

Curriculum Vitae

Jielun Sun

Contact Information

Address: NorthWest Research Associates
3380 Mitchell Lane
Boulder, CO 80301

Email: jielun@nwra.com
Phone (W): 303-415-9701x 235

Educational Information

Ph.D.	atmospheric science	Yale University	1991
M. Phil.	atmospheric science	Yale University	1986
B. S.	meteorology	Peking Univ. (Beijing Univ.)	1983

Work History

Apr. 2018 -	Senior Research Scientist	Northwest Research Associates
Sept. 2018-Oct. 2021	Program Director Physical and Dynamic Met.	National Science Foundation (NSF)
Jan. 2010 - Dec. 2018	Graduate faculty	Univ. of Colorado at Boulder.
Jul. 2005 - Aug. 2018	Scientist III	NCAR
Jun. 2001 - Jun. 2005	Scientist II	NCAR
Oct.1998 - May 2001	Project Scientist II	NCAR
Aug. - Oct. 1997	Visiting Scientist	Risø National Lab., Denmark
Jun. 1995 - Jul. 2003	Research Associate	Univ. of Colorado
Sept. 1995 - Sept. 1998	Long-Term Visitor	NCAR
Oct. - Dec. 1994	Visiting Scientist	NCAR
Oct. 1994 - May 1995	Research Assistant Prof.	Saint Louis Univ.
Oct. 1994 - Oct. 1998	Research Assistant Prof.	Oregon State Univ.
Oct. 1991 - Sept. 1994	Postdoctoral Research Associate	Oregon State Univ.

Editorships

Journal of Meteorological Research, 2017-
Associate Editor, Journal of Applied Meteorology and Climatology, 2004-2010
Editorial Board of Boundary-Layer Meteorology, 2004-2014

Awards and Honors

- The 2021 NSF Director's Award for Superior Accomplishment to the Navigating the New Arctic (NNA) program
- UCAR Outstanding Publication Nominee from NCAR/MMM, 2014
- UCAR Outstanding Accomplishment Award for Mentoring, 2009

Across NSF Working Group

-NSF Navigating the New Arctic (NNA) with the budget of \$30 M / year

Interagency Working Group

-U.S. Global Change Research Program (USGCRP), Integrated Water Cycle Working Group

External Services at NCAR

-Planning Committee, Workshop on The Future of Boundary Layer Observations, the National Academies of Sciences, Engineering, and Medicine, 2017- 2018

-International Advisory Committee, Institute of Urban Meteorology, Beijing, China, 2014-

-The Observing Facilities Assessment Panel (OFAP), 2015-2017

-DOE Panel Review, Apr. 2014

-Biosphere 2 Advisory Board, Univ. of Arizona, 30 Nov., 2012

-Advisory Group, Fundamental Instrument Unit, National Ecological Observatory Network (NEON), 2009-2017

-American Meteorological Society Boundary Layers and Turbulence Committee, 1998-2000

Contribution to Advanced Education

-Ph.D. Thesis Committee, Eric Russel, Dept. of Civil and Environmental Engineering, Washington State Univ., 2014-2016

-Ph.D. Thesis Committee, Sean Burns, Dept. of Geography, Univ. of Colorado, 2013-

-Ph.D. Research Advisor, Thesis Committee, Mireia Udina, Univ. of Barcelona, Spain, 2012-2015

-Ph.D. Research Advisor, Guoyin Wang, Lanzhou Univ., China, 2010-2012

-Ph.D. Research Advisor, Thesis Committee, Sherri Heck, Univ. of Colorado, 2010-2012

-A UCAR SOARS Science Mentor, Robert Cancel III, Jackson State Univ., 2004

-Master Research Advisor, Gerrit Oosterhuis, Dept. Meteorology and Air Quality, Wageningen Univ., the Netherlands, 2000

