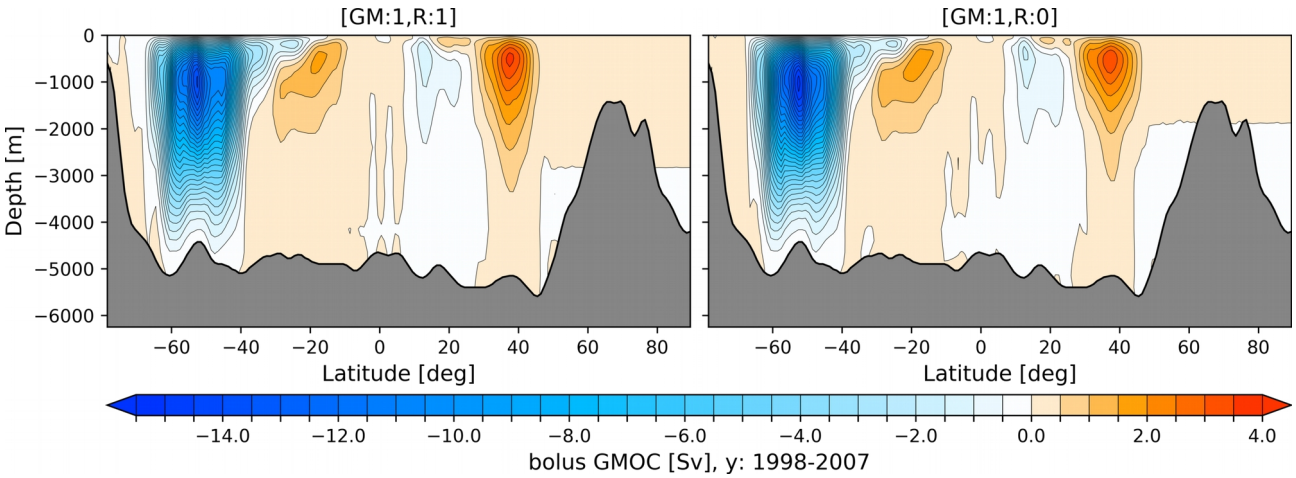
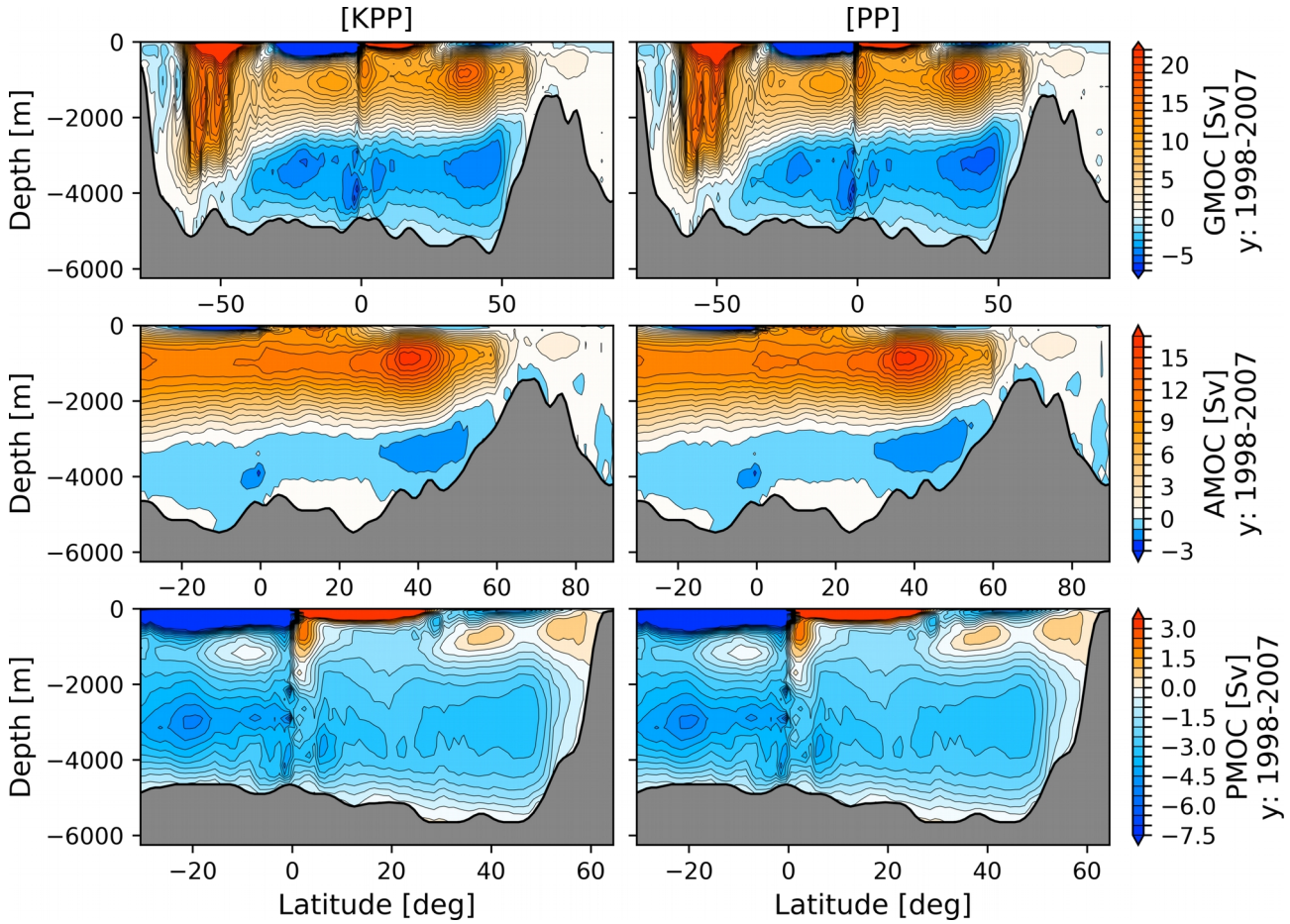
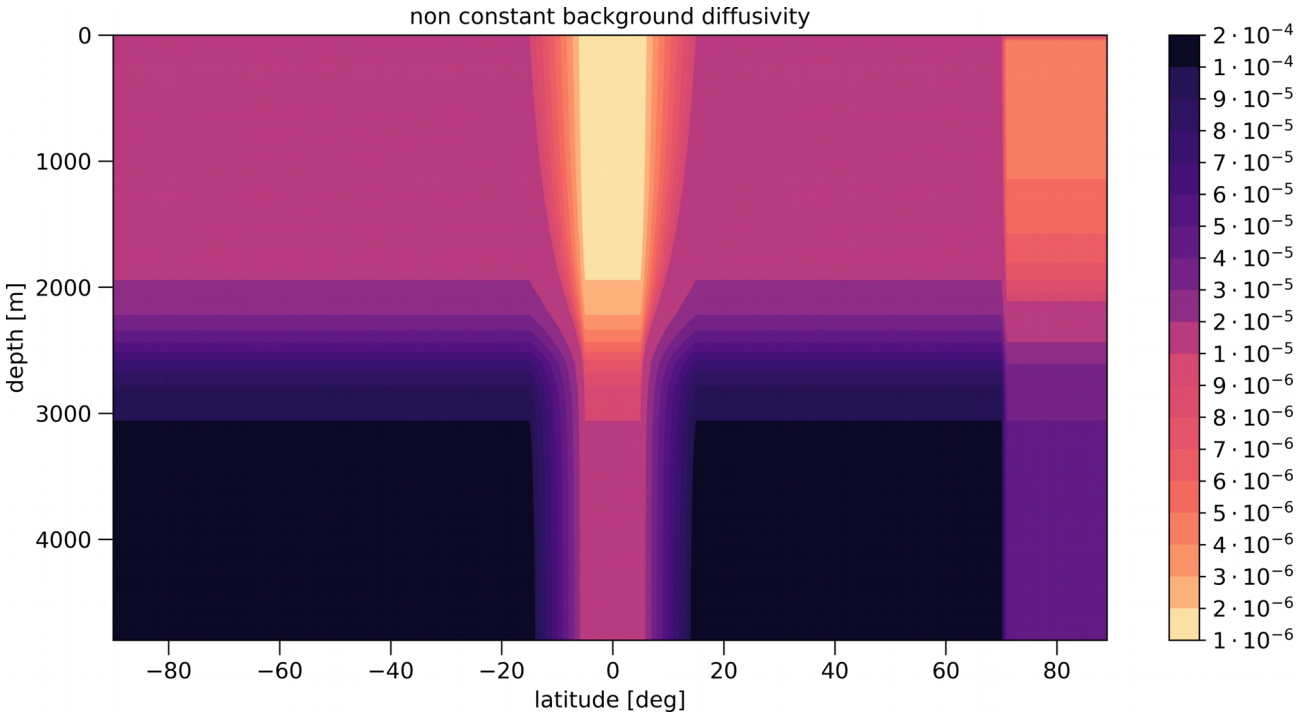
Supplementary



Suppl. 1: Global Meridional Overturning Circulation (GMOC) calculated from Gent McWilliams vertical bolus velocity, averaged for the time period 1998-2007, for the reference simulation (left) and the simulation in which the Redi diffusivity is set to zero (right).



Suppl. 2: Global (GMOC, upper row), Atlantic (AMOC, middle row) and Indo-Pacific (PMOC, lower row) Meridional Overturning Circulation averaged for the time period 1998-2007 for the simulations with KPP (left column) and PP (right column) vertical mixing.



Suppl. 3: Depth and latitude dependent background vertical diffusivity used in PP and KPP vertical mixing scheme.