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RESEARCH APPOINTMENTS

Associate Professor	2019-present
Associate Chair for Graduate Studies (2022-) Climate and Space Sciences and Engineering, Applied Physics University of Michigan, Ann Arbor, MI	
Assistant Professor	2013-2019
Climate and Space Sciences and Engineering, Applied Physics University of Michigan, Ann Arbor, MI	
W. M. Keck Institute for Space Studies Postdoctoral Fellow	2011-2013
Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA	

EDUCATION

Ph.D., Applied Physics , Harvard University, Cambridge, MA	2011
S.M., Applied Physics , Harvard University, Cambridge, MA	2005
B.A., Physics (with Honors), minor Mathematics, Pomona College, Claremont, CA	2004

RECOGNITIONS

NCAR Affiliate Scientist	2022-2025
UM CLASP Department Faculty Award	2023
NASA Group Achievement Award (OCO-2 Science Team)	2018
NSF CAREER award	2017
NASA New Investigator Program (NIP) in Earth Science award	2014
Early Career Award, Gordon Conference for Atmospheric Chemistry, Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS)	2013
W. M. Keck Institute for Space Studies Postdoctoral Fellowship	2011-2013
National Center for Atmospheric Research Advanced Study Program Postdoctoral Fellowship (Declined)	2011
Outstanding Student Paper Award, Fall Meeting, AGU	2010
National Defense Science and Engineering Graduate (NDSEG) Fellowship	2007-2010
Edmunds Physics Prize, Pomona College	2004
Tileston Physics Prize, Pomona College	2003

AIRBORNE CAMPAIGNS

(* instrument PI and/or mission scientist, ** overall project PI)

**Flaring & Fossil Fuels: Uncovering Emissions and Losses (F³UEL), Gulf of Mexico/TX, Summer 2020; North Dakota/Alaska/California, Summer 2021; Gulf of Mexico, Spring 2022, Fall 2022

**MAIZE: Measurement of Agriculture Investigating farm-Zone Emissions of N₂O, Iowa/Nebraska, Spring 2021; Spring 2022

**AVIRIS-NG COVID: Directly observing changes in California Methane Emissions due to Covid-19, California, Summer 2020

** RAPID: Time-critical airborne measurements to quantify ozone impacts of emissions changes during the Covid-19 pandemic response in the U.S., Houston & Denver, Summer 2020
 East-Coast Outflow Greenhouse Gas study, Covid response (ECO-Covid), East Coast US, Spring 2020
 * East-Coast Outflow Greenhouse Gas study (ECO-GHG), East Coast US, Spring 2018
 Offshore oil & gas emissions assessment, Gulf of Mexico, Winter 2018
 * Greenhouse Emissions in the Midwest (GEM), Minnesota, Summer 2017; GEM-2, Winter 2018; GEM-3, Spring 2018
 ** Fertilizer Emissions Airborne Study (FEAST), Colorado & Mississippi River Valley, Spring 2017
 * The O₂/N₂ Ratio and CO₂ Airborne Southern Ocean Study (ORCAS), Chile, Winter 2016
 ** Twin Otter Project Defining Oil/gas Well emissioNs (TOPDOWN), New Mexico** & Pennsylvania*, Spring 2015
 * TOPDOWN, North Dakota, Colorado, Spring 2014
 * Barnett methane emissions study (Environmental Defense Fund), Denton, TX, Fall 2013
 HIAPER Pole to Pole Observations (HIPPO-5), Pole to Pole, Summer-Fall 2011; HIPPO-4, Pole to Pole, Spring-Summer 2011
 California Nexus, Research at the Nexus of Air Quality and Climate Change (CALNEX), Ontario, CA, Spring 2010
 HIPPO-2, Pole to Pole, Fall 2009; HIPPO-3, Pole to Pole, Spring 2010;
 HIPPO-1, Pole to Pole, Winter 2009
 Stratosphere-Troposphere Analyses of Regional Transport (START08), Broomfield, CO, Spring 2008

TEACHING

Earth System Evolution (AOSS 320, CLIMATE 320), University of Michigan, Fall 2014- 2016, 2018, 2021-2023
 Atmospheric Chemistry (CLIMATE 479), University of Michigan, Winter 2021, Winter 2023
 Climate and the Media (CLIMATE/EARTH 140), University of Michigan, Winter 2022, 2024
 Earth System Interactions (AOSS 475), University of Michigan, Winter 2014-2019
 AOSS Seminar (AOSS 749), University of Michigan, Fall 2014 & Winter 2015

