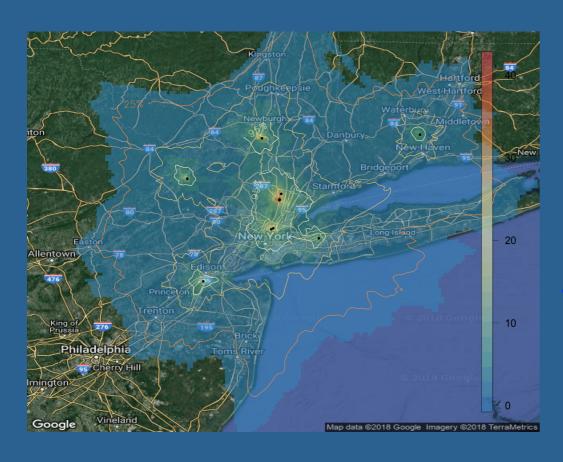
Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY | EARTH INSTITUTE

Carbon fluxes in New York City: planning for long term measurements



Róisín Commane Columbia University

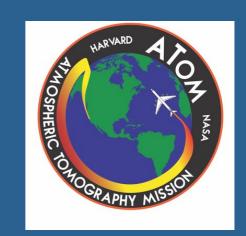
rcommane@LDEO.columbia.edu

Emily Follansbee, Bronte Dalton, Columbia University Cody Floerchinger, Conor Gately, Steve Wofsy, Harvard

Biogenic carbon fluxes: Arctic & Boreal, Harvard Forest Global GHG (ATom, airborne) Atmospheric Chemistry (HOx/NOx observations)

Carbon dioxide sources from Alaska driven by increasing early winter respiration from Arctic tundra

Róisín Commane^{a,b,1}, Jakob Lindaas^b, Joshua Benmergui^a, Kristina A. Luus^c, Rachel Y.-W. Chang^d, Bruce C. Daube^{a,b}, Eugénie S. Euskirchen^e, John M. Henderson^f, Anna Karion^g, John B. Miller^h, Scot M. Millerⁱ, Nicholas C. Parazoo^{j,k}, James T. Randerson^l, Colm Sweeney^{g,m}, Pieter Tans^m, Kirk Thoning^m, Sander Veraverbeke^{l,n}, Charles E. Miller^k, and Steven C. Wofsy^{a,b}



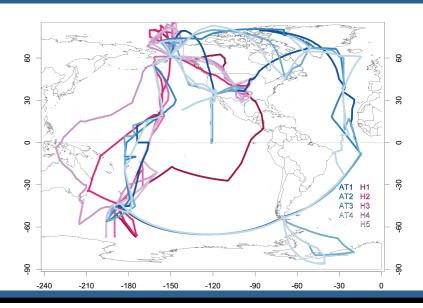






Seasonal fluxes of carbonyl sulfide in a midlatitude forest

Róisín Commane^{a,b,1}, Laura K. Meredith^{c,2}, Ian T. Baker^d, Joseph A. Berry^e, J. William Munger^{a,b}, Stephen A. Montzka^f, Pamela H. Templer^g, Stephanie M. Juice^g, Mark S. Zahniser^h, and Steven C. Wofsy^{a,b}



Iodine monoxide at a clean marine coastal site: observations of high frequency variations and inhomogeneous distributions

R. Commane^{1,*}, K. Seitz², C. S. E. Bale¹, W. J. Bloss³, J. Buxmann², T. Ingham^{1,4}, U. Platt², D. Pöhler², and D. E. Heard^{1,4}

Sarah A. Strode^{1,2}, Junhua Liu^{1,2}, Leslie Lait^{2,3}, Róisín Commane^{4,a}, Bruce Daube⁴, Steven Wofsy⁴, Austin Conaty^{2,5}, Paul Newman², and Michael Prather⁶

Forecasting carbon monoxide on a global scale for the ATom-1

aircraft mission: insights from airborne and satellite

observations and modeling

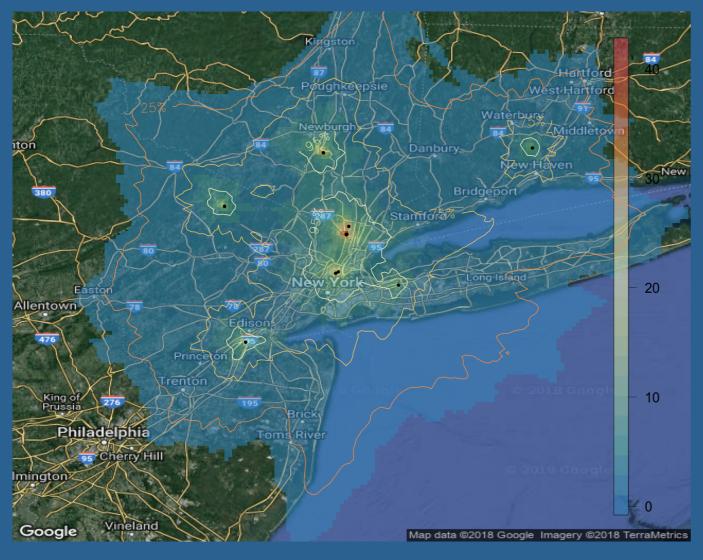
Observations of OH and HO₂ radicals over West Africa

R. Commane^{1,*}, C. F. A. Floquet^{1,**}, T. Ingham^{1,2}, D. Stone^{1,3}, M. J. Evans³, and D. E. Heard^{1,2}

Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

Current work

Getting to know what everyone is doing so don't duplicate!



Bronte Dalton, Research Assistant Where should we measure? How much anthropogenic CO2/CH4 should we expect to see at each tower?

Emily Follansbee, G1
Planned measurements of CO2/CO/
N2O/CH4/C2H6 in New York City.
Jan 2019 onwards. Borrowing
Harvard QCL/ICL

Calibrating standards for NYS Methane study (Lee Murray, Eric Leibensperger)

Coordinate with LISTOS plans (Paul Miller) and AQ studies in the area (Luke Valin, EPA)