

### Peer Reviewed Publications

- Arnott, W.P., H. Moosmüller, and J.W. Walker, 2000: Nitrogen dioxide and kerosene-flame soot calibration of photoacoustic instruments for measurement of light absorption by aerosols. *Rev. Sci. Instrum.*, **71**(12), 4545-4552.
- Borys, R.D., D.H. Lowenthal, and D.L. Mitchell, 2000: The relationships among cloud microphysics, chemistry and precipitation rate in cold mountain clouds. *Atmos. Environ.*, **34**, 2593-2602.
- Bristow, C.S., S.D. Bailey, and N. Lancaster, 2000: Sedimentary structure of linear sand dunes. *Nature*, **406**, 56-59.
- Brown, T.J. and P.W. Mielke, Jr., 2000: Guest Editorial: Statistical Mining and Data Visualization in Atmospheric Sciences. *Data Mining and Knowledge Discovery*, **4**, 5-6.
- Carter, R.C. and R.E. Keislar, 2000: Emergency response transport forecasting using historical wind field pattern matching. *J. Appl. Meteor.*, **39**, 446-462.
- Chang, M.C., C. Sioutas, S. Kim, H. Gong, and W.S. Linn, 2000: Reduction of nitrate losses from filter and impactor samplers by means of concentration enrichment. *Atmos. Environ.*, **34**(1), 85-98.
- Chow, J.C., 2000: IMPROVE and NIOSH Carbon Measurement Methods Show Differences. In *The IMPROVE Newsletter*, Vol. 9, No. 1 (Winter 2000). Air Resource Specialists Inc., Ft. Collins, CO, pp. 4-5.
- Chow, J.C., D.H. Lowenthal, J.G. Watson, S.D. Kohl, B.A. Hinsvark, E.I. Hackett, and J.K. McCormack, 2000: Light Absorption by Black Sand Dust. *Appl. Opt.*, **39**(27), 4232-4236.
- Chow, J.C., J.G. Watson, M.C. Green, D.H. Lowenthal, G. Torres, and B. Bates, 2000: Cross-Border Transport and Spatial Variability of Suspended Particles in Mexicali and California's Imperial Valley. *Atmos. Environ.*, **34**(11), 1833-1843.
- Cook, D., and T.J. Brown, 2000: Visual data mining in atmospheric science data. *Data Mining and Knowledge Discovery*, **4**, 69-80.
- Davidson, C.I., W. Tang, S. Finger, V. Etyemezian, M.F. Striegel, and S.I. Sherwood, 2000: Soiling patterns on a tall limestone building: Changes over 60 years. *Environ. Sci. Technol.*, **34**(4), 560-565.
- Doyle, J.D., D.R. Durran, C. Chen, B.A. Colle, M. Georgelin, V. Grubišić, W.R. Hsu, C.Y. Huang, D. Landau, Y.L. Lin, G.S. Poulos, W.Y. Sun, D.B. Weber, M.G. Wurtele, and M. Xue, 2000: An Intercoparison of Model-Predicted Wave Breaking for the 11 January 1972 Boulder Windstorm. *Notes and Correspondence, Mon. Wea. Rev.*, **128**, 901-914.
- Droessler, E.G., J.M. Lewis, and T.F. Malone, 2000: Lloyd Berkner: Catalyst for meteorology's fabulous fifties. *Bull. Am. Meteor. Soc.*, **81**(12), 2963-2973.

