



Supplement of

No changes in overall AMOC strength in interglacial PMIP4 time slices

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Supplement

Fig. 5 in the main text shows the estimated maximum contribution of AMOC-related temperature changes to the *mid-Holocene* annual mean temperature anomalies. Equivalents for the AMOC-induced precipitation contributions in each model end up looking rather messy, mainly because both the AMOC fingerprint and the *midHolocene* changes are spatially heterogeneous with several location of no changes in precipitation. To increase the clarity of the precipitation contributions, we choose
5 instead to present the ensemble mean of the percentage of precipitation changes that could be explained by AMOC changes.

All the models are first regridded onto a common $1^\circ \times 1^\circ$ grid, then the ensemble mean AMOC-induced precipitation changes ($\overline{\Delta P_\Psi}$) are computed, as are the ensemble mean simulated precipitation changes ($\overline{\Delta P}$). The ratio of these to ensemble mean fields ($\overline{\Delta P_\Psi} / \overline{\Delta P}$) is shown in the Figure below.

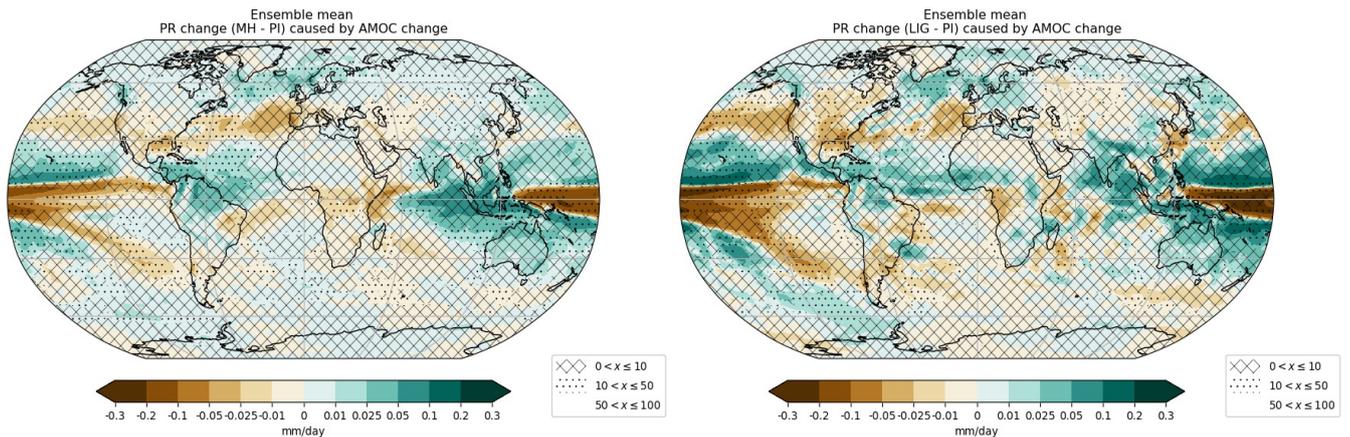


Figure 1. Ensemble mean plot of the precipitation changes caused by AMOC changes ($\overline{\Delta P_\Psi}$) at the *midHolocene* (left) and *lig127k* (right). Overlaid markers provide, the percentage of those changes that could potentially be explained by AMOC changes ($100 \times \overline{\Delta P_\Psi} / \overline{\Delta P}$): no shading indicates that AMOC contributes half or more of the changes ($>50\%$) seen in the experiment, whilst the dotted symbol indicates a small contribution (10-50%). Areas where there this no AMOC contribution ($<10\%$) are covered by crosshatching.