NCAR OPERATED BY UCAR | Community Earth System Model

OCEAN MODEL
WINTER WORKING GROUP MEETING
February 2026

Thursday Feb. 5 Main Seminar Room

** All times are MST; **Speakers**: (15 min total: 12 min talk + 3 min for questions)*

Time	Topic	Speakers
8:25am	Welcome *Joint OMWG/PCWG* Topic: Wave-ice interactions	
8:30	Overview of sea ice floe size distribution and wave-fracture processes	Lettie Roach (REMOTE)
8:45	Wave-ice interactions in CESM3: Model physics and results	Cecilia Bitz
9:00	Machine learning-based parameterization of floe perimeter	Diajeng Atmojo (REMOTE)
9:15	A new parameterization to describe the health of a sea ice floe and its potential to influence wave fracture	Geraint Webb
9:30	The Full Wave-Coupled Configuration of E3SMv3: Wave, Ocean, Atmosphere, Sea Ice Coupling	Erin Thomas
9:45	Modelling wave–ice–ocean interactions using ACCESS-OM3	Noah Day (REMOTE)
10:00	*Discussion:* Topic: Wave-ice physics - Wave Ice Physics and future development - Coordinated experiments and analysis with CESM - Regional ice/ocean/wave modeling (CROCODILE) - other…	
10:30	***Break***	
11am	Understanding biases in Antarctic passive microwave sea ice concentration using ICESat-2, NISAR, and data assimilation.	Chris Horvat (REMOTE)
12-1:25	***Lunch (1 hr, 25 min)***	
1:25	Welcome - Joint OMWG/PCWG Focus: CESM3	Convenors: Gustavo Marques, Ian Grooms, Alice

		DuVivier, David Bailey
1:30	Cross WG Session for June Workshop: Storytelling to craft climate science tools for communities	Laura Landrum, Mari Tye, James Done
1:35	CESM3 sea ice overview	Alice DuVivier and Dave Bailey
1:50	CESM3 ocean overview	Ian Grooms and Gustavo Marques
2:15-3:00	*Discussion Topics:* - CESM3 release, CMIP7 plans, etc. - CESM3 planned manuscripts - Coordinated experiments and analysis, etc. - Regional ice/ocean/wave modeling (CROCODILE) - Anything else	
3:00-3:30	***Break***	
OMWG Only		
3:30	Design and implementation of ML parameterization to aid Gent-McWilliams scheme	Dhruv Balwada
3:50	Leith+E backscatter in CESM-MOM6	Ian Grooms
4:10	Using the ocean's internal wave spectrum to inform eddy viscosities	Darren Engwirda
4:30	An implicit closure for subgrid potential vorticity mixing in MOM6	Wenda Zhang
4:50	***Adjourn for day***	

Friday, Feb 6th - Main Seminar Room

** All times are MST; **Speakers**: (15 min total: 12 min talk + 3 min for questions)*

Time	Topic	Speakers
8:25	Introduction	
8:30	Experience with BLOM and the ALE method in earth system modelling	Mats Bentsen (REMOTE)
8:50	CFORCE: Creating the Next Generation Datasets for Forcing Ocean – Sea-ice Coupled Models	Margarita Markina

9:10	Status update on the software developments of the TURBO project	John Dennis
9:30	CESM Ocean Diagnostics: Current and Future Plans	Mike Levy
9:45	Simulating the Marine Methane Cycle	Shanlin Wang
10:05-10:30	***Break*: Posters**	
10:30	Quantifying wave groups' contributions to variability in surface wave properties	Ryan Du
10:50	Effects of Stochastic Parameterization in MOM6 on Global Ensemble-Based Data Assimilation	Kate Boden
11:10	Regional MOM6 in CESM via CROCODILE & CrocoDash	Dan Amrhein, Manish Venumuddula, and Aidan Janney
11:30	Model-data comparison tools using DART and CrocoLake	Enrico Milanese
11:45-12:00	*Discussion*: (Topics - Beyond CESM3) - ML enabled CESM - OMWG resource request and University large allocation requests - OMWG led community Experiments - Regional modeling/CROCODILE - High resolution	Gustavo Marques Ian Grooms
12:00-1:30	***Lunch (1.5 hrs: note cafeteria only serving employees)***	
1:30	Recent advances with the High-Resolution version of CESM by the MESACLIP project	Fred Castruccio
1:50	Characteristics of Mesoscale Eddies in an Eddy-Permitting Ocean Model and Reanalysis Data	Ben Lombardi
2:10	Predictability of ocean eddies and air-sea interaction	Justin Small
2:30	***Adjourn***	