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Scientific Peer-reviewed Publications Scientific Non Peer-reviewed Publications

Published date begin: 2008-05-15 to published date end:
2009-05-15

Results: 168 Publication(s) were found (most recent, first)

Hu, A., G. A. Meehl, 2009: Effect of the Atlantic hurricanes on the oceanic meridional overturning circulation and heat transport. *Geophys. Res. Lett.*, **36**, doi: [10.1029/2008GL036680](https://doi.org/10.1029/2008GL036680), L03702

Randel, W. J., K. Shine, J. Austin, J. Barnett, C. Claud, N. P. Gillett, P. Keckhut, U. Langematz, R. Lin, C. Long, C. Mears, A. Miller, J. Nash, D. J. Seidel, D. W. Thompson, F. Wu, S. Yoden, 2009: An update of observed stratospheric temperature trends. *J. Geophys. Res.*, **114**, doi: [10.1029/2008JD010421](https://doi.org/10.1029/2008JD010421), D02107

Geng, F., Q. Zhang, X. Tie, M. Huang, X. Ma, Z. Deng, Q. Yu, J. Quan, C. Zhao, 2009: Aircraft measurements of O₃, NO_x, CO, VOCs, and SO₂ in the Yangtze River Delta region. *Atmos. Environ.*, **43**, doi: [10.1016/j.atmosenv.2008.10.021](https://doi.org/10.1016/j.atmosenv.2008.10.021), 584-593

Wedi, N. P., P. K. Smolarkiewicz, 2009: A framework for testing global non-hydrostatic models. *Quart. J. Roy. Meteor. Soc.*, **135**, doi: [10.1002/qj.377](https://doi.org/10.1002/qj.377), 469-484

Smolarkiewicz, P. K., J. Szmelter, 2009: Iterated upwind schemes for gas dynamics. *J. Comput. Phys.*, **228**, doi: [10.1016/j.jcp.2008.08.008](https://doi.org/10.1016/j.jcp.2008.08.008), 33-54

Trenberth, K. E., L. Smith, 2008: Atmospheric energy budgets in the Japanese Reanalysis: Evaluation and variability. *J. Meteor. Soc. Japan*, **86**, doi: [10.2151/jmsj.86.579](https://doi.org/10.2151/jmsj.86.579), 579-592

Pfister, G., L. Emmons, P. G. Hess, J. Lamarque, A. M. Thompson, J. E. Yorks, 2008: Analysis of the Summer 2004 ozone budget over the United States using Intercontinental Transport Experiment Ozonesonde Network Study (IONS) observations and Model of Ozone and Related Tracers (MOZART-4) simulations. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2008JD010190](https://doi.org/10.1029/2008JD010190), D23306

Tian, X., Z. Xie, A. Dai, 2008: An ensemble-based explicit four-dimensional variational assimilation method. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2008JD010358](https://doi.org/10.1029/2008JD010358), D21124

Rasch, P. J., S. Tilmes, R. P. Turco, A. Robock, L. Oman, C. J. Chen, G. L. Stenchikov, R. R. Garcia, 2008: An overview of geoengineering of climate using stratospheric sulphate aerosols. *Phil. Trans. R. Soc. A*, 4007-4038

Latham, J., P. J. Rasch, C. J. Chen, L. Kettles, A. Gadian, A. Gettelman, H. Morrison, K. Bower, T. Chouarton, 2008: Global temperature stabilization via controlled albedo enhancement of

Dangerous Climate Chg., 366, 3969-3988

Field, P. R., A. Gettelman, R. B. Neale, R. Wood, P. J. Rasch, H. Morrison, 2008: Midlatitude cyclone compositing to constrain climate model behavior using satellite observations. *J. Climate*, **21**, doi: [10.1175/2008JCLI2235.1](https://doi.org/10.1175/2008JCLI2235.1), 5887-5903

Pfister, G., L. Emmons, C. Wiedinmyer, 2008: Impacts of the Fall 2007 California Wildfires on Surface Ozone: Integrating Local Observations with Global Model Simulations. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL034747](https://doi.org/10.1029/2008GL034747), L19814

Lee, J., I. Fung, D. J. DePaolo, B. L. Otto-Bliesner, 2008: Water isotopes during the Last Glacial Maximum: New general circulation model calculations. *J. Geophys. Res.*, **113**, doi: [10.1029/2008JD009859](https://doi.org/10.1029/2008JD009859), D19109

Lamarque, J., 2008: Estimating the potential for methane clathrate instability in the 1%-CO₂ IPCC AR-4 simulations. *Geophys. Res. Lett.*, **35**, L19806

Xiao, Q., Y. Kuo, Z. Ma, W. Huang, X. Huang, X. Zhang, D. M. Barker, J. Michalakes, 2008: Development of the WRF adjoint modeling system and its application to the investigation of the May 2004 McMurdo Antarctica severe wind event. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2008MWR2235.1](https://doi.org/10.1175/2008MWR2235.1), 3696-3713

Prusa, J. M., P. K. Smolarkiewicz, A. A. Wyszogrodzki, 2008: EULAG, a computational model for multiscale flows. *Comput. Fluids*, **37**, doi: [10.1016/j.compfluid.2007.12.001](https://doi.org/10.1016/j.compfluid.2007.12.001), 1193-1207

Gao, Z., D. H. Lenschow, R. Horton, M. Zhou, J. Wen, 2008: Comparison of two soil temperature algorithms for a bare ground site on the Loess plateau in China. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2008JD010285](https://doi.org/10.1029/2008JD010285), 2008, D18105

Trenberth, K. E., J. Fasullo, 2008: Energy budgets of Atlantic hurricanes and changes from 1970. *Geochem. Geophys. Geosys.*, **9**, doi: [10.1029/2007GC001847](https://doi.org/10.1029/2007GC001847), Q09V08

Lauritzen, P. H., E. Kaas, B. Machenhauer, K. Lindberg, 2008: A mass-conservative version of the semi-implicit semi-Lagrangian HIRLAM. *Mon. Wea. Rev.*, **134**, doi: [10.1002/qj.307](https://doi.org/10.1002/qj.307), 1583-1595

Cantrell, C., 2008: Technical Note: Review of methods for linear least-squares fitting of data and application to atmospheric chemistry problems. *Atmos. Chem. Phys.*, **8**, 5477-5487

Fang, X., C. E. Randall, D. Lummerzheim, S. C. Solomon, M. J. Mills, D. R. Marsh, C. H. Jackman, W. Wang, G. Lu, 2008: Electron impact ionization: A new parameterization for 100 eV to 1 MeV electrons. *J. Geophys. Res.*, **113**, doi: [10.1029/2008JA013384](https://doi.org/10.1029/2008JA013384), A09311

Smith, A. K., D. R. Marsh, J. M. Russell III, M. G. Mlynczak, F. J. Martin-Torres, E. Kyrola, 2008: Satellite observations of high nighttime ozone at the equatorial mesopause. *J. Geophys. Res.*, **113**, doi: [10.1029/2008JD010066](https://doi.org/10.1029/2008JD010066), D17312

