

CSL AGU Presentation Schedule 2021

Italics represent former students/guests/employee of NOAA

| Presentation date | Presenter Name | Title | Presentation Length (CST) | Session Time (CST) | Session Number | Session Title | Presentation Type | Room Number |
|-------------------------|----------------------|--|---------------------------|--------------------|----------------|---|-------------------|--------------------------------------|
| MONDAY 12.12.22 | | | | | | | | |
| 12.12.22 | Lu Xu | Primary Convener | 08:00-09:30 | 08:00-09:30 | A12C | Air Quality Trends and challenges in Urban Area I | Oral | McCormick Place, E354b |
| 12.12.22 | Jianhao Zhang | On the Conditionality of Marine Low Cloud Albedo Susceptibility: from Meteorological conditions to Spatiotemporal Scales | 09:00-09:10 | 09:00-10:30 | A12G | Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions I | Oral | McCormick Place, E450a |
| 12.12.22 | Carsten Warneke | Characterizing the Impact of Cooking and VCP Emissions on Urban VOCs in Las Vegas and Los Angeles in Preperation for AEROMMA 2023 | 09:13-09:24 | 09:00-10:30 | A12C | Air Quality Trends and challenges in Urban Area I | Oral | McCormick Place, E354b |
| 12.12.22 | Steven Brown | Pollutant Emissions and Distributions in the U.S. Urban Southwest: Mobile Measurements of Nitrogen Oxides, Greenhouse Gases and VOCs | 09:24-09:35 | 09:00-10:30 | A12C | Air Quality Trends and challenges in Urban Area I | Oral | McCormick Place, E354b |
| 12.12.22 | Xiaoli Zhou | Impacts of Mesoscale Cloud Organization on Aerosol-induced Brightness | 09:50-10:00 | 09:00-10:30 | A12G | Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions I | Oral | McCormick Place, E3450a |
| 12.12.22 | Lu Xu | Primary Convener | 10:00-11:30 | 10:00-11:30 | A13B | Air Quality Trends and challenges in Urban Area II | Oral | McCormick Place, E450a |
| 12.12.22 | Prasanth Prabhakaran | Impact of Aerosol Perturbation on Marine Stratocumulus Clouds | 14:45-18:15 | 14:45-18:15 | A15J | Marine Cloud Brightening: Exploring Inadvertent and Deliberate Perturbations to Understand Aerosol-Cloud Interactions III | Poster | McCormick Hall, Poster Hall, Hall A |
| TUESDAY 12.13.22 | | | | | | | | |
| 12.13.22 | Siyuan Wang | Tackle Wildfire Plume Rise using Large Eddy Simulation (LES) and Machine Learning | 08:00-09:00 | 08:00-09:00 | A21B | Atmospheric Chemistry in the Wildfire Plume I | Poster | online |
| 12.13.22 | Xiaoli Zhou | Observational estimate of stratocumulus susceptibility across timescales | 08:00-09:00 | 08:00-09:00 | A21C | Lagrangian and Climatological transitions of Boundary Layer Clouds I | Poster | online |
| 12.13.22 | Rebecca Schwantes | Chair | 08:00-09:00 | 08:00-09:00 | A21B | Atmospheric Chemistry in the Wildfire Plume I | Poster | online |
| 12.13.22 | Ewa Bednarz | Impact of the Latitude of Stratospheric Aerosol Injection on the Southern Annular Mode | 09:00-12:30 | 09:00-12:30 | GC22E | Advances in Solar Radiation Modification (SRM) Research III | Poster | McCormick Place, Poster Hall, Hall A |
| 12.13.22 | Rebecca Schwantes | Chair | 09:00-12:30 | 09:00-12:30 | A22C | Atmospheric Chemistry in the Wildfire Plume II | Poster | McCormick Place, Poster Hall, Hall A |

