Dr. Jessica L. McCarty

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Dr. Jessica L. McCarty is the Director of the Geospatial Analysis Center and as of July 1, 2021, an Associate Professor of Geography at Miami University of Ohio. She has a Bachelor of Arts in Geography and Spanish from Morehead State University, a Master of Arts and PhD in Geography from the University of Maryland in College Park, and is a 2005 awardee of the National Aeronautics and Space Administration (NASA) Earth System Science Graduate Fellowship. Dr. McCarty has more than 15 years' experience in applications of geospatial and data science to accurately quantify wildland and human-caused fire emissions, agriculture and food security, and land-cover/land-use change. She is the author/co-author of more than 30 peer-reviewed journal articles, 12 peer-reviewed conference proceedings, 3 book chapters, 4 technical reports, 4 data citations, and 1 NASA Technology Transfer. She is an invited contributor to the Intergovernmental Panel on Climate Change Expert Meetings on Short-Lived Climate Forcers (SLCFs), the Arctic Monitoring and Assessment Programme's Expert Group on SLCFs (an Expert Group of the Arctic Council), a Co-Investigator of the NASA FIREX-AQ field campaign, and a NASA Land-Cover/Land-Use Change Science Team member. Her published fire emission methodologies have been used by the U.S. Environmental Protection Agency for the U.S. Greenhouse Gas Inventory and National Emissions Inventory. Dr. McCarty is often an invited speaker on issues related to human-caused fires in the U.S. and fires in the Arctic, specifically black carbon and methane emissions, impacts of smoke on air quality, future Arctic fire regimes, and human-caused fires and fire management strategies. Dr. McCarty is an active member of the International Association of Wildland Fire and is currently serving as the invited Co-Chair of the Steering Committee for the 2022 Fire & Climate Conference.