Tang, Y., P. Lee, M. Tsidulko, H. Huang, J. T. McQueen, G. J. Dimego, L. Emmons, R. B. Pierce, A. M. Thompson, H. M. Lin, D. Kang, D. Tong, S. Yu, R. Mathur, J. E. Pleim, T. L. Otte, G. Pouliot, J. O. Young, K. L. Schere, P. M. Davidson, I. Stajner, 2008: The impact of chemical lateral boundary conditions on CMAQ predictions of tropospheric ozone over the continental

United States. *Environ. Fluid Mech.*, doi: [10.1007/s10652-008-9092-5](https://doi.org/10.1007/s10652-008-9092-5)

Judge, P. G., 2008: An explanation of the Solar transition region. *Astr. Astrophys. Lett.*, **683**, L87-L90

Rickenbach, T., P. A. Kucera, M. Gentry, A. Carey, A. Lare, R. -. Lin, B. Demoz, O. Starr, 2008: The relationship between anvil clouds and convective cells: A case study in South Florida during CRYSTAL-FACE. *Mon. Wea. Rev.*, doi: [10.1175/2008MWR2441.1](https://doi.org/10.1175/2008MWR2441.1)

Fried, A., J. R. Olson, J. G. Walega, J. H. Crawford, G. Chen, P. Weibring, D. Richter, C. Roller, F. Tittel, M. Porter, H. Fuelberg, J. Halland, T. H. Bertram, R. C. Cohen, K. Pickering, B. G. Heikes, J. A. Snow, H. Shen, W. H. Brune, X. Ren, D. R. Blake, N. Blake, G. Sachse, G. S. Diskin, J. Podolske, S. A. Vay, R. E. Shetter, S. Hall, B. E. Anderson, L. Thornhill, A. D. Clarke, C. S. McNaughton, H. B. Singh, M. A. Avery, G. Huey, S. Kim, D. B. Millet, 2008: Role of convection in redistributing formaldehyde to the upper troposphere over North America and the North Atlantic during the summer 2004 INTEX campaign. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009760](https://doi.org/10.1029/2007JD009760), D17306

Bardeen, C. G., O. B. Toon, E. J. Jensen, D. R. Marsh, V. L. Harvey, 2008: Numerical simulations of the three-dimensional distribution of meteoric dust in the mesosphere and upper stratosphere. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009515](https://doi.org/10.1029/2007JD009515), D17202

Gibson, S. E., Y. Fan, 2008: Partially ejected flux ropes: Implications for interplanetary coronal mass ejections. *J. Geophys. Res.*, **113**, A09103

Solana, D. C., L. R. Bellot Rubio, J. Borrero, J. C. del Toro Iniesta, 2008: Temporal evolution of the Evershed flow in sunspots. II. Physical properties and nature of Evershed clouds. *Astr. Astrophys.*, **477**, doi: [10.1051/0004-6361:20077820](https://doi.org/10.1051/0004-6361:20077820), 273-283

Remsberg, E. E., B. T. Marshall, M. Garcia-Comas, D. Krueger, G. S. Lingenfelter, J. Martin-Torres, M. G. Mlynczak, J. M. Russell III, A. K. Smith, Y. Zhao, C. Brown, L. L. Gordley, M. J. Lopez-Gonzalez, M. Lopez-Puertas, C. Y. She, M. J. Taylor, R. E. Thompson, 2008: Assessment of the quality of the Version 1.07 temperature-versus-pressure profiles of the middle atmosphere from TIMED/SABER. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2008JD010013](https://doi.org/10.1029/2008JD010013), D17101

Wang, W., J. Lei, A. Burns, M. Wiltberger, A. D. Richmond, S. C. Solomon, T. L. Killeen, E. R. Talaat, D. N. Anderson, 2008: Ionospheric electric field variations during a geomagnetic storm simulated by a coupled magnetosphere ionosphere thermosphere (CMIT) model. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL035155](https://doi.org/10.1029/2008GL035155), L18105

Luan, X., W. Wang, A. Burns, S. C. Solomon, J. Lei, 2008: Midlatitude nighttime enhancement in F region electron density from global COSMIC measurements under solar minimum winter condition. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2008JA013063](https://doi.org/10.1029/2008JA013063), A09319

Tang, W., C. Zhao, F. Geng, L. Peng, G. Zhou, W. Gao, J. Xu, X. Tie, 2008: Study of ozone "weekend effect" in Shanghai. *Sci. in China Series D: Earth Sci.*, **51**, doi: [10.1007/s11430-008-0088-2](https://doi.org/10.1007/s11430-008-0088-2), 1354-1360

- Yi, C., D. E. Anderson, A. A. Turnipseed, S. P. Burns, J. P. Sparks, D. I. Stannard, R. K. Monson, 2008: The contribution of advective fluxes to net ecosystem exchange in a high-elevation, subalpine forest. *Ecological Applications*, **18**, 1379-1390
- Nevison, C. D., N. Mahowald, S. C. Doney, I. D. Lima, G. R. van der Werf, J. T. Randerson, D. F. Baker, P. Kasibhatla, G. A. McKinley, 2008: Contribution of ocean, fossil fuel, land biosphere, and biomass burning carbon fluxes to seasonal and interannual variability in atmospheric CO₂. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JG000408](https://doi.org/10.1029/2007JG000408), G01010
- Luo, D., N. Mahowald, T. Bond, P. Y. Chuang, P. Artaxo, R. Siefert, Y. Chen, J. Schauer, 2008: Combustion iron distribution and deposition. *Global Biogeochemical Cycles*, **22**, doi: [10.1029/2007GB002964](https://doi.org/10.1029/2007GB002964), GB1012
- Nevison, C. D., N. Mahowald, S. C. Doney, I. D. Lima, N. Cassar, 2008: Impact of variable air-sea O₂ and CO₂ fluxes on atmospheric potential oxygen (APO) and land-ocean carbon sink partitioning. *Biogeosciences*, **5**, 875-889
- Neff, J. C., A. P. Ballantyne, G. L. Farmer, N. Mahowald, J. L. Conroy, C. C. Landry, J. T. Overpeck, T. H. Painter, C. R. Lawrence, R. L. Reynolds, 2008: Increasing eolian dust deposition in the western United States linked to human activity. *Nature Geosci.*, **3**, 189-195
- Winckler, G., R. F. Anderson, M. Q. Fleisher, D. McGee, N. Mahowald, 2008: Half a million years of coherent dust flux variations in the tropical Pacific and Antarctica. *Geochimica et Cosmochimica Acta*, **72**, A1026-A1026
- Evan, A. T., A. K. Heidinger, R. Bennartz, V. Bennington, N. Mahowald, H. Corrada-Bravo, C. S. Velden, G. Myhre, J. P. Kossin, 2008: Ocean temperature forcing by aerosols across the Atlantic tropical cyclone development region. *Geochem. Geophys. Geosys.*, **9**, doi: [10.1029/2007GC001774](https://doi.org/10.1029/2007GC001774), Q05V04
- Wong, S., A. E. Dressler, N. Mahowald, P. R. Colarco, A. da Silva, 2008: Long-term variability in Saharan dust transport and its link to North Atlantic sea surface temperature. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2007GL032297](https://doi.org/10.1029/2007GL032297), L07812
- Wagener, T., C. Guieru, R. Losno, S. Bonnet, N. Mahowald, 2008: Revisiting atmospheric dust export to the Southern Hemisphere ocean: Biogeochemical implications. *Global Biogeochemical Cycles*, **22**, doi: [10.1029/2007GB002984](https://doi.org/10.1029/2007GB002984), GB2006
- Winckler, G., R. F. Anderson, M. Q. Fleisher, D. McGee, N. Mahowald, 2008: Covariant Glacial-Interglacial Dust Fluxes in the Equatorial Pacific and Antarctica. *Science*, **320**, doi: [10.1126/science.1150595](https://doi.org/10.1126/science.1150595), 93-96
- Qian, L., S. C. Solomon, R. G. Roble, B. R. Bowman, F. A. Marcos, 2008: Thermospheric neutral density response to solar forcing. *Adv. Space Res.*, **42**, doi: [10.1016/j.asr.2007.10.019](https://doi.org/10.1016/j.asr.2007.10.019), 926-932
- de Wijn, A., B. W. Lites, T. E. Berger, Z. A. Frank, T. D. Tarbell, R. Ishikawa, 2008: Hinode observations of magnetic elements in internetwork areas. *Astrophys. J.*, **684**, doi: [10.1086/590237](https://doi.org/10.1086/590237), 1469-1476
- Sun, J., Y. Zhang, 2008: Analysis and prediction of a squall line observed during IHOP using multiple WSR-88D observations.

