

CHRISTINE WIEDINMYER

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EDUCATION

The University of Texas at Austin Ph.D., Chemical Engineering	12/1999
The University of Texas at Austin M.S. Chemical Engineering	05/1998
Tulane University , New Orleans, LA B.S.E. Chemical Engineering, <i>Cum Laude</i>	05/1994

WORK EXPERIENCE

<i>Associate Director for Science</i> University of Colorado Boulder, Boulder, CO <i>Cooperative Institute for Research in Environmental Sciences (CIRES)</i>	Aug 2017 – Present
<i>Research Professor</i> University of Colorado Boulder, Boulder, CO <i>Department of Mechanical Engineering</i>	Aug 2019 – Present
<i>Scientist III</i>	2012 – 2017
<i>Scientist II</i>	2008 – 2012
<i>Scientist I</i>	2005 – 2008
<i>Project Scientist I</i> National Center for Atmospheric Research, Boulder, CO <i>Atmospheric Chemistry Observations & Modeling Laboratory</i>	2001 – 2005
<i>Research Associate</i> University of Colorado, CIRES, Boulder, CO <i>(at the National Oceanic and Atmospheric Administration, Aeronomy Lab)</i>	2001
<i>Post-Doctoral Research Scientist/Research Faculty</i> University of Denver, Denver, CO <i>Department of Mechanical Engineering</i>	2000 – 2001
<i>Graduate Research Assistant</i> University of Texas at Austin, Austin, TX <i>Department of Chemical Engineering</i>	1995 – 1999
<i>Consultant</i> ENVIRON Technology, Inc., Novato, CA	1998 – 1999
<i>Undergraduate Research Assistant</i> Tulane University, New Orleans, LA <i>Department of Chemical Engineering</i>	1993 – 1994

HONORS

Nominated Lecturer, Assoc. for Women Geoscientists Distinguished Lecture Series	2011 – Present
NASA Group Achievement Award for KORUS	2017
NASA Group Achievement Award for SEAC ⁴ RS	2015
Thomson Reuters Highly Cited Researcher	2014
American Meteorological Society: Walter Orr Roberts Lecturer	2014
UCAR Diversity Award	2011
NASA Group Achievement Award for ARCTAS	2009
Invited Speaker: International Young Scientist Global Change Conference; Trieste, Italy	Nov. 2003
Invitee: Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS VI)	2001
University of Texas Continuing Fellowship recipient	1998
Tau Beta Pi (Engineering Honor Society)	1994
Omega Chi Epsilon (Chemical Engineering Honor Society)	1993

STUDENTS

Co-Advisor:

- Cristina Fayad Martinez, Dept. Atmos. Sciences, University of Miami M.S. 2021
- Colin Harkins, Dept. of Mechanical Engineering, University of Colorado at Boulder M.S. 2021
- Tanarit Sakulyanontvittaya, Dept. of Mechanical Engineering, University of Colorado at Boulder Ph.D. 2007

Ph.D. Thesis Committee:

- Qingqing Xu, University of California Merced Ph.D. Expected 2022
- Amy Decastro, Dept. of Geography, University of Colorado Boulder Ph.D. 2022
- Alex Rybchuk, Dept. of Mech. Eng., University of Colorado Boulder Ph.D. 2021
- Ryan Cole, Dept. of Mech. Eng., University of Colorado Boulder Ph.D. 2021
- Kristen Okorn, Dept. of Mech. Eng., University of Colorado Boulder Ph.D. 2021
- David Pfothenauer, Dept. of Mech. Eng., University of Colorado Boulder Ph.D. 2021
- Chitsan Wang, School of Engineering and Public Health, University of North Carolina at Chapel Hill Ph.D. 2019
- Ricardo Piedrahita, Dept. of Mechanical Engineering, Univ. of Colorado Boulder Ph.D. 2016
- Forrest Lacey, Dept. of Mechanical Engineering, University of Colorado Boulder Ph.D. 2016
- Chris Gray, Dept. of Microbiology, Univ. of Colorado Ph.D. 2014
- Rodrigo Gonzalez-Abraham, Dept. Civil & Env. Eng., Wash. State Univ. Ph.D. 2013
- Kelly Baustian, Dept. of Atmos. & Ocean Sciences, Univ. of Colorado Ph.D. 2011
- Michael Feldman, Dept. of Chemical Engineering, Univ. of Texas at Austin Ph.D. 2010

NCAR supervisor/advisor:

- Ricardo Piedrahita, Evan Coffey, Nick Masson, Didier Muvandimwe, Elise Mesenbring: Department of Mechanical Engineering, Univ. of Colorado, Boulder, CO
- Isaac Rivera, University of Colorado-Denver, CO
- Xiaoyan Jiang, Jackson School of Geosciences, Univ. of Texas at Austin
- Barron Henderson, School of Engineering and Public Health, Univ. of N. Carolina at Chapel Hill
- Ashley Berg, Colorado State University, Ft. Collins, CO

High School:

- Amy Sahud and Bailey Page, Monarch High School 2015 –2016

PROFESSIONAL TRAINING

Franklin Covey 4 essential roles of Leadership Program	August 2019
ESWN Workshop: Leadership Skills for Success in the Scientific Workforce	October 2018
ESWN Workshop: Building Leadership and Management Skills for Success	June 2013
UCAR Leadership Academy	October 2009 – May 2010
ANSI Green House Gas Technical Assessor Training, Washington D.C.	July 2009
ESWN Workshop: Building Leadership Skills for Success in Scientific Organizations	Dec. 2008

PROFESSIONAL ORGANIZATIONS

American Geophysical Union	1998 – Present
American Meteorological Society	2014 – 2015
American Chemical Society	2011 – 2012
American Association for Aerosol Research	2004–2006, 2014, 2016
Air & Waste Management Association	1997 – 1999
AICHE	1992 – 1999

PROFESSIONAL SERVICE/LEADERSHIP

<u>UCAR Board of Trustees</u>	2019 – Present
<u>Board member and Founding member</u> , Earth Science Women's Network (ESWN) (http://www.eswnonline.org):	2004 – Present
◦ Treasurer	2019 – Present
◦ Secretary	2017 – 2018
<u>Committee Co-Chair</u> , Society of Behavioral Medicine Presidential Working Group on Climate Change, Behavior and Health	2020 – Present
<u>Advisory Board Member</u> , Colorado Local Science Engagement Network	2020 - Present
<u>Member</u> , National Academies of Science Committee: Workshop on wildfires, air quality and health	December 2019 – October 2020
<u>Member</u> , IGAC Interdisciplinary Biomass Burning Initiative (IBBI)	2016 – 2019
<u>Member</u> , National Academies of Science Committee: The Future of Atmospheric Chemistry Research	January 2015 – August 2016
<u>Chair, Local Organizing Committee</u> , International Global Atmospheric Chemistry Project 2016 Conference, Breckenridge, CO	2014 – 2016
<u>Member, Scientific Planning Committee</u> , International Global Atmospheric Chemistry Project 2016 Conference, Breckenridge, CO	2015 – 2016
<u>Discussion Leader</u> , Biogenic Hydrocarbons and the Atmosphere Gordon Research Conference, Barcelona, Spain	June 2016
<u>Member</u> , Advisory Board, CU EPA Grant “Climate Change Mitigation in Low-Income Communities in Colorado: Home Weatherization Impacts on Respiratory Health and Indoor Air Quality during Wildfires”	April 2016 – Present
<u>Member</u> , GEIA VOC Working Group	November 2015 – Present
<u>Member</u> , Garfield County Gas Emissions Study Technical Advisory Committee, Colorado State University	2012 – 2016
<u>Member</u> , Independent Technical Advisory Committee, Texas Air Quality Research Program, Univ. of Texas/Texas Center for Environmental Quality	June 2010 – Present
<u>Chair</u> , Atmospheric Chemistry Working Group, Fundamental Instrument Unit of the National Ecological Observatory Network (NEON)	2011 – 2015

Member, Professional Advisory Board, Environmental Engineering Program, University of Colorado-Boulder, 2010 – 2011

Chair, 2012 Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere, Bates College, Lewiston, Maine. June 24-29, 2012

Reviewer:

- *Nature-Geosciences*
- *Environmental Research Letters*
- *Journal of Geophysical Research- Atmospheres*
- *Atmospheric Chemistry & Physics*
- *Atmospheric Environment*
- *Geophysical Research Letters*
- *Environmental Science & Technology*
- *PNAS*
- *Nature*
- *Journal of Air & Waste Management Association*
- *Geoscientific Model Development*
- *Earth System Science Data*
- UK National Environment Research Council
- U.S. Environmental Protection Agency
- U.S. Department of Defense
- U.S. National Science Foundation

Co-Chair, 2010 Biogenic Hydrocarbons and the Atmosphere Gordon Research Conference, Les Diablerets, Switzerland. May 23-28, 2010

Member, Advisory Board for Univ. of Wisconsin Project: “A cost-benefit analysis of expanding gas-powered freight transport versus expanding gas-powered electricity generation” 2010 – 2013

Organizer, ESWN Career Workshop: *Defining Your Research Identity*, Boulder, CO June 6-8, 2011

Associate Editor, *Journal of Geophysical Research- Atmospheres* 2007 – 2011

Member, Design Review Panel for the NSF Storm Peak Laboratory's renovation 2010 – 2011

Co-Convener, session “Wildland Fire Emissions in Chemical Transport Models: Improving Input Resolution”, AGU Fall Meeting, San Francisco, CA December 14-18, 2009

Co-Organizer, NSF Biogenic Secondary Organic Aerosol Workshop series for early career US and Nordic Scientists Sweden (2008) and Finland (2009)

Discussion Leader/Panelist, NCAR GIS in Weather, Climate and Impacts Workshop Boulder, Colorado July 6-8, 2005

Co-Chair/Organizer, UCAR/NCAR Junior Faculty Forum on Future Scientific Directions: *Interactions between land ecosystems and the atmospheric hydrologic cycle*. NCAR, Boulder, CO June 2003

Organizer/Leader, BVOC Emissions Workshop, Lancaster University, Lancaster, U.K. September 2002

COMMUNITY OUTREACH

Mentor for PROGRESS (PROmoting Geoscience Research, Education and Success) 2016-2020

UCAR SOARS Program

Science Mentor (x's 2) Summer 2015

Science Mentor Summer 2014

Science Mentor Summer 2008

Writing Mentor Summer 2005

Science Mentor, Earth Explorers Film Program with Trail Ridge Middle School Fall 2012 & Fall 2010

Final Video (2010): <http://vimeo.com/earthexplorers/cooliochem>

Final Video (2012): <https://vimeo.com/71733296>

Panelist (Careers in Science), HIRO Summer High School Student Program July 21, 2011

Speaker, Denver School of Science & Technology May 23, 2011

Speaker, Fairmount Elementary School, Golden, CO March 15, 2011

Speaker /Mentor, Geoscience Research at Storm Peak (GRASP) Program 2008, 2010

Speaker, NCAR Undergraduate Leadership Workshop 2005, 2006, 2007, 2008, 2010

Invited Panelist, Storm Peak Laboratory/DRI 50th Anniversary Celebration, Steamboat Springs 2009

<u>Presenter</u> , Workshop activity (the Nitrogen Cycle Game), the Girls Exploring Science, Engineering and Technology (GESET) Symposium, Denver, CO	2007, 2008
<u>Air Quality Expert</u> , NCAR Broadcast Meteorologist Meeting	June 27, 2008
<u>Keynote Speaker</u> , "Climate Impacts of the Great Outdoors," National Wildlife Federation National Meeting, Keystone, CO	May 16, 2008
<u>Speaker</u> , "Energy, Air Quality, and Water Systems in Colorado," Trout Unlimited Conservation Day, Boulder, CO	Oct. 6, 2007
<u>Speaker</u> , Western Regional Retired FBI Agents luncheon, Golden, CO,	Feb. 21, 2007
<u>Science Fair Judge</u> , Regional Secondary Science Fair, BVSD, Boulder, CO,	March 3, 2005
<u>Lecturer</u> , NCAR Climate and Global Change Geoscience Workshop	July 2002 & 2004
<u>Science Fair Judge</u> , Weber Elementary School, Arvada, CO	February, 2003
<u>Lecturer</u> , Environmental Science Workshop for School Teachers, Center for Energy and Environmental Resources, University of Texas at Austin	1997, 1998, 1999

