

Reference

To cite the data directly, please use:

Buchholz, R. R., Emmons, L. K., Tilmes, S., & The CESM2 Development Team, (2019). CESM2.1/CAM-chem Instantaneous Output for Boundary Conditions. UCAR/NCAR - Atmospheric Chemistry Observations and Modeling Laboratory. Subset used[†] XXX, Accessed^{*} dd mmm yyyy, <https://doi.org/10.5065/NMP7-EP60>.

[†]Please fill in the "subset used" with region and/or date of the subset you used (e.g. Lat: -10 to 10, Lon: 100 to 150, September 2015 - February 2016).

^{*}Please fill in the "Accessed" date with the day, month, and year that you last accessed the data (e.g. - 5 Aug 2011).

We suggest to also cite the following paper that discusses the new configuration of CESM2/CAM-chem and assesses chemical species, including using output from this boundary condition simulation.

Emmons, L. K., Schwantes, R. H., Orlando, J. J., Tyndall, G., Kinnison, D., Lamarque, J.F., et al., (2020). The Chemistry Mechanism in the Community Earth System Model version 2 (CESM2). *Journal of Advances in Modeling Earth Systems*, 12, e2019MS001882, <https://doi.org/10.1029/2019MS001882>.

Other simulations

Directions to access other experimental output can be found here: [Benchmarks and Production](#)

Using the boundary conditions with WRF-Chem

The CAM-chem chemistry and aerosols for this run are identical to the WACCM forecasts. Mapping CAM-chem output to WRF-Chem chemistry schemes can be found in:

https://www2.acom.ucar.edu/sites/default/files/wrf-chem/CESM-WRFchem_aerosols_20190822.pdf

which is linked from this page:

<https://www2.acom.ucar.edu/wrf-chem/wrf-chem-tools-community>