Mon. Wea. Rev., **136**, doi: [10.1175/2007MWR2205.1](https://doi.org/10.1175/2007MWR2205.1), 2364-2388

Gritsun, A., G. W. Branstator, A. Majda, 2008: Climate response of linear and quadratic functionals using the Fluctuation-Dissipation Theorem. *J. Atmos. Sci.*, **65**, doi: [10.1175/2007JAS2496.1](https://doi.org/10.1175/2007JAS2496.1), 2824-2841

Liu, C., Q. Xiao, B. Wang, 2008: An ensemble-based four-dimensional variational data assimilation scheme: Part I: Technical formulation and preliminary test. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2008MWR2312.1](https://doi.org/10.1175/2008MWR2312.1), 3363-3373

Tamagawa, K., M. Kitsuregawa, E. Ikoma, T. Ohta, S. Williams, T. Koike, 2008: An Advanced Quality Control System for the CEOP/CAMP In-Situ Data Management. *IEEE Systems Journal*, **2(3)**, doi: [10.1109/JSYST.2008.927710](https://doi.org/10.1109/JSYST.2008.927710), 406-413

Hurrell, J., 2008: Decadal climate prediction: challenges and opportunities. *J. Phys.: Conf. Series*, **125**, doi: [10.1088/1742-6596/125/1/012018](https://doi.org/10.1088/1742-6596/125/1/012018)

Burkhardt, U., B. Kaercher, M. Ponater, K. Gierens, A. Gettelman, 2008: Contrail cirrus supporting areas in model and observations. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL034056](https://doi.org/10.1029/2008GL034056), L16808

Deng, X., X. Tie, X. Zhou, D. Wu, L. Zhong, H. Tan, F. Li, X. Huang, X. Bi, T. Deng, 2008: Effects of Southeast Asia biomass burning on aerosols and ozone concentrations over the Pearl River Delta (PRD) region. *Atmos. Environ.*, **42**, doi: [10.1016/j.atmosenv.2008.08.013](https://doi.org/10.1016/j.atmosenv.2008.08.013), 8493-8501

Skamarock, W. C., 2008: A linear analysis of the NCAR CCSM finite-volume dynamical core. *Mon. Wea. Rev.*, **136**, doi: [10.1175/MWR2217.1](https://doi.org/10.1175/MWR2217.1), 2112-2119

Bordoni, S., T. Schneider, 2008: Monsoons as eddy mediated regime transitions of the tropical overturning circulation. *Nature Geosci.*, **1**, doi: [10.1038/ngeo248](https://doi.org/10.1038/ngeo248), 515-519

Swenson, S., D. Chambers, J. Wahr, 2008: Estimating geocenter variations from a combination of GRACE and ocean model output. *J. Geophys. Res. - Biogeo.*, **113**, doi: [10.1029/2007JB005338](https://doi.org/10.1029/2007JB005338), B08410

Laakso, L., H. Laakso, P. P. Aalto, P. Keronen, T. Petaja, T. Nieminen, T. Pohja, E. Siivola, M. Kulmala, N. Kgabi, M. Molefe, D. Mabaso, D. Phalatse, K. Pienaar, V. M. Kerminen, 2008: Basic characteristics of atmospheric particles, trace gases and meteorology in a relatively clean Southern African Savannah environment. *Atmos. Chem. Phys.*, **8**, 4823-4839

Taylor, M. A., J. Edwards, A. St-Cyr, 2008: Petascale atmospheric models for the Community Climate System Model: New developments and evaluation of scalable dynamical cores. *J. Phys.: Conf. Series*, **125**, doi: [10.1088/1742-6596/125/1/012023](https://doi.org/10.1088/1742-6596/125/1/012023), 012023

Deierling, W., W. A. Petersen, J. Latham, S. Ellis, H. J. Christian, 2008: The relationship between lightning activity and ice fluxes in thunderstorms. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009700](https://doi.org/10.1029/2007JD009700), 2008, D15210

Carbone, R. E., J. D. Tuttle, 2008: Rainfall occurrence in the U.S. warm season: The diurnal cycle. *J. Climate*, **21**, doi: [10.1175/2008JCLI12275.1](https://doi.org/10.1175/2008JCLI12275.1), 4132-4146

[10.1175/2008JTECHA1105.1](https://doi.org/10.1175/2008JTECHA1105.1)

Newman, A. J., P. A. Kucera, L. F. Bliven, 2008: Snowflake Size Spectra Retrieved From a UHF Vertical Profiler. *J. Atmos. Ocean. Technol.*, doi: [10.1175/2008JTECHA1105.1](https://doi.org/10.1175/2008JTECHA1105.1)

Fried, A., G. Diskin, P. Weibring, D. Richter, J. G. Walega, G. Sachse, T. Slate, M. Rana, J. Podolske, 2008: Tunable Infrared Laser Instruments for Airborne Atmospheric Studies. *Applied Physics B: Lasers and Optics*, 92, doi: [10.1007/s00340-008-3136-x](https://doi.org/10.1007/s00340-008-3136-x), 409-417

Mueller-Wodarg, I. C., D. F. Strobel, J. I. Moses, J. H. Waite, J. Crovisier, R. V. Yelle, S. W. Bougher, R. G. Roble, 2008: Neutral atmospheres. *Space Science Reviews*, doi: [10.1007/s11214-008-9404-6](https://doi.org/10.1007/s11214-008-9404-6)

McIntosh, S. W., B. De Pontieu, S. Tomczyk, 2008: A coherence-based approach for tracking waves in the solar corona. *arXiv:astro-ph*, **0808**, 2978

Morrison, H., A. Gettelman, 2008: A new two-moment bulk stratiform cloud microphysics scheme in the Community Atmosphere Model, version 3 (CAM3). Part I: Description and numerical tests. *J. Climate*, **21**, doi: [10.1175/2008JCLI2105.1](https://doi.org/10.1175/2008JCLI2105.1), 3642-3659

Gettelman, A., H. Morrison, S. J. Ghan, 2008: A new two-moment bulk stratiform cloud microphysics scheme in the Community Atmosphere Model, Version 3 (CAM3). Part II: Single-column and global results. *J. Climate*, **21**, doi: [10.1175/2008JCLI2116.1](https://doi.org/10.1175/2008JCLI2116.1), 3660-3679

