

CURRICULUM VITAE

NAME: Samantha J. Kramer, PhD, ORCID: 0000-0002-0526-6057

EDUCATION/TRAINING

Institution and Location	Degree	Completion	Field of Study
Univ. of Miami, Miami, FL	BS	05/2015	Atmos. Science & Math
Univ. of Miami, Miami, FL	PhD	06/2020	Meteorology & Phys. Oceanography

A. Personal Statement

My technical expertise broadly ranges in natural aerosol pollutants, airflow tracking, regional climatology, radiative impacts, and sub-seasonal prediction. I am currently leading a cross-sector research study, (Kramer- Lead PI) NOAA Weather Program Office (WPO) Innovations Fire Weather Competition (Award #NA23OAR4590383) generating a standardized fire weather database to streamline research and reduce barriers to evaluating forecasts. This work includes evaluating new NOAA United Forecast System (UFS) products specifically for decision-maker cases. I have led stakeholder workshops and iterative polling for key partners, in-line with research to ensure maximum potential benefit. Prior research in this area includes statistical analysis of forecast variability, climatology, and accuracy to determine the baseline dependability of six-week forecasts for use in regional natural aerosol predictions to redefine how research communities can approach computational limitations. I have also recently led particulate matter (PM_{2.5}) smoke-dispersion modeling efforts using BlueSky Pipeline, HYSPLIT, and ArcGIS for historical wildfire and prescribed fire records. I have designed and implemented 4 million acres of hypothetical projected prescribed fires in California to determine the public health impacts from smoke at ZIP-code levels based on state policy. I also oversee the development of EPA's Smoke Sense citizen science application, and secondary NSF-funded smoke mitigation study for disadvantaged communities. My greatest strength is harmonizing university, federal, state, and industry connections to build interdisciplinary teams and cross-sharing data to improve societal outcomes for decision support processes. This includes direct work with the University of Miami, U.S. EPA, U.S. Forest Service, NOAA, California Department of Public Health (CDPH), and California Department of Forestry and Fire Protection (CAL FIRE). I have also coordinated at the local level, including fire evacuation research, mitigation prioritization research, and tool development for the Marin Wildfire Prevention Authority (MWWA), which included direct collaboration with local agencies including fire departments, office of emergency management, and department of transportation.

B. Positions and Honors

Career

2013-2015	Research Assistant, Univ. of Miami
2015-2017	Graduate Researcher, Univ. of Miami Rosenstiel School of Marine and Atmos. Science
2017-2020	PhD Candidate, Univ. of Miami Rosenstiel School of Marine and Atmos. Science
2020-2022	Air Quality Data Scientist, Sonoma Technology
2022-2025	Air Quality Data Scientist and Project Manager, Sonoma Technology
2024-2025	Program Manager Wildland Fire and Smoke, Sonoma Technology
2025-Current	Symposium Chair: Community Modeling and Innovation Committee at AMS Annual
2026-Current	Principal Scientist, Founder, Atmospheric Interdisciplinary Research Institute

Memberships and Awards

2023	Sonoma Technology 'You Make a Difference Award': Peer nominated and selected
2021-Current	Member, International Association of Wildland Fire

2017-Current Member, American Meteorological Society
2015 Outstanding Meteorology Major Award: Faculty nominated and selected

C. Contributions to Science

1. Numerical Weather Prediction

I am currently leading a cross-sector research study, (Kramer- PI) NOAA Weather Program Office (WPO) Innovations Fire Weather Competition, Award #NA23OAR4590383, generating a standardized fire weather database to streamline research and reduce barriers to forecast evaluation. This work includes evaluating new NOAA United Forecast System (UFS) forecast products specifically for decision-maker cases. Stakeholder workshops and iterative polling for key partners/participants/collaborators is being conducted in-line with research to ensure maximum potential benefit. Prior research in this area includes statistical analysis of forecast variability, climatology, and accuracy to determine the baseline dependability of six-week forecasts for use in regional natural aerosol predictions to re-define how research communities can approach computational limitations.