PUBLICATIONS

Total: 139

h index = 49/65 (ISI/Google Scholar) as of June 2022

Accepted/Published

2022

1. Iglesias V., Stavros N., Balch J.K., Barrett K., Cobian-Iñiguez, J., Hester C., Kolden C., Leyk S., Nagy R.C., Reid C., Wiedinmyer, C., Woolner, E., Travis, W.R. (2022) Fires that matter: Reconceptualizing fire risk to include interactions between humans and the natural environment. *Environmental Research Letters*, 17, 10.1088/1748-9326/ac5c0c.
2. Desservettaz, M. J., Fisher, J. A., Luhar, A. K., Woodhouse, M. T., Bukosa, B., Buchholz, R. R., Wiedinmyer, C., Griffith, D.W.T., Krummel, P.B., Jones, N.B., Deutscher, N.M. Greeslade, J.W. (2022) Australian fire emissions of carbon monoxide estimated by global biomass burning inventories: Variability and observational constraints. *Journal of Geophysical Research: Atmospheres*, 127, e2021JD035925. <https://doi.org/10.1029/2021JD035925>.
3. Bela, M. M., Kille, N., McKeen, S. A., Romero-Alvarez, J., Ahmadov, R., James, E., Pereira, G., Schmidt, C., Pierce, R.B., O'Neil, S.M., Zhang, X., Kondragunta, S., Wiedinmyer, C., Volkamer, R. (2022) Quantifying carbon monoxide emissions on the scale of large wildfires. *Geophysical Research Letters*, 49, e2021GL095831. <https://doi.org/10.1029/2021GL095831>.
4. Marais E.A., Akker, O., Wiedinmyer C. (2022). Greenhouse gas and air pollutant emissions from power barges (powerships). *Environmental Sciences: Advances.*, 1, 164-169, 10.1039/d1va00049g.

2021

5. Abdo, M., Kanyomse, E., Alirigia, R., Coffey, E.R., Piedrahita, R., Diaz-Sanchez, D., Hagar, Y., Naumenko, D.J., Wiedinmyer. C., Hannigan, M.P., Oduro, A.R., Dickinson, K.L. (2021) Health impacts of a randomized biomass cookstove intervention in northern Ghana. *BMC Public Health* 21:2211, <https://doi.org/10.1186/s12889-021-12164-y>.

6. Kiely, L., Spracklen, D.V., Arnold, S.R., Papargyropoulou, E., Conibear, L., Wiedinmyer, C., Knote, C., Adrianto, H.A. (2021) Assessing costs of Indonesian fires and the benefits of restoring peatland. *Nature Comms* 12, 7044, <https://doi.org/10.1038/s41467-021-27353-x>.
7. Angot, H., Davel, C., Wiedinmyer, C., Pétron, G., Chopra, J., Hueber, J., Blanchard, B., Bourgeois, I., Vimont, I., Montzka, S. A., Miller, B. R., Elkins, J. W., and Helmig, D. (2021) Temporary pause in the growth of atmospheric ethane and propane in 2015–2018. *Atmos. Chem. Phys.*, 21, 15153–15170, <https://doi.org/10.5194/acp-21-15153-2021>.
8. Harkins, C., McDonald, B.C., Henze, D.K., Wiedinmyer, C. (2021) A Fuel-based method for updating mobile source emissions during the COVID-19 pandemic. *Environmental Research Letters*, 16(6), 10.1088/1748-9326/ac0660.

2020

9. O’Lenick, C.R., A. Baniassadi, R. Michael, A. Monaghan, J. Boehnert, X. Yu, M.H. Hayden, C. Wiedinmyer, K. Zhang, P.J. Crank, J. Heusinger, P. Hoel, D.J. Sailor, O.V. Wilhelmi (2020) A Case-Crossover Analysis of Indoor Heat Exposure on Mortality and Hospitalizations among the Elderly in Houston, Texas. *Environmental Health Perspectives*, 128(12), doi.org/10.1289/EHP6340.
10. Kiely, L., Spracklen, D.V., Wiedinmyer, C., Conibear, L., Reddington, C.L., Arnold, S.R., Knote, C., Khan, M.F., Latif, M.T., Syaufina, L., Adrianto, H.A. (2020) Air quality and health impacts of vegetation and peat fires in Equatorial Asia during 2004-2015., *Environmental Research Letters*, 15(9), doi: 10.1088/1748-9326/ab9a6c.
11. Wang, C.-T., Ashworth, K., Wiedinmyer, C., Ortega, J., Harley, P. C., Rasool, Q. Z., and Vizueté, W. (2020) Ambient measurements of monoterpenes near *Cannabis* cultivation facilities in Denver, Colorado. *Atmospheric Environment*, 232, doi.org/10.1016/j.atmosenv.2020.117510.
12. Carter, T. S., Heald, C. L., Jimenez, J. L., Campuzano-Jost, P., Kondo, Y., Moteki, N., Schwarz, J. P., Wiedinmyer, C., Darmenov, A. S., da Silva, A. M., and Kaiser, J. W. (2020) How emissions uncertainty influences the distribution and radiative impacts of smoke from fires in North America, *Atmos. Chem. Phys.*, 20, 2073–2097, <https://doi.org/10.5194/acp-20-2073-2020>.

2019

13. Wang, C.-T., Wiedinmyer, C., Ashworth, K., Harley, P. C., Ortega, J., Rasool, Q. Z., and Vizueté, W. (2019) Potential regional air quality impacts of cannabis cultivation facilities in Denver, Colorado, *Atmos. Chem. Phys.*, 19, 13973–13987, <https://doi.org/10.5194/acp-19-13973-2019>.
14. Michael, R., O’Lenick, C.R., Monaghan, A., Wilhelmi, O., Wiedinmyer, C., Hayden, M., Estes, M. (2019) Application of geostatistical approaches to predict the spatio-temporal distribution of summer ozone in Houston, Texas. *J. Exposure Science and Environmental Epidemiology*, 29(6), pp. 806–820, 10.1038/s41370-018-0091-4.
15. Li, F., Val Martin, M., Andreae, M. O., Arneth, A., Hantson, S., Kaiser, J. W., Lasslop, G., Yue, C., Bachelet, D., Forrest, M., Kluzek, E., Liu, X., Mangeon, S., Melton, J. R., Ward, D. S., Darmenov, A., Hickler, T., Ichoku, C., Magi, B. I., Sitch, S., van der Werf, G. R., Wiedinmyer, C., and Rabin, S. S. (2019) Historical (1700–2012) global multi-model estimates of the fire emissions from the Fire Modeling Intercomparison Project (FireMIP), *Atmos. Chem. Phys.*, 19, 12545–12567, <https://doi.org/10.5194/acp-19-12545-2019>.

16. Hurteau, M.D., S. Liang, A.L. Westerling, C. Wiedinmyer (2019) Vegetation-fire feedback reduces projected area burned under climate change. *Scientific Reports*, 9:2838, doi.org/10.1038/s41598-019-39284-1.
17. Piedrahita, R; Coffey, ER; Hagar, Y; Kanyomse, E; Verploeg, K; Wiedinmyer, C; Dickinson, KL; Oduro, A; Hannigan, MP (2019), Attributing Air Pollutant Exposure to Emission Sources with Proximity Sensing. Version: 1 *Atmosphere* 10 (7) , Art. No. 395, doi: 10.3390/atmos10070395
18. Lai, AM, E Carter, M Shan, K Ni, S Clark, M Ezzati, C Wiedinmyer, XD Yang, J Baumgartner and JJ Schauer (2019), Chemical composition and source apportionment of ambient, household, and personal exposures to PM2.5 in communities using biomass stoves in rural China. *Sci. Total Environ.* Version: 1 646 309-319, issn: 0048-9697, ids: GU3GO, doi: 10.1016/j.scitotenv.2018.07.322, PubMed ID: 30055493.
19. Kiely, L; Spracklen, DV; Wiedinmyer, C; Conibear, L; Reddington, CL; Archer-Nicholls, S; Lowe, D; Arnold, SR; Knote, C; Khan, MF; Latif, MT; Kuwata, M; Budisulistiorini, SH; Syaufina, L (2019), New estimate of particulate emissions from Indonesian peat fires in 2015. Version: 1 *Atmospheric Chemistry & Physics* 19 (17) 11105-11121, issn: 1680-7316, doi: 10.5194/acp-19-11105-2019
20. Dickinson, KL; Piedrahita, R; Coffey, ER; Kanyomse, E; Alirigia, R; Molnar, T; Hagar, Y; Hannigan, MP; Oduro, AR; Wiedinmyer, C (2019), Adoption of improved biomass stoves and stove/fuel stacking in the REACTING intervention study in Northern Ghana. Version: 1 *Energy Policy* 130 361-374, issn: 0301-4215, doi: 10.1016/j.enpol.2018.12.007
21. Piedrahita, R; Coffey, ER; Hagar, Y; Kanyomse, E; Wiedinmyer, C; Dickinson, KL; Oduro, A; Hannigan, MP (2019), Exposures to Carbon Monoxide in a Cookstove Intervention in Northern Ghana. Version: 1 *Atmosphere* 10 (7) , Art. No. 402, doi: 10.3390/atmos10070402
22. Pfothenauer, DJ; Coffey, ER; Piedrahita, R; Agao, D; Alirigia, R; Muvandimwe, D; Lacey, F; Wiedinmyer, C; Dickinson, KL; Dalaba, M; Kanyomse, E; Oduro, A; Hannigan, MP (2019), Updated Emission Factors from Diffuse Combustion Sources in Sub-Saharan Africa and Their Effect on Regional Emission Estimates. Version: 1 *Environmental Science & Technology* 53 (11) 6392-6401, issn: 0013-936X, doi: 10.1021/acs.est.8b06155, PubMed ID: 31070029
23. Wang, CT; Wiedinmyer, C; Ashworth, K; Harley, PC; Ortega, J; Vizuete, W (2019), Leaf enclosure measurements for determining volatile organic compound emission capacity from Cannabis spp.. Version: 1 *Atmospheric Environment* 199 80-87, doi: 10.1016/j.atmosenv.2018.10.049.
24. Olenick, CR; Wilhelmi, OV; Michael, R; Hayden, MH; Baniassadi, A; Wiedinmyer, C; Monaghan, AJ; Crank, PJ; Sailor, DJ (2019), Urban heat and air pollution: A framework for integrating population vulnerability and indoor exposure in health risk analyses. Version: 1 *Science of the Total Environment* 660 715-723, issn: 0048-9697, doi: 10.1016/j.scitotenv.2019.01.002, PubMed ID: 30743957
25. Archer-Nicholls, S; Lowe, D; Lacey, F; Kumar, R; Xiao, Q; Liu, Y; Carter, E; Baumgartner, J; Wiedinmyer, C (2019), Radiative Effects of Residential Sector Emissions in China: Sensitivity to Uncertainty in Black Carbon Emissions. Version: 1 *J. Geophys. Res.-Atmos.* 124 (9) 5029-5044, issn: 2169-897X, doi: 10.1029/2018JD030120

