



Supplement of

The coupled system response to 250 years of freshwater forcing: Last Interglacial CMIP6–PMIP4 HadGEM3 simulations

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SUPPLEMENTARY FIGURES



Suppl. Figure 1 LIG_hosing – LIG anomalies of the zonal mean temperature for the global ocean (annual mean).



Suppl. Figure 2 As in Figure 4(a) but for the four seasons: DJF (a), MAM (b), JJA (c), SON (d). Shading corresponds to \pm the standard deviation.



Suppl. Figure 3 As in Figure 4(b) but for the four seasons: DJF (a), MAM (b), JJA (c), SON (d). Shading corresponds to \pm the standard deviation.



Suppl. Figure 4 As in Figure 5(b) but for the four seasons: DJF (a), MAM (b), JJA (c), SON (d).



Suppl. Figure 5 As in Figure 5(a) but for the four seasons: DJF (a), MAM (b), JJA (c), SON (d).



Suppl. Figure 6 Area-weighted annual timeseries of the Total Advective (a), Overturning (b), and Gyre (c) heat transport in the whole Atlantic basin for the LIG_hosing and LIG simulations. Shading corresponds to \pm the standard deviation.



Suppl. Figure 7 Northern Hemisphere sea ice concentration LIG_hosing – LIG anomalies. Non-hatched areas correspond to statistically significant differences (at 95% confidence).



Suppl. Figure 8 Northern Hemisphere Mixed Layer Depth annual LIG_hosing – LIG anomalies. Non-hatched areas correspond to statistically significant differences (at 95% confidence).



Suppl. Figure 9 Meridional Streamfunction LIG_hosing-LIG anomalies for the global ocean (annual mean).



Suppl. Figure 10 Time-series of global ocean salinity for the LIG spin-up run (blue line) and the LIG production (purple line) and LIG_hosing (green line) runs.



Suppl. Figure 11 As in Figure 2 but for salinity: North Atlantic (NA) and Southern Hemisphere (SH) depth averaged means of salinity for LIG_hosing (blue) and LIG (black). (a) and (b) averages over the top 200m of water column, (c) and (d) averages over the top 1045m of water column. Thick lines are annual means, shaded areas represent the standard deviation.



Suppl. Figure 12 Total advective northward heat transport for the Pacific (top) and Indian (bottom) basins.