Journal Articles

Kramer S.J., Huang S., McClure C.D., Chaveste M.R., and Lurmann F. (2023) Projected smoke impacts from increased prescribed fire activity in California's high wildfire risk landscape *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2023.119993, August 2. Available at https://www.sciencedirect.com/science/article/pii/S1352231023004193.

Herbert N., Beckman C., Cannedy C., Cao J., Cho S.-H., Fischer S., Huang S., Kramer S.J., and others (2023) Improving adaptation to wildfire smoke and extreme heat in frontline communities: evidence from a community-engaged pilot study in the San Francisco Bay Area. *Environmental Research Letters*, 18(7), 074026, June 26. Available at https://dx.doi.org/10.1088/1748-9326/acddf9.

McClure C.D., Pavlovic N.R., Huang S., Chaveste M., and Wang N. (2023) Consistent, high-accuracy mapping of daily and sub-daily wildfire growth with satellite observations. *International Journal of Wildland Fire*, 32(4), doi: 10.1071/WF22048, April.

Mukherjee A., Huang S., Chaveste M.R., Kramer S.J., Welch K.R., Moody T.J., Talhelm A.F., and Lottes A.M. (2021) Implementation of greenhouse gas benefit quantification for diverse forest management activities in a statewide program. (submitted), (STI-919033-7552).

Mukherjee A., McCarthy M.C., Brown S.G., Huang S., Landsberg K., and Eisinger D.S. (2020) Influence of roadway emissions on near-road $PM_{2.5}$: monitoring data analysis and implications. *Transportation Research Part D: Transport and Environment*, 86(102442), (STI-7166). Available at https://www.sciencedirect.com/science/article/pii/S1361920920306295.

Larkin N.K., Raffuse S.M., Huang S., Pavlovic N., Lahm P., and Rao V. (2020) The Comprehensive Fire Information Reconciled Emissions (CFIRE) inventory: wildland fire emissions developed for the 2011 and 2014 U.S. National Emissions Inventory. *J. Air Waste Manage.*, doi: https://doi.org/10.1080/10962247.2020.1802365 (STI-7439), September 11.

Rappold A.G., Hano M.C., Prince S., Wei L., Huang S.M., Baghdikian C., Stearns B., Gao X., Hoshiko S., Cascio W.E., Diaz-Sanchez D., and Hubbell B. (2019) Smoke Sense initiative leverages citizen science to address the growing wildfire-related public health problem. *GeoHealth,* 3(10) 307-336, doi: 10.1029/2019gh000199. Available at https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019GH000199.

Seagram A.F., Brown S.G., Huang S., Landsberg K., and Eisinger D.S. (2019) National assessment of near-road air quality in 2016: multi-year pollutant trends and estimation of near-road $PM_{2.5}$ increment. Transportation Research Record, doi: 10.1177/0361198119825538 (STI-6963), January 30. Available at https://journals.sagepub.com/doi/10.1177/0361198119825538.

Drury S.A., Rauscher H.M., Banwell E.M., Huang S., and Lavezzo T.L. (2016) The Interagency Fuels Treatment Decision Support System: functionality for fuels treatment planning. *Fire Ecology*, 12(1), 103-123, doi: 10.4996/fireecology.1201103 (STI-6061).

Drury S.A., Larkin N.K., Strand T.T., Huang S., Strenfel S.J., Banwell E.M., O'Brien T.E., and Raffuse S.M. (2014) Intercomparison of fire size, fuel loading, fuel consumption, and smoke emissions estimates on the 2006 Tripod Fire, Washington, USA. *The Journal of the Association for Fire Ecology*, 10(1), 56-83, doi: 10.4996/fireecology.1001056 (STI-908054-5477).

Meeting Presentations, Webinars, and Conference Proceedings

Kramer S.J., Huang S., Chaveste M.R., McClure C., and Lurmann F. (2023) Public Health Impact of Prescribed Fire (PHIRE) study – baseline and projected prescribed fire smoke exposures in California. Presented online as for the *AGU Atmospheric Science Section Early Career Committee for Science Seminar on Igniting Early Career Wildfire Studies, August 22,* by Sonoma Technology, Petaluma, CA. STI-7806.

