

Users and Projects

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Name /contact	Institute/ Organization	Description of project/s	Date updated
Rebecca Buchholz	NCAR/ACOM	Understanding fire pollution impact on air quality and climate, determining local versus distant contributions to pollution, links between climate and chemistry. Experiments include: 1. Full chemistry simulation over long time periods; 2. Intercomparison of fire inventories; 3. Tagged CO for pollution event attribution	20-20-07-09
Louisa Emmons	NCAR/ACOM	Co-chair of CESM Chemistry-Climate Working Group; evaluating updated chemistry mechanisms with field campaign observations; analysis of KORUS-AQ observations.	20-18-05-14
Benjamin Gaubert	NCAR/ACOM	Chemical data assimilation, ensemble forecasting, model evaluation and intercomparison.	20-18-05-01
Hannah Horowitz	University of Washington	Adding blowing snow sea salt emissions to study its radiative effects and predict changes in future climate.	20-19-02-27
Duseong Jo	University of Colorado, Boulder	Investigating the sources, properties, processing, and removal of organic aerosols under current and future climate scenarios.	20-18-04-26
Forrest Lacey	NCAR/ACOM	Implementing chemistry into spectral elements grid with regional refinement. Research focus includes modeling anthropogenic influences on ambient air quality and estimating the related health impacts.	20-18-06-13
Rebecca Schwantes	NCAR/ACOM	Improving simulated surface Ozone in CAM-chem by 1) Updating and adding more complexity to the current chemical mechanism for isoprene and terpene oxidation, 2) Testing different NO emission inventories and assumptions, and 3) Testing the impact of model resolution including using the new Spectral Element version of CAM-chem, which has the capability for regional refinement.	20-18-04-03
Wenfu Tang	University of Arizona	1) KORUS-AQ field campaign analysis, 2) CO2 simulation in CAM-chem.	20-18-07-11
Simone Tilmes	NCAR/ACOM	CESM Chemistry Climate Working Group Liaison / User Support for CAMchem. Works on CAM-chem development, evaluation, chemistry-aerosol-climate interactions.	20-18-06-20
Maria Val Martin	Leverhulme Centre for Climate Change Mitigation (LC3M), University of Sheffield	Works on atmosphere/biosphere/climate interactions; currently using CESM2 (CAM-chem/CLM5) to quantify unintended feedbacks on the Earth system from land-based CO2 removal strategies.	20-19-03-13
Siyuan Wang	NCAR/ACOM	Developing an online air-sea exchange module for trace gases for CESM, in order to better understand the broader impacts of ocean on the atmospheric budgets of an array of compounds of interests, such as oxygenated volatile organic compounds (OVOCs), halogenated VOCs, etc.	20-18-04-15
Najib Yusuf	NASRDA Centre for Atmospheric Research, Nigeria	Using CAM-chem with different emissions inventories to compare with ground-based, aircraft and satellite observations in order to study AQ and climate impacts over Nigeria.	20-18-09-28
Haipeng Zhang	Nanjing University	Using CAM-chem to investigate what causes the variation in low-cloud cover over China in recent years.	20-18-09-29
Yuqi Zhang	Duke University	Using CAM-Chem to investigate regional emission changes on global tropospheric ozone burden; To study the intercontinental transport of air pollution from China to western US.	20-18-10-10