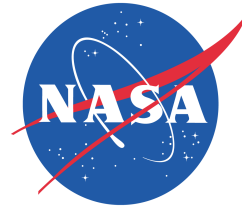




HAQAST3 Agenda November 28-29, 2017



Day 1 Intro

- 9:00 5 minutes: Arlene Fiore, LDEO/Columbia, Welcome
- 9:05 5 minutes: Ellen Burkhard, NYSERDA, *NYSERDA's Air Quality and Health Effects Research Plan*
- 9:10 15 minutes: John Haynes, Program Manager
- 9:25 5 minutes: Felix Seidel, NASA HQ, *How To Engage with Upcoming NASA Missions for Air Quality and Health*
- 9:30 15 minutes: Tracey Holloway, Daegan Miller & Rhianna Miles, UW-Madison, *HAQAST Team Report*
- 9:45 15 minute Meeting Overview + Q&A

I. Energy and Emissions

- 10:00 15 minutes: Brad Pierce/NOAA and Daniel Tong/George Mason Univ., **HAQAST TT: Improved National Emissions Inventory NO_x emissions using OMI tropospheric NO_2 retrievals and potential impacts on air quality strategy development**
- 10:15 5 minutes: Terry Keating, EPA, *The value of improving emission inventories*
- 10:20 5 minutes: Dan Goldberg, Argonne National Laboratory, *Using satellite information to aid in the development of high spatial resolution estimates of NO_2 and $PM_{2.5}$*
- 10:25 5 minutes: Daven Henze, University of Colorado Boulder/NASA HAQAST, *Top-down trends in NO_x - recent changes and impacts on O_3*
- 10:30 15 minute Q&A with speakers

10:45-11:00 Coffee Break

- 11:00 15 minutes: Bryan Duncan/NASA Goddard and Jason West/ Univ. of North Carolina, **HAQAST TT: Demonstration of the Efficacy of Environmental Regulations in the Eastern U.S.**
- 11:15 5 minutes: Brian McDonald, NOAA/CIRES, *Emerging Sources of Air Pollution*
- 11:20 5 minutes: Mark Zondlo, Princeton University, *Satellite measurements of spatiotemporal variability and comparison to emission inventories*
- 11:25 5 minutes: Matt Alvarado, AER, *Constraining NH₃ emissions over the southeast US using CrIS observations*
- 11:30 15 minute Q&A with speakers

II. Satellite Data and Air Quality Trends

- 11:45 15 minutes: Julie McDill, MidAtlantic Regional Air Management Association (MARAMA), *MidAtlantic Air Quality Priorities*

12:00-1:30 Break for lunch (catered)

- 1:35 5 minutes: Xiaomeng Jin, Columbia University, *Use of satellite observations for estimating decadal trend of PM_{2.5} over Northeast US: values and uncertainties*
- 1:40 5 minutes: Monica Harkey, UW-Madison, *Using OMI HCHO for model evaluation and scaling to near-surface amounts*
- 1:45 5 minutes: Maria Tzortziou, City University of New York and Columbia University/LDEO, *Temporal and spatial dynamics of atmospheric trace gases (NO₂ and ozone) in heavily polluted coastal regions*
- 1:50 5 minutes: Kevin Civerolo, New York State DEC, *Issues with predicting PM_{2.5} in the Northeast: a few examples from recent modeling exercises*
- 1:55 5 minutes: Robert Judge, EPA-Region 1, *Enhanced monitoring plans in the Ozone Transport Region*
- 2:00 20 minutes Q&A with speakers

III. Satellite Data and Health

- 2:20 15 minutes: Pat Kinney, Boston University School of Public Health, **HAQAST TT: Piloting a low cost sensor for long-term PM_{2.5} monitoring**
- 2:35 5 minutes: Mike He, Columbia University Mailman School of Public Health, *Associations between Air Pollution and Hospital Admissions in New York State*

- 2:40 5 minutes: Rich Kleidman, NASA GSFC, *New Capabilities for Aerosol Retrieval from Space*
- 2:45 5 minutes: Susan Anenberg, George Washington University, *Estimating the global burden of ambient air pollution on asthma using satellite-derived exposure estimates*
- 2:50 5 minutes: Jason West, University of North Carolina, *Trends in air pollution-related mortality in the US over recent decades*
- 2:55 15 minute Q&A with speakers

3:10-3:30 Coffee Break

- 3:30 15 minutes: Randall Martin, Dalhousie University, *Perspectives on satellite-based estimates of PM_{2.5}*
- 3:45 5 minutes: Barry Gross, City College of New York, *Application of Geostationary Aerosol Retrievals on PM_{2.5} Forecasting: Increased Potential from GOES-15*
- 3:50 5 minutes: Jeremy Hess, University of Washington, *Weather, Climate, Pollen, and Health: An Update*
- 3:55 5 minutes: Bob Chen, CIESIN, Columbia University, *Assessing Population Exposure and Vulnerability for Health Applications*
- 4:00 5 minutes: Yang Liu, Emory University, *Emory Progress Report*
- 4:05 15 minute Q&A with speakers

IV. Stakeholder Engagement

- 4:20 15 minutes: Yusuke Kuwayama, Resources for the Future, *Quantifying the Socioeconomic Benefits Derived From Applications of Earth Observations*
- 4:35 5 minutes: Barry Lefer, NASA, *How Planned NASA Missions are Engaging Stakeholders*
- 4:40 5 minutes: Bryan Duncan, NASA HAQAST, *Update on ongoing conversations with end-users*
- 4:45 5 minutes: Frank Freedman, San Jose State University, *Satellite-Dispersion Modeling System to Downscale Fine Particulate Fields to Near-Road Scale*

