Seminar Series 2021 - 2022

Southern Ontario Centre for Atmospheric Aerosol Research

University of Toronto

Observing global fine-scale changes in ambient NO2 during COVID-19 lockdowns using satellites

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Nitrogen dioxide (NO2) is an important contributor to air pollution with serious health effects. Many reports have shown that NO2 concentrations decreased in 2020 during COVID-19 lockdowns, but these studies are limited by the availability of air quality monitoring globally. In this talk, I will show how we use satellite observations to infer global fine resolution (~1km) ground-level NO2 concentrations. Using these observations, we find that mean NO2 concentrations are ~30% lower in countries with strict COVID-19 lockdowns than in those without. I will also present case studies that compare lockdown-driven changes to long-term NO2 trends, and show how the sensitivity of NO2 to lockdowns varied across cities, countries, and emissions sectors.

Wednesday, April 6 , 2022 3:00 - 4:00PM EST

Microsoft Teams Meeting - Click here to join the meeting

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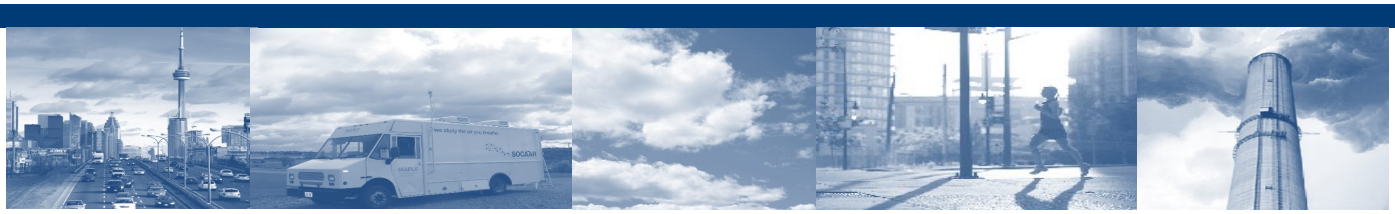
Phone Conference ID: 612 523 657#



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