

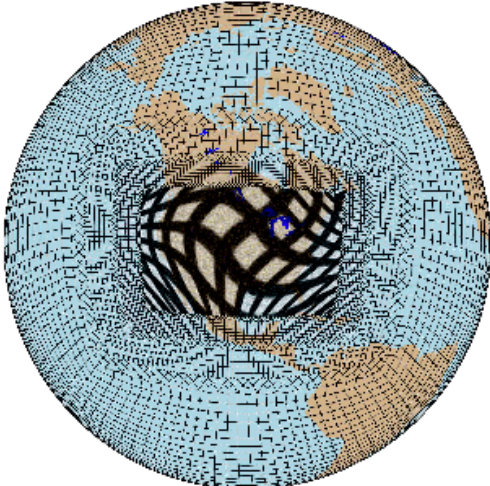
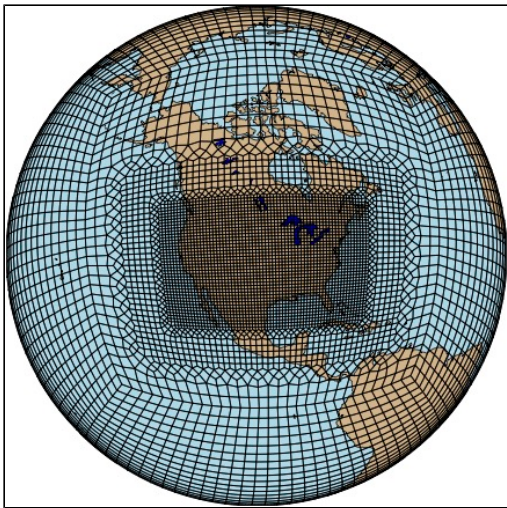
Available Grids

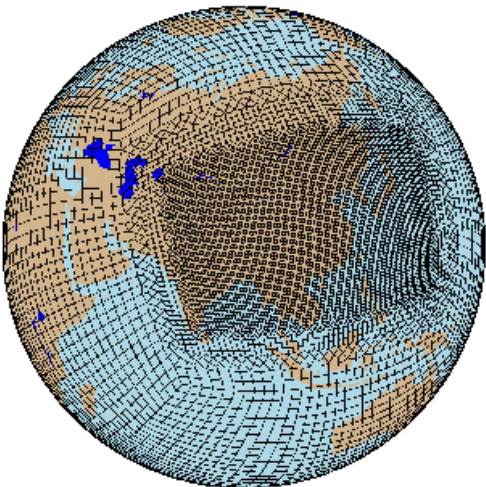
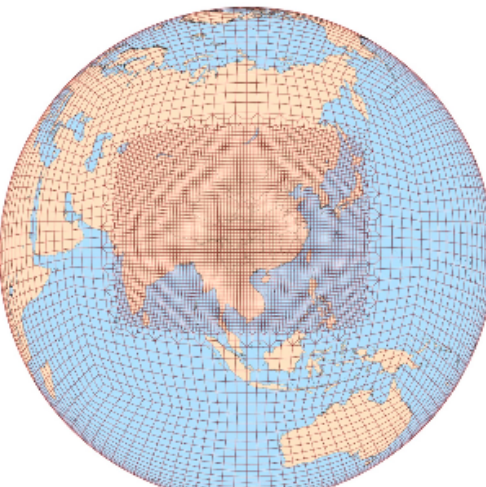
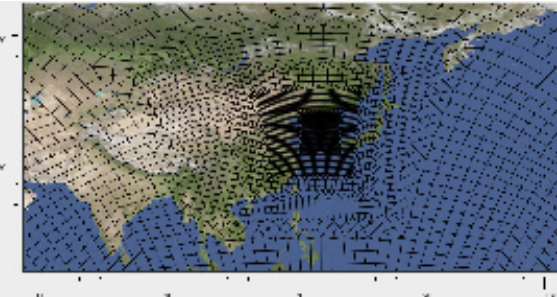
A number of grids have been created by various users for use in MUSICAv0 which we list here to demonstrate the diverse capability of MUSICAv0. The CONUS ne30x8 and ARCTIC grids are available resolutions in CESM2.2, but the other grids have been developed for various science applications which have not yet been published. In the future we plan to have a public repository of grids, or may provide some grids in future model results.

