

# Janice L. Coen

## CURRICULUM VITAE

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### EDUCATION

- 1992 Ph.D., Dept. of Geophysical Sciences, The University of Chicago, Chicago, IL.  
Dissertation- A numerical study of the microburst downdraft and outflow: the interaction of precipitation microphysics and dynamics.
- 1988 M.S., Dept. of Geophysical Sciences, The University of Chicago, Chicago, IL
- 1986 B.S., Engineering Physics, magna cum laude, Grove City College, Grove City, PA

### PROFESSIONAL RECORD

- 2010- Project Scientist II, NCAR, Mesoscale and Microscale Meteorology Division
- 2004-2010 Project Scientist II, NCAR Joint appointment: Mesoscale and Microscale Meteorology Division and Research Applications Laboratory.
- 2004-2006 Co-leader of NCAR's Wildland Fire Initiative.
- 2002-2004 Project Scientist II, NCAR. Scientific lead of NCAR's Wildland Fire Initiative.  
Joint Appointment: Mesoscale and Microscale Meteorology Division, Research Applications Program, and The Institute for Multidisciplinary Earth Studies (TIMES)
- 2001-2002 Project Scientist I, NCAR. Joint appointment: Mesoscale and Microscale Meteorology and Research Applications Program.
- 1996-2001 Associate Scientist III, Mesoscale and Microscale Meteorology Division, NCAR
- 1994-1996 Associate Scientist II, Mesoscale and Microscale Meteorology Division, NCAR
- 1992-1994 Scientific Visitor, Mesoscale and Microscale Meteorology Division, NCAR
- 1990-1992 NASA Graduate Student Research Program Fellowship, Dept. of Geophysical Sciences, University of Chicago. Research on numerical modeling of microburst phenomena.
- 1986-1989 Teaching assistant (R. Srivastava and V. Ramanathan), research assistant (R. Srivastava), Dept. of Geophysical Sciences, University of Chicago.
- 1985 Student Research Participant, Argonne National Lab., Argonne, IL

### HONORS AND AWARDS

- 2005 Paper ' Infrared imagery of crown-fire dynamics during FROSTFIRE', selected as Research Application Program's nomination for NCAR Outstanding Publication Award.

1989-1992 NASA Graduate Student Researchers Program Fellowship  
1986-1989 McCormick Fellowship, The University of Chicago

### **PROFESSIONAL ACTIVITIES**

2010- Member of Editorial team, E-Journal of Severe Storms Meteorology  
2007- Associate Editor, International Journal of Wildland Fire  
2007-2009 Board of Directors, International Association of Wildland Fire  
2007 Program committee Member, 28th Intl. Conf. on Distributed Computing Systems (ICDCS 2008)  
2006-2007 Office of the Federal Coordinator for Meteorology (OFCM) National Wildland Fire Weather Needs Assessment Joint Action Group (JAG) member  
2004-2005 Steering Committee, The Institute for Multidisciplinary Earth Studies (TIMES)  
2004- Member, International Association of Wildland Fire  
2002-2006 National Computational Science Alliance Allocations Board / National Resource Allocations Committee  
1987- Member, American Meteorological Society

### **Teaching Experience**

2010-2011 Instructor, WRF-Fire segment of NCAR's Weather Research and Forecasting Model Tutorial  
2008 Guest lecturer in Steven Krueger's class at University of Utah on Boundary Layer Meteorology  
2007 Guest lecturer in Monique Rocca's class at Colorado State University on Fire Behavior  
1994-1997 Organizer and Instructor in the Clark-Hall Model Workshop, NCAR (2 weeks/yr)

### **Activities Enhancing Graduate/Undergraduate Student Education & Research Experience**

2011 Obtained funding through NCAR's Graduate Student Advanced Studies program to host graduate student Kara Yedinak, Washington State University, (3/1-5/31).  
2011 Hosted Colin Simpson, graduate student at University of Canterbury, Christchurch, New Zealand (6/5-7/4).  
2011 E-mail research advising of graduate student Mika Peace, University of Adelaide  
2011 Graduate student committee: Kara Yedinak (Ph. D. student, Washington State University), Daisuke Seto (M. S. student, San Jose State University)  
2010 Presented a Short Course on Short Course on Coupled Weather Fire Modeling. To students and faculty, Geography Department, San Diego State University, San Diego, CA. 8/26/10. [Invited]  
2010 Hosted Daisuke Seto, M.S. student San Jose State University, and advisor Prof. Craig Clements. (7/19-7/31).  
2009 Scientific mentor for Marques Cameron, student participant in UCAR's Significant Opportunities in Atmospheric Research and Science (SOARS) program (6/1-8/31).  
2007-2010 PhD. Committee, Minjeong Kim, Dept. of Mathematics, University of Colorado at Denver.  
2006-2009 PhD. Committee, Jonathan Beezley, Dept. of Mathematics, University of Colorado at Denver.

