

Cross Working Groups

High Resolution (including regional and regionally-refined) development and applications

30th Annual CESM Workshop
June 11th, 2025

Wednesday, June 11th, 08:30 am – 12:00pm

* All times are MDT; **Speakers:** 10 minute talk + 2 minutes for Q&A and exchange. This will be strictly enforced to keep us on time.

Time	Topic	Speakers
08:30	Projected Increase of Tropical Cyclone Induced Extreme Rainfall Over Coastal Areas Under Climate Change	Dan Fu
08:42	Does model resolution impact its ECS and TCR?	Fred Castruccio
08:54	Insights into Regional Sea Level Rise from a High-Resolution CESM Ensemble	John Fasullo
09:06	The role of variability changes for future extreme precipitation – can high resolution models reduce the uncertainty?	Iris de Vries
09:18	DYAMOND simulations with CESM3	Adam Herrington
09:30	A Parallel Effort: E3SM's Plans for High Resolution	Peter Caldwell
09:42	Convection transition and convection organization over land: Case studies using regionally refined-SCREAM and ARM observations	His-Yen Ma
09:54	Kilometer-scale downscaling of CESM2 Large Ensemble simulations over CONUS	Alexander Thompson
10:06	BREAK	
10:36	Altered NAO - North Atlantic SST Feedback in Mesoscale Resolving Simulations	Joas Muller (online)
10:48	Representation and projections of midlatitude extreme wind speeds in the variable-resolution Community Earth System Model	Lucas Prates
11:00	Increased Model Resolution Amplifies Arctic Precipitation and Atmospheric Circulation Response to Sea-Ice Loss	Lantao Sun

11:12	Leveraging Variable-Resolution CESM to Understand the Drivers of a Historic Rain-on-Snow Flooding Event in Glacier National Park	Kyle Nardi
11:24	Various Types of Latent Heating Structures and the role of Western Boundary Current over the Kuroshio-Oyashio Extension Region	Dong Wan Kim
11:36	Developing Actionable Regional Climate Models and Data for Communities and Decision-makers Across Alaska and the Yukon River	Andrew Newman
11:48	NSF StormSPEED: Enabling Global Convection-Permitting Simulations with CESM3	Nicholas Forcone
12:00	<i>LUNCH</i>	

Posters

	Dynamical Downscaling of CESM-SAI Datasets for Assessing the Impacts of Climate Interventions	Kwesi Quagraine
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