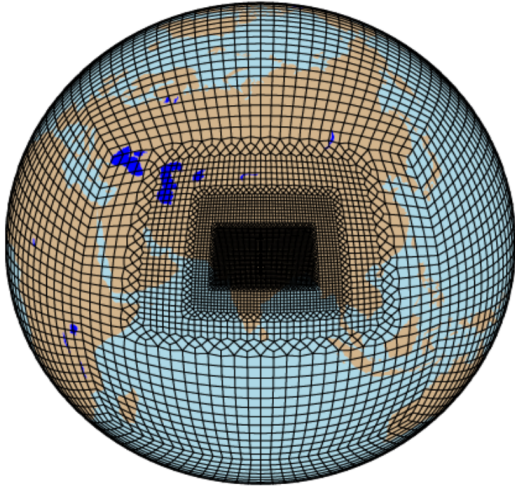
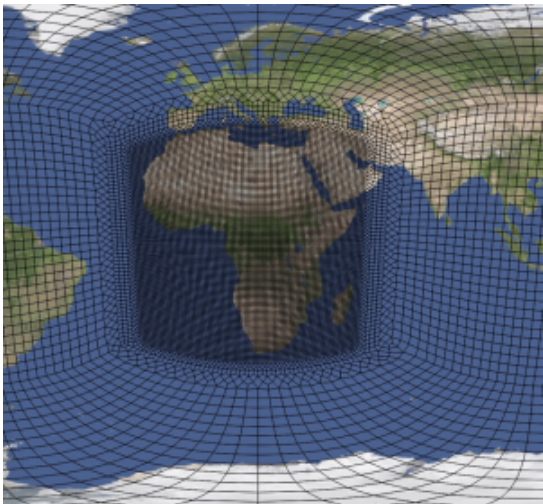
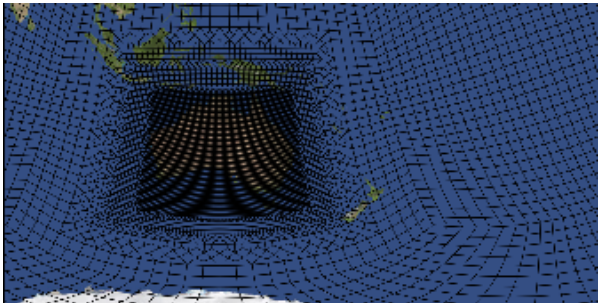
Protocol: Please contact the developer of the grid if you are interested it in using it and include them as co-author of any work using that grid.

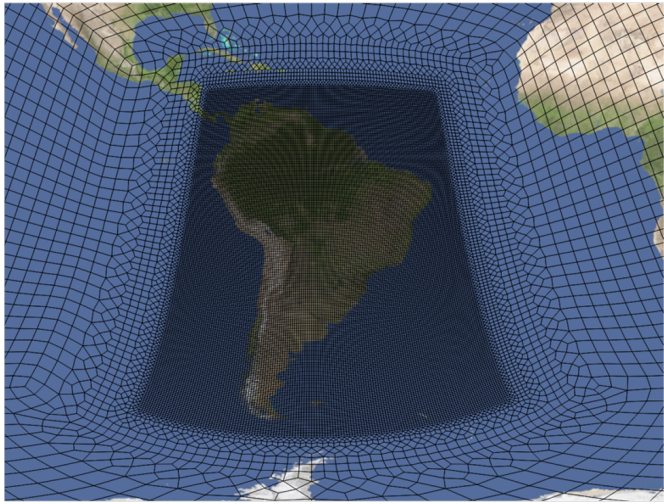
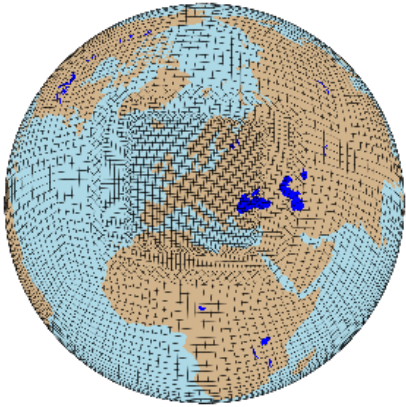
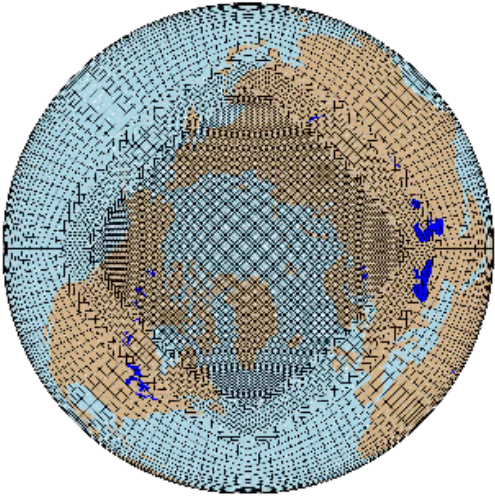
Emissions may be available for sharing for these grids - contact the grid developers. We will develop a public repository for those as well.