2018

26. Dalaba, M, R Alirigia, E Mesenbring, E Coffey, Z Brown, M Hannigan, C Wiedinmyer, A Oduro and KL Dickinson (2018), Liquified Petroleum Gas (LPG) Supply and Demand for Cooking in Northern Ghana. *EcoHealth* Version: 1 15 (4) 716-728, issn: 1612-9202, ids: HC1VP, doi: 10.1007/s10393-018-1351-4, PubMed ID: 30109459
27. Snider, G, E Carter, S Clark, J Tseng, XD Yang, M Ezzati, JJ Schauer, C Wiedinmyer and J Baumgartner (2018), Impacts of stove use patterns and outdoor air quality on household air pollution and cardiovascular mortality in southwestern China. *Environ. Int.* Version: 1 117 116-124, issn: 0160-4120, ids: GK9ME, doi: 10.1016/j.envint.2018.04.048, PubMed ID: 29734062
28. Brey, SJ, EA Barnes, JR Pierce, C Wiedinmyer and EV Fischer (2018), Environmental Conditions, Ignition Type, and Air Quality Impacts of Wildfires in the Southeastern and Western United States. *Earth Future* Version: 1 6 (10) 1442-1456, issn: 2328-4277, ids: HA2JB, doi: 10.1029/2018EF000972
29. Kumar, R, MC Barth, GG Pfister, L Delle Monache, JF Lamarque, S Archer-Nicholls, S Tilmes, SD Ghude, C Wiedinmyer, M Naja and S Walters (2018), How Will Air Quality Change in South Asia by 2050?. *J. Geophys. Res.-Atmos.* Version: 1 123 (3) 1840-1864, issn: 2169-897X, ids: FX4UO, doi: 10.1002/2017JD027357

2017

30. Lacey, FG, EA Marais, DK Henze, CJ Lee, A van Donkelaar, RV Martin, MP Hannigan and C Wiedinmyer (2017), Improving present day and future estimates of anthropogenic sectoral emissions and the resulting air quality impacts in Africa. *Faraday Discuss.* Version: 1 200 397-412, issn: 1359-6640, ids: FE4TC, doi: 10.1039/c7fd00011a, PubMed ID: 28598475
31. Dickinson, KL, AJ Monaghan, IJ Rivera, LQ Hu, E Kanyomse, R Alirigia, J Adoctor, RE Kaspar, AR Oduro and C Wiedinmyer (2017), Changing weather and climate in Northern Ghana: comparison of local perceptions with meteorological and land cover data. *Reg. Environ. Chang.* Version: 1 17 (3) 915-928, issn: 1436-3798, ids: EM0EG, doi: 10.1007/s10113-016-1082-4
32. Clark, S, E Carter, M Shan, K Ni, H Niu, JTW Tseng, SK Pattanayak, M Jeuland, JJ Schauer, M Ezzati, C Wiedinmyer, X Yang and J Baumgartner (2017), Adoption and use of a semi-gasifier cooking and water heating stove and fuel intervention in the Tibetan Plateau, China. *Environ. Res. Lett.* Version: 1 12 (7) , Art. No. 75004, issn: 1748-9326, ids: EZ7ZI, doi: 10.1088/1748-9326/aa751e
33. Wiedinmyer, C, K Dickinson, R Piedrahita, E Kanyomse, E Coffey, M Hannigan, R Alirigia and A Oduro (2017), Rural-urban differences in cooking practices and exposures in Northern Ghana. *Environ. Res. Lett.* Version: 1 12 (6) , Art. No. 65009, issn: 1748-9326, ids: EY7GU, doi: 10.1088/1748-9326/aa7036
34. Zhu, J, XG Xia, J Wang, JQ Zhang, C Wiedinmyer, JA Fisher and CA Keller (2017), Impact of Southeast Asian smoke on aerosol properties in Southwest China: First comparison of model simulations with satellite and ground observations. *J. Geophys. Res.-Atmos.* Version: 1 122 (7) 3904-3919, issn: 2169-897X, ids: ET3IP, doi: 10.1002/2016JD025793

35. Hagar, Y, M Hayden, C Wiedinmyer and V Dukic (2017), Comparison of Models Analyzing a Small Number of Observed Meningitis Cases in Navrongo, Ghana. *J. Agric. Biol. Environ. Stat.* Version: 1 22 (1) 76-104, issn: 1085-7117, ids: EL0MY, doi: 10.1007/s13253-016-0270-5
36. Piedrahita, R, E Kanyomse, E Coffey, MJ Xie, Y Hagar, R Alirigia, F Agyei, C Wiedinmyer, KL Dickinson, A Oduro and M Hannigan (2017), Exposures to and origins of carbonaceous PM2.5 in a cookstove intervention in Northern Ghana. *Sci. Total Environ.* Version: 1 576 178-192, issn: 0048-9697, ids: EG3SJ, doi: 10.1016/j.scitotenv.2016.10.069, PubMed ID: 27788434
37. Coffey, ER, D Muvandimwe, Y Hagar, C Wiedinmyer, E Kanyomse, R Piedrahita, KL Dickinson, A Oduro and MP Hannigan (2017), New Emission Factors and Efficiencies from in-Field Measurements of Traditional and Improved Cookstoves and Their Potential Implications. *Environ. Sci. Technol.* Version: 1 51 (21) 12508-12517, issn: 0013-936X, ids: FM3EN, doi: 10.1021/acs.est.7b02436, PubMed ID: 29058409
38. Thomas, JL, CM Polashenski, AJ Soja, L Marelle, KA Casey, HD Choi, JC Raut, C Wiedinmyer, LK Emmons, JD Fast, J Pelon, KS Law, MG Flanner and JE Dibb (2017), Quantifying black carbon deposition over the Greenland ice sheet from forest fires in Canada. *Geophys. Res. Lett.* Version: 1 44 (15) 7965-7974, issn: 0094-8276, ids: FE7HU, doi: 10.1002/2017GL073701

2016

39. Gaubert, B, AF Arellano, J Barre, HM Worden, LK Emmons, S Tilmes, RR Buchholz, F Vitt, K Raeder, N Collins, JL Anderson, C Wiedinmyer, SM Alonso, DP Edwards, MO Andreae, JW Hannigan, C Petri, K Strong and N Jones (2016), Toward a chemical reanalysis in a coupled chemistry-climate model: An evaluation of MOPITT CO assimilation and its impact on tropospheric composition. *J. Geophys. Res.-Atmos.* Version: 1 121 (12) 7310-7343, issn: 2169-897X, ids: DT6YU, doi: 10.1002/2016JD024863
40. West, JJ, A Cohen, F Dentener, B Brunekreef, T Zhu, B Armstrong, ML Bell, M Brauer, G Carmichael, DL Costa, DW Dockery, M Kleeman, M Krzyzanowski, N Kunzli, C Liousse, SCC Lung, RV Martin, U Poschl, CA Pope, JM Roberts, AG Russell and C Wiedinmyer (2016), What We Breathe Impacts Our Health: Improving Understanding of the Link between Air Pollution and Health. *Environ. Sci. Technol.* Version: 1 50 (10) 4895-4904, issn: 0013-936X, ids: DM4QJ, doi: 10.1021/acs.est.5b03827, PubMed ID: 27010639
41. Adams, AS, AL Steiner and C Wiedinmyer (2016), The Earth Science Women's Network (ESWN): Community-Driven Mentoring for Women in the Atmospheric Sciences. *Bull. Amer. Meteorol. Soc.* Version: 1 97 (3) 345-354, issn: 0003-0007, ids: DI9DJ, doi: 10.1175/BAMS-D-15-00040.1
42. Kodros, JK, R Cucinotta, DA Ridley, C Wiedinmyer and JR Pierce (2016), The aerosol radiative effects of uncontrolled combustion of domestic waste. *Atmos. Chem. Phys.* Version: 1 16 (11) 6771-6784, issn: 1680-7316, ids: DP2WQ, doi: 10.5194/acp-16-6771-2016
43. Saunio, M, P Bousquet, B Poulter, A Peregón, P Ciais, JG Canadell, EJ Dlugokencky, G Etiope, D Bastviken, S Houweling, G Janssens-Maenhout, FN Tubiello, S Castaldi, RB Jackson, M Alexe, VK Arora, DJ Beerling, P Bergamaschi, DR Blake, G Brailsford, V Brovkin, L Bruhwiler, C Crevoisier, P Crill, K Covey, C Curry, C Frankenberg, N Gedney, L Hoglund-Isaksson, M Ishizawa, A Ito, F Joos, HS Kim, T Kleinen, P Krummel, JF Lamarque, R Langenfelds, R Locatelli, T Machida, S Maksyutov, KC McDonald, J Marshall, JR Melton, I Morino, V Naik, S O'Doherty, FJW Parmentier, PK Patra, CH

- Peng, SS Peng, GP Peters, I Pison, C Prigent, R Prinn, M Ramonet, WJ Riley, M Saito, M Santini, R Schroeder, IJ Simpson, R Spahni, P Steele, A Takizawa, BF Thornton, HQ Tian, Y Tohjima, N Viovy, A Voulgarakis, M van Weele, GR van der Werf, R Weiss, C Wiedinmyer, DJ Wilton, A Wiltshire, D Worthy, D Wunch, XY Xu, Y Yoshida, B Zhang, Z Zhang and Q Zhu (2016), The global methane budget 2000-2012. *Earth Syst. Sci. Data* Version: 1 8 (2) 697-751, issn: 1866-3508, ids: EF2HL, doi: 10.5194/essd-8-697-2016
44. Kodros, JK, C Wiedinmyer, B Ford, R Cucinotta, R Gan, S Magzamen and JR Pierce (2016), Global burden of mortalities due to chronic exposure to ambient PM_{2.5} from open combustion of domestic waste. *Environ. Res. Lett.* Version: 1 11 (12) , Art. No. 124022, issn: 1748-9326, ids: EG1UX, doi: 10.1088/1748-9326/11/12/124022
45. Crippa, P, S Castruccio, S Archer-Nicholls, GB Lebron, M Kuwata, A Thota, S Sumin, E Butt, C Wiedinmyer and DV Spracklen (2016), Population exposure to hazardous air quality due to the 2015 fires in Equatorial Asia. *Sci Rep* Version: 1 6 , Art. No. 37074, issn: 2045-2322, ids: EC5MY, doi: 10.1038/srep37074, PubMed ID: 27848989
46. Marais, EA and C Wiedinmyer (2016), Air Quality Impact of Diffuse and Inefficient Combustion Emissions in Africa (DICE-Africa). *Environ. Sci. Technol.* Version: 1 50 (19) 10739-10745, issn: 0013-936X, ids: DY1GC, doi: 10.1021/acs.est.6b02602, PubMed ID: 27611340
47. Piedrahita, R, KL Dickinson, E Kanyomse, E Coffey, R Alirigia, Y Hagar, I Rivera, A Oduro, V Dukic, C Wiedinmyer and M Hannigan (2016), Assessment of cookstove stacking in Northern Ghana using surveys and stove use monitors. *Energy Sustain Dev.* Version: 1 34 67-76, issn: 0973-0826, ids: EA6ZP, doi: 10.1016/j.esd.2016.07.007
48. Archer-Nicholls, S, E Carter, R Kumar, QY Xiao, Y Liu, J Frostad, MH Forouzanfar, A Cohen, M Brauer, J Baumgartner and C Wiedinmyer (2016), The Regional Impacts of Cooking and Heating Emissions on Ambient Air Quality and Disease Burden in China. *Environ. Sci. Technol.* Version: 1 50 (17) 9416-9423, issn: 0013-936X, ids: DV3FG, doi: 10.1021/acs.est.6b02533, PubMed ID: 27479733
49. Bauwens, M, T Stavrakou, JF Muller, I De Smedt, M Van Roozendaal, GR van der Werf, C Wiedinmyer, JW Kaiser, K Sindelarova and A Guenther (2016), Nine years of global hydrocarbon emissions based on source inversion of OMI formaldehyde observations. *Atmos. Chem. Phys.* Version: 1 16 (15) 10133-10158, issn: 1680-7316, ids: DV8HH, doi: 10.5194/acp-16-10133-2016
50. Carter, E, S Archer-Nicholls, K Ni, AM Lai, HJ Niu, MH Secrest, SM Sauer, JJ Schauer, M Ezzati, C Wiedinmyer, XD Yang and J Baumgartner (2016), Seasonal and Diurnal Air Pollution from Residential Cooking and Space Heating in the Eastern Tibetan Plateau. *Environ. Sci. Technol.* Version: 1 50 (15) 8353-8361, issn: 0013-936X, ids: DS8WH, doi: 10.1021/acs.est.6b00082, PubMed ID: 27351357

