

CSL AGU Presentation Schedule 2023

Italics represent former students/guests/employees of NOAA

Presentation Date	Presenter Name	Presentation Title	Presentation Length (PST)	Session Time (PST)	Session Number	Session Title	Presentation Type	Room Number
MONDAY 12.11.23								
12/11/23	Jake Gristey	N/A (Chair)	8:30 - 10:00	8:30 - 10:00	A11G	The Spectral Dimension of Shortwave and Longwave Radiation in the Earth System I	Oral	Moscone Center, 3000 - West
12/11/23	Sean Davis	The SPARC-Reanalysis Intercomparison Project: Summary of Phase 1 and Plans for Phase 2 (S-RIP2): Chemical Reanalyses & Air Quality, Tropospheric Circulation, Extreme Events, and More	14:10 - 18:30	14:10 - 18:30	A13M	General Session: Atmospheric Chemistry and Composition I	Poster	Moscone Center, South, Poster Hall A-C
12/11/23	Jian He	Development of Configurable Atmospheric Chemistry (CATChem) component within NOAA's Unified Forecasting System (UFS)	14:10 - 18:30	14:10 - 18:30	A13P	Multiscale Air Quality Modeling: Development and Application I	Poster	Moscone Center, South, Poster Hall A-C
12/11/23	Jan Kazil	The Cold Pool Model Intercomparison Project (CP-MIP)	14:10 - 18:30	14:10 - 18:30	A13J	Atmospheric and Oceanic Processes of the Trade Wind Regions and Their Wider Impact	Poster	Moscone Center, South, Poster Hall A-C
12/11/23	Congmeng Lyu	Developing and Validating Self-Consistent Fossil Fuel Carbon Dioxide and Air Quality Emissions Inventories	15:02 - 15:12	14:10 - 15:40	GC13C	Improvements in Regional and Global Air Pollutant and GHG Emissions Inventories I	Oral	Moscone Center, 2006 - West
TUESDAY 12.12.23								
12/12/23	John Daniel	A New Bottom-Up Model for Estimating Emissions and Banks of Ozone-Depleting Substances and Their Replacements: Application to HCFC-141b	8:30 - 12:50	8:30 - 12:50	A21I	Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends I	Poster	Moscone Center, South, Poster Hall A-C

12/12/23	Claire Granier	Surface Emissions for Forecasts and Historical Reanalyses at the Global and European Scales	8:30 - 12:50	8:30 - 12:50	GC21K	Improvements in Regional and Global Air Pollutant and GHG Emissions Inventories II	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	Eric Ray	Detecting Multi-Decadal Changes in the Brewer-Dobson Circulation From In Situ Trace Gas Measurements and Idealized Modeling	8:30 - 12:50	8:30 - 12:50	A21I	Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends I	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	Steven Brown	Ozone production in wildfire smoke plumes and its influence on urban ozone (Invited)	14:10 - 18:30	14:10 - 18:30	A23K	Ground Ozone: Trends, Chemistry, and Impact on Multiphase Chemistry	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	Jake Gristey	A Space-Based Camera Will Benefit Future Earth Radiation Budget Satellite Observations	14:10 - 18:30	14:10 - 18:30	A23S	The Spectral Dimension of Shortwave and Longwave Radiation in the Earth System II	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	Joshua (Shuka) Schwarz	Climate Intervention Strategy Based on Reducing Stratospheric Water Vapor	14:10 - 18:30	14:10 - 18:30	GC23G	Climate Intervention, Mitigation, Adaptation, and Restoration Solutions: Interdisciplinary Development and Evaluation of Safety and Efficacy	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	Jake Gristey	N/A (Chair)	14:10 - 18:30	14:10 - 18:30	A23S	The Spectral Dimension of Shortwave and Longwave Radiation in the Earth System II	Poster	Moscone Center, South, Poster Hall A-C
12/12/23	<i>Aparajeo Chattopadhyay</i>	Does Trifluoroacetaldehyde (CF ₃ CHO) UV Photolysis Lead to the Formation of Trifluoromethane (CHF ₃ , HFC-23), a Major Greenhouse Gas?	16:40 - 16:50	16:00 - 17:30	A24F	General Session: Atmospheric Chemistry and Composition III	Oral	Moscone Center, 3001 - West