### **Field Program Participation**

2002-	Independent infrared observations of fire dynamics at Colorado wildland fires (City of Boulder Prescribed burns and CO wildfires)
1999	FROSTFIRE Wildland Fire Experiment, Fairbanks, AK
1998	WildFire Experiment (WiFE), NCAR
1994	Winter Storms Project (WISP), Boulder, CO
1985	Preliminary Regional Expt. for the Storm scale Operational and Research Meteorology Project, (Pre-STORM) Norman, OK

## FUNDING

- “An End-to-End Integrated Cyberinfrastructure for Wildfire Modeling, Prevention, and Monitoring. Altintas, I., J. Block, H.-W. Braun, L. D. Crawl, R. deCallafon, E. Frost, L. Smarr (University of California San Diego), J. Coen and C. Snyder (NCAR). Collaborative Research: SI2-SSI: WIFIRE: 1/1/12-12/31/14. Pending.
- “MRI-Consortium: Acquisition of a Supercomputer by the Front Range Computing Consortium”. NSF Major Research Instrumentation (MRI). Rich Loft (PI), Henry Tufo (PI) (NCAR/Univ. of Colorado at Boulder), J. Mandel (PI)(Univ. of Colorado at Boulder). Janice Coen (one of many NCAR co-PIs). Current, 8/1/2008-7/31/2012.
- “Collaborative Research: The Open Wildland Fire Modeling E-community: a virtual organization accelerating research, education, and fire management technology”. NSF Cyber-Enabled Discovery and Innovation (NCAR \$355k, 4 yrs). Jan Mandel (PI) (Univ. of Colorado at Denver), Janice Coen (PI), Chris Johnson (PI) and Claudio Silva (co-PI) (Univ. of Utah). Current, 11/08-10/12.
- “Extreme Fire Behavior State-of-the-Science Synthesis”. Joint Fire Science Program. Paul Werth (independent) (PI), Brian Potter (USDA Forest Service Pacific Northwest Fire Lab), Craig Clements (San Jose State University), Janice Coen (NCAR), Mark Finney (USDA Forest Service, Missoula Fire Lab), Scott Goodrick (Southeast Fire Lab), 7/1/09-10/1/10.
- “ITR: Collaborative Research: DDDAS: Data-dynamic Simulation for Disaster Management”. Agency/Program: NSF Information Technology Research (ITR). J. Mandel (PI) (CU Denver - Math), L. Franca (CU Denver - Math), A. Puhalski (CU Denver - Math), C. Douglas (PI) (Univ. of Kentucky - Computer Science), A. Vodacek (PI) (Rochester Institute of Technology), R. Kremens (RIT), J. Coen (PI) (NCAR), W. Zhao (PI) (Texas A&M Univ.). 9/13/03-8/31/07.
- “Collaborative Research: Acquisition of an IBM BlueGene/L Supercomputer”, NSF CNS Major Research Instrumentation (MRI). Rich Loft (PI), Henry Tufo (PI) (NCAR/Univ. of Colorado at Boulder), J. Coen (co-PI), W. Grabowski, S. Thomas (NCAR). 7/1/04-6/30/07.