2015

51. van der Laan-Luijkx, IT, IR van der Velde, MC Krol, LV Gatti, LG Domingues, CSC Correia, JB Miller, M Gloor, TT van Leeuwen, JW Kaiser, C Wiedinmyer, S Basu, C Clerbaux and W Peters (2015), Response of the Amazon carbon balance to the 2010 drought derived with CarbonTracker

South America. *Glob. Biogeochem. Cycle* Version: 1 29 (7) 1092-1108, issn: 0886-6236, ids: CP3VJ, doi: 10.1002/2014GB005082

52. Dickinson, KL, E Kanyomse, R Piedrahita, E Coffey, IJ Rivera, J Adoctor, R Alirigia, D Muvandimwe, M Dove, V Dukic, MH Hayden, D Diaz-Sanchez, AV Abisiba, D Anaseba, Y Hagar, N Masson, A Monaghan, A Titiati, DF Steinhoff, YY Hsu, R Kaspar, B Brooks, A Hodgson, M Hannigan, AR Oduro and C Wiedinmyer (2015), Research on Emissions, Air quality, Climate, and Cooking Technologies in Northern Ghana (REACTING): study rationale and protocol. *BMC Public Health* Version: 1 15 , Art. No. 126, issn: 1471-2458, ids: CB6PS, doi: 10.1186/s12889-015-1414-1, PubMed ID: 25885780
53. Gonzalez-Abraham, R, SH Chung, J Avise, B Lamb, EP Salathe, CG Nolte, D Loughlin, A Guenther, C Wiedinmyer, T Duhl, Y Zhang and DG Streets (2015), The effects of global change upon United States air quality. *Atmos. Chem. Phys.* Version: 1 15 (21) 12645-12665, issn: 1680-7316, ids: CW9OV, doi: 10.5194/acp-15-12645-2015
54. de Foy, B, YY Cui, JJ Schauer, M Janssen, JR Turner and C Wiedinmyer (2015), Estimating sources of elemental and organic carbon and their temporal emission patterns using a least squares inverse model and hourly measurements from the St. Louis-Midwest supersite. *Atmos. Chem. Phys.* Version: 1 15 (5) 2405-2427, issn: 1680-7316, ids: CC7PE, doi: 10.5194/acp-15-2405-2015
55. Kulkarni, S, N Sobhani, JP Miller-Schulze, MM Shafer, JJ Schauer, PA Solomon, PE Saide, SN Spak, YF Cheng, HACD van der Gon, Z Lu, DG Streets, G Janssens-Maenhout, C Wiedinmyer, J Lantz, M Artamonova, B Chen, S Imashev, L Sverdlik, JT Deminter, B Adhikary, A Dallura, C Wei and GR Carmichael (2015), Source sector and region contributions to BC and PM_{2.5} in Central Asia. *Atmos. Chem. Phys.* Version: 1 15 (4) 1683-1705, issn: 1680-7316, ids: CB7IP, doi: 10.5194/acp-15-1683-2015
56. Wiedinmyer, C. (2015) Breathing easier in the Amazon. *Nature Geosci* 8, 751–752, <https://doi.org/10.1038/ngeo2550>.

2014

57. Hurteau, MD, AL Westerling, C Wiedinmyer and BP Bryant (2014), Projected Effects of Climate and Development on California Wildfire Emissions through 2100. *Environ. Sci. Technol.* Version: 1 48 (4) 2298-2304, issn: 0013-936X, ids: AB4QD, doi: 10.1021/es4050133, PubMed ID: 24443984
58. Schiferl, LD, CL Heald, JB Nowak, JS Holloway, JA Neuman, R Bahreini, IB Pollack, TB Ryerson, C Wiedinmyer and JG Murphy (2014), An investigation of ammonia and inorganic particulate matter in California during the CalNex campaign. *J. Geophys. Res.-Atmos.* Version: 1 119 (4) 1883-1902, issn: 2169-897X, ids: AD3KP, doi: 10.1002/2013JD020765
59. Eidhammer, T, MC Barth, MD Petters, C Wiedinmyer and AJ Prenni (2014), Aerosol microphysical impact on summertime convective precipitation in the Rocky Mountain region. *J. Geophys. Res.-Atmos.* Version: 1 119 (20) 11709-11728, issn: 2169-897X, ids: AU0FE, doi: 10.1002/2014JD021883
60. Wiedinmyer, C, RJ Yokelson and BK Gullett (2014), Global Emissions of Trace Gases, Particulate Matter, and Hazardous Air Pollutants from Open Burning of Domestic Waste. *Environ. Sci.*

Technol. Version: 1 48 (16) 9523-9530, issn: 0013-936X, ids: AN6JW, doi: 10.1021/es502250z, PubMed ID: 25019173

61. Zhang, F, J Wang, C Ichoku, EJ Hyer, ZF Yang, C Ge, SJ Su, XY Zhang, S Kondragunta, JW Kaiser, C Wiedinmyer and A da Silva (2014), Sensitivity of mesoscale modeling of smoke direct radiative effect to the emission inventory: a case study in northern sub-Saharan African region. *Environ. Res. Lett.* Version: 1 9 (7) , Art. No. 75002, issn: 1748-9326, ids: AP2AA, doi: 10.1088/1748-9326/9/7/075002
62. Hu, JL, HL Zhang, SH Chen, C Wiedinmyer, F Vandenberghe, Q Ying and MJ Kleeman (2014), Predicting Primary PM_{2.5} and PM_{0.1} Trace Composition for Epidemiological Studies in California. *Environ. Sci. Technol.* Version: 1 48 (9) 4971-4979, issn: 0013-936X, ids: AG9DY, doi: 10.1021/es404809j, PubMed ID: 24694302
63. Hu, JL, HL Zhang, SH Chen, Q Ying, C Wiedinmyer, F Vandenberghe and MJ Kleeman (2014), Identifying PM_{2.5} and PM_{0.1} Sources for Epidemiological Studies in California. *Environ. Sci. Technol.* Version: 1 48 (9) 4980-4990, issn: 0013-936X, ids: AG9DY, doi: 10.1021/es404810z, PubMed ID: 24552458
64. Zhang, HL, G Chen, JL Hu, SH Chen, C Wiedinmyer, M Kleeman and Q Ying (2014), Evaluation of a seven-year air quality simulation using the Weather Research and Forecasting (WRF)/Community Multiscale Air Quality (CMAQ) models in the eastern United States. *Sci. Total Environ.* Version: 1 473 275-285, issn: 0048-9697, ids: AB6UB, doi: 10.1016/j.scitotenv.2013.11.121, PubMed ID: 24374589

2013

65. Bowers, RM, N Clements, JB Emerson, C Wiedinmyer, MP Hannigan and N Fierer (2013), Seasonal Variability in Bacterial and Fungal Diversity of the Near-Surface Atmosphere. *Environ. Sci. Technol.* Version: 1 47 (21) 12097-12106, doi: 10.1021/es402970s.
66. Li, R, C Wiedinmyer and MP Hannigan (2013), Contrast and correlations between coarse and fine particulate matter in the United States. *Sci. Total Environ.* Version: 1 456 346-358, issn: 0048-9697, ids: 163NH, doi: 10.1016/j.scitotenv.2013.03.041, PubMed ID: 23624008
67. val Martin, M, CL Heald, B Ford, AJ Prenni and C Wiedinmyer (2013), A decadal satellite analysis of the origins and impacts of smoke in Colorado. *Atmos. Chem. Phys.* Version: 1 13 (15) 7429-7439, issn: 1680-7316, ids: 200XE, doi: 10.5194/acp-13-7429-2013
68. Li, R, C Wiedinmyer, KR Baker and MP Hannigan (2013), Characterization of coarse particulate matter in the western United States: a comparison between observation and modeling. *Atmos. Chem. Phys.* Version: 1 13 (3) 1311-1327, issn: 1680-7316, ids: 096LR, doi: 10.5194/acp-13-1311-2013

2012

69. Paton-Walsh, C, LK Emmons and C Wiedinmyer (2012), Australia's Black Saturday fires - Comparison of techniques for estimating emissions from vegetation fires. *Atmos. Environ.* Version: 1 60 262-270, issn: 1352-2310, ids: 020DU, doi: 10.1016/j.atmosenv.2012.06.066

70. Jiang, XY, C Wiedinmyer and AG Carlton (2012), Aerosols from Fires: An Examination of the Effects on Ozone Photochemistry in the Western United States. *Environ. Sci. Technol.* Version: 1 46 (21) 11878-11886, issn: 0013-936X, ids: 031TK, doi: 10.1021/es301541k, PubMed ID: 23013157
71. Dukic, V, M Hayden, AA Forgor, T Hopson, P Akweongo, A Hodgson, A Monaghan, C Wiedinmyer, T Yoksas, MC Thomson, S Trzaska and R Pandya (2012), The Role of Weather in Meningitis Outbreaks in Navrongo, Ghana: A Generalized Additive Modeling Approach. *J. Agric. Biol. Environ. Stat.* Version: 1 17 (3) 442-460, issn: 1085-7117, ids: 010NL, doi: 10.1007/s13253-012-0095-9
72. Young, PJ, LK Emmons, JM Roberts, JF Lamarque, C Wiedinmyer, P Veres and TC VandenBoer (2012), Isocyanic acid in a global chemistry transport model: Tropospheric distribution, budget, and identification of regions with potential health impacts. *J. Geophys. Res.-Atmos.* Version: 1 117 , Art. No. D10308, issn: 2169-897X, ids: 952CK, doi: 10.1029/2011JD017393
73. Hodzic, A, C Wiedinmyer, D Salcedo and JL Jimenez (2012), Impact of Trash Burning on Air Quality in Mexico City. *Environ. Sci. Technol.* Version: 1 46 (9) 4950-4957, issn: 0013-936X, ids: 933GO, doi: 10.1021/es203954r, PubMed ID: 22458823
74. Lin, MY, AM Fiore, LW Horowitz, OR Cooper, V Naik, J Holloway, BJ Johnson, AM Middlebrook, SJ Oltmans, IB Pollack, TB Ryerson, JX Warner, C Wiedinmyer, J Wilson and B Wyman (2012), Transport of Asian ozone pollution into surface air over the western United States in spring. *J. Geophys. Res.-Atmos.* Version: 1 117 , Art. No. D00V07, issn: 2169-897X, ids: 899NE, doi: 10.1029/2011JD016961
75. Wiedinmyer, C, M Barlage, M Tewari and F Chen (2012), Meteorological Impacts of Forest Mortality due to Insect Infestation in Colorado. *Earth Interact.* Version: 1 16 , Art. No. 2, issn: 1087-3562, ids: 897AR, doi: 10.1175/2011EI419.1
76. de Foy, B, C Wiedinmyer and JJ Schauer (2012), Estimation of mercury emissions from forest fires, lakes, regional and local sources using measurements in Milwaukee and an inverse method. *Atmos. Chem. Phys.* Version: 1 12 (19) 8993-9011, issn: 1680-7316, ids: 020TF, doi: 10.5194/acp-12-8993-2012
77. Avise, J, RG Abraham, SH Chung, J Chen, B Lamb, EP Salathe, YX Zhang, CG Nolte, DH Loughlin, A Guenther, C Wiedinmyer and T Duhl (2012), Evaluating the effects of climate change on summertime ozone using a relative response factor approach for policymakers. *J. Air Waste Manage. Assoc.* Version: 1 62 (9) , issn: 1096-2247, ids: 996YS, doi: 10.1080/10962247.2012.696531, PubMed ID: 23019820
78. Kumar, R, M Naja, GG Pfister, MC Barth, C Wiedinmyer and GP Brasseur (2012), Simulations over South Asia using the Weather Research and Forecasting model with Chemistry (WRF-Chem): chemistry evaluation and initial results. *Geosci. Model Dev.* Version: 1 5 (3) 619-648, issn: 1991-959X, ids: 942QH, doi: 10.5194/gmd-5-619-2012

