

UCDAVIS

AIR QUALITY RESEARCH CENTER

MAC -

MAQ

Conference

*Meteorology and Climate -
Modeling for Air Quality*

September 13 - 15, 2023

University of California, Davis

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Welcome to MAC-MAQ 2023!

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Technical Planning Committee

The 2023 MAC-MAQ Technical Program Committee has meticulously drawn from their extensive knowledge, experience, and dedication to craft a comprehensive program. Every effort has been made to ensure that the information presented is of the highest quality, relevance, and scientific accuracy. The UC Davis AQRC extends its profound gratitude to our committee members. Their invaluable knowledge and generous commitment of time have been pivotal in realizing this enriching educational conference.

We deeply appreciate their support and contributions.

Committee Leads*

Maryam Abdi-Oskouei
UCAR

Karin Ardon-Dryer
Texas Tech University

Jeremy Avise
CARB

Sebastian Eastham
UCAR

Louisa Emmons
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Carl Malings
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Brad Pierce
University of Wisconsin-Madison

Daniel Tong
George Mason University

William Vizuete*
UNC

Siyuan Wang
NOAA

Yang Zhang
Northeastern University

Notes

Schedule Overview

Wednesday, September 13, 2023

- 7:00 AM Registration Opens & Continental Breakfast Served
- 8:00 AM Conference Welcome & Opening Remarks
- 8:10 AM **Keynote by Tracey Holloway: *Linking Data with Decision-Making for Air Quality***
- 9:15 AM Morning Break
- 10:00 AM **Session: Meteorology-Chemistry Coupling, Feedback, and Interactions**
- 11:15 AM Transition
- 11:25 AM Lightning Talk Presentations (Part 1)
- 11:50 AM Lunch Break
- 1:00 PM **Session: Composition and Operational Forecasting from Daily to Seasonal Scales (Part 1)**
- 2:00 PM Transition
- 2:10 PM Lightning Talk Presentations (Part 2)
- 2:40 PM Afternoon Break
- 3:25 PM **Session: Composition and Operational Forecasting from Daily to Seasonal Scales (Part 2)**
- 4:25 PM Transition
- 4:35 PM Lightning Talk Presentations (Part 3)
- 5:10 PM Welcome Reception and Poster Review
- 7:10 PM Conference Day 1 Concludes

Thursday, September 14, 2023

- 7:15 AM Registration Opens & Continental Breakfast Served
- 8:00 AM **Session: M3: Merging Measurements & Models (Part 1)**
- 9:15 AM Transition Break
- 9:25 AM **Session: M3: Merging Measurements & Models (Part 2)**
- 10:25 AM Morning Break
- 11:00 AM **Session: Modeling of Processes Across Multiple Scales**
- 12:15 PM Lunch Break
- 1:25 PM **Keynote by Pablo Saide: *Pathways to Advance Wildfire Smoke Predictions***
- 2:30 PM Afternoon Break
- 3:00 PM **Session: Breakthrough Innovations in Atmospheric & Air Quality Modeling (Part 1)**
- 4:00 PM Transition
- 4:10 PM **Session: Breakthrough Innovations in Atmospheric & Air Quality Modeling (Part 2)**
- 5:10 PM Poster Competition Awards Announced & Conference Day 2 Concludes

Friday, September 15, 2023

- 7:15 AM Registration Opens & Continental Breakfast Served
- 8:00 AM **Session: Unique / Extreme Events and their Impacts on Meteorology and Air Quality (Part 1)**
- 9:30 AM Break
- 10:15 AM **Session: Unique / Extreme Events and their Impacts on Meteorology and Air Quality (Part 2)**
- 11:35 AM Conference Concludes

Conference Information

Virtual Platforms

Pheedloop

The Pheedloop Virtual Platform and Phone App is the system that hosts information about the current schedule, updates on speaker changes, specialty announcements and the Conference live stream. Access the virtual portal by entering the website link below or by scanning the barcode to the right.

pheedloop.com/macmaq2023/virtual/

Use Pheedloop to:

- Connect with speakers and other attendees.
- View the event agenda and plan your personal schedule
- Access handouts, video recordings, or articles uploaded by other participants



Slido

Slido is the system we are using to moderate questions during the symposium. Each session will have a personalized Slido "event" which you can post questions to. There are two ways to post a question.

1. You will visit the site below on your computer or phone and enter the specialty "event code" that shows up as listed on this print program AND on the sessions Q&A slides through out the conference.
2. You can directly click on the link within the Pheedloop Virtual Platform located in each session description from your phone or computer.

