

Journal Articles

- Craig K., Erdakos G., Chang S.Y., and Baringer L. (2020) Air quality and source apportionment modeling of Year 2017 ozone episodes in Albuquerque/Bernalillo County, New Mexico. *J. Air Waste Manage.*, 70(11), 1101-1120, (STI-7231), May 15. Available at <https://doi.org/10.1080/10962247.2020.1764879>.
- Reid S., Bai S., Du Y., Craig K., Erdakos G., Baringer L., Eisinger D., McCarthy M., and Landsberg K. (2016) Emissions modeling with MOVES and EMFAC to assess the potential for a transportation project to create particulate matter hot spots. *Transportation Research Record: Journal of the Transportation Research Board*, 2570, 12-20, doi: 10.3141/2570-02 (STI-6330).
- Erdakos G.B., Bhavé P.V., Pouliot G.A., Simon H., and Mathur R. (2014). Predicting the effects of nanoscale cerium additives in diesel fuel on regional-scale air quality. *Environ. Sci. Technol.* 48 (21), 12775–12782.
- Gantt B., Hoque S., Willis R.D., Fahey K.M., Delgado-Saborit J.M., Harrison R.M., Erdakos G.B., Bhavé P.V., Zhang K.M., Kovalcik K., and Pye H.O. (2014) Near-road modeling and measurement of cerium-containing particles generated by nanoparticle diesel fuel additive use. *Environ. Sci. Technol.* 48 (18), 10607–10613.
- Majestic B.J., Erdakos G.B., Lewandowski M., Oliver K.D., Willis R.D., Kleindienst T.E., and Bhavé P.V. (2010) A review of selected engineered nanoparticles in the atmosphere: sources, transformations, and techniques for sampling and analysis. *Int. J. Occup. Environ. Health* 16, 488-507.
- Erdakos G.B., Chang E.I., Pankow J.F., and Seinfeld J.H. (2006) Prediction of activity coefficients in liquid aerosol particles containing organic compounds, dissolved inorganic salts, and water. 3. Organic compounds, water, and ionic constituents by consideration of short-, mid-, and long-range effects using X-UNIFAC.3. *Atmos. Environment* 40, 6437-6452.
- Erdakos G.B., Asher W.E., Seinfeld J.H., and Pankow J.F. (2006) Prediction of activity coefficients in liquid aerosol particles containing organic compounds, dissolved inorganic salts, and water. 1. Organic compounds and water by consideration of short- and long-range effects using X-UNIFAC.1. *Atmos. Environment* 40, 6410-6421.
- Erdakos G.B. and Pankow J.F. (2004) Gas/particle partitioning of neutral and ionizing compounds to single- and multi-phase aerosol particles. 2. Phase separation in liquid particulate matter containing both polar and low-polarity organic compounds. *Atmos. Environment* 38, 1005-1013.
- Asher W.E., Pankow J.F., Erdakos G.B., and Seinfeld J.H. (2002) Estimating the vapor pressures of multi-functional oxygen-containing organic compounds using group contribution methods. *Atmos. Environment* 36, 1483-1498.
- Seinfeld J.H., Erdakos G.B., Asher W.E., and Pankow J.F. (2001) Modeling the formation of secondary organic aerosol (SOA). 2. The predicted effects of relative humidity on aerosol formation in the α -pinene-, β -pinene-, sabinene-, Δ^3 -carene-, and cyclohexene-ozone systems. *Environ. Sci. Technol.* 35, 1806-1817.
- Pankow J.F., Seinfeld J.H., Asher W.E., and Erdakos G.B. (2001) Modeling the formation of secondary organic aerosol. 1. Application of theoretical principles to measurements obtained in the α -pinene/, β -pinene/, sabinene/, Δ^3 -carene/, and cyclohexene/ozone systems. *Environ. Sci. Technol.* 35, 1164-1172.

Erdakos G.B. and Ren S.-F. (1998) Poisson's ratios in diamond/zincblende crystals. *J. Phys. Chem. Solids* 59, 21-26.

