

2025 AiRMAPS Coordination Workshop

September 3-4, 2024

University of Maryland, College Park

ESSIC Building, Room 4102, 5825 University Research Court, College Park, MD 20740

Google Meet link for both days: meet.google.com/edw-geai-wcz

Google Drive folder to upload presentations:

https://drive.google.com/drive/folders/1QHq9o_ylHwHx8RrzbYi8hcwZGwmbCR7F?usp=drive_link

Day 1: Tuesday, September 3

WiFi connection: Network: umd-guest; Username: baqmms1, Password: neoustlibiva

09:00-10:00: Breakfast/Coffee

10:00-10:05	Opening Remarks	Ariel Stein, NOAA ARL Director
Introduction to U.S. GHG Center and GHG Applications		Moderators: Lesley Ott & Barry Lefer
10:05-10:20	Workshop Goals & Introduction to U.S. GHG Center	Steve Brown, Lesley Ott & Barry Lefer
10:20-10:30	GHGMMIS Overview	Ben Poulter/Ron Cohen
10:30-10:45	U.S. GHG Inventory	Erin McDuffie (virtual)
10:45-11:00	USGS Coalmine Methane	Peter Warwick (virtual)
11:00-11:15	DOE controlled releases	Jared Ciferno (virtual)
11:15-11:30	Overview of NOAA AiRMAPS and discussion of activities in 2024	Steve Brown
11:30-11:45	AiRMAPS 2026	Carsten Warneke
11:45-12:00	MDE's Perspectives on AQ and GHGs	Joel Dresseen
12:00-12:30	Discussion	

12:30-1:30pm: Lunch Break

Planned In-situ Field Campaigns		Moderators: Ken Davis & Xinrong Ren
1:30-1:40	BAQMMS - Twin Otter	Xinrong Ren
1:40-1:50	BAQMMS - Mobile Lab	Phil Stratton
1:50-2:00	Airborne Doppler lidar	Sunil Baidar (virtual)
2:00-2:15	BSEC and COURAGE Research Plans	Ken Davis
2:15-2:25	NASA SARP Program 2025	Barry Lefer
2:25-2:40	NSF GOTHAAM	John Mak

2:40–3:00	NIST Urban Testbed in Baltimore/DC and Inversions	Anna Karion
3:00–3:20	Discussion	
3:20–3:40	Break	
Planned Remote Sensing Field Campaigns		Moderators: Steve Brown & Amin Nehrir
3:40–3:55	Airborne GHG Remote Sensing	Andrew Thorpe (virtual)
3:55–4:10	MethaneAIR & MethaneSAT	Jasna Pittman
4:10–4:25	HALO and MethaneAIR on NASA G-III	Amin Nehrir
4:25–4:40	JAXA's Greenhouse Gases Monitoring Plan in 2025	Hiroshi Suto
4:40–4:55	EnMAP / PRISMA data and the MEDUSA project	Bram Maasakkers (virtual)
4:55–5:30	Discussion	
5:30pm	Adjourn	

6:00-8:00pm Group Dinner at Busboys & Poets, 5331 Baltimore Ave, Hyattsville, MD 20781

Day 2: Wednesday, September 4

WiFi connection: Network: umd-guest, Username: baqmms2, Password: tcructescarp

09:00-10:00: Breakfast/Coffee

Instruments, Methods and Results from Previous Coordinated Campaigns		Moderators: Russ Dickerson & Ben Nault
10:00–10:15	Historical and current policy relevant research on GHGs and AQ in the Baltimore/Washington area	Russ Dickerson
10:15–10:20	TOLNet	John Sullivan
10:20–10:30	TOLNet and Airborne NO ₂ , O ₃ , and PM measurements for AiRMAPS 2025	Mike Newchurch
10:30–10:45	Utilizing Meteorological Data from Commercial Aircraft for Urban Boundary Layer and Air Quality Applications	Edward Strobach
10:45–11:00	PM2.5 is not the same across seasons: Characterization of PM2.5 composition at a fixed urban site for the DOE BSEC project	Benjamin Nault
11:00–11:10	Airborne Mass Balance during AiRMAPS 2024	Xinrong Ren
11:10–11:20	NASA SARP & ALEGROS 2024	Glenn Wolfe
11:20–11:35	Open-path dual comb spectroscopy of GHGs and small trace gases	Kevin Cossel (virtual)

11:35–11:50	Relating Multi-Scale Plume Detection and Area Estimates of Methane Emissions: A Theoretical and Empirical Analysis	Sudhanshu Pandey
11:50–12:05	Results from NYC tower network	Róisín Commane
12:05–12:30	Discussion	Russ Dickerson & Ben Nault

12:30-1:30: Lunch Break

Integration with space-based remote sensing		Moderators: Shobha Kondragunta & Lesley Ott
1:30–1:50	NESDIS Perspectives of AiRMAPS 2025	Shobha Kondragunta
1:50–2:05	Methane and CO ₂ Observations with EMIT, AVIRIS-3 and AVIRIS-5	Robert Green (virtual)
2:05–2:20	Carbon Mapper	Dan Cusworth (virtual)
2:20–2:40	Discussion	
2:40–4:00	Open Discussion <ul style="list-style-type: none"> • Goals for coordinated experiment • Gaps and needs not discussed at this workshop • Data sharing and data hosting - role of the GHG center ? • Stakeholder needs, especially at the state level (e.g., MD, PA other northeastern states) 	Steve Brown & Lesley Ott
4:00pm	Adjourn	