WEDNESDAY 12.13.23

12/13/23	Graham Feingold	Community Consensus on Research Needs to Evaluate the Viability of Marine Cloud Brightening	8:30 - 12:50	8:30 - 12:50	A31K	Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions	Poster	Moscone Center, South, Poster Hall A-C
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12/13/23	Prasanth Prabhakaran	Effects of Intermittent Aerosol Forcing on the Stratocumulus-to-Cumulus Transition	8:30 - 12:50	8:30 - 12:50	A31K	Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	Takanobu Yamaguchi	Do Aerosol-Cloud Interactions Alter Clouds in the Hadley Circulation? A Study with High Resolution, Idealized Two-Dimensional Hadley Circulation Simulations	8:30 - 12:50	8:30 - 12:50	A31K	Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	Jianhao Zhang	Addressing the Detectability of an MCB Type of Perturbation Over the Northeastern Pacific with a Data-Driven Approach	8:30 - 12:50	8:30 - 12:50	A31K	Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	Daniel Murphy	Metals From the Reentry of Spacecraft in Stratospheric Particles	10:20 - 10:30	10:20 - 11:50	A32F	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) I	Oral	Moscone Center, 3001 - West
12/13/23	Jeff Peischl	Methane Emissions from Natural Gas Distribution in New York City and Chicago	10:20 - 10:30	10:20 - 11:50	A32E	Constraining Greenhouse Gas Exchange Processes Using Remote Sensing and In Situ Observations I	Oral	Moscone Center, 3003 - West
12/13/23	Joshua (Shuka) Schwarz	N/A (Chair)	10:20 - 11:50	10:20 - 11:50	A32A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences I	Oral	Moscone Center, 3002 - West
12/13/23	Gregory Schill	Single Particle Aerosol Composition in the Asian Tropopause Aerosol Layer and in the North American Upper Troposphere/Lower Stratosphere During ACCLIP Stratosphere Water Vapor Observations from Satellite,	10:30 - 10:40	10:20 - 11:50	A32F	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) I	Oral	Moscone Center, 3001 - West
12/13/23	Karen Rosenlof	Balloon and Aircraft: What Have We Learned over the Past 75 Years? (Invited)	10:29 - 10:38	10:20 - 11:50	A32D	Atmospheric Sciences 2023 Fellows	Oral	Moscone Center, 3014 - West
12/13/23	Ru-Shan Gao	The Ozone Photometer for UAS/Balloon-Based Studies	10:40 - 10:50	10:20 - 11:50	A32A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences I	Oral	Moscone Center, 3002 - West

12/13/23	Georgios Gkatzelis	Quantification of Oxygenated Volatile Organic Compounds in Ammonia Chemical Ionization Mass Spectrometry Using the Voltage Scanning Technique	11:30 - 11:40	10:20 - 11:50	A32A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences I	Oral	Moscone Center, 3002 - West
12/13/23	Wayne Angevine	Cloud Properties and Transitions in MAGIC Simulated by a Mesoscale Model	14:10 - 18:30	14:10 - 18:30	A33P	Lagrangian and Climatological Transitions of Boundary Layer Clouds II	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	Isabel McCoy	Mesoscale Organization Increases Dynamic Efficiency and Radiative Impact of Trade Cumuli	14:10 - 18:30	14:10 - 18:30	A33P	Lagrangian and Climatological Transitions of Boundary Layer Clouds II	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	James Roberts	Designing On-line Chemical Sources for the Calibration of Atmospheric Measurement Instrumentation	14:10 - 18:30	14:10 - 18:30	A33H	Advances in Measuring and Modeling Emerging Atmospheric Chemical Species, Their Reaction and Transportation Processes, and the Associated Impacts on Air Quality, Climate, and Health II	Poster	Moscone Center, South, Poster Hall A-C
12/13/23	Joshua (Shuka) Schwarz	N/A (Chair)	14:10 - 15:40	14:10 - 15:40	A33A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences II	Oral	Moscone Center, 3002 - West
12/13/23	Amy Butler	Influence of Stratosphere-Troposphere Coupling on Surface Climate Across Timescales (Invited)	14:19 - 14:28	14:10 - 15:40	A33C	Atmospheric Sciences 2023 Ascent and Holton Award Winners	Oral	Moscone Center, 3006 - West
12/13/23	Georgia Michailoudi	Characteristics of refractive black carbon aerosols over the Arctic	14:20 - 14:30	14:10 - 15:40	A33E	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) II	Oral	Moscone Center, 3001 - West
12/13/23	Brian McDonald	Detecting Ethane over Oil and Gas Regions with the Cross-track Infrared Sounder	15:04 - 15:16	14:10 - 15:40	A33D	Constellation of Satellites for Atmospheric Composition and Air Quality I	Oral	Moscone Center, 3003 - West
12/13/23	Troy Thornberry	The Stratospheric Aerosol processes, Budget and Radiative Effects (SABRE) project	15:30 - 15:40	14:10 - 15:40	A33E	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) II	Oral	Moscone Center, 3001 - West