2. Smoke-Related Health Assessments

I have managed PM_{2.5} smoke-dispersion modeling efforts using BlueSky Pipeline, HYSPLIT, and ArcGIS for 10 years of wildfire and prescribed fire records. This work involves comparing fire weather climatology over 10 years and modeling dispersion for 4 million acres of hypothetical prescribed fires in California to determine the public health impacts from smoke at ZIP-code levels. I have also done extensive analysis for an National Institutes of Health (NIH)-funded study focused on PM_{2.5} smoke impacts on California birth outcomes (2007-2018) using model output for wildland fire smoke scenarios, completing data extractions, smoke exposure assignments, environmental justice analyses, and data quality assessments. I am serving as the technical lead on a current smoke transport climatology project for California and Nevada, funded by CAL FIRE, which will use high-resolution HYSPLIT trajectories with kernel density calculations for spatial probability density. currently leading a report on

3. Wildfire Impacts for Carbon and Climate

I have performed greenhouse gas (GHG) and carbon quantification for forest management activities utilizing the Forest Vegetation Simulator, Interagency Fuel Treatment Decision Support System Model, and field observations. This work was funded by the State of California through the Cap-and-Trade program serving to meet climate emission goals in tandem with wildfire hazard actions. Our efforts in this analysis lead to improved understanding of wildfire risk reduction and impacts on carbon capture. Most recently, I am leading an analysis and written report on extreme temperature, wildfire, and smoke exposure projections for the 5th California Climate Change Assessment in collaboration with UC Berkeley. This work includes past and historical data synthesized with downscaled climate projections for various simulations and scenarios.

4. Community Mitigation of Wildland Fire Tools

Due to the increasing threat of wildfire and wildfire smoke impacts, community decision support tools have become necessary for public agencies and citizens. My research has included the development of EPA's Smoke Sense citizen science application, an NSF-funded smoke mitigation study for disadvantaged communities. I have also led the development of an evacuation risk mitigation toolkit, which involved (1) an extensive literature review on the state of science and citizen fatality incidents due to wildfire; (2) direct communication and discussion with local agencies, including fire departments, emergency

support services, and traffic control services; and (3) developing guidance for local agencies to implement mitigation solutions and reduce risks at the local level.

D. Teaching Experience

Graduate Teaching Assistant (Aug – Dec 2018)

Climate Change (MPO 653), Rosenstiel School of Marine and Atmospheric Science

Graduate course. Experiences include maintaining course website (Blackboard), class communications, comprehensive feedback to student blog posts, writing homework questions, grading, overseeing exams, lecture involvement, and maintaining office hours.

Graduate Teaching Assistant (Aug – Dec 2016)

Weather Forecasting (ATM243), University of Miami

Undergraduate course with weekly forecasting lab assignments. Experiences include giving multiple lectures, grading, overseeing lab assignments, and maintaining course website (Blackboard), class communications, grading, overseeing exams, and maintaining office hours.

E. Mentorship and Leadership Experience

(2024-Current) Program Manager Wildland Fire and Smoke, Data Science Department

As Program Manager, I oversee the safety requirements, scientific standards, and communication of the Wildland Fire and Smoke group at Sonoma Technology: 6 full-time support scientists across 6-10 projects at any given time. I provide direct guidance and training to scientists at all skill and career levels for both technical science and for communication. This role also includes the initiation, development, and organization of proposals through to the management, organization, and scientific milestones of each project as awarded. This includes management of several million dollars of won and prospective funds and their reporting requirements. In this role I have continued to leverage university, federal, state and industry connections to build interdisciplinary teams and cross-sharing of data to improve societal outcomes for decision support. In addition to previous collaborators, this includes serving as lead coordinator across projects with UC Berkeley, San Jose State University's Wildfire Interdisciplinary Research Center, Cloud Fire, Marin Wildfire Prevention Authority, and the Desert Research Institute.

(2022-Current) Project Manager Data Science Department

Accepted a project management role, in addition to technical science contributions and business development. Perennial high performer demonstrating strong critical thinking, problem solving, and collaboration skills that drive innovative solutions to achieving successful outcomes in complex, cross-functional projects. This includes direct work with the U.S. EPA, U.S. Forest Service, California Department of Public Health (CDPH), University of Miami, and California Department of Forestry and Fire Protection (CAL FIRE). Awarded Sonoma Technology's 2023 'You Make A Difference Award' nominated by colleagues with descriptions including: "sustained energy, creativity, and leadership," "able to anticipate and prepare for potential project roadblocks," "genuine interest in creating a streamlined experience for all involved".

