Supplementary of "The Late Pliocene jet stream: Changes and drivers of the mean state and variability"

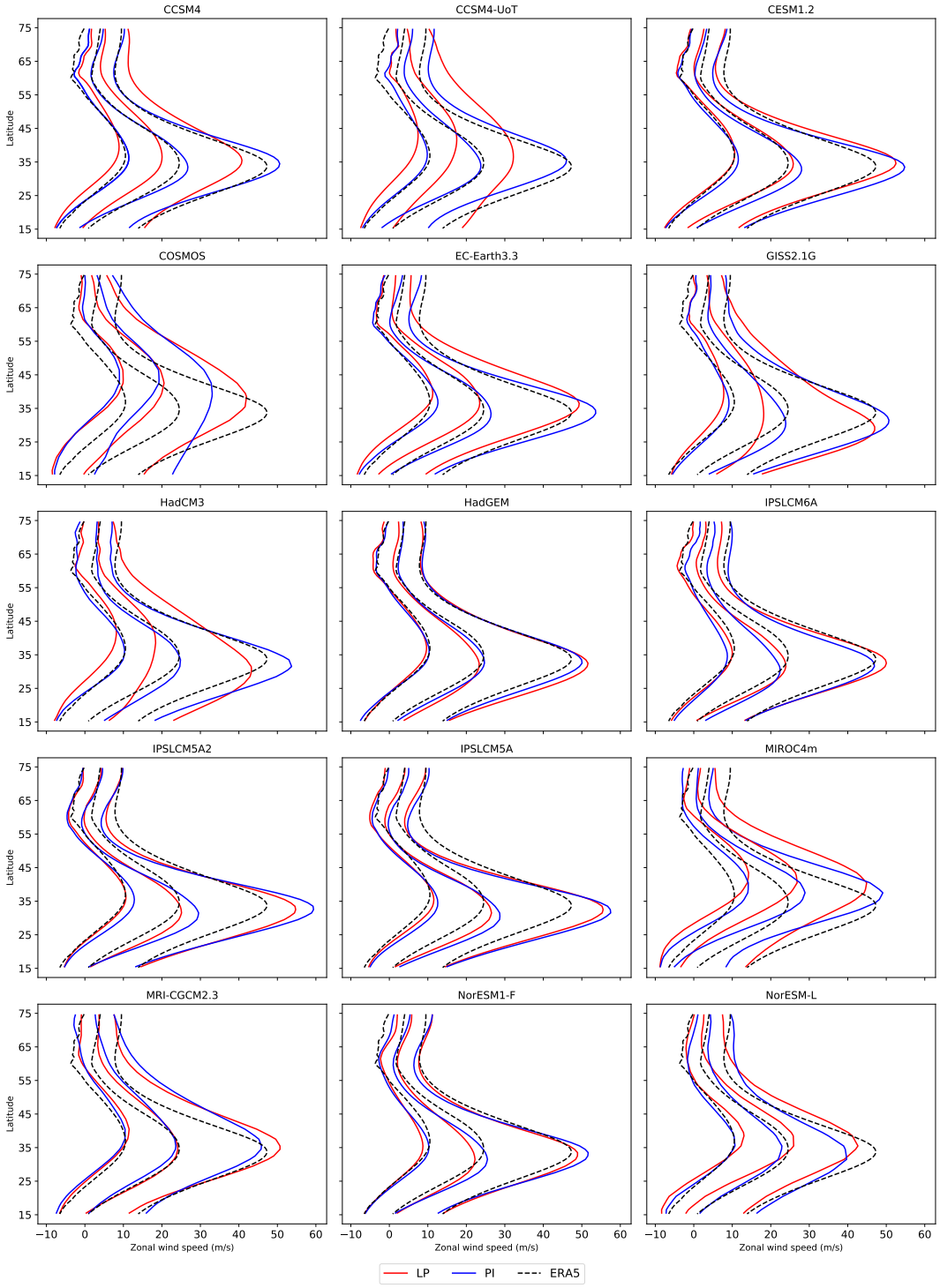

Figure S1. North Pacific winter zonal wind speeds for the PI (blue) and LP (red) for each model. ERA5 reanalysis data is shown in the dashed black line.

