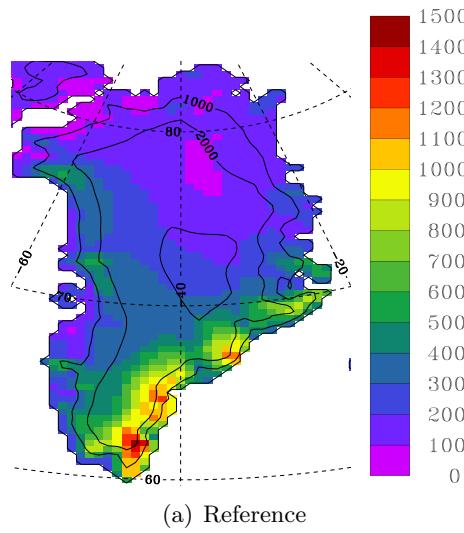


Small impact of surrounding oceanic conditions on 2007-2012 Greenland Ice Sheet surface mass balance

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Supplementary Material



(a) Reference

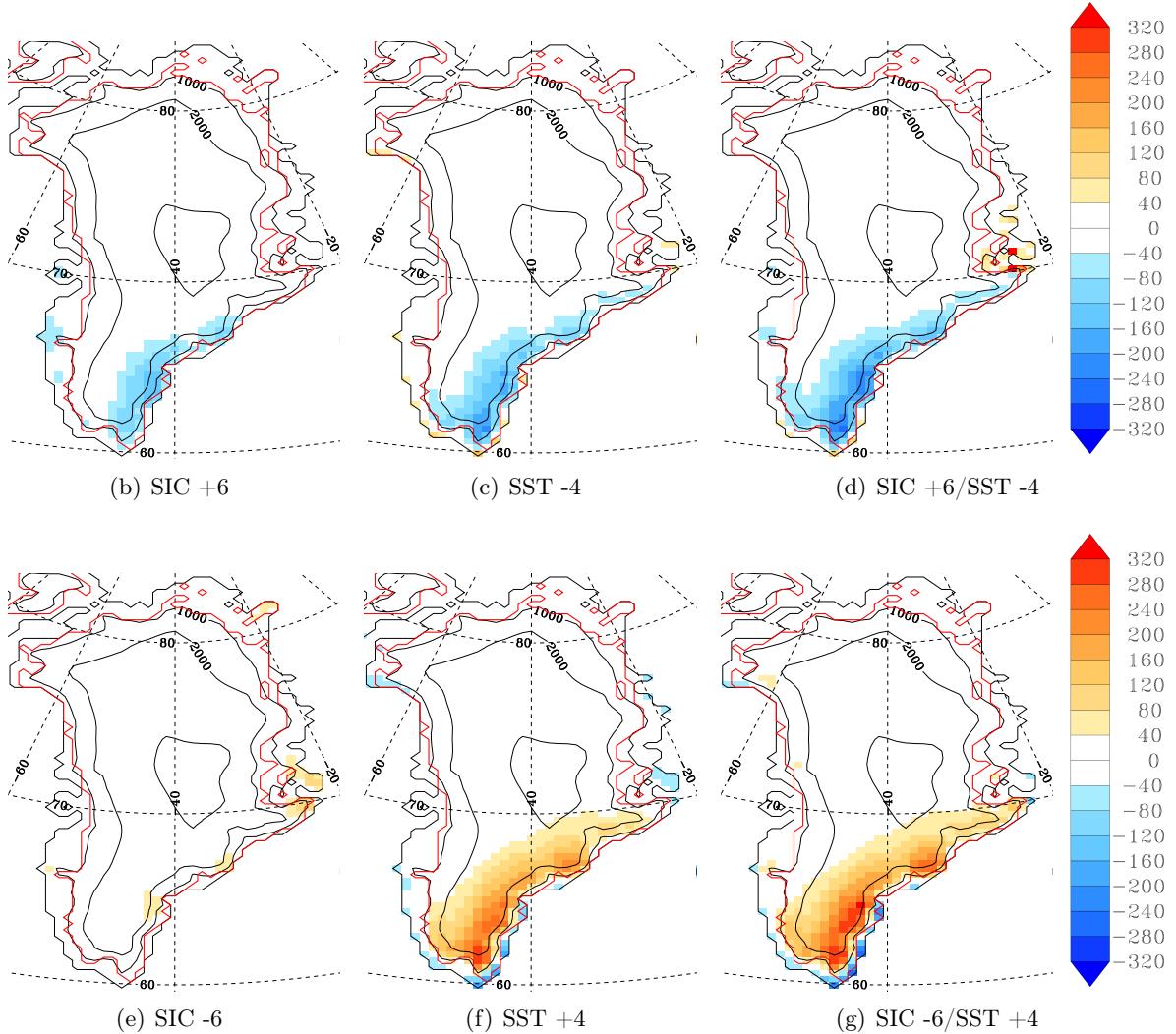


Fig. S1 – Annual mean cumulated snowfall (mmWE yr^{-1}) for the reference run (a), using the MAR model over 2007–2012. Difference in annual mean cumulated snowfall (mmWE yr^{-1}) between (b) SIC +6, (c) SST -4, (d) SIC +6 / SST -4, (e) SIC -6, (f) SST +4, (g) SIC -6 / SST +4 experiments and the reference run. The red thick line defines the GrIS area in MAR.