Kramer S.J., Huang S., Chang S.Y., Huang J., Padula A., and Lurmann F. (2023) Exposure to $PM_{2.5}$ and ozone pollution from wildfire and prescribed fire by demographics in California. Presentation given at the *103rd AMS Annual Meeting, Denver, CO, January 12,* by Sonoma Technology, Petaluma, CA, and the University of California, San Francisco, San Francisco, CA. STI-7807.

Kramer S.J., Huang S., Chaveste M.R., McClure C.D., and Lurmann F.W. (2023) Public Health Impact of Prescribed Fire (PHIRE) study – baseline and projected prescribed fire smoke exposures in California. Presentation given at the *103rd AMS Annual Meeting, Denver, CO, January 11,* by Sonoma Technology, Petaluma, CA. STI-7806.

Pavlovic N., McClure C.D., Huang S., Chaveste M., and Wang N. (2022) Mapping hourly wildfire growth rate using fused geostationary and polar orbiting satellite observations. Presented at the *American Geophysical Union (AGU) Fall Meeting, Chicago, IL, December 12-16,* by Sonoma Technology, Petaluma, CA. STI-7773.

Huang S., Kramer S., Chaveste M., McClure C., and Lurmann F. (2022) Public Health Impact of Prescribed Fire (PHIRE) Study – baseline and projected prescribed fire smoke exposures in California. Presented at the *CAL FIRE Forest Health Research Program Grantee Webinar, November 10*, by Sonoma Technology. STI-7813.

Huang J., Chang S.Y., Huang S., and Lurmann F. (2022) Understanding the contributions of different types of biomass combustion to ambient $PM_{2.5}$ in the U.S. using CMAQv5.3.3. Poster presented at the *American Association for Aerosol Research (AAAR) conference in Raleigh, North Carolina, October 3-7,* by Sonoma Technology, Petaluma, CA. STI-7792.

Huang S., McClure C., Pavlovic N., Chaveste M., and Wang N. (2022) Consistent, high accuracy mapping of daily and sub daily wildfire growth using satellite observations. Presented at the *California Utility Forecasters Meeting, June 29,* by Sonoma Technology, Petaluma, CA. STI-7744.

Huang S., Pavlovic N., McClure C., Chaveste M., and Wang N. (2022) Methodology for consistent daily and sub daily mapping of wildfire growth for 2003-2020 and beyond. Presentation given at the *Fire and Climate 2022 Conference, Pasadena, CA, May 26,* by Sonoma Technology, Petaluma, CA. STI-7730.

Huang S., Mukherjee A., Chaveste M.R., Kramer S.J., Welch K.R., Moody T.J., Talhelm A.F., and Lottes A.M. (2022) Quantification of greenhouse gas benefits for diverse forest management activities in a statewide program. Presentation given at the *Fire and Climate 2022 Conference, Pasadena, CA, May 24,* by Sonoma Technology, Petaluma, CA, the California Department of Forestry and Fire Protection, Sacramento, CA, and the California Air Resources Board, Sacramento, CA. STI-7661.

Huang J., Chang S.Y., Huang S., and Lurmann F. (2022) Understanding the contributions of different types of biomass combustion to ambient $PM_{2.5}$ in the U.S. using CMAQv5.3.3. Poster presented at the *21th Community Modeling and Analysis System Conference, Chapel Hill, North Carolina,* by Sonoma Technology, Petaluma, CA. STI-7792.

Pavlovic N., McClure C., Huang S., Chaveste M., and Wang N. (2021) Methodology for consistent daily and sub-daily mapping of wildfire growth for 2003-2020 and beyond. Presented at the *Association for Fire Ecology 9th International Fire Ecology and Management Congress, Virtual, December 3,* by Sonoma Technology, Petaluma, CA. STI-7643.

Chang S.Y., Huang J., Alexander M., Eisinger D., Pavlovic N., and Knipping E. (2021) Air quality benefit from accelerated EV penetration in Southern California: a case study in the Interstate 710 corridor. Presented at the *CMAS Conference, virtual, November 4,* by Sonoma Technology, Petaluma, CA and Electric Power Research Institute, Palo Alto, CA. 600600-7613.

Kramer S.J., Huang S., Chaveste M.R., McClure C.D., and Lurmann F.W. (2021) Public Health Impact of Prescribed Fire (PHIRE) Study - baseline and projected prescribed fire smoke exposures in California. Poster presented at the *AGU Fall Meeting, New Orleans, LA, December 13-17,* by Sonoma Technology, Inc., Petaluma, CA. STI-7572.

