

## Journal Articles

- Thomas P.C., Gierasch P., Sullivan R., Miller D.S., Alvarez del Castillo E., Cantor B., and Mellon M.T. (2003) Mesoscale linear streaks on Mars: environments of dust entrainment. *Icarus* **162**, pp. 242-258.
- Rauber R.M., Olthoff L.S., Ramamurthy M.K., Miller D., and Kunkel K.E. (2001) A synoptic weather pattern and sounding-based climatology of freezing precipitation in the United States east of the Rocky Mountains. *J. Appl. Meteorol.* **40**, 1724.

## Meeting Presentations and Conference Proceedings

- Miller D.S., Dye T.S., and Craig K.J. (2009) Bias-correcting NOAA model data in real time: AQMOS. Presented at the NOAA focus group meeting, Washington, D.C., by Sonoma Technology, Inc., Petaluma, CA, September 16 (STI-3699).
- Miller D.S., Pasch A.N., Chan A.C., and Dye T.S. (2009) Real-time PM<sub>2.5</sub> reporting. Presented at the *National Air Quality Conference, Dallas, TX, March 3*, by Sonoma Technology, Inc., Petaluma, CA (STI-3549).
- Miller D.S., MacDonald C.P., Pasch A.N., and Zahn P.H. (2009) Fundamentals of air quality forecasting: PM<sub>2.5</sub> focus. Presented at the *National Air Quality Conference Forecaster's Training, Dallas, TX, March 2*, by Sonoma Technology, Inc., Petaluma, CA (STI-905501-3580).
- Miller D.S. and Knoderer C.A. (2008) 2008 ozone forecasting and outreach end-of-season report. Presentation made to the Air Districts of the Sacramento Region and Air Pollution Control Officers, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-906064.01-3527, December.
- Miller D.S., MacDonald C.P., and Bratek S.A. (2008) Imperial valley ozone forecasting end of 2008 season report. Presented to the *Imperial County Air Pollution Control District and California Air Resources Board, Sacramento, CA, October 30* by Sonoma Technology, Petaluma, CA (STI-907061-3483).
- MacDonald C.P., Knoderer C.A., Bratek S.A., and Miller D.S. (2008) Sacramento Winter PM<sub>2.5</sub> Forecasting Evaluation. Presented to *Sacramento Metropolitan Air Quality Management District, Sacramento, CA, September 29* by Sonoma Technology, Inc. (STI-906064.04-3449).
- Miller D.S., Chan A.C., and Dye T.S. (2008) Real-time PM<sub>2.5</sub> reporting: the good, the bad, and the ugly. Poster presented at the *National Air Quality Conferences, Portland, OR, April 6-9* (STI-905401-3301).
- Miller D.S., Dye T.S., and Chan A.C., Zell E.R., and Engel-Cox J. (2008) Air quality stories: bridging the gap between the media and air quality. Presented at the *National Air Quality Conferences, Portland, OR, April 8* (STI-905401-3300).
- Miller D.S. and MacDonald C.P. (2008) 2007-2008 PM<sub>2.5</sub> forecasting end of season report. Presented to the *Sacramento Metropolitan Air Quality Management District, Sacramento, CA, March 14* by Sonoma Technology, Petaluma, CA (STI-906064-3330).
- Miller D.S., Dye T.S., Jackson S.E., and White J.E. (2007) Workshop: Air Quality 101—Tools and Resources. Presented at the *National Weather Association's 32nd Annual Meeting, Reno, NV, October 13-18* (STI-905301.05-3238).
- Chan A.C., Dye T.S., and Miller D.S. (2007) Louisiana Department of Environmental Quality ozone forecasting. Presentation for the Louisiana Department of Environmental Quality, Baton Rouge, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-907015-3160, April 23.

