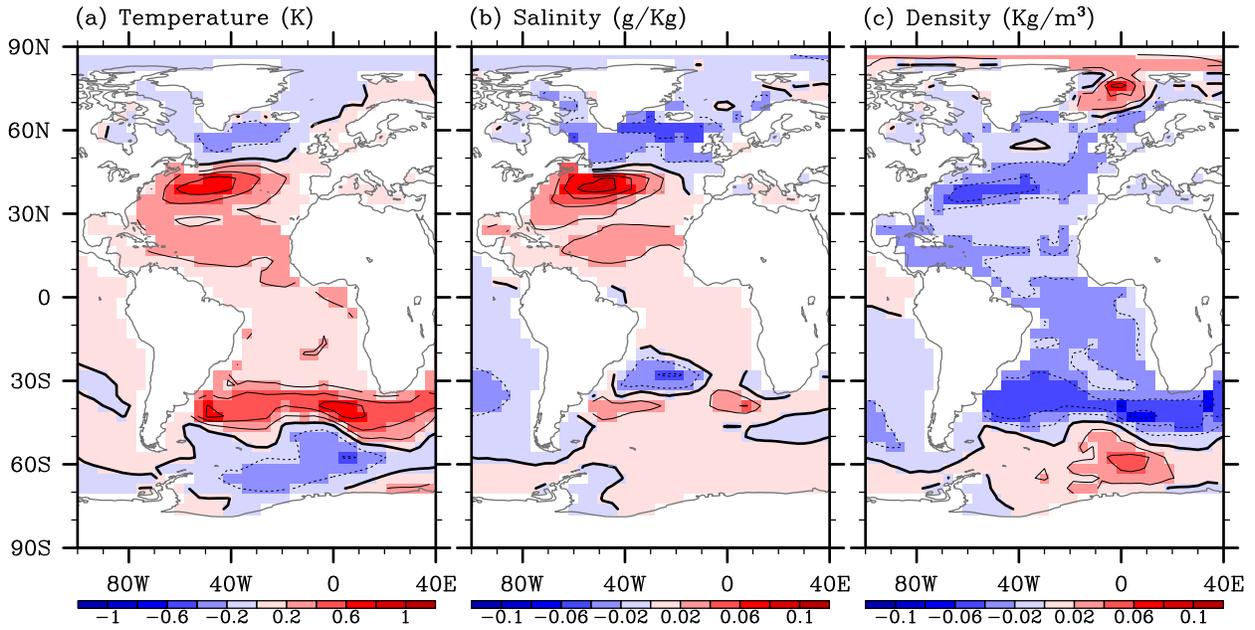


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 2 **Figure S1.** (a) Simulated barotropic stream function averaged for 2001-2008 periods, obtained  
 3 from EXP\_CTR. (b) Difference in the simulated barotropic stream function between 2001-2008  
 4 and 1871-1900 periods, obtained from EXP\_CTR. The unit is Sv ( $10^6 m^3 s^{-1}$ ). (c) Globally  
 5 averaged zonal wind stress for 1871-1900 and for 2001-2008 periods, obtained from the 20CR.

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**Figure S2.** (a) Simulated differences in temperature, salinity and potential density in the upper

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3000 m between 2001-2008 and 1871-1900 periods, obtained from EXP\_CTR.

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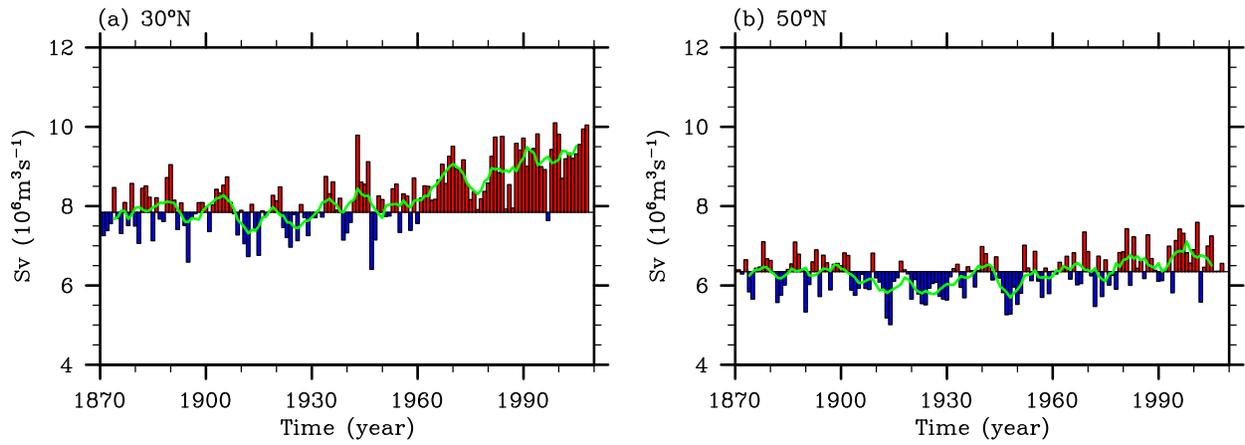
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CCSM3\_POP (EXP\_CTR): AMOC Index (Max. Stream Function)



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2 **Figure S3.** Time series of the simulated AMOC index (maximum overturning stream function)

3 at (a) 30°N and (b) 50°N obtained from EXP\_CTR.

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