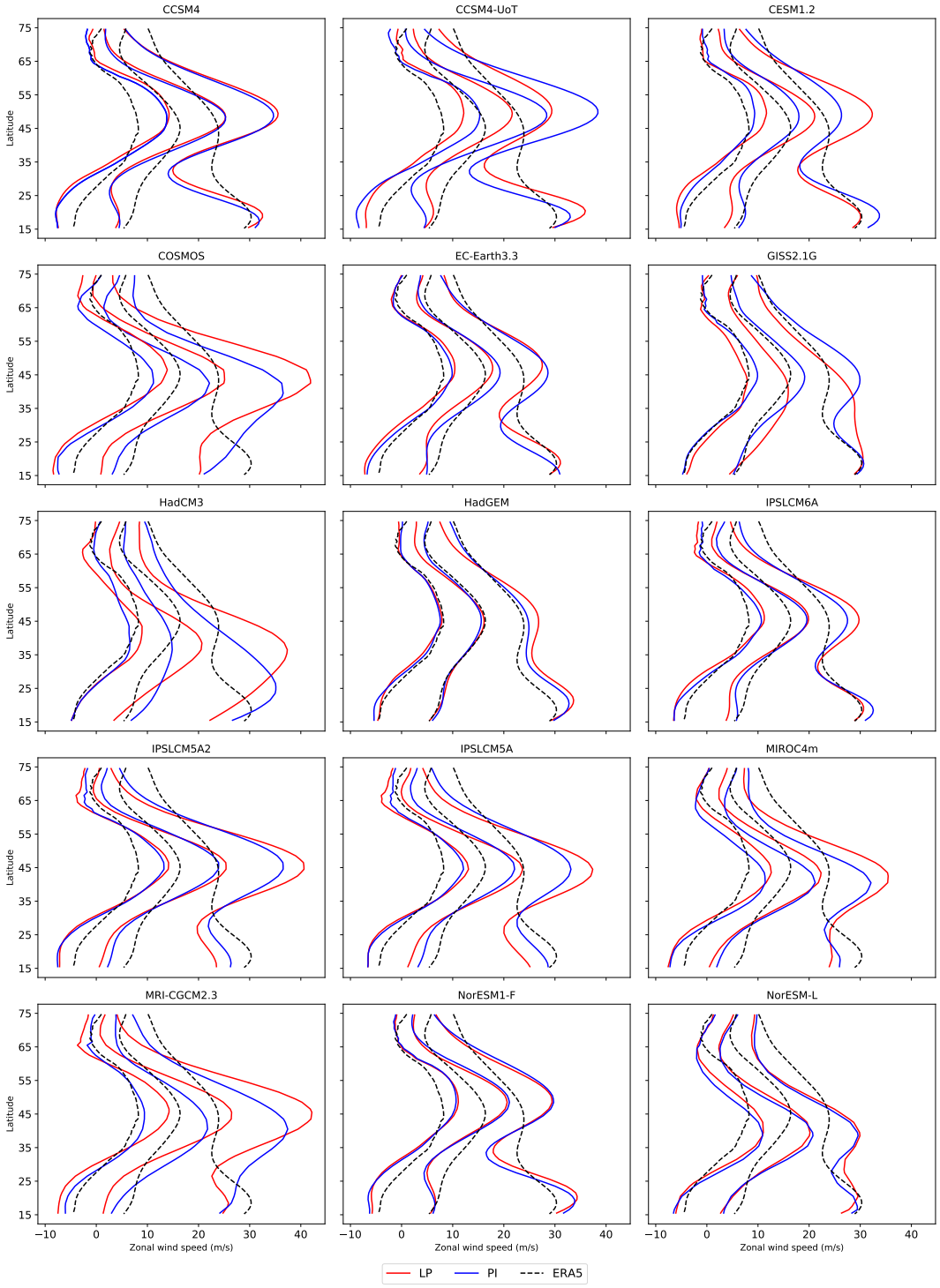

Figure S2. North Atlantic winter zonal wind speeds for the PI (blue) and LP (red) for each model. ERA5 reanalysis data is shown in the dashed black line.