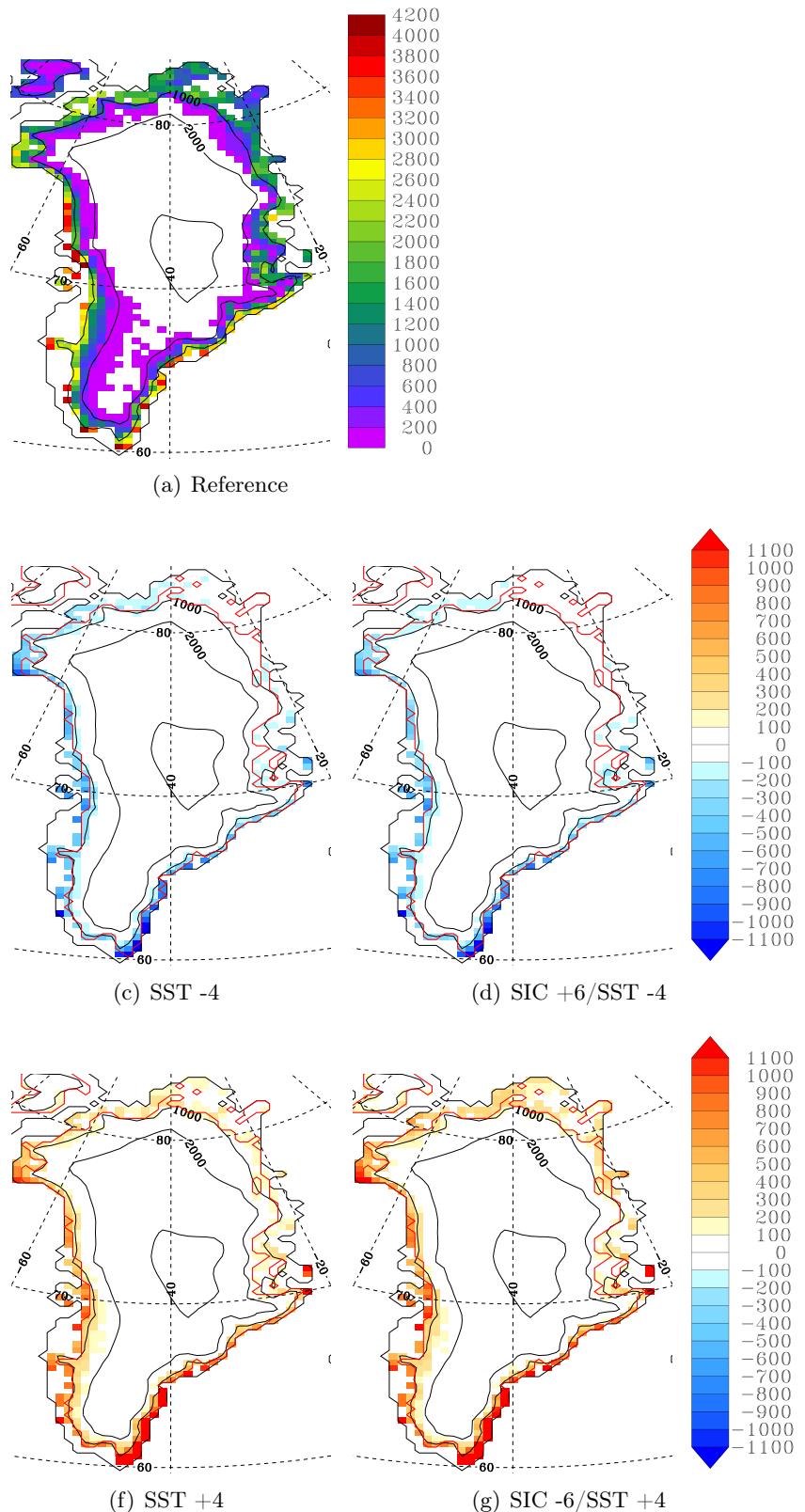


Fig. S2 – Annual mean cumulated runoff (mmWE yr^{-1}) for the reference run (a) over 2007–2012. Difference in annual mean cumulated runoff (mmWE yr^{-1}) between (b) SST -4, (c) SIC +6 / SST -4, (d) SST +4, (e) SIC -6 / SST +4 experiments and the reference run. The red thick line defines the GrIS area in MAR.

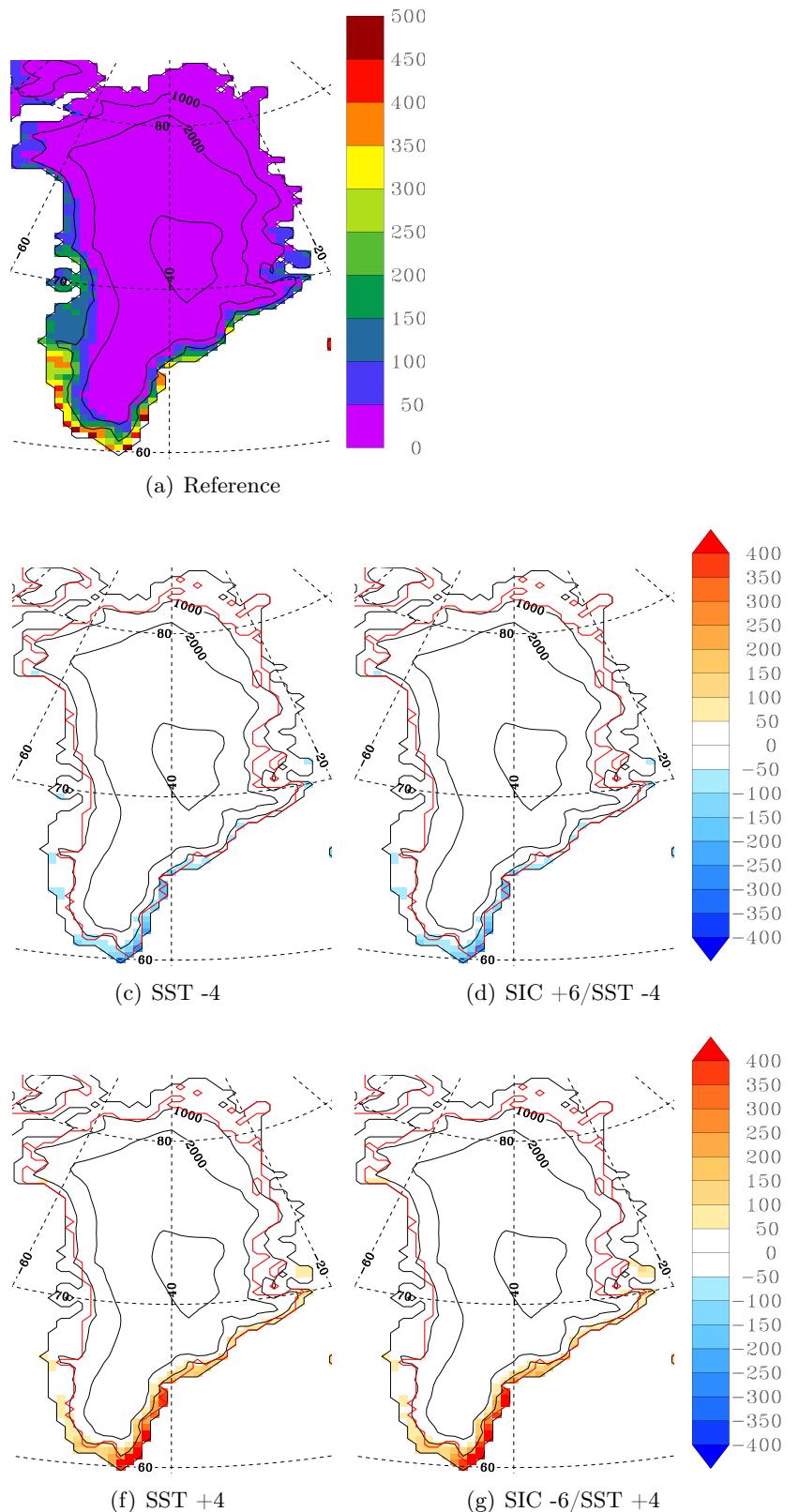
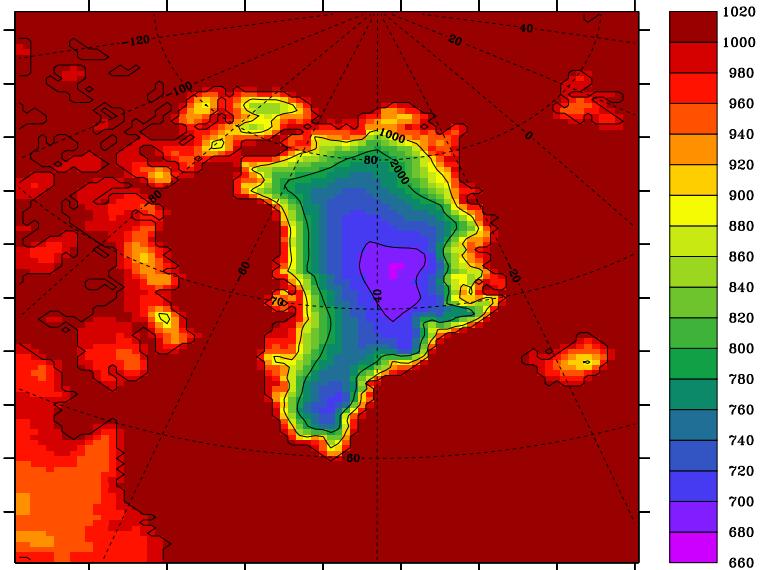


