

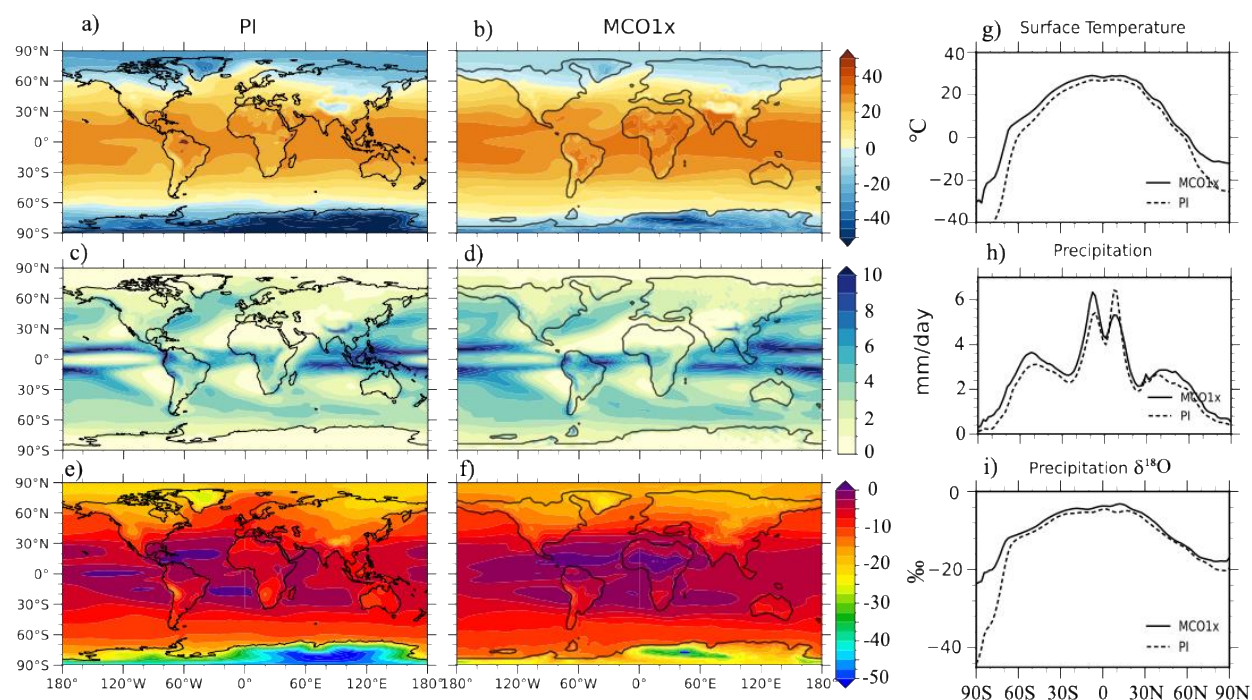


Figure 2. Comparison of simulated MCO climate under 1x PI CO₂ and PI climate for annual mean surface temperature (a, b) precipitation (c, d) and $\delta^{18}\text{O}_p$ (e, f). The right panel shows the zonal mean annual surface temperature (g), precipitation (h), and precipitation $\delta^{18}\text{O}_p$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

