

Journal Articles

- Pasch A.N., MacDonald C.P., Gilliam R.C., Knoderer C.A., and Roberts P.T. (2011) Meteorological characteristics associated with PM_{2.5} air pollution in Cleveland, Ohio, during the 2009-2010 Cleveland Multiple Air Pollutants Study. *Atmos. Environ.* 45, 7026-7035 (STI-909032-3910). doi: 10.1016/j.atmosenv.2011.09.065. Available on the Internet at <http://www.sciencedirect.com/science/article/pii/S1352231011010284>.
- Scheffe R., Philbrick R., MacDonald C.P., Dye T.S., Gilroy M., and Carlton A. (2009) Observational needs for four-dimensional air quality characterization. *Air & Waste Manag. Assoc.'s EM*, October 2.
- Zhao C., Andrews A.E., Bianco L., Eluszkiewicz J., Hirsch A., MacDonald C., Nehr Korn T., and Fischer M.L. (2009) Atmospheric inverse estimates of methane emissions from Central California. *J. Geophys. Res.* 114, D16302, doi:16310.11029/12008JD011671.
- MacDonald C.P., McCarthy M.C., Dye T.S., Wheeler N.J.M., Hafner H.R., and Roberts P.T. (2006) Transport and dispersion during wintertime particulate matter episodes in the San Joaquin Valley, California. *J. Air & Waste Manag. Assoc.* 56, 961-976 (STI-902329-2660).
- MacDonald C.P., Roberts P.T., Main H.H., Dye T.S., Coe D.L., and Yarbrough J. (2001) The 1996 Paso del Norte Ozone Study: phenomena that influence the local ozone concentrations. *Sci. Total Environ.* (Special Issue: U.S.-Mexico Transboundary Air Pollution Studies) 276, Nos. 1-3, 93-110 (STI-1949).
- Hanna S.R., MacDonald C.P., Lilly M., Knoderer C.A., and Huang C.H. (2006) Analysis of three years of boundary layer observations over the Gulf of Mexico and its shores. *Estuarine, Coastal and Shelf Science* 70, 541-550.
- Reissell A., MacDonald C., Roberts P., and Arey J. (2003) Characterization of biogenic volatile organic compounds and meteorology at Azusa during the SCOS97-NARSTO. *Atmos. Environ.* 37 (Supplement 2), 181-196.

Meeting Presentations and Conference Proceedings

- MacDonald C.P. (2011) Overview: meteorological and wave measurements for improving meteorological and air quality modeling. Webinar presented to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), July 28 by Sonoma Technology, Inc., Petaluma, CA (STI-908059-4173).
- Alrick D.M., MacDonald C.P., Tollstrup B., and Lam J. (2011) Techniques for evaluating wildfire smoke impact on ozone for possible exceptional events. Presented at the *National Air Quality Conferences, San Diego, California, March 7-10* by Sonoma Technology, Inc., Petaluma, CA, and the Sacramento Metropolitan Air Quality Management District, Sacramento, CA (STI-4069).
- MacDonald C.P., Pasch A.N., Gilliam R., Knoderer C.A., Roberts P.T., and Norris G. (2011) Use of a radar wind profiler and sodar to characterize PM_{2.5} air pollution in Cleveland, Ohio. Presented at the *National Air Quality Conferences, San Diego, California, March 7-10* by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Research Triangle Park, NC (STI-4070).
- Jackson S.A., Zahn P.H., MacDonald C.P., Pasch A.N., Chan A.C., Dye T.S., and White J.E. (2011) Techniques for improving air quality maps with data fusion. Presented at the *American Meteorological Society Annual Meeting, 13th Conference on Atmospheric Chemistry, Seattle, WA, January 26*.