79. Hallar, AG, DH Lowenthal, G Chirokova, RD Borys and C Wiedinmyer (2011), Persistent daily new particle formation at a mountain-top location. *Atmos. Environ.* Version: 1 45 (24) 4111-4115, issn: 1352-2310, ids: 796IU, doi: 10.1016/j.atmosenv.2011.04.044
80. Pfister, GG, J Avise, C Wiedinmyer, DP Edwards, LK Emmons, GD Diskin, J Podolske and A Wisthaler (2011), CO source contribution analysis for California during ARCTAS-CARB. *Atmos. Chem. Phys.* Version: 1 11 (15) 7515-7532, issn: 1680-7316, ids: 806RA, doi: 10.5194/acp-11-7515-2011
81. Pfister, GG, DD Parrish, H Worden, LK Emmons, DP Edwards, C Wiedinmyer, GS Diskin, G Huey, SJ Oltmans, V Thouret, A Weinheimer and A Wisthaler (2011), Characterizing summertime chemical boundary conditions for air masses entering the US West Coast. *Atmos. Chem. Phys.* Version: 1 11 (4) 1769-1790, issn: 1680-7316, ids: 727JW, doi: 10.5194/acp-11-1769-2011
82. de Foy, B, SP Burton, RA Ferrare, CA Hostetler, JW Hair, C Wiedinmyer and LT Molina (2011), Aerosol plume transport and transformation in high spectral resolution lidar measurements and WRF-Flexpart simulations during the MILAGRO Field Campaign. *Atmos. Chem. Phys.* Version: 1 11 (7) 3543-3563, issn: 1680-7316, ids: 750LN, doi: 10.5194/acp-11-3543-2011
83. Akagi, SK, RJ Yokelson, C Wiedinmyer, MJ Alvarado, JS Reid, T Karl, JD Crouse and PO Wennberg (2011), Emission factors for open and domestic biomass burning for use in atmospheric models. *Atmos. Chem. Phys.* Version: 1 11 (9) 4039-4072, issn: 1680-7316, ids: 764GT, doi: 10.5194/acp-11-4039-2011
84. Yokelson, RJ, IR Burling, SP Urbanski, EL Atlas, K Adachi, PR Buseck, C Wiedinmyer, SK Akagi, DW Toohey and CE Wold (2011), Trace gas and particle emissions from open biomass burning in Mexico. *Atmos. Chem. Phys.* Version: 1 11 (14) 6787-6808, issn: 1680-7316, ids: 797KI, doi: 10.5194/acp-11-6787-2011
85. Li, R, Wiedinmyer C, Hannigan MP, Baker KR. (2011) Comparative study of observed and CMAQ modeled coarse particulate matter. *Abstracts of Papers of the American Chemical Society*, 242.
86. Hornbrook, RS, DR Blake, GS Diskin, A Fried, HE Fuelberg, S Meinardi, T Mikoviny, D Richter, GW Sachse, SA Vay, J Walega, P Weibring, AJ Weinheimer, C Wiedinmyer, A Wisthaler, A Hills, DD Riemer and EC Apel (2011), Observations of nonmethane organic compounds during ARCTAS - Part 1: Biomass burning emissions and plume enhancements. *Atmos. Chem. Phys.* Version: 1 11 (21) 11103-11130, issn: 1680-7316, ids: 847IZ, doi: 10.5194/acp-11-11103-2011
87. Wiedinmyer, C, SK Akagi, RJ Yokelson, LK Emmons, JA Al-Saadi, JJ Orlando and AJ Soja (2011), The Fire INventory from NCAR (FINN): a high resolution global model to estimate the emissions from open burning. *Geosci. Model Dev.* Version: 1 4 (3) 625-641, issn: 1991-959X, ids: 826UD, doi: 10.5194/gmd-4-625-2011
88. Hallar, AG, G Chirokova, I McCubbin, TH Painter, C Wiedinmyer and C Dodson (2011), Atmospheric bioaerosols transported via dust storms in the western United States. *Geophys. Res. Lett.* Version: 1 38 , Art. No. L17801, issn: 0094-8276, ids: 816RQ, doi: 10.1029/2011GL048166

89. Jiang, XY, ZL Yang, H Liao and C Wiedinmyer (2010), Sensitivity of biogenic secondary organic aerosols to future climate change at regional scales An online coupled simulation. *Atmos. Environ.* Version: 1 44 (38) 4891-4907, issn: 1352-2310, ids: 682GM, doi: 10.1016/j.atmosenv.2010.08.032
90. Hurteau, MD and C Wiedinmyer (2010), Response to Comment on "Prescribed Fire as a Means of Reducing Forest Carbon Emissions in the Western United States". *Environ. Sci. Technol.* Version: 1 44 (16) 6521-6521, issn: 0013-936X, ids: 636JD, doi: 10.1021/es102186b
91. Wiedinmyer, C and MD Hurteau (2010), Prescribed Fire as a Means of Reducing Forest Carbon Emissions in the Western United States. *Environ. Sci. Technol.* Version: 1 44 (6) 1926-1932, issn: 0013-936X, ids: 565WG, doi: 10.1021/es902455e, PubMed ID: 20148581
92. Warneke, C, JA de Gouw, L Del Negro, J Brioude, S McKeen, H Stark, WC Kuster, PD Goldan, M Trainer, FC Fehsenfeld, C Wiedinmyer, AB Guenther, A Hansel, A Wisthaler, E Atlas, JS Holloway, TB Ryerson, J Peischl, LG Huey and ATC Hanks (2010), Biogenic emission measurement and inventories determination of biogenic emissions in the eastern United States and Texas and comparison with biogenic emission inventories. *J. Geophys. Res.-Atmos.* Version: 1 115, Art. No. D00F18, issn: 2169-897X, ids: 568BA, doi: 10.1029/2009JD012445
93. Aiken, AC, B de Foy, C Wiedinmyer, PF DeCarlo, IM Ulbrich, MN Wehrli, S Szidat, ASH Prevot, J Noda, L Wacker, R Volkamer, E Fortner, J Wang, A Laskin, V Shutthanandan, J Zheng, R Zhang, G Paredes-Miranda, WP Arnott, LT Molina, G Sosa, X Querol and JL Jimenez (2010), Mexico city aerosol analysis during MILAGRO using high resolution aerosol mass spectrometry at the urban supersite (T0) - Part 2: Analysis of the biomass burning contribution and the non-fossil carbon fraction. *Atmos. Chem. Phys.* Version: 1 10 (12) 5315-5341, issn: 1680-7316, ids: 618YC, doi: 10.5194/acp-10-5315-2010
94. Naik, V, AM Fiore, LW Horowitz, HB Singh, C Wiedinmyer, A Guenther, JA de Gouw, DB Millet, PD Goldan, WC Kuster and A Goldstein (2010), Observational constraints on the global atmospheric budget of ethanol. *Atmos. Chem. Phys.* Version: 1 10 (12) 5361-5370, issn: 1680-7316, ids: 618YC, doi: 10.5194/acp-10-5361-2010
95. Emmons, LK, EC Apel, JF Lamarque, PG Hess, M Avery, D Blake, W Brune, T Campos, J Crawford, PF DeCarlo, S Hall, B Heikes, J Holloway, JL Jimenez, DJ Knapp, G Kok, M Mena-Carrasco, J Olson, D OSullivan, G Sachse, J Walega, P Weibring, A Weinheimer and C Wiedinmyer (2010), Impact of Mexico City emissions on regional air quality from MOZART-4 simulations. *Atmos. Chem. Phys.* Version: 1 10 (13) 6195-6212, issn: 1680-7316, ids: 624VY, doi: 10.5194/acp-10-6195-2010
96. Emmons, LK, S Walters, PG Hess, JF Lamarque, GG Pfister, D Fillmore, C Granier, A Guenther, D Kinnison, T Laepple, J Orlando, X Tie, G Tyndall, C Wiedinmyer, SL Baughcum and S Kloster (2010), Description and evaluation of the Model for Ozone and Related chemical Tracers, version 4 (MOZART-4). *Geosci. Model Dev.* Version: 1 3 (1) 43-67, issn: 1991-959X, ids: 703FW, doi: 10.5194/gmd-3-43-2010

2009

97. Weaver, CP, XZ Liang, J Zhu, PJ Adams, P Amar, J Avise, M Caughey, J Chen, RC Cohen, E Cooter, JP Dawson, R Gilliam, A Gilliland, AH Goldstein, A Grambsch, D Grano, A Guenther, WI Gustafson, RA Harley, S He, B Hemming, C Hogrefe, HC Huang, SW Hunt, DJ Jacob, PL Kinney, K Kunkel, JF

- Lamarque, B Lamb, NK Larkin, LR Leung, KJ Liao, JT Lin, BH Lynn, K Manomaiphiboon, C Mass, D McKenzie, LJ Mickley, SM O'Neill, C Nolte, SN Pandis, PN Racherla, C Rosenzweig, AG Russell, E Salathe, AL Steiner, E Tagaris, Z Tao, S Tonse, C Wiedinmyer, A Williams, DA Winner, JH Woo, S Wu and DJ Wuebbles (2009), A PRELIMINARY SYNTHESIS OF MODELED CLIMATE CHANGE IMPACTS ON US REGIONAL OZONE CONCENTRATIONS. *Bull. Amer. Meteorol. Soc.* Version: 1 90 (12) 1843-1863, issn: 0003-0007, ids: 546SJ, doi: 10.1175/2009BAMS2568.1
98. Chen, J, J Avise, A Guenther, C Wiedinmyer, E Salathe, RB Jackson and B Lamb (2009), Future land use and land cover influences on regional biogenic emissions and air quality in the United States. *Atmos. Environ.* Version: 1 43 (36) 5771-5780, issn: 1352-2310, ids: 523YJ, doi: 10.1016/j.atmosenv.2009.08.015
99. Wang, XM, F Chen, ZY Wu, MG Zhang, M Tewari, A Guenther and C Wiedinmyer (2009), Impacts of Weather Conditions Modified by Urban Expansion on Surface Ozone: Comparison between the Pearl River Delta and Yangtze River Delta Regions. *Adv. Atmos. Sci.* Version: 1 26 (5) 962-972, issn: 0256-1530, ids: 492FS, doi: 10.1007/s00376-009-8001-2
100. Wiedinmyer, C, RM Bowers, N Fierer, E Horanyi, M Hannigan, AG Hallar, I McCubbin and K Baustian (2009), The contribution of biological particles to observed particulate organic carbon at a remote high altitude site. *Atmos. Environ.* Version: 1 43 (28) 4278-4282, issn: 1352-2310, ids: 485BM, doi: 10.1016/j.atmosenv.2009.06.012
101. Bowers, RM, CL Lauber, C Wiedinmyer, M Hamady, AG Hallar, R Fall, R Knight and N Fierer (2009), Characterization of Airborne Microbial Communities at a High-Elevation Site and Their Potential To Act as Atmospheric Ice Nuclei. *Appl. Environ. Microbiol.* Version: 1 75 (15) 5121-5130, issn: 0099-2240, ids: 474VE, doi: 10.1128/AEM.00447-09, PubMed ID: 19502432
102. Karl, T, E Apel, A Hodzic, DD Riemer, DR Blake and C Wiedinmyer (2009), Emissions of volatile organic compounds inferred from airborne flux measurements over a megacity. *Atmos. Chem. Phys.* Version: 1 9 (1) 271-285, issn: 1680-7316, ids: 395DO, doi: 10.5194/acp-9-271-2009
103. Avise, J, J Chen, B Lamb, C Wiedinmyer, A Guenther, E Salathe and C Mass (2009), Attribution of projected changes in summertime US ozone and PM_{2.5} concentrations to global changes. *Atmos. Chem. Phys.* Version: 1 9 (4) 1111-1124, issn: 1680-7316, ids: 4111C, doi: 10.5194/acp-9-1111-2009
104. Chen, J, J Avise, B Lamb, E Salathe, C Mass, A Guenther, C Wiedinmyer, JF Lamarque, S O'Neill, D McKenzie and N Larkin (2009), The effects of global changes upon regional ozone pollution in the United States. *Atmos. Chem. Phys.* Version: 1 9 (4) 1125-1141, issn: 1680-7316, ids: 4111C, doi: 10.5194/acp-9-1125-2009
105. Carlton, AG, C Wiedinmyer and JH Kroll (2009), A review of Secondary Organic Aerosol (SOA) formation from isoprene. *Atmos. Chem. Phys.* Version: 1 9 (14) 4987-5005, issn: 1680-7316, ids: 477RF, doi: 10.5194/acp-9-4987-2009
106. Yokelson, RJ, JD Crouse, PF DeCarlo, T Karl, S Urbanski, E Atlas, T Campos, Y Shinozuka, V Kapustin, AD Clarke, A Weinheimer, DJ Knapp, DD Montzka, J Holloway, P Weibring, F Flocke, W Zheng, D Toohey, PO Wennberg, C Wiedinmyer, L Mauldin, A Fried, D Richter, J Walega, JL Jimenez, K Adachi, PR Buseck, SR Hall and R Shetter (2009), Emissions from biomass burning in

