Advanced Webinar: High Resolution NO$_2$ Monitoring From Space with TRÓPOMI

May 28, 30, and June 3

Sessions 1 & 2: 09:00-10:00 EDT (UTC-4),
Session 3: 09:00-11:00 EDT (UTC-4)

Nitrogen dioxide (NO$_2$) is unhealthy to breathe and is a necessary ingredient for the formation of unhealthy levels of surface ozone [NASA Air Quality]. This advanced training will introduce the TROPOMI instrument, onboard Sentinel-5P. TROPOMI represents a significant improvement in spatial resolution over OMI and will be better-suited for many applications currently using OMI data. In this webinar, attendees will learn how to access and analyze TROPOMI data, and learn about its applications.

Part One, May 28

This session will provide an introduction to remote sensing of air quality, a description of OMI, an overview of available data products for NO$_2$, and available data portals and tools.

Part Two, May 30

This session will cover an introduction to TROPOMI, available data products for NO$_2$, information about products detecting AI, CO, SO$_2$, and HCHO, an overview of accessing TROPOMI data, and an exercise for downloading the data.

Part Three, June 3

This session will primarily consist of going through an exercise on using updated python codes to work with TROPOMI data. This will include reading, mapping, extracting over a point location, gridding the data, and dumping the data to a CSV file.