Meeting Presentations, Webinars, and Conference Proceedings

- Erdakos G. (2019) Zero emission vehicles: forecasting fleet scenarios and their emissions implications. Presented to the National Cooperative Highway Research Program project panel, NCHRP 25-25, Task 115, November 21. STI-918083-7205. Available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_wod_274Presentation.pptx.
- Craig K., Erdakos G., Chang S.-Y., and Baringer L. (2019) Source apportionment modeling to investigate local and non-local contributions to ground-level ozone in Albuquerque, New Mexico. Presentation given at the *2019 CMAS Conference, Chapel Hill, NC, October 23*, by Sonoma Technology, Inc., Petaluma, CA. STI-7145.
- Craig K., Chang S.Y., Erdakos G., and Baringer L. (2019) Projecting future ground-level ozone concentrations in Albuquerque, New Mexico. Poster presented at the *2019 CMAS Conference, Chapel Hill, NC, October 21-23*, by Sonoma Technology, Inc., Petaluma, CA. STI-7175.
- Erdakos G. and Bai S. (2019) Caltrans Construction Emissions Tool (CAL-CET2018). Webinar prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-917101-7080, April.
- Craig K., Seagram A., Du Y., Bai S., Eisinger D., Baringer L., Erdakos G., and Brown S. (2017) TPF TO 2 phase III, case study 1 – Providence, RI: work update. Webinar presented to the Transportation Pooled Fund participants, December 11, by Sonoma Technology, Inc., Petaluma, CA. STI-914202-6838.
- Craig K., Erdakos G., Baringer L., and Chang S.Y. (2017) Source apportionment modeling to investigate background, regional, and local contributions to ozone concentrations in Denver, Phoenix, Detroit, and Atlanta. Presentation given at the *16th Annual CMAS Conference, Chapel Hill, NC, October 23*, by Sonoma Technology, Inc., Petaluma, CA. STI-6759.
- Craig K. (2018) Air quality modeling of 2017 ozone episodes in the City of Albuquerque. Presented to the City of Albuquerque Air Quality Control Board, Albuquerque, NM, October 18, by Sonoma Technology, Inc., Petaluma, CA. STI-918015-7000.
- Craig K. and Erdakos G. (2018) Air quality modeling of 2017 ozone episodes in the City of Albuquerque. Presented to the City of Albuquerque Air Quality Program, Albuquerque, NM, October 18, by Sonoma Technology, Inc., Petaluma, CA. STI-918015-7000.
- Craig K., Erdakos G., Baringer L., and Chang S.Y. (2017) Source apportionment modeling analysis findings. Webinar presented to the Electric Power Research Institute, August 30, by Sonoma Technology, Inc., Petaluma, CA. STI-916029-6786.
- Craig K.J., Erdakos G.B., Song B., and Reid S. (2017) Roadway Source Setup in AERMOD View. Webinar presented to the California Department of Transportation, Sacramento, CA, May 31, by Sonoma Technology, Petaluma, CA. STI-914103-6719.