Contribution to K-12 Education

Science Advisory Board, Cool Girls Science and Art Club, 2010-2011

NCAR Committees and Services

-The NCAR Library Advisory Board, 2015-2017

-Co-Chair of Goal 8 for the UCAR Strategic Plan, 2014

-NCAR/EOL CentNet Committee, 2012-2018

-The NCAR Women Organizing Research and Leading Science (WORLS), 2010-2014

-NCAR Diversity Committee Chair, 2010-2011

-NCAR Asian Circle, 2009-2014

-NCAR Diversity Committee, 2009-2011

-Seminar Coordinator, MMM Division, NCAR, 2009-2012

-UCAR Distinguished Accomplishment Awards Committee, 2006-2008

-A selected member for the NCAR Leadership Academy, 2006

-Chair/Co-Chair, English as a Second Language (ESL), UCAR, 2005-2017

-Executive Committee of NCAR Biogeoscience Initiative, 2003-2009

-Co-Chair, Junior Faculty Forum on Future Science Directions: Interactions between Land Ecosystem and the Atmospheric Hydrological Cycle, NCAR Advanced Study Program and

NCAR's Early Career Scientists Assembly (ECSA), 18-20 June 2003

Workshop Committees, Conference Chair

- Organizing Committee Chair, Scientific Committee, the NCAR/GTP Workshop on Wave-Turbulence Interactions in Stable Boundary Layer (WINBAL), 2012.
- Organizing Committee Chair for the NCAR/GTP Workshop on Roughness Sublayers, 2006.
- Co-Chair, CASES-99 Workshop, 2001.
- Co-Chair, the Southern Great Plains Experiment Workshop, 2001
- Program Committee Co-Chair, the 14th AMS Boundary Layers and Turbulence Conference, 2000
- Co-Chair, Special Session-Cooperative Atmosphere-Surface Exchange Study, the 2000 AGU Fall Conference

Field Campaigns

Air-Land Experiments:

- SAVANT (Stable Atmospheric Variability ANd Transport), 2018-2021, funded by NSF.
- FANTASTIC-1 (Forced and Natural Turbulence Allowing Studies of Anisotropic Conditions), 2018-2021, funded by NSF.
- SCP (Shallow Cold Pool), October-December, 2012, funded by NSF
- ACME-04 and ACME-07 (Airborne Carbon in the Mountains Experiment), 2004, 2007, funded by NSF
- CME-04 (Carbon in the Mountains Experiment) 2004, funded by NSF.
- NIWOT-02 (Niwot-Ridge Experiment), 2002, PI for the multidisciplinary experiment, funded by the NCAR Director Office, NSF.
- CASES-99 (Cooperative Atmosphere-Surface Exchange Study), 1999, funded by NSF and ARO with international participants.
- SGP-97 (Southern Great Plains), 1997, funded by NASA, with international participants.
- Microfronts, March, 1995, funded by NSF
- BOREAS (Boreal Ecosystem-Atmosphere Study), 1994 and 1996, funded by NASA.

Air-Sea Experiments:

- CBLAST-Low (Coupled Boundary Layer Air-Sea Transfer at Low Winds), 2001-2004, funded by ONR
- SHOWEX (Shoaling Wave Experiment), 1998-2001, funded by ONR

Membership in Professional Societies

European Geophysical Union
American Meteorological Society
American Geophysical Union
Sigma Xi

Citation Index

[Google Scholar](#)

ResearchID H-6576-2015

ORCID ID: 0000-0003-3271-7914

Theses

- B.S. Physical processes for maintaining the meridional and zonal circulation in midlatitude atmosphere. Supervisor: Qiushi Chen
- Ph.D. Tropopause fold investigations: secondary circulations, water vapor and ozone analysis. Supervisor: Ronald Smith