<https://www.slido.com/>

Networking Highlights

Early Career Networking in Downtown Davis

Tuesday, September 12th at 7pm

Engaging early career and student registrants before the conference kicks off.

Welcome Reception & Poster Review

Wednesday, September 13th

Optimal opportunity to network with scientists working on similar topics, build new connections, and say hello to fellow researchers whom you haven't seen in a while.

General Lunch Open Networking

Wednesday, September 13th and Thursday, September 14th

Whether you're exploring new career possibilities, just starting out, or already a seasoned pro, we encourage you to stick around for lunch on Wednesday and Thursday, provided by Olive & Vine Catering! Find a new group of people to sit with and share your latest research or learn from others on theirs.

Early Career Lunch Discussions

Thursday, September 14th

Gain invaluable insights into various career pathways. You'll have the unique chance to move between tables, interacting with leaders in your field and engaging in meaningful conversations about advancing your career.

Conference Program

Wednesday, September 13, 2023

7:00 AM Registration Check In and Breakfast

8:00 AM Conference Welcome & Opening Remarks

Emma Knowland, *NASA and Co-Lead of the 2023 MAC-MAQ Conference*

Will Vizuete, *UNC Chapel Hill and Co-Lead of the 2023 MAC-MAQ Conference*

8:10 AM Keynote: Linking Data with Decision-Making for Air Quality

Tracey Holloway, *University of Wisconsin, Madison*

Q&A Moderated by: *Emma Knowland and Will Vizuete*

9:15 AM Morning Break

10:00 AM Meteorology-Chemistry Coupling, Feedback, and Interactions

Chaired By: Heather Holmes, *University of Utah*, and Maryam Abdi-Oskouei, *UCAR*

Local Formation versus Regional Contributions to Secondary Organic Aerosol - Allison Steiner, *University of Michigan*

Understanding US Air Quality – Drought Linkages For Seasonal Prediction Potential - Meiyun Lin, *NOAA Geophysical Fluid Dynamics Laboratory*

Characterizing continental-scale OH trends in CESM2-WACCM6 climate model - Qindan Zhu, *Massachusetts Institute of Technology*

Biomass Burning Aerosols Effects on Rainfall Characteristics and Cloud formation over West Africa - Njie Teeda, *Federal University of Technology, Akure, Nigeria*

11:15 AM Transition

11:25 AM Lighting Talk Presentations (Part 1)

11:50 AM Lunch Break

1:00 PM Composition and Operational Forecasting from Daily to Seasonal Scales (Part 1)

Chaired by: Yang Zhang, *Northeastern University*, and Daniel Tong, *George Mason University*

Next-Generation Air Quality Predictions for the United States in the Unified Forecast System - Ivanka Stajner, *NOAA/NWS/NCEP/EMC*

Recent Developments in ECCC's Regional Air Quality Deterministic Prediction System - Craig Stroud, *Environment and Climate Change Canada*

Real-time simulations of smoke and dust by NOAA's Rapid Refresh Forecasting System - Ravan Ahmadov, *NOAA/GSL*

2:00 PM Transition

2:10 PM Lighting Talk Presentations (Part 2)

2:40 PM Afternoon Break

3:25 PM Composition and Operational Forecasting from Daily to Seasonal Scales (Part 2)

Chaired by: Yang Zhang, *Northeastern University*, and Daniel Tong, *George Mason University*

Quasi-Realtime/Operational Forecasting/Assimilation/Emissions Estimation for Tropospheric Atmospheric Composition (Including All Criteria Pollutants) - Arthur Mizzi, *NASA Ames Research Center, NOAA Chemical Systems Laboratory, and University of Colorado at Boulder Mechanical Engineering*

Recent Developments in ECCC's Regional Air Quality Deterministic Prediction System - Gabi Pfister, *National Center for Atmospheric Research*

Forecasting the occurrence of severe haze events: A deep learning approach - Chien Wang, *LAERO, CNRS/UPS*

4:25 PM Transition Break

4:35 PM Lighting Talk Presentations (Part 3)

5:10 PM Welcome Reception and Poster Review

Join us in the Conference Center Lobby for some light appetizers, drinks and great discussions on the poster displays and session topics. Make sure to converse with the poster competitors and check out the general poster displays!

