

PSMI Panel Meeting, September 5 and 6, 2024

Thursday, September 5

All times are EST, * indicates virtual

Time	Topic	Speakers
<i>Location: Geophysical Fluid Dynamics Laboratory (GFDL) Princeton University Forrestal Campus</i>		
8:30 AM	Breakfast	
9:30 AM	Introduction and logistics	
9:45 AM	Session 1: Big data, and model-process study intercomparisons	
9:50 AM	3.5 experiences with data for process studies*	Robert Pincus (Columbia University)
10:10 AM	Open climate data for agile and inclusive science communities*	Julius Busecke (Columbia University)
10:30 AM	Break	
10:50 AM	Towards improved cloud parameterizations in climate models using machine learning	Kara Lamb (Columbia University)
11:10 AM	Discussion	
11:50 AM	Panel discussion	
12:00 PM	Lunch	
1:00 PM	Session 2: Bringing together large eddy models and field data to build a parameterization	
1:05 PM	Global kilometer-scale atmospheric models: opportunities and challenges	Pu Lin (Princeton University)
1:25 PM	Improving upper ocean vertical mixing parameterizations with large eddy simulations and observations*	Brandon Reichl (NOAA)
1:45 PM	Using large-eddy simulations informed by observations for developing GCM parameterizations: achievements and challenges	Zhihong Tan (Princeton University)
2:05 PM	Discussion	
3:00 PM	Break	
3:30 PM	Session 3: CPT Planning (panel members only)	
4:45 PM	Discussion	
5:30 PM	End day 1	
6:30 PM	Panel working dinner (panel members only)	

Friday, September 6

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Time	Topic	Speakers
<i>Location: Geophysical Fluid Dynamics Laboratory (GFDL) Princeton University Forrestal Campus</i>		
8:30 AM	Breakfast	
9:30 AM	Recap of day 1	
9:45 AM	Session 4: Continuity of the long-term climate observational record	
9:50 AM	The role of observations in climate model development and evaluation	Leo Donner (GFDL)
10:10 AM	Libera, NASA's next-gen ERB continuity mission*	Maria Hakuba (JPL)
10:30 AM	Break	
10:50 AM	How Argo observations can be used to inform models*	Susan Wijffels (WHOI – Argo)
11:10 AM	Discussion	
12:00 PM	Lunch	
1:00 PM	Session 5: SST pattern effect and process level investigation of the causes for GCM biases in historical SST trend patterns	
1:00 PM	Decadal cooling trends in the eastern equatorial Pacific: separating the forced response to global warming from natural variability	Alexey Federov (Yale University)
1:20 PM	How the good (global-mean temperature) and the bad (global-mean radiation and local surface temperature) conspire to the ugly (radiative feedbacks)*	Maria Rugenstein (Colorado State University)
1:40 PM	Impacts of missing Southern Ocean cooling on the recent tropical Pacific SST trend bias*	Sarah Kang (Max Planck Institute for Meteorology)
2:00 PM	Discussion	
3:00 PM	Break	
3:30 PM	Panel summary work session	
4:00 PM	Session summaries (10 minutes each)	
4:50 PM	Circle back to panel priorities & plan future activities	
5:30 PM	Meeting concludes	