Mukherjee A., Huang S., Chaveste M.R., Kramer S.J., Welch K.R., Moody T.J., Talhelm A.F., and Lottes A.M. (2021) Quantification of greenhouse gas benefit for diverse forest management activities in a statewide program. Poster presented at the *AGU Fall Meeting, New Orleans, LA, December 13-17,* by Sonoma Technology, Inc., Petaluma, CA. STI-7575.

McClure C.D., Pavlovic N.R., Huang S., Chaveste M.R., and Wang N. (2021) Consistent, high-accuracy mapping of daily and sub-daily wildfire growth with satellite observations. Poster presented at the *AGU Fall Meeting, New Orleans, LA, December 13-17,* by Sonoma Technology, Inc., Petaluma, CA. STI-921020-7573.

Huang S., Mukherjee A., Chaveste M.R., Kramer S.J., Moody K.R.W.T.J., Talhelm A.F., and Lottes A.M. (2021) Quantification of greenhouse gas benefits for diverse forest management activities in a statewide program. Presented at the *Association for Fire Ecology, November 30 - December 3,* by Sonoma Technology, Inc., Petaluma, CA. STI-600600-7644.

Huang S., Mukherjee A., Chaveste M.R., Kramer S.J., Moody K.R.W.T.J., Talhelm A.F., and Lottes A.M. (2021) Quantification of greenhouse gas benefits for diverse forest management activities in a statewide program. Presented at the *Society of American Foresters, virtual conference, November 3-6,* by Sonoma Technology, Inc., Petaluma, CA. STI-600600-7637.

Huang S., Kramer S., Chaveste M., McClure C., and Lurmann F. (2021) Public health impact of prescribed fire (PHIRE) study - baseline and projected prescribed fire smoke exposures in California. Presentation given at the *Community Modeling and Analysis System virtual conference, November 1-5,* by Sonoma Technology, Inc., Petaluma, CA. STI-7597.

Mukherjee A., Huang S., Hafner H., and Gorham D. (2021) Examining smoke impacts from major California wildfires in 2017 and 2018 using modeled smoke based on BlueSky Framework and observed smoke data from ground monitors and satellites. Presentation given at the *Air and Waste Management Association Visibility Conference, Bryce Canyon, UT, October 5-8,* by Sonoma Technology, Inc., Petaluma, CA. STI-7389.

Brown S., Craig K., Eisinger D., Landsberg K., Mukherjee A., Baringer L., Chang S.Y., DeWinter J., McCarthy M., and Huang S. (2019) National assessment of near-road (NR) air quality: requirements, trends, and analysis insights. Presented for the U.S. Transportation Research Board webinar series, September 30, by Sonoma Technology, Inc., and the Washington State Department of Transportation.

Kramer S.J. and Huang S. (2021) Applications of SubX for air quality, fire, and smoke. Presented at the 2021 Subseasonal Experiment (SubX) Current and Potential Users Forum Section on Public Health and Insurance, August 25, by Sonoma Technology, Petaluma, CA. STI-7668.

Brown S., Craig K., Eisinger D., Landsberg K., Mukherjee A., Baringer L., Chang S.Y., DeWinter J., McCarthy M., and Huang S. (2019) National assessment of near-road (NR) air quality: requirements, trends, and analysis insights. Presented to the AASHTO Committee on Environment and Sustainability, 2019 Annual Meeting, Minneapolis, MN, August 7, by Sonoma Technology, Inc., Petaluma, CA, and the Washington State Department of Transportation, Olympia, WA. STI-7154.

Craig K.J., Huang S., Pavlovic N., Chang S.Y., Cavallaro A., and Drury S. (2019) Improving spatial resolution of wildland fire location and fuel biomass data inputs to NOAA's NAQFC. Presentation given at the *International Fire Behavior and Fuels Conference, Albuquerque, NM, April 30*, by Sonoma Technology Inc., Petaluma, CA. STI-7017.

Pavlovic N., Huang S., McClure C., and Mukherjee A. (2019) Modeling of smoke impacts on air quality using direct observation of hourly fire activity from geostationary satellites. Presentation given at the *Fire Behavior and Fuels Conference, Albuquerque, New Mexico, April 30,* by Sonoma Technology, Inc., Petaluma, CA. STI-7110.