(2021-2022) Task Manager Data Science Department

Advanced task, project, and proposal management responsibilities including complex smoke modeling, and oversaw management of Smoke Sense, a National Science Foundation (NSF) funded (led by Stanford University) citizen science mobile app development projects. Led complex technical tasks in collaboration with senior scientists for California Dept of Public Health (CDPH) on an interdisciplinary smoke exposure health study, devising and executing analysis and modeling plans that required substantial knowledge of atmospheric science with expert use of the HYSPLIT model, as well as the ability to employ data through statistical assessments within massive data sets through scripting, geoprocessing, analysis, and data visualization. Initiated, developed and organized four major proposals as the manager or co-manager.

(2018-2020) Lead Coordinator, Founder *'Students for Students' Outreach Initiative.*

Created and incubated a new outreach program at the University of Miami in which graduate students visit K-12 schools and businesses to reduce barriers for Diversity and Inclusion in the sciences. The goal is to increase graduate student teaching experience while sharing vast knowledge of the earth system. As lead coordinator, responsibilities include recruiting volunteers, distribution of information, processing requests, coordinating visits, and ensuring student follow-through. Key skills honed in outreach, professional correspondence, people management and teaching. The program is still active since leaving the University of Miami in 2020.

(2019) Lead Coordinator *'Why RSMAS Research Matters II' Event and Reception.*

Second installment aimed at improving student and faculty morale regarding the purpose of science and research. Responsibilities included selecting professors to speak, arrangements for catered reception, event announcements and media, production control, public speaking, generating discussion. Enhanced skills in coordinating professional collaborations and general event planning.

(2017-2018) Vice President *Marine Science Graduate Student Organization (MSGSO).*

Responsible for fundraising to enable student travel to conferences and field experiments as well as planning social events for all atmosphere and marine science graduate students. Developed skills in event planning, coordination, leadership, fundraising and program management.

(2017) Co-Coordinator *'Why RSMAS Research Matters' Event and Reception.*

Event aimed at improving student and faculty morale regarding the purpose of science and research. Responsibilities included selecting professors to speak, arrangements for catered reception, event announcements and media, production control, public speaking, generating discussion. Permanent funding was established by the University to hold this event annually due to positive response. Sharpened public speaking, teamwork and event coordination skills.

(2014-2015) Peer Counselor *Undergraduate Department for Atmospheric Science*

Responsibilities include aiding new students in picking classes, setting research goals, demonstrating resources, and helping with meteorology classwork. Valuable mentorship experience.

F. Professional Development Highlights

(Aug. 2025- current) Symposium Chair for Community Modeling and Innovation Committee, invited by current NOAA leadership/chairs, based on past advocacy and presentations, to provide future continuity and leadership for continued symposium at the American Meteorological Society Annual Meetings

(Apr. 2024) Gathering User-Input for Long-Term Fire Weather Outlooks, workshop organized and hosted in collaboration with the U.S. Forest Service

(Nov. 2023) USDA Forest Service Atmospheric Science R&D Workshop, invited to attend by USFS as the only industry representative

(Aug. 2023) AGU Atmospheric Science Section Early Career Committee for Science Seminar on Igniting Early Career Wildfire Studies, invited to present by AGU Committee

(May 2019) Sea Level Rise Workshop, by the Miami Dade Office of Resilience

(Feb. 2019) Building Professional Relationships that Thrive: Mentoring Actively, by the Merlin Wahlberg (Phoenix Consultancy)

(June 2014) Undergraduate Leadership Workshop, by the University Corporation for Atmospheric Science at Boulder, CO; selected to attend by department professors