- Miller D.S., Chan A.C., and MacDonald C.P. (2011) 2010 Ozone forecasting and outreach end of season report. Presentation made to the Air Districts of the Sacramento Region Air Pollution Control Officers meeting, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909004-4058, January 26.
- Wheeler N., Hafner H., Roberts P., Craig K., MacDonald C., Gray E., and Reid S. (2011) Design recommendations for the three-state pilot study. Presented at the *Federal Leadership Forum, Denver, CO, January 19* by Sonoma Technology, Inc., Petaluma, CA (STI-910208-4079).
- Miller D., MacDonald C., Dye T., Craig K., and Alrick D. (2010) AQMOS: air quality model output statistics from CMAQ model forecasts. Poster presented at the *9th Annual CMAS Conference, Chapel Hill, NC, October 11-13* by Sonoma Technology, Inc., Petaluma, CA (STI-3897).
- Dye T.S., Miller D.S., MacDonald C.P., Craig K.J., and Alrick D.M. (2010) Adjusting numerical model data in real time: AQMOS. Presented at the *A&WMA International Specialty Conference, Xi'an, Shaanxi Province, China, May 10-14* by Sonoma Technology, Inc., Petaluma, CA (STI-3865).
- MacDonald C.P. and Dye T.S. (2010) CRADA activities Winter 2010. Presented to Vaisala, *Boulder, CO, April 21* (STI-3853).
- MacDonald C.P., Craig K.J., DeWinter J.L., Pasch A.N., Tollstrup B., and Kennard A. (2010) Benefits of forecast-based residential wood burning bans on air pollution. Presented at the *National Air Quality Conferences, Raleigh, NC, March 15-18* (STI-3807).
- MacDonald C.P., Miller D.S., Dye T.S., Craig K.J., and Alrick D.M. (2010) Adjusting numerical model data in real time: AQMOS. Presented at the *National Air Quality Conferences, Raleigh, NC, March 15-18* (STI-3805).
- Craig K., Wheeler N., Raffuse S., Sullivan D., Reid S., MacDonald C., Larkin S., Solomon R., and Strand T. (2010) Experimental air quality predictions from the BlueSky Gateway. Presented at the *National Air Quality Conferences, Raleigh, NC, March 15-18* by Sonoma Technology, Inc., Petaluma, CA and the USDA Forest Service, Pacific Northwest Research Station, Seattle, WA (STI-3803).
- Alrick D.M., Knoderer C., and MacDonald C. (2010) MOS accuracy in Sacramento air pollution forecasting. Presentation made to the Sacramento Metropolitan Air Quality Management District by Sonoma Technology, Inc., Petaluma, CA, STI 909004-3826, March.
- Dye T.S., MacDonald C.P., Craig K.J., and Alrick D.M. (2010) Adjusting numerical model data in real time: AQMOS. Presented at the *American Meteorological Society Annual Meeting, 12th Conference on Atmospheric Chemistry, Atlanta, GA, January 21*, by Sonoma Technology, Inc., Petaluma, CA (STI-3667).
- MacDonald C.P., Shell N.M., and Alrick D.M. (2010) 2009 Ozone forecasting and outreach end-of-season report. Presentation made to the Air Districts of the Sacramento Region Air Pollution Control Officers Meeting, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909004-3793, January.
- Miller D.S., MacDonald C.P., Pasch A.N., and Zahn P.H. (2009) Fundamentals of air quality forecasting: PM_{2.5} focus. Presented at the *National Air Quality Conference Forecaster's Training, Dallas, TX, March 2*, by Sonoma Technology, Inc., Petaluma, CA (STI-905501-3580).
- MacDonald C.P. and Roberts P.T. (2009) Meteorological and wave measurements for improving meteorological and air quality modeling (GM-08-04), project kick-off meeting. Presented to the *U.S. Minerals Management Service and Scientific Review Board* by Sonoma Technology, Inc., Petaluma, CA, STI-908059-3540, January.