Oleson, K. W., G. Niu, Z. Yang, D. M. Lawrence, P. Thornton, P. Lawrence, R. Stockli, R. Dickinson, G. Bonan, S. Levis, A. Dai, T. Qian, 2008: Improvements to the community land model and their impact on the hydrological cycle. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JG000563](https://doi.org/10.1029/2007JG000563), G01021

Stockli, R., D. M. Lawrence, G. Niu, K. W. Oleson, P. Thornton, Z. Yang, G. Bonan, A. Denning, S. Running, 2008: Use of FLUXNET in the community land model development. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JG000562](https://doi.org/10.1029/2007JG000562), G01025

Cook, B., G. Bonan, S. Levis, H. Epstein, 2008: The thermoinsulation effect of snow cover within a climate model. *Clim. Dyn.*, **31**, 107-124

Wang, Y., M. Notaro, Z. Liu, R. Gallimore, S. Levis, J. Kutzbach, 2008: Detecting vegetation-precipitation feedbacks in mid-Holocene North Africa from two climate models. *Clim. Past*, **4**, 59-67

Sacks, W., B. Cook, N. Buening, S. Levis, J. Helkowski, 2008: Effects of global irrigation on the near-surface climate. *Clim. Dyn.*, doi: [10.1007/s00382-008-0445-z](https://doi.org/10.1007/s00382-008-0445-z)

Nemitz, E., J. L. Jimenez, J. A. Huffman, I. M. Ulbrich, M. R. Canagaratna, D. R. Worsnop, A. B. Guenther, 2008: An eddy-covariance system for the measurement of surface/atmosphere exchange fluxes of submicron aerosol chemical species - first application above an urban area. *Aerosol Science and Technology*, **42**, doi: [10.1080/02786820802227352](https://doi.org/10.1080/02786820802227352), 636-657

Woods, T. N., P. C. Chamberlin, W. K. Peterson, R. R. Meier, P. G. Richards, D. J. Strickland, G. Lu, L. Qian, S. C. Solomon, B. A. Iijima, A. J. Mannucci, B. T. Tsurutani, 2008: XUV

Photometer System (XPS): Improved solar irradiance algorithm using CHIANTI spectral models. *Sol. Phys.*, **250**, doi: [10.1007/s11207-008-9196-6](https://doi.org/10.1007/s11207-008-9196-6), 235-267

Lu, G., L. P. Goncharenko, A. D. Richmond, R. G. Roble, N. Aponte, 2008: A dayside ionospheric positive storm phase driven by neutral winds. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JA012895](https://doi.org/10.1029/2007JA012895), 08304

Jurcak, A., L. Bellot Rubio, K. Ichimoto, Y. Katsukawa, B. W. Lites, S. Nagata, T. Shimizu, Y. Suematsu, T. D. Tarbell, A. M. Title, S. Tsuneta, 2008: Erratum: The analysis of penumbral fine structure using an advanced inversion technique. *Pub. Astrono. Soc. Japan*, **60**, 933

Knutti, R. M., M. Allen, P. Friedlingstein, J. Gregory, G. Hegerl, G. A. Meehl, M. Meinshausen, J. Murphy, G. Plattner, S. Raper, T. Stocker, P. Stott, H. Teng, T. M. Wigley, 2008: A review of uncertainties in global temperature projections over the twenty-first century. *J. Climate*, **21**, doi: [10.1175/2007JCLI2119](https://doi.org/10.1175/2007JCLI2119), 2651-2663

Hu, A., B. L. Otto-Bliesner, G. A. Meehl, W. Han, C. Morrill, E. Brady, B. P. Briegleb, 2008: Response of thermohaline circulation to freshwater forcing under present day and LGM conditions. *J. Climate*, **21**, 2239-2258

Otto-Bliesner, B. L., E. Brady, 2008: PMIP2 climate model-proxy data intercomparisons for LGM. *PAGES Newsletter*, **16**, 18-20

Lawrence, D. M., A. Slater, V. Romanovsky, D. Nicolsky, 2008: The sensitivity of a model projection of near-surface permafrost degradation to soil column depth and inclusion of soil organic matter. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JF000883](https://doi.org/10.1029/2007JF000883), F02011

Han, W., P. Webster, J. Lin, W. Liu, R. Fu, D. Yuan, A. Hu, 2008: Dynamics of intraseasonal sea level and thermocline variability in the equatorial Atlantic during 2002-2003. *J. Phys. Oceanogr.*, **38**, 945-967

Ammann, C. M., N. Graham, 2008: The paleoclimate reconstruction challenge. *PAGES Newsletter*, **16**, 4

Hughes, M., M. Salzar, C. M. Ammann, R. Franklin, N. Fenbiao, 2008: A process-based modeling approach to the interpretation of high-elevation tree-ring records in the Western US. *Mtn. Clim. 2008*

Bonan, G., 2008: Forests and climate change: Forcings, feedbacks, and the climate benefits of forests. *Science*, **320**, 1444-1449

Meehl, G. A., J. Arblaster, G. W. Branstator, H. Vanloon, 2008: A coupled air-sea response mechanism to solar forcing in the Pacific region. *J. Climate*, **21**, 2883-2897

Meehl, G. A., J. Arblaster, W. Collins, 2008: Effects of black carbon aerosols on the Indian monsoon. *J. Climate*, **21**, 2869-2882

Monaghan, A., D. Bromwich, D. Schneider, 2008: Twentieth-century Antarctic air temperature and snowfall simulations by IPCC climate models. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2007GL032630](https://doi.org/10.1029/2007GL032630), L07502

Kim, D., C. Wang, A. M. L. Ekman, M. C. Barth, P. J. Rasch, 2008: Distribution and direct radiative forcing of carbonaceous and sulfate aerosols in an interactive size-resolving aerosol-climate model. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009756](https://doi.org/10.1029/2007JD009756), D16309

Huey, L. G., R. E. Stickel, R. B. Pierce, G. Chen, M. A. Avery, J. E. Dibb, G. S. Diskin, G. W. Sachse, C. S. McNaughton, A. D. Clarke, B. E. Anderson, D. R. Blake, 2008: Airborne measurements of HCl from the marine boundary layer to the lower stratosphere over the North Pacific Ocean during INTEX-B. *Atmos. Chem. Phys.*, **8**, 3563-3595

Habbal, S. R., I. F. Scholl, S. W. McIntosh, 2008: Impact of active regions on coronal hole outflows. *2008 DoD HPCMP User Group Conf.*, **683**, doi: [10.1086/591315](https://doi.org/10.1086/591315), L75-L78

Vanloon, H., G. A. Meehl, 2008: The response in the Pacific to the sun's decadal peaks and contrasts to cold events in the southern oscillation. *J. Atmos. Sol. Terr. Phys.*, **70**, 1046-1055

Tebaldi, C., G. A. Meehl, 2008: Beyond mean climate change: What climate models tell us about future climate extremes. *Climate Extremes and Society*, 99-119

Lane, T. P., M. W. Moncrieff, 2008: Stratospheric gravity waves generated by multiscale tropical convection. *J. Atmos. Sci.*, **65**, doi: [10.1175/2007JAS2601.1](https://doi.org/10.1175/2007JAS2601.1), 2598-2614