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| 12.13.22 | Alison Piasecki | Secondary Aerosol Formation from Glycol Ethers: Chamber and Modeling Studies | 13:45-17:15 | 13:45-17:15 | A25H | Atmospheric Chemical Mechanisms: Connecting Experiments, Theory, and Modeling II | Poster | McCormick Place-Poster Hall, Hall- A |
| 12.13.22 | Rebecca Schwantes | Chair | 14:45-16:15 | 14:45-16:15 | A25A | Atmospheric Chemistry in the Wildfire Plume III | Oral | McCormick Place, E271ab |
| 12.13.22 | Lu Xu | A Chemical Ionization Mass Spectrometer Utilizing Ammonium Ions (NH ₄ ⁺ CIMS) for Measurements of Organic Compounds in the Atmosphere | 14:45-18:15 | 14:45-18:15 | A25G | Air Quality Trends and Challenges in Urban Area V | Poster | McCormick Place, Poster Hall, Hall A |
| 12.13.22 | Chelsea Stockwell | Evaluating the anthropogenic ozone sensitivity to emissions from Volatile Chemical Products (VCPs) and other non-traditional urban sources in two unique urban centers: Las Vegas and Los Angeles | 14:45-18:15 | 14:45-18:15 | A25G | Air Quality Trends and Challenges in Urban Area V | Poster | McCormick Place, Poster Hall, Hall A |
| 12.13.22 | Jeff Peischl | Calculating Modified Combustion Efficiency in Biomass Burning Plumes Sampled from Aircraft for Cases with Significant Biosphere Influence | 15:15-15:25 | 14:45-16:15 | A25A | Atmospheric Chemistry in the Wildfire Plume III | Oral | McCormick Place, E271ab |
| 12.13.22 | Gregory Schill | Size Distributions of Biomass Burning Aerosol as a Function of Age and Comparisons to Models | 17:00-17:10 | 16:45-18:15 | A26D | Models, in Situ, and Remote Sensing of Aerosols (MIRA) IV | Oral | McCormick Place, E350 |
| 12.13.22 | Jake Gristey | Angular Sampling of a Monochromatic, Wide-Field-of-View Camera to Augment Next-Generation Earth Radiation Budget Satellite Observations | 17:50-18:00 | 16:45-18:15 | GC26G | The Flows of Energy Through the Climate System I | Oral | McCormick Place, S406b |
| WEDNESDAY 12.14.22 | | | | | | | | |
| 12.14.22 | Michael Diamond | Earth's Hemisphere Albedo Symmetry by Cloud Type | 09:00-12:30 | 09:00-12:30 | GC32M | The Flows of Energy Through the Climate System II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.14.22 | Nobuhiro Moteki | Constraining the complex refractive index of black carbon and light absorbing iron oxides according to their complex forward-scattering amplitude at 633 nm wavelength | 09:00-12:30 | 09:00-12:30 | A32I | Light-Absorbing Carbon Aerosol from Observations and Models II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.14.22 | Claire Granier | Chair | 10:00-11:30 | 10:00-11:30 | A33C | Air Quality in Africa: Observations, Emissions, and Modeling | Oral | McCormick Place - E271ab |
| 12.14.22 | Jessica Gilman | Characterizing Modern VOC sources and Chemistry in California's South Coast AirBasin | 11:20-11:30 | 11:00-12:30 | A33G | Sources and Fate of Volatile Organic Compounds (VOCs) and Nox in Human-Made Environments III | Oral | McCormick Place, E350 |
| 12.14.22 | Steven Brown | The Dark Side of Atmospheric Chemistry | 11:50-11:55 | 11:00-12:30 | A33D | Atmospheric Sciences 2022 Fellows I | Oral | McCormick Place, E450a |
| 12.14.22 | Congmeng Lyu | Developing and Validating Self-Consistent Fossil Fuel Carbon Dioxide and Air Quality Emissions Inventories | 13:45-14:45 | 13:45-14:45 | GC34D | Advances in Urban Climate and Biogeochemistry II | Poster | online |

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| 12.14.22 | Joshua Schwarz | Chair | 14:45-16:15 | 14:45-16:15 | A35F | Light-Absorbing Carbon Aerosol from Observations and Models | Oral | McCormick Place, E351 |
| 12.14.22 | Meng Li | Air Quality and health impact from oil and gas production over the Contiguous United States | 15:45-15:55 | 14:45-16:15 | A35E | Emissions of Atmospheric Pollutants from Oil, Gas, and Coal Operations III | Oral | McCormick Place, E253ab |
| 12.14.22 | Yunqian Zhu | Hunga-Tunga eruption: stratospheric aerosol evolution in a water-rich plume (invited) | 16:45-17:00 | 16:45-18:15 | V36A | Dynamics and Atmospheric Impacts of the January 2022 Hunga Tonga-Hunga Ha'apai Eruption IV | Oral | McCormick Place, S102cd |
| 12.14.22 | Caroline Womack | A Lightweight Broadband Cavity-Enhanced Spectrometer for NO ₂ Measurement on Unscrewed Aerial Vehicles | 17:37-17:47 | 16:45-18:15 | A36A | Advances in Methods and Technologies for Emission Monitoring and Exposure Assessment to Hazardous Air Pollutants I | Oral | McCormick Place, E450a |
| THURSDAY 12.15.22 | | | | | | | | |
| 12.15.22 | Claire Granier | Chair | 07:00-08:00 | 07:00-08:00 | A41B | Air Quality in Africa: Observations, Emissions, and Modeling | Poster | online |
| 12.15.22 | Claire Granier | Chair | 08:00-11:30 | 08:00-11:30 | A42O | Air Quality in Africa: Observations, Emissions, and Modeling | Poster | McCormick Place, Poster Hall, Hall A |
| 12.15.22 | Elizabeth Asher | The unprecedented rapid aerosol formation from the Hunga Tonga-Hunga Ha'apai eruption (invited) | 09:00-09:20 | 09:00-10:30 | A421 | General Session: Atmospheric Chemistry & Composition I | Oral | McCormick Place, E450a |
| 12.15.22 | Christopher Jernigan | Sulfate and carbonyl sulfide production from aqueous processing of dimethyl sulfide oxidation products | 09:00-12:30 | 09:00-12:30 | A42P | Aquatic Aerosols: From Microscale Processes to Impacts on Climate II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.15.22 | Daniel Murphy | Coarse-mode organic-sulfate aerosols from evaporating precipitation and novel chemistry | 09:20-09:30 | 09:00-10:30 | A42C | Atmospheric Aerosols and Their Interactions with Clouds, Radiation, and Climate III | Oral | McCormick Place, E350 |
| 12.15.22 | Rudra Pokhrel | Aerosol Hygroscopic Growth and its Dependence on Chemical Composition | 09:30-09:40 | 09:00-10:30 | A42C | Atmospheric Aerosols and Their Interactions with Clouds, Radiation, and Climate III | Oral | McCormick Place, E350 |
| 12.15.22 | Eleanor Waxman | Upper troposphere and Lower Stratosphere Measurements of NO and NO ₂ from High-Altitude Aircraft | 09:40-09:50 | 09:00-10:30 | A421 | General Session: Atmospheric Chemistry & Composition I | Oral | McCormick Place, E450a |
| 12.15.22 | Michael Diamond | Surprises in the Study of Smoke Effects on Shallow Convection: Subsidence, Scavenging, and Cellular Organization | 09:40-09:50 | 09:00-10:30 | A42G | Convection Processes and Their Environmental and Aerosol Interactions: Theory, Observation, and Modeling I | Oral | McCormick Place, E258 |
| 12.15.22 | Gregory Frost | Presenter | 12:45-13:45 | 12:45-13:45 | TH43A | NOAA's Geostationary Extended Observations (GeoXO) Satellite Atmospheric Composition Capabilities | Town Hall | McCormick Place, S102cd |
| 12.15.22 | Gordon Novak | Observational Constraints of Nox Abundance, Sources, and Cycling in the Remote Marine Boundary Layer | 14:45-14:55 | 13:45-15:15 | A45D | Atmospheric Oxidation Capacity Constraints: Laboratory Investigations, Field and Remote Sensing Observations, and Modeling Studies III | Oral | McCormick Place, E270 |

