



NASA Health and Air Quality Applied Sciences Team



Connecting NASA Data and Tools with Health and Air Quality Stakeholders



Tracey Holloway

HAQAST Team Lead | University of Wisconsin-Madison

Tracey is evaluating the use of satellite data products as air quality and health indicators; and integration of satellite data into decision frameworks for air quality and health.

Satellite Data for Health and Air Quality Management



Bryan Duncan

NASA Goddard Space Flight Center

Bryan is leading the development and assessment of a satellite-based global health air quality index (HAQI). The unique advantages of satellite observations is 1) global spatial coverage and 2) co-located observations of multiple pollutants.

HAQI Development and Assessment



Arlene Fiore

Columbia University

Arlene is using satellite products and models to inform air quality planning and health accountability. She plans to conduct health impact assessments, attribute sources of pollution for linkages to health analyses, and estimate uncertainties in satellite-based and modeling approaches.

Satellite Data to Inform Air Quality Planning and Health Accountability



Frank Freedman

San Jose State University

Frank Freedman is developing a user-friendly web platform for health and public policy stakeholders to visualize air quality.

Dispersion Model Downscaling of Satellite-Derived PM2.5 Grids



Daven Henze

Colorado University at Boulder

Daven is researching remote sensing of aerosols and trace-gases; regional-to-global air quality modeling; data assimilation and source-receptor modeling; domestic and international air quality management; and environmental health and policy

Remote Sensing & Earth System Models to Support Health Impact Assessments

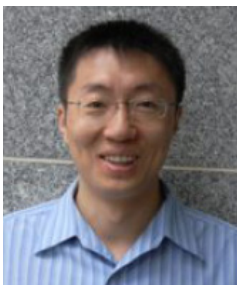


Jeremy Hess

Washington University

Jeremy aims to determine the climate factors that influence allergenic pollen season; identify the weather patterns related to high pollen days; determine links between pollen season parameters and health outcomes; and integrate this information to forecast pollen concentrations and health burdens.

Climate, Weather, Pollen, and Health



Yang Liu

Emory University

Yang aims to develop tracking-style environmental public health indicators and measures. His research uses remote sensing and exposure modeling.

Earth Observations to Support Environmental Health Surveillance



Jessica Neu

NASA Jet Propulsion Laboratory

Jessica is analyzing how background ozone responds to changes in international emissions, generating boundary conditions for regional models, and creating maps and visualizations to aid in event analysis.

Quantification and Attribution of Background Ozone with Satellite Data



Susan O'Neill

USDA Forest Service Pacific Northwest Research Station

Susan plans to pioneer a smoke modeling framework to be distilled for use in management and public health decisions as well as public information.

Smoke and Wildfire Research for Air Quality and Public Health



Ted Russell

Georgia Tech

Ted is using a hi-res air quality and burn impact forecasting system for health protection, ecosystem management and economic development.

Providing Smoke Impact Forecasting System Using Earth Observations



Daniel Tong

George Mason University

Daniel is interested in improvements to the National Air Quality Forecast Capability (NAQFC). Specifically, he is working toward improving emission inputs, initialization and deterministic predictions and evaluating forecasting accuracy.

Air Quality Forecasting



Jason West

North Carolina University

Jason West is researching the relationships between air quality, climate change and energy and their relevance for policy and health.

Connecting Air Quality, Climate Change, Energy, Policy and Health



Mark Zondlo

Princeton University

Mark is using remote sensing measurements of ammonia to inform farm management practices and to reduce local emissions.

Remote Sensing Data to Impact Population and Ecological Health