

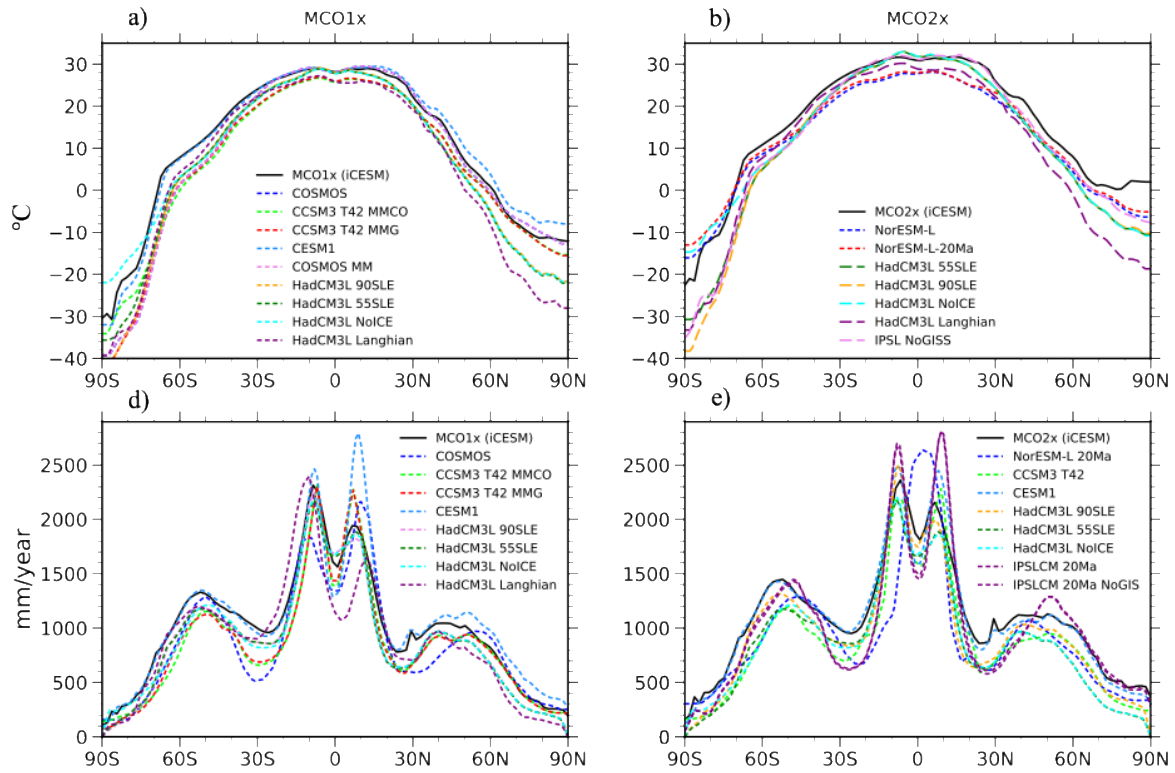


Figure SP16. Comparison of simulated zonal mean surface temperature (a,b) and annual precipitation (c,d) against available MioMIP simulations at 1x and 2x PI CO₂. Our iCESM simulations are plotted in black.

