

1 **Supplementary material to ‘Holocene Evolution of the**
2 **Southern Hemisphere Westerly Winds in Transient**
3 **Simulations with Global Climate Models’**

4 Here, we present the spatial distribution of annual mean SWW (Fig. 1) along with trends in
5 the seasonal mean low-level zonal wind (Figs. 2-5) and surface temperature (Figs. 6-9) for
6 the period 7 kyr BP to 250 yr BP for all models. The zonal winds are plotted at 850 hPa for
7 CCSM3, ECHO-G (I and II) and COSMOS, and at the lowermost model level for ECbilt-
8 CLIO-VECODE (800 hPa) and CLIMBER2-LPJ. All polar stereographic plots represent the
9 Southern Hemisphere, with latitudes starting from equator to 90°S, placed at 10° interval.

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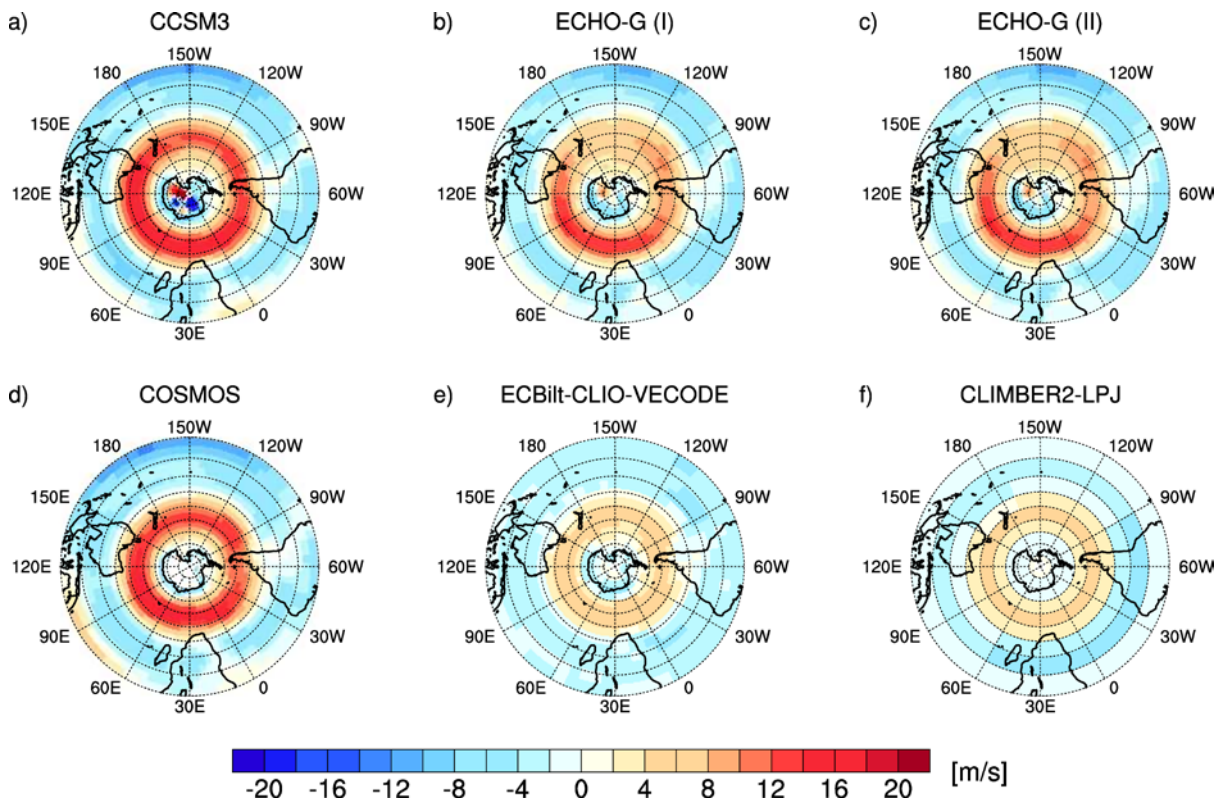
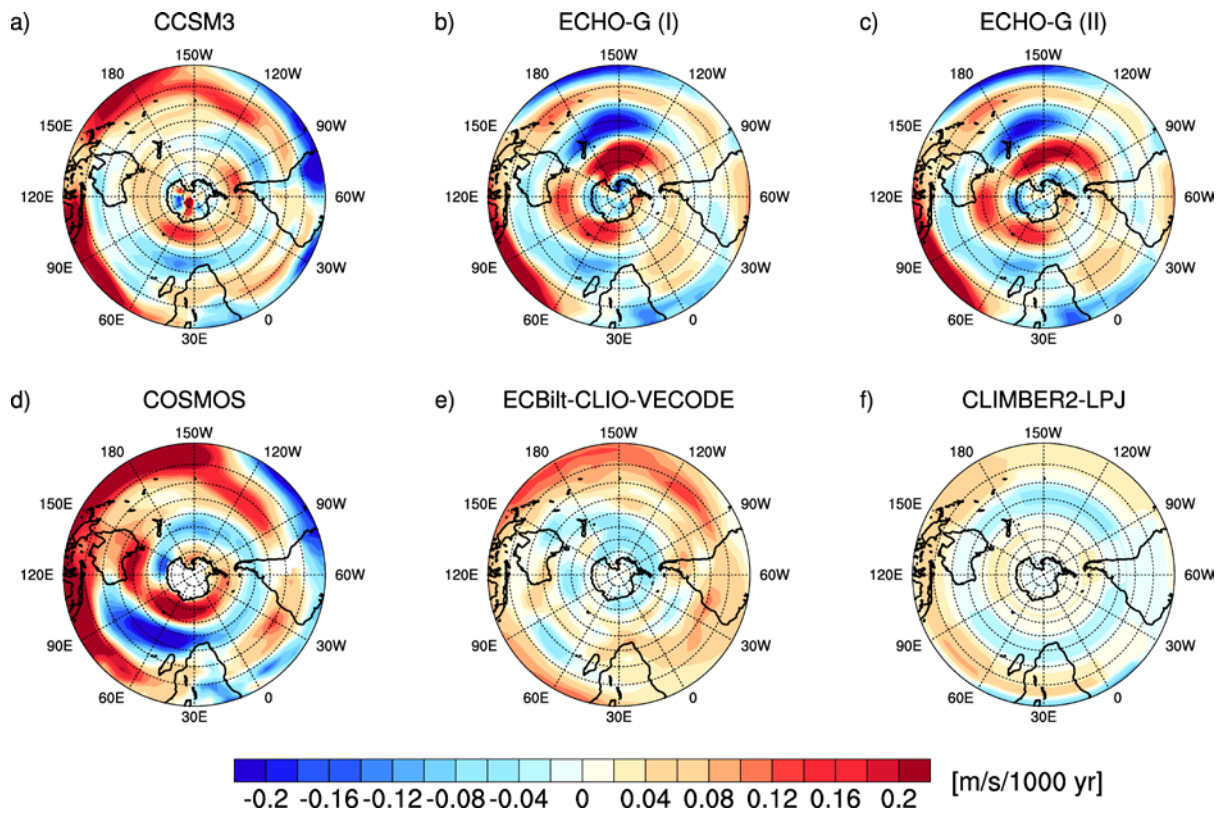


Figure 1. Annual mean low-level zonal wind in a) CCSM3, b) ECHO-G (I), c) ECHO-G (II),
d) COSMOS, e) ECbilt-CLIO-VECODE, and f) CLIMBER2-LPJ, temporally averaged over
the period 7 kyr BP to 250 yr BP.



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21 Figure 2. Trend in the low-level zonal wind for the JJA season in a) CCSM3, b) ECHO-G (I),
 22 c) ECHO-G (II), d) COSMOS, e) ECBilt-CLIO-VECODE, and f) CLIMBER2-LPJ.