the Yucatan. *Atmos. Chem. Phys.* Version: 1 9 (15) 5785-5812, issn: 1680-7316, ids: 482HW, doi: 10.5194/acp-9-5785-2009

107. Fast, J, AC Aiken, J Allan, L Alexander, T Campos, MR Canagaratna, E Chapman, PF DeCarlo, B de Foy, J Gaffney, J de Gouw, JC Doran, L Emmons, A Hodzic, SC Herndon, G Huey, JT Jayne, JL Jimenez, L Kleinman, W Kuster, N Marley, L Russell, C Ochoa, TB Onasch, M Pekour, C Song, IM Ulbrich, C Warneke, D Welsh-Bon, C Wiedinmyer, DR Worsnop, XY Yu and R Zaveri (2009), Evaluating simulated primary anthropogenic and biomass burning organic aerosols during MILAGRO: implications for assessing treatments of secondary organic aerosols. *Atmos. Chem. Phys.* Version: 1 9 (16) 6191-6215, issn: 1680-7316, ids: 489EY

2008

108. Sakulyanontvittaya, T, A Guenther, D Helmig, J Milford and C Wiedinmyer (2008), Secondary Organic Aerosol from Sesquiterpene and Monoterpene Emissions in the United States. *Environ. Sci. Technol.* Version: 1 42 (23) 8784-8790, issn: 0013-936X, ids: 378FS, doi: 10.1021/es800817r, PubMed ID: 19192798
109. Jiang, XY, C Wiedinmyer, F Chen, ZL Yang and JCF Lo (2008), Predicted impacts of climate and land use change on surface ozone in the Houston, Texas, area. *J. Geophys. Res.-Atmos.* Version: 1 113 (D20) , Art. No. D20312, issn: 2169-897X, ids: 368CD, doi: 10.1029/2008JD009820
110. Pfister, GG, C Wiedinmyer and LK Emmons (2008), Impacts of the fall 2007 California wildfires on surface ozone: Integrating local observations with global model simulations. *Geophys. Res. Lett.* Version: 1 35 (19) , Art. No. L19814, issn: 0094-8276, ids: 359LE, doi: 10.1029/2008GL034747
111. Sakulyanontvittaya, T, T Duhl, C Wiedinmyer, D Helmig, S Matsunaga, M Potosnak, J Milford and A Guenther (2008), Monoterpene and sesquiterpene emission estimates for the United States. *Environ. Sci. Technol.* Version: 1 42 (5) 1623-1629, issn: 0013-936X, ids: 267PK, doi: 10.1021/es702274e, PubMed ID: 18441812
112. Al-Saadi, J, A Soja, RB Pierce, J Szykman, C Wiedinmyer, L Emmons, S Kondragunta, XY Zhang, C Kittaka, T Schaack and K Bowman (2008), Intercomparison of near-real-time biomass burning emissions estimates constrained by satellite fire data. *J. Appl. Remote Sens.* Version: 1 2 , Art. No. 21504, issn: 1931-3195, ids: 417AG, doi: 10.1117/1.2948785

2007

113. Wiedinmyer, C and H Friedli (2007), Mercury emission estimates from fires: An initial inventory for the United States. *Environ. Sci. Technol.* Version: 1 41 (23) 8092-8098, issn: 0013-936X, ids: 236LW, doi: 10.1021/es071289o, PubMed ID: 18186342
114. Wiedinmyer C, Neff JC. (2007) Estimates of CO₂ from fires in the United States: implications for carbon management. *Carbon Balance and Management* 2007; 2: 1–12, doi: [10.1186/1750-0680-2-10](https://doi.org/10.1186/1750-0680-2-10)

115. Helmig, D, J Ortega, T Duhl, D Tanner, A Guenther, P Harley, C Wiedinmyer, J Milford and T Sakulyanontvittaya (2007), Sesquiterpene emissions from pine trees - Identifications, emission rates and flux estimates for the contiguous United States. *Environ. Sci. Technol.* Version: 1 41 (5) 1545-1553, issn: 0013-936X, ids: 139XZ, doi: 10.1021/es0618907, PubMed ID: 17396639
116. Matsunaga, SN, AB Guenther, Y Izawa, C Wiedinmyer, JP Greenberg and K Kawamura (2007), Importance of wet precipitation as a removal and transport process for atmospheric water soluble carbonyls. *Atmos. Environ.* Version: 1 41 (4) 790-796, issn: 1352-2310, ids: 1330T, doi: 10.1016/j.atmosenv.2006.08.054
117. Fast, JD, B de Foy, FA Rosas, E Caetano, G Carmichael, L Emmons, D McKenna, M Mena, W Skamarock, X Tie, RL Coulter, JC Barnard, C Wiedinmyer and S Madronich (2007), A meteorological overview of the MILAGRO field campaigns. *Atmos. Chem. Phys.* Version: 1 7 (9) 2233-2257, issn: 1680-7316, ids: 167MP, doi: 10.5194/acp-7-2233-2007
118. Hodzic, A, S Madronich, B Bohn, S Massie, L Menut and C Wiedinmyer (2007), Wildfire particulate matter in Europe during summer 2003: meso-scale modeling of smoke emissions, transport and radiative effects. *Atmos. Chem. Phys.* Version: 1 7 (15) 4043-4064, issn: 1680-7316, ids: 199ZJ, doi: 10.5194/acp-7-4043-2007

2006

119. Guenther, A, T Karl, P Harley, C Wiedinmyer, PI Palmer and C Geron (2006), Estimates of global terrestrial isoprene emissions using MEGAN (Model of Emissions of Gases and Aerosols from Nature). *Atmos. Chem. Phys.* Version: 1 6 3181-3210, issn: 1680-7316, ids: 069QR, doi: 10.5194/acp-6-3181-2006
120. Palmer, PI, DS Abbot, TM Fu, DJ Jacob, K Chance, TP Kurosu, A Guenther, C Wiedinmyer, JC Stanton, MJ Pilling, SN Pressley, B Lamb and AL Sumner (2006), Quantifying the seasonal and interannual variability of North American isoprene emissions using satellite observations of the formaldehyde column. *J. Geophys. Res.-Atmos.* Version: 1 111 (D12) , Art. No. D12315, issn: 2169-897X, ids: 062IR, doi: 10.1029/2005JD006689
121. Wiedinmyer, C, B Quayle, C Geron, A Belote, D McKenzie, XY Zhang, S O'Neill and KK Wynne (2006), Estimating emissions from fires in North America for air quality modeling. *Atmos. Environ.* Version: 1 40 (19) 3419-3432, issn: 1352-2310, ids: 056EP, doi: 10.1016/j.atmosenv.2006.02.010
122. Wiedinmyer, C, XX Tie, A Guenther, R Neilson and C Granier (2006), Future changes in biogenic isoprene emissions: How might they affect regional and global atmospheric chemistry?. *Earth Interact.* Version: 1 *International Young Scientists Global Change Conference 10*, Trieste, ITALY, NOV 16-19, 2003, Art. No. 3, issn: 1087-3562, ids: 096EH, doi: 10.1175/EI174.1

2005

123. Barth, M, JP McFadden, JL Sun, C Wiedinmyer, P Chuang, D Collins, R Griffin, M Hannigan, T Karl, SW Kim, S Lasher-Trapp, S Levis, M Litvak, N Mahowald, K Moore, S Nandi, E Nemitz, A Nenes, M Potosnak, TM Raymond, J Smith, C Still and C Stroud (2005), Coupling between land ecosystems and the atmospheric hydrologic cycle through biogenic aerosol pathways. *Bull. Amer.*

Meteorol. Soc. Version: 1 86 (12) 1738-1742, issn: 0003-0007, ids: 003CX, doi: 10.1175/BAMS-86-12-1738

124. Wiedinmyer, C, J Greenberg, A Guenther, B Hopkins, K Baker, C Geron, PI Palmer, BP Long, JR Turner, G Petron, P Harley, TE Pierce, B Lamb, H Westberg, W Baugh, M Koerber and M Janssen (2005), Ozarks Isoprene Experiment (OZIE): Measurements and modeling of the "isoprene volcano". *J. Geophys. Res.-Atmos.* Version: 1 110 (D18), Art. No. D18307, issn: 2169-897X, ids: 968RL, doi: 10.1029/2005JD005800
125. Pfister, G, PG Hess, LK Emmons, JF Lamarque, C Wiedinmyer, DP Edwards, G Petron, JC Gille and GW Sachse (2005), Quantifying CO emissions from the 2004 Alaskan wildfires using MOPITT CO data. *Geophys. Res. Lett.* Version: 1 32 (11), Art. No. L11809, issn: 0094-8276, ids: 938FR, doi: 10.1029/2005GL022995

2004

126. Neuman, JA, DD Parrish, TB Ryerson, CA Brock, C Wiedinmyer, GJ Frost, JS Holloway and FC Fehsenfeld (2004), Nitric acid loss rates measured in power plant plumes. *J. Geophys. Res.-Atmos.* Version: 1 109 (D23) , Art. No. D23304, issn: 2169-897X, ids: 881PH, doi: 10.1029/2004JD005092
127. Greenberg, JP, AB Guenther, G Petron, C Wiedinmyer, O Vega, LV Gatti, J Tota and G Fisch (2004), Biogenic VOC emissions from forested Amazonian landscapes. *Glob. Change Biol.* Version: 1 10 (5) 651-662, issn: 1354-1013, ids: 820WY, doi: 10.1111/j.1365-2486.2004.00758.x

2003

128. Otter, L, A Guenther, C Wiedinmyer, G Fleming, P Harley and J Greenberg (2003), Spatial and temporal variations in biogenic volatile organic compound emissions for Africa south of the equator. *J. Geophys. Res.-Atmos.* Version: 1 108 (D13) , Art. No. 8505, issn: 2169-897X, ids: 708VJ, doi: 10.1029/2002JD002609
129. Ryerson, TB, M Trainer, WM Angevine, CA Brock, RW Dissly, FC Fehsenfeld, GJ Frost, PD Goldan, JS Holloway, G Hubler, RO Jakoubek, WC Kuster, JA Neuman, DK Nicks, DD Parrish, JM Roberts, DT Sueper, EL Atlas, SG Donnelly, F Flocke, A Fried, WT Potter, S Schauffler, V Stroud, AJ Weinheimer, BP Wert, C Wiedinmyer, RJ Alvarez, RM Banta, LS Darby and CJ Senff (2003), Effect of petrochemical industrial emissions of reactive alkenes and NOx on tropospheric ozone formation in Houston, Texas. *J. Geophys. Res.-Atmos.* Version: 1 108 (D8) , Art. No. 4249, issn: 2169-897X, ids: 678AV, doi: 10.1029/2002JD003070
130. Wert, BP, M Trainer, A Fried, TB Ryerson, B Henry, W Potter, WM Angevine, E Atlas, SG Donnelly, FC Fehsenfeld, GJ Frost, PD Goldan, A Hansel, JS Holloway, G Hubler, WC Kuster, DK Nicks, JA Neuman, DD Parrish, S Schauffler, J Stutz, DT Sueper, C Wiedinmyer and A Wisthaler (2003), Signatures of terminal alkene oxidation in airborne formaldehyde measurements during TexAQS 2000. *J. Geophys. Res.-Atmos.* Version: 1 108 (D3) , Art. No. 4104, issn: 2169-897X, ids: 661KL, doi: 10.1029/2002JD002502
131. Brock, C.A., M. Trainer, T.B. Ryerson, J.A. Neuman, D.D. Parrish, J.S. Holloway, D.K. Nicks, Jr., G.J. Frost, G. Hubler, F.C. Fehsenfeld, J.C. Wilson, J.M. Reeves, B.G. Lafleur, H. Hilbert, E.L. Atlas, S. G. Donnelly, S.M. Schauffler, V.R. Stroud, C. Wiedinmyer. (2003) Particle Growth in Urban and

Industrial Plumes in Texas. *Journal of Geophysical Research-Atmospheres*, 108(D3), 4111, doi:10.1029/2002JD002746.