- Knoderer C.A., MacDonald C.P., Zahn P.H., and Gilroy M. (2008) Remote sensing meteorological instrumentation to support photochemical assessment monitoring stations (PAMS). Presented at the *Air & Waste Management Association Symposium on Air Quality Measurement Methods and Technology, Chapel Hill, NC, November* by Sonoma Technology, Petaluma, CA (STI-3416).
- 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. (2008) Wind profiler applications: air quality analysis, forecasting, and modeling. Presented for *Vaisala Training, Beijing, China, October 27, 2008* by Sonoma Technology, Petaluma, CA (STI-907503.03-3469).
- MacDonald C.P., Knoderer C.A., Bratek S.A., and Miller D.S. (2008) Sacramento Winter PM_{2.5} Forecasting Evaluation. Presented to *Sacramento Metropolitan Air Quality Management District, Sacramento, CA, September 29* by Sonoma Technology, Inc. (STI-906064.04-3449).
- Zahn P.H. and MacDonald C.P. (2008) AIRNow Mapper: EPA's new air quality mapping system. Presented at the *National Air Quality Conferences, Portland, OR, April 7* (STI-905413.02-3299).
- MacDonald C.P., Knoderer C.A., and Bratek S.A. (2008) TexAQS-II radar wind profiler analyses. Presented to the *Texas Commission on Environmental Quality, Austin, TX, March 26* by Sonoma Technology, Petaluma, CA (STI-907101-3333).
- Miller D.S. and MacDonald C.P. (2008) 2007-2008 PM_{2.5} 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).
- Zahn P.H. and MacDonald C.P. (2008) Demonstration of Data Fusion Methods for AQI Maps. Presented to the *U.S. Environmental Protection Agency* by Sonoma Technology, Inc., Petaluma, CA (STI-905413-3435).
- Knoderer C.A., MacDonald C.P., and Zahn P.H. (2007) The relationship among air quality, mixing layer heights, and winds observed during the TexAQS-II field study - preliminary results. Poster presented at the *Fall 2007 American Geophysical Union Conference, San Francisco, CA, December 14*, by Sonoma Technology, Inc., Petaluma, CA (STI-3220).
- MacDonald C.P., Dye T.S., and Knoderer C.A. (2007) Using radar wind profilers for air quality applications. Presentation prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-3248, October 18.
- MacDonald C.P. (2007) Using radar wind profiler and radio acoustic sounding systems data for air quality applications. Presentation prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-3235, September 27.
- MacDonald C.P., Dye T.S., and Chan A.C. (2007) Continuous vs. filter measurements of PM_{2.5} in Columbus, Ohio. Presentation prepared for the Mid-Ohio Regional Planning Commission, Columbus, OH, by Sonoma Technology, Inc., Petaluma, CA, STI-905025.03-3192, July.
- Dye T.S. and MacDonald C.P. (2007) Air quality community's meteorological data needs. Presentation to the Committee on Developing Mesoscale Meteorological Observational Capabilities to Meet Multiple National Needs, Louisville, CO, by Sonoma Technology, Inc., Petaluma, CA, STI-3102, July.
- MacDonald C.P., Bratek S.A., Chan A.C., and Dye T.S. (2007) Analysis to improve Louisiana forecasts. Presentation prepared for LA Department of Environmental Quality, Baton Rouge, LA, by Sonoma Technology, Inc., Petaluma, CA, STI-907015-3178, June.

- Chan A.C., MacDonald C.P., Wang J.J., Fu J.Q., Lin C., and Dye T.S. (2007) Air quality forecasting and technical exchange and support for the Shanghai Environmental Protection Bureau. Poster presented at the *10th International Conference on Atmospheric Sciences and Applications to Air Quality, Hong Kong, China, May 14-16*, by Sonoma Technology, Inc., Petaluma, CA, and the Shanghai Environmental Monitoring Center (STI-3101).
- 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.
- Dye T., MacDonald C., and Chan A. (2006) Air quality forecasting and measurements. Presentation prepared for China Meteorological Agency, The People's Republic of China, by Sonoma Technology, Inc., Petaluma, CA, STI-906015-2934, April.
- MacDonald C.P., Knoderer C.A., Dye T.S., and Chan A.C. (2005) Vaisala wind profiler software, data validation, and data analysis training. Training manual prepared for Vaisala, Inc., Louisville, CO, by Sonoma Technology, Inc., Petaluma, CA, STI-905058-2865, December.
- Miller D.S., MacDonald C.P., Lengyel C.E., and Nguyen D.T. (2005) Albuquerque PM_{2.5} 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.
- MacDonald C.P., Lilly M.R., and Dye T.S. (2004) Boundary layer characteristics and transport analysis. Presented at *Vaisala Wind Profiler Workshop, Boulder, CO, October 14-15* by Sonoma Technology, Inc., Petaluma, CA (STI-904012-2626).
- 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).
- Miller D.S. and MacDonald 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., Dye T.S., Strohm D.E., Nguyen D.T., Miller D.S., and Ryan W. (2003) PM_{2.5} regional forecasting workshop (San Francisco, Research Triangle Park, Chicago, Boston). Workshop prepared for the 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.
- MacDonald C.P. and Lilly M.R. (2003) Making better use of RWP/RASS data. Conference presentation prepared for and presented at *Radar Development and Applications Workshop, NCAR (National Center for Atmospheric Research), Boulder, CO, April 23-25* (STI-2353).