SLIDO #2842516

SLIDO #2842517

SLIDO #2842518

SLIDO #2842519

Conference Program

Thursday, September 14, 2023

7:15 AM Registration Check In and Breakfast

8:00 AM **M3: Merging Measurements & Models (Part 1)**

Chaired By: Brad Pierce, *University of Wisconsin-Madison*, and Carl Malings, *NASA*

Atmospheric composition reanalysis - Kazuyuki Miyazaki, NASA JPL

Quantifying Sources of Transported and Background Atmospheric Pollutants to California Part I:

Model Evaluations for 2017-2021 - Yuyan Cui, California Air Resources Board

The MELODIES MONET Atmospheric Composition Diagnostics Package - David Fillmore, NCAR

Flash frequency parameterization insights from the Geostationary Lightning Mapper - Jonathan Wynn Smith, NOAA/GFDL

SLIDO #2842520

9:15 AM Transition

9:25 AM **M3: Merging Measurements & Models (Part 2)**

Chaired By: Brad Pierce, *University of Wisconsin-Madison* and Carl Malings, *NASA*

1km-resolution, multi-species (pm2.5, no2, o3) surface air pollution by machine learning data fusion:

effects of surface observation sparsity, and inclusion of GEMS geostationary satellite fields over

Korea - Beiming Tang, University of Iowa and George Mason University

A data fusion model for rapid wildfire smoke exposure estimates using routinely-available data - Sean Raffuse, UC Davis Air Quality Research Center

Spatial Resolved Surface Ozone with Urban and Rural Differentiation during 1990–2019: A

Space–Time Bayesian Neural Network Downscaler - Haitong Sun, University of Cambridge & NCAS-Climate

SLIDO #2842520

10:25 AM Morning Break

11:00 AM **Modeling of Processes Across Multiple Scales**

Chaired by: Louisa Emmons, *NCAR*, and Petra Klein, *University of Oklahoma*

Advancing understanding of land-atmosphere interactions by breaking discipline and scale barriers -

Jordi Vila-Guerau de Arellano, Wageningen University

Large-eddy simulation (LES) of atmospheric chemical and physical processes: from semi-idealized

NCAR LES-Chem to realistic WRF-LES-Chem - Yang Li, Baylor University

Multi-Scale Modeling of Turbulence and Convection: The Eddy-Diffusivity/Mass-Flux (EDMF)

Approach - Joao Teixeira, JPL/Caltech and UCLA

Quantifying the effects of vegetative in-canopy photolysis and turbulence processes on U.S. air quality

- Chi-Tsan Wang, George Mason University

SLIDO #2842521

12:15 PM Lunch Break

1:25 PM **Keynote: Pathways to Advance Wildfire Smoke Predictions**

Pablo Saide, *University of California, Los Angeles*

Q&A Moderated by: *Emma Knowland and Will Vizuet*

2:30 PM Afternoon Break

3:00 PM **Breakthrough Innovations in Atmospheric & Air Quality Modeling (Part 1)**

Chaired by: Siyuan Wang, *NOAA*, and Sebastian Eastham, *UCAR*

Efficient multiscale weather modeling of the atmospheric boundary layer with NCAR's GPU-resident

model FastEddy@ - Domingo Muñoz-Esparza, NCAR

Spatiotemporal estimates of surface PM2.5 concentrations in the western U.S. using NASA MODIS

and VIIRS retrievals, data fusion, and Machine Learning techniques - Marcela Loria-Salazar, School

of Meteorology, University of Oklahoma

Ending the half-a-century monopoly of similarity functions in boundary layer modeling - Kiran Alapaty,

US EPA

SLIDO #28425

SLIDO #2842523

4:00 PM Transition

We encourage you to stand up and stretch in your seat as we get ready for the final session of the day.

Conference Program

Thursday, September 14, 2023

4:10 PM Breakthrough Innovations in Atmospheric & Air Quality Modeling (Part 2)

Chaired by: Siyuan Wang, NOAA, and Sebastian Eastham, UCAR

Online Machine Learning Chemical Solver for Fast, Stable Long-Term Global Simulations of Atmospheric Chemistry - Makoto Kelp, Stanford University

GPU Assisted Computation for a Gas Phase Chemical Solver in CMAQ - Cesunica Ivey, University of California Berkeley

Chemistry in the twilight zone: a species-level assessment of numerical stiffness - Obin Sturm, University of Southern California