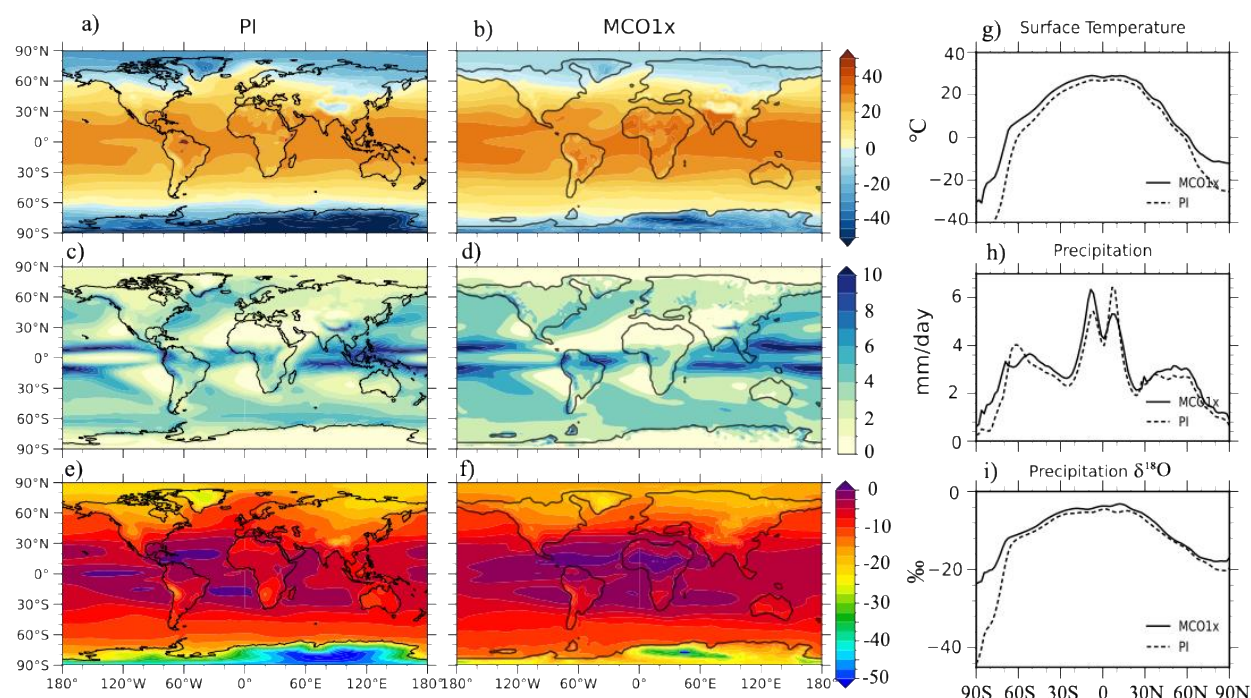


Figure 2. Comparison of simulated MCO climate under 1x PI CO₂ and PI climate for annual mean surface temperature (a, b) precipitation (c, d) and $\delta^{18}\text{O}_p$ (e, f). The right panel shows the zonal mean annual surface temperature (g), precipitation (h), and precipitation $\delta^{18}\text{O}_p$ (i).

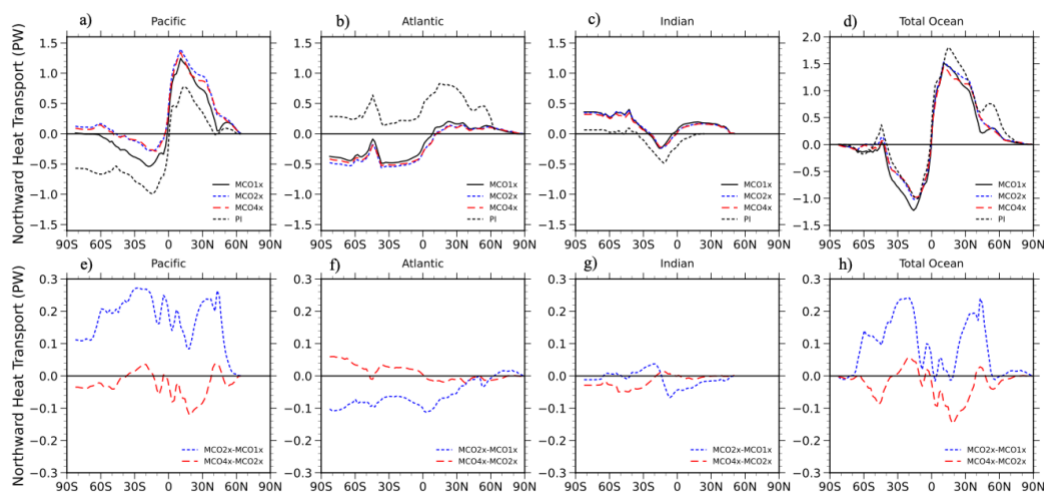


Figure 7. Meridional ocean heat transport by the Pacific (a), Atlantic (b), Indian (c) and Global Ocean (d) for PI and the three MCO experiments. The lower panel shows differences between the MCO2x and MCO1x, and MCO4x and MCO2x for the Pacific (e), Atlantic (f), Indian (g) and Global Ocean (h).