SERVICE ACTIVITIES

Scientific Advisory Board, Member, European Integrated Carbon Observing System (ICOS) (2023-)
 Committee on Earth Science and Applications from Space (CESAS), Member, National Academies of Sciences, Engineering, and Medicine (2023-)
 Chair of Scientific Advisory Committee, Carbon Mapper, Inc. (2021-)
 Permian Methane Analysis Project, Environmental Defense Fund, Scientific Advisory Panel (2019-)
 Topic Chair, International Bureau of Weights and Measures/World Meteorology Organization Metrology for Climate Action workshop, 2022
 Science and Technology in Society forum, Japan, 2022
 National Academies of Sciences, Engineering, and Medicine (NASEM) Committee member on the *Future Use of NASA Airborne Platforms to Advance Earth Science Priorities*, (2020-2021)
 European Commission Joint Research Centre workshop participant and report co-author “Atmospheric monitoring and inverse modeling for verification of GHG inventories” (2017-2018)
 Japanese National Institute for Environmental Studies (NIES), workshop participant and report co-author “A guidebook on the use of satellite greenhouse gases observation data for verification of greenhouse gases emission inventories” (2017-2018)
 Co-lead for Workshop Towards Addressing Major Gaps in the Global Methane Budget, Linde Center, Caltech (2017)

World Meteorological Organization Integrated Global GHG Information System (IG³IS) planning & implementation team (2016-2020)
 Co-chair of NACP breakout session on “Quantification and attribution of anthropogenic methane emissions in North America” (2015)
 Co-organizer Workshop on Measurements in Oil and Gas Production Regions, NOAA ESRL (2015)
 Public forum on Four Corners methane, Farmington, New Mexico (2015)
 JPL Carbon Cycle & Ecosystems Initiative steering committee member (2013)
 American Geophysical Union member

University of Michigan service:

Associate Chair for Graduate Studies, CLaSP Department (2022-)
 Co-lead UM CLaSP department AGU Bridge program (2022-)
 Co-creator/director of Climate Change Solutions graduate certificate program (2020-)
 Michigan Engineering ONRAMP Faculty Advisory Board (2021-)
 Reviewer for Rackham Merit Fellowship (2022-2023)
 Launch Committee for Dr. Jim Raines (2022-2023)
 College of Engineering Energy Institute visioning committee (2021-2022)
 Climate and Space Sciences and Engineering graduate admissions chair (2021-2022); graduate committee (2020-2022); curriculum committee (2020-2022); research excellence committee (2019-2020); mentoring committee (2018-2020); executive committee (2016-2020); graduate admission committee (2015-2019)
 President’s Commission on Carbon Neutrality: Carbon Accounting Sub Group (2019)
 Faculty transition team for new School of Sustainability at University of Michigan (2016-2017)
 Michigan Geophysical Union judge (2014, 2015)
 University of Michigan College of Engineering Graduate Symposium conference judge (2015)
 Atmospheric, Oceanic and Space Sciences Seminar co-organizer (2014-2015)
 President Schlissel’s committee on Greenhouse Gas Reduction, University of Michigan (2014-2015)
 UM Integrated Assessment on Hydraulic Fracturing in Michigan (consulting member; 2014-2015)
 Qualifying and prospectus exams: Anna Savage (2014, Applied Physics), Ben Isaacoff (2014, Applied Physics), Jamie MacLennan (2014, Applied Physics), Rebecca Craig (2014, Chemistry), Liz Ultee (2015, AOSS), Judit Szente (2015, AOSS), Zach Butterfield (2015, CLaSP), Rahul Gogna (2016, Applied Physics), Samantha Basile (2016/2017, CLaSP), Anthony Torres (2016/2017, CLaSP), Shane Coffing (2017, Applied Physics), Dien Wu (2017, U. of Utah), Brian Swiger (2018, CLaSP), Yifan Guan (2020, CLaSP), Yingxiao Zhang (2021, CLaSP), Erica Whiting (2023, CLaSP), Maya Fields (2023, CLaSP).
 PhD committees: Chunpeng Wang (2014, AOSS), Anna Savage (2017, Applied Physics), Rebecca Craig (2018, Chemistry), Matthew Wozniak (2019, CLaSP), Dien Wu (2020, Utah), Zachary Butterfield (2020, CLaSP), Morgan Loechli (2023, CLaSP), Yifan Guan (2023, CLaSP), Katlyn Mackay (2023, Memorial University, Newfoundland), Anthony Torres (2023, CLaSP).
 PhD committees chaired/co-chaired: John Ware (2018, Physics), Alexander (Sandro) Gvakharia (2019, Applied Physics), Emily Yang (2022, CLaSP), Alan Gorchov Negron (2023, CLaSP), Daniel Huber (2023, CLaSP).