Fig. S3 – Annual mean cumulated rainfall (mmWE yr^{-1}) for the reference run (a) over 2007–2012. Difference in annual mean cumulated rainfall (mmWE yr^{-1}) between (b) SST -4, (c) SIC +6 / SST -4, (d) SST +4, (e) SIC -6 / SST +4 experiments and the reference run. The red thick line defines the GrIS area in MAR.



(a) Reference

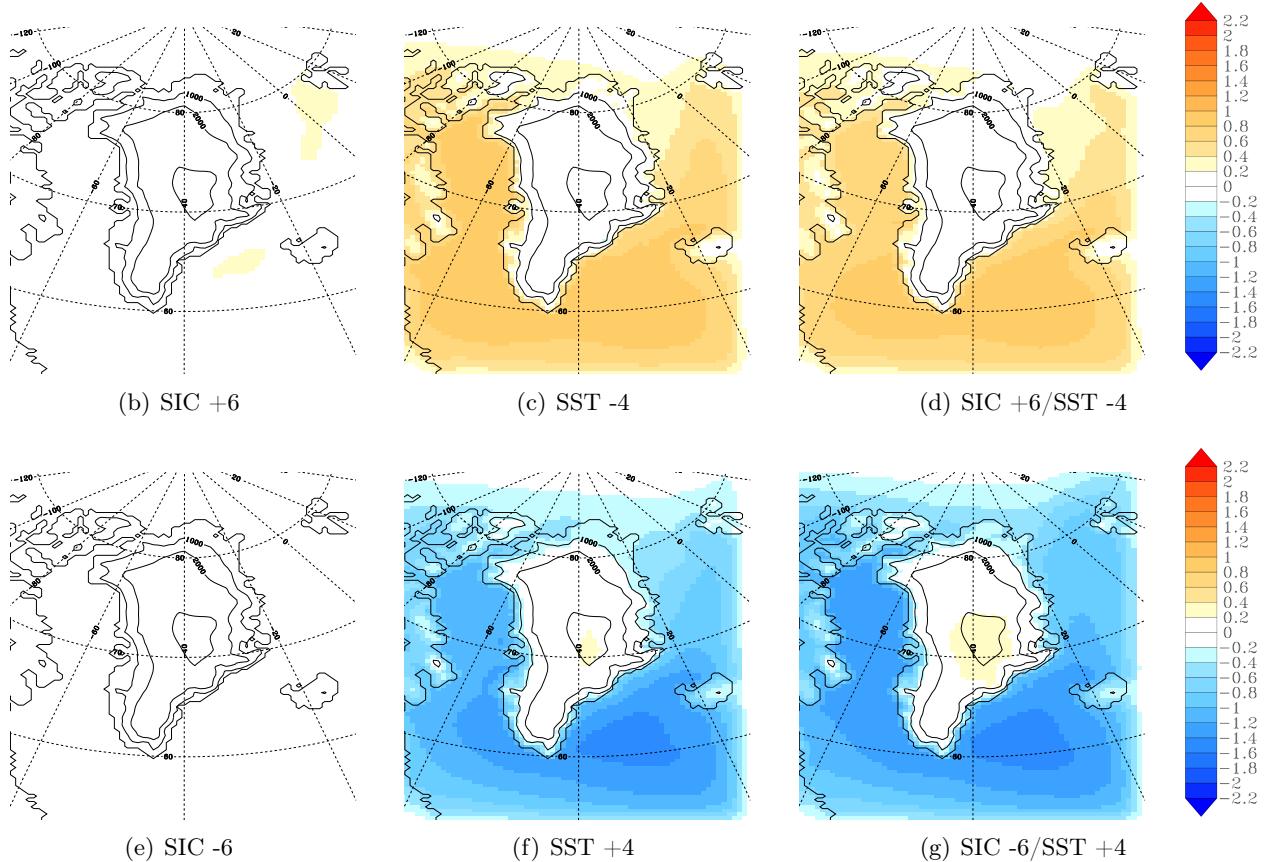
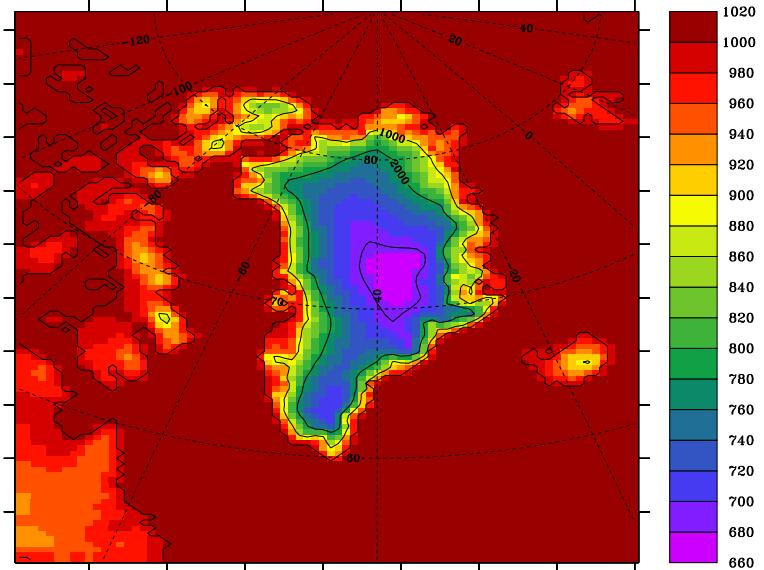


Fig. S4 – JJA mean surface pressure (hPa) for the reference run (a) over 2007–2012. Difference in JJA mean surface pressure (hPa) between (b) SIC +6, (c) SST -4, (d) SIC +6/SST -4, (e) SIC -6, (f) SST +4, (g) SIC -6 / SST +4 experiments and the reference run.