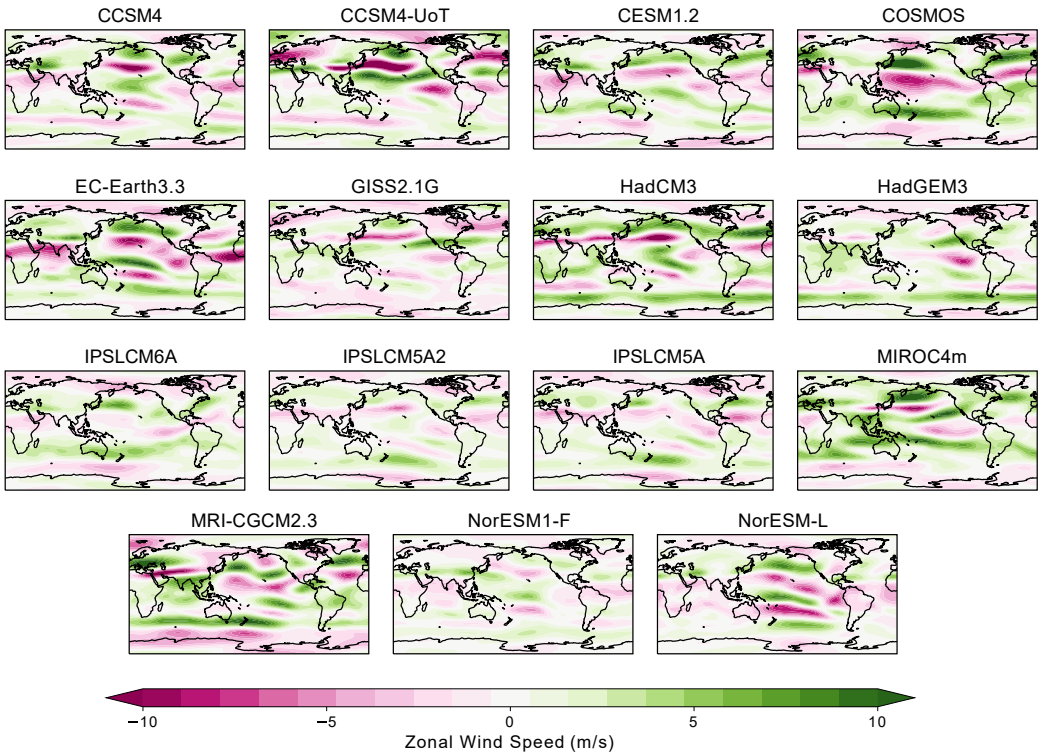

Figure S3. LP-PI zonal wind speeds at 200hPa for each model.

