



NCAR
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**Community Earth
System Model**

**Development and Application of High-Resolution CESM
Configurations
31st Annual CESM Workshop
June 16th, 2026**

Tuesday, June 16th, 1:30- 4:30 pm

** All times are MST; Speakers: 10 min talk. Please leave 2 min at the end of your slot for questions.*

Time	Topic	Speakers	Organization
1:30-1:40	CMIP7 HighResMIP: Global high resolution climate modelling for process understanding, impacts and future change	Kevin Reed	Stony Brook University
1:40-1:50	Understanding solar climate intervention impacts on extremes requires large ensemble, high-resolution, and convection permitting simulations: Insights from the SCI-EX workshop	Danielle Touma	University of Texas at Austin
1:50-2:00	MESACLIP Project: An Update and Recent Highlights	Gokhan Danabasoglu	NSF NCAR
2:00-2:10	Using MESACLIP to investigate community relevant changes in the Bering Strait region, Alaska	Alice DuVivier	NSF NCAR
2:10-2:20	High-Resolution, Isotope-Enabled Coupled CESM simulations of "paleoWeather"	Bette Otto-Bliesner	NSF NCAR
2:20-2:30	A Global High-Resolution Ocean–Sea Ice Configuration for CESM3	Gustavo Marques	NSF NCAR
2:30-2:40	Anthropogenically forced tropical Pacific cooling via tropical–extratropical coupling	Cuong San	University of Colorado, Boulder
2:40-2:50	Migrating Semidiurnal Tidal Modulation on Resolved Gravity Waves during the 2018/2019 Major Sudden Stratospheric Warming	Zishun Qiao	NSF NCAR
2:50-3:00	Pacific winds and AMOC drive Indonesian Throughflow decline under future warming	Shawn Wang	University of Colorado, Boulder
3:00-3:30	Break		
3:30-3:40	A High-Resolution Regional Coupled MPAS-A–MOM6 Prototype for Air-Sea Interaction Research and Prediction	Dan Amrhein	NSF NCAR
3:40-3:50	The NSF StormSPEED Project: Enabling Kilometer-Scale Earth System Simulations in CESM3	Christiane Jablonowski	University of Michigan
3:50-4:00	Inclusion of a Mass-Flux Scheme Enables Realistic Tropical Clouds in the Global Storm-Resolving	Adam Herrington	NSF NCAR

	Configuration of CESM		
4:00-4:10	Convective Transport by the Asian Summer Monsoon with MUSICAv1	Ren Smith	NSF NCAR
4:10-4:20	Improving Fire Emission Estimates over Southeast Asia Using Himawari-9 and Multi-VIIRS Sensor Integration: Implications for Regional Air Quality Modeling	Nattamon (Jeep) Maneenoi	UCLA
4:20-4:30	Moisture Recycling over South America in Variable-Resolution CESM	Yang Tian	NSF NCAR
4:30-4:40	Hillslope-Scale Terrestrial Modeling for High-Resolution CESM Applications	Samar Minallah	NSF NCAR
4:40-4:50	Physics-Constrained Adaptive Flow Matching for Climate Downscaling	Aytaç Paçal	Deutsches Zentrum für Luft- und Raumfahrt (DLR)
4:50-5:00	Tropical Cyclones in CAM7: Assessing the Impact of Prognostic Momentum Fluxes and Convective Parameterization at Global and Storm Scales	Benjamin Stephens	NSF NCAR

Posters

	High-Resolution Modeling of Urban Wildfire Aerosols from the 2025 Los Angeles Fires	Elisa Bergas Masso	North Carolina State University
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