G. Full List of Publications, Presentations, and Formal Reports

Peer-Review Publications

- Kramer, S. J., Besong, K., Potter, B., Charney, J., Huang, S., Fenske, T., and Kirtman, B. (2025). Implications of the Spatiotemporal Sensitivity of Hot-Dry-Windy as a Fire Weather Metric. *Weather and Forecasting*, *in preparation*.
- Kramer, S. J., Potter, B., McClure, C., Benson, N., Huang, S., and Schill, M., (2025). Connecting Research and Operational Needs in the Wildfire Community. *IAWF Communications*, *in preparation*.
- Kirtman B.P., Arcodia M.C., Becker E.J., Besong K., Boyd J.S., Daher H., Gifford I., Infanti J., Kaiser J., Kramer S., Larson S.M., Laurindo L.C., Lopez H., Malloy K., Martinez C., Papazian K., Pegion K., Perlin N., Schuler C., Schoenwald V., Siqueira L.S.P., Zavadoff B., and Zhang W. (2025) A simplified-physics atmosphere general circulation model for idealized climate dynamics studies. *Bulletin of the American Meteorological Society*, BAMS-D-24-0196.0191, doi: <https://doi.org/10.1175/BAMS-D-24-0196.1>, 22 Aug. 2025. Available at <https://journals.ametsoc.org/view/journals/bams/aop/BAMS-D-24-0196.1/BAMS-D-24-0196.1.xml>.
- Zare-Harofteh A., Kramer S.J., Huang S., Scarborough C.R., Besong K., Kumar N., Brown T., and Hosseinpour F. (2025) SmokePath Explorer – a data driven smoke management tool to support prescribed fire planning in California, USA. *J. Air Waste Manage.*, 1-21, doi: 10.1080/10962247.2025.2553822, September 5. Available at <https://www.tandfonline.com/doi/full/10.1080/10962247.2025.2553822>.
- Prince S.E., Muskin S.E., Kramer S.J., Huang S., Blakey T., and Rappold A.G. (2024) Smoke on the horizon: leveling up citizen and social science to motivate health protective responses during wildfires. 11(253), doi: 10.1057/s41599-024-02641-1, February 12. Available at <https://www.nature.com/articles/s41599-024-02641-1>.
- Rosenberg A., Hoshiko S., Buckman J.R., Yeomans K.R., Hayashi T., Kramer S.J., Huang S., French N.H.F., and Rappold A.G. (2024) Health Impacts of Future Prescribed Fire Smoke: Considerations From an Exposure Scenario in California. *Earth's Future*, 12(2), doi: 10.1029/2023EF003778, February 7. Available at <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023EF003778>.
- 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>.

- 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).
- Kramer S.J. and Kirtman B.P. (2021) Saharan dust transport predictability utilizing a subseasonal experiment (SubX) model. *Journal of Geophysical Research: Atmospheres*, 126(e2020JD033802). Available at <https://doi.org/10.1029/2020JD033802>.
- Kramer S.J., Alvarez C., Barkley A., Colarco P.R., Custals L., Delgadillo R., Gaston C., Govindaraju R., and Zuidema P. (2020) Apparent dust size discrepancy in aerosol reanalysis in north African dust after long-range transport. *Atmos. Chem. Phys. Discuss.* (Accepted), 1-32, doi: 10.5194/acp-2020-1, February 29. Available at <https://doi.org/10.5194/acp-20-10047-2020>.
- Kramer S.J., Kirtman B.P., Zuidema P., and Ngan F. (2020) Subseasonal variability of elevated dust concentrations over South Florida. *Journal of Geophysical Research: Atmospheres*, 125(6), February 26. Available at <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019JD031874>.
- Zuidema P., Alvarez C., Kramer S.J., Custals L., Izaguirre M., Sealy P., Prospero J.M., and Blades E. (2019) Is summer African dust arriving earlier to Barbados? The updated long-term in situ dust mass concentration time series from Ragged Point, Barbados, and Miami, Florida. *Bulletin of the American Meteorological Society*, 100(10), 1981-1986, October 24. Available at <https://doi.org/10.1175/BAMS-D-18-0083.1>.