Mukherjee A., DeWinter J., and Huang S. (2019) Ozone impacts on vegetation. Webinar presented to Electric Power Research Institute by Sonoma Technology, Inc., Petaluma, CA, STI-918085-7103, April.

Huang S. and Hafner H. (2019) Camp Fire impacts on air quality in California in November 2018. Presentation given at the *A&WMA Impacts of Wildfires on Air Quality and Health Conference, Santa Rosa, CA, February 14*, by Sonoma Technology, Inc., Petaluma, CA. STI-7062.

Seagram A., Huang S., Brown S., Landsberg K., DeWinter J., and Eisinger D. (2019) National assessment of near-road air quality: trends and estimation of near-road $PM_{2.5}$ increment. Presented at the *Transportation Research Board 2019 Annual Meeting, Analysis Subcommittee, Transportation and Air Quality Committee, Washington, DC, January 14,* by Sonoma Technology, Inc., Petaluma, CA. STI-7034.

Craig K.J., Huang S., Pavlovic N., Chang S.Y., and Cavallaro A. (2018) Improving spatial resolution of wildland fire location and fuel biomass data inputs to NOAA's NAQFC. Presentation given at the *17th Annual CMAS Conference, Chapel Hill, NC, October 23,* by Sonoma Technology, Inc., Petaluma, CA. STI-6993. Available at https://www.cmascenter.org/conference//2018/slides/craig_improving_spatial_2018.pdf.

Pavlovic N., Brown S., O'Brien T., Huang S., Craig K., Zahn P., Penfold B., and Jaffe D. (2018) Wildland fire smoke from long-range transport enhances ozone in the Southeastern U.S. Presentation given at the N*ational Ambient Air Monitoring Conference, Portland, OR, August 16*, by Sonoma Technology, Inc., Petaluma, CA, and the University of Washington, Bothell, WA. STI-6934.

Seagram A., Huang S., Brown S., DeWinter J., Landsberg K., and Eisinger D. (2018) National-scale near-road monitoring findings in 2016. Presented at the *Transportation Research Board 2018 Annual Meeting, Analysis Subcommittee, Transportation and Air Quality Committee, January 9*, by Sonoma Technology, Inc., Petaluma, CA, and the Washington State Department of Transportation, Olympia, WA. STI-6842.

Pavlovic N., Huang S., and Rao V. (2017) The 2015 wildland fire emissions inventory for the United States, Canada, and Mexico. Presented at the *2017 International Emission Inventory Conference, Baltimore, MD, August 18,* by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Environmental Protection Agency, Durham, NC.

Huang S., Pavlovic N., Rao V., and Larkin S. (2017) Development of the 2014 wildland fire National Emissions Inventory version 1. Presented at the *2017 International Emissions Inventory Conference, Baltimore, MD, August 18,* by Sonoma Technology, Inc., Petaluma, CA. STI-6674.

Seagram A., Huang S., and Rao V. (2017) A comparison between model- and literature-based emission factors for wildland fires. Presented at the *2017 International Emission Inventory Conference, Baltimore, MD, August 14-18.* STI-6728.

Lavezzo T., Huang S., Pavlovic N., and Hafner H. (2017) The Marin Community Wildfire Protection Plan: science-based collaborative planning and implementation. Presented at the *National Cohesive Wildland Fire Management Strategy Workshop, Reno, NV, April 25-27,* by Sonoma Technology, Inc., Petaluma, CA. STI-6668.

Huang S., Pavlovic N., Rao V., and Larkin S. (2017) Development of the 2014 wildland fire National Emissions Inventory version 1. Presented at *2017 Smoke Management in the Northwest, Portland, OR, March 22,* by Sonoma Technology, Inc., Petaluma, CA. STI-6699.

Brown S., Pavlovic N., Graham A., and Huang S. (2016) Understanding the impacts of wildfires on ozone concentrations. Presented at the *IAWF's 2nd International Smoke Symposium, Long Beach, CA, November 17*, by Sonoma Technology, Inc., Petaluma, CA. STI-6514.