## PUBLICATIONS - Refereed

- Clark, T. L., J. L. Coen, and D. Latham, 2004: Description of a Coupled Atmosphere-Fire Model. *Intl. J. Wildland Fire*. 13:49-63.
- Clark T. L., L. F. Radke, J. L. Coen, D. Middleton, 1999: Analysis of Small-Scale Convective Dynamics in a Crown Fire Using Infrared Video Camera Imagery. *Journal of Applied Meteorology*: Vol. 38, No. 10, pp. 1401-1420.
- Clark, T. L., M. A. Jenkins, J. Coen and David Packham, 1996: A Coupled Atmospheric-Fire Model: Convective Feedback on Fire Line Dynamics. *J. Appl. Meteor.*, 35, 875-901.
- Clark, T. L., M. A. Jenkins, J. Coen and David Packham, 1996: A Coupled Atmospheric-Fire Model: Convective Froude number and Dynamic Fingering. *Intl. Journal of Wildland Fire*. 6:177-190.
- Clark, T. L., T. Keller, J. Coen, P. Neillely, H. Hsu and W. D. Hall, 1997: Terrain-induced Turbulence over Lantau Island: 7 June 1994 Tropical Storm Russ Case Study. *J. Atmos. Sci.*, 54:1795-1814.

- Coen, J. L., 1992: A numerical study of the microburst downdraft and outflow: The interaction of precipitation microphysics and dynamics. Ph. D. dissertation, The University of Chicago. 151 pp.
- Coen, J. L., 2003: Wildfire Weather. Encyclopedia of Atmospheric Sciences, J. Holton, J. Pyle, and J. Curry, eds. Academic Press.
- Coen, J. L., 2005: Simulation of the Big Elk Fire using coupled atmosphere-fire modeling. Intl. J. Wildland Fire. 14(1):49-59.
- Coen, J., 2008: Deadly fingers of flame. Southern California Fire Journal, 1, 5-6.
- Coen, J., 2010: Dry lightning. Southern California Fire Journal, 1, 1-12.
- Coen, J.L., 2011. Some new basics of fire behavior. Fire Management Today. 71(1):37-42.
- Coen, J. L., 2013, "Wildfire Weather". Encyclopedia of Atmospheric Science, 2<sup>nd</sup> Ed. Gerald North, Fuqing Zhang, and John Pyle, eds. Submitted.
- Coen, J. L. and C. C. Douglas, 2010: Computational Modeling of Large Wildfires: A Roadmap. 9th International Symposium on Distributed Computing and Applications To Business, Engineering & Science (DCABES). August 10-12, Lingnan University, Hong Kong. Proceedings. 5 pp.
- Coen, J. L. and C. C. Douglas, 2011: Computational Modeling of Large Wildfires: Status and Challenges. Journal of Algorithms and Computational Technology. Submitted.
- Coen, J. L., S. Mahalingam, and J. W. Daily, 2004: Infrared imagery of crown-fire dynamics during FROSTFIRE. J. Appl. Meteor. 43:1241-1259.
- Jenkins, M. A., T. Clark, and J. Coen, 2001: Coupling Atmospheric and Fire Models. Chapter 7, in Forest Fires: Behavior and Ecological Effects. Academic Press. E. A. Johnson and Kiyoko Miyanishi, eds. 600 pp.
- Mandel, J., Beezley, J., Coen, J., Kim, M., 2009: Data assimilation for wildland fires: Ensemble Kalman Filters in coupled atmosphere-surface models. IEEE Control Systems Magazine, 29, 47-65.
- Mandel, J., L. S. Bennethum, J. D. Beezley, J. L. Coen, C. C. Douglas, M. Kim, A. Vodacek, 2008: A wildland fire model with data assimilation. Math. and Computers in Simulation. 78:584-606.
- Radke, L. R., T. L. Clark, J. L. Coen, C. Walther, R. N. Lockwood, P. J. Riggan, J. Brass, and R. Higgins, 2000: The WildFire Experiment (WiFE): Observations with airborne remote sensors. Canadian J. Remote Sensing. 26:406-417.
- Reinking, R. F., J. B. Snider, and J. L. Coen, 2000: Influences of storm-embedded orographic gravity waves on cloud liquid water and precipitation. J. Appl. Meteor. 39:733-759.
- Srivastava, R. C., and J. L. Coen, 1992: New explicit equations for the accurate calculation of the growth and evaporation of hydrometeors by the diffusion of water vapor. J. Atmos. Sci. 49, 1643-1651.
- Srivastava, R. C. and J. L. Coen, 1993: Reply (to Comments of M. Kulmala). J. Atmos. Sci., 50, 4104-4106.
- Wang, Z., Coen, J., Vodacek, A., 2008: Generation of synthetic infrared remote sensing scenes of wildland fire. Intl. J. of Wildland Fire, 18, 302-319.