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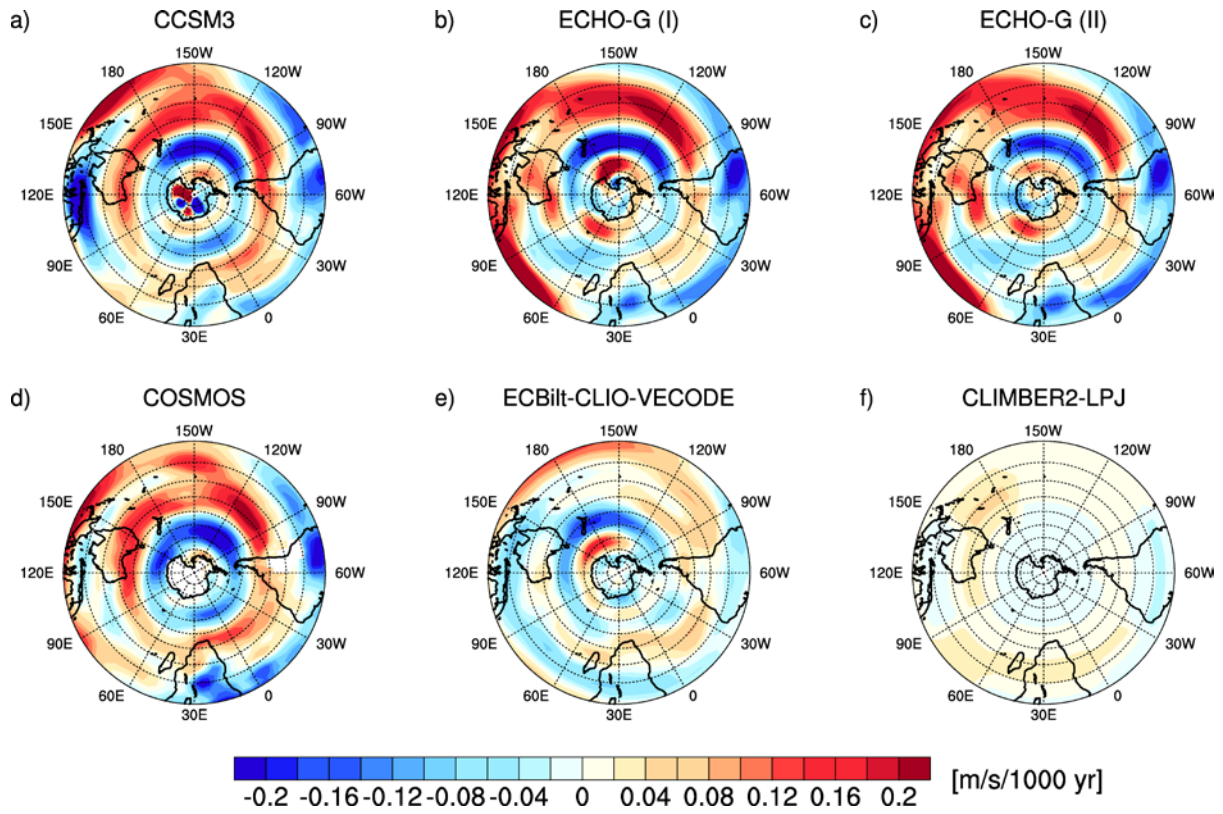
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36 Figure 3. Same as Figure 2 but for the SON season.