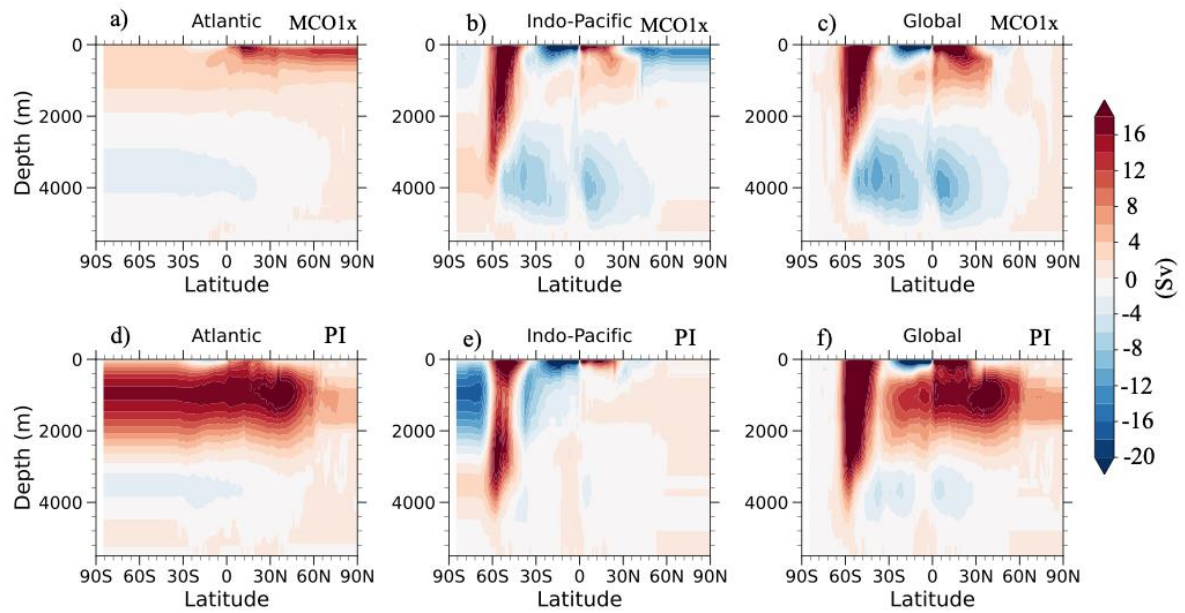


Figure 9. Zonal mean stream function of the Meridional Overturning circulation in the Atlantic, Indo-Pacific and global ocean for the MCO1x (a,b,c) and preindustrial (d,e,f).

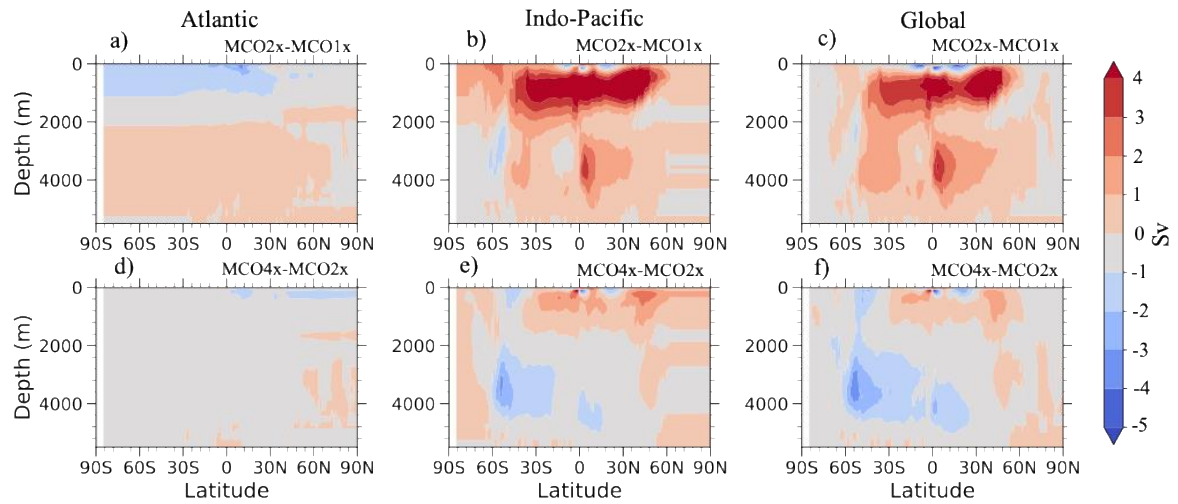


Figure SP8. Zonal mean stream function differences in ocean overturning circulation for MCO2x-MCO1x, and MCO4x-MCO2x in the Atlantic (a,d), Indo-Pacific (b,e) and Global ocean (c,f).