- Chan A.C., Conatser N.D., Dye T.S., and Miller D.S. (2006) 2006 forecasting and outreach. End of season report prepared for the Air Districts of the Sacramento Region, *Air Pollution Control Officers Meeting, Sacramento, CA, December 19*, by Sonoma Technology, Inc., Petaluma, CA (STI-904311-3100).
- MacDonald C.P., Miller D.S., Raffuse S., and Dye T.S. (2006) WESTAR Ozone Transport Analysis. Presented at the WESTAR Fall Business Meeting, Boise, ID, by Sonoma Technology, Inc., Petaluma, CA, STI-3037, September.
- Chan A.C., Anderson C.B., Conatser N.D., Miller D.S., and Dye T.S. (2006) Review of the 2005-2006 winter smog season – air quality forecasting for Youngstown, Ohio. Presentation prepared for the Eastgate Regional Council of Governments, Youngstown, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-906007.03-3002, July.
- Anderson C.B., Chan A.C., Conatser N.D., Dye T.S., and Miller D.S. (2006) Review of the 2005-2006 winter smog season–air quality forecasting for Columbus, Ohio. Presentation to Mid-Ohio Regional Planning Commission, Air Quality Committee, Columbus, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-905025.02-3003, July.
- Dye T.S., Miller D.S., Carmichael G., Jalkanen L., Manins P., and San Jose R. (2006) World Meteorological Organization course on air quality forecasting. Presented in Lima, Peru, July 10-14, by Sonoma Technology, Inc., Petaluma, CA; University of Iowa, Iowa City, IA; World Meteorological Organization, Geneva, Switzerland; Commonwealth Scientific and Industrial Research Organization, Australia; and Technical University of Madrid, Campus de Montegancedo, Madrid, Spain (STI-905059-2951).
- Chan A.C., Miller D.S., Conatser N.D., and Anderson C.B. (2005) Imperial Valley ozone forecasting end of 2005 season report. Presentation prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-904460.03-2848, November.
- Raffuse S.M., McCarthy M.C., and Miller D.S. (2005) Automated mapping tools for large spatial data sets. Presented at *Air & Waste Management Association Environmental Data Analysis: Assessing Health and Environmental Impacts, Oak Brook, IL, October 4* by Sonoma Technology, Inc., Petaluma, CA (STI-2707).
- Miller D.S., MacDonald C.P., Lengyel C.E., and Nguyen D.T. (2005) Albuquerque PM<sub>2.5</sub> forecasting tool development training manual. Presentation to the City of Albuquerque, Air Quality Division, Albuquerque, NM, March 17 (STI-904740-2708).
- MacDonald C.P., Miller D.S., Chan A.C., Knoderer C.A., Nolan S., Jackson S., Bridgers G.M., Schranz S., Seybold M., Woodman M., Ryan W.F., Shipp E., and Ferreria S. (2005) Short course on air quality forecasting. Presented at *The 2005 National Air Quality Conference: Quality of Air Means Quality of Life, San Francisco, CA, February 13* (STI-902476-2697).
- Miller D.S., MacDonald C.P., and Dye T.S. (2004) Using aerosol optical depth products as forecasting tools. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-902472-2624, October.
- Miller D.S., MacDonald C.P., Lilly M.R., Nguyen D.T., and Dye T.S. (2004) Albuquerque ozone forecasting tool development training manual. Presented to the City of Albuquerque, Air Quality Division, Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-904340-2563, June.
- Miller D.S., MacDonald C.P., and Ryan W.F. (2004) Virginia ozone forecasting tool development. Presented to the Virginia Department of Environmental Quality, Richmond, VA, May 25 (STI-903800-2549).