- Eatough, D.J., R.J. Farber, and J.G. Watson, 2000: Second-generation chemical mass balance source apportionment of sulfur oxides and sulfate at the Grand Canyon during the Project MOHAVE summer intensive. *J. AIR & WASTE MANAGE. ASSOC.*, **50**(5), 759-774.
- Elliott, S., I.J. Simpson, D.R. Blake, J.E. Bossert, J.C. Chow, J.A. Colina, M.K. Dubey, R.A. Duce, S.A. Edgerton, and J.S. Gaffney, 2000: Mexico City and the biogeochemistry of global urbanization. *Environmental Science & Policy*, **3**(2-3), 145-156.
- Engelbrecht, J.P., L. Swanepoel, M. Zunckel, J.C. Chow, J.G. Watson, and R.T. Egami, 2000: Modelling PM<sub>10</sub> Aerosol Data from the Qalabotjha Low-Smoke Fuels Macro-Scale Experiment in South Africa. *Ecological Modelling*, **127**(2-3), 235-244.
- England, G.C., B.Zielinska, K. Loos, I.Crane, K. Ritter, 2000: Characterizing PM<sub>2.5</sub> emission profiles for stationary sources: comparison of traditional and dilution sampling techniques. *Fuel Processing Technology.*, **65-66**, 177-188.
- Etyemezian, V.; Davidson, C.I.; Zufall, M.; Dai, W.; Finger, S.; and Striegel, M., 2000: Impingement of rain drops on a tall building. *Atmos. Environ.*, **34**(15), 2399-2412.
- Fuentes, J.D., M. Lerdau, R. Atkinson, D. Baldocchi, J.W. Bottenheim, P. Ciccioli, B. Lamb, C. Geron, L. Gu, A. Guenther, T.D. Sharkey, and W. Stockwell, 2000: Biogenic Hydrocarbons in the Atmospheric Boundary Layer: A Review. *Bulletin, Amer. Meteorol. Soc.*, **81**, 1537-1575.
- Gertler, A.W., J.A. Gillies, and W.R. Pierson, 2000: An assessment of the mobile source contribution to PM<sub>10</sub> and PM<sub>2.5</sub> in the United States. *Water Air and Soil Pollution*, **123**(1-4), 203-214.
- Gillies, J.A. and A.W. Gertler, 2000: Comparison and Evaluation of Chemically Speciated Mobile Source PM<sub>2.5</sub> Particulate Matter Profiles. *J. Air & Waste Manage. Assoc.*, **50**, 1459-1480.
- Gillies, J.A., N. Lancaster, W.G. Nickling, and D. Crawley, 2000: Field determination of drag forces and shear stress partitioning effects for a desert shrub (*Sarcobatus vermiculatus*, Greasewood). *J. Geophys. Res.*, **105**(D20), 24871-24880.
- Green, M.C., and I.H. Tombach, 2000: Use of Project MOHAVE perfluorocarbon tracer data to evaluate source and receptor models. *J. AIR & WASTE MANAGE. ASSOC.*, **50**(5), 717-723.
- Green, M.C., P. Pai, L.L. Ashbaugh, and R.J. Farber, 2000: Evaluation of wind fields used in Grand Canyon Visibility Transport Commission analyses. *J. AIR & WASTE MANAGE. ASSOC.*, **50**(5), 809-817.
- Grell, G.A., S. Emeis, W.R. Stockwell, T. Schoenemeyer, R. Forkel, J. Michalakes, R. Knoche, and W. Seidl, 2000: Application of a multiscale, coupled MM5/chemistry model to the complex terrain of the VOTALP valley campaign. *Atmos. Environ.*, **34**, 1435-1453.
- Grubišić, V., and M.W. Moncrieff, 2000: Parameterization of convective momentum transport in highly baroclinic conditions. *J. Atmos. Sci.*, **57**, 3035-3049.
- Grubisic, V., and M.W. Moncrieff, 2000: Parameterization of convective momentum transport in highly baroclinic conditions. *J. Atmos. Sci.*, **57**, 3035-3049.

- Hidy, G.M., C. Lachenmyer, J.C. Chow, and J.G. Watson, 2000: Urban outdoor-indoor PM<sub>2.5</sub> concentrations and personal exposure in the deep south: Part II. Inorganic chemistry. *Aerosol Sci. Technol.*, **33**, 357-375.
- Hudson, J.G., T.J. Garrett, P.V. Hobbs, S.R. Strader, Y.X. Xie, and S.S. Yum, 2000: Cloud condensation nuclei and ship track clouds. *J. Atmos. Sci.*, **57**, 2696-2706.
- Kim, S., M.C. Chang, D. Kim, and C. Sioutas, 2000: A new generation of portable coarse, fine, and ultrafine particle concentrators for use in inhalation toxicology. *Inhal. Toxicol.*, **12**(Suppl. 1), 121-137.
- Klemm, O., W.R. Stockwell, H. Schlager and M. Krautstrunk, 2000: NO<sub>x</sub> or VOC Limitation in East German Ozone Plumes. *J. of Atmos. Sci.*, **35**, 1-18.
- Koračin, D., D. Podnar, V. Isakov, J. Chow, Y. Dong, A. Miller, and M. McGown, 2000: PM<sub>10</sub> dispersion modeling for Treasure Valley, Idaho. *Journal of Air Waste Management Association*, **50**, 174-185.
- Koračin, D., J. Frye and V. Isakov, 2000: A method of evaluating atmospheric models using tracer measurements. *J. Appl. Met.*, **39**, 201-221.
- Korolev, A.V., G.A. Isaac, and J. Hallett, 2000: Ice particle habits in Arctic clouds. *Geophys. Res. Letters*, **26**, 1299-1302.
- Koracin, D.; Podnar, D.; Chow, J.C.; Isakov, V.; Dong, Y.; Miller, A.; and McGown, M. (2000). PM<sub>10</sub> dispersion modeling for Treasure Valley, Idaho. *J. AIR & WASTE MANAGE. ASSOC.*, **50**(8):1335-1344.
- Korolev, A.V.; Isaac, G.A.; and Hallett, J. (2000). Ice particle habits in stratiform clouds. *Q. J. R. Meteorol. Soc.*, **126**:2873-2902.
- Lancaster, N.; and Helm, P. (2000). A test of a climatic index of dune mobility using measurements from the southwestern United States. *Earth Surf. Proc. Landf.*, **25**(197):207.
- Koracin, D.; Isakov, V.; and Frye, J. (2000). A method of evaluating atmospheric models using tracer measurements: Main algorithms. *Int. J. Environ. Pollut.*, **14**(1-6):89-97.
- Leipper, D.F.; and Lewis, J.M. (2000). Letter exchange documents 50 years of progress in oceanography. *Earth in Space*, **13**(2):9-12.
- Lowenthal, D.H. and R.D. Borys, 2000: Sources of microphysical variation in marine stratiform clouds in the North Atlantic, *Geophys. Res. Lett.*, **27**, 1491-1494.
- Lowenthal, D.H., Chow, J.C., Mazzera, D.M., Watson, J.G., and Mosher, B.W., 2000: Aerosol vanadium at McMurdo Station, Antarctica: implications for Dye 3, Greenland, *Atmos. Environ.*, **34**, 677-679.
- Lowenthal, D.H., Watson, J.G., and P. Saxena, 2000: Contributions to light extinction during Project MOHAVE, *Atmos. Environ.*, **34**, 2351-2359.
- Macêvo, M., D. Cook, T.J. Brown, 2000: Visual Data Mining in Atmospheric Science Data. *Data Mining and Knowledge Discovery*, **4**, 69-80.

