

# SUTER SCIENCE SEMINARS 2023-24

## Using Aircraft Observations to Address Critical Concerns in Climate Change and Air Quality

**Hannah M. Daley**

*Graduate Student Researcher*

*University of Maryland*

*Department of Atmospheric and Oceanic Science*

*College Park, MD*



**Saturday, October 14, 2023**

**10 a.m. • Science Center, room 106**

*What is with the fires this year? Should we be concerned about methane emissions from the rise in natural gas production? Do some neighborhoods have worse air quality than others? Air quality and climate change play vital, interconnected roles impacting the earth and the human condition. In this seminar, we will highlight the application of aircraft measurements of greenhouse gases and pollutants in addressing these critical concerns.*

Hannah M. Daley earned a dual bachelor's degree in Chemistry and Environmental Sustainability from Eastern Mennonite University in 2017. After working at EMU as an admissions counselor, she went back to school to pursue her PhD in Atmospheric and Oceanic Science at the University of Maryland. Advised by Dr. Russell Dickerson, Hannah is actively involved with collecting in-situ aircraft measurements of greenhouse gases and air quality pollutants. Her research focuses on greenhouse gas flux estimates from oil and natural gas operations in Colorado, and evaluates the impact of transported smoke on photochemical smog and aerosol optical properties. In her free time, Hannah enjoys playing intramural sports and obsessing over her pup, Jane.



Suter Science Center  
1194 Park Rd.  
Harrisonburg VA 22802  
540-432-4400