#### **PUBLICATIONS – Not refereed**

- Beezley, J. D., S. Chakraborty, J. L. Coen, C. C. Douglas, J. Mandel, A. Vodacek, Z. Wang, 2008: Real-time data driven wildfire modeling. Intl. Conf. on Computer Science. Krakow. 8 pp.
- Bruintjes, R. "Phillips Laboratory Project: Icing Potential product Quarterly Report for December 1996." (with Bruintjes, Dec. 1996). [plus final report]
- Bruintjes, R. T., J. Coen, and T. L. Clark, 1997: Modelling experiments of clouds and precipitation in frontal systems over Korea. Joint U.S.-Korea Workshop on Storm- and Mesoscale Weather Analysis and Prediction. Oct. 7-10, Seoul, Korea. 139-145.
- Bruintjes, R. T., J. L. Coen, T. L. Clark, 1997: Report on Modelling Experiments of Clouds and Precipitation in Frontal Systems over Korea. Final report to Korean Advanced Institute of Science and Technology, 64 pp.
- Bruintjes, R. T., T. L. Clark, and J. L. Coen, 1996: Report on the Potential for Cloud Seeding in Northern Arizona. Report to University of Arizona and ADWR on Arizona Program (sent to ADWR).

- Clark, T. L., H. Hsu, T. Keller, J. Coen, P. Neillley and J. Tuttle. Prediction of Terrain Induced Turbulence in the Lee of Lantau Island in Hong Kong: Use of High Resolution Modelling. 2nd HIRLAM Workshop, 29-30 March 1995, Copenhagen, Denmark.
- Clark, T. L., H. Hsu, T. Keller, J. Coen and J. Tuttle. 20 May 1994 LANTEX Case Study: Numerical Simulations of Critical Level Flow Over Lantau Island and Comparison with Observations by 7th Conf on Mountain Meteor., July 17-21, 1995, Breckenridge, CO.
- Clark, T. L., J. L. Coen, L. Radke, M. Reeder, and D. Packham, 1998: Coupled Atmosphere-Fire Dynamics. 3rd Intl. Conf. on Forest Fire Research. 16-20 Nov., Coimbra, Portugal. pp. 67-82
- Clark, T. L., J. L. Coen, and L. F. Radke, 2000: The collection and analysis of infrared observations of fire-atmosphere dynamics. Preprints 3rd Symp. Fire and Forest Meteor, Jan. 9-12, 2000, Long Beach, California, Amer. Meteor Soc. 27-30.
- Clark, T. L., W. D. Hall, J. L. Coen, 1996: Source code documentation for the Clark-Hall Cloud-scale model: Code version G3CH01. NCAR Tech. Note. NCAR/TN-426+STR. 174 pp.
- Clark, T.L., J. Coen, M.A. Jenkins and D.R. Packham, 1996: Coupled Fire-Atmosphere Modelling. Proceedings of the 13th Conf on Fire and Forest Meteorology, Oct 27-31 1996, Lorne, Australia.
- Coen, J. L., 1990: A numerical simulation of the microburst phenomenon: Comparison of a discrete and a parameterized microphysical representation. Preprints, Conf. on Cloud Physics, Amer. Meteor. Soc., Jun. 23-27. 589-595.