- Erdakos G., Craig K., and Bai S. (2017) Overview of the Design Value Tool: DVTool v3.0. Webinar presented to the California Department of Transportation, Sacramento, CA, May 16, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6718.
- Erdakos G.B., Craig K.J., and Bai S. (2017) AERMOD modeling with depressed and elevated roadways. Webinar presented to the California Department of Transportation, Sacramento, CA, May 9, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6714.
- Craig K., Seagram A., Erdakos G., and Bai S. (2017) Overview of the ArcGIS web-based tool and CTM-based PM background concentration spreadsheet. Webinar presented to the California Department of Transportation, April 11, by Sonoma Technology, Inc. STI-914103-6708.
- Craig K., Erdakos G., Baringer L., Reid S., and Kumar N. (2017) Source apportionment modeling to investigate background, regional, and local contributions to ozone concentrations in Denver and Phoenix. Presented at the Background Ozone Scientific Assessment Workshop, Denver, CO, March 29, by Sonoma Technology, Inc., Petaluma, CA. STI-6735.
- Reid S.B., Du Y., and Erdakos G.B. (2017) Overview of the Caltrans Construction Emissions Tool (CAL-CET). Webinar presented to the California Department of Transportation, March 7, by Sonoma Technology, Inc. STI-914103-6681.
- Craig K., Erdakos G., Baringer L., and Reid S. (2016) Ozone source apportionment modeling to support policy initiatives in the eastern United States. Presented at the *15th Annual CMAS Conference in Chapel Hill, NC, October 26*, by Sonoma Technology, Inc., Petaluma, CA. STI-6537.
- Erdakos G.B., Bai S., and Craig K.J. (2016) AERMOD View modeling quality assurance. Webinar presented to the California Department of Transportation, Sacramento, CA, August 17, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6565.
- Erdakos G.B. and Craig K.J. (2016) AERMOD View receptor and meteorology pathways. Webinar presented to the California Department of Transportation, Sacramento, CA, August 4, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6562.
- Bai S. and Erdakos G. (2016) AERMOD View and EM4AQ Tool. Webinar presented to the California Department of Transportation, Sacramento, CA, July 14. STI-6518.
- Erdakos G.B. and Craig K.J. (2016) AERMOD View source pathway. Webinar presented to the California Department of Transportation, Sacramento, CA, June 30, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6541.
- Reid S., Bai S., Du Y., Craig K., Erdakos G., Baringer L., Eisinger D., and McCarthy M. (2016) Emissions modeling with MOVES and EMFAC to assess the potential for a transportation project to create particulate matter hot spots. Presentation given at the *2016 Transportation Research Board Annual Meeting, Washington, DC, January 13*, by Sonoma Technology, Inc., Petaluma, CA. STI-914202-6417.
- Erdakos G.B., Craig K.J., DeWinter J.L., and Reid S.B. (2015) MetDat meteorological database system: data acquisition, processing, and accessibility through the AirNow Portal. Poster presented at the *14th Annual CMAS Conference, Chapel Hill, NC, October 5-7*. STI-6353.

- Erdakos G. and Bai S. (2015) The Design Value (DV) tool: using v2.0 for PM hot-spot analysis. Webinar presented to the California Department of Transportation, Sacramento, CA, July 22, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6317.
- Craig K.J. and Erdakos G.B. (2015) Review and quality control (QC) of quantitative PM hot-spot dispersion modeling results. Presented to the California Department of Transportation, Sacramento, CA, June 17, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6301.
- Bai S., Brown S., DeWinter J., Du Y., Eisinger D., Erdakos G., Graham A., and Reid S. (2015) Transportation Pooled Fund (TPF): overall progress webinar. Presented to Transportation Pooled Fund participants, May 14, by Sonoma Technology, Inc., Petaluma, CA. STI-914201-6273.
- Erdakos G. and Craig K. (2015) Representing roadway emission sources in AERMOD (webinar 2 of 2). Webinar presented to the California Department of Transportation, Sacramento, CA, February 19, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6108.
- Erdakos G. and Craig K. (2015) Representing roadway emission sources in AERMOD (webinar 1 of 2). Webinar presented to the California Department of Transportation, Sacramento, CA, February 17, by Sonoma Technology, Inc., Petaluma, CA. STI-914103-6107.
- Reid S., Craig K., Erdakos G., Driscoll C., Fakhraei H., Lambert K.F., Schwartz J., Buonocore J., and Levy J. (2014) Modeling the co-benefits of carbon standards for existing power plants. Presented at the *13th Annual CMAS Conference, Chapel Hill, NC, October 29*, by Sonoma Technology, Inc., Petaluma, CA. STI-6102.
- Craig K.J., Alrick D.M., Du Y., Erdakos G.B., MacDonald C.P., Gross T., and Watson D. (2014) Use of photochemical grid modeling to quantify ozone impacts from fires in support of exceptional event demonstrations. Presented at the *2014 Midwest and Central States Air Quality Workshop, St. Louis, MO, April 23*, by Sonoma Technology, Inc., Petaluma, CA. STI-5704.
- Craig K.J., Alrick D.M., Du Y., Erdakos G.B., MacDonald C.P., Gross T., and Watson D. (2013) Use of photochemical grid modeling to quantify ozone impacts from fires in support of exceptional event demonstrations. Presented at the *12th Annual CMAS Conference, Chapel Hill, NC, October 28-30*, by Sonoma Technology, Inc., Petaluma, CA. STI-5704.
- Craig K., Reid S., Erdakos G., Wang Z., Taylor C., Reed J., and Herr L. (2013) Annual WRF simulations for the Utah Bureau of Land Management's Air Resource Management Strategy (ARMS) air quality modeling. Poster presented at the *12th Annual CMAS Conference, Chapel Hill, NC, October 28-30*, by Sonoma Technology, Inc., Petaluma, CA. STI-5707.
- Eisinger D.S., Erdakos G.B., and Pasch A.N. (2013) Criteria pollutant, air toxics, and GHG air quality support: Tools developed to assist with project analyses. Webinar presented to the California Department of Transportation, September 19, by Sonoma Technology, Inc., Petaluma, CA. STI-909104-5762.
- Drury S.A., Rorig M.L., Wheeler N.J.M., Craig K.J., Stille J.C., Gray E.A., and Erdakos G.B. (2012) Real-time analysis of fire weather prediction accuracy: year two. Poster presented at the *5th International Fire Ecology and Management Conference, Portland, OR, December 3-7* (STI-5455).

