



Geostationary Remote Sensing of Trace Gases for Air Quality Applications in North America

January 20 & 22, 2026

11:00-12:30 (Session A) or 15:00-16:30 (Session B) EST (UTC-5)

The Tropospheric Emissions: Monitoring of POLLution (TEMPO) mission is the first space-based instrument to continuously measure daytime air quality over North America, from the Atlantic Ocean to the Pacific and from Central Canada to Mexico City. These data are essential for understanding diurnal changes in air quality and monitoring real-time movement of pollutant plumes, such as wildfire smoke and urban emissions. This training, led by NASA's Applied Remote Sensing Training Program (ARSET), will provide an overview of TEMPO capabilities and available trace gas data products, and illustrate how TEMPO data can be visualized using NASA Worldview online. These capabilities will be demonstrated through hands-on exercises where participants will look at TEMPO data events and learn how to interpret TEMPO observations to better understand the scope and potential air quality impact of these types of hazards.

Part 1: North American Geostationary Trace Gas Data Products for Air Quality

ARSET Host: Kristina Pistone

ARSET Trainers: Aaron Naeger

- About ARSET
- Training Overview
- Part 1 Introduction
- Overview of the TEMPO Mission
- TEMPO Trace Gas Data Products
- TEMPO Data Walkthrough in Worldview
- Part 1 Summary
- Q&A Session

Part 2: Case Studies in Trace Gas Monitoring with North American Geostationary Sensors

ARSET Host: Kristina Pistone

ARSET Trainers: Aaron Naeger

- Part 2 Introduction
- Case 1: Colorado Front Range Fires
- Case 1 Exercise in Worldview
- Case 2: Urban Air Quality Levels and Sources
- Case 2 Exercise in Worldview
- Training Summary
- Q&A Session



ARSET empowers the global community through remote sensing training.