132. Hawes, AK, S Solomon, RW Portmann, JS Daniel, AO Langford, HL Miller, CS Eubank, P Goldan, C Wiedinmyer, E Atlas, A Hansel and A Wisthaler (2003), Airborne observations of vegetation and implications for biogenic emission characterization. *J. Environ. Monit.* Version: 1 5 (6) 977-983, issn: 1464-0325, ids: 749EX, doi: 10.1039/b308911h, PubMed ID: 14710942
133. Schmid, O., J. M. Reeves, J. C. Wilson, C. Wiedinmyer, C.A. Brock, D.W. Toohey, L. M. Avallone, A. M. Gates, M.N. Ross. (2003) Size-Resolved Particle Emission Indices in the Stratospheric Plume of an Athena II Rocket. *Journal of Geophysical Research-Atmospheres*, 108(D8), 10.1029/2002JD002486.
134. Levis, S, C Wiedinmyer, GB Bonan and A Guenther (2003), Simulating biogenic volatile organic compound emissions in the Community Climate System Model. *J. Geophys. Res.-Atmos.* Version: 1 108 (D21) , Art. No. 4659, issn: 2169-897X, ids: 742GA, doi: 10.1029/2002JD003203
135. Roberts, JM, BT Jobson, W Kuster, P Goldan, P Murphy, E Williams, G Frost, D Riemer, E Apel, C Stroud, C Wiedinmyer and F Fehsenfeld (2003), An examination of the chemistry of peroxy-carboxylic nitric anhydrides and related volatile organic compounds during Texas Air Quality Study 2000 using ground-based measurements. *J. Geophys. Res.-Atmos.* Version: 1 108 (D16) , Art. No. 4495, issn: 2169-897X, ids: 715XE, doi: 10.1029/2003JD003383

2001

136. McDonald-Buller, E., Wiedinmyer, C., Kimura, Y., Allen, D. (2001) Effects of Land Use Data on Dry Deposition in a Regional Photochemical Model for Eastern Texas. *J. Air & Waste Management Assoc.* 51 (8), 1211-1218, 10.1080/10473289.2001.10464340.
137. Wiedinmyer, C., Friedfeld, S., Baugh, W., Greenberg, J., Guenther, A., Fraser, M., Allen, D. (2001) Measurement and analysis of atmospheric concentrations of isoprene and its reaction products in central Texas. *Atmos. Env.* 35(6), 1001-1013, 10.1016/S1352-2310(00)00406-4.
138. Wiedinmyer, C., Guenther, A., Estes, M., Strange, IW., Yarwood, G., Allen, DT. (2001) A land use database and examples of biogenic isoprene emission estimates for the state of Texas, USA. *Atmos. Env.* 35(36), 6465-6477, 10.1016/S1352-2310(01)00429-0.

2000

139. Wiedinmyer, C., Strange, IW., Estes, M., Yarwood, G., Allen, DT. (2000) Biogenic hydrocarbon emission estimates for North Central Texas. *Atmos. Env.* 34(20), 3419-3435, 10.1016/S1352-2310(99)00448-3.

OTHER PUBLICATIONS

National Academies of Sciences, Engineering, and Medicine. 2022. *Wildland Fires: Toward Improved Understanding and Forecasting of Air Quality Impacts: Proceedings of a Workshop*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26465>.

Apte, J., Brauer, M., Guttikunda, S., Hamlet, C., Hasenkopf, C., Kass, D., Matte, T., Mehta, S., Pun, V.C., Teffera, S., Wiedinmyer, C. (2019) "Accelerating City Progress on Clean Air: Innovation and Action Guide",

Produced by Vital Strategies. <https://www.vitalstrategies.org/resources/accelerating-city-progress-on-clean-air-innovation-and-action-guide/>

Carlton, A.G., Barsanti, K.C., Wiedinmyer, C., Afreh, I. (2018) "Detailed characterization of organic carbon from fire: capitalizing on analytical advances to improve atmospheric models." Chapter in Multi-phase Environmental Chemistry in the Atmosphere, (Hunt, S.W., Laskin, A., Nizkorodov, S.A., eds), American Chemical Society, Washington D.C., v1299, pp 349-361.

National Academies of Sciences, Engineering, and Medicine, 2016. *The Future of Atmospheric Chemistry Research: Remembering Yesterday, Understanding Today, and Anticipating Tomorrow*. Washington DC: The National Academies Press. DOI: 10.17226/235730.

AMAP, 2015. (*Contributing Author*) AMAP Assessment 2015: Black carbon and ozone as Arctic climate forcers. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway. vii + 116 pp. <http://www.amap.no/documents/doc/AMAP-Assessment-2015-Black-carbon-and-ozone-as-Arctic-climate-forcers/1299>.

Wiedinmyer, C., Steiner, A., Ashworth, K. (2014) "Plant Influences on Atmospheric Chemistry", chapter in The Plant Sciences: Ecology and the Environment, (Monson, R.K., ed.), Springer Publishers, Inc., Heidelberg, Germany, pp. 573-572. ISBN 978-1-4614-7501-9

Luber, G., K. Knowlton, J. Balbus, H. Frumkin, M. Hayden, J. Hess, M. McGeehin, N. Sheats, L. Backer, C. B. Beard, K. L. Ebi, E. Maibach, R. S. Ostfeld, **C. Wiedinmyer**, E. Zielinski-Gutiérrez, and L. Ziska. Forthcoming (2014). Ch. 9: Human Health. In: *Climate Change Impacts in the United States, The Third National Climate Assessment*, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds. U.S. Global Change Research Program. (available at: <http://nca2014.globalchange.gov/report/sectors/human-health>)

Hastings, MG; **Wiedinmyer, C**; Kontak, R (2015) "Facilitating career advancement for women in the Geosciences through the Earth Science Women's Network (ESWN)" in *Women in the Geosciences: Practical, Positive Practices Toward Parity*, Holmes, MA and O'Connell, S eds, 70, 149-159, AGU Monograph.

Jiang, X., Barth, M. C., **Wiedinmyer, C.**, and Massie, S. T.: Influence of anthropogenic aerosols on the Asian monsoon: a case study using the WRF-Chem model, *Atmos. Chem. Phys. Discuss.*, 13, 21383-21425, doi:10.5194/acpd-13-21383-2013, 2013.

Wiedinmyer, C., P. Harley and A. Guenther (2009), "Exchange of organic compounds between the biosphere and the atmosphere", iLEAPS Newsletter Issue No. 7, June 2009.

Wiedinmyer, C., Guenther, A., Harley, P., Hewitt, C.N., Geron, C., Artaxo, P., Steinbrecher, R., Rasmussen. (2004) Global organic emissions from vegetation. Chapter in Emissions of Atmospheric Trace Compounds, Edited by Claire Granier, Paulo Artaxo, and Claire E. Reeves. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 115 -170.

INVITED TALKS

2022

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2021

- “Fires and their impacts, from household burning to wildfires”
 - California Fire Science Seminar Series, University of California Berkeley (online), California, USA. (<https://www.youtube.com/playlist?list=PLvPofWzmi8889iiaMSPtzUD0VLqxyo-fz>), 06 April 2021.
- “Wildfires and Air Quality”, NASA ACCP Data Use for Air Quality Workshop, Hampton, VA, 16 March 2021.
- “Africa Air Monitoring- Lessons Learned”, Symposium on Air Pollution Measurement and Analysis Systems (APMAS) Global Perspectives and Approach for India, Online, 15 January 2021.

2020

- “Fires and their impacts, from household burning to wildfires”
 - Department of Energy, Environmental and Chemical Engineering, Washington University, 23 October 2020.
 - AWG Distinguisher Lecture, DMV AWG Regional Chapter, Virginia, 02 October 2020
 - Department of Atmospheric Sciences, University of Oklahoma, 21 February 2020.

2019

- “Fires and their impacts, from household burning to wildfires”
 - Rosenstiel School of Marine and Atmospheric Science, University of Miami, 30 October 2019.
 - Department of Mechanical Engineering, University of Colorado Boulder, 05 April 2019.

2018

- “Global Air Quality, Challenges and Opportunities”. Sixth Arab-American Frontiers symposium, Kuwait City, Kuwait, November 05, 2018.
- “AON: Atmospheric Tracers for Arctic Wildfires, Air Pollution, Atmospheric Chemistry, and Climate Change at GEOSummit, Greenland.” Helmig, D., C. Wiedinmyer, L. Emmons, M. val Martin, 2018-9-25: Interagency Arctic Research Policy Committee, online.
- “Fires and their impacts, from household burning to wildfires”, Rice University, 20 April 2018
- “Fires, fires everywhere! Fires and their impacts from household burning to wildfires”, University of Wollongong, 5 February 2018.

2017

- “Quantifying interactions between technologies, behaviors, air quality and climate: A case study in West Africa”, NCAR ACOM, 30 October 2017.
- “Emissions and Impacts of Air Pollutants from Biomass Burning”
 - NOAA Chemical Sciences Division, 27 September 2017
 - University of Utah, 05 April 2017.
- “Fire emissions modeling with EO at NCAR”, NASA Wildland Fire Applications 2017 Team Meeting, University of Colorado-Boulder, 01 March 2017.

2016

- “Emissions and Impacts of Air Pollutants from Biomass Burning”, Earth Science Colloquium Speaker, Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, 09 December 2016.
- “Fire Aerosols: Exceptionally Common”, Plenary talk at the 35th Annual Conference of the American Association for Aerosol Research, Portland, OR, 21 October 2016.
- “Constraining the Emissions of Air Pollutants and Their Impacts”, University of Rijeka, Rijeka, Croatia, 23 June 2016.

- “Modeling Air Quality and Climate”, Health Effects Institute Annual Meeting, Denver, CO, 01 May 2016.
- “Fires in the Earth System”, AWG Distinguished Lecture, Oregon State University, Corvallis, OR, 28 April 2016.