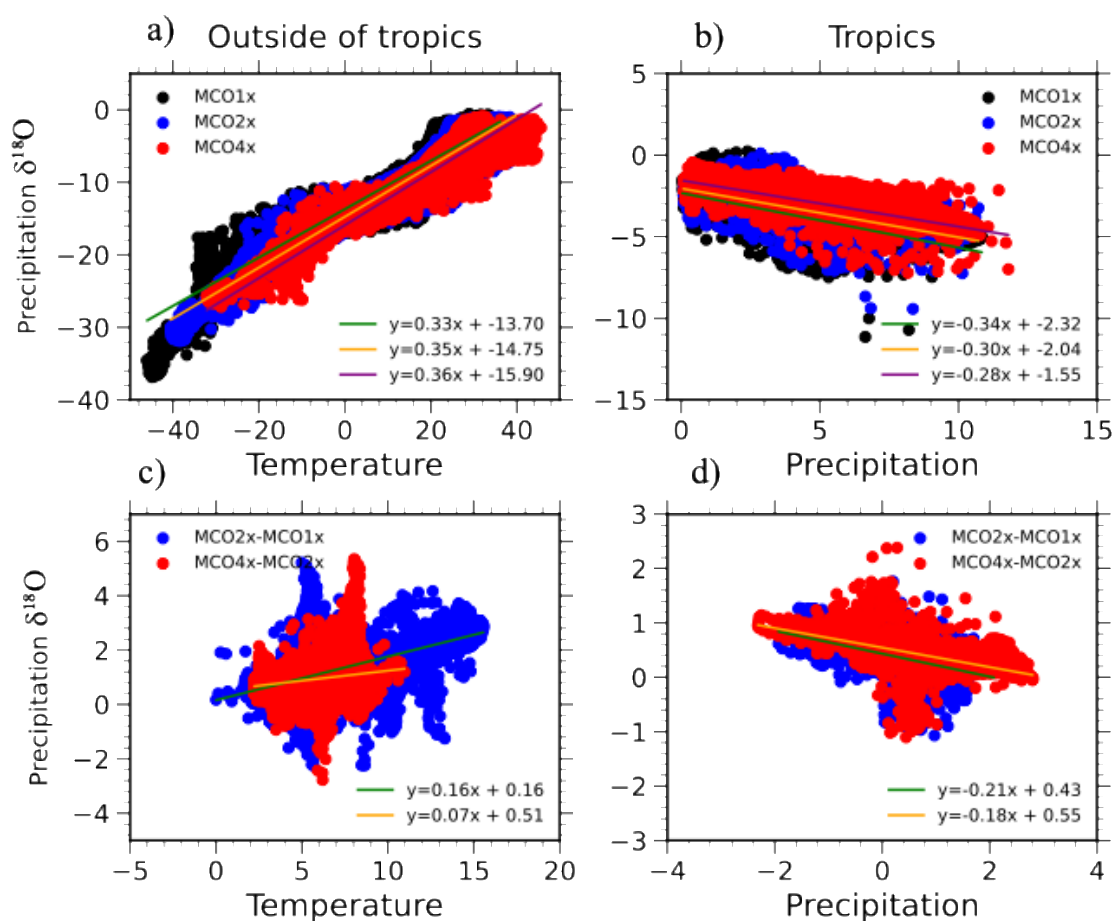


Figure SP6. Mean annual $\delta^{18}\text{O}_p$ versus temperature outside of the tropics (15-90°N and 90-15°S) (a) and versus precipitation in the tropics (15°N to 15°S) (b) at each model grid cell using annual climatology of model data. The regression lines: green is for MCO1x, orange is for MCO2x, and purple is for MCO4x. The bottom panel shows the differences in the same $\delta^{18}\text{O}_p$, temperature (c) and precipitation (d) data between MCO2x-MCO1x (green regression line) and MCO4x-MCO2x (orange regression line).

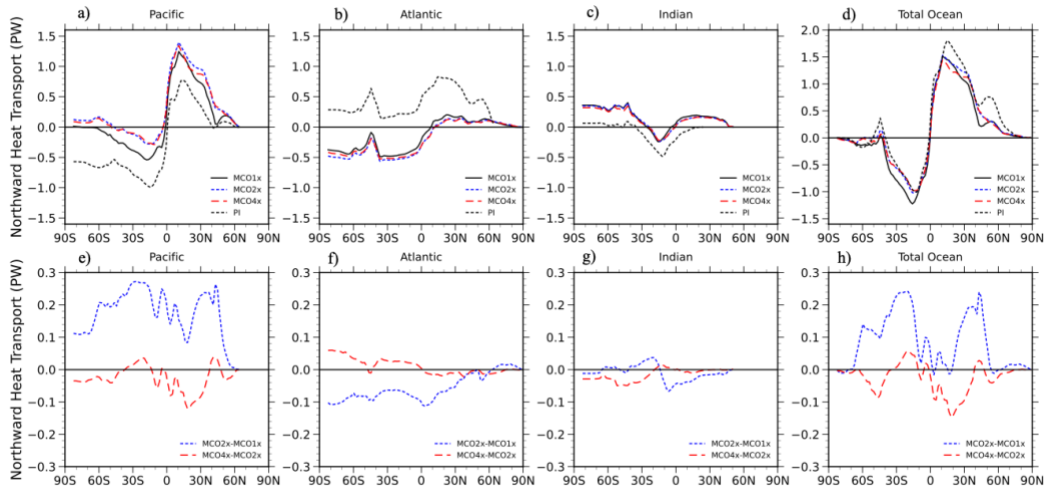


Figure 7. Meridional ocean heat transport by the Pacific (a), Atlantic (b), Indian (c) and Global ocean (d) for PI and the three MCO experiments. The lower panel shows differences between the MCO2x and MCO1x, and MCO4x and MCO2x for the Pacific (e), Atlantic (f), Indian (g) and Global ocean (h).

