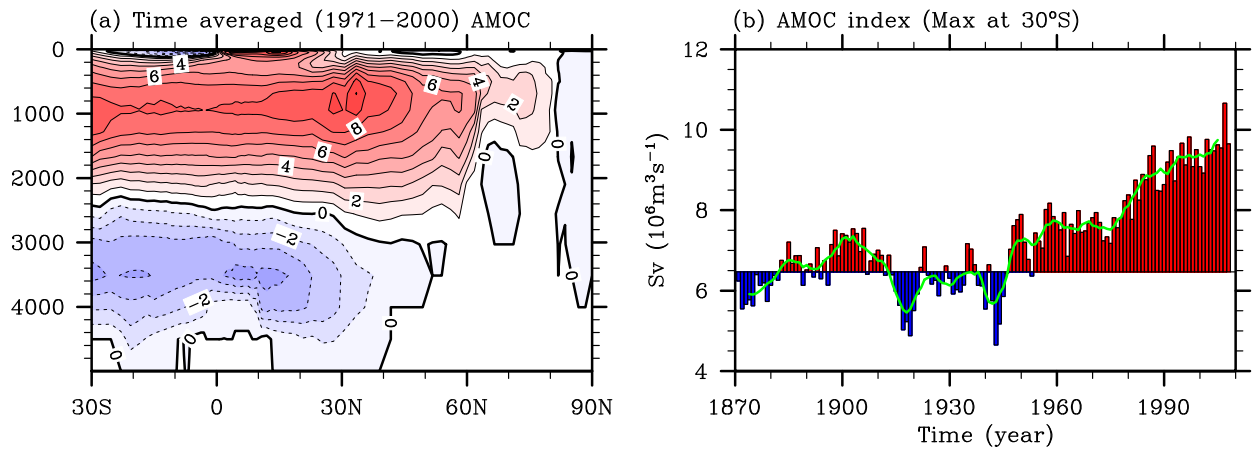


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 2 **Figure 1.** (a) Simulated Atlantic Ocean heat content change in the upper 3000m and (b)
 3 simulated northward ocean heat transport in the South Atlantic at 30S in reference to 1870-1900
 4 periods obtained from the three model experiments. The black thick line in (a) is the observed
 5 trend of the Atlantic Ocean heat content increase reproduced from Levitus (2000).

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2 **Figure 2.** (a) Time-averaged AMOC during 1971-2000 and (b) time series of the simulated

3 AMOC index (maximum overturning stream function) at 30°S obtained from EXP_20C.

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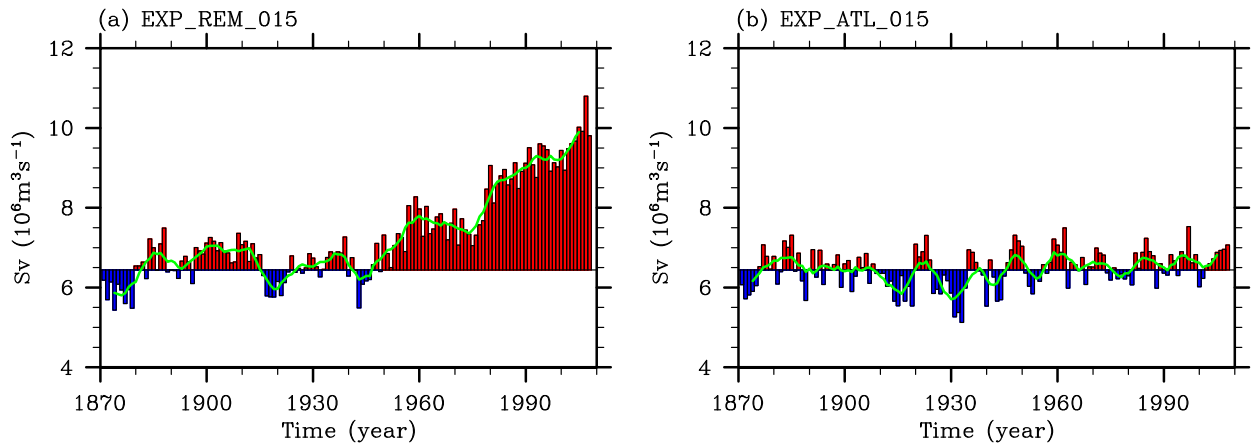
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CCSM3_POP: AMOC Index (Max at 30°S)



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2 **Figure 3.** Time series of the simulated AMOC index (maximum overturning stream function) at
3 30S obtained from (a) EXP_REM and (b) EXP_ATL.