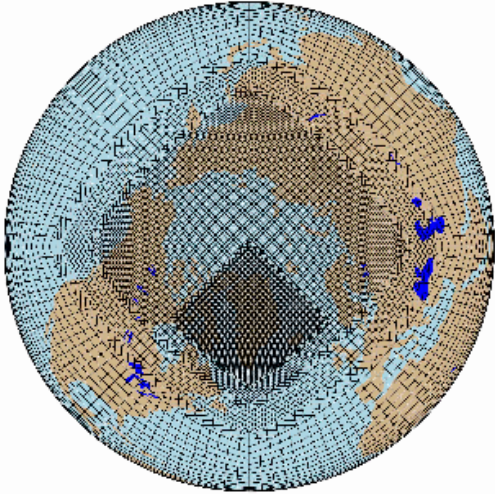
The grid resolutions (e.g., ne30x{N}) are defined at the bottom of this page.

Refined region	Resolution, Repository, Contact	Image (click for full size)
CONUS 1/8 degree (14 km)	Resolution: ne0CONUSne30x8_ne0CONUSne30x8_mt12 Repository: part of CESM2.2 (CAM User's Guide) Output from community simulation - DOI: https://doi.org/10.5065/tgbj-yv18 Publications: - Schwantes, R. et al., JAMES, in press. - Tang, Wenfu, et al., JGR-Atmospheres, in review.	
CONUS 1/4 degree (28 km)	Resolution: ne0np4.CONUS.ne30x4_mt12 Repository: /glade/campaign/acom/acom-weather/MUSICA/musica_repo/ne0np4.CONUS.ne30x4 Contact: Louisa Emmons, NCAR/ACOM	

East Asia 1/4 degree	Resolution: Repository: Contact: Ren Smith, Shawn Honomichl, Simone Tilmes, Jun Zhang, Doug Kinnison - NCAR/ACOM	
East Asia 1/4 degree	Contact: Man Yue, Minghui Wang, Nanjing University	
Korea 1/8, 1/16 degree	Contact: Duseong Jo, NCAR/ACOM Publications: Jo, D.S., et al., JAMES, in review.	

India 1/8 degree	Resolution: ne0np4.India07.ne30x8 Repository: /glade/work/behroozr/VRM_files/ne0np4.India07.ne30x8 Contact: Behrooz Roozitalab, Univ. Iowa	
Africa 1/4 degree	Resolution: ne0np4.africa_v5.ne30x4 Repository: /glade/work/wenfut/build_new_grid/AMWG_REPO/ne0np4.africa_v5.ne30x4 Contact: Wenfu Tang, NCAR/ACOM	
Australia 1/8 degree	Contact: Rebecca Buchholz, NCAR/ACOM	

South America 1/2, 1/4, 1/8, 1/16 degree		
Europe 1/4 and 1/8 degree	Resolution: Repository: /glade/work/lupascu/VRM_files Contact: Aurelia Lupescu, IASS Potsdam	Europe ne30x4 
ARCTIC 1/4 degree over Arctic	Resolution: ne0ARCTICne30x4_ne0ARCTICne30x4_mt 12 Repository: Available in CESM2.2 (CAM User's Guide); not yet used with chemistry (that we know of)	

ARCTICGRIS 1/8 degree over Greenland	Resolution: ne0ARCTICGRISne30x8_ne0ARCTICGRISne30x8_mt12 Repository: Available in CESM2.2 (CAM User's Guide); not yet used with chemistry (that we know of)	
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SE refined grid definitions

Refined resolution is the base grid resolution divided by 2^(refinement level)

Base grid name	Base grid resolution	Refinement level	Refinement name	Refinement region resolution (approx)
ne30	1 degree	1	ne30x2	0.5 degree
		2	ne30x4	0.25 degree
		3	ne30x8	0.125 degree (14 km)
		4	ne30x16	0.0625 degree (7 km)
ne60	0.5 degree	1	ne60x2	0.25 degree
		2	ne60x4	0.125 degree (14 km)
		3	ne60x8	0.0625 degree (7 km)