Review tasks:

Peer reviewer for *Nature*, *PNAS*, *Nature Geoscience*, *Geophysical Research Letters*, *Nature Scientific Reports*, *Atmospheric Chemistry and Physics*, *Journal of Geophysical Research*, *Global Biogeochemical Cycles*, *Environmental Pollution*, *Atmospheric Measurement Techniques*, and *Environmental Science and Technology*
 Proposal & panelist reviewer (*NASA*, *NSF*, *NERC*, *NSERC*, *Belmont Forum*, *Netherlands Space Office*, *Swedish National Space Board*) & panelist for *NASA* (2013, 2014 [2], 2016, 2019)

 INVITED SEMINARS

Schlumberger-Doll Research, Sustainability and Emissions (2023); NASA Jet Propulsion Laboratory, Carbon Cycle seminar (2022); Andrews University, Chemistry & Biochemistry (2019); Max Planck Institute for Biogeochemistry, Jena, Germany (2017); University of California- Berkeley, Berkeley Atmospheric Sciences Center Seminar (2017); University of Colorado- Boulder, Atmospheric and Oceanic Sciences (2017); California Institute of Technology, Environmental Science and Engineering (2017); University of Washington, Atmospheric Science (2017); University of Toronto, Center for Global Change Science Distinguished Lecturer Series (2017); Dartmouth College (2017); NASA GMAO, Goddard Space Flight Center (2015); NOAA ESRL Chemical Science Division (2014); University of Michigan, Atmospheric, Oceanic and Space Sciences (2014); UiT The Arctic University of Norway, (CAGE) Centre for Arctic Gas Hydrate, Environment, and Climate (2013); Boston University, Terrestrial Biogeochemistry (2013); Massachusetts Institute of Technology, Civil & Environmental Engineering (2013); University of Michigan, Atmospheric, Oceanic and Space Sciences (2013); Jet Propulsion Laboratory (2013); Pomona College, Physics (2012); UC Irvine, Earth System Science (2012); UCLA, Atmospheric and Oceanic Sciences (2012); Caltech, ESE & Society discussion group (2012); Caltech, Yuk Lunch seminar (2011); Jet Propulsion Laboratory (2011); JAMSTEC, Yokohama, Japan (2010)

 BOOK CHAPTERS AND REPORTS

- McDonald BC, He J, Harkins C, de Gouw J, Elguindi N, Duren R, Gilman J, Kort EA, Miller CE, Peischl J, Petron G, Thompson C, *A Review of U.S. Oil and Gas Methane and Air Pollutant Emissions*, Air and Waste Management Environmental Manager Magazine, 2023.
- Kort EA, McKain K, Chapter 13 - Aircraft vertical profile measurements for evaluation of satellite retrievals of long-lived trace gases, chapter in *Field Measurements for Passive Environmental Remote Sensing*, Elsevier, 235-244, <https://doi.org/10.1016/B978-0-12-823953-7.00020-4>, 2023.
- Report co-author: National Academies of Sciences, Engineering, and Medicine. *Airborne Platforms to Advance NASA Earth System Science Priorities: Assessing the Future Need for a Large Aircraft*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26079>, 2021.
- Report co-author: *Atmospheric monitoring and inverse modelling for verification of greenhouse gas inventories*, EUR 29276 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-79-88938-7 (online), 978-92-79-88939-4 (print), doi:10.2760/759928 (online), 10.2760/02681 (print), JRC111789, 2018.
- Chapter 4 lead author, Matsunaga T. and Maksyutov S. (eds.) *A Guidebook on the Use of Satellite Greenhouse Gases Observation Data to Evaluate and Improve Greenhouse Gas Emission Inventories*, Satellite Observation Center, National Institute for Environmental Studies, Japan, 129 pp. 2018.