12/13/23	Joshua (Shuka) Schwarz	N/A (Chair)	16:00 - 17:30	16:00 - 17:30	A34A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences III	Oral	Moscone Center, 3002 - West
12/13/23	Ru-Shan Gao	The In-situ Balloon-Borne Ice Spectrometer	16:20 - 16:30	16:00 - 17:30	A34A	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences III	Oral	Moscone Center, 3002 - West
12/13/23	Sean Davis	The Role of Tropical Upwelling in Recent Lower Stratospheric Ozone Trends (Invited)	16:32 - 16:42	16:00 - 17:30	A34G	Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends II	Oral	Moscone Center, 3011 - West
12/13/23	Victoria Treadway	Distributions and correlations of organic trace gases measured during the Asian Summer Monsoon Chemical and Climate Impact Project (ACCLIP)	16:40 - 16:50	16:00 - 17:30	A34E	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) III	Oral	Moscone Center, 3011 - West
12/13/23	Ewa Bednarz	Injection Strategy - A Driver of Atmospheric Circulation and Ozone Response to Stratospheric Aerosol Geoengineering	16:52 - 17:02	16:00 - 17:30	A34G	Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends II	Oral	Moscone Center, 3011 - West

THURSDAY 12.14.23

12/14/23	Alexandre Baron	The Uncommon Optical and Microphysical Properties of Hunga Tonga Aerosols	8:30 - 8:40	8:30 - 10:00	A41B	Atmospheric and Climate Impacts of the Hunga Tonga Volcanic Eruption II	Oral	Moscone Center, 3003 - West
12/14/23	Carsten Warneke	Summary and First Results from Atmospheric Emissions and Reactions Observed from Megacities to Marine Areas (AEROMMA 2023)	8:30 - 8:40	8:30 - 10:00	A41A	Air Quality Trends and Challenges in Urban Area I	Oral	Moscone Center, 3001 - West
12/14/23	Joshua (Shuka) Schwarz	N/A (Chair)	8:30 - 10:00	8:30 - 10:00	A41S	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences IV	eLightning	Moscone Center, South, Hall D, Theater I