- McDonald, J.D., B. Zielinska, E.M. Fujita, J.C. Sagebiel, J.C. Chow, and J.G. Watson, 2000: Fine Particle and Gaseous Emission Rates from Residential Wood Combustion. *Environ. Sci. Technol.*, **34**, 2080-2091.
- McKenna-Neuman, C.; Lancaster, N.; and Nickling, W.G. (2000). The effects of unsteady winds on sediment transport on the stoss slope of a transverse dune, Silver Peak, NV, USA. *Sedimentology*, **47**:211-226.
- Mitchell, D.L., 2000: Parameterization of the Mie Extinction and Absorption Coefficients for Water Clouds. *J. Atmos. Sci.*, **57**, 1311-1326.
- Perez, J.C., F. Herrera, F. Rosa, A. Gonzalez, M.A. Wetzel, R.D. Borys, and D.H. Lowenthal, 2000: Retrieval of marine stratus cloud droplet size from NOAA-AVHRR nighttime imagery, *Remote Sensing of the Environment*, **73**, 31-45.
- Redmond, K.T., 2000: Climated Monitoring: Taking the Long View. *Water Resources IMPACT*, **2**, 7-10.
- Pitchford, M.L.; Green, M.C.; Kuhns, H.D.; and Farber, R.J. (2000). Characterization of regional transport and dispersion using Project MOHAVE tracer data. *J. AIR & WASTE MANAGE. ASSOC.*, **50**(5):733-745.
- Sioutas, C.; Kim, S.; Chang, M.C.; Terrell, L.L.; and Gong, H. (2000). Field evaluation of a modified DataRAM MIE scattering monitor for real-time PM<sub>2.5</sub> mass concentration measurements. *Atmos. Environ.*, **34**(28):4829-4838.
- Steinbrecher, R., M. Klauer, K. Hauff, W.R. Stockwell, W. Jaeschke, T. Dietrich, F. Herbert, 2000: Biogenic and anthropogenic fluxes of non-methane hydrocarbons over an urban-impacted forest, Frankfurter Stadtwald, Germany. *Atmos. Environ.*, **34**, 3779-3788.
- Svensson, G., M. Tjernstrom, and D. Koraćin, 2000: The sensitivity of a stratocumulus transition: Model simulations of the ASTEX First Lagrangian. *Boundary-Layer Meteorol.*, **95**, 57-90.
- Stockwell, W.R.; Watson, J.G.; Robinson, N.F.; Steiner, W.; and Sylte, W.W. (2000). The ammonium nitrate particle equivalent of NO<sub>x</sub> emissions for wintertime conditions in Central California's San Joaquin Valley. *Atmos. Environ.*, **34**(27):4711-4717. ISI:000089444900016.
- Telford, J.W., 2000: Marine stratus clouds: Changing liquid-water and temperature structure. *Q. J. R. Meteorol. Soc.*, **126**, 1789-1813.
- Watson, J.G., J.C. Chow, J.L. Bowen, D.H. Lowenthal, S. Hering,, P. Ouchida, and W. Oslund, 2000: Air quality measurements from the Fresno Supersite, *J. Air & Waste Manage. Assoc.*, **50**, 1321-1334.
- Watson, J.G.; Chow, J.C.; and Pace, T.G. (2000). Fugitive dust emissions. In *Air Pollution Engineering Manual, Second Edition*, 2nd ed., W.T. Davis, Ed. John Wiley & Sons, Inc., New York, pp. 117-135.