 PUBLICATIONS

As of Jan. 2024: Google Scholar h-index = 53, total citations = 11,012
(indicates Kort group member)

106. Li M, Kort EA, Bloom AA, Wu D, Plant G, Gerlein-Safdi C, Pu T, *Underestimated Dry Season Methane Emissions from Wetlands in the Pantanal*, Environ. Sci. Technol., <https://doi.org/10.1021/acs.est.3c09250>, 2024.
105. Jin Y, Keeling RF, Stephens BB, Long MC, Patra PK, Rodenbeck C, Morgan EJ, Kort EA, Sweeney C, *Improved Atmospheric Constraints on Southern Ocean CO₂ Exchange*, Proceedings of the National Academy of Science, <https://doi.org/10.1073/pnas.2309333121>, 2024.

104. Plant G, Kort EA, Gorchov Negron AM, Chen Y, Fordice G, Harkins C, *In situ sampling of NOx emissions from United States natural gas flares reveals heavy-tail emission characteristic*, Environ. Sci. Technol., <https://doi.org/10.1021/acs.est.3c08095>, 2024.
103. Pühl M, Roiger A, Fiehn A, Gorchov Negron AM, Kort EA, Schwietzke S, Pisso I, Foulds A, Lee J, France JL, Jones AE, Lowry D, Fisher RE, Huang L, Shaw J, Bateson P, Andrews S, Young S, Dominutti P, Lachlan-Cope T, Weiss A, Allen G, *Aircraft-based mass balance estimate of methane emissions from offshore gas facilities in the southern North Sea*, Atmos. Chem. Phys., 24, 1005–1024, <https://doi.org/10.5194/acp-24-1005-2024>, 2024.
102. Roten D, Lin JC, Das S, Kort EA, *Constraining Sector-specific CO₂ Fluxes using Space-based XCO₂ Observations over the Los Angeles Basin*, Geophysical Research Letters, <https://doi.org/10.1029/2023GL104376>, 2023.
101. Gorchov Negron AM, Kort EA, Chen Y, Brandt AR, Smith ML, Plant G, Ayasse AK, Schwietzke S, Zavala-Araiza D, Hausman C, Adames-Corraliza AF, *Excess methane emissions from shallow water platforms elevate the carbon intensity of US Gulf of Mexico oil and gas production*, Proceedings of the National Academy of Science, <https://doi.org/10.1073/pnas.2215275120>, 2023.
100. Huber DE, Steiner AL, Kort EA, *Sensitivity of Modeled Soil NO_x Emissions to Soil Moisture*, J. Geophys. Res. Atmospheres, <https://doi.org/10.1029/2022JD037611>, 2023.
99. Kryzstofiak G, Catoire V, Dudok de Wit T, Kinnison DE, Ravishankara AR, Brocchi V, Atlas E, Bozem H, Commane R, D'Amato F, Daube B, Diskin GS, Engel A, Friedl-Vallon F, Hintsa E, Hurst DF, Hoor P, Jegou F, Jucks KW, Kleinbohl A, Kullmann H, Kort EA, McKain K, Moore FL, Obersteiner F, Gonzalez Ramos Y, Schuck T, Toon GC, Viciani S, Wetzels G, Williams J, Wofsy SC, *N₂O temporal variability from the middle troposphere to the middle stratosphere based on airborne and balloon-borne observations during the period 1987-2018*, Atmosphere, <https://doi.org/10.3390/atmos14030585>, 2023.
98. Lal R, Kort EA, *Observing system choice can minimize interference of the biosphere in studies of urban CO₂ emissions*, J. Geophys. Res. Atmospheres, <https://doi.org/10.1029/2022JD037452>, 2023.
97. Sherwin ED, Rutherford JS, Chen Y, Aminfard S, Kort EA, Jackson RB, Brandt AR, *Single-blind validation of space-based point-source detection and quantification of onshore methane emissions*, Scientific Reports **13**, 3836, <https://doi.org/10.1038/s41598-023-30761-2>, 2023.
96. Yang EG, Kort EA, Ott LE, Oda T, Lin JC, *Using Space-Based CO₂ and NO₂ Observations to Estimate Urban CO₂ Emissions*, J. Geophys. Res. Atmospheres, <https://doi.org/10.1029/2022JD037736>, 2023.
95. Thorpe AK, Kort EA, Cusworth DH, Ayasse AK, Bue BD, Yadav V, Thompson D, Frankenberg C, Herner J, Falk M, Lozo CJ, Langfitt Q, Wilhelm SF, Eggers R, Green RO, Miller CE, Duren RM, *Methane emissions decline from reduced oil, natural gas, and refinery production during COVID-19*, Environmental Research Communications, <https://doi.org/10.1088/2515-7620/acb5e5>, 2023.
94. Plant G, Kort EA, Brandt A, Chen Y, Fordice G, Gorchov Negron AM, Schwietzke S, Smith M, Zavala-Araiza D, *Inefficient and unlit natural gas flares both emit large quantities of methane*, Science, <https://doi.org/10.1126/science.abq0385>, 2022.
93. Meyer AG, Lindenmaier R, Heerah S, Benedict KB, Kort EA, Peischl J, Dubey M, *Using Multiscale Ethane/Methane Observations to Attribute Coal Mine Vent Emissions in the San Juan Basin from 2013–2021*, J. Geophys. Res. Atmospheres, doi: <http://dx.doi.org/10.1029/2022JD037092>, 2022.