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| 12.15.22 | Maya Abou-Ghanem | Understanding the Influence of Heavy Fuel Ships on Non-Refractory Vanadium Particles in the Marine Boundary Layer Using Single-Particle Mass Spectrometry | 14:45-18:15 | 14:45-18:15 | A45N | General Session: Atmospheric Chemistry & Composition II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.15.22 | Michael Lawler | Global-scale distribution of sea salt aerosol organic fraction from airborne single particle mass spectrometry | 17:55-18:05 | 16:45-18:15 | A46B | Aquatic Aerosols: From Microscale Processes to Impacts on Climate III | Oral | McCormick Place, E270 |
| FRIDAY 12.16.22 | | | | | | | | |
| 12.16.22 | Sean Davis | The Role of Tropical Upwelling in Explaining Discrepancies Between Modeled and Observed Recent Lower Stratospheric Ozone Trends | 09:00-12:30 | 09:00-12:30 | A52Q | Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.16.22 | Yue Jia | Quantifying Drift and Bias of Ozone Measurements from the Ozone Mapping and Profiler Suite Limb Profiler (OMPS-LP) in Upper Troposphere and Lower Stratosphere (UTLS) | 09:00-12:30 | 09:00-12:30 | A52Q | Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.16.22 | Ewa Bedarz | The impacts of Short-Lived Chlorinated Species on Stratospheric Chlorine Budget and Ozone, and the Role of Transport | 09:00-12:30 | 09:00-12:30 | A52Q | Stratospheric and Tropospheric Composition Changes: Observations and Modeling of Special Events, Feedback Mechanisms, and Long-Term Trends II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.16.22 | Jake Gristey | Inordinately Large Leverage of Aerosol on Surface Solar Irradiance Variability when Co-Occurring with Shallow Cumulus Clouds | 09:15-09:25 | 09:00-10:30 | A52G | General Session: Atmospheric Physics, Radiation, Clouds, and Aerosols II | Oral | McCormick Place, E354a |
| 12.16.22 | Chuck Brock | Aerosol Optical Properties from High-Resolution Size Distribution Measurements in the Lower Midlatitude Stratosphere | 10:15-10:25 | 09:00-10:30 | A52G | General Session: Atmospheric Physics, Radiation, Clouds, and Aerosols II | Oral | McCormick Place, E354a |
| 12.16.22 | Chia-Hua Hsu | How well can assimilation of geostationary trace-gas observations constrain Nox emissions in the US? | 11:50-12:00 | | A53A | Advances in the Integrated Global Observing System for Air Quality: Science and Societal Benefit | Oral | McCormick Place, E271ab |
| 12.16.22 | Elizabeth Asher | Working towards long endurance stratospheric Portable Optical Particle Spectrometer (POPS) measurements onboard the World View Stratollite | 14:45-18:15 | 14:45-18:15 | P55D | Balloons in Earth and Planetary Sciences: Research, Applications, and Emerging Concepts II | Poster | McCormick Place, Poster Hall, Hall A |
| 12.16.22 | Takanobu Yamaguchi | Resolving away stratocumulus biases in modern global climate models | 14:45-18:15 | 14:45-18:15 | A55S | High-resolution Earth Modeling on Large Supercomputers III | Poster | McCormick Place, Poster Hall, Hall A |