- Coen, J. L., 1992: A numerical study of the microburst downdraft and outflow: The interaction of precipitation microphysics and dynamics. Intl. Commiss. on Clouds and Precip./Intl. Assn. of Meteor. and Atmos. Phys., 11th Intl. Conf. on Clouds and Precipitation, Montreal. 688-691.
- Coen, J. L., 1993: The effect of precipitation characteristics on microburst and behavior. Preprints, 17th Conf. on Severe Local Storms, Oct. 4-8, St. Louis. 660-663.
- Coen, J. L., 1996: Initial Experiments in Modeling Clouds and Precipitation in Frontal Systems over Korea. Report to Korean Advanced Institute of Science and Technology, 25 pp.
- Coen, J. L., 2001: Wildfire Research at NCAR: Wildfire simulations, observations of fire dynamics, and applications for hazard management. 3rd Intl. Conf. Geospatial Information in Agriculture and Forestry. Denver, November 5-7. 4 pp.
- Coen, J. L., 2003: Book Review of "Burning Questions: America's fight with Nature's Fire, by David Carle". The Environment. 45:36.
- Coen, J. L., 2003: Infrared imagery applied for insights into wildland fire dynamics. Preprints, 5th Symp. Fire & Forest Meteorology/2nd Intl. Fire Ecology and Fire Management Congress, Orlando, FL, American Meteorological Society, CD-ROM, J2.9.
- Coen, J. L., 2003: Simulation of wildfire incidents using coupled atmosphere-fire modeling. Preprints, 5th Symp. Fire & Forest Meteorology/2nd Intl. Fire Ecology and Fire Management Congress, Orlando, FL, American Meteorological Society, CD-ROM, J2.4.
- Coen, J. L., 2005: Applications of coupled atmosphere-fire modeling: Prototype demonstration of real-time modeling of fire behavior. Amer. Meteor. Soc. Joint 6th Symp. on Fire & Forest Meteor./Interior West Fire Council Conf. 25-27 October. Canmore, AB, Canada. CD-ROM, Paper 8.1
- Coen, J. L., 2006: Multiple fire interactions. Preprints 5th Intl. Conf. on Forest Fire Research. Coimbra, Portugal. Nov. 27-30th. 12 pp.
- Coen, J. L., R. T. Bruintjes, and T. L. Clark, 1997: Interim Progress Report on Experiments in Modeling Clouds and Precipitation in Frontal Systems over Korea. Report to Korean Advanced Institute of Science and Technology. 36 pp.
- Coen, J. L., R.T. Bruintjes, R. F. Reinking, and G. Thompson, 1998: Summary of the Arizona Winter Storm Case: 5-6 March 1995. WMO Report 29, 37-44.
- Coen, J. L., R.T. Bruintjes, W.D. Hall, T.L. Clark, and R. F. Reinking, 1996: Numerical simulation of wintertime precipitation development in gravity wave and upslope flow in Arizona's Verde valley. 12th Intl. Conf. on Clouds and Precip. 19-23 August 1996, Zurich, 778-781.

