

# Supplementary material: On the glacial and interglacial thermohaline circulations and the associated transports of heat and freshwater

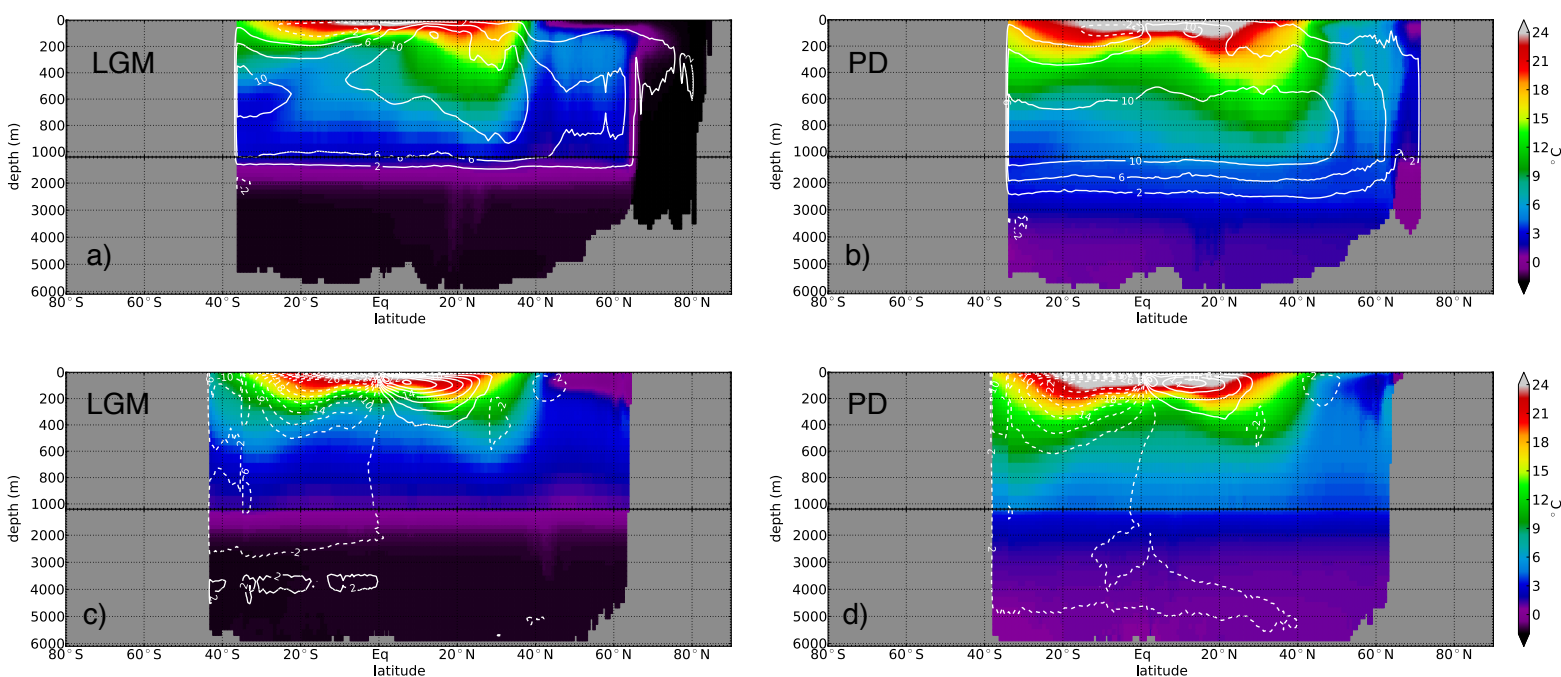
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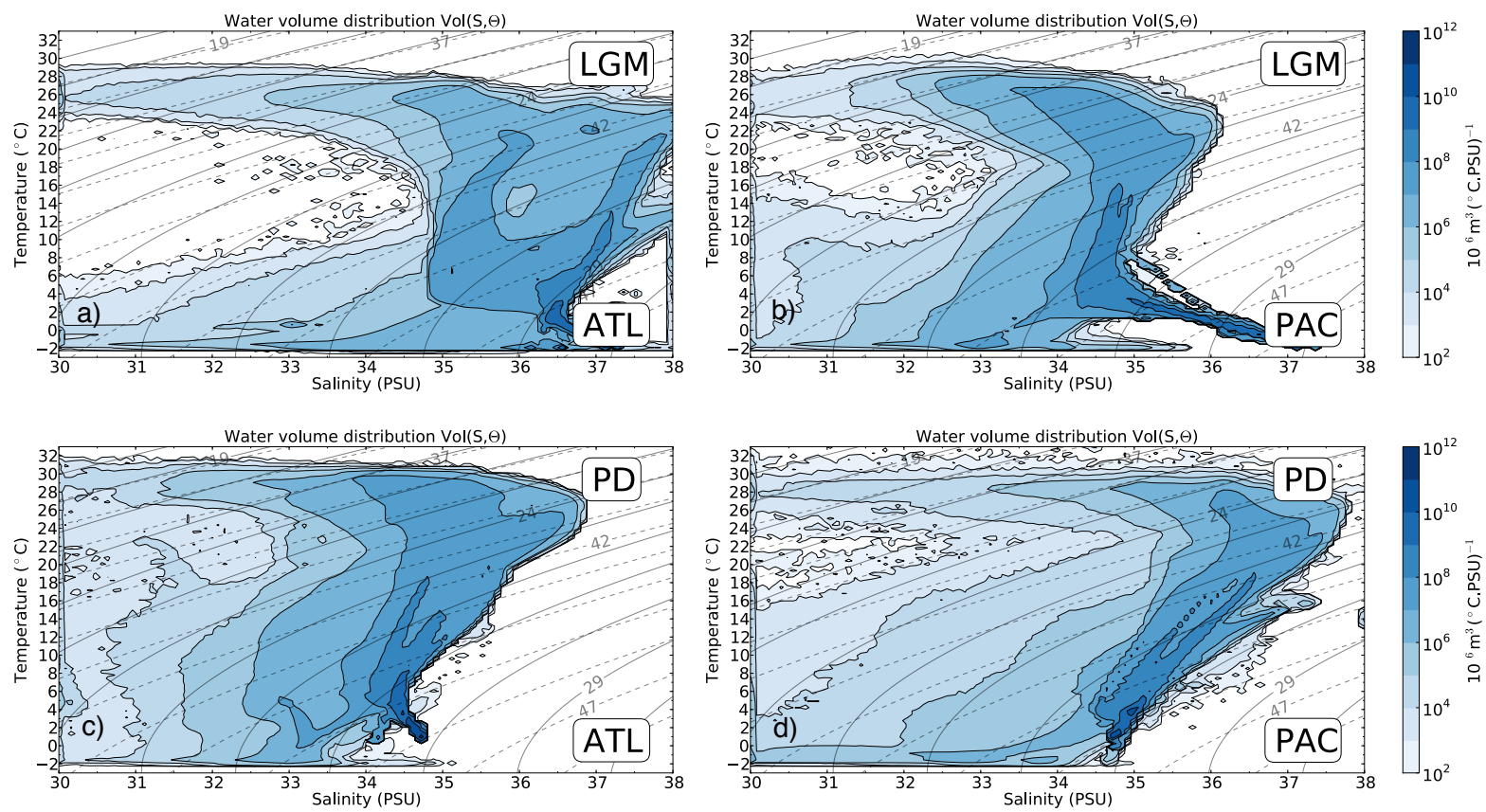
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This supplementary material includes the Figures S1 and S2. Figure S1 supplements the figure 4. It represents the time and zonally averaged temperature in the Atlantic and Pacific Oceans. The meridional circulations are superimposed. Figure S2 supplements figures 9 and 10. It represents the LGM and PD volumetric distribution in the Atlantic and Pacific Oceans. The distinct states of the Atlantic and Pacific Oceans are more evident for the LGM than for the PD period.



**Fig. S1.** LGM and PD meridional overturning circulation in depth coordinates superimposed on the time-zonally averaged temperature a),b) in the Atlantic basin and c),d) the Indo-Pacific basin. The contour interval for the circulation is 2Sv. Thick lines correspond to clockwise circulations whereas dashed lines are for counter-clockwise motions.



**Fig. S2.:** Sea-water volumetric distribution in the Atlantic and the Pacific basins projected in the Temperature-Salinity diagram for a),b) the LGM and c),d) the PD simulation. The contour interval for the volume is  $10^7 \text{m}^{-3} (\text{°C.PSU})^{-1}$ .