- MacDonald C.P., Lilly M.R., and Miller D.S. (2004) Ozone forecast tools for the bay area. Presented at the *Bay Area Air Quality Management District meeting, San Francisco, CA, May 17* (STI-904110-2540).
- Miller D.S. and McDonald C.P. (2004) AIRNow air quality forecast system. Presented at the *U.S. Environmental Protection Agency's 2004 National Air Quality Conference: Your Forecast to Breathe By, Baltimore, MD, February 22* (STI-902472-2493).
- MacDonald C.P., Carfagno J., Cassmassi J.C., Dye T.S., Gilroy M.J., Miller D.S., Nese J., Ryan W.F., and Weinstock L. (2004) Short course on air quality forecasting. Presented at the *U.S. Environmental Protection Agency's 2004 National Air Quality Conference: Your Forecast to Breathe By, Baltimore, MD, February 22* (STI-902475-2489).
- Chan A.C., Dye T.S., MacDonald C.P., Anderson C.B., Miller D.S., and Garlock J. (2004) Air quality nowcasting for the issuance of health advisories in the Sacramento, California, metropolitan region. Paper for the *2004 American Meteorological Society Annual Meeting, Symposium on Planning, Nowcasting, and Forecasting in the Urban Zone, Seattle, WA, January 11-15* (STI-2410).
- Anderson C.B., Dye T.S., Chan A.C., Miller D.S., Strohm D.E., and MacDonald C.P. (2003) Summary of 2003 ozone forecasting, ozone mapping, and AirAlert. Presented to the Air Districts of the Sacramento Region, Air Pollution Control Officers Meeting, Sacramento, CA, December 15 (903213-2455).
- MacDonald C.P., Roberts P.T., Knoderer C.A., Miller D.S., Lilly M.R., and Hanna S.R. (2003) Boundary layer study in the western and central Gulf of Mexico. Presentation at the final meeting of the Technical Review Group, Minerals Management Group, New Orleans, LA, STI-998555-2265, October.
- MacDonald C.P., Dye T.S., Strohm D.E., Nguyen D.T., Miller D.S., and Ryan W. (2003) PM<sub>2.5</sub> regional forecasting workshop (San Francisco, Research Triangle Park, Chicago, Boston). Workshop prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-902466-2411, September.
- Dye T.S., Anderson C.B., Strohm D.E., Miller D.S., Chan A.C., MacDonald C.P., and Nguyen D.T. (2003) Summary of ozone forecasting in Youngstown, Ohio. Presentation prepared for EASTGATE Regional Council of Governments, Austintown, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-903380-2382, June.
- Miller D.S., MacDonald C.P., and Dye T.S. (2003) Ozone forecasting tool development to support forecasting for the EPA AIRNow program. *American Meteorological Society Annual Meeting, Fifth Conference on Atmospheric Chemistry: Gases, Aerosols, and Clouds, Long Beach, CA, February 11* (STI-90120x-2323).
- MacDonald C.P., Roberts P.T., Knoderer C.A., Miller D.S., and Hanna S.R. (2003) Boundary layer study in the western and central Gulf of Mexico. Presented at the *American Meteorological Society Annual Meeting 12th Conference on Interactions of the Sea and Atmosphere, Long Beach, CA, February 9-13* (STI-998555-2321).
- Miller D.S., MacDonald C.P., and Dye T.S. (2003) Ozone forecasting tool development to support forecasting for the EPA AIRNow program. Paper No. 5.5a presented at the *American Meteorological Society Annual Meeting, Fifth Conference on Atmospheric Chemistry: Gases, Aerosols, and Clouds, Long Beach, CA, February 8-13* (STI-901202-2220).

- Chan A.C., Dye T.S., Anderson C.B., MacDonald C.P., Miller D.S., and Knoderer C.A. (2002) Summary of the 2002 ozone forecasting for Minneapolis/St. Paul, MN. Presentation prepared for the Minneapolis Pollution Control Agency, St. Paul, MN, by Sonoma Technology, Inc., Petaluma, CA, STI-901102-2272, October.
- Roberts P.T., Brown S.G., Main H.H., Buhr M.P., Hyslop N.P., MacDonald C.P., Roney J., Knoderer C.A., and Miller D. (2002) Preliminary VOC, olefin, and conceptual model results for Houston. Presented to Texas Natural Resource Conservation Commission, Austin, TX, April 4.
- Miller D.S., MacDonald C.P., Dye T.S., and Thompson B.S. (2002) Part 1: Minneapolis forecasting tool Part 2: Review of 2001 ozone episodes. Prepared for the Lake Michigan Air Directors Consortium and Minnesota Pollution Control Agency, February 26, STI-901102-2160.
- MacDonald C.P., Knoderer C.A., Dye T.S., Thompson B.S., Miller D.S., and Anderson C.B. (2002) Developing and operating air quality forecasting programs for five cities. Presented at the *U.S. Environmental Protection Agency's National Air Quality Conference: Forecasting and Public Outreach*, San Francisco, CA, February 4-6 (STI-2148).
- Dye T.S., Miller D.S., MacDonald C.P., Anderson C.B., and Thompson B.S. (2002) PM<sub>2.5</sub> forecasting method development and operations for Salt Lake City, Utah. Presented at the *U.S. Environmental Protection Agency's National Air Conference: Forecasting and Public Outreach*, San Francisco, CA, February 4-6 (STI-2146).
- Dye T.S., Anderson C.B., MacDonald C.P., Knoderer C.A., Miller D.S., Ludewig S.A., and Thompson B.S. (2001) Summary of 2001 ozone forecasting, ozone mapping, and AirAlert. Presentation made to Air Districts of the Sacramento Region, APCO Meeting, December 6, STI-900151-2133.
- Miller D.S., MacDonald C.P., Dye T.S., and Nguyen D.T. (2001) Memphis Ozone Forecasting Tool Development. Presentation prepared for the United States Environmental Protection Agency and Memphis/Shelby County Health Department, Memphis, TN, by Sonoma Technology, Inc., Petaluma, CA, STI-901202-2126, October.

