CESM Whole Atmosphere Working Group Meeting  
20 – 21 February 2019  
Mesa Lab – National Center for Atmospheric Research – Boulder, Colorado

WEDNESDAY, 20 February:

Joint Session of Whole Atmosphere and Chemistry-Climate Working Groups  
Mesa Lab – Damon Room

Webcast Instructions:  
AUDIO: Dial this access number:  1-866-740-1260 – Enter access code 4971358  
VIDEO: Go to www.readytalk.com; under “join a meeting” enter access code 4971358

8:30 Coffee
9:00 Status of chemistry and aerosols in WACCM and CAM-chem  
Louisa Emmons
9:20 Reaching exposure-relevant scales: The implementation of full chemistry into  
regionally refined CAM-chem  
Forrest Lacey
9:40 Examining the impact of anthropogenic aerosols emitted by China on global climate  
using CESM2 coupled with MOSAIC aerosol module  
Zheng Lu
10:00 Update on the Brewer-Dobson Circulation variability driven by the QBO, including results from CESM-2  
Jessica Neu
10:20 Break
10:40 Stratospheric volcanic aerosol simulations using SD-WACCM/CARMA model  
Yunqian Zhu
11:00 Stratospheric aerosols and volcanic eruptions in WACCM6  
Mike Mills
11:20 New investigation into human and environmental impacts from nuclear war using WACCM  
Chuck Bardeen
11:40 Discussion
12:00 Lunch (on your own)

Joint Session of Atmosphere Model, Chemistry-Climate, and Whole Atmosphere  
Working Groups – Mesa Lab, Main Seminar Room

Webcast:  www.fin.ucar.edu/it/mms/ml-live.htm

1:00 Introduction to WACCM6  
Andrew Gettelman
1:20 Climate impacts of secondary organic aerosols (SOA)  
Simone Tilmes
1:40 QBO in 110L WACCM: the importance of vertical resolution  
Rolando Garcia
2:00 An improved aerosol wet processes parameterization coupled with an explicit  
convective cloud scheme in CAM6  
Yunpeng Shan
2:20 Efficient in-cloud removal of aerosols by deep convection  
Pengfei Yu
2:40 Spectrum: an underutilized dimension in model validations and diagnostics  
Xianglei Huang
3:00 Break
3:30 Evaluating and improving parameterization of ice fall velocity in convective  
clouds: Using the NCAR CAM-SCM with TWP-ICE data  
Lin Lin
3:50 Implementing marine organic aerosol and ice nucleation in CESM2: Description,  
evaluation, and impacts on clouds  
Xi Zhao
4:10 Competing roles of the fast and slow response in the total coupled West African  
precipitation response to anthropogenic aerosol forcing  
Paul Kushner / Haruki Hirasawa
4:30 Discussion: Promising parameterizations? Critical biases to get to the bottom of?  
5:30 Reception (Damon Room)
### Webcast Instructions:

**AUDIO:** Dial this access number: 1-866-740-1260 – Enter access code **8531794**  
**VIDEO:** Go to [www.readytalk.com](http://www.readytalk.com); under "join a meeting" enter access code **8531794**

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tr>
<td>9:00</td>
<td>Thermospheric and ionospheric composition and gravity wave</td>
<td>Hanli Liu</td>
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<td>9:20</td>
<td>The QBO in model-simulated and observed equatorial temperature of the lower stratosphere</td>
<td>Curt Covey</td>
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<td>9:40</td>
<td>Data assimilation in WACCM-X</td>
<td>Nich Pedatella</td>
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<td>10:00</td>
<td>Evaluation of the mesospheric polar vortices in SD-WACCM version 6</td>
<td>Lynn Harvey</td>
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<td><strong>Break</strong></td>
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<td>10:50</td>
<td>The semi-annual oscillation in WACCM and other models participating in QBOi</td>
<td>Anne Smith</td>
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<td>11:10</td>
<td>Quantifying Energetic Particle Precipitation (EPP) influences on the budget of NOy</td>
<td>Doug Kinnison</td>
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<td>11:30</td>
<td>Discussion</td>
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<td>12:00</td>
<td><strong>Adjourn</strong></td>
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