

Chemistry Climate Working Group

30th Annual CESM Workshop June 10th, 2025

Tuesday, June 10th, 08:30 am – 12:00 pm

** All times are MDT; **Speakers:** 10-12 min. talk. Please leave 3-5 min at the end of your slot for questions.*

Time	Topic	Speakers
8:30	CMIP7 development updates for chemistry	Simone Tilmes/ Rebecca Buchholz
8:45	Model-measurement comparisons during Australian extreme bushfires: MUSICA and AQFx	Samantha Lee (remote)
9:00	Simulated wildfire aerosols reduce global mean surface temperatures by up to 1 degree Celsius	Sean Leister
9:15	Analysis of ASIA-AQ observations with MUSICAv0	Louisa Emmons
9:30	Modeling Investigation of Volatile Methyl Siloxane Oxidation, Secondary Organic Aerosol Formation, and Aging Using CESM-MUSICA	Saeideh Mohammadi
9:45	Discussion	
10:00	Break	
10:30	Arctic halogens reduce ozone in the northern mid-latitudes	Rafael Pedro Fernandez
10:45	Investigating the role of chemistry on the methane budget in emission-driven CH4 simulations	Benjamin Gaubert
11:00	Distinct Efficacy of Regional Emissions in Affecting Global Methane Concentrations: A Modeling Study with Interactive Methane Chemistry and Emission Tags	Chuan Feng
11:15	Diagnosing the OH response to ENSO and its underlying drivers	Qindan Zhu
11:30	The CESM Chemical Forecast System: A Summary of Capabilities and What's Next	Shawn Honomichl (remote)
11:45	Discussion	

Poster

	Repartitioning CESM Fire CO and CO2 Emissions Using Satellite-Constrained Modified Combustion Efficiency	Lakhima Chutia
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