SLIDO #2842523

5:10 PM Poster Competition Awards Announced

Conference Day 2 Concludes

Friday, September 15, 2023

7:15 AM Check-in and Breakfast

8:00 AM Unique/Extreme Events and their Impacts on Meteorology and Air Quality (Part 1)

Chaired By: Karin Ardon-Dryer, Texas Tech University, and Susan O'Neill, USDA Forest Service

Wake Energy Retrieval: Formation Flying - Jenny Hand, Colorado State University

Modeling the June 2023 Smoke Event over the Northeast United States - Peter Colarco, NASA GSFC

Worldwide pyrocumulonimbus inventory reveals the frequency, variability, and stratospheric impact of smoke-infused storms during 2013-2021 - David Peterson, Naval Research Laboratory

Examining the regional impacts of smoke shading on smoke transport and chemistry - Adam Kochanski, San Jose State University

Investigating the weather effects of smoke aerosols in the Unified Forecast System: A study of 2020 summer North America wildfires - Sarah Lu, JCSDA & Ualban

SLIDO #2842524

9:30 AM Programming Break

10:15 AM Unique/Extreme Events and their Impacts on Meteorology and Air Quality (Part 2)

Chaired By: Karin Ardon-Dryer, Texas Tech University, and Susan O'Neill, USDA Forest Service

Diablo Wind Impacts on Turbulence Fluxes - Holly Oldroyd, University of California, Davis

Relationships of Stratospheric Dynamics and Composition Variations to Stratosphere to Troposphere Transport: Tropopause and Upper Tropospheric Jet Variations and Links to Extreme Weather Events - Gloria Manney, NorthWest Research Associates & NM Tech

Ozone Enhancement Due to the Lake Breeze and Upwind Wildfires in The Great Lakes Basin - Tsengel Nergui, Lake Michigan Air Directors Consortium

Anatomy of a high winter ozone episode in Colorado - Andrew Langford, NOAA Chemical Sciences Laboratory

SLIDO #2842525

11:25 AM Closing Remarks

11:35 AM Conference Concludes

Thank you for joining us in Davis!



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Poster Presentations

Lightning Talks

Multiple poster presenters will give a 1 minute lightning talk on Wednesday afternoon.
Note: Lightning Talk Presenters are distinguished in the program with an asterisk (*).

Student Poster Competition

Overview

The Technical Program Committee is thrilled to introduce a brand-new addition to the MAC-MAQ Conference Program—an exciting poster competition. During the Call for Abstracts, we extended a warm invitation to emerging researchers and practitioners in the field, offering them a unique opportunity to refine their presentation skills and gain invaluable experience. At the welcome reception, a panel of esteemed judges will evaluate these posters, providing participants with the chance to showcase their research and ideas to experts in the field.

We are excited to welcome **23 competitors** to this inaugural MAC-MAQ Poster Competition!

The winners of this competition will be officially announced at the end of the conference day on Thursday, September 14th. Stay tuned for the exciting results!

Judges

Karin Ardon-Dryer, *Texas Tech University*
Sebastian Eastham, *UCAR*
Tracey Holloway, *University of Wisconsin – Madison*
Emma Knowland, *NASA*
Carl Malings, *NASA*

Brad Pierce, *University of Wisconsin-Madison*
Pablo Saide, *UCLA*
Allison Steiner, *University of Michigan*
Will Vizuete, *UNC*

Poster Competitors

- #31 High-resolution WRF-Chem modeling of June 2022 ozone exceedance events in the Lake Michigan region*
Jerrold Acdan, University of Wisconsin-Madison
- #20 An evaluation of lidar derived ozone curtain profiles from the TRACER-AQ campaign and WRF-Chem simulation*
Claudia Bernier, University of Houston
- #44 Global sectional aerosol microphysics simulations the January 2022 Hunga Tonga Eruption*
Parker Case, NASA
- #4 Combining High Spatial Resolution Fire Information with Daily Fire Activity to Improve a Fire Emissions Estimates*
Sam D. Faulstich, University of Utah, Department of Chemical Engineering
- #45 Evaluation of the HYSPLIT-WRF-Chem framework to simulate volatile phenols under wildfire conditions. Case study: two wildfire smoke events at a central Washington State winery.*
Ana Carla Fernandez Valdes, Washington State University
- #34 Predicting major pollutant concentrations and linkages to emissions, meteorology and policy implications in Beijing, China using machine learning methods*
Shreya Guha, George Mason University
- #5 Investigating the role of nocturnal heterogeneous chemistry on daytime air quality: a comparison of two modeling schemes*
Alicia Hoffman, University of Wisconsin - Madison
- #22 Improved NOx and VOCs emissions estimate by assimilating of geostationary trace-gas observations: an Observing System Simulation Experiment*
Chia-Hua Hsu, University of Colorado, Boulder
- #46 Towards Improved Understanding of Wildfire Smoke Plume Height Estimation in Western U.S. Using Multisource Satellite Observations*
Jingting Huang, University of Utah

Say hello to the poster competitors and learn more about their research during Wednesday's Reception!