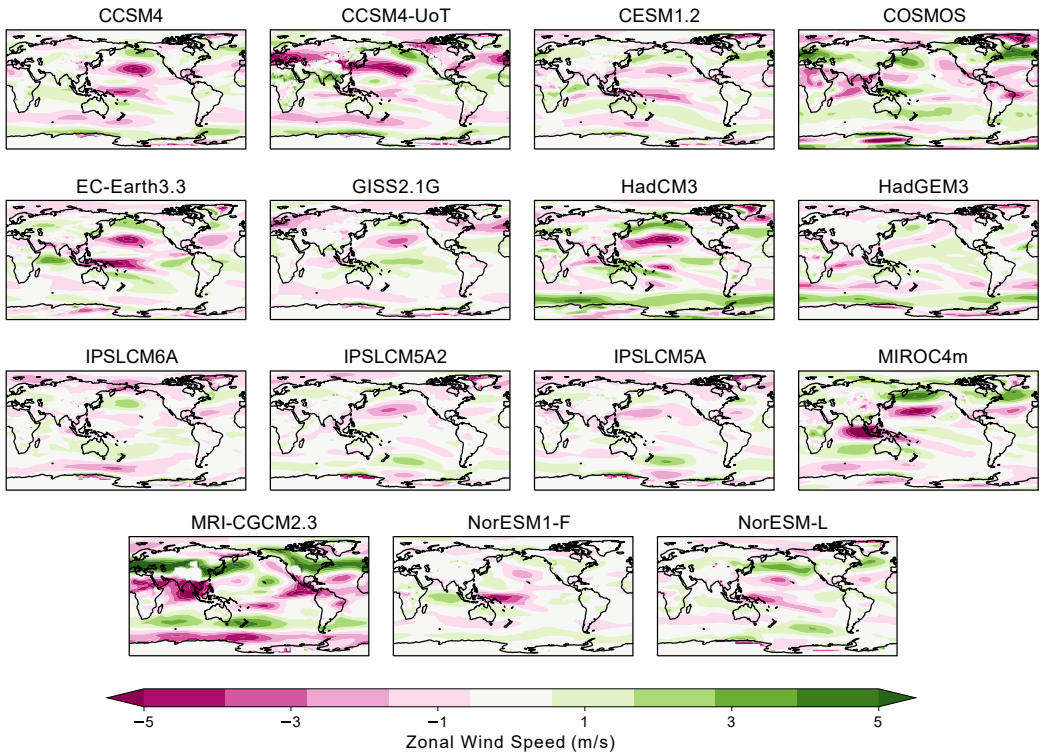

Figure S4. LP-PI zonal wind speeds at 850hPa for each model.

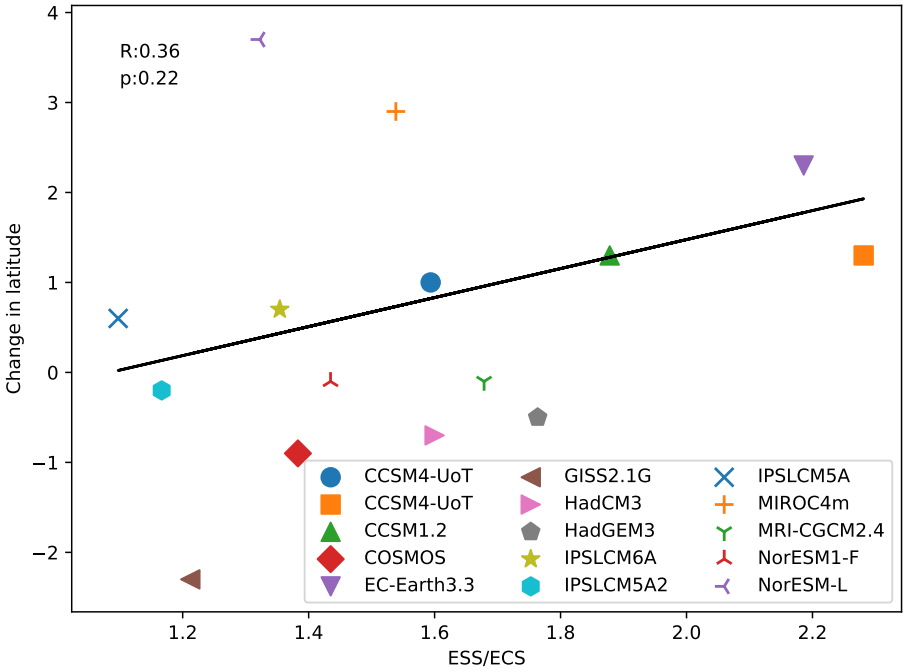

Figure S5. Ratio of Earth system sensitivity (ESS) and Equilibrium climate sensitivity (ECS). The black line shows the line of best fit (not including HadGEM3 or MRI-CGCM2.3), with the Pearson correlation and p value shown in the top left.