- Miller D.S., MacDonald C.P., and Dye T.S. (2003) Ozone forecasting tool development to support forecasting for the EPA AIRNow program. *Fifth Conference on Atmospheric Chemistry: Gases, Aerosols, and Clouds (American Meteorological Society Annual Meeting), Long Beach, CA, February 11* (STI-90120x-2323).
- MacDonald C.P., Dye T.S., and Lilly M.R. (2003) Profiler observations, applications, and analysis: techniques that use Profiler/RASS data to characterize meteorological phenomena for use in air quality data analysis and forecasting. Presented at the *American Meteorological Society Short Course on the Fundamentals of Boundary Layer Wind and Temperature Profiling using Radar and Acoustic Techniques, Long Beach, CA, February 9-13* (STI-2320).
- Dye T.S., MacDonald C.P., Cassmassi J.C., Gilroy M.J., Ryan W.F., and Weinstock L. (2003) Short course on air quality forecasting workbook. Prepared for U.S. EPA Office of Air Quality Planning and Standards, Research Triangle Park, NC; presented at *U.S. Environmental Protection Agency's 2003 National Air Quality Conference, San Antonio, TX, February 2* (STI-902464-2319).
- MacDonald C.P., Roberts P.T., Knoderer C.A., and Hanna S. (2002) Estimation of scaling parameters and energy fluxes over the Gulf of Mexico using new observations and using the COARE program. Presented at the *12th Conference on Interaction of the Sea and Atmosphere, 2003 American Meteorological Society Annual Meeting, Long Beach, CA, February 9-13* (STI-998555-2219).
- Dye T.S., Gilroy M., and MacDonald C.P. (2002) Short course on air quality forecasting. Presented at *U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, San Francisco, CA, February* (STI-2145).
- MacDonald C.P., Blumenthal D.L., Roberts P.T., and Crews J.M. (2002) Ozone yield and gross estimation of point, mobile, and area source contributions to regional background ozone in eastern Texas. Presented at the *American Meteorological Society Annual Conference, Orlando, FL, January 17* (STI-2140).
- MacDonald C.P., Dye T.S., and Roberts P.T. (2001) Quality control of the radar profiler wind and RASS virtual temperature data collected during the 1997 Southern California Ozone Study. Presented at *SCOS97-NARSTO Data Analysis Conference, Los Angeles, CA, February 13-15* (STI-2058).
- MacDonald C.P., Dye T.S., and Roberts P.T. (2001) Spatial and temporal observations of the planetary boundary layer during ozone episodes in Southern California. Presented at *SCOS97-NARSTO Data Analysis Conference, Los Angeles, CA, February 13-15* (STI-2057).
- Dye T.S., MacDonald C.P., and Narayanan M. (2000) Development of the Air Quality Early Warning System for Cairo, Egypt. Egyptian Environmental Affairs Agency, Cairo, Egypt, September (STI-900442-2002).
- MacDonald C.P., Roberts P.T., Main H.H., Dye T.S., Coe D.L., and Yarbrough J. (1999) The 1996 and 1997 Paso del Norte Ozone Studies: An overview of the field studies and data analyses. Paper no. 99-199 presented at the *Air & Waste Management Association 92nd Annual Meeting & Exhibition, St. Louis, MO, June 20-24* (STI 1863).