- Drury S.A., Rorig M.L., Wheeler N., J. M., Craig K.J., Stille J.C., Gray E.A., and Erdakos G.B. (2012) Real-time analysis of fire weather prediction accuracy. Poster presented at the *Southwest Fire Ecology Conference, Santa Fe, New Mexico*, February 28 (STI-4301).
- Drury S.A., Rorig M., Craig K.J., Wheeler N.J.M., Strenfel S.M., Erdakos G.B., and Bothwell P. (2012) Uncertainty in model-generated fire weather values: how does model variability influence the reliability of dry thunderstorm risk and ignition potential predictions? Year 1 update. Presented at the *2012 Annual Meeting of the Association of American Geographers, New York, NY, February 24-28*, by Sonoma Technology, Inc., Petaluma, CA; Pacific Northwest Research Station, Seattle, WA; and NOAA NWS Storm Prediction Center, Norman, OK (STI-4241).
- Wheeler N.J.M., Craig K.J., Drury S.A., Gray E.A., and Erdakos G.B. (2011) Real-time analysis of weather prediction accuracy. Paper presented at the *10th Annual CMAS Conference, Chapel Hill, NC, October 24-26* (STI-4238).
- Wheeler N.J.M., Craig K.J., Drury S.A., Rorig M.L., Gray E.A., and Erdakos G.B. (2011) Real-time analysis of weather prediction accuracy. Poster presented at the *10th Annual CMAS Conference, Chapel Hill, NC, October 24*, by Sonoma Technology, Inc., Petaluma, CA (STI-4238).
- Drury S.A., Rorig M., Craig K.J., Wheeler N.J.M., Strenfel S.J., Erdakos G.B., and Bothwell P. (2011) Uncertainty in model-generated fire weather values: how does model variability influence the reliability of dry thunderstorm risk and ignition potential predictions? Year 1 update. Presented at the *Ninth Symposium on Fire and Forest Meteorology, Palm Springs, CA, October 18-20* by Sonoma Technology, Inc., Petaluma, CA; Pacific Northwest Research Station, Seattle, WA; and NOAA NWS Storm Prediction Center, Norman, OK (STI-4243).
- Erdakos G. B., Bhave P.V., Pouliot G.A., Simon H., and Mathur R. "Predicting the regional air quality impacts of diesel fuel additives containing nano-scale cerium compounds." *American Association for Aerosol Research 29th Annual Conference* Portland, OR, October 28, 2010.
- Erdakos G.B., Bhave P.V., Willis R., Lewandowski M., Norris G., and Sahle-Demessie E. "Fate and transport of cerium oxide nanoparticles in the atmosphere and in porous media." *U.S. Environmental Protection Agency Office of Research and Development (ORD) Nanomaterials Research Symposium* Washington, D.C., November 16, 2010.
- Erdakos G.B., Bhave P.V., and Zhang K.M. "Effects of fuel additives containing nano-scale cerium on diesel emissions: Modeling Impacts Near Roadways." *CRC Mobile Source Air Toxics Workshop* Sacramento, CA, December 1, 2010.
- Erdakos G.B., Pankow J.F., and Seinfeld J.H. "A model for predicting activity coefficients of neutral compounds in liquid particulate matter containing organic compounds, water, and dissolved inorganic salts." *American Association for Aerosol Research 23rd Annual Conference* Atlanta, GA, October 5, 2004.
- Erdakos G.B. and Pankow J.F. "The predicted effects of dissolved inorganic salts on the formation of aerosol particulate matter containing organic compounds and water." *American Association for Aerosol Research 23rd Annual Conference* Atlanta, GA, October 8, 2004.