92. Ayasse AK, Thorpe AK, Cusworth DH, Kort EA, Gorchov Negron AM, Heckler J, Asner G, Duren RM, *Methane remote sensing and emission quantification of offshore shallow water oil and gas platforms in the Gulf of Mexico*, Environ. Res. Lett. **17** 084039, doi: <https://doi.org/10.1088/1748-9326/ac8566>, 2022.
91. Chen Y, Sherwin ED, Berman ESF, Jones BB, Gordon MP, Wetherley EB, Kort EA, Brandt AR, *Quantifying Regional Methane Emissions in the New Mexico Permian Basin with a Comprehensive Aerial Survey*, Environ. Sci. Technol., <https://doi.org/10.1021/acs.est.1c06458>, 2022.
90. Hegarty JD, Cady-Pereira KE, Payne VH, Kulawik SS, Worden JR, Kantchev V, Worden HM, McKain K, Pittman JV, Commane R, Daube BC, Kort EA, *Validation and error estimation of AIRS MUSES CO Profiles with HIPPO, ATom and NOAA GML aircraft observations*, Atmos. Meas. Tech., **15**, 205-223, <https://doi.org/10.5194/amt-15-205-2022>, 2022.
89. Patra PK, Dlugokencky EJ, Elkins JW, Dutton GS, Tohjima Y, Sasakawa M, Ito A, Weiss RF, Manizza M, Krummel PB, Prinn RG, O'Doherty S, Bianchi D, Nevison C, Solazzo E, Lee H, Joo S, Kort EA, Maity S, Masayuki T, *Forward and inverse modelling of atmospheric nitrous oxide using MIROC4-atmospheric chemistry-transport model*, Journal of the Meteorological Society of Japan, doi:10.2151/jmsj.2022-018, 2022.
88. Plant G, Kort EA, Murray LT, Maasackers JD, Aben I, *Evaluating urban methane emissions from space using TROPOMI methane and carbon monoxide observations*, Remote Sensing of Environment, **268**, 112756, <https://doi.org/10.1016/j.rse.2021.112756>, 2022.
87. Long MC, Stephens BB, McKain K, Sweeney C, Keeling RF, Kort EA, Morgan EJ, Bent JD, Chandra N, Chevallier F, Commane R, Daube BC, Krummel PB, Loh Z, Luijkx IT, Munro D, Patra P, Peters W, Ramonet M, Rodenbeck C, Stavert A, Tans P, Wofsy SC, *Strong Southern Ocean carbon uptake evident in airborne observations*, Science, **374**, 1275-1280, doi: 10.1126/science.abi4355, 2021.
86. Gerlein-Safdi C, Bloom AA, Plant G, Kort EA, Ruf CS, *Improving Representation of Tropical Wetland Methane Emissions with CYGNSS Inundation Maps*, Global Biogeochemical Cycles, **35**, e2020GB006890, <https://doi.org/10.1029/2020GB006890>, 2021.
85. Laughner JL, Neu JL, Schimel D, Wennberg PO, Barsanti K, Bowman KW, Chatterjee A, Croes BE, Fitzmaurice HL, Henze DK, Kim J, Kort EA, Liu Z, Miyazaki K, Turner AJ, Anenberg S, Avise J, Cao H, Crisp D, de Gouw J, Eldering A, Fyfe JC, Goldberg DL, Gurney KR, Hasheminassab S, Hopkins F, Ivey CE, Jones DBA, Lovenduski NS, Martin RV, McKinley GA, Ott L, Poulter B, Ru M, Sander SP, Swart N, Yung YL, Zeng ZC, KISS team, *Societal shifts due to COVID-19 reveal large-scale complexities and feedbacks between atmospheric chemistry and climate change*, Proceedings of the National Academy of Sciences, **118**, 46, <https://doi.org/10.1073/pnas.2109481118>, 2021.
84. Hintsä E, Moore FL, Hurst DF, Dutton GS, Hall BD, Nance JD, Miller BR, Montzka SA, Wolton LP, McClure-Begley A, Elkins JW, Hall EG, Jordan AF, Rollins AW, Thornberry TD, Watts LA, Thompson CR, Peischl J, Bourgeois I, Ryerson TB, Daube BC, Pittman JV, Wofsy SC, Kort EA, Diskin GS, Bui TP, *UAS Chromatograph for Atmospheric Trace Species (UCATS) – a versatile instrument for trace gas measurements on airborne platforms*, Atmos. Meas. Tech., **14**, 6795-6819, <https://doi.org/10.5194/amt-14-6795-2021>, 2021.
83. Gonzalez A, Millet DB, Yu X, Wells KC, Griffis TJ, Baier BC, Campbell PC, Choi Y, DiGangi JP, Gvakharia A, Halliday H, Kort EA, McKain K, Nowak J, Plant G, *Fossil Versus Nonfossil CO Sources in the US: New Airborne Constraints from ACT-America and GEM*, Geophysical Research Letters, <https://doi.org/10.1029/2021GL093361>, 2021.