Huang S., Pavlovic N., Rao V., and Larkin S. (2016) Development of the 2014 wildland fire National Emissions Inventory version 1. Presented at the *IAWF's 2nd International Smoke Symposium, Long Beach, CA, November 15,* by Sonoma Technology, Inc., Petaluma, CA. STI-6512.

Rappold A., Rappazzo K., Baghdikian C., Stone S., Huang S., Blakey T., Healy A., and Hubbell B. (2016) Smoke Sense: a mobile application for estimating health impacts from smoke through crowdsourcing. Poster presented at the *International Association of Wildland Fire's 2nd International Smoke Symposium, Long Beach, CA, November 14-17,* by U.S. Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC. STI-6606.

Huang S., Pavlovic N., Lavezzo T., Drury S., Neill C., Walsh T., and Lando T. (2016) Development and application of a high-resolution (5-m) fuel model map based on LiDAR and NAIP for Marin County, California. Extended abstract in the conference proceedings of the *IAWF Fire Behavior and Fuels Conference, Portland, OR, April 11-15.* STI-6524.

Pavlovic N., Huang S., Drury S., Lavezzo T., Neill C., and Lando T. (2016) Development of a high-resolution (5-m) fuel model map for Marin County, California, based on LiDAR and NAIP. Poster presented at the *IAWF Fire Behavior and Fuels Conference, Portland, OR, April 11-15.* STI-6396.

Zahn P. and Huang S. (2015) Ozone trends and transport patterns in the Mojave Desert and surrounding areas. Presented at the *California Desert Air Working Group Conference, Big Bear, CA, November 19,* by Sonoma Technology, Inc., Petaluma, CA. STI-6399. Available at http://mdaqmd.ca.gov/ftp/2015CDAWG/17.pptx.

Huang S. (2015) BlueSky development 2014-2015. Presented at the BlueSky Canada Meeting, Vancouver, BC, October 15, by Sonoma Technology, Inc. STI-6375.

Craig K.J., Raffuse S., Larkin S., Huang S., and Drury S. (2015) Megafires and smoke exposure under future climate scenarios in the contiguous United States. Presented at the *14th Annual CMAS Conference, Chapel Hill, NC, October 5-7.* STI-6361.

Huang S., Dye T., and Miller D. (2015) Kids Making Sense Sacramento project. Presented to the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, May 27, by Sonoma Technology, Inc., Petaluma, CA. STI-914089-6287.

Raffuse S.M., Larkin S., Huang S., Drury S.A., and Lorentz K.A. (2015) Megafires and smoke exposure under future climate scenarios in the contiguous U.S. Presented at the *11th Symposium on Fire and Forest Meteorology, Minneapolis, MN, May 6*. STI-6268.

Huang S., Ottmar R., Prichard S., Larkin S., Raffuse S., Cavallaro A., Carrier L., and Swedin K. (2015) BlueSky Playground for the U.S. Army Corps of Engineers. Presented at the *11th Symposium on Fire and Forest Meteorology, Minneapolis, MN, May 5,* by Sonoma Technology, Inc., Petaluma, CA. STI-6169.

McCarthy M., Ekstrand A., Huang S., and Penfold B. (2015) Oil Sands ambient air monitoring network evaluation: analysis results. Webinar presented to Alberta Environment and Sustainable Resource Development, Edmonton, AB, Canada, April 16, by Sonoma Technology, Inc., Petaluma, CA. STI-914049-6241.

Drury S.A., Weyenberg S., Huang S., Raffuse S.M., and Chinkin L.R. (2015) Modeling fire behavior, fire effects, and smoke concentrations for prescribed burns on the Indiana Dunes National Lakeshore. Poster presented at the *Midwest Fire Conference: Keeping Fire Working for the Land, Dubuque, IA, February 17-19*. STI-6167.

McCarthy M., O'Brien T., Huang S., Reid S., and Sullivan D. (2015) Toxic air pollutants risk assessment study: final results. Webinar presented to Metro Vancouver, Burnaby, BC, January, by Sonoma Technology, Inc., Petaluma, CA. STI-914008-5981.

Huang S., Larkin N.K., Raffuse S.M., Lorentz K.A., Drury S.A., and Craig K.J. (2014) Megafires and smoke exposure under future climate scenarios in the contiguous United States. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 15-19,* by Sonoma Technology, Inc., Petaluma, CA. STI-6041.