12/14/23	Joshua (Shuka) Schwarz	N/A (Chair)	8:30 - 12:50	8:30 - 12:50	A41I	Advances in Instrumentation and Measurement Technology in the Atmospheric Sciences V	Poster	Moscone Center, South, Poster Hall A-C
12/14/23	Wyndom Chace	Efficiency of Urban Ozone Photochemistry During the 2023 AEROMMA and CUPiDS Airborne Field Campaigns	8:40 - 8:50	8:30 - 10:00	A41A	Air Quality Trends and Challenges in Urban Area I	Oral	Moscone Center, 3001 - West
12/14/23	Michael Lawler	Submicron Sea Spray Aerosol Over the Remote Oceans Has Low Organic Content	8:45 - 8:48	8:30 - 10:00	A41T	Aquatic Aerosols: From Microscale Processes to Impacts on Climate	eLightning	Moscone Center, South, Hall D, Theater VI
12/14/23	Michael Robinson	Fate of Isoprene Peroxy Radical in Four North American Mega Cities Informs Ozone Photochemical Regime	8:50 - 9:00	8:30 - 10:00	A41A	Air Quality Trends and Challenges in Urban Area I	Oral	Moscone Center, 3001 - West
12/14/23	Yaosheng Chen	Explore Aerosol-Cloud Interactions Using an LES Ensemble of Stratocumulus	9:00 - 9:10	8:30 - 10:00	A41D	Boundary Layer Clouds and Climate Change I	Oral	Moscone Center, 3002 - West
12/14/23	Carsten Warneke	Results from Fire Influence on Regional to Global Environments and Air Quality (FIREX-AQ) and Impact of Biomass Burning on the Colorado Front Range (Invited)	9:30 - 9:40	8:30 - 10:00	A41F	Climate Change and the Chemistry of Landscape Fire Smoke: Present and Future Primary Gas and Particle Emissions and the In-plume Photochemical Processes Responsible for Toxic Impacts on Humans and Ecosystems II	Oral	Moscone Center, 3005 - West
12/14/23	Qindan Zhu	Improved WRF-Chem representation of VOC chemistry from VCP and cooking emissions	9:40 - 9:50	8:30 - 10:00	A41A	Air Quality Trends and Challenges in Urban Area I	Oral	Moscone Center, 3001 - West
12/14/23	Andrew Rollins	N/A (Chair)	10:20 - 11:50	10:20 - 11:50	A42D	Chemistry in the Marine Atmosphere I	Oral	Moscone Center, 3002 - West
12/14/23	Yunqian Zhu	Stratospheric Ozone Depletion Inside the Volcanic Plume Shortly After the 2022 Hunga Tonga Tonga Eruption	10:30 - 10:40	10:20 - 11:50	A42C	Atmospheric and Climate Impacts of the Hunga Tonga Volcanic Eruption III	Oral	Moscone Center, 3003 - West

12/14/23	Patrick Veres	Overview of the Marine Flights Conducted Along Coastal California During the Atmospheric Emissions and Reactions Observed from Megacities to Marine Areas (AEROMMA) Campaign	11:30 - 11:40	10:20 - 11:50	A42D	Chemistry in the Marine Atmosphere I	Oral	Moscone Center, 3002 - West
12/14/23	Jake Gristey	The Impact of Heterogeneous Surface Solar Heating on Shallow Cumulus Clouds in the Southern Great Plains	14:10 - 18:30	14:10 - 18:30	A43N	Boundary Layer Clouds and Climate Change II	Poster	Moscone Center, South, Poster Hall A-C
12/14/23	Christopher Jernigan	Observations and Constraints on the Sulfur Budget Over the Marine Environment	14:10 - 18:30	14:10 - 18:30	A43P	Chemistry in the Marine Atmosphere II	Poster	Moscone Center, South, Poster Hall A-C
12/14/23	Andrew Rollins	N/A (Chair)	14:10 - 18:30	14:10 - 18:30	A43P	Chemistry in the Marine Atmosphere II	Poster	Moscone Center, South, Poster Hall A-C
12/14/23	Yue Jia	Underestimation of Anthropogenic Bromoform Emissions: Implications for Ozone Depletion	14:10 - 18:30	14:10 - 18:30	OS43D	The Surface Ocean-Lower Atmosphere Study (SOLAS): 20 Years of Progress and Developments in Ocean-Atmosphere Science II	Poster	Moscone Center, South, Poster Hall A-C
12/14/23	Steven Brown	Nighttime Chemical Processes in Megacities and Fires	14:13 - 14:23	14:10 - 15:40	A43A	Advances in Observing and Modeling Nighttime Processes in the Earth System II	Oral	Moscone Center, 3006 - West
12/14/23	Joshua (Shuka) Schwarz	N/A (Chair)	16:00 - 17:30	16:00 - 17:30	A44E	Light-Absorbing Carbon Aerosols: Observations, Models, Processes, and Impacts I	Oral	Moscone Center, 3003 - West
FRIDAY 12.15.23								
12/15/23	Charles Brock	Particle Size Distributions in the Arctic Stratospheric Polar Vortex	8:30 - 12:50	8:30 - 12:50	A51K	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) V	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Kai-Lan Chang	Challenges of Detecting Free Tropospheric Ozone Trends in a Sparsely Sampled Environment	8:30 - 12:50	8:30 - 12:50	SY51D	Planning for Observation Continuity: Scientific Needs, Decision Support Value, and Practical Challenges II	Poster	Moscone Center, South, Poster Hall A-C