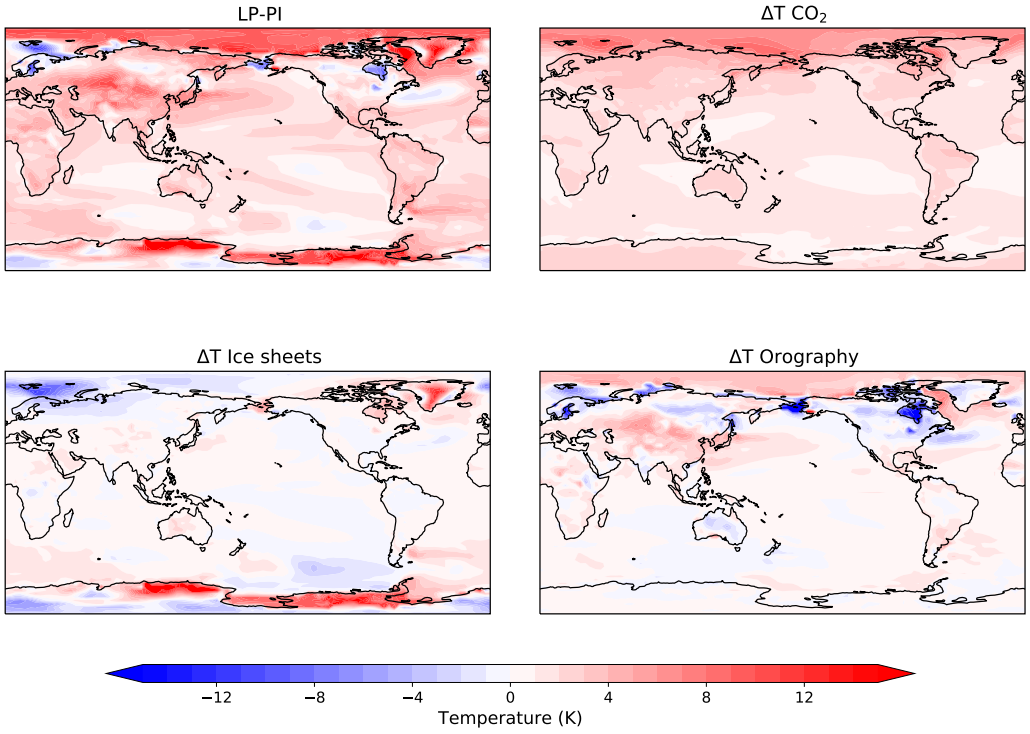

Figure S6. Change in surface temperature between the Late Pliocene and the Pre-industrial in HadCM3 and the contribution of the change in CO_2, Ice sheet and Orography forcings to the total change.

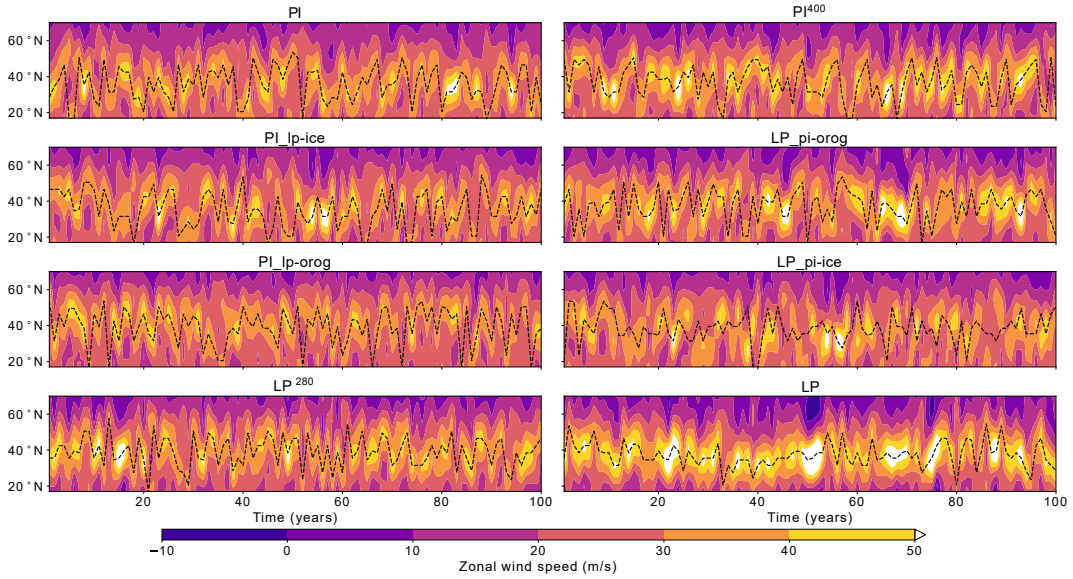

Figure S7. Hovmöller diagrams for the zonal mean wind speed at 200hPa for 100 Januaries for the North Pacific from COSMOS. The dashed black line indicates the latitude of maximum zonal wind speed.