Formal Reports

- Knoderer C.A., Smith K.M., MacDonald C., and Miller D.S. (2011) 2008 through 2010 South Coast Air Quality Management District (SCAQMD) upper-air station data summary. Data summary prepared for the South Coast Air Quality Management District, Diamond Bar, CA, by Sonoma Technology, Petaluma, CA, STI-910015-4169, August 3.

- Wheeler N.J.M., Hafner H.R., Roberts P.T., Craig K.J., Reid S.B., MacDonald C.P., and Gray E.A. (2011) Design recommendations for the three-state pilot study data warehouse. Report prepared for the U.S. Environmental Protection Agency, Region 8, Denver, Colorado. by Sonoma Technology, Inc., Petaluma, California, STI-910208-4092-FR, March 21.
- Pasch A.N., Haderman M.D., MacDonald C.P., and Dye T.S. (2010) Key elements for the development of the AIRNow satellite data processor system: a software development guide. Prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC by Sonoma Technology, Inc., Petaluma, CA, STI-910109-3981, October.
- Alrick D.M., Miller D.S., MacDonald C.P., and Hafner H.R. (2010) Wyoming statewide air monitoring network assessment Task E: meteorological network assessment. Technical memorandum prepared for the Wyoming Department of Environmental Quality by Sonoma Technology, Inc., Petaluma, CA, STI-910019-3935-TM, September 10.
- Miller D.S., Craig K.J., DeWinter J.L., MacDonald C.P., Reid S.B., and Hafner H.R. (2010) An air parcel transport corridor analysis for Sublette County, Wyoming. Technical memorandum prepared for the Wyoming Department of Environmental Quality by Sonoma Technology, Inc., Petaluma, CA, STI-910028-3954, September 2.
- Knoderer C.A., MacDonald C.P., and Roberts P.T. (2010) Quality assurance project plan for the Apex Regional Landfill. Prepared for the Clark County Department of Air Quality and Environmental Management, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-910031-3892, August.
- Knoderer C.A., MacDonald C.P., and Roberts P.T. (2010) Data collected by a 9150MHz RWP, RASS, mini-sodar, and surface meteorological station in Cleveland Ohio July 24, 2009–March 15, 2010. Final report prepared for Alion Science and Technology, Durham, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-909032-3885-FR2, June 30.
- Knoderer C.A. and MacDonald C.P. (2010) Delivery of quality controlled surface meteorological data collected at the Geysers Geothermal Field from June 3, 2008, through December 15, 2009. Technical memorandum Prepared for Ram Power, Inc., STI-908033-3834, April.
- Charrier J.G., Hafner H.R., Wade K.S., Brown S.G., and MacDonald C.P. (2010) California ambient dioxin air monitoring program 2002 to 2006 data analysis of dioxins, furans, biphenyls, and diphenylethers. Final report 2 prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-907024.05-3292-FR2, March.
- Knoderer C., MacDonald C., and Pasch A. (2010) Summary of data quality control of data collected by a 915-MHz RWP, RASS, miniSodar, and surface meteorological station in Cleveland, Ohio. Technical memorandum prepared for Alion Science and Technology, Durham, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-909032-3741-TM-Revised, January.
- Reid S.B., Huang S., Pollard E.K., Craig K.J., Sullivan D.C., Zahn P., MacDonald C., and Raffuse S.M. (2009) An almanac for understanding smoke persistence during the 2008 fire season. Final report prepared for the U.S. Department of Agriculture, Forest Service, Pacific Southwest Region, STI-908045-3747-FR, November.
- MacDonald C.P., Craig K.J., Pasch A.N., Pollard E.K., Wheeler N.J.M., and Reid S.B. (2009) Contributors to Sacramento County wood smoke primary PM_{2.5}. Final report prepared for the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909014.06-3676-FR2, September.