82. Lyon DR, Hmiel B, Gautam R, Omara M, Roberts K, Barkley Z, Davis KJ, Miles N, Monteiro V, Richardson S, Conley S, Smith M, Jacob DJ, Shen L, Varon DJ, Deng A, Rudelis X, Sharma N, Story K, Brandt A, Kang M, Kort EA, Marchese A, Hamburg SP, *Concurrent variation in oil and gas methane emissions and oil price during the COVID-19 pandemic*, Atmos. Chem. Phys., <https://doi.org/10.5194/acp-21-6605-2021>, 2021.
81. Wu D, Lin JC, Duarte HF, Yadav V, Parazoo NC, Oda T, Kort EA, *A model for urban biogenic CO₂ Fluxes: Solar-Induced Fluorescence for Modeling Urban biogenic Fluxes (SMUrF v1)*, Geosci. Model Dev., <https://doi.org/10.5194/gmd-14-3633-2021>, 2021.
80. Zavala-Araiza D, Omara M, Gautam R, Smith ML, Pandey S, Aben I, Almanza-Veloz V, Conley S, Houweling S, Kort EA, Maasackers JD, Molina LT, Pusuluri A, Scarpelli T, Schwietzke S, Shen L, Zavala M, Hamburg SP, *A tale of two regions: methane emissions from oil and gas production in offshore/onshore Mexico*, Environ. Res. Lett. 16 024019, <https://doi.org/10.1088/1748-9326/abceeb>, 2021.
79. Yu X, Millet DB, Wells KC, Henze DK, Cao H, Griffis TJ, Kort EA, Plant G, Deventer MJ, Kolka RK, Roman DT, Davis KJ, Desai A, Baier BC, McKain K, Czarnetzki AC, Bloom AA, *Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions*, Atmos. Chem. Phys., <https://doi.org/10.5194/acp-21-951-2021>, 2021.
78. Huber DE, Steiner AL, Kort EA, *Daily Cropland Soil NO_x Emissions Identified by TROPOMI and SMAP*, Geophysical Research Letters, doi: 10.1029/2020GL089949, 2020.
77. Gvakharia A, Kort EA, Smith ML, Conley S, *Evaluating Cropland N₂O Emissions and Fertilizer Plant Greenhouse Gas Emissions With Airborne Observations*, J. Geophys. Res. Atmospheres, doi: 10.1029/2020JD032815, 2020.
76. Gorchov Negron AM, Kort EA, Conley SA, Smith ML, *Airborne Assessment of Methane Emissions from Offshore Platforms in the U.S. Gulf of Mexico*, Environ. Sci. Technol., doi: 10.1021/acs.est.0c00179, 2020.
75. Yang EG, Kort EA, Wu D, Lin JC, Oda T, Ye X, Lauvaux T, *Using space-based observations and Lagrangian modeling to evaluate urban carbon dioxide emissions in the Middle East*, J. Geophys. Res. Atmospheres, doi: 10.1029/2019JD031922, 2020.
74. Ye X, Lauvaux T, Kort EA, Oda T, Feng S, Lin JC, Yang EG, Wu D, *Constraining fossil fuel CO₂ emissions from urban area using OCO-2 observations of total column CO₂*, J. Geophys. Res. Atmospheres, doi: 10.1029/2019JD030528, 2020.
73. Wu D, Lin JC, Oda T, Kort EA, *Space-based quantification of per capita CO₂ emissions from cities*, Environ. Res. Lett. 15 035004, <https://doi.org/10.1088/1748-9326/ab68eb>, 2020.
72. Yu X, Millet DB, Wells KC, Griffis TJ, Chen X, Baker JM, Conley SA, Smith ML, Gvakharia A, Kort EA, Plant G, Wood JD, *Top-down constraints on methane point source emissions from animal agriculture and waste based on new airborne measurements in the US Upper Midwest*, J. Geophys. Res. Biogeosciences, doi: 10.1029/2019JG005429, 2020.
71. Morgan EJ, Stephens BB, Long MC, Keeling RF, Bent JD, McKain K, Sweeney C, Hoecker-Martinez MS, Kort EA, *Summertime Atmospheric Boundary Layer Gradients of O₂ and CO₂ over the Southern Ocean*, J. Geophys. Res. Atmospheres, 124, doi: 10.1029/2019JD031479, 2019.
70. Huang Y, Kort EA, Karion A, Ware J, Mueller K, Gourdji S, *Seasonally resolved excess urban methane emissions from the Baltimore/Washington, DC metropolitan region*, Environ. Sci. Technol., doi: 10.1021/acs.est.9b02782, 2019.