Schlatter, P. T., T. W. Schlatter, C. A. Knight, 2008: An unusual hailstorm on 24 June 2006, Boulder, Colorado, Part I: Mesoscale setting and radar features. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2008MWR2337.1](https://doi.org/10.1175/2008MWR2337.1), 2813-2832

Knight, C. A., P. T. Schlatter, T. W. Schlatter, 2008: An unusual hailstorm on 24 June 2006, Boulder, Colorado, Part II: Low density growth of hail. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2008MWR2338.1](https://doi.org/10.1175/2008MWR2338.1), 2833-2848

Matrosov, S. Y., A. J. Heymsfield, 2008: Estimating ice content and extinction in precipitating cloud systems from CloudSat radar measurements. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009633](https://doi.org/10.1029/2007JD009633), D00A05

Musgrave, K. D., C. A. Davis, M. T. Montgomery, 2008: Numerical simulations of the formation of Hurricane Gabrielle (2001). *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2110.1](https://doi.org/10.1175/2007MWR2110.1), 3151-3167

Seo, H., R. Murtugudde, M. Jochum, A. J. Miller, 2008: Modeling of mesoscale coupled ocean-atmosphere interaction and its feedback to ocean in the western Arabian Sea. *Ocean Modelling*, **25**, doi: [10.1016/j.ocemod.2008.07.003](https://doi.org/10.1016/j.ocemod.2008.07.003), 120-131

DeCarlo, P. F., E. J. Dunlea, J. R. Kimmel, A. C. Aiken, D. Sueper, J. Crouse, P. O. Wennberg, L. Emmons, Y. Shinozuka, A. Clarke, J. Zhou, J. Tomlinson, D. R. Collins, D. Knapp, A. Weinheimer, D. Montzka, T. Campos, J. L. Jimenez, 2008: Fast airborne aerosol size and chemistry measurements above Mexico City and Central Mexico during the MILAGRO campaign. *Atmos. Chem. Phys.*, **8**, 4027-4048

Sipila, M., K. Lehtipalo, M. Kulmala, T. Petaja, H. Junninen, P. P. Aalto, H. E. Manninen, E. M. Kyro, E. Asmi, I. Riipinen, J. Curtius, A. Kurten, S. Borrmann, C. D. O'Dowd, 2008: Applicability of condensation particle counters to measure

atmospheric clusters. *Atmos. Chem. Phys.*, **8**, 4049-4060

Savage III, L. C., S. Zhong, W. Yao, W. O. Brown, T. Horst, C. Whiteman, 2008: An observational and numerical study of a regional-scale downslope flow in northern Arizona. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009623](https://doi.org/10.1029/2007JD009623), D14114

Centeno-Elliot, R., H. Socas-Navarro, 2008: A new approach to the solar oxygen abundance problem. *Astrophys. J. Letters*, **682**, doi: [10.1086/590405](https://doi.org/10.1086/590405), L61-L64

Vilibic, I., G. Paklar, N. Zagar, H. Mihanovic, N. Supic, M. Zagar, N. Domijan, M. Pasaric, 2008: Summer breakout of trapped bottom dense water from the northern Adriatic. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JC004535](https://doi.org/10.1029/2007JC004535), C11S02

Gao, R. S., S. Hall, W. H. Swartz, J. P. Schwarz, J. R. Spackman, L. A. Watts, D. W. Fahey, K. C. Aikin, R. E. Shetter, T. P. Bui, 2008: Calculations of solar shortwave heating rates due to black carbon and ozone absorption using in situ measurements. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009358](https://doi.org/10.1029/2007JD009358), D14203

Jiang, J. H., H. Su, M. R. Schoeberl, S. T. Massie, P. Colarco, S. Platnick, N. J. Livesey, 2008: Clean and polluted clouds: Relationships among pollution, ice clouds, and precipitation in South America. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL034631](https://doi.org/10.1029/2008GL034631), L14804

Zeng, Z., A. Burns, W. Wang, J. Lei, S. C. Solomon, S. Syndergaard, L. Qian, Y. Kuo, 2008: Ionospheric annual asymmetry observed by the COSMIC radio occultation measurements and simulated by the TIEGCM. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JA012897](https://doi.org/10.1029/2007JA012897), A07305

Reeves, K. K., T. B. Guild, W. J. Hughes, K. E. Korreck, J. Lin, J. Raymond, S. Savage, N. A. Schwadron, H. E. Spence, D. F. Webb, M. Wiltberger, 2008: Post-eruptive phenomena in coronal mass ejections and substorms: Indicators of a universal process?. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2008JA013049](https://doi.org/10.1029/2008JA013049), A00B02

Siskind, D. E., D. R. Marsh, M. G. Mlynczak, F. J. Martin-Torres, J. M. Russell III, 2008: Decreases in atomic hydrogen over the summer pole: Evidence for dehydration from polar mesospheric clouds?. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL033742](https://doi.org/10.1029/2008GL033742), L13809

Yokelson, R. J., T. Christian, T. Karl, A. B. Guenther, 2008: The tropical forest and fire emissions experiment: laboratory fire measurements and synthesis of campaign data. *Atmos. Chem. Phys.*, **8**, 3509-3527

Kinnison, D. E., J. Gille, J. Barnett, C. Randall, V. L. Harvey, A. Lambert, R. Khosravi, M. J. Alexander, P. F. Bernath, C. D. Boone, C. Cavanaugh, M. Coffey, C. Craig, V. Dean, T. Eden, D. Ellis, D. W. Fahey, G. L. Francis, C. Halvorson, J. W. Hannigan, C. S. Hartsough, C. Hepplewhite, C. Krinsky, H. Lee, B. Mankin, T. P. Marcy, S. T. Massie, B. Nardi, D. Packman, P. J. Popp, M. L. Santee, V. Yudin, K. A. Walker, 2008: Global observations of HNO₃ from the High Resolution Dynamics Limb Sounder (HIRDLS): First results. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD008814](https://doi.org/10.1029/2007JD008814), D16S44

Lauritzen, P. H., R. D. Nair, 2008: Monotone and conservative Cascade Remapping between Spherical grids (CaRS): Regular latitude-longitude and cubed-sphere grids. *Mon. Wea. Rev.*,

136, 1416-1432

Bougher, S. W., P. Bliely, M. Combi, J. L. Fox, I. Mueller-Wodarg, A. Ridley, R. G. Roble, 2008: Neutral upper atmosphere and ionosphere modeling. *Space Science Reviews*, doi: [10.1007/s11214-008-9401-9](https://doi.org/10.1007/s11214-008-9401-9)

Liu, Y., C. X. Liu, H. P. Wang, X. Tie, S. T. Gao, D. E. Kinnison, G. P. Brasseur, 2008: Atmospheric tracers during the 2003-2004 stratospheric warming event and impact of ozone intrusions in the troposphere. *Atmos. Chem. Phys. Discuss.*, **8**, 13633-13666

Gettelman, A., Q. Fu, 2008: Observed and Simulated Upper-Tropospheric Water Vapor Feedback. *J. Climate*, **21**, doi: [10.1175/2007JCLI2142.1](https://doi.org/10.1175/2007JCLI2142.1), 3282-3289

