

### **Montclair State University Digital** Commons

Sustainability Seminar Series

Sustainability Seminar Series, 2023

Apr 3rd, 3:45 PM - 5:00 PM

#### Air Quality Analysis with Sensors, Satellites, and Models

Carl Malings Morgan State University, carl.a.malings@nasa.gov

Follow this and additional works at: https://digitalcommons.montclair.edu/sustainability-seminar



Part of the Sustainability Commons

Malings, Carl, "Air Quality Analysis with Sensors, Satellites, and Models" (2023). Sustainability Seminar Series. 10.

https://digitalcommons.montclair.edu/sustainability-seminar/2023/spring2023/10

This Open Access is brought to you for free and open access by the Events at Montclair State University Digital Commons. It has been accepted for inclusion in Sustainability Seminar Series by an authorized administrator of Montclair State University Digital Commons. For more information, please contact digitalcommons@montclair.edu.



The Doctoral Program in Environmental Science & Management and MSU Sustainability Seminar Series Present:

# Air Quality Analysis with Sensors, Satellites, and Models

WHEN: April 3, 3:45 pm WHERE: Streamed over Zoom

# Dr. Carl Malings

## Morgan State University & NASA Goddard Space Flight Center



Carl Malings is an Assistant Research Scientist at Morgan State University, working under the GESTAR II cooperative agreement at the NASA Goddard Space Flight Center's Global Modelling and Assimilation Office. He works to combine atmospheric chemistry models, satellite retrievals, and surface monitor data to better estimate & forecast air quality to support air quality decision-making globally. Previously, he worked as a post-doctoral researcher with low-cost air quality sensors. He obtained his PhD in Civil and Environmental Engineering from Carnegie Mellon University in 2017.

Poor air quality is a major global public health concern, which is only projected to get worse in coming years. A comprehensive understanding of current and potential future air quality and its key drivers spanning from local to global scales is needed to tackle this important problem. This presentation will outline the sources of information that we use to understand air quality (e.g., ground-based measurements, satellites, and models), their strengths and limitations, and how they are being used together to give us a better picture of air quality locally and globally.