

HEMCO

HEMCO is the **H**armonized **E**missions **C**omponent. It is being implemented as a component for CESM, for use with CAM, CAM-chem, MUSICAv0, WACCM.

Getting started:

HEMCO in CESM, as of 2023-10-11:

- [HEMCO-CESM User's Guide](#)

Note there are reproducibility issues: https://github.com/ESCOMP/HEMCO_CESM/issues/31

Older version: Nov 2022:

- Presentation by Haipeng Lin at NCAR on 9 Nov 2022: [Slides](#) and [Video](#)
- Common error -
"Model cam missing file hemco_config_file = '/glade/scratch/hplin/2211_camchem_2.2_ne0korus/run/HEMCO_Config.rc.1'"
 - Please make sure to update user_nl_cam's hemco_config_file parameter to point to your own "run" directory in scratch! This is where the HEMCO_Config.rc and HEMCO_Diagn.rc files are downloaded to during the steps in slide 29.
 - Sample configuration files are available in https://github.com/jimmielin/HEMCO_CESM_configs/ and you may customize your own HEMCO_Config.rc file to specify emissions, following the slides and the HEMCO User's Guide: <https://hemco.readthedocs.io/en/stable/hco-ref-guide/hemco-config.html>.

Resources:

- HEMCO User's Guide: <https://hemco.readthedocs.io/>
- Reference for HEMCO in CESM: Lin et al., 2021: <https://gmd.copernicus.org/articles/14/5487/2021/>
- HEMCO Core code: <https://github.com/geoschem/HEMCO/>
- HEMCO-CESM interface: https://github.com/ESCOMP/HEMCO_CESM