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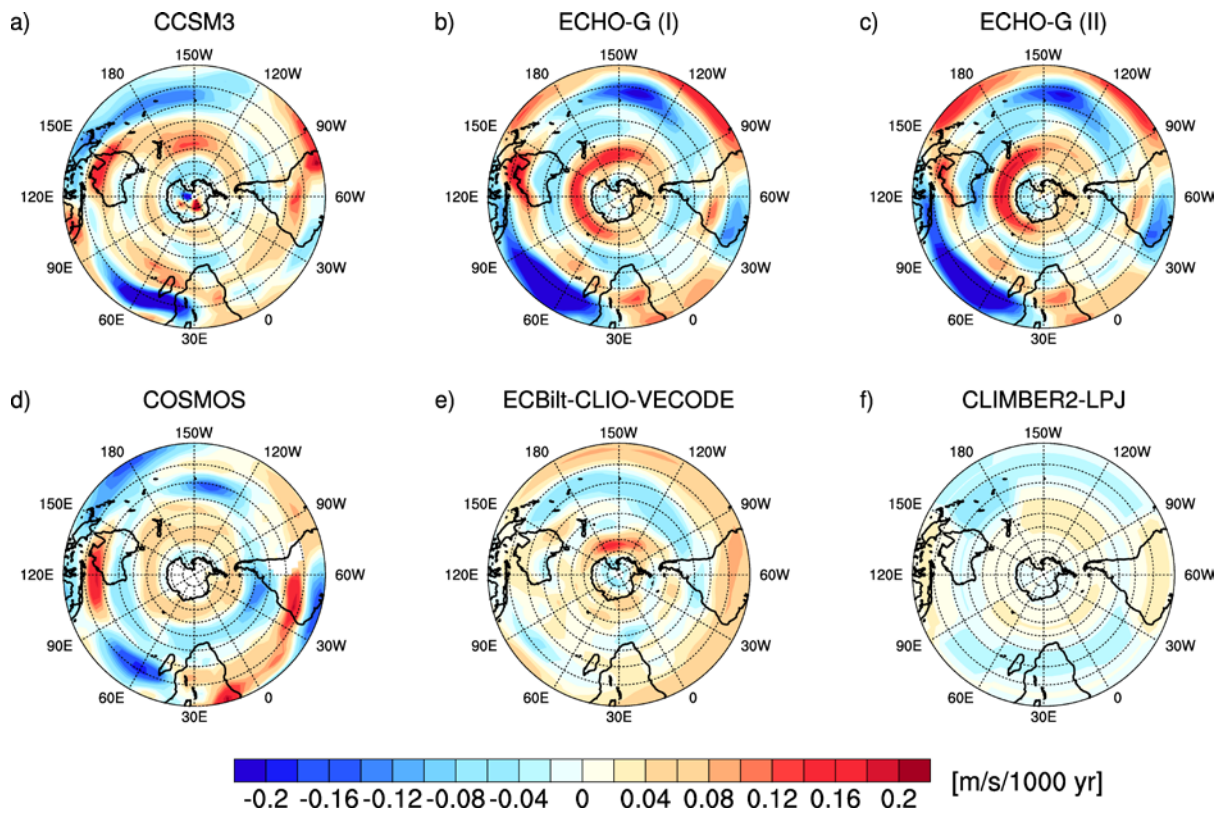
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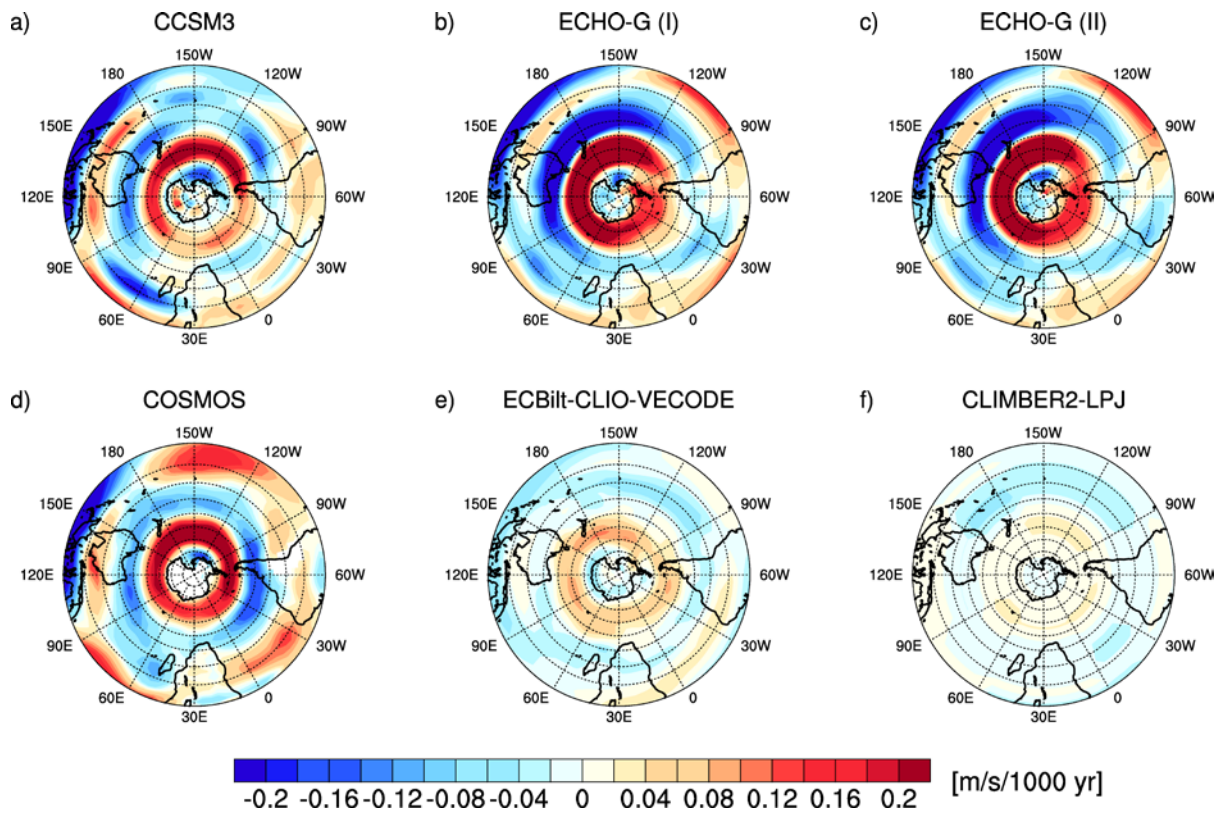
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51 Figure 