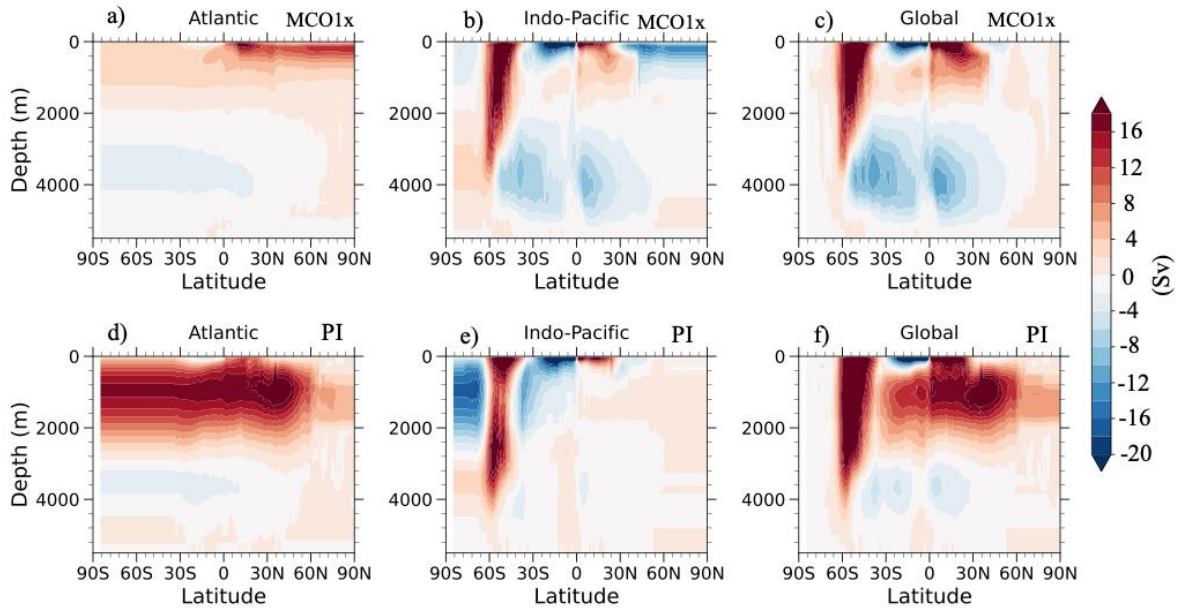


Figure 9. Zonal mean stream function of the Meridional Overturning circulation in the Atlantic, Indo-Pacific and global ocean for the MCO1x (a,b,c) and preindustrial (d,e,f).

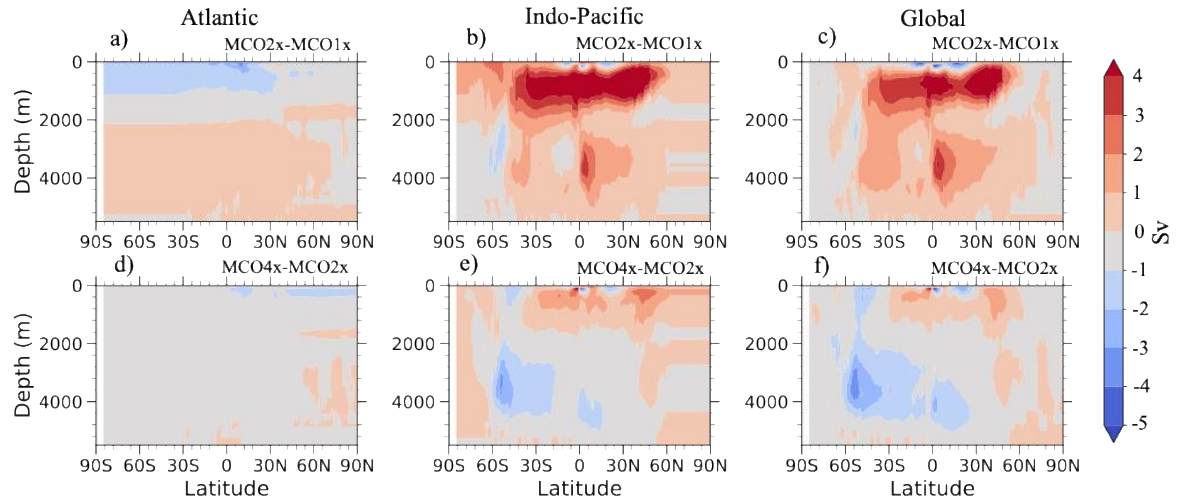


Figure SP7. Zonal mean stream function differences in ocean overturning circulation for MCO2x-MCO1x, and MCO4x-MCO2x in the Atlantic (a,d), Indo-Pacific (b,e) and Global ocean (c,f).