Presentations, Webinars, and Conference Proceedings

- Kramer S.J., Kirtman B., and Perlin N. (2025) EPIC's Unified Forecast System Short Range Weather App for Wildland Fire. Presented at the *Unifying Innovations in Forecasting Capabilities Workshop*, September 11, Boulder, CO, by Sonoma Technology, Petaluma, CA. STI-8467.
- Kramer S.J., Besong-Cowan K., Fenske T.M., Valencia A., Nash L.A., Potter B., Kirtman B., Huang S., Benson N.C., and Charney J. (2025) Sub-seasonal predictability of fire weather metrics for decision support. Presented online NIFC Science Friday, June 13, by Sonoma Technology, Petaluma, CA. STI-8412.
- Kramer S.J., Besong-Cowan K., Potter B., Charney J., Kirtman B., and Huang S. (2025) Implications of hot-dry-windy spatiotemporal sensitivity. Poster presented at the *2025 AMS Denver Summit*, Denver, CO, May 13, by Sonoma Technology, Petaluma, CA. STI-8342.
- Kramer S.J., Besong-Cowan K., Huang S., Fenske T.M., Valencia A., Nash L.A., Benson N.C., Kirtman B., and Potter B. (2025) Subseasonal Predictability of Fire Weather Metrics for Decision Support: The Standardized Fire Weather Research Database. Presented at the *AMS Denver Summit*, Denver, CO, May 13, by Sonoma Technology, Petaluma, CA. STI-8344.
- Kramer S. (2025) SmokePath Explorer transition. Presented to the *California Department of Forestry and Fire Protection*, March 12, by Sonoma Technology, Petaluma, CA. STI-8348.
- Kramer S.J., Lavezzo T.L., Penfold B.M., Scarborough C.R., Eisinger D.S., Hafner H.R., Brown M., Soga K., Grandy R., Moghaddas J., and Lautenberger C. (2025) High-resolution wildfire evacuation risk assessment for mitigation implementation. Presented at the *105th American Meteorological Society Annual Meeting*, New Orleans, LA, January 16, by Sonoma Technology, Petaluma, CA. STI-8213.
- Huang S., Kramer S.J., Hosseinpour F., Harofteh A.Z., Besong-Cowan K., Scarborough C.R., Brown T., and Kumar N. (2025) Smoke transport and fire weather climatology dashboard for California. Presented

at the *105th American Meteorological Society Annual Meeting, New Orleans, LA, January 16*, by Sonoma Technology, Petaluma, CA. STI-8209.

Kramer S.J., Besong-Cowan K., Huang S., Fenske T.M., Valencia A., Nash L.A., Benson N.C., Kirtman B., and Potter B. (2025) Subseasonal predictability of fire weather metrics for decision support: the Standardized Fire Weather Research Database. Presented at the *105th AMS Annual Meeting, New Orleans, LA, January 14*, by Sonoma Technology, Petaluma, CA. STI-8252.

Kramer S.J., Besong-Cowan K., Potter B., Charney J., Kirtman B., and Huang S. (2025) Implications of Hot-Dry-Windy spatiotemporal sensitivity. Poster presented at the *105th American Meteorological Society Annual Meeting, New Orleans, LA, January 14*, by Sonoma Technology, Petaluma, CA. STI-8211.

Kramer S., Scarborough C., Lavezzo T., Benson N., Huang S., Besong-Cowan K., Hosseinpour F., Harofteh A.Z., Brown T., and Kumar N. (2025) SmokePath Explorer: a new smoke management tool for California. Virtual webinar presented on January 24, by Sonoma Technology, Petaluma, CA. STI-8314.

Fenske T., Kramer S., Besong-Cowan K., and Kirtman B. (2024) Solutions for accommodating temporally limited subseasonal-to-seasonal data: using harmonics to generate a climatology. Presented at the *American Geophysical Union Fall Meeting, Washington, D.C., December 12*, by Sonoma Technology, Petaluma, CA. STI-8183.

Kramer S.J., Besong-Cowan K., Huang S., Fenske T.M., Benson N.C., Kirtman B., and Potter B. (2024) Subseasonal predictability of fire weather metrics for decision support. Presented at the *7th International Fire Behavior and Fuels Conference; Boise, ID, April 18*, by Sonoma Technology, Petaluma, CA. STI-8144.

Kramer S., Lavezzo T., Penfold B., Scarborough C., Eisinger D., and Hafner H. (2024) High-resolution wildfire evacuation risk assessment for mitigation implementation. Presentation given at the *104th AMS Annual Meeting, Baltimore, MD, January 29*, by Sonoma Technology, Petaluma, CA. STI-7970.

Kramer S.J., Besong-Cowan K., Huang S., Fenske T.M., and Benson N.C. (2024) Subseasonal predictability of fire weather metrics for decision support. Presentation given at the *104th AMS Annual Meeting, Baltimore, MD, January 30*, by Sonoma Technology, Petaluma, CA. STI-7973.

Huang S., Hosseinpour F., Kramer S., Harofteh A.Z., Besong-Cowan K., Scarborough C., Brown T., and Kumar N. (2024) Smoke transport and fire weather climatology dashboard for California. Presentation given at the *104th AMS Annual Meeting, Baltimore, Maryland, January 29*, by Sonoma Technology, Petaluma, CA. STI-7978.