4. Same as Figure 2 but for the DJF season.

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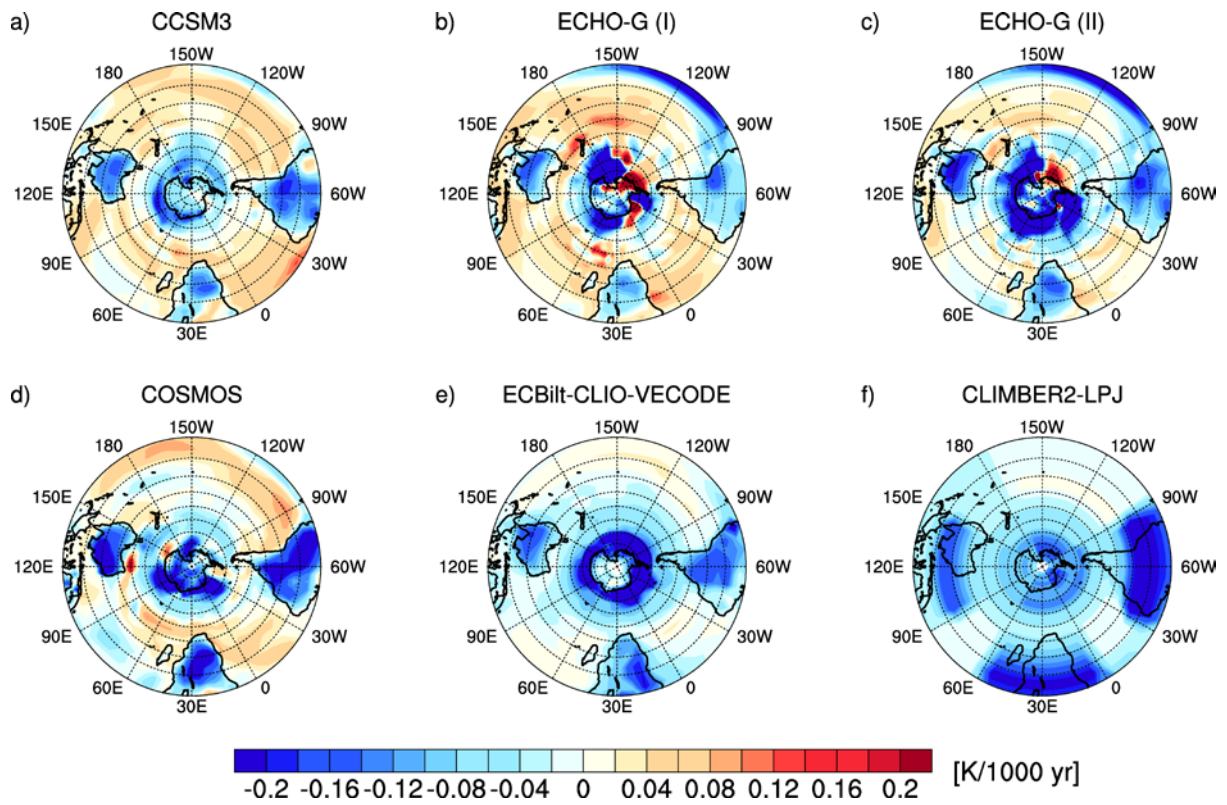
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57 Figure 5. Same as Figure 2 but for the MAM season.