4:50 5 minutes: Melanie Follette-Cook, NASA GSFC/Morgan State University, *NASA Applied Remote Sensing Training (ARSET) Program Overview*

4:55 35 minutes Q&A and Wrap-Up

5:30 – 7:00 Poster Session and Reception

Day 2

V. Connecting NASA Data with Policy Applications

9:00 15 minutes: Michael Geigert, CT DEEP, *Using Satellite Data for Exceptional Event Demonstrations*

9:15 5 minutes: Ravan Ahmadov, NOAA/ESRL/GSD and CU Boulder, *High resolution smoke forecasting for the US using satellite data*

9:20 5 minutes: Ted Russell, Georgia Tech, *TBD*

9:25 5 minutes Kevin Cromar, Marron Institute at NYU, *Considerations in creating a global, health-based air quality index: Urban extents and spatial resolution*

9:30 5 minutes: Luke Valin, EPA/ORD, *PAMS re-design and related topics*

9:35 15 minute Q&A with speakers

9:50 15 minutes: Arlene Fiore, LDEO/Columbia/NASA HAQAST, **HAQAST TT: Update on "Satellite data in SIPs" Tiger Team**

10:05 5 minutes: Margaret Valis, NYSDEC, *Air quality data needs, NYSDEC perspective*

10:10 5 minutes: Jessica Neu, NASA Jet Propulsion Laboratory/Caltech, *Contribution of East Asian emissions to Western US ozone 2005-2016*

10:15 15 minute Q&A with speakers

10:30 - 10:45 Coffee Break

VI. HAQAST Successes, Opportunities and Next Steps

10:45 15 minutes: Paul Miller, NESCAUM, *By Land and by Sea: Air Quality Planning Challenges in NYC/Long Island Sound Region*

11:00 5 minutes: Rish Vaidyanathan, CDC, *Title TBD*

11:05 15 minutes: Tracey Holloway, *HAQAST Wrap-up and Look Ahead*

11:20 Q&A and Wrap Up

11:45 Public Session Adjourn

[HAQAST Members Meeting Immediately Follows 11:45-5:00]

HAQAST3 Poster Session (Tuesday, November 28 5:30-7:00 pm)

Poster dimensions are 40 inches x 30 inches, either landscape or portrait.

The setup includes an easel with a plain white poster board that can be flipped either horizontal (40 wide x 30 tall) or vertical (30 wide x 40 tall).

David Abel, University of Wisconsin-Madison, *Electricity and Air Quality in the Eastern U.S.*

Mahdi Ahmadi, NESCAUM, *Investigating spatial interpolation methods for ambient ground-level ozone pollution*

Benjamin Brown-Steiner, Atmospheric and Environmental Research, *Title TBD*

Sheng-Po Chen, ASRC/SUNYA, *Investigation of Long-Range Smoke Transport and their impact on Air Quality in New York State*

Seohyun (Grace) Choi, University of Wisconsin-Madison, *Satellite Data for Public Health Applications: What Can We Learn from Air Quality Management Successes?*

Melanie Follette-Cook, NASA GSFC/Morgan State University, *Capacity Building for the Access and Application of NASA Earth Science Data*

Xuehui Guo, Princeton University, *Feasibility of Using IASI Satellite NH₃ for Air Quality Monitoring*

Weihong Han, Lamont-Doherty Earth Observatory, *Impact of Long Range Wildfire Smoke Plumes on NYC Air Quality*

Xiaomeng Jin, Columbia University, *Diagnosing surface ozone sensitivity to precursor emissions: the view from space*

Debra Kollonige, UMD/NASA Goddard, *OMI NO₂ in the Central US Great Plains: How Should We Interpret NO₂ Trends?*

Runkui Li, LDEO visiting scholar, *Title TBD*

Samuel Lightstone, City College of New York, *Comparing CMAQ Forecasts with a Neural Network Forecast Model for PM_{2.5} in New York*

V. Faye McNeill, Columbia University, *Title TBD*

Anastasia Montgomery, SAGE, *Evaluating Trends in Satellite-Derived NO₂ & NO₂ Emissions with Economic Development over the 100 Most Populous Global Cities*

Talat Odman, Georgia Tech, *Challenges with estimating prescribed fire emissions*

Susan O'Neill, USDA Forest Service, *Satellite Products for Decision Support During Wildfire Smoke Episodes in 2017*

Da Pan, Princeton University, *Intercomparison of Ammonia Observations from Policy Making Perspective*

Elise Penn, UW-Madison, *Evaluation of GFDL-AM4 simulations of nitrogen oxides with OMI satellite observations*

Meytar Sorek-Hamer, NASA Ames Research Center, *Utilizing Satellite-Based Observations to Improve PM_{2.5} Simulations for Air Quality Management and Health Impact Assessment in the San Francisco Bay Area*

Peidong Wang, University of Wisconsin-Madison, *Formaldehyde (HCHO) Trend Analysis from OMI Satellite Observations and AQS Ground Measurements*

Rui Wang, Princeton University, *Validation of CrIS Ammonia Observations in the San Joaquin Valley during DISCOVER-AQ*

Dan Westervelt, LDEO, *Impact of future emissions and climate change on surface ozone and PM_{2.5} in China*

Yonghua Wu, City College of New York, *Continental Transport of Wildfire Smoke and Impact on Air Quality observed by ground-based and satellite sensors in New York State*

Beizhan Yan, Lamont-Doherty Earth Observatory, *Impact of New York City air quality by wildfires in west*