Poster Presentations

Poster Competitors

- #39 Katabatic Flow Turbulence Modeling*
Yicheng Li, UC Davis, Civil and Environmental Engineering
- #6 Spatiotemporal Gap-Filling of NASA Satellite-Derived-AOD in North America Using The UNet 3+ Machine Learning Architecture*
Marcela Loria Salazar, School of Meteorology, University of Oklahoma
- #41 Investigating surface ozone sensitivity to HCHO/NO₂ ratios over Arizona using the Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA) model*
Seyed Mohammad Amin Mirrezaei, Department of Hydrology and Atmospheric Sciences, University of Arizona
- #49 Observational Assessment of Aerosol Impacts on Updraft Speed in Deep Convection*
Hallie Pimperl, UC Davis
- #50 Impacts of climate change on wildfire PM_{2.5} and the human health burdens in the US*
Minghao Qui, Stanford University
- #51 Trace gas atmospheric rivers: remote drivers of air pollutants*
Mukesh Rai, Jet Propulsion Laboratory, California Institute of Technology
- #8 An evaluation of Model II Regression techniques for the intercomparison of two instrumental methods for a national air quality monitoring network*
Colleen Marciel Rosales, OpenAQ & UC Davis
- #9 Development of PM_{2.5} transport: Modeling the spatial distribution of Camp Fire from California to New York
Xiaorong Shan, George Mason University
- #26 Spatial Variability in Formaldehyde and Nitrogen Dioxide Diurnal Cycles in the New York City Area*
Madankui Tao, Columbia University, Lamont-Doherty Earth Observatory
- #54 Forecasting daily and sub-daily fire radiative power using scaled persistence and machine learning for air quality applications*
Laura Thapa, University of California, Los Angeles, Atmospheric and Oceanic Sciences
- #27 Configuration and evaluation of the WRF-Chem air quality simulations over Thailand*
Worapop Thongsame, University of Colorado Boulder
- #10 Extending AIRPACT Simulations to a Third Day*
Mohammadamin Vahidi Ghazvini, Washington State University
- #37 Connecting Aerosol Modeling and Numerical Weather Prediction from Data Assimilation*
Shih-Wei Wei, Joint Center for Satellite Data Assimilation and University at Albany
- #29 High Spatiotemporal Resolution Modeling of PM_{2.5} in West Africa Using Satellite Data and Machine Learning*
Benjamin Yang, Columbia University

**CONGRATULATIONS TO OUR
POSTER COMPETITORS**

*Thank you for being a part of the inaugural
MAC-MAQ Student Poster Competition!*

