

CESM POLAR MODEL AND LAND ICE WORKING GROUP MEETING 7-9 March 2022

Monday, March 7

** All times are MST*

Time	Topic	Speakers
1:00	Welcome and logistics	
1:05	Polar Climate Working Group update	Marika Holland and Dave Bailey
1:20	Impact of sea-ice model complexity on the performance of a sea-ice/ocean model under different atmospheric forcing	Lorenzo Zampieri
1:35	Snow redistribution onto young ice: Sensitivity in CESM2	David Clemens-Sewall
1:50	Spurious climate impacts in sea ice loss simulations	Mark Ross England
2:05	Feedbacks, climate sensitivity and polar amplification insights from volcanic eruptions in model large ensembles	Andrew Pauling
2:20	Break	
2:45	Impact of winds on Arctic climate	Edward Blanchard-Wrigglesworth
3:00	An optimal atmospheric circulation mode in the Arctic favoring strong summertime sea ice melting and ice-albedo feedback	Ian Baxter
3:15	Surface salinity under transitioning ice cover in the Canada Basin: Climate model biases linked to vertical distribution of fresh water	Erica Rosenblum
3:30	Understanding Davis Strait freshwater flux variability using observations and models	Jed Lenetsky
3:45	The changing influence of cyclones on Arctic sea ice under global warming	Robin Clancy
4:00	TBD	Petra Heil
4:15	Discussion	
4:30	Adjourn	

Tuesday, March 8

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Time	Topic	Speakers
8:30	Welcome and logistics	
8:35	Teleconnections between El Niño events and Southern Ocean heat uptake in CMIP6	Ariel Morrison
8:50	Has there been a snow drought in Antarctica, and do our models get it?	David Schneider
9:05	ANTS! Variable-resolution CESM over Antarctica, quantifying the impact of resolution	Tri Datta
9:20	Assessing Antarctic polynyas and their impacts on biology	Alice DuVivier
9:35	Actionable science in the context of polar climate research	Monica Morrison
9:50	Break	
10:00	Discussion: PCWG and LIWG opportunities for CESM3	
10:45	Adjourn for seminar	
11:00	CGD Seminar: Anticipating climate change over Antarctica: Means and extremes over a warming ice sheet https://www.youtube.com/c/NCARCGD/featured	Hansi Singh
12:00	Informal Zoom lunch	

Wednesday, March 9

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Time	Topic	Speakers
8:30	Welcome and logistics	
8:35	Land Ice Working Group modeling and software update	Bill Lipscomb, Gunter Leguy, Kate Thayer-Calder
9:00	Variable-resolution CESM in High Mountain Asia	René Wijngaard
9:15	Modeling the Evolution of Himalaya-Karakoram-Hindukush Glacier	Samar Minallah
9:30	Modeling constraints derived from high-resolution altimeter data: crevasses on land ice, ponds and ridges on sea ice, and other examples of complexity in the cryosphere	Ute Herzfeld

9:45	Modeling satellite-based Antarctic melt leads to higher Southern Ocean sea ice extent by 2100	Tessa Gorte
10:00	Break	
10:30	Improving the incorporation of ice streams in North American ice sheets by combining datasets of subglacial geology, landform evidence and a revised model of subglacial hydrology	Sarah Bradley
10:45	Coupled Greenland ice sheet-climate simulations with the Norwegian Earth System model	Heiko Goelzer
11:00	Testing the Zoet-Iverson basal friction law in ISMIP6-like experiments	Tim van den Akker
11:15	Under what conditions does WAIS collapse? Evaluating the CESM2 Southern Ocean response during the Last Interglacial	Mira Berdahl
11:30	Discussion	
12:00	Adjourn	