Kramer S.J., Besong-Cowan K., Huang S., Fenske T.M., Benson N.C., Kirtman B., and Potter B. (2024) Gathering user input for long-term fire weather outlooks. Presentation given at the *7th International Fire Behavior and Fuels Conference, Boise, ID, April 15*, by Sonoma Technology, Petaluma, CA. STI-8143.

Scarborough C.R., Huang S., Kramer S.J., and Besong-Cowan K. (2024) Wildfire smoke transport probability dashboard. Demonstration given at *ShinyConf 2024, April*, by Sonoma Technology, Petaluma, CA. STI-8089.

Lavezzo T. and Kramer S. (2024) Pre-Fire Planning for Marin County. Presented for the Marin Wildfire Protection Agency at the MWPA Coastal Webinar, January 19, by Sonoma Technology, Petaluma, CA. STI-8065.

- Kramer S., Huang S., Chaveste M., McClure C., and Lurmann F. (2023) Smoke exposure from prescribed fire and wildfire. Presentation given at the *USDA Forest Service Atmospheric Science R&D Workshop, November 17*, by Sonoma Technology, Petaluma, CA. STI-8030.
- Huang S., Kramer S., Zahn P., and Lavezzo T. (2023) Prescribed fires: latest in science, approaches, challenges, and opportunities. Presented to the California Air Pollution Control Officers Association (CAPCOA) Prescribed Fire Working Group, September 20, by Sonoma Technology, Petaluma, CA. STI-7997.
- 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.
- 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.
- McClure C.D., Kramer S.J., and Hafner H.R. (2022) Two years of CAS Auto-GC PAMS monitoring: successes and challenges in software/hardware implementation, monitoring, and data QC. Presentation given at the *2022 National Ambient Air Monitoring Conference, Pittsburgh, PA, August 25*, by Sonoma Technology, Petaluma, CA. 7696.
- 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.
- Kramer S.J. and Kirtman B.P. (2022) Saharan dust transport predictability using a subseasonal experiment (SubX) model. Poster presented at the *2022 American Meteorological Society Annual Conference, January 26, 2022, in Houston, TX (virtual)*, by Sonoma Technology, Petaluma, CA. STI-7599.
- 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.
- 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.
- 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.
- Kramer S.J., Kirtman B., Zuidema P., and Ngan F. (2020) Predictability of extreme dust events in South Florida. Presentation given at the *American Meteorological Society 100th Annual Meeting, Boston, MA, January 15*. Available at <https://ams.confex.com/ams/2020Annual/meetingapp.cgi/Paper/363634>.
- Kramer S.J. (2019) Saharan dust variability at Miami, Florida. Presented at the *Rosenstiel School of Marine and Atmospheric Science, Miami, FL, November 6*. Available at <https://youtu.be/8B0vbmOUv8>.
- Kramer S.J., Zuidema P., Delgadillo R., Silvia A.d., Alvarez C., Custals L., Barkley A., Gaston C.J., and Prospero J.M. (2018) Comparison of Saharan dust surface mass observations and Lidar in Miami, FL, to the MERRA2 reanalysis. Presentation given at the *American Meteorological Society 98th Annual Meeting, Austin, TX, January 8*. Available at <https://ams.confex.com/ams/98Annual/webprogram/Paper335459.html>.

Formal Reports

- McClure C., Anderson A., Beamish J., Besong K., Chaveste M., Gostic C., Kramer S., Scarborough C., Zahn P., and Brown S. (2024) Exceptional event demonstration for PM₁₀ exceedances in Clark County, Nevada – February 21, 2023. Final report prepared for the Clark County Department of Environment and Sustainability Division of Air Quality, Las Vegas, NV, by Sonoma Technology, Petaluma, CA, STI-8111, June.
- McClure C., Anderson A., Beamish J., Besong K., Chaveste M., Gostic C., Kramer S., Scarborough C., Zahn P., and Brown S. (2024) Exceptional event demonstration for PM₁₀ exceedances in Clark County, Nevada – July 31, 2023. Final report prepared for the Clark County Department of Environment and Sustainability Division of Air Quality, Las Vegas, NV, by Sonoma Technology, Petaluma, CA, STI-8112, June.
- McClure C., Anderson A., Beamish J., Besong-Cowan K., Chaveste M., Gostic C., Irwin S., Kramer S., Scarborough C., Wang N., Zahn P., and Brown S. (2024) Exceptional event demonstration for PM₁₀

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