- Erdakos G.B., Pankow J.F., and Seinfeld J.H. "Thermodynamic modeling of the formation of aerosol particles containing organics, water, and dissolved inorganic salts." *American Association for Aerosol Research 21st Annual Conference* Charlotte, NC, October 10, 2002.
- Erdakos G.B. and Pankow J.F. "The thermodynamic stability of multiple phases in the particulate material of aerosols containing both polar and non-polar compounds." *European Geophysical Society XXVII General Assembly* Nice, France April 22, 2002.
- Erdakos G.B. and Pankow J.F. "A consideration of the possible formation of multiple phases in secondary organic aerosol systems." *American Association for Aerosol Research 20th Annual Conference* Portland, OR, October 18, 2001.
- Erdakos G.B. and Ren S.-F. "Poisson's ratios in diamond/zincblende crystals." *Joint Meeting of the Illinois Section of the American Association of Physics Teachers and the Society of Physics Students* Normal, IL, April 11, 1997.
- Erdakos G.B. and Ren S.-F. "Poisson's ratios in diamond/zincblende crystals." *Argonne Symposium for Undergraduates in Science, Engineering and Mathematics* Argonne, IL, November 1, 1996.
- Erdakos G.B. and Ren S.-F. "Poisson ratios in diamond/zincblende crystals." *Joint Meeting of the American Physical Society and the American Association of Physics Teachers* Indianapolis, IN, May 2, 1996.
- Erdakos G.B. and Ren S.-F. "Poisson ratios in diamond/zincblende crystals." *Illinois State University Undergraduate Research Symposium* Normal, IL, March 28, 1996.
- Erdakos G.B. and Ren S.-F. "Poisson ratios in the diamond crystal." *Argonne Symposium for Undergraduates in Science, Engineering and Mathematics* Argonne, IL, November 3, 1995.

Invited Presentations

- Midsummer Conference – Apprenticeships in Science and Engineering Saturday Academy, Portland, OR, "Predicting the formation of particulate matter in the ambient atmosphere." 2003.
- Department Colloquium Department of Physics, Illinois State University, Normal, IL, "Thermodynamic Modeling of the formation of aerosol particles in the ambient atmosphere." 2002.
- Department Seminar Department of Environmental Science & Engineering, Oregon Graduate Institute of Science and Technology, Beaverton, OR, "Modeling the formation of secondary organic aerosol (SOA)." 2001.
- Department Seminar Department of Physics, Illinois State University, Normal, IL, "Poisson's ratios in diamond/zincblende crystals." 1997.

Formal Reports

- Erdakos G.B., Craig K.J., and Houk J.A. (2024) I-70/I-270 direct connect ramps - I-70 East record of decision 2: air quality draft technical report. Report prepared for the Colorado Department of Transportation, Denver, CO, by Sonoma Technology, Petaluma, CA, STI-8142.