Raffuse S.M., Larkin N.K., Cavallaro A.M., Huang S., Solomon R., and Lahm P. (2014) BlueSky Playground: web-based smoke modeling. Poster presented at the *A Future with Fire Conference, McClellan, CA, December 2-3,* by Sonoma Technology, Inc., Petaluma, CA. STI-6125.

McCarthy M., Ekstrand A., Huang S., and Penfold B. (2014) Oil sands ambient air monitoring network evaluation: conceptual model webinar. Presented to Alberta Environment and Sustainable Resource Development, Edmonton, AB, November 19, 2014, by Sonoma Technology, Inc., Petaluma, CA. STI 914049-6123.

McCarthy M., Ekstrand A., Huang S., and Penfold B. (2014) Oil sands ambient air monitoring network evaluation: data verification webinar. Webinar presented to Alberta Environment and Sustainable Resource Development, October 16, by Sonoma Technology, Inc., Petaluma, CA. STI-914049-6093.

Dye T.S., Gordon B.J., Heimbinder M., and Huang S. (2014) Kids Making Sense: student scientists finding pollution and taking action. Poster presented at the Kids Making Sense Workshop, Mark Keppel High School, Alhambra, CA, August 6. STI-910502-5951.

Huang S., Gordon B., and Lurmann F. (2014) Particulate matter exposure and health effects. Presented at the Kids Making Sense Workshop, Mark Keppel High School, Alhambra, CA, August 6, by Sonoma Technology, Inc., Petaluma, CA. STI-910502-6032.

Eberly S., McCarthy M.C., and Huang S. (2014) Bias in PM$_{2.5}$ filter-based methods. Presented at the *National Ambient Air Monitoring Conference, Atlanta Georgia, August,* by Geometric Tools, LLC, WA, and Sonoma Technology, Inc., Petaluma, CA. Available at www.epa.gov/ttn/amtic/files/2014conference/wedqaeberly.pdf.

Raffuse S.M., Larkin N.K., and Huang S. (2014) Emissions of greenhouse gases and fine particles from wildland fires in the United States from 2003 to 2011. Presented at the *2014 Global Emissions InitiAtive Conference, Boulder, CO, June 10-11*. STI-5986.

Huang S., Larkin N., and Raffuse S. (2013) Emissions of greenhouse gases and fine particles from wildland fires in the United States from 2003 to 2011. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 9-13,* by Sonoma Technology, Inc., Petaluma, CA. STI-5731.

Dawes S., Burke G.B., Pasch A., Huang S., Dye T., Zahn P., DeWinter J., Haderman M., Szykman J., White J., Dickerson P., van Donekelaar A., and Martin R. (2013) Assessing the value of enhancing AirNow with the NASA satellite data. Presented at the *AGU Fall Meeting, San Francisco, CA, December 9*. STI-5734.

Raffuse S., Larkin N., Rorig M., Huang S., Cavallaro A., Solomon R., and Stilley J. (2013) BlueSky Playground: a web-based smoke modeling decision support tool. Presented at the *Tenth Annual Symposium on Fire and Forest Meteorology, Bowling Green, KY, October 15-17,* by Sonoma Technology, Inc., Petaluma, CA. STI-5683.

Huang S., Larkin N., Raffuse S., Ekstrand A., Jumbam L., Lam P., and Rao V. (2013) Improving the wildland fire portion of the National Emissions Inventory. Poster presented at the *4th International Fire Behavior and Fuels Conference, Raleigh, NC, February 18-22* (STI-5474).

Drury S.A., Haste T.L., Noha D.J., Banwell E.M., Huang S., Rauscher H.M., and Cissel J. (2013) Interagency Fuels Treatment Decision Support System (IFTDSS 2.0 beta): current software tools and data available online for fuels treatment planning. Poster presented at the *4th Fire Behavior and Fuels Conference, Raleigh, North Carolina, February 18-22, 2013,* Sonoma Technology, Petaluma, CA; Joint Fire Science Program, Boise, ID (STI-5509).

Drury S.A., Larkin N.K., Strand T.T., Huang S., Strenfel S.J., Banwell E.M., O'Brien T., and Raffuse S.M. (2012) Comparing fire size, fuels, fuel consumption, and smoke emissions estimates: a case study using the 2006 Tripod wildfire. Presented at the *5th International Fire Ecology and Management Congress, Portland, OR, December 3-7,* by Sonoma Technology, Inc., Petaluma, CA. STI-5457.