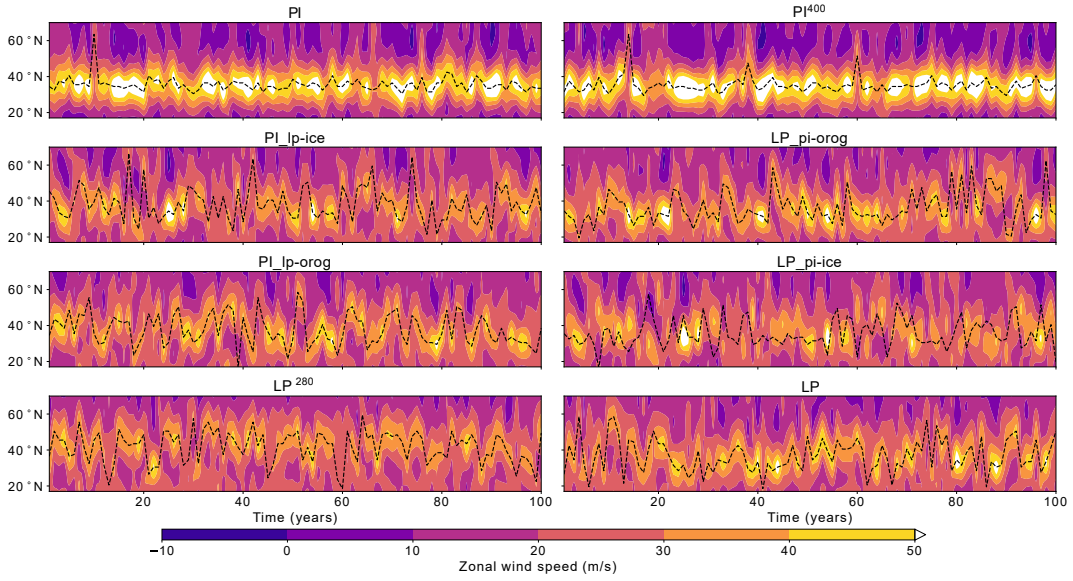

Figure S8. Hovmöller diagrams for the zonal mean wind speed at 200hPa for 100 Januaries for the North Pacific from CCSM4-UoT. The dashed black line indicates the latitude of maximum zonal wind speed.

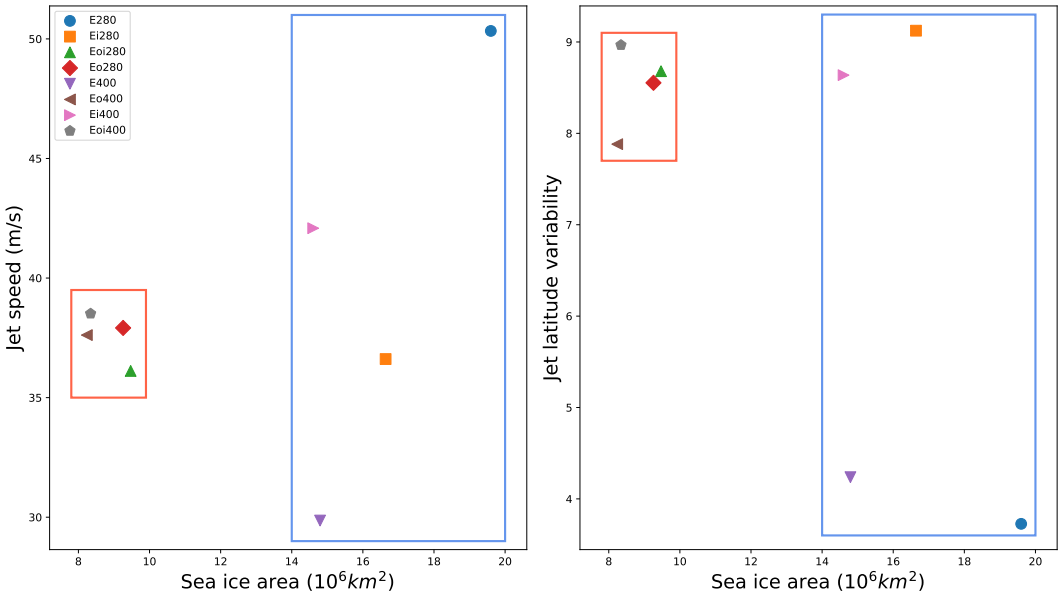

Figure S9. January sea ice area and jet stream speed, and jet latitude variability in CCSM4-UoT. The red box groups experiments with Late Pliocene orography and the blue box group experiments with pre-industrial orography.