### **Formal Reports**

- Pasch A.N. and Miller D.S. (2009) Regional Air Pollution Control Agency PM<sub>2.5</sub> forecasting tool development database contents. Database documentation prepared for Public Health Dayton and Montgomery County, Regional Air Pollution Control Agency, Dayton, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-908048.06-3642, June.
- Miller D.S. and MacDonald C.P. (2009) Summary of 2008-2009 Sacramento County "Check Before You Burn" Season. Presentation made to the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909004.05-3618, May.
- Miller D.S. and Pasch A.N. (2009) RAPCA PM<sub>2.5</sub> forecasting training. Training course prepared for the Regional Air Pollution Control Agency, Dayton, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-908048.05-3595, March.
- Miller D.S., MacDonald C.P., and Bratek S.A. (2009) Regression tool development documentation. Technical memorandum prepared for the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-906064.10-3553, January.
- Miller D.S., MacDonald C.P., Bratek S.A., Bowman C., and Gilroy M. (2008) PM<sub>2.5</sub> wood smoke forecasting. Training manual prepared for Air Quality Forecasters Training Meeting, Lacey, WA, by Sonoma Technology, Inc., Petaluma, CA; Washington State Department of Ecology, Olympia, WA; and Puget Sound Clean Air Agency, Seattle, WA, STI-905511.03-3523, December 18-19.

- Gray E., Dye T., Ovard C., Chan A., Conatser N., Ludewig S.A., and Miller D.S. (2007) AIRNow Gateway implementation, final specifications. Specifications document prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-905302.02-3033-TM, January.
- Brown S., Hafner H., MacDonald C., Wade K., and Miller D. (2006) Preliminary analysis of the contribution of wood smoke to PM<sub>2.5</sub> concentrations in Sacramento, California. Technical memorandum prepared for the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-906029-3118-TM, December.
- MacDonald C.P., Miller D.S., and Raffuse S.M. (2006) Regional and local contributions to peak local ozone concentrations in six western cities. Final report prepared for the Western States Air Resources Council, Seattle, WA, by Sonoma Technology, Inc., Petaluma, CA, STI-906004-2970-FR, May.
- Miller D.S., MacDonald C.P., and Knoderer C.A. (2006) Birmingham PM<sub>2.5</sub> forecasting tool development training manual. Prepared for the Jefferson County Department of Health, Birmingham, AL, by Sonoma Technology, Inc., Petaluma, CA, STI-905046.02-2932, March.
- Chinkin L.R., Wheeler N.J.M., and Miller D.S. (2006) Final validation of Central California Ozone Study (CCOS) field data. Final report prepared for the San Joaquin Valleywide Air Pollution Study Agency, Fresno, CA, and the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-905003.07-2851-FR2, March.
- Miller D.S. and Chinkin L.R. (2005) Revised summary of data missing in the CCOS subset of the CCAQS database. Technical memorandum prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-905003-2749-TM2, August.
- Miller D.S., MacDonald C.P., Lengyel C.E., Nguyen D.T., and Dye T.S. (2005) Albuquerque PM<sub>2.5</sub> forecasting tool development. Final report prepared for the City of Albuquerque, Air Quality Division, Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-904740-2679-FR, April.
- Miller D.S., MacDonald C.P., and Ryan W.F. (2005) Virginia ozone forecasting tool development. Project summary prepared for the Virginia Department of Environmental Quality, Richmond, VA, by Sonoma Technology, Inc., Petaluma, CA, and Pennsylvania State University, University Park, PA, STI-903800-2639-PS4, March.
- Miller D.S., MacDonald C.P., and Dye T.S. (2004) Using aerosol optical depth products as forecasting tools. Prepared for U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-902472-2624, October.
- MacDonald C.P., Roberts P.T., Lilly M.R., Knoderer C.A., Miller D.S., and Hanna S.R. (2004) Boundary layer study in the western and central Gulf of Mexico. Report prepared for the Minerals Management Service, New Orleans, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-998555-2266-FR3, September.
- Miller D.S., MacDonald C.P., Lilly M.R., Nguyen D.T., and Dye T.S. (2004) Albuquerque ozone forecasting tool development. Final report prepared for the City of Albuquerque, Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-904340-2572-FR, June.
- Miller D.S., Lilly M.R., and Nguyen D.T. (2004) Albuquerque ozone forecasting tool development database contents. Database document prepared for the City of Albuquerque, Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-904340-2566-DD2, June.

