NCAR | ATMOSPHERIC CHEMISTRY OBSERVATIONS & MODELING

Virtual ACOM Seminar

Long-term observations in urban atmospheres: What can we learn from the COVID-19 shutdown?

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Date: Monday, March 29, 2020, 3:30pm – 4:30pm (MT)
Link: https://operations.ucar.edu/live-acom

ABSTRACT

Many city governments in the US have committed to reducing their emissions of GHGs based on inventories calculated for the city. However, few cities measure their carbon emissions to know if the enacted policies are having the desired effect.

The New York Metro Area (pop. 20M) is the most populous urban area in the United States (US) and the largest urban source of CO_2 in the US. The region also has some of the worst summertime air quality outside of California. In response to the COVID-19 pandemic, New York ordered state-wide closures of all non-essential businesses in March 2020. On-road transportation and economic activity were dramatically reduced in the New York City metro area. Fortuitously, we began measuring CO_2, CH_4 and CO at an observatory in Manhattan in January 2020 and have continued through the lockdown. I will present a preliminary analysis of the changes we have seen in the atmospheric composition of New York City and discuss the possible causes of these changes.