

Figure 1. (a) Simulated Atlantic Ocean heat content change in the upper 3000m and (b) simulated northward ocean heat transport in the South Atlantic at 30°S in reference to 1871-1900 obtained from the three model experiments. The thick black line in (a) is the observed trend of the Atlantic Ocean heat content increase reproduced from Levitus (2000).

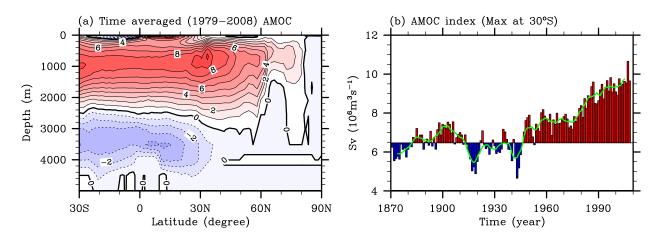


Figure 2. (a) Time-averaged AMOC during 1979-2008 and (b) time series of the simulated AMOC index (maximum overturning stream function) at 30°S obtained from EXP_CTR.

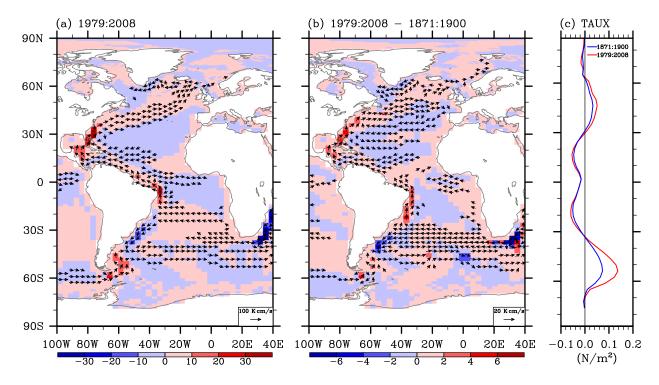


Figure 3. (a) Simulated pathways of the northward heat transport (contours) and heat transport vector (vectors) averaged in the upper 3000 m for 1979-2008, obtained from EXP_CTR. The unit is K·cm/sec. (b) Differences in the simulated northward heat transport (contours) and heat transport vector (vectors) between 1979-2008 and 1871-1900 periods, obtained from EXP_CTR. (c) Globally averaged zonal wind stress for 1871-1900 and for 1979-2008 periods, obtained from the 20CR.