- Erdakos G., Anderson A., Sussman E.A., Afreh I.K., and Craig K. (2024) Literature review of ammonia emissions from on- and off-road mobile sources. Report prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, 8051, CTAQ-TM-24-435.03.01
- Klobas J.G., Erdakos G.B., and Craig K.J. (2024) Assembly Bill 617 Community Air Protection Program (AB 617 CAPP): 2024 community status update. Technical memorandum prepared for the California Department of Transportation, Division of Environmental Analysis, Sacramento, CA, by Sonoma Technology, Petaluma, CA, CTAQ-TM-24-435.01.08, STI-8123, May.
- Erdakos G. (2023) Caltrans Construction Emissions Tool (CAL-CET2021) best practices guidance. Report prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-7848, CTAQ-RT-23-435.02.07.
- Erdakos G. (2023) CAL-CET2021 frequently asked questions (FAQ). Technical report prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-8160, CTAQ-RT-23-435.02.07.
- Erdakos G., Craig K., Ekstrand A., and Marcus D.L. (2023) Scoping outcomes for CAL-CET202X upgrade. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-8155, CTAQ-TM-23-435.03.02.
- Erdakos G. (2022) CAL-CET2021 technical support document. Report prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-7842, CTAQ-TM-22-435-01.06.
- Erdakos G.B. and Craig K.J. (2021) Using EMFAC2021 for project-level assessment. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-917101-7555, July.
- Erdakos G.B. and Craig K. (2021) Project-level case studies of new technologies and innovative measures to reduce air pollution and emissions from mobile sources and transportation projects. Final report prepared for California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc, Petaluma, CA, STI-917101-7480-FR, July 26.
- Erdakos, G., Chang, S., Huang, J., Sussman, E., and Craig, K. (2021) Project-level PM_{2.5} emissions analysis of future zero emission vehicle fleet changes. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, June.
- Erdakos G. and Hafner H. (2020) Methane emissions from natural gas distribution and end use sources. Final report prepared for the Electric Power Research Institute, Palo Alto, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-920038-7429, October.
- Erdakos G., Chang S.Y., Eisinger D., Heller A., and Unger H. (2019) Zero emission vehicles: forecasting fleet scenarios and their emissions implications. Final report prepared for NCHRP 25-25, Task 115 by Sonoma Technology, Inc., Petaluma, CA, and Louis Berger, Denver, CO, STI-918083-7043, November. Available at <http://www.trb.org/Main/Blurbs/180232.aspx>.
- Craig K.J., Erdakos G.B., Chang S.Y., Baringer L., Brown S., and Lavezzo T. (2019) Air quality modeling of 2017 ozone episodes in the City of Albuquerque. Final report prepared for the Environmental Health

Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-7010, June.

- Erdakos G. and Bai S. (2019) Caltrans Construction Emissions Tool (CAL-CET2018) best practices guidance. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, CTAQ-TM-19-368.04.08; STI-917101-7097-TM, April.
- Erdakos G. and Craig K. (2018) CAMx future-year (2025) modeling for the June-July 2017 Albuquerque ozone episodes. Technical memorandum prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-7018-TM, November 5.
- Erdakos G. and Craig K. (2018) CAMx base-case sensitivity modeling for the June-July 2017 Albuquerque ozone episodes. Technical memorandum prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-6985-TM, September 14.
- Erdakos G. and Bai S. (2018) Comparison of the Caltrans Construction Emissions Tool (CAL-CET2018 v1.0) and the Sacramento Metropolitan Air Quality Management District's Roadway Construction Emissions Model (RCEM v9.0). Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, CTAQ-TM-18-368.04.07; STI-917104-7016, August 31.
- Craig K., Erdakos G., and Baringer L. (2018) CAMx source apportionment modeling for the June-July 2017 Albuquerque ozone episodes. Technical memorandum prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-6973-TM, August 24.
- Craig K. and Erdakos G. (2018) CAMx base case photochemical model performance evaluation for the June-July 2017 Albuquerque ozone episodes. Technical memorandum prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-6933-TM, August 1.
- Craig K.J., Huang S., Pavlovic N.R., Erdakos G.B., and Drury S.A. (2018) Improving spatial resolution of wildland fire location and fuel biomass data inputs to NOAA's NAQFC. Final report prepared for the National Oceanic and Atmospheric Administration by Sonoma Technology, Inc., STI-916034-6927-FR, July 20.
- Bai S. and Erdakos G. (2018) CAL-CET2018 technical support document. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma CA, 917104-6940-TM, May.
- Craig K. and Erdakos G. (2018) Protocol for the City of Albuquerque 2018 ozone modeling analysis, version 1.0. Prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-6902-MP, April 6.
- Craig K. and Erdakos G. (2018) Quality assurance project plan (QAPP) for City of Albuquerque 2018 ozone modeling analysis. Prepared for the Environmental Health Department, City of Albuquerque, NM, by Sonoma Technology, Inc., Petaluma, CA, STI-918015-6893-QAP, April 6.