- Miller D.S. and Brown S.G. (2004) San Diego PM<sub>2.5</sub> and PM<sub>10</sub> forecasting tool development. Final report prepared for the San Diego Air Pollution Control District, San Diego, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-903530-2562-FR, June.
- Miller D.S. and Brown S.G. (2004) San Diego PM<sub>2.5</sub> and PM<sub>10</sub> forecasting tool development database contents. Database document prepared for the San Diego Air Pollution Control District, San Diego, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-903530-2571-DD, June.
- Miller D.S., Roberts P.T., and MacDonald C.P. (2003) Breton aerometric monitoring program data analysis. Executive summary prepared for Offshore Operators Committee and Minerals Management Service, Department of the Interior, New Orleans, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-999479-2267-ES2, August.
- Chinkin L.R., Tamura T.M., Eisinger D.S., Gorin C.A., Miller D.S., Coe D.L., MacDonald C.P., and Wheeler N.J.M. (2003) Preliminary assessment of ozone and PM air quality issues in Central Ohio. Final report prepared for Mid-Ohio Regional Planning Commission, Columbus, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-902900-2377-FR, June.
- MacDonald C.P., Prouty J.D., Miller D.S., Dye T.S., Knoderer C.A., Gray E.A., and Nguyen D.T. (2003) EDAT User Guide [Environmental Data Analysis Tool User Guide]. User Guide prepared for Offshore Operators Committee and Minerals Management Service, Department of the Interior, New Orleans, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-999475/998555-2344-UG, April.
- Dye T.S., MacDonald C.P., and Miller D.S. (2002) Summary of PM<sub>2.5</sub> forecasting tool development for Pittsburgh, Pennsylvania. Technical memorandum prepared for the Pennsylvania Department of Environmental Protection and Allegheny County Health Department, Pittsburgh, PA, by Sonoma Technology, Inc., Petaluma, CA, STI-901491-2259-TM, September.
- Miller D.S., MacDonald C.P., and Dye T.S. (2002) Ozone forecasting tool development to support forecasting for the EPA AIRNow program. Final report prepared for United States Environmental Protection Agency Information Transfer Group, OAQPS, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-901202-2189-FR3, July.
- Miller D.S. and Dye T.S. (2002) Ozone forecasting tool user's guide. Prepared for the Information Transfer Group, OAQPS, United States Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-901202-2171-UG, April.
- Dye T.S., Miller D.S., MacDonald, C.P. (2002) Summary of PM<sub>2.5</sub> forecasting program development and operations for Salt Lake City, Utah, during winter 2002. Technical Memorandum prepared for the Utah Department of Environmental Quality, Salt Lake City, UT, by Sonoma Technology, Inc., Petaluma, CA, STI-901491-2243-TM, August 23.
- Miller D.S., Anderson C.B., Roberts P.T., and Dye T.S. (2001-2002) Profilers and data collection for Breton Aerometric Monitoring Program, phase II. Series of monthly reports for September 2000 through September 2001 prepared for Offshore Operators Committee, New Orleans, LA, and Minerals Management Service, U.S. Department of the Interior, New Orleans, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-999473-2127, October 2001-February 2002.