Invited Talks

- (32) Sun, J., E. Takle, and O. Acevedo, 2019, Revisiting Monin-Obukhov Similarity Theory. 2019 EGU General Assembly, AS2.2 Atmospheric Boundary Layer: From Basic Turbulence Studies to Integrated Applications
- (31) Sun, J. 2017, Energy conservation. Invited seminar at Department of Geophysics, Faculty of Science, 3 April, University of Zagreb, Zagreb, Croatia.
- (30) Sun, J. 2017, Energy conservation, *Workshop on the Atmospheric Stable Boundary Layer*, 27-31 March 2017, Delft, the Netherlands.
- (29) Sun, J., 2017, Energy conservation in understanding atmospheric thermodynamic structures and wave-turbulence interactions. *The 10th International Workshop on Nonlinear Waves and Chaos (NWCW17)*, 20-24 March 2017, Lo Jolla, CA.
- (28) Sun, J., D. H. Lenschow, M. A. LeMone, L. Mahrt, 2015, the role of large-coherent-eddy transport in the atmospheric surface layer based on CASES-99 observations. 9 December, 2015, University of Barcelona, Spain.
- (27) Sun, J., D. H. Lenschow, M. A. LeMone, L. Mahrt, 2015, The role of large-coherent-eddy transport in the atmospheric surface layer based on CASES-99 observations. 7 December, 2015, Universidad Complutense de Madrid, Spain
- (26) Sun, J., D. H. Lenschow, M. A. LeMone, L. Mahrt, 2015, The role of large-coherent-eddy transport in the atmospheric surface layer based on CASES-99 observations. *9th Brazilian Micrometeorology Workshop*, 11-13 November, 2015, Santa Maria, Brazil.
- (25) Sun, J. 2015: Field experiments and data archive, *Workshop for the Beijing Urban Meteorology Field Experiment*, 21-23 October, 2015, Beijing, China
- (24) Sun, J., 2014: Observed features of flow in the atmospheric boundary layer. *11th Symposium for Strategic Development of Boundary Layer Research*, 28-29 November, 2014, Nanjing, China.
- (23) Sun, J., D. H. Lenschow, L. Mahrt, and C. Nappo 2014: The relationships between wind, horizontal pressure gradient, and turbulent momentum transport during CASES-99. 19 March 2014, Depart of Atmospheric and Oceanic Sciences, Peking University, Beijing, China
- (22) Sun, J., M. Zhou, and S. Zhong, 2014: Some fundamental issues in Urban Meteorology

and Field Campaign Strategies. 13-14 March 2014, Workshop on Urban Rainfall and Air Quality, Institute of Urban Meteorology, Beijing, China.