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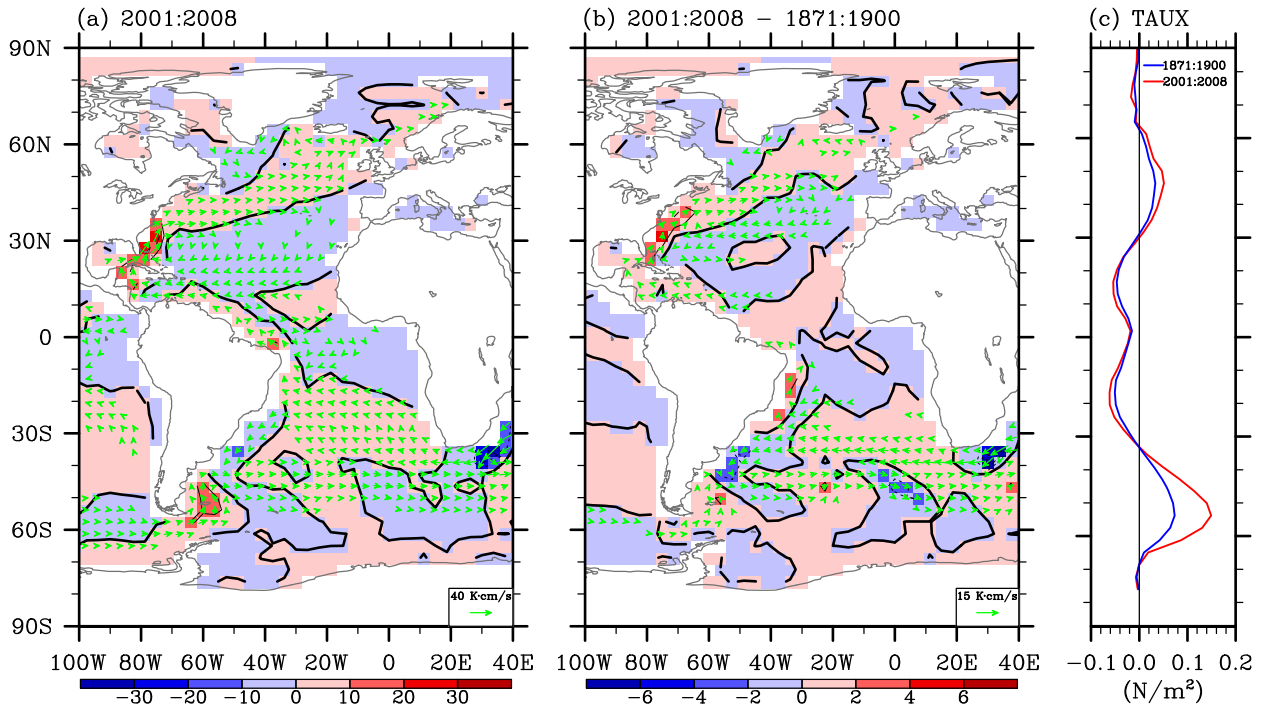
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2 **Figure 4.** (a) Simulated pathways of the northward heat transport (contours) and heat transport
3 vector (vectors) averaged in the upper 3000m for 2001-2008, obtained from EXP_20C. The unit
4 is K-cm/sec. (b) The difference in the simulated northward heat transport (contours) and heat
5 transport vector (vectors) between 2001-2008 and 1871-1900 periods, obtained from EXP_20C.
6 (c) Global-averaged zonal wind stress for 1871-1900 and for 2001-2008 periods, obtained from
7 20CR.

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