- Craig K.J. and Erdakos G. (2018) Modeling analysis of ozone source contributions in Denver, Phoenix, Atlanta, and Detroit. Final report prepared for the Electric Power Research Institute, Palo Alto, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-916029-6583-FR, February.
- Erdakos G., Du Y., and Bai S. (2018) Comparison of NONROAD and OFFROAD emission factors and project-level emissions. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, CTAQ-TM-18-368.01.02; STI-917101-6872-TM, January 31.
- Erdakos G., Bai S., Du Y., and Vu K. (2018) Comparison of NONROAD and OFFROAD models for CAL-CET update. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA by Sonoma Technology, Petaluma, CA, STI-917101-7040-TM, January 31.
- Craig K.J. and Erdakos G. (2017) Executive Summary on U.S. background ozone. Prepared for the Electric Power Research Institute, Palo Alto, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-916029-6825-FR, December.
- Bai S., Craig K., Reid S., Eisinger D., Farstad E., Erdakos G., Du Y., and Baringer L. (2017) Quantitative particulate matter hot-spot analysis best practices guidebook. Report prepared for the California Department of Transportation, Sacramento, CA by Sonoma Technology, Inc., Petaluma, CA, CTAQ-RT-17-317.02.6, STI-914112-6704-FR, June.
- Bai S., Craig K., Reid S., Eisinger D., Farstad E., Erdakos G., Du Y., and Baringer L. (2017) Streamlining air dispersion modeling to support quantitative particulate matter hot-spot analysis. Final report prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, CTAQ-RT-17-317.12.29; STI-914112-6707-FR, June. Available at <http://www.dot.ca.gov/env/air/docs/dispersion-modeling-support-pm-hot-spot-analysis.pdf>.
- Erdakos G.B., Bai S., Baringer L.M., Craig K.J., and Eisinger D.S. (2017) Modeling elevated roadways in AERMOD View. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Petaluma, CA, STI-914112-6717-TM, May.
- Erdakos G., Bai S., Baringer L., Craig K., and Eisinger D. (2017) Modeling depressed roadways in AERMOD View using the AERMOD OPENPIT source type. Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, CTAQ-TM-17-317.12.27, STI-914112-6640-TM, May 16.
- Erdakos G.B. and Bai S. (2017) PM background ArcGIS web map user guide (version 1.2). Technical memorandum prepared for the California Department of Transportation, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, 914111-6316-UG, March.
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Courses Taught

- Craig K.J. and Erdakos G.B. (2023) Introduction to dispersion modeling with AERMOD View for project-level analysis: two-day hands-on workshop. Training course presented to the California Department of Transportation, February 23-24, by Sonoma Technology, Petaluma, CA. STI-922102-7875.
- Craig K.J. and Erdakos G.B. (2023) Caltrans Construction Emissions Tool (CAL-CET2021 v1.0.2) for project-level analysis: hands-on workshop. Training course presented to the California Department of Transportation, January 27, by Sonoma Technology, Petaluma, CA. STI-922102-7849.
- Craig, K.J., Erdakos G.B., Choi, Y., Yoon, A., and Lee, J. (2019) Project-level air quality modeling: two-day hands-on training. Training course presented to the California Department of Transportation by Sonoma Technology, Inc., Petaluma, CA, STI-917106-7396, August 20-21.
- Bai S., Erdakos G.B., Choi, Y., Yoon, A., and Lee, J. (2019) Introduction to air quality modeling tools: two-day hands-on workshop. Training course presented to the California Department of Transportation by Sonoma Technology, Inc., Petaluma, CA, STI-917106-7395, March 5-6.
- Bai S., Erdakos G., Yoon A., and Choi Y. (2018) Introduction to air quality modeling tools: two-day hands-on workshop. Training course presented to the California Department of Transportation by Sonoma Technology, Inc., Petaluma, CA, STI-917106-7050, November 6-7.
- Craig K. and Erdakos G. (2018) Air quality modeling process Part 1: conceptual model, episode selection, and meteorological modeling. Presented to the City of Albuquerque Air Quality Program, Albuquerque, NM, October 18, by Sonoma Technology, Inc. STI-918015-7000.
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