Larkin N., Strand T., Solomon R., Martinez N., Drury S., Raffuse S., Huang S., and Strenfel S. (2011) Uncertainties in modeling smoke impacts from wildland fire. Presented at the *Ninth Symposium on Fire and Forest Meteorology, Palm Springs, CA, October 18–20*, by the USDA Forest Service, Seattle, WA, and Sonoma Technology, Inc., Petaluma, CA. Available at https://ams.confex.com/ams/9FIRE/webprogram/Paper192364.html.

Drury S.A., Larkin N., Huang S., Strenfel S.J., O'Brien T., and Raffuse S.M. (2010) Fuel loading, fuel consumption, and smoke emissions simulations under wildfire conditions: the 2006 tripod wildfire case study. Poster presented at the *3rd Fire Behavior and Fuels Conference, Spokane, WA, October 25-29* by Sonoma Technology, Inc., Petaluma, CA and USFS AirFire Team, PNW Research Station, Seattle, WA (STI-4010).

Hafner H., Alrick D., Huang S.M., and Pasch A. (2010) The importance of meteorological data in exceptional events analysis. *National Air Quality Conferences, Raleigh, NC, March 15-18* (STI-3801).

Huang, S., Sullivan, D.C., Raffuse, S., and Procter, T. (2009) A retrospective analysis of smoke during the 2008 California fires. Presented at the *4th International Fire Ecology and Management Congress, Savannah, GA, December 2* by Sonoma Technology, Inc., Petaluma, CA (STI-620000-3689).

Huang S. and Hafner H. (2009) Exceptional event case study: Region 9, PM_{10} events, Arizona. Presented to EPA Region 9 and EPA OAQPS, July 7 (STI 905512-3662).

Formal Reports

Lavezzo T.L., Penfold B.M., Huang S.M., and Scarborough C.R. (2020) Marin County Community Wildfire Protection Plan. Prepared for the Marin County Fire Department, Woodacre, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-7472, December. Available at http://www.sonomatech.com/sites/default/files/filedepot/MarinCountyCWPP_2020.pdf.

Mukherjee A. and Huang S. (2020) Examining smoke impacts from major california wildfires and smoke damage insurance claims using modeled and observed particulate matter. Technical memorandum prepared for Insurance Institute for Business and Home Safety, Richburg, SC by Sonoma Technology, Inc., Petaluma, CA, STI-918084-7484, December.

McClure C., Wang N., Chaveste M., Pavlovic N., and Huang S. (2020) Remote sensing fire activity database with agency record integration for years 2003-2019. Technical memorandum prepared for Pacific Gas & Electric, San Francisco, CA by Sonoma Technology, Petaluma, CA, STI-920029-7286, September 15.

Mukherjee A., DeWinter J., Huang S., McCarthy M., Drury S., Brown S., Hafner H., and Roberts P. (2020) Review: framework for research informing the ozone secondary NAAQS. Final report prepared for the Electric Power Research Institute, Washington, DC, by Sonoma Technology, Inc., Petaluma, CA, STI-918085-7269, March 25.

Mukherjee A., Huang S., and McCarthy M. (2019) 2019 ozone secondary NAAQS review: framework for recent and future research. Final report prepared for the Electric Power Research Institute, Washington, DC, by Sonoma Technology, Inc., Petaluma, CA, STI-918085-7210, December.

Mukherjee A., McCarthy M.C., Brown S.G., Huang S., Landsberg K., and Eisinger D.S. (2019) Influence of roadway emissions on near-road $PM_{2.5}$: monitoring data analysis and implications for determining transportation projects of local air quality concern (POAQC). Final report prepared for the Washington State Department of Transportation, lead agency for the Near-Road Air Quality Research Transportation Pooled Fund, by Sonoma Technology, Inc., Petaluma, CA, STI-914203-7088, October.

Pavlovic N., Huang S., Craig K., and Zahn P. (2019) Smoke information system for Mexico City: understanding and managing air quality impacts of smoke from wildland fires and agricultural burning. White paper prepared by Sonoma Technology, Inc., Petaluma, CA, STI-7100, May 2.

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.

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