Poster Presentations

General Poster Displays

- #18 Towards an end-to-end data assimilation system for atmospheric composition with JEDI Skylab*
Maryam Abdi-Oskouei, UCAR/JCSDA
- #19 A Quantile Conserving Ensemble Filtering Framework: Next Generation Nonlinear and Non-Gaussian Data Assimilation for Tracers*
Jeffrey Anderson, National Center for Atmospheric Research
- #43 How do we underestimate the impact of dust events on air quality*
Karin Ardon-Dryer, Texas Tech University
- #32 Influence of meteorological conditions on PM2.5 concentrations in Ho Chi Minh city, Viet Nam: a merging measurements and WRF/CMAQ models approach*
Long Bui Ta, Ho chi minh city university of Technology (Bach Khoa University)
- #33 Turbulence Time Series Analysis for Partitioned Methane Fluxes from Reservoirs*
Corrin Clemons, University of California, Davis
- #38 Urban Air Quality Across the Globe with MUSICAv0*
Louisa Emmons, NCAR/ACOM
- #3 On The Role of Simplified Models in Understanding Background Tropospheric Ozone and its Contributions to Maximum Surface Concentrations Across the Continental US*
Ian Faloona, UC Davis Air Quality Research Center
- #12 Assessment of modern climate change on the territory of Central Asia*
Sh. Khabibullaev Forukh Boltabaev, METEINFOCOM
- #21 Harnessing our Air Quality Modeling & Observational Capabilities to Establish Key Factors Influencing Ozone Levels in Arizona*
Yafang Guo, The University of Arizona
- #35 Meteorological impacts on the spatial distribution of air pollution in Salt Lake City*
Heather Holmes, University of Utah
- #23 UAV Measurements in a Heavily Burdened Air Basin to Understand Meteorological and Emissions Uncertainties in CMAQ*
Cesunica Ivey, University of California, Berkeley
- #47 Source Apportionment and Integrated Process Analyses to Probe CMAQ Model Biases during Wintertime PCAP Events*
Cesunica Ivey, University of California, Berkeley
- #13 NASA GEOS Composition Forecast System, GEOS-CF: Overview, Applications, and Future Directions*
K. Emma Knowland, NASA
- #24 Broadening Systematic Reanalysis Intercomparisons in SPARC-Reanalysis Intercomparison Project Phase 2 (S-RIP2): Chemical Reanalyses & Air Quality, Tropospheric Circulation, Extreme Events, and More*
K. Emma Knowland, NASA and Gloria Manney, NorthWest Research Associates & NM Tech
- #48 Multi-Model Ensemble Forecasts of Hazardous Air Quality Events: Comparisons of Weighted and Unweighted Approaches*
Yunyao Li and Daniel Tong, George Mason University
- #40 The GFDL Variable-Resolution Global Chemistry-Climate Model for Research at the Nexus of US Climate and Air Quality Extremes*
Meiyun Lin, NOAA Geophysical Fluid Dynamics Laboratory
- #55 Toward Understanding Smoke Aerosol Optical Properties due to Local-Generated and Transported Smoke from a Decade (2012-2022) of Measurements from the Western to the Great Plains United States*
Marcela Loría-Salazar, School of Meteorology, University of Oklahoma
- #36 Investigating Impacts of Local Circulation on Coastal Ozone Problem in the New York Metropolitan Area: A modeling and observational study*
Sarah Lu, JCSDA & Ualbany

Poster Presentations

General Poster Displays

- #7 Data fusion with uncertainty quantification for sub-city-scale air quality assessment and forecasting*
Carl Malings, Morgan State University and Global Modeling & Assimilation Office
- #1 Efficient Joint Assimilation of Ozone Retrievals with Nitrogen Dioxide Emissions Estimation in Regional Air Quality Forecast Models*
Arthur Mizzi, NASA Ames Research Center / NOAA Chemical Systems Laboratory
- #25 WRF-Chem/DART: A Regional Ensemble Atmospheric Composition Forecast/Assimilation/Emissions Estimation System - Recent Developments and Applications*
Arthur Mizzi, NASA Ames Research Center / NOAA Chemical Systems Laboratory
- #14 HiRes-X: Forecasting Air Quality and Health Impacts of Prescribed Fires in Southeastern U.S.*
M. Talat Odman, Georgia Institute of Technology
- #17 Joint Assimilation of CO, O3, NO2, SO2, PM, AOD, NH4, PAN, and HNO3 in Support of the Tropospheric Regional Atmospheric Composition and Emissions Reanalysis (2005 - 2024) (TRACER-I)*
Aish Raman, NASA Ames and BAERI & Arthur Mizzi, NASA & NOAA Chemical Systems Laboratory
- #53 Simulating 2020 Creek fire with cloud-resolving E3SM and high-resolution satellite observations*
Qi Tang, Lawrence Livermore National Laboratory
- #11 Advancing Wildfire Research using Large Eddy Simulation (LES) and Machine Learning*
Siyuan Wang, CIRES/NOAA/GSL
- #28 Slope Angle Impacts on the Turbulence Structure of Daytime Anabatic Winds and Modeling Implications*
Ting (Diane) Wang, UC Davis
- #16 Development and Implementation of a Novel Bias Correction Technique for GFSv15-CMAQv5.3.1 Air quality Forecasting System*
Yang Zhang and Xiaoyang Chen, Northeastern University

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Our mission at the AQRC is to facilitate research on the scientific, engineering, health, social, and economic aspects of gaseous and particulate atmospheric pollutants. The best way for us to facilitate the research and education of the world is through educational conferences like this. We thank you, as our attendees, for joining us to learn about new science and technology and for sharing your experiences and knowledge with the world.

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aqrc.ucdavis.edu/events

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