Tian, F., S. C. Solomon, L. Qian, J. Lei, R. G. Roble, 2008: Hydrodynamic planetary thermosphere model: 2. Coupling of an electron transport/energy deposition model. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JE003043](https://doi.org/10.1029/2007JE003043), E07005

Matsuo, T., A. D. Richmond, 2008: Effects of high-latitude ionospheric electric field variability on global thermospheric Joule heating and mechanical energy transfer rate. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JA012993](https://doi.org/10.1029/2007JA012993), 07309

Tsuneta, S., K. Ichimoto, Y. Katsukawa, B. W. Lites, K. Matsuzaki, S. Nagata, D. Orozco Suarez, T. Shimizu, M. Shimojo, R. A. Shine, Y. Suematsu, T. K. Suzuki, T. D. Tarbell, A. M. Title, 2008: Magnetic landscape of sun's polar region. *arXiv:astro-ph*, **0807**, 4631

Kubo, M., B. W. Lites, T. Shimizu, K. Ichimoto, 2008: Magnetic flux loss and flux transport in a decaying active region. *arXiv:astro-ph*, **0807**, 4340

Kubo, M., B. W. Lites, K. Ichimoto, T. Shimizu, Y. Suematsu, Y. Katsukawa, T. D. Tarbell, R. A. Shine, A. M. Title, S. Nagata, S. Tsuneta, 2008: Disintegration of magnetic flux in decaying sunspots as observed with the Hinode SOT. *Astrophys. J.*, **681**, doi: [10.1086/588040](https://doi.org/10.1086/588040), 1677-1687

Malinowski, S. P., M. Andrejczuk, W. W. Grabowski, P. Korczyk, T. A. Kowalewski, P. K. Smolarkiewicz, 2008: Laboratory and modeling studies of cloud-clear air interfacial mixing: anisotropy of small-scale turbulence due to evaporative cooling. *New J. Phys.*, **10**, doi: [10.1088/1367-2630/10/7/075020](https://doi.org/10.1088/1367-2630/10/7/075020), 075020

Williamson, D. L., 2008: Equivalent finite volume and Eulerian spectral transform horizontal resolutions established from aqua-planet simulations. *Tellus*, doi: [10.1111/j.1600-0870.2008.00340.x](https://doi.org/10.1111/j.1600-0870.2008.00340.x)

Straus, T., B. Fleck, S. M. Jefferies, G. Cauzzi, S. W. McIntosh, K. Reardon, G. Severino, M. Steffen, 2008: The energy flux of internal gravity waves in the lower solar atmosphere. *Astrophys. J. Letters*, **681**, doi: [10.1086/590495](https://doi.org/10.1086/590495), L125-L128

Laing, A. G., R. E. Carbone, V. Levizzani, 2008: The propagation of deep convection in Africa: Implications for predictability of precipitation. *Quantification and Reduction of Predictive Uncertainty for Sustainable Water Resources Management*, 313, 24-32

Laing, M. A. G. Laing, 2008: The influence of El Niño-Southern

LaJoie, M., A. G. Laing, 2008: The influence of El Niño-Southern oscillation on lightning in the Gulf coast of the United States, Part I: Lightning climatology. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2227.1](https://doi.org/10.1175/2007MWR2227.1), 2523-2542

Laing, A. G., M. LaJoie, S. Reader, K. Pfeiffer, 2008: The influence of El Niño-Southern oscillation on lightning in the Gulf coast of the United States, Part II: Monthly correlations. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2228.1](https://doi.org/10.1175/2007MWR2228.1), 2544-2556

Trier, S. B., F. Chen, K. W. Manning, M. A. Lemone, C. A. Davis, 2008: Sensitivity of the PBL and precipitation in 12-day simulations of warm-season convection using different land surface models and soil wetness conditions. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2289.1](https://doi.org/10.1175/2007MWR2289.1), 2321-2343

Lin, C., F. Chen, J. C. Huang, W. Chen, Y. Liou, W. Chen, S. Liu, 2008: Urban Heat Island effect and its impact on boundary layer development and land-sea circulation over northern Taiwan. *Atmos. Environ.*, **42**, doi: [10.1016/j.atmosenv.2008.03.015](https://doi.org/10.1016/j.atmosenv.2008.03.015), 5635-5649

Ayala, O., J. Abernethy, B. Rosa, L. Wang, W. W. Grabowski, 2008: Effects of turbulence on the geometric collision rate of sedimenting droplets: Part I Results from direct numerical simulation. *New J. Phys.*, **10**, doi: [10.1088/1367-2630/10/7/075015](https://doi.org/10.1088/1367-2630/10/7/075015), 075015

Davis, C. A., C. S. Snyder, A. C. Didlake, 2008: A vortex-based perspective of eastern Pacific tropical cyclone formation. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2319.1](https://doi.org/10.1175/2007MWR2319.1), 2461-2477

Skofronick-Jackson, G., A. J. Heymsfield, E. Holthaus, C. Albers, M. Kim, 2008: Correction to "Nonspherical and spherical characterization of ice in Hurricane Erin for wideband passive microwave comparisons". *J. Geophys. Res.*, **113**, doi: [10.1029/2008JD010387](https://doi.org/10.1029/2008JD010387), D14210

Wang, L., O. Ayala, B. Rosa, W. W. Grabowski, 2008: Turbulent collision efficiency of cloud droplets. *New J. Phys.*, **10**, doi: [10.1088/1367-2630/10/7/075013](https://doi.org/10.1088/1367-2630/10/7/075013)

Ruzanski, E., J. Hubbert, V. Chandrasekar, 2008: Evaluation of the Simultaneous Multiple Pulse Frequency Algorithm. *J. Atmos. Ocean. Technol.*, **25**, doi: [10.1175/2007JTECHA1042.1](https://doi.org/10.1175/2007JTECHA1042.1), 1166-1181

Desai, A. R., A. D. Richardson, A. M. Moffat, J. Kattge, D. Y. Hollinger, A. Barr, E. Falge, A. Noormets, D. Papale, M. Reichstein, V. J. Stauch, 2008: Cross-site evaluation of eddy covariance GPP and RE decomposition techniques. *Agric. For. Meteorol.*, **148**, doi: [10.1016/j.agrformet.2007.11.012](https://doi.org/10.1016/j.agrformet.2007.11.012), 821-838

Gille, J., J. Barnett, P. Arter, M. Barker, P. Bernath, C. Boone, C. Cavanaugh, J. Chow, M. Coffey, J. Craft, C. Craig, M. Dials, V. Dean, T. Eden, D. P. Edwards, G. L. Francis, C. Halvorson, I. Harvey, C. Hepplewhite, R. Khosravi, D. E. Kinnison, C. Krinsky, A. Lambert, H. Lee, L. Lyjak, W. Mankin, S. T. Massie, J. McInerney, J. Moorhouse, B. Nardi, D. Packman, C. Randall, J. Reburn, W. Rudolf, M. Schwartz, J. Serafin, K. Stone, B. Torpy, K. Walker, A. Waterfall, R. Watkins, J. Whitney, D. Woodard, G. Young, 2008: High Resolution Dynamics Limb Sounder: Experiment overview, recovery, and validation of initial temperature data. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD008824](https://doi.org/10.1029/2007JD008824), D16S43

Donner, I. J., W. G. Large, 2008: Climate Modeling. *Ann. Rev.*

of *Environ. Resources*, **33**, doi:
[10.1146/annurev.enviro.33.020707.160752](https://doi.org/10.1146/annurev.enviro.33.020707.160752), 1-17

