

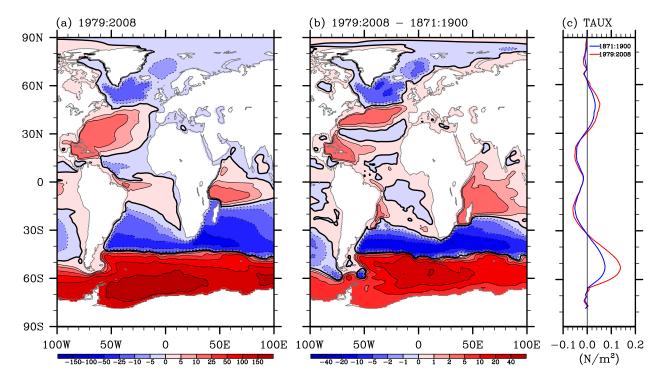
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Figure S1. Time series of the simulated AMOC index (maximum overturning stream function)

- at 30°S obtained from (a) EXP\_REM and (b) EXP\_ATL. Green lines are obtained by performing
- 4 a 11- year running average.

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**Figure S2.** (a) Simulated barotropic streamfunction averaged for the 1979-2008 period obtained from EXP\_CTR. (b) Difference in the simulated barotropic streamfunction between 1979-2008 and 1871-1900 periods, obtained from EXP\_CTR. The unit is Sv (10<sup>6</sup>m<sup>3</sup>s<sup>-1</sup>). (c) Globally averaged zonal wind stress for 1871-1900 and for 1979-2008 periods, obtained from the 20CR.