- Funk T.H., Penfold B.M., Pasch A.N., MacDonald C.P., and Stone J.M. (2009) Ambient air quality monitoring network assessment for the San Joaquin Valley. Final report prepared for the San Joaquin Valley Unified Air Pollution Control District by Sonoma Technology, Inc., Petaluma, CA, STI-908072.04-3643-FR, July.
- MacDonald C.P., Craig K.J., DeWinter J.L., Pasch A.N., Brown S.G., and Wheeler N.J.M. (2009) Evaluation of Sacramento Metropolitan Air Quality Management District's Check Before You Burn Program. Final report prepared for the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909014.06-3612-FR2, August.
- 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.
- MacDonald C.P. (2009) Evaluation of Sacramento's Check Before You Burn program: phase 1. Presentation made to the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-909014.07-3607, April.
- MacDonald C.P. (2009) Meteorological and wave measurements for improving meteorological and air quality modeling (GM-08-04). Project kick-off meeting summary prepared for the U.S. Minerals Management Service and Scientific Review Board by Sonoma Technology, Inc., Petaluma, CA, STI-908059.07-3570, February.
- 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_{2.5} 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.
- Charrier J.G., Hafner H.R., Wade K.S., Brown S.G., and MacDonald C.P. (2008) California ambient dioxin air monitoring program data analysis. Draft final report 3 prepared for the California Air Resources Board, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-907024.05-3292-DFR3, May.
- MacDonald C.P. and Knoderer C.A. (2008) Spatial and temporal characteristics of winds and mixing during TEXAQS-II. Final report prepared for Texas A&M University, College Station, TX by Sonoma Technology, Petaluma, CA, STI-907101-3344-FR, April.
- Blumenthal D.L., MacDonald C.P., and Knoderer C.A. (2007) Turbulence felt in a light helicopter caused by a power plant thermal plume. Final report prepared for Downey Brand LLP, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, 907059-3269-FR, December.
- MacDonald C.P., Miller D.S., and Dye T.S. (2007) Wintertime PM_{2.5} forecasting for No-burn Rule 421. Presented to the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-907040-3223, September.
- Knoderer C.A. and MacDonald C.P. (2007) TEXAQS-II radar wind profiler, Radio Acoustic Sounding System, solar, and lidar data quality control and mixing height derivation. Final report prepared for Texas A&M University, College Station, TX, by Sonoma Technology, Inc., Petaluma, CA, STI-907100-3215-FR, August.

- Knoderer C.A. and MacDonald C.P. (2007) Summary of data collected by a 915-MHz RWP, RASS, mini-sodar, and surface meteorological station at Boulder, Wyoming, from February 1 through March 31, 2007. Technical memorandum prepared for ENVIRON International, Inc., Novato, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-907002.04-3183-TM, June.
- Brown S., Hafner H., MacDonald C., Wade K., and Miller D. (2006) Preliminary analysis of the contribution of wood smoke to PM_{2.5} 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., Knoderer C.A., and Blumenthal D.L. (2006) Development and implementation of offshore meteorological systems to support TexAQS-II. Final report prepared for the Texas Commission on Environmental Quality, Austin, TX, by Sonoma Technology, Inc., Petaluma, CA, STI-905060-2993-FR, June.
- MacDonald C.P., Nguyen D.T., Dye T.S., Barnett A.N., Knoderer C.A., Roberts P.T., Baxter R.A., and Weber B.L. (2002) Processing and validation of data collected by radar wind profilers, radio acoustic sounding systems, and sodars during the 1997 Southern California Ozone Study. Final report prepared for California Air Resources Board, Sacramento, CA and South Coast Air Quality Management District, Diamond Bar, CA, by Sonoma Technology, Inc., Petaluma, CA, Parsons Corporation, Pasadena, CA, and National Oceanic and Atmospheric Administration, Environmental Technology Laboratory, Boulder, CO, STI-99752A/B-2151-FR, May.
- 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.
- MacDonald C.P., Knoderer C.A., Nguyen D.T., and Dye T.S. (2005) PAMS meteorological demonstration analysis, software, and training. Final report prepared for the South Coast Air Quality Management District, Diamond Bar, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-904044-2759-FR2, October.
- Sullivan D.C., Hafner H.R., Brown S.G., MacDonald C.P., Raffuse S.M., Penfold B.M., and Roberts P.T. (2005) Analyses of the causes of haze for the Central States (Phase II) Summary of findings. Executive summary prepared for the Central States Regional Air Planning Association by Sonoma Technology, Inc., Petaluma, CA, STI-904780.08-2754-ES, August.
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