## Conference Papers/Presentations:

- Abu-Allaban, M., A.W. Gertler, D.H. Lowenthal, J.C. Sagebiel, M. Keith, and W.A. Dippel (2000). Cairo Air Improvement Project: Source Attribution Study. *93<sup>rd</sup> Annual Air and Waste Management Association Conference*, Salt Lake City, UT, 18-22 June 2000. Proceedings, Paper #344, 20pp.
- Arnott, W.P., D. Mitchell, C. Schmitt, D. Kingsmill and D. Ivanova, 2000: Analysis of the FSSP performance for measurement of small crystal spectra in cirrus. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 191-193.
- Bailey, M. and J. Hallett, 2000: Nucleation, growth and habit distributions of cirrus type crystals under controlled laboratory conditions. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 629-632.
- Borys, R., D.L. Lowenthal and D.L. Mitchell, 2000: Pollutant aerosol effects on orographic snowfall rates. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **2**, 924-927.
- Borys, R.D., 2000: A tethered balloon cloud microphysics sounder. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 220-223.
- Chai, S.K., W.G. Finnegan, A.W. Huggins and R.L. Smith, 2000: Rimed and aggregated ice crystals with specific orientations in cumulus clouds. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **2**, 685-688.
- Foster, T.C. and J. Hallett, 2000: A laboratory investigation of the orientation, alignment, and oscillation of ice crystals. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 641-644.
- Fujita, E., R. Keislar, and W. Stockwell, 2000: What do on-road motor vehicles have to do with higher ozone on weekends in the South Coast Air Basin? Presented at *Tenth CRC On-Road Vehicle Emissions Workshop*, San Diego, CA, 27-29, March. Proceedings, 10pp.
- Gertler, A.W. J.C. Sagebiel, and J.A. Gillies (2000). Trends in Emissions from In-Use Light- and Heavy-Duty Vehicles. *Recent Advances in the Science and Management of Air Toxics*, Banff, Alberta, Canada, 9-12 April 2000. Proceedings, 15pp.
- Gertler, A.W., M. Abu-Allaban, W. Coulombe, J.A. Gillies, W.R. Pierson, C.F. Rogers, J.C. Sagebiel, L. Tarnay, and T.A. Cahill, 2000: Measurements of Mobile Source Particulate Emissions In a Highway Tunnel. *9<sup>th</sup> International Scientific Symposium Transport and Air Pollution*, Avignon, France, 5-8 June 2000. Proceedings, 159-166pp.
- Gertler, A.W., M. Abu-Allaban, W. Coulombe, J.A. Gillies, W.R. Pierson, C.F. Rogers, J.C. Sagebiel, L. Tarnay, and T.A. Cahill, 2000: On-Road Measurements of Mobile Source Particulate Emissions. *93<sup>rd</sup> Annual Air and Waste Management Association Conference*, Salt Lake City, UT, 18-22 June 2000. Proceedings, Paper #342, 15pp.
- Gillies, J.A. and A.W. Gertler, 2000: Comparison and Evaluation of Chemically Speciated Mobile Source PM<sub>2.5</sub> Profiles. *10<sup>th</sup> Coordinating Research Council On-Road Vehicle Emissions Workshop*, San Diego, CA, 27-29 March 2000. Proceedings, 21pp.

- Grubišić, V. and D.L. Mitchell, 2000: A new microphysical parameterization for cloud resolving models. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 604-605.
- Hallett, J. and J.T. Hallett, 2000: The scale and role of spatial discontinuities of particles in clouds. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 633-636.
- Hudson, J.G. and S.S. Yum, 2000: Continental/maritime drizzle contrasts in stratus and cumuli. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 71-74.
- Ivanova, D., D. L. Mitchell, P. Arnott and M. Poellot, 2000: A GCM parameterization of bimodal size spectra for mid-latitude cirrus clouds. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 546-549.
- Korolev, A., G.A. Isaac and J. Hallett, 2000: Ice particle habits in stratiform clouds. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **2**, 709-712.
- Mazin, I.P, G. A. Isaac and J. Hallett, 2000: Harmonization of cloud physics terminology. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 9-12.
- Oraltay, R.G. and J. Hallett, 2000: Particle break up by melting and evaporating ice. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 649-652.
- Wetzel, M., S. Chai, M. Szumowski, W. Thompson, T. Haack, G. Vali and R. Kelly, 2000: Application of satellite microphysical retrievals for analysis of the COAMPS mesoscale prediction model. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 306-309.
- Yum, S.S. and J.G. Hudson, 2000: Cloud microphysical relationships in warm clouds. *13<sup>th</sup> International Conference on Clouds and Precipitation*, 14-18 August, Reno, Nevada. Proceedings, **1**, 75-78.