- (21) Sun, J. 2013: The relationships between wind, horizontal pressure gradient, and turbulent momentum transport during CASES-99. 4 April 2013, Atmospheric Sciences, University of Utah.
- (20) Sun, J., 2012: Turbulence regimes and surface turbulence parameterization in neutral to stable boundary layer during CASES-99. 29 November 2012, Department of Geography, Michigan State University.
- (19) Sun, J. 2012: Interactions between the Atmosphere and Ecosystem over Complex Terrain---A Journey from Candle Lake to the Rocky Mountains of Colorado. *The American Meteorological Society, First Conference on Atmospheric Biogeosciences*, 29 May-1 June 2012, Boston MA.
- (18) Sun, J. 2011: Challenging issues in atmospheric boundary layers. *The American Geophysical Union Fall Conference*, 9 December 2011, San Francisco, California.
- (17) Sun, J. 2011: The role of atmospheric boundary layer dynamics in the environmental sciences. Department of Civil and Environmental Engineering, Environmental and Water Resources Engineering, Washing State University, Pullman, WA, 10 October 2011.
- (16) Sun, J., 2011: Vertical variations of mixing lengths under neutral and stable conditions during CASES-99. Danish Meteorological Institute, 29 March 2011, Copenhagen, Denmark.
- (15) Sun, J. 2010: New developments in atmospheric boundary layer observations. Institute of Urban Meteorology, Beijing, China, December 2010.
- (14) Sun, J., 2010: Atmospheric carbon dioxide transport over mountain terrain. *The American Geophysical Union Fall Conference*, San Francisco, CA, Dec. 2010.
- (13) Sun, J. 2010: Nocturnal stable boundary layer parameterization. *Institute of Atmospheric Physics, Chinese Academy of Sciences*, June, 2010, Beijing, China.
- (12) Sun, J. 2008: CO₂ transport over complex terrain. *Proceedings of the International Symposium on CO₂ Flux Monitoring Technology*. December 16-18, 2008, The Experimental Forest, National Taiwan University, Taiwan.
- (11) Sun, J. 2008: Eddy fluxes in complex terrain. *The Summer School of Flux Measurements and Advanced Modeling*, Ecology & Evolutionary Biology, the University of Colorado, July 14-25, 2008, University of Colorado Mountain Research Station, Colorado.
- (10) Sun, J. 2007: Trace gas transport in nocturnal boundary layers. *Expert workshop on the relevance of surface and boundary layer processes for the exchanges of reactive- and greenhouse gases*, 9-12 October 2007. Wageningen University, The Netherlands.
- (9) Sun, J. 2007: Carbon in the mountain. *NCAR ASP Summer Colloquium*, Boulder, CO, 4-15 June 2007.
- (8) Sun, J. 2006: Turbulence in Stable Boundary Layers. *An invitation-only workshop on Stable*

Boundary Layers, November 2006, Sedona, Arizona, USA.

- (7) Sun, J. 2004: Current issues in urban boundary layer meteorology. *The Institute of Urban Meteorology, October 2004, Beijing, China.*
- (6) Sun, J. 2003: Boundary Layer Meteorology. *The National Academy of Science Committee on Weather Research for Surface Transportation: The Roadway Environment, June 23-25, 2003, Boulder, Colorado, USA.*
- (5) Sun, J., 2000: Transport of carbon dioxide in nocturnal boundary layers. *Workshop on CO₂ Boundary-Layer Budget Flux Methods, 6-8 October 2000, Gubbio, Italy.*
- (4) Mahrt, L. and J. Sun 1998: Surface fluxes and boundary layer structure. *Clear and Cloudy Boundary Layers, Amsterdam, the Netherlands, 26-29 August 1997.* Sponsored by the Netherlands Academy of Sciences, the Royal Netherlands Meteorological Institute, and the Institute for Marine and Atmospheric Research at Utrecht University.
- (3) Mahrt, L., and J. Sun 1997: Stable boundary layers. *Workshop on the stable boundary layer. 21-24 October 1997, Lövånger, Sweden.*
- (2) Sun, J., 1997: Overview of California Ozone Deposition Experiment (CODE). *American Geophysical Union, 27-30 May 1997, Baltimore, Maryland, USA, American Geophysical Union.*
- (1) Sun, J., and L. Mahrt, 1995: Spatially averaged heat and moisture fluxes over heterogeneous surfaces. *1995 American Geophysical Union Spring Meeting, 30 May- 2 June 1995, Baltimore, Maryland, USA, American Geophysical Union, p.S126.*

Conference Presentations (abstracts, conference preprints)

- (89) Sun, J., 2020, Progresses in understanding Monin-Obukhov similarity theory, turbulence parameterization, and turbulence energetics. *100th American Meteorological Society Annual Meeting, 12-16 January 2020, Boston, MA.*
- (88) Li, J., J. Sun, M. Zhou, Z. Cheng, Q. Li, X. Cao, J. Zhang, 2017, Observational analyses of dramatic developments of a severe air pollution event in the Beijing area. *AGU Fall Meeting 11-15 December 2017, New Orleans, LA.*
- (87) Sun, J., Z. Cheng, J. Li, J. Dou, X. Cao, J. Zhang, and M. Zhou, 2017, Urban HOST during SURF-15. *American Meteorological Society Annual Meeting, 23-27 January 2017, Seattle, Washington.*
- (86) Rajewski, Daniel, Eugene s. Takle, J. Sun, S. Zilintinkevich, M. Nelson, S. Irvin, R. Doorenbos, 2016, Measurements of Spatial and Temporal Characteristics of Turbulence Outside and Within a Wind Farm from a Network of Surface Flux Stations and a Tall Tower Network, *the Fall American Geophysical Union Meeting, 2016.*
- (85) Sun, J., and J. French 2016: Air-sea interactions in light of new understanding of air-land interactions. *20th Conference on Air-Sea Interactions, American Meteorological Society, 15-19 August 2016, Madison, Wisconsin, USA.*

- (84) Sun, J., D. H. Lenschow, M. A. LeMone, and L. Mahrt, 2016, The role of large-coherent-eddy transport in the atmospheric surface layer based on CASES-99 observations. *22nd Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 20-24 June 2016, Salt Lake City, Utah, USA.
- (83) Sun, J. 2016, The myth of the surface energy imbalance. *32nd Conference on Agricultural and Forest Meteorology*, 20-24 June 2016, Salt Lake City, Utah, USA.
- (82) Udina, M., J. Sun, B. Kosovic, and M. R. Soler, 2016, Exploring vertical turbulence structure in neutrally and stably stratified flows using WRF-LES. *22nd Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 20-24 June 2016, Salt Lake City, Utah, USA.
- (81) Maroneze, R., J. Sun, F. D. Costa, O. C. Acevedo, 2016, Why can't SBL models reproduce the near-zero heat flux at high wind speeds? *22nd Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 20-24 June 2016, Salt Lake City, Utah, USA.
- (80) Acevedo, O. and J. Sun 2016, Terrain effects on the turbulence relationship with wind speed in the nocturnal boundary layer. *22nd Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 20-24 June 2016, Salt Lake City, Utah, USA.
- (79) Yagüe, C., J. Sun, C. Román-Cascón, M. Sastre, and J. A. Arrilaga, 2016, Turbulence-wave interactions associated to drainage flows observed during the BLLAST field campaign. *EGU General Assembly, 2016*, 17-22 April 2016, Vienna, Austria.
- (78) Metzger, S., E. Ayres, R. Clement, D. Durden, T. Foken, A. S. Kowalski, H. Luo, H. McCaughey, N. Pingingtha-Durden, P. Serrano-Ortiz, J. Sun, 2015, Alignment of surface-atmosphere exchange sensors at sloped sites: An integrated strategy. *Poster A41G-0139, 48th American Geophysical Union Fall Meeting*, San Francisco, California, USA, 14-18 December 2015.
- (77) Sun, J., L. Mahrt, C. Nappo, and D. Lenschow 2015: Wind and temperature oscillations generated by wave-turbulence interactions in the stably stratified boundary layer. *EGU General Assembly, 2015*, 13-17 April 2015, Vienna, Austria.
- (76) Sun, J., D. Lenschow, M. LeMone, and L. Mahrt, 2015: Turbulence generation in the atmospheric boundary layer and limitations of the Monin-Obukhov similarity theory. *EGU General Assembly, 2015*, 13-17 April 2015, Vienna, Austria.
- (75) Sun, J., 2014, Revisit Monin-Obukhov similarity theory and the bulk formula for turbulence parameterization. *21st Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 9--13 June 2014, Leeds, UK.
- (74) Udina, M., J. Sun, B. Kosović, and M. R. Soler, 2014, Investigating turbulence regimes in the weakly stably-stratified boundary layer with Large Eddy Simulation. *21st Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 9--13 June 2014, Leeds, UK.
- (73) Udina, M., J. Sun, and M. R. Soler, B. Kosović, 2013, Exploring wave-turbulence interaction through LES modeling. *International Conference on Alpine Meteorology*

(ICAM), Kranjska Gora, Slovenia, 3-7 June 2013.

- (72) Sun, J. 2013: What do we need to know about monitoring the atmosphere-ecosystem carbon dioxide exchange? ---from a micrometeorologist's perspective. *9th International Carbon Dioxide Conference*, 3-7 June 2013, Beijing, China.
- (71) Burns, S.P., J. Sun, D. H. Lenschow, S.P. Oncley, and P.D. Blanken, 2012: Gravity waves within and above a subalpine forest in complex terrain. *20th Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 9-13 July 2012, Boston, Massachusetts, USA.
- (70) Sun, J., C. Nappo, and L. Mahrt, 2012: Atmospheric waves and turbulence intermittency in stable boundary layers during CASES-99. *20th Symposium on Boundary Layer and Turbulence Conference, American Meteorological Society*, 9-13 July 2012, Boston, Massachusetts, USA.
- (69) Sun, J., 2011: Vertical variations of mixing lengths under neutral and stable conditions during CASES-99. *European Geosciences Union General Assembly*, 3-8 April 2011, Vienna, Austria.
- (68) Burns, S. P., J. Sun, S. P. Oncley, D. H. Lenschow, and R. K. Monson, 2010: The effect of tilt-corrections on fluxes and 3-D wind statistics over sloping forested terrain. *29th Conference on Agricultural and Forest Meteorology*, 2-6 August 2010, Keystone, Colorado, USA.
- (67) Sun, J., L. Mahrt, R. M Banta, and Y. L. Pichugina, 2010: Intermittent turbulence in stable boundary layers. *19th Symposium on Boundary Layers and Turbulence*, 2-6 August 2010, Keystone, Colorado, USA.
- (66) Sun, J., and S. F. J. de Wekker, 2010: Trace gas transport by mountain circulations. *29th Conference on Agricultural and Forest Meteorology*, 2-6 August 2010, Keystone, Colorado, USA.
- (65) Oncley, S., K. Schwenz, S. Burns, J. Sun, and R. Monson, 2009: An investigation of nocturnal drainage of carbon dioxide in a montane forest using a new TRAM system. *8th International Carbon Dioxide Conference (ICDC8)*, 13-19 September 2009, Jena, Germany.
- (64) Sun, J. 2008: Turbulence transport processes and parameterization in nocturnal boundary layers. *18th American Meteorological Society Boundary Layer and Turbulence Conference*, 9-13 June 2008, Stockholm, Sweden.
- (63) Monson, R. K., A. A. Turnipseed, J. Sun, Chuixiang Yi, D. Anderson, S. Burns, and B. Lamb, 2007: Measurement of landscape-scale fluxes in the complex terrain of a Rocky Mountain subalpine forest. *The American Geophysical Union Fall Conference*, December 2007, San Francisco, California, USA.
- (62) Laffea, L., R. Monson, R. Manning, R. Han, A. Glasser, S. Oncley, J. Sun, S. Burns, S. Semmer, and J. Militzer, 2006: Comprehensive monitoring of CO₂ sequestration in subalpine forest ecosystems and its relation to global warming. *The 4th Association for Computing Machinery (ACM) Conference on Embedded Networked Sensor Systems*, October 31- November 3 2006, Boulder, Colorado, USA.

- (61) Schaeffer, S., S.P. Burns, D.E. Anderson, J. Sun, Chuixiang Yi, and D.R. Bowling, 2006: Environmental controls on the $\delta^{13}\text{C}$ of forest respired CO_2 across a vertical canopy profile in a subalpine coniferous forest. *The American Geophysical Union Fall Conference*, December 2006, San Francisco, California, USA.
- (60) Burns, S. P., J. Sun, S. P. Oncley, A. C. Delany, B. B. Stephens, D. E. Anderson, D. S. Schimel, D. H. Lenschow, and R. K. Monson, 2006: Measurements of the diurnal cycle of temperature, humidity, wind, and carbon dioxide in a subalpine forest during the Carbon in the Mountains Experiment (CME04). *27th Conference on Agricultural and Forest Meteorology*, 21-26 May 2006, San Diego, California, USA, American Meteorological Society.
- (59) Sun, J., and S. Burns, 2006: Intermittent turbulence in stable boundary layers and its influence on turbulence parameterization. *17th Conference on Boundary Layers and Turbulence*, 22-25 May 2006, San Diego, California, USA, American Meteorological Society.
- (58) Sun, J., S. Burns, J. Edson, D. Khelif, L. Mahrt, D. Vickers, and T. Hristov, 2006: Contributions of swell to air-sea interactions under weak wind conditions. *27th Hurricanes and Tropical Meteorology*, 24-28 April 2006, Monterey, California, USA, American Meteorological Society.
- (57) Sun, J., S. Burns, T. Delany, S. Oncley, A. Turnipseed, B. Stephens, D. Lenschow, M. LeMone, R. Monson, and D. Anderson, 2006: CO_2 transport over complex terrain. *Flux Measurements in Difficult Conditions, a Specialist Workshop*, 26-28 January 2006, Boulder, Colorado, USA.
- (56) Sun, J., S. P. Burns, A. C. Delany, S. P. Oncley, A. A. Turnipseed, B. B. Stephens, R. K. Monson, and D. E. Anderson, 2005: Trace gas transport over complex terrain. *The American Geophysical Union Fall Conference*, 5-9 December 2005, San Francisco, California, USA.
- (55) Schimel, D., B. Stephens, R. Monson, W. Sacks, and J. Sun, 2005: Aircraft to inventories: a multiscale investigations of carbon fluxes in a montane landscape. *Seventh International Carbon Dioxide Conference*, 25-30 September 2005, Boulder, Colorado, LU-96, p.571.
- (54) Monson, R., C. Yi, D. Anderson, J. Sun, B. Lamb, A. Turnipseed, S. Burns, B. Stephens, G. Allwine, A. Delany, and S. Oncley, 2005: Observational uncertainties in net ecosystem CO_2 exchange. *Seventh International Carbon Dioxide Conference*, 25-30 September 2005, Boulder, Colorado, USA, LU-192, p. 537.
- (53) Sun, J., S. Burns, T. Delany, S. Oncley, A. Turnipseed, B. Stephens, R. Monson, and D. Anderson, 2005: CO_2 transport over complex terrain. *Seventh International Carbon Dioxide Conference*, 25-30 September 2005, Boulder, Colorado, FF262, p. 385.
- (52) Sun, J., S. P. Burns, A. C. Delany, S. P. Oncley, A. Turnipseed, B. Stephens, A. Guenther, D. E. Anderson, and R. Monson, 2004: Carbon dioxide transport over complex terrain. *26th Agricultural and Forest Meteorology*, 23-26 August 2004, Vancouver, British Columbia, Canada, American Meteorological Society.
- (51) Vandemark, D., W. M. Drennan, J. Sun, J. R. French, H. Graber, 2004: Wind stress and

wind wave observations in the presence of swell. *13th Conference on Interactions of the Sea and Atmosphere*, 9-13 August 2004, Portland, Maine, USA, American Meteorological Society.

- (50) Lenschow, L. D., and J. Sun, 2004: The spectral composition of fluxes and variances over land and sea. *16th Symposium on Boundary Layers and Turbulence*, 9-13 August 2004, Portland, Maine, USA, American Meteorological Society.
- (49) Sun, J., S. P. Burns, R. M. Banta, and R. L. Coulter, 2004: Turbulence intermittency and nocturnal disturbances in CASES-99. *16th Symposium on Boundary Layers and Turbulence*, 9-13 August 2004, Portland, Maine, USA, American Meteorological Society.
- (48) Sun, J., S. Burns, L. Mahrt, D. Vickers, D. Khelif, and H. H. Jonsoon, 2004: Characteristics of air-sea interaction in surface and wave layers during CBLAST-Low. *Join Conferences on 13th Conference on Interactions of the Sea and Atmosphere and 16th Symposium on Boundary Layers and Turbulence*, 9-13 August 2004, Portland, Maine, USA, American Meteorological Society.
- (47) Sun, J., S. Burns, D. Vickers, and L. Mahrt, 2004: Marine surface and wave layer characteristics during CBLAST-pilot experiment. *American Geophysical Union Ocean Science Meeting*, 26-30 January 2004, Portland, Oregon, USA.
- (46) Vandermark, D., B. Chapron, W. Drennan, J. Sun, and H. Graber, 2004: Examining wind stress and wind waves in the presence of swell. *IEEE IGARSS*, 20-24 September 2004, Anchorage, Alaska, USA.
- (45) Desjardins, R. L., J. I. MacPherson, P. H. Schuepp, E. Pattey, B. Amiro, A. Barr, L. Mahrt, J. Sun, T. Chu, C. Flechard, and R. Riznek, 2003: Interesting measurements obtained using the NRC Twin Otter Research Aircraft. *Canadian Meteorological and Oceanographic Society Ottawa Congress*, 2-5 June 2003, Canadian Society of Agrometeorology Session, No. 381.
- (44) Sun, J., 2003: Intermittent turbulence in stable boundary layer. *EGS/AGU/EUG joint Assembly*, 7-11 April 2003, Nice, France, EAE-03-A-07713.
- (43) Sun, J., S. P. Burns, A. C. Delany, S. P. Oncley, T. W. Horst, and D. H. Lenschow, 2002: Heat balance in nocturnal boundary layers. *15th Symposium on Boundary Layers and Turbulence*, 15-19 July 2002, Wageningen, the Netherlands, American Meteorological Society, p. 493-496.
- (42) Sun, J., S.P. Burns, D. Lenschow, X. Hu, and X. Lee, 2000: Intermittent turbulent mixing in stable boundary layers. *The American Geophysical Union Fall Conference*, 15-19 December 2000, San Francisco, California, USA, American Geophysical Union, F 149.
- (41) Mahrt, L., D. Vickers, R. Nakamura, J. Sun, S. Burns, J. Preuger, and J. Hatfield, 2000: Shallow gully flow. *24th Conference on Agricultural and Forest Meteorology*, 14-18 August 2000, Davis, California, USA, American Meteorological Society, p. 202-203.
- (40) Sun, J., D. Vandemark, L. Mahrt, D. Vickers, T. Crawford, and C. Vogel, 2000: Momentum transfer over the coastal zone. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 526-529.

- (39) Oosterhuis, G., J. Sun, and S. Burns, 2000: Wavelet analysis of thermocouple measurements during CASES-99. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 590-592.
- (38) Burns, S. and J. Sun, 2000: Thermocouple temperature measurements from the CASES-99 main tower. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 358-361.
- (37) Vickers, D., L. Mahrt, J. Sun, and T. Crawford, 2000: Structure of the mean flow and wind stress in off-shore flow. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 285-288.
- (36) Sun, J., G. Oosterhuis, S. Burns, D. Lenschow, and L. Mahrt, 2000: Turbulence intermittency in the stable boundary layers. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 329-331.
- (35) Sun, J., L. Mahrt, D. Vickers, and I. MacPherson, 2000: Response of the atmospheric moisture to the soil moisture. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 220-222.
- (34) Burns, S., J. Sun, A. Delany, T. Horst, and S. Oncley, 2000: Radiative flux divergence in CASES-99. *14th Symposium on Boundary Layer and Turbulence*, 7-11 August 2000, Snowmass, Colorado, USA, American Meteorological Society, p. 351-354.
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