69. Asher E, Hornbrook RS, Stephens BB, Kinnison D, Morgan E, Keeling R, Atlas E, Schauffler S, Tilmes S, Kort EA, Hoecker-Martinez M, Long M, Lamarque JF, Saiz-Lopez A, McKain K, Sweeney C, Hills AJ, Apel EC, *Novel approaches to improve estimates of short-lived halocarbon emissions during summer from the Southern Ocean using airborne observations*, Atmos. Chem. Phys., 19, 14071–14090, <https://doi.org/10.5194/acp-19-14071-2019>, 2019.
68. Cui YY, Vijayan A, Falk M, Hsu YK, Yin D, Chen XM, Zhao Z, Avise J, Chen Y, Verhulst K, Duren R, Yadav V, Miller C, Weiss R, Keeling R, Kim J, Iriaci LT, Tanaka T, Johnson MS, Kort EA, Bianco L, Fischer ML, Stroud K, Herner J, Croes B, *A multi-platform inversion estimation of statewide and regional methane emissions in California during 2014-2016*, Environ. Sci. Technol., doi: 10.1021/acs.est.9b01769, 2019.
67. Plant G, Kort EA, Floerchinger C, Gvakharia A, Vimont I, Sweeney C, *Large fugitive methane emissions from urban centers along the US East Coast*, Geophysical Research Letters, doi:10.1029/2019GL082635, 2019.
66. Ware J, Kort EA, Duren R, Verhulst K, Yadav V, *Detecting Urban Emissions Changes and Events with a Near Real Time Capable Inversion System*, J. Geophys. Res. Atmospheres, 124, 5117-5130. doi:10.1029/2018JD029224, 2019.
65. Turner A*, Frankenberg C*, Kort EA*, *Interpreting contemporary trends in atmospheric methane*, PNAS Perspective, 201814297, doi:10.1073/pnas.1814297116, 2019. *authors contributed equally.
64. Gaubert B, Stephens BB, Basu S, Chevallier F, Deng F, Kort EA, Patra PK, Peters W, Rodenbeck C, Saeki T, Schimel D, Van der Laan-luijckx I, Wofsy S, Yin Y, *Global atmospheric CO₂ inverse models converging on neutral tropical land exchange but diverging on fossil fuel and atmospheric growth rate*, Biogeosciences, 16, 117-134, <https://doi.org/10.5194/bg-16-117-2019>, 2019.
63. Gvakharia A, Kort EA, Smith M, Conley S, *Testing and evaluation of a new airborne system for continuous N₂O, CO₂, CO, and H₂O measurements: the Frequent Calibration High-performance Airborne Observation System (FCHAOS)*, Atmos. Meas. Tech. 11, 6059-6074, <https://doi.org/10.5194/amt-11-6059-2018>, 2018.
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PRESENTATIONS & POSTERS (*invited)

(indicates Kort group member)