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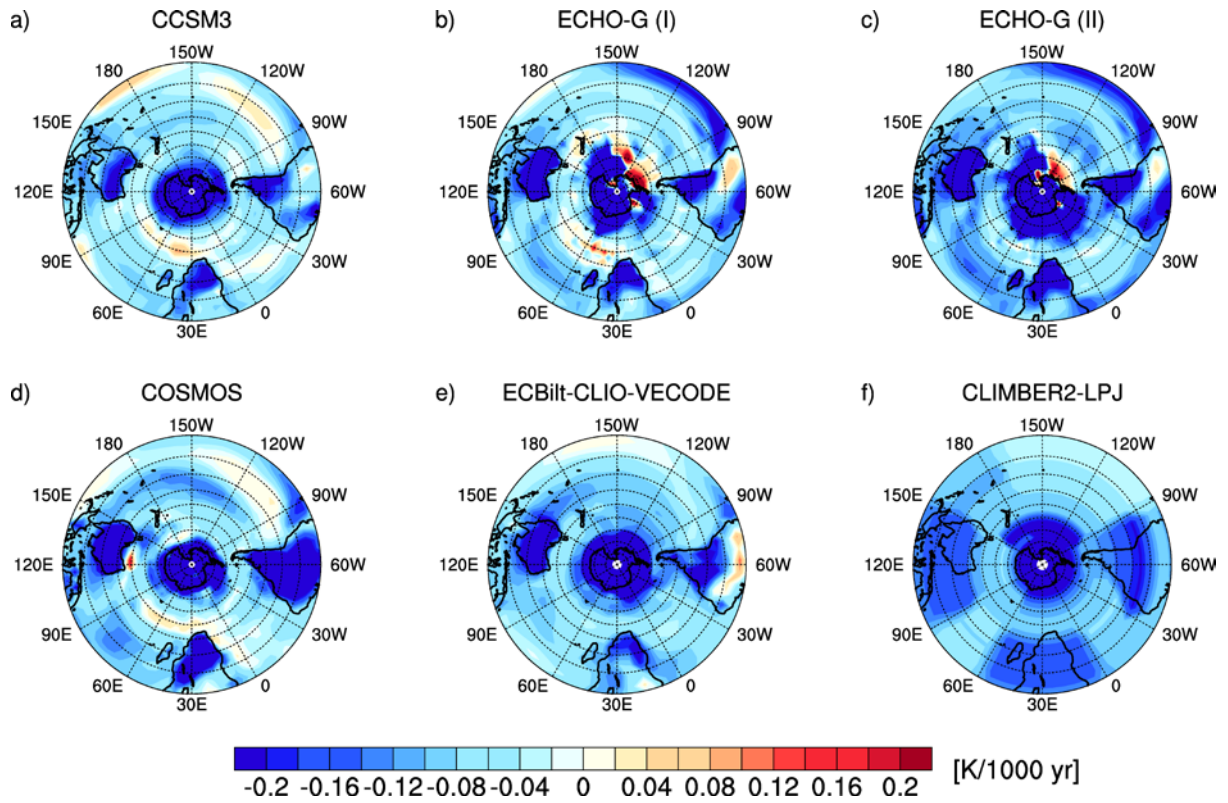
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63 Figure 6. Trend in the surface temperature for the JJA season in a) CCSM3, b) ECHO-G (I),
 64 c) ECHO-G (II), d) COSMOS, e) ECBilt-CLIO-VECODE, and f) CLIMBER2-LPJ.

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