2015

- “Air Quality and Health”, AWG Distinguished Lecture, Westminster College, Salt Lake City, UT, 24 September 2015.
- “Constraining the Emissions of Air Pollutants and Their Impacts”
 - Emory University, Atlanta, GA, 21 January 2015
 - Lyndon State University, *online*, 19 February 2015

2014

- “Succeeding in science and life: some lessons learned about work-life balance”, Gulf Coast ADVANCE Retreat, Dauphin Island Sea Lab, Alabama, 08 November 2014.
- “Fires in the Earth System: From Emissions to Impacts”, Tutorial, AAAR Annual Meeting, Orlando, Florida, October 20, 2014.
- “Constraining the Emissions of Air Pollutants and their Impacts”, Department of Mechanical Engineering, Colorado State University, Ft. Collins, CO, 10 April 2014.
- “Fires in the Earth System: Interactions with the Atmosphere”, Walter Orr Roberts Lecture at the 2014 Annual Meeting of the American Meteorological Society, Atlanta, GA, 05 February 2014.

2013

- “Cleaner cooking in the Sahel: Impacts for air quality, climate, and health”
 - Massachusetts Institute of Technology, Boston, MA, 17 October 2013
 - University of Denver, Denver, CO, 10 October 2013
- “Status and Recent Development of the FINN Emissions”, Western Modeling Workshop, Boulder, CO, 09 July 2013.
- “Open Burning and its Atmospheric Impacts”,
 - University of Utah, 21 February 2013
 - University of Wollongong, Wollongong, Australia, 14 January 2013.

2012

- “Open Burning and its Atmospheric Impacts”,
 - Washington State University, Pullman, WA, 22 October 2012.
 - Harvard University, Boston, MA, 12 October 2012.
- “Using existing measurements to estimate the emissions of primary biological particles to the atmosphere”, Bioaerosol Effects on Clouds Workshop, Steamboat Springs, CO, 4-7 August 2012.

2011

- “Emissions from Open Burning: Evaluation Challenges at Different Scales,” Session: Evaluating Emissions Inventories, AGU Fall Meeting, San Francisco, CA, 5-9 December 2011.
- “Feedbacks between climate and fire emissions,” *DoD SERDP Partners in Environmental Technology Technical Symposium and Workshop*, Washington D.C., 29 November 2011.
- “Biogenic emissions modeling for chemistry and climate models,” Joint MUSCATEN – ABBA Workshop on Biogenic VOC: Emissions, Aerosol Formation, Modeling”, Tartu, Estonia, 19-21 October 2011.

- “Aerosols: Biomass Burning, Dust, and Climate in Africa”, NCAR ISP Summer Colloquium *African Weather and Climate*, 02 August 2011.
- “Fires in the Earth System”, Nelson Institute for the Environment, University of Wisconsin-Madison, 07 April 2011.

2010

- “Forest fire air pollution in the Western U.S”, Session: Protecting vulnerable communities from climate change, American Public Health Association Meeting, Denver, CO, 09 November 2010.
- “Mapping the World’s VOC Emissions from Vegetation”, *Phyllosphere 2010: Ninth International Symposium of the Microbial Ecology of Aerial Plant Surfaces*, Oregon State University, Corvallis, OR; 15 August 2010.
- “Fires in Asia”, NCAR ASP Summer Colloquium: Asia in the 21st Century, Boulder, CO, 05 Aug. 2010.
- “Exchanges of Organic Compounds Between the Biosphere and the Atmosphere: Now and in the Future”
 - North Carolina State University, 22 March 2010.
 - North Carolina A&T University, 25 March 2010.

2009

- “Exchanges of Organic Compounds Between the Biosphere and the Atmosphere: Now and in the Future”
 - University of California-Davis, 27 April 2009.
- “Climate Change and Water Systems, Forests, and the Atmosphere,” Department of Environmental and Water Resources Engineering, University of Texas in Austin, 29 January 2009.

2008

- “Observations from a mountain site in Colorado: The Storm Peak Aerosol and Clouds Characterization Study (SPACCS08)”, Department of Atmospheric and Oceanic Sciences, University of Colorado, Boulder, 14 November 2008.
- “Exchanges of Organic Compounds Between the Biosphere and the Atmosphere”, Marie Curie-iLEAPS Conference- Feedbacks-Land-Climate Dynamics. Hyeres, France, 17-21 November 2008.
- “Estimating Emissions from Fires”, Environmental Engineering Department, University of Colorado at Boulder, Boulder, CO, 01 February 2008.

2007

- “Estimating Emissions from Vegetation for Air Quality Modeling: Methods and Challenges”, University of Texas at Austin, Austin, TX, 22 August 2007.
- “Aerosols and the Terrestrial Biosphere: Emissions, Processes, and Feedbacks”
 - University of North Carolina at Chapel Hill, Chapel Hill, NC, 22 March 2007.
 - ACD/TIIMES Seminar, NCAR, Boulder, CO, 22 January 2007.

2005

- “Understanding and Quantifying Biosphere-Atmosphere Interactions,” NCAR, Boulder, CO, 10 October 2005.
- “Working with spatial data to model and evaluate biosphere-atmosphere interactions”, NCAR GIS Initiative Seminar, Boulder, CO, 22 March 2005.

2004

- “Estimating Emissions from Fires in North America for Air Quality Modelers,” Monitoring Science & Technology Symposium, Denver, CO, September 2004

2003

- “Changes in biogenic isoprene emissions: How do they affect regional and global atmospheric chemistry?” International Young Scientist Global Change Conference, Trieste, Italy, November, 2003

2000

- “Regional Air Quality in Texas and the Influence of Biogenic Isoprene,” Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere, Ventura, CA, February, 2000

1999

- Department of Chemical Engineering, Widener University, Chester, PA, May 1999
- Department of Environmental Engineering, Drexel University, Philadelphia, PA, May 1999

SELECTED CONFERENCE PRESENTATIONS

Wiedinmyer, C. E. McDonald-Buller, Y. Kimura, A.G. Carlton, K.C. Barsanti, A.J. Soja, J.L. McCarty, Q. Xu and A.L. Westerling. (*invited*) “Biomass Burning: Emissions, Chemistry, and Transport”, AGU Fall Meeting, San Francisco, CA, 09 December 2019.

Wiedinmyer, C, I. Afreh, K.C. Barsanti, A.G. Carlton, 2018-12-12: Improved parameterizations for simulating the fate of monoterpene emissions. 2018 AGU Fall Meeting, Washington DC, USA.

Wiedinmyer, C., S.H. Chung, R.J. Yokelson, E. McDonald-Buller, T. Oda, C. Elvidge, L. Emmons, J. Orlando, “Constraining Emissions from Open Burning Sources and Their Atmospheric Impacts” Biomass Burning Symposium, AAAR Annual Meeting, Orlando, Florida, 23 October 2014.

Wiedinmyer, C., R. Li, M. Hannigan, K. Baker, A.G. Hallar, N. Clements, 2011: Coarse Particulate Matter in the Atmosphere: What do we really know? *AGU Fall Meeting*, San Francisco, CA, December 5-9, 2011.

Wiedinmyer, Christine; Louisa Emmons; John Orlando; Bob Yokelson; Sheryl Akagi; Jassim Al-Saadi; Amber Soja. "New global fire emission estimates and evaluation of volatile organic compounds." presented at the AGU Fall Meeting, San Francisco, CA, December 13-17, 2010.

Wiedinmyer, Christine, Jerome Fast, Alex Guenther, Serena Chung. "The Influence of Aerosols on Biogenic Emissions: Case Studies for... (1) Mexico and (2) Eastern U.S.", presented at the AGU Fall Meeting, San Francisco, CA, December 10-15, 2006.

Wiedinmyer, Christine, Chris Geron, Angie Belote, Brad Quayle, Don McKenzie, Xiaoyang Zhang, Susan O’Neill, Kristina Klos Wynne, and Alex Guenther. “Fire emissions from North America: A simple modeling approach”, presented at the U.S. EPA Emission Inventory Conference, New Orleans, LA, May 18, 2006.

Wiedinmyer, Christine, Angie Belote, Kristina Klos, Alex Guenther, Brad Quayle, Chris Geron, Carol Shay, Tanarit Sakulyanontvittaya, and Jana Milford. “Estimating fire emissions and the impacts for air quality in the eastern United States”, presented at the EastFIRE Conference, Fairfax, VA., May 11-13, 2005

Wiedinmyer, C., K. Klos, A. Belote, C. Geron, B. Quayle, A. Guenther, and C. Shay. “Daily fire emissions in North America for air quality modelers,” Monitoring Science & Technology Symposium, Denver, CO, September 22, 2004.

Wiedinmyer, C., Ross, M.N. Reeves, J.M., Wilson, J.C., Brock, C.B. "Measurement of the aerosol size distributions in the stratospheric wakes of three rockets." Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS). Brookhaven National Laboratory, Long Island, NY, June, 2001.

Wiedinmyer, C. "Regional Air Quality in Texas and the Influence of Biogenic Isoprene." Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere. Ventura, CA. February 27 – March 3, 2000.

Geron, C., Guenther, A., Greenberg, J., Wiedinmyer, C. "Scaling Isoprene Emissions in the Western and Central United States." American Geophysical Union Fall Conference. San Francisco, Ca. December 1999.

Wiedinmyer, C. and D. Allen. (Paper 99-236) "Isoprene Emissions and Concentrations in Central Texas." Proceedings of the Air and Waste Management Association's 92nd Annual Meeting. St. Louis, MO. June 20-24, 1999.

Wiedinmyer, C., Strange, W., Allen, D. (Paper 99-233) "Vegetation Coverage for Central Texas." Proceedings of the Air and Waste Management Association's 92nd Annual Meeting. St. Louis, MO. June 20-24, 1999.

Estes, M., Smith, J., Wiedinmyer, C. "Hierarchical Emissions Inventory Development for Nested Photochemical Modeling Part 3: Biogenic Sources." Proceeding of the Air and Waste Management Association Emission Inventory Conference. New Orleans, LA. Dec. 8-10, 1998.

SELECTED POSTER PRESENTATIONS

Wiedinmyer, C., Y. Kiumra, E. McDonald-Buller, J. Zheng, "The influence of land cover characterization on emissions estimates from the Fire INventory from NCAR (FINN), Presented at the AGU Fall Meeting, San Francisco, CA, 19 December 2014.

Wiedinmyer, C., Jassim Al-Saadi, Louisa Emmons, Robert Yokelson, Sheryl Akagi, Amber Soja, Colette Heald. "High resolution fire emission estimates for air quality applications", Presented at the AGU Fall Meeting, San Francisco, CA, December 14-18, 2009.

Wiedinmyer, C., S. Chung, J. Fast, and A. Guenther. "Impacts of aerosols on meteorology and biogenic emissions", Presented at the Biogenic Hydrocarbons and the Atmosphere Gordon Research Conference, Ventura, CA, Feb. 25- March 2, 2007.

Wiedinmyer, Christine, Tanarit Sakulyanontvittaya, Jana Milford, Alex Guenther, Detlev Helmig, Chao-Jung Chien, John Ortega, Tiffany Duhl, David Tanner, Angie Belote, Chris Geron, Brad Quayle. "Estimating the impact of biogenic sesquiterpene and fire emissions to organic aerosol concentrations", presented at the 24th Annual AAAR Annual Conference, Austin, TX, Oct. 17-21, 2005.

Matsunaga, S., C. Wiedinmyer, S. Kato, A. Yoshino, Y. Miyakawa, J. Greenberg, Y. Kajii, A. Guenther. "Sources of Biogenic and Anthropogenic Semi Volatile Organic Carbonyls and Their Effects on the Air Quality in Suburban and Remote Areas." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.

Nandi, S., U. Vanchindorj, C. Wiedinmyer, A. Guenther, E. Prins, A. Setzer, P. Artaxo, C. Elvidge. "Uncertainties in Satellite Based Fire Emission Inventories in the Amazon." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.

Chen, J., J. Avise, B. Lamb, C. Wiedinmyer, A. Guenther, J.F. Lamarque, E. Salathe, C. Mass. "Influence of Global Change and Asian Emissions on Regional Air Quality in the Pacific Northwest." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.