- Kort EA, Negron AMG, Plant G, Biener KJ, Chen Y, Brandt AR, Smith M, Zavala-Araiza D, Adames-Corraliza A, Schwietzke S, *Emissions of Greenhouse Gases and Pollutants from Natural Gas Flares and Offshore Oil and Gas Platforms: Results from the F³UEL Project*, AGU Fall Meeting, San Francisco, 2023.
- Xiong Y, Kort EA, Bloom AA, Gerlein-Safdi C, Pu T, *Interannual and Seasonal Variability of Methane Emissions from Tropical Wetlands Derived from Four Years of CYGNSS Observations*, AGU Fall Meeting, San Francisco, 2023.
- Whiting E, Plant G, Kort EA, Aben I, Leguijt G, Maasackers J, *Evaluating Methane Emissions of C40 Cities from Space*, AGU Fall Meeting, San Francisco, 2023.
- Roten D, Wilmot T, Lin JC, Das S, Kort EA, Chatterjee A, *How Well do OCO-2 and OCO-3 Monitor the United States? Implications for Current and Future Space-based Carbon-observing Systems*, AGU Fall Meeting, San Francisco, 2023.
- Plant G, Kort EA, Negron AMG, Fordice G, Brandt AR, Chen Y, Smith M, *NO_x from US flares exhibits a skewed emissions distribution*, AGU Fall Meeting, San Francisco, 2023.
- Huber DE, Steiner A, Kort EA, *Agricultural Soil NO_x and its Contribution to Primary and Secondary Pollutant Formation*, AGU Fall Meeting, San Francisco, 2023.
- Gerlein-Safdi C, Pu T, Xiong Y, Kort EA, Bloom AA, *Beneath the sea of clouds: a new CYGNSS-based monthly watermask product uncovers the hidden seasonality of tropical waterbodies*, AGU Fall Meeting, San Francisco, 2023.
- Burton N, Kort EA, Pettersen C, *Marine Cloud Brightening from Offshore Oil and Gas Platform Emissions in the Southern Gulf of Mexico*, AGU Fall Meeting, San Francisco, 2023.
- Biener KJ, Negron AG, Kort EA, Chen Y, Ayasse A, Brandt AR, MacLean JP, McKeever J, *Persistence and Temporal Variation of Methane Emissions from Shallow Water Oil and Gas Production in the Gulf of Mexico, from 2018 to 2022*, AGU Fall Meeting, San Francisco, 2023.
- Moss Z, Kort EA, Stephens B, *Investigating the Cause of Unexpected CO₂ signals Seen from Ship-Based Measurements in the Southern Ocean*, 103rd AMS Annual Meeting, 2023.

- Gorchov Negron AM, Kort EA, Chen Y, Brandt AR, Smith M, Plant G, Ayasse A, Schwietzke S, Zavala-Araiza D, Hausman C, Adames-Corraliza A, *Observations show that methane emissions elevate the carbon intensity of oil and gas production in the US Gulf of Mexico*, AGU Fall Meeting, Chicago, 2022.
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- Li M, Kort EA, Bloom AA, Wu D, Plant G, Gerlein-Safdi C, Pu T, *Using Atmospheric Observations to Improve the Representation of Wetland Methane Emissions in the Pantanal*, AGU Fall Meeting, Chicago, 2022.
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- Dacic N, Plant G, Sullivan T, Kort EA, *Using airborne observations over the U.S. Corn Belt to quantify N₂O emission and evaluate underlying controlling processes*, AGU Fall meeting, New Orleans, 2021.
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- Sweeney C, Lopez-Coto ILG, McKain K, Shepson P, Kort EA, Plant G, Ren X, Dickerson RR, Gourджи S, Miller J, *The East Coast Outflow Experiment before and during SARS-CoV-2*, AMS Annual Meeting 101, virtual, 2021.
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- Kort EA, *Role of Space-Based Measurements in Urban Emissions Monitoring*, IG3IS/TRANSCOM meeting, Paris, 2019.
- Kort EA, *Observational constraints on anthropogenic CO₂ emissions: current capabilities and the impact on detecting carbon-climate feedbacks*, AGU Chapman Conference, Understanding Carbon Climate Feedbacks, Scripps, 2019
- Kort EA, Gorchov Negron AM, Smith ML, Conley S, *Airborne observation of fugitive methane emissions from offshore oil and gas platforms*, Atmospheric Chemistry Gordon Conference, Maine, 2019.
- Kort EA, Gvakharia A, Smith ML, Conley S, *Using airborne observations to quantify N₂O emissions from fertilizer plants and croplands in the Mississippi River Valley*, 8th International Symposium on Non-CO₂ Greenhouse Gases, Amsterdam, 2019.
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