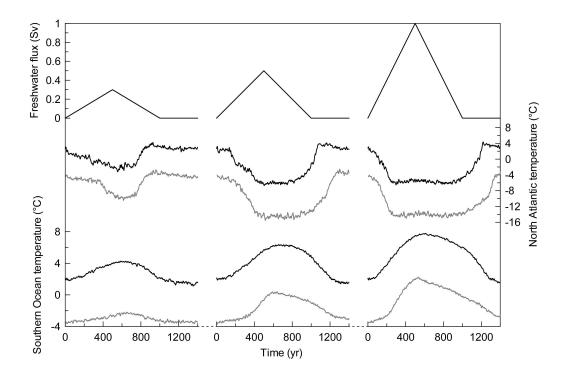
Knutti R., J. Flückiger, T.F. Stocker, A. Timmermann, Strong hemispheric coupling of glacial climate through freshwater discharge and ocean circulation. *Nature* 430, 851-856, 2004.

## Supplementary figure 1



Supplementary Figure S1: Sensitivity of the CGAOM to glacial boundary conditions. Time evolution of the three freshwater discharge scenarios (top) discussed in Figure 1, and evolution of North Atlantic (middle) and Southern Ocean (bottom) near surface temperature for modern boundary (black) and glacial boundary conditions (grey). The change of ice sheet topography, greenhouse gas concentrations, orbital parameters and albedo values to conditions of the last glacial maximum (LGM) leads to colder conditions, but both the amplitude and timing of the simulated anomalies are similar to modern boundary conditions. The flux corrections and runoff masks were not changed in the LGM simulations, since those are uncertain. Under these assumptions, the strength and stability of the thermohaline circulation are similar for modern and LGM conditions. We note that our conclusions do not depend on specific stability and hysteresis properties of the thermohaline circulation.