

Air Quality, Wildfires, and Respiratory Health Work Group

Nathan Pavlovic

(Sonoma Technology)

Carl Malings

(NASA GSFC/Morgan State University)

Air Quality, Wildfires & Respiratory Health Work Group Goals

This work group aims to identify and disseminate recent advances in air quality applications of Earth observations, including geostationary satellites, small-sats, and data fusion, and the application of these tools to advance management and decision-making related to health through targeted presentations to practitioners and publicly-available reporting.

Group Mailing List: 76 (representing 12 countries)

Monthly Meeting Attendance: 22-25

Air Quality, Wildfires & Respiratory Health Work Group Accomplishments

- **April: Kick-off meeting, discussion of plans**
- **May: Geostationary Satellite Data for Air Quality** (TEMPO, GOES, GEMS)
 - *Aaron Naeger (NASA), Shobha Kondragunta (NOAA), Jhoon Kim (Yonsei University)*
- **June: Smallsats for Air Quality and Health** (TANGO, NACHOS, TOMCAT)
 - *Manvendra Dubey (LANL), Jochen Landgraf (Netherlands Institute for Space Research), John Yorks (NASA)*
- **July: New Aerosol Missions and their Health Applications** (PACE, MAIA)
 - *Natasha Sadoff (NASA), Sina Hasheminassab (NASA JPL)*
- **August: Pollutant Tracers and Indicators** (Formaldehyde, Carbon Monoxide)
 - *Amir Souri (NASA), Lindsey Anderson (University of Colorado, Boulder)*
- **September: Satellite Aerosols and Smoke** (MAIAC, nighttime AOD)
 - *Alexei Lyapustin (NASA), Meng Zhou (University of Iowa)*
- **October: Data Fusion and Exposure Products** (Global PM_{2.5} and constituents)
 - *Randall Martin (Washington University in St. Louis)*
- **November: Health Studies and Environmental Justice** (Warehouse Emissions & Prison Exposures)
 - *Gaige Kerr (George Washington University), Ufuoma Ovienmhada (Massachusetts Institute of Technology)*
- **November: Hosted Community of Practice Work Group Telecon**
 - *Bryan Duncan (NASA), Susan Anenberg (George Washington University)*

Meeting Recordings and Slides available in [Publically Accessible Drive](#), Meeting Notes in [Shared Document](#)

Air Quality, Wildfires & Respiratory Health Work Group Needs & Next Steps

- Continue meetings to share new developments in the use of earth observations to support air quality and health applications with the community.
- Work with HAQAST, NASA Earthdata, and others to update their [data resources and tools flowcharts](#).
- Translate short regionally-specific guides into other languages (as time & resources allow).
- Identify gaps in existing earth observation resources and products for health and air quality applications, summarize via white paper.