- Coen, J. L., T. L. Clark, and D. Latham, 2001: Coupled Atmosphere-Fire model simulations in various fuel types in complex terrain. 4th. Symp. Fire and Forest Meteor. Amer. Meteor. Soc., Reno, Nov. 13-15. 39-42.
- Coen, J. L., T. L. Clark, and W. D. Hall, 1998: Effect of atmospheric winds and shear on fire behavior: Experiments using a coupled atmosphere-fire model. Preprints 2nd Symposium on Fire and Forest Meteorology, Jan. 11-16, Phoenix, Arizona, Amer. Meteor. Soc. 81-86.
- Coen, J. L., T. L. Clark, and W. D. Hall, 1998: Simulations of the effect of terrain on fire behavior: Experiments using a coupled atmosphere-fire model. Preprints 2nd Symposium on Fire and Forest Meteorology, Jan. 11-16, Phoenix, Arizona, Amer. Meteor. Soc. 87-90.
- Coen, J. L. and R. T. Brientjes, 2000: Summer convective precipitation during monsoon flow against Mexico's Sierra Madres. Intl. Conf. on Clouds and Precipitation. Aug. 14-18. Intl. Commission on Clouds and Precipitation. Reno. 383-386.
- Coen, J. L. and R. T. Brientjes, 2001: Summer convective precipitation during monsoon flow against Mexico's Sierra Madres: effects of hygroscopic seeding. Preprints 15th Conf. on Planned and Inadvertent Weather Modification. Amer. Meteor. Soc. Albuquerque, January. 91-94.
- Coen, J. L. and T. L. Clark, 2000: Coupled atmosphere-fire model dynamics of a fireline crossing a hill. Preprints 3rd Symp. Fire and Forest Meteor, Jan. 9-12, 2000, Long Beach, California, Amer. Meteor Soc. 7-10.
- Coen, J. L., and T. L. Clark, 2001: Coupled Atmosphere-Fire model simulations in various fuel types in complex terrain. 4th. Symp. Fire and Forest Meteor. Amer. Meteor. Soc., Reno, Nov. 13-15. 4 pp.
- Coen, J. L., J. Daily, S. Mahalingam, 2010: Application of infrared imagery for understanding wildfire dynamics. Inframation 2010. Proceedings. 15pp.
- Coen, J. L., J. D. Beezley, L. S. Bennethum, C. C. Douglas, M. Kim, R. Kremens, J. Mandel, G. Qin, and A. Vodacek, 2007: A wildland fire dynamic data-driven application system. Preprints 11th Symp. on Integrated Observing and Assimilation Systems, Amer. Meteor. Soc., Jan 14-17, San Antonio. CD-ROM Paper 3.12.
- Coen, J. L. and P. J. Riggan, 2010: Landscape-Scale Wildland Fire Modeling: Research & Applications. AFAC and Bushfire CRC Conference. Darwin, Sept.8-10. Proceedings. 11 pp.
- Coen, J. L. and P. J. Riggan, 2010: A landscape-scale wildland fire study using a coupled weather-wildland fire model and airborne remote sensing. Proceedings of 3rd Fire Behavior and Fuels Conference, October 25-29, 2010, Spokane, Washington, USA. Published by the International Association of Wildland Fire, Birmingham, Alabama, USA. CD-ROM. 12 pp.
- Daily, J. W., S. Mahalingam, J. Milford, Y. Khunatorn, T. L. Clark, J. Coen, L. Radke, 1999: Visible and IR Imaging and UV-Visible Spectral Analysis of the Frostfire Controlled Burn near Fairbanks, Alaska, July 1999. Preprints, Spring Meeting Western States Section/The Combustion Institute. March 13-14. Golden, CO. 12 pp.
- Douglas, C. C., J. D. Beezley, J. Coen, D. Li, W. Li, A. K. Mandel, J. Mandel, Guan Qin, A. Vodacek, 2006: Demonstrating the validity of a wildfire DDDAS. Preprints 6th Intl. Conf. on Computer Science. May 28-31, Reading, UK, 8 pp.
- Douglas, C. C., J. D. Beezley, J. Coen, R. E. Ewing, Y. Efendiev, G. Haase, M. Iskandarani, M. Kritz, R. A. Lodder, J. Mandel, G. Qin, A. Vodacek, 2006: DDDAS Approaches to wildland fire modeling and contaminant tracking. Proc. Winter Simulation Conf., Dec. 3-6, Monterey. 8 pp.
- Hacker, J., J. Coen, and J. Michalakes, A Mesoscale Nature Run for Predictability, Turbulence, and Parameterization Studies. 2006. WRF User's workshop. P7.2. 2 pp.
- Hall, W.D., R.T. Brientjes, J. Coen and T.L. Clark, 1996: A case study of wintertime orographic precipitation in the northern mountains of Arizona. 12th Intl. Conf. on Clouds and Precip. 19-23 Aug. 1996, Zurich, 717-720.
- Heymsfield, A. J. and J. L. Coen, 1993: Parameterization of cirrus microphysical and radiative properties in larger-scale models. Proc. 3rd. Atmospheric Radiation Measurement (ARM) Science Team Meeting. Mar. 1-4, Norman. pp. 221.

- Hsu, H., T. Clark, T. Keller and J. Coen. Numerical Simulations of Flow over Lantau Island. 7th Conf on Mountain Meteor., July 17-21, 1995, Breckenridge, CO.
- Jenkins, M. A., T. L. Clark, J. L. Coen, and D. R. Packham, 1996: Coupled atmospheric-fire modeling: Role of the Convective Froude number and dynamic fingering at the fire line. 12th Intl. Conf. on Clouds and Precip. 19-23 August 1996, Zurich, Switzerland. 686-689.
- Keller, T., T. Clark, H. Hsu, J. Coen. Simulations of mountain-induced turbulence to the lee of Lantau Island During the Passage of Tropical Storm Russ. 7th Conf on Mountain Meteor., July 17-21, 1995, Breckenridge, CO.
- Mandel, J., J. D. Beezley, S. Chakraborty, J. L. Coen, C.C. Douglas, and A. Vodacek: 2008: Towards a Real-time Data Driven Wildland Fire Model. 22nd IEEE Intl. Parallel and Distributed Processing Symposium. Apr 14-18, Miami. 5 pp.
- Mandel, J., Chen, M., Coen, J.L, Douglas, C.C., Franca, L.P., Johns, C., Kremens, R., Puhalskii, A., Vodacek, A., Zhao, W., 2004: Dynamic data driven wildfire modeling, F. Darema (ed.), Dynamic Data Driven Applications Systems, Kluwer Academic Publishers. Submitted.
- Mandel, J. L. S. Bennethum, M. Chen, L. P. Franca, C. Johns, J. L. Coen, C. C. Douglas, M. Kim, A. V. Knyazev, R. Kremens, V. Kulkarni, G. Qin, A. Vodacek, J. Wu, W. Zhao, A. Zornes, 2005: Towards a dynamic data driven application for wildfire simulation. Lecture Notes in Computer Science. V.S. Sunderam, G. D. van Albada, P. M. A. Sloot, eds. Springer-Verlag, 3515:632-639. ISBN 3-540-26043-9. Computational Science - ICCS 2005: 5th Intl. Conference. Atlanta, GA, USA, May 22-25, Proceedings, Part II.
- Mandel, J., M. Chen, L. P. Franca, C. Johns, A. Puhalski, J. L. Coen, C. C. Douglas, R. Kremens, A. Vodacek, W. Zhao, 2004: A note on dynamic data driven wildfire modeling. 4th Intl. Conf. on Computer Science - ICCS 2004, Krakow, Poland, Jun 6-9. In Volume 3038 of Lecture Notes in Computer Science. M. Bubak, G. D. van Albada, P. M. A. Sloot, J. J. Dongarra, eds. Springer Publishers. 725-731. ISBN: 3-540-22116-6.
- Patton, E. G. and J. L. Coen, 2004: WRF-Fire: A coupled atmosphere-fire module for WRF. Preprints Joint MM5/Weather Research and Forecasting Model Users' Workshop. June 22-25. Boulder. 221-223.
- Radke, L. R., T. L. Clark, J. L. Coen, C. Walther, P.J. Riggan, J. Brass, and R. Higgins, 1999: Airborne remote sensors look at wildfires. Preprints 4th Intl. Airborne Remote Sensing Conf. and Exhibition/21st Canadian Symp. on Remote Sensing, Ottawa, Canada, 21-24 June 1999. II:885-890.
- Reinking, R. F., J. L. Coen, J. B. Snider, R. T. Brientjes, T. L. Clark, and W. D. Hall, 1997: Storm-embedded precipitating orographic gravity waves-Observations and Simulations at Peak Development. Proc. WMO/Workshop on Measurements of Cloud Properties for Forecasts of Weather and Climate. Mexico City. 23-27 June. 404-410.
- Reinking, R. F. and J.B. Snider, R. T. Brientjes, J. Coen, T. Clark and W. D. Hall, 1996: Liquid water in storm-embedded orographic gravity waves. 12th Intl. Conf. on Clouds and Precip. 19-23 August 1996, Zurich, Switzerland. 554-557.
- Reinking, R., J. Snider, J. Coen, R. Brientjes, T. Clark, and W. Hall, 1996: Storm-Embedded Precipitating Orographic Gravity Waves. Poster presentation for review of NOAA.
- Rife, D. L., T. T. Warner, Y. Liu, and J. Coen, 2003: New methods for providing high resolution weather information to wildfire managers. Preprints, 5th Symp. Fire & Forest Meteorology/2nd Intl. Fire Ecology and Fire Management Congress, Orlando, FL, American Meteorological Society, CD-ROM, 2.8.
- Riggan, P.J., L. G. Wolden, R. G. Tissell, J. Coen, 2010: Remote sensing fire and fuels in Southern California. Proceedings of 3rd Fire Behavior and Fuels Conference, October 25-29, 2010, Spokane, Washington, USA. Published by the International Association of Wildland Fire, Birmingham, Alabama, USA. CD-ROM. 14 pp.
- Second Meteorological Report for the Hong Kong Project, Chapter, "Numerical modeling of the microscale dynamics of TIWT over CLK". (contributions)

- Srivastava, R. C., and J. L. Coen, 1992: New explicit equations for the accurate calculation of the growth and evaporation of hydrometeors by the diffusion of water vapor. Intl. Commiss. on Clouds and Precip./Intl. Assn. of Meteor. and Atmos. Phys., 11th Intl. Conf. on Clouds and Precipitation, Montreal. 89-92.
- Yedinak, K. M., B. Lamb, and J. L. Coen, 2010: Sensitivity analyses and application of WRF-Fire. Proceedings of 3rd Fire Behavior and Fuels Conference, October 25-29, 2010, Spokane, Washington, USA. Published by the International Association of Wildland Fire, Birmingham, Alabama, USA. 11 pp.