12/15/23	Dillon Elsbury	Seasonal Influence of Antarctic Sea Ice on Southern Hemisphere Stratosphere-Troposphere Coupling	8:30 - 12:50	8:30 - 12:50	A51W	Polar Amplification and Its Connection to Lower-Latitude Weather and Climate II	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Audrey Gaudel	Air (Ine)quality in New York City	8:30 - 12:50	8:30 - 12:50	A51Q	Interdisciplinary and Community-Based Participatory Research to Tackle Environmental Injustice: Focus on Air (Ine)quality	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Audrey Gaudel	N/A (Chair)	8:30 - 12:50	8:30 - 12:50	A51Q	Interdisciplinary and Community-Based Participatory Research to Tackle Environmental Injustice: Focus on Air (Ine)quality	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Jessica Gilman	Characterizing volatile organic compound (VOC) emissions in California's South Coast Air Basin (SoCAB): Comparison of AEROMMA 2023 airborne and SUNVEx 2021 ground-based observations	8:30 - 12:50	8:30 - 12:50	A51I	Air Quality Trends and Challenges in Urban Area V	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Gordon Novak	In-situ Constraints on Reactive Halogen and Nitrogen Cycling from an Iodide CIMS in the UTLS	8:30 - 12:50	8:30 - 12:50	A51K	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) V	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Nell Schafer	Trends in Methane Emission Sources in the Los Angeles Basin, California	8:30 - 12:50	8:30 - 12:50	A51U	New Developments in Urban Greenhouse Gas Emissions Quantification and Related Uncertainty II	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Joshua (Shuka) Schwarz	N/A (Chair)	8:30 - 12:50	8:30 - 12:50	A41R	Light-Absorbing Carbon Aerosols: Observations, Models, Processes, and Impacts II	Poster	Moscone Center, South, Poster Hall A-C
12/15/23	Ming Lyu	Particle Size Distribution Measurements for Stratospheric Aerosols in the Range of 0.003 – ~4.0 µm During the SABRE Mission	8:51 - 8:54	8:30 - 10:00	A51AA	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) IV	eLightning	Moscone Center, South, Hall D, Theater I

12/15/23	Colin Guganus	Insights into Carbonyl Sulfide (OCS) Distribution and Sources in the Asian Summer Monsoon (ASM) Region: Evidence from Elevated Levels Observed in the UTLS during the ACCLIP Campaign	9:39 - 9:42	8:30 - 10:00	A51AA	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) IV	eLightning	Moscone Center, South, Hall D, Theater I
12/15/23	Amy Butler	Externally-Forced Changes to Stratosphere-Troposphere Coupling Mode Influences Southern Hemisphere Seasonal Climate Predictability	10:20 - 11:50	10:20 - 11:50	A52G	Extratropical Large-Scale Atmospheric Circulation Variability II	eLightning	Moscone Center, South, Hall D, Theater I
12/15/23	Gregory Schill	Single-Particle Aerosol Composition in the Asian Tropopause Aerosol Layer and in the North American Upper Troposphere/Lower Stratosphere during ACCLIP	10:30 - 10:40	10:20 - 11:50	A32F	Dynamics and Chemistry of the Upper Troposphere and Lower Stratosphere (UTLS) I	Oral	Moscone Center, 3001 - West
12/15/23	Dillon Elsbury	Sensitivity of Easterly QBO's Boreal Winter Teleconnections and Surface Impacts to SSWs	10:50 - 11:00	9:30-11:00	A51D	Extratropical Large-Scale Atmospheric Circulation Variability I	Oral	Moscone Center, 3003 - West