(a) Reference

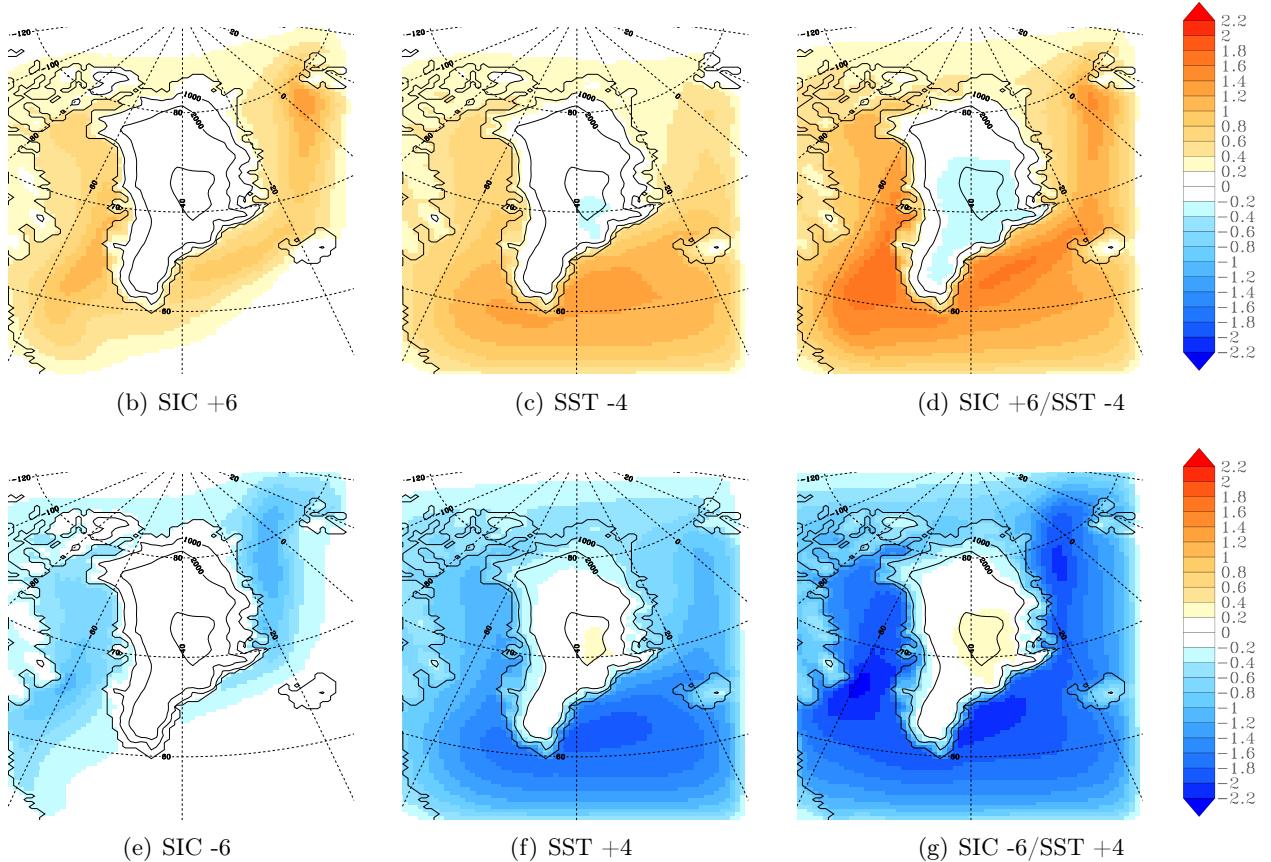


Fig. S5 – Annual mean surface pressure (hPa) for the reference run (a) over 2007–2012. Difference in annual mean surface pressure (hPa) between (b) SIC +6, (c) SST -4, (d) SIC +6 / SST -4, (e) SIC -6, (f) SST +4, (g) SIC -6/SST +4 experiments and the reference run.