Lei, J., A. Burns, T. Tsugawa, W. Wang, S. C. Solomon, M. Wiltberger, 2008: Observations and simulations of quasiperiodic ionospheric oscillations and large-scale traveling ionospheric disturbances during the December 2006 geomagnetic storm. *J. Geophys. Res. - Space Phys.*, **113**, doi:
[10.1029/2008JA013090](https://doi.org/10.1029/2008JA013090), A06310

Petropavlovskikh, I., L. Froidevaux, R. E. Shetter, S. Hall, K. Ullmann, P. K. Bhartia, M. Kroon, P. Levelt, 2008: In-flight validation of Aura MLS ozone with CAFS partial ozone columns. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD008690](https://doi.org/10.1029/2007JD008690), D16S41

Pancheva, D., P. Mukhtarov, N. J. Mitchell, E. Merzlyakov, A. K. Smith, B. Andonov, W. Singer, W. Hocking, C. Meek, A. Manson, Y. Murayama, 2008: Planetary waves in coupling the stratosphere and mesosphere during the major stratospheric warming in 2003/2004. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009011](https://doi.org/10.1029/2007JD009011), D12105

Lamarque, J., D. E. Kinnison, P. G. Hess, F. Vitt, 2008: Simulated lower stratospheric trends between 1970 and 2005: Identifying the role of climate and composition changes. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009277](https://doi.org/10.1029/2007JD009277), D12301

Lyon, S. W., F. Dominguez, D. J. Gochis, N. A. Brunsell, C. L. Castro, F. K. Chow, Y. Fan, D. Fuka, Y. Hong, P. A. Kucera, S. W. Nesbitt, N. Salzmann, J. Schmidli, P. K. Snyder, A. J. Tueling, T. E. Twine, S. Levis, J. D. Lundquist, G. G. Salvucci, A. M. Sealy, M. T. Walter, 2008: Coupling terrestrial and atmospheric water dynamics to improve prediction in a changing environment. *Bulletin of the American Physical Society*, doi: [10.1175/2008BAMS2547.1](https://doi.org/10.1175/2008BAMS2547.1)

Austin, J., K. Tourpali, E. Rozanov, H. Akiyoshi, S. Bekki, G. Bodeker, C. Bruhl, N. Butchart, M. Chipperfield, M. Deushi, V. I. Fomichev, M. A. Giorgetta, L. Gray, K. Koder, F. Lott, E. Manzini, D. R. Marsh, K. Matthes, T. Nagashima, K. Shibata, R. S. Stolarski, H. Struthers, W. Tian, 2008: Coupled chemistry climate model simulations of the solar cycle in ozone and temperature. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009391](https://doi.org/10.1029/2007JD009391), D11306

Nardi, B., J. Gille, J. J. Barnett, C. E. Randall, V. Lynn Harvey, A. Waterfall, W. J. Reburn, T. Leblanc, T. J. McGee, L. W. Twigg, A. M. Thompson, S. Godin-Beekmann, P. F. Bernath, B. R. Bojkov, C. D. Boone, C. Cavanaugh, M. Coffey, J. Craft, C. Craig, V. Dean, T. Eden, G. L. Francis, L. Froidevaux, C. Halvorson, J. W. Hannigan, C. L. Hepplewhite, D. E. Kinnison, R. Khosravi, C. Krinsky, A. Lambert, H. Lee, J. Loh, S. T. Massie, I. S. McDermid, D. Packman, B. Torpy, J. Valverde-Canossa, K. A. Walker, D. N. Whiteman, J. C. Witte, G. Young, 2008: Initial validation of ozone measurements from the High Resolution Dynamics Limb Sounder. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD008837](https://doi.org/10.1029/2007JD008837), D16S36

Shindell, D. T., H. Levy II, M. D. Schwarzkopf, L. W. Horowitz, J. Lamarque, G. Faluvegi, 2008: Multimodel projections of climate change from short-lived emissions due to human activities. *J. Geophys. Res.*, **113**, D11109

Winter, C. L., D. M. Tartakovsky, 2008: A reduced complexity model for probabilistic risk assessment of ground water contamination. *Water Resources Research*, **44**, doi:

contamination. *Water Resources Research*, **44**, doi: [10.1029/2007WR006599](https://doi.org/10.1029/2007WR006599), W06501

Davis, C. A., W. Wang, S. Chen, Y. Chen, K. Corbosiero, M. DeMaria, J. Dudhia, G. Holland, J. Klemp, J. Michalakes, H. Reeves, R. Rotunno, Q. Xiao, 2008: Prediction of landfalling hurricanes with the advanced hurricane WRF model. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2085.1](https://doi.org/10.1175/2007MWR2085.1), 1990-2005

Emery, B. A., V. Coumans, D. S. Evans, G. A. Germany, M. S. Greer, E. Holeman, K. Kadinsky-Cade, F. J. Rich, W. Xu, 2008: Seasonal, Kp, solar wind, and solar flux variations in long-term single-pass satellite estimates of electron and ion auroral hemispheric power. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JA012866](https://doi.org/10.1029/2007JA012866), 06311

Liu, Y., T. T. Warner, J. F. Bowers, L. Carson, F. Chen, C. A. Clough, C. A. Davis, C. H. Egeland, C. Halvorson, T. W. Huck, L. Lachapelle, R. E. Malone, D. L. Rife, R. Sheu, S. P. Swerdlin, D. S. Weingarten, 2008: The operational mesogamma-scale analysis and forecast system of the U.S. Army Test and Evaluation Command. Part 1: Overview of the modeling system, the forecast products. *J. Appl. Meteor. Climat.*, **47**, 1077-1093

Gutowski, W., G. Hegerl, G. J. Holland, T. Knutson, L. O. Mearns, R. Stouffer, P. Webster, F. Zwiers, 2008: How well do we understand the causes of observed changes in extremes, and what are the projected future changes?. *Weather and Climate Extremes in a Changing Climate, CCSP Synthesis and Assessment Product 3.3*, 81-116

Liu, G., G. G. Shepherd, R. G. Roble, 2008: Seasonal variations of the nighttime O(1S) and OH airglow emission rates at mid-to-high latitudes in the context of the large-scale circulation. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JA012854](https://doi.org/10.1029/2007JA012854), A06302

Jouve, L., A. S. Brun, R. Arlt, A. Brandenburg, M. Dikpati, A. Bonanno, P. J. Kapyla, D. Moss, M. Rempel, P. A. Gilman, M. J. Korpi, A. G. Kosovichev, 2008: A solar mean field dynamo benchmark. *Astr. Astrophys.*, **483**, doi: [10.1051/0004-6361:20078351](https://doi.org/10.1051/0004-6361:20078351), 949-960

Harnett, E. M., R. M. Winglee, A. Stickle, G. Lu, 2008: Prompt ionospheric/magnetospheric responses 29 October 2003 Halloween storm: Outflow and energization. *J. Geophys. Res. - Space Phys.*, **113**, doi: [10.1029/2007JA012810](https://doi.org/10.1029/2007JA012810), 06209

Tsuneta, S., K. Ichimoto, Y. Katsukawa, S. Nagata, M. Otsubo, T. Shimizu, Y. Suematsu, M. Nakagiri, M. Noguchi, T. Tarbell, A. Title, R. Shine, W. Rosenberg, C. Hoffmann, B. Jurcevich, G. Kushner, M. Levay, B. W. Lites, D. F. Elmore, T. Matsushita, N. Kawaguchi, H. Saito, I. Mikami, L. D. Hill, J. K. Owens, 2008: The Solar Optical Telescope for the Hinode mission: An overview. *Sol. Phys.*, **249**, doi: [10.1007/s11207-008-9174-z](https://doi.org/10.1007/s11207-008-9174-z), 167-196

Matsumoto, T., R. Kitai, K. Shibata, S. Nagata, K. Otsuji, T. Nakamura, H. Watanabe, S. Tsuneta, Y. Suematsu, K. Ichimoto, T. Shimizu, Y. Katsukawa, T. D. Tarbell, B. W. Lites, R. A. Shine, A. M. Title, 2008: Cooperative observation of Ellerman bombs between the solar optical telescope aboard Hinode and Hida/domeless solar telescope. *Pub. Astrono. Soc. Japan*, **60**, 577-584

Shimizu, T., B. W. Lites, Y. Katsukawa, K. Ichimoto, Y. Suematsu, S. Tsuneta, S. Nagata, M. Kubo, R. A. Shine, T. D.

- Tarbell, 2008: Frequent occurrence of high-speed local mass downflows on the solar surface. *Astrophys. J.*, **680**, doi: [10.1086/588775](https://doi.org/10.1086/588775), 1467-1476
- Lawrence, D. M., A. G. Slater, R. Tomas, M. Holland, C. Deser, 2008: Accelerated Arctic land warming and permafrost degradation during rapid sea ice loss. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL033985](https://doi.org/10.1029/2008GL033985), L11506
- Hobbins, M. T., A. Dai, M. L. Roderick, G. D. Farquhar, 2008: Revisiting the parameterization of potential evaporation as a driver of long-term water balance trends. *Geophys. Res. Lett.*, **35**, doi: [10.1029/2008GL033840](https://doi.org/10.1029/2008GL033840), L12403
- Lima, M. A., J. W. Wilson, 2008: Convective storm initiation in a moist tropical environment. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2279.1](https://doi.org/10.1175/2007MWR2279.1), 1847-1864
- Chen, S., J. Dudhia, J. S. Kain, T. Kindap, E. Tan, 2008: Development of the online MM5 tracer model and its applications to air pollution episodes in Istanbul, Turkey and Sahara dust transport. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009244](https://doi.org/10.1029/2007JD009244)
- Weisman, M. L., C. A. Davis, W. Wang, K. Manning, 2008: Experiences with 0-36h explicit convective forecasts with the WRF-ARW model. *Wea. Forecasting*, **23**, doi: [10.1175/2007WAF2007005.1](https://doi.org/10.1175/2007WAF2007005.1), 407-437
- Waite, M. L., P. K. Smolarkiewicz, 2008: Instability and breakdown of a vertical vortex pair in a strongly stratified fluid. *J. Fluid Mech.*, **606**, doi: [10.1017/S0022112008001912](https://doi.org/10.1017/S0022112008001912), 239-273
- Halverson, J., M. Black, S. Braun, D. Cecil, M. Goodman, A. J. Heymsfield, G. Heymsfield, R. Hood, T. Krishnamurti, G. McFarquhar, M. J. Mahoney, J. Molinari, R. Rogers, J. Turk, C. Velden, D. Zhang, E. Zipser, R. Kahar, 2008: NASA's tropical cloud systems and processes (TCSP) experiment: Investigating tropical cyclogenesis and hurricane intensity change. *Bull. Amer. Meteor. Soc.*, **88**, doi: [10.1175/BAMS-88-6-867](https://doi.org/10.1175/BAMS-88-6-867), 867-882
- St-Cyr, A., C. Jablonowski, J. M. Dennis, H. M. Tufo, S. J. Thomas, 2008: A comparison of two shallow-water models with nonconforming adaptive grids. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2108.1](https://doi.org/10.1175/2007MWR2108.1), 1898-1922
- Kuang, C., P. H. McMurry, A. V. McCormick, F. Eisele, 2008: Dependence of nucleation rates on sulfuric acid vapor concentration in diverse atmospheric locations. *J. Geophys. Res. - Atmos.*, **113**, doi: [10.1029/2007JD009253](https://doi.org/10.1029/2007JD009253), D10209
- Tilmes, S., R. Muller, R. Salawitch, 2008: The sensitivity of polar ozone depletion to proposed geoengineering schemes. *Science*, **320**, doi: [10.1126/science.1153966](https://doi.org/10.1126/science.1153966), 1201-1204
- Al-Saadi, J., A. J. Soja, R. B. Pierce, J. Szykman, C. Wiedinmyer, L. Emmons, S. Kondragunta, X. Zhang, C. Kittaka, T. Schaack, K. Bowman, 2008: Intercomparison of near-real-time biomass burning emissions estimates constrained by satellite fire data. *J. Appl. Remote Sens.*, **2**, doi: [10.1117/1.2948785](https://doi.org/10.1117/1.2948785), 021504
- Jochum, M., J. Potemra, 2008: Sensitivity of tropical rainfall to Banda Sea Diffusivity in the Community Climate System Mode. *J. Climate* **21** doi: [10.1175/2008JCLI12230.1](https://doi.org/10.1175/2008JCLI12230.1) 6445-6454

J. Climate, **21**, doi: [10.1175/2008JCLI2293.1](https://doi.org/10.1175/2008JCLI2293.1), 3443-3454

Gilleland, E., T. C. M. Lee, J. E. Halley Gotway, R. G. Bullock, B. G. Brown, 2008: Computationally efficient spatial forecast verification using Baddeley's image metric. *Mon. Wea. Rev.*, **136**, doi: [10.1175/2007MWR2274.1](https://doi.org/10.1175/2007MWR2274.1), 1747-1757

Fried, A., J. G. Walega, J. Olson, J. Crawford, G. Chen, P. Weibring, D. Richter, C. Roller, F. Tittel, B. Heikes, J. Snow, H. Shen, D. O'Sullivan, M. Porter, H. Fuelberg, J. Halland, D. Millet, 2008: Formaldehyde over North America and the North Atlantic during the Summer 2004 INTEX Campaign: Methods, Observed Distributions, and Measurement-Model Comparisons. *J. Geophys. Res.*, **113**, doi: [10.1029/2007JD009185](https://doi.org/10.1029/2007JD009185), D10302

Yin, J. H., G. W. Branstator, 2008: Geographical variations of the influence of low-frequency variability on lower-tropospheric extreme westerly wind events. *J. Climate*, **21**, doi: [10.1175/2008JCLI2149.1](https://doi.org/10.1175/2008JCLI2149.1), 4779-4798

Wohlfahrt, J., S. P. Harrison, P. Braconnot, C. D. Hewitt, A. Kitoh, U. Mikolajewica, B. L. Otto-Bliesner, S. L. Weber, 2008: Evaluation of coupled ocean-atmosphere simulations of the mid-Holocene using palaeovegetation data from the northern hemisphere extratropics. *Clim. Dyn.*, **31**, doi: [10.1007/s00382-008-0415-5](https://doi.org/10.1007/s00382-008-0415-5), 871-890