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Education

- Ph.D., Atmospheric Science, York University, Canada, (2009)
- M.Sc., Atmospheric Science, Lanzhou University, China, (2001)
- B.Sc., Atmospheric Science, Lanzhou University, China, (1998)

Research interests

- Lower and middle atmospheric chemistry and transport, satellite data analysis and modeling. The current study focuses on long range transport of air pollution.

Work experience

- Post-doctorate scholar, Jet Propulsion Laboratory, California Institute of Technology, June 2009 – present.
- Research associate, Department of Earth and Space Science and Engineering, York University, March – May 2009.
- Post-doctorate fellow, Department of Physics, University of Toronto, September 2008 – February 2009.
- Research assistant/Teaching assistant, Department of Earth and Space Science and Engineering, York University, September 2003 – August 2008.
- Research assistant, Institute of the Atmospheric Physics, Chinese Academy of Science, September 2001 – August 2003.

Publications

1. Beagley, S. R., C. D. Boone, V. I. Fomichev, **J. J. Jin**, K. Semeniuk, J. C. McConnell, and P. F. Bernath, **2009**, First multi-year occultation observations of CO₂ in the MLT by ACE satellite: observations and analysis using the extended CMAM, *Atmos. Chem. Phys. Discuss.*, *9*, 11551-11587.
2. **Jin, J. J.**, K. Semeniuk, S. R. Beagley, V. I. Fomichev, A. I. Jonsson, J. C. McConnell, J. Urban, D. Murtagh, G. L. Manney, C. D. Boone, P. F. Bernath, K. A. Walker, B. Barret, P. Ricaud, and E. Dupuy, **2009**, Comparison of CMAM simulations of carbon monoxide (CO), nitrous oxide (N₂O), and methane (CH₄) with observations from Odin/SMR, ACE-FTS, and Aura/MLS, *Atmos. Chem. Phys.* *9*, 3233-3252.
3. Dupuy, E., K. A. Walker, J. Kar, C. D. Boone, C. T. McElroy, P. F. Bernath, J. R. Drummond, R. Skelton, S. D. McLeod, R. C. Hughes, C. R. Nowlan, D. G. Dufour, J. Zou, F. Nichitiu, K. Strong, P. Baron, R. M. Bevilacqua, T. Blumenstock, G. E. Bodeker, T. Borsdorff, A. E. Bourassa, H. Bovensmann, I. S. Boyd, A. Bracher, C. Brogniez, J. P. Burrows, V. Catoire, S. Ceccherini, S. Chabrilat, T. Christensen, M. T. Coffey, U. Cortesi, J. Davies, C. De Clercq, D. A. Degenstein, M. De Mazière, P. Demoulin, J. Dodion, B. Firanski, H. Fischer, G. Forbes, L. Froidevaux, D. Fussen, P. Gerard, S. Godin-Beekmann, F. Goutail, J. Granville, D. Griffith, C. S. Haley, J. W. Hannigan, M. Höpfner, **J. J. Jin**, A. Jones, N. B. Jones, K. Jucks, A. Kagawa, Y. Kasai, T. E. Kerzenmacher, A. Kleinböhl, A. R. Klekociuk, I. Kramer, H. Küllmann, J. Kuttippurath, E. Kyrölä, J.-C. Lambert, N. J. Livesey, E. J. Llewellyn, N. D. Lloyd, E. Mahieu, G. L. Manney, B. T. Marshall, J. C. McConnell, M. P. McCormick, I. S. McDermid, M. McHugh, C. A. McLinden, J. Mellqvist, K. Mizutani, Y. Murayama, D. P. Murtagh, H. Oelhaf, A. Parrish, S. V. Petelina, C. Piccolo, J.-P. Pommereau, C. E. Randall, C. Robert, C. Roth, M. Schneider, C. Senten, T. Steck, A. Strandberg, K. B. Strawbridge, R. Sussmann, D. P. J. Swart, D. W. Tarasick, J. R. Taylor, C.

- Tétard, L. W. Thomason, A. M. Thompson, M. B. Tully, J. Urban, F. Vanhellemont, C. Vigouroux, T. von Clarmann, P. von der Gathen, C. von Savigny, J. W. Waters, J. C. Witte, M. Wolff, and J. M. Zawodny, **2009**, Validation of ozone measurements from the Atmospheric Chemistry Experiment (ACE), *Atmos. Chem. Phys.*, 9, 287-343.
4. Semeniuk, K., J. C. McConnell, **J. J. Jin**, J. R. Jarosz, C. D. Boone, P. F. Bernath, **2008**, N₂O production by high energy auroral electron precipitation, *J. Geophys. Res.*, 113, D16302, doi:10.1029/2007JD009690.
 5. Strong, K., M. A. Wolff, T. E. Kerzenmacher, K. A. Walker, P. F. Bernath, T. Blumenstock, C. Boone, V. Catoire, M. Coffey, M. De Mazière, P. Demoulin, P. Duchatelet, E. Dupuy, J. Hannigan, M. Höpfner, N. Glatthor, D. W. T. Griffith, **J. J. Jin**, N. Jones, K. Jucks, H. Kuehlmann, J. Kuttippurath, A. Lambert, E. Mahieu, J. C. McConnell, J. Mellqvist, S. Mikuteit, D. P. Murtagh, J. Notholt, C. Piccolo, P. Raspollini, M. Ridolfi, C. Robert, M. Schneider, O. Schrems, K. Semeniuk, C. Senten, G. P. Stiller, A. Strandberg, J. Taylor, C. Tétard, M. Toohey, J. Urban, T. Warneke, and S. Wood, **2008**, Validation of N₂O from ACE-FTS, *Atmos. Chem. Phys.*, 8, 4759 – 4786.
 6. McConnell, J. C., and **J. J. Jin**, **2008**, Stratospheric ozone chemistry, *Atmos.-Ocean*, 46(1), 69 – 92.
 7. **Jin, J. J.**, K. Semeniuk, G. L. Manney, A. I. Jonsson, S. R. Beagley, J. C. McConnell, C. P. Rinsland, C. D. Boone, K. A. Walker, and P. F. Bernath, **2006**, Denitrification in the Arctic winter 2004/2005: Observations from ACE-FTS, *Geophys. Res. Lett.*, 33, L19814, doi: 10.1029/2006GL027687.
 8. **Jin, J. J.**, K. Semeniuk, G. L. Manney, A. I. Jonsson, S. R. Beagley, J. C. McConnell, G. Dufour, R. Nassar, C. D. Boone, K. A. Walker, P. F. Bernath, and C. P. Rinsland, **2006**, Severe Arctic ozone loss in the winter 2004/2005: observations from ACE-FTS, *Geophys. Res. Lett.*, 33, L15801, doi:10.1029/2006GL026752 .
 9. Dufour G., R. Nassar, C. D. Boone, R. Skelton, K. A. Walker, P. F. Bernath, C. P. Rinsland, K. Semeniuk, **J. J. Jin**, J. C. McConnell, and G. L. Manney, **2006**, Partitioning between the inorganic chlorine reservoirs HCl and ClONO₂ during the Arctic winter 2005 from the ACE-FTS, *Atmos. Chem. Phys.*, 6, 2355 – 2366.
 10. **Jin, J. J.**, K. Semeniuk, A. I. Jonsson, S. R. Beagley, J. C. McConnell, C. D. Boone, K. A. Walker, P. F. Bernath, C. P. Rinsland, E. Dupuy, P. Ricaud, J. De La Noë, J. Urban, and D. Murtagh, **2005**, Co-located ACE-FTS and Odin/SMR stratospheric-mesospheric CO 2004 measurements and comparison with a GCM, *Geophys. Res. Lett.*, 32, L15S03, doi:10.1029/2005GL022433.
 11. **Jin, J.**, L. Zhang, C. Chen, Y. Bai, and Y. Xian, **2000**, Characteristics of surface wind over the eastern part of Lanzhou Basin in winter, *Journal of Lanzhou University(Natural Sciences) (in Chinese)*, 36(1), 113 – 120.
 12. **Jin, J.**, L. Zhang, C. Chen, Y. Bai, and Y. Xian, **2000**, Characteristics of atmospheric stability in low hill area, *Gansu Environmental Study and Monitoring (in Chinese)*, 13(2), 80 – 84.

Presentation

1. Polar stratospheric chlorine evolution, *3rd C-SPARC Annual Workshop*, University of Toronto, November 24 – 25, 2008.
2. ACE-FTS climatology dataset, *ACE workshop*, University of Waterloo, Waterloo, November 3 – 5, 2008.
3. ACE-FTS observations of polar zone loss and related chemical processes, *Department of Physics and Atmospheric Sciences, Dalhousie University*, Halifax, November 29, 2007. **(Seminar)**
4. Comparison of CMAM simulations of carbon monoxide (CO), Nitrous Oxygen (N₂O), and Methane (CH₄) with observations from Odin/SMR, ACE-FTS, and Aura/MLS, *2nd C-SPARC Annual Workshop*, University of Toronto, December 3 – 4, 2007.
5. Analyses of the Antarctic Ozone Loss and the Related Chemical Processes, Validation of the CO and N₂O from CMAM with ACE-FTS and SMR, *ACE workshop*, University of Waterloo, Waterloo, May 14 – 16, 2007.
6. Arctic O₃ loss and denitrification in the winter 2004/2005, *ACE workshop*, University of Waterloo, Waterloo, May 1 – 3, 2006.
7. Preliminary comparisons between MIPAS and ACE-FTS H₂O and CO measurements, *ACE workshop*, University of Waterloo, Waterloo, May 1 – 3, 2006.

8. Severe Arctic ozone reduction in the winter 2004/2005: ACE observations, *13th Annual MAM/GCC Workshop*, University of Toronto, Toronto, December, 12 – 13, 2005.
9. Analysis of the Arctic Ozone reduction in the Winter 2004-2005 using ACE and Odin Measurements, *MANTRA Data workshop*, University of Toronto, September 13, 2005.
10. Strato-mesospheric CO measurements from ACE-FTS and Odin/SMR and a comparison with CMAM, a middle atmosphere model, *European Geoscience Union, EGU05-A-05564, General Assembly 2005*, Vienna, Austria, April 24 – 29, 2005.
11. Use of GEM-Strato for Analysis of Stratospheric Data from Balloons and Satellites, *MANTRA Data workshop*, University of Toronto, February 8, 2005.

Other work

- **Jin, J. J.**, and L. Zhang, Inverse estimating of air pollutant source strengths using the variational algorithm, *9th National symposium on atmospheric environmental sciences: Advance of atmospheric environmental science and technology (Conference proceeding, in Chinese)*, Ulongmuqi, China, **2002**.
- *Environmental Assessment on the Project of the Highway from Shuping to Zhongchuan Airport (in Chinese)*, Lanzhou University, March, 2001 (Collaborated with Lei Zhang, Lei Li, Shihong Wang, Changhe Chen, *et al.*).