.W., K.J. Davis, P.S. Bakwin, and **C. Yi**, "Diurnal carbon dioxide fluxes and boundary layer structure from a very tall tower." Paper presented at Amer. Geophys. Union Spring Meeting, Boston, Mass., 1999.
- Davis, K.J., P.S. Bakwin, B.W. Berger, B.D. Cook, and **C. Yi**, Flux budgets and CO2 profiles in the atmospheric boundary layer. Fall meeting of the American Geophysical Union, San Francisco, CA, December, 1999.
- Denning, A.S., N. Zhang, K.J. Davis, **C. Yi**, P.S. Bakwin and B.W. Berger, Simulations and observations of diurnal coupling between ecophysiology and the atmospheric boundary layer as a control on CO2. Fall meeting of the American Geophysical Union, San Francisco, CA, December, 1999.
- Davis K. J., B.D. Cook, W.B. Sea, **C. Yi**, PV Bolstad, J. Martin, P.S. Bakwin, C. Zhao, J.G. Isebrands, R. Teclaw and V. Gutschick, The Chequamegon ecosystem-atmosphere study: overview and preliminary results, Proceedings in 23rd Conference on Agricultural and Forest Meteorology, New Mexico, 1998.
- Davis, K.J., **C. Yi**, P.S. Bakwin, W.M. Angevine, C. Zhao, J.G. Isebrands and R. Teclaw, Profiles, fluxes and entrainment of carbon dioxide observed from a very tall tower. Proceedings of

the 4th International Symposium on Tropospheric Profiling: Needs and Technologies, September, Snowmass, Colorado, 73-75, 1998.

Yi, C., and Rongsheng Wu, Mechanism on the Quaternary Glacier, in The Research on Historic Evolution of the Existent Environment in China, Ocean Publishing House, 156-169, 1992. (In Chinese)

Teaching and Advising

Courses

GEOL 011 Survey of Atmospheric Science

Undergraduate Course (Queens College at CUNY), 2007 fall, 2009spring

GEOL 383 Meteorology

Undergraduate Course (Queens College at CUNY), 2007 fall.

GEOL 520 Meteorology

Undergraduate Course (Queens College at CUNY), 2008 spring

GEOL 799.3 Extreme Weather and Megacities

Graduate Course (Queens College at CUNY), 2008 spring

ENSCI 112 Our Changing Planet

Undergraduate Course (Queens College at CUNY), 2008 fall.

ENSCI 111 Introduction to Environmental Sciences

Undergraduate Course (team teaching at Queens College at CUNY), 2008fall, 2009spring.

Climate Change and Climate Models

Graduate Course (BNU in China), Fall 1992-1995

Nonlinear Sciences and their Applications in Geosciences

Senior Undergraduate and Graduate Course (BNU in China), Spring 1993-1996

Nonequilibrium statistical physics

Graduate Course (LNU in China), Fall 1987

Physics

Undergraduate Course (LNU in China), 1985-1988

Advising

Ph.D. Advisees: Xiyan Xu, John Wolbeck, Jose Campos

M.A. Advisees: Caroline Farkas

Advised

M.S. Advisees: Tao Zhou, Shaoqiang Wang, Dongmei Guo, Qiaozhen Mu.

B.S. Advisee: Kaiyu Liu

Service

Reviewers of Journals

- ***Tellus***
- ***Biogeosciences***
- ***Ecological Modeling***
- ***Journal of Hydrology***
- ***Global Change Biology***
- ***Atmospheric Environment***
- ***Water Resources Research***
- ***Geophysical Research Letters***
- ***Environmental Fluid Mechanics***
- ***Journal of Geophysical Research***
- ***Journal of Hydraulic Engineering***
- ***Rangeland Ecology & Management***
- ***Advances in Atmospheric Sciences***
- ***Atmospheric Chemistry and Physics***
- ***Agricultural and Forest Meteorology***
- ***Theoretical and Applied Climatology***
- ***Journal of Applied Meteorology and Climatology***
- ***Journal of Atmospheric and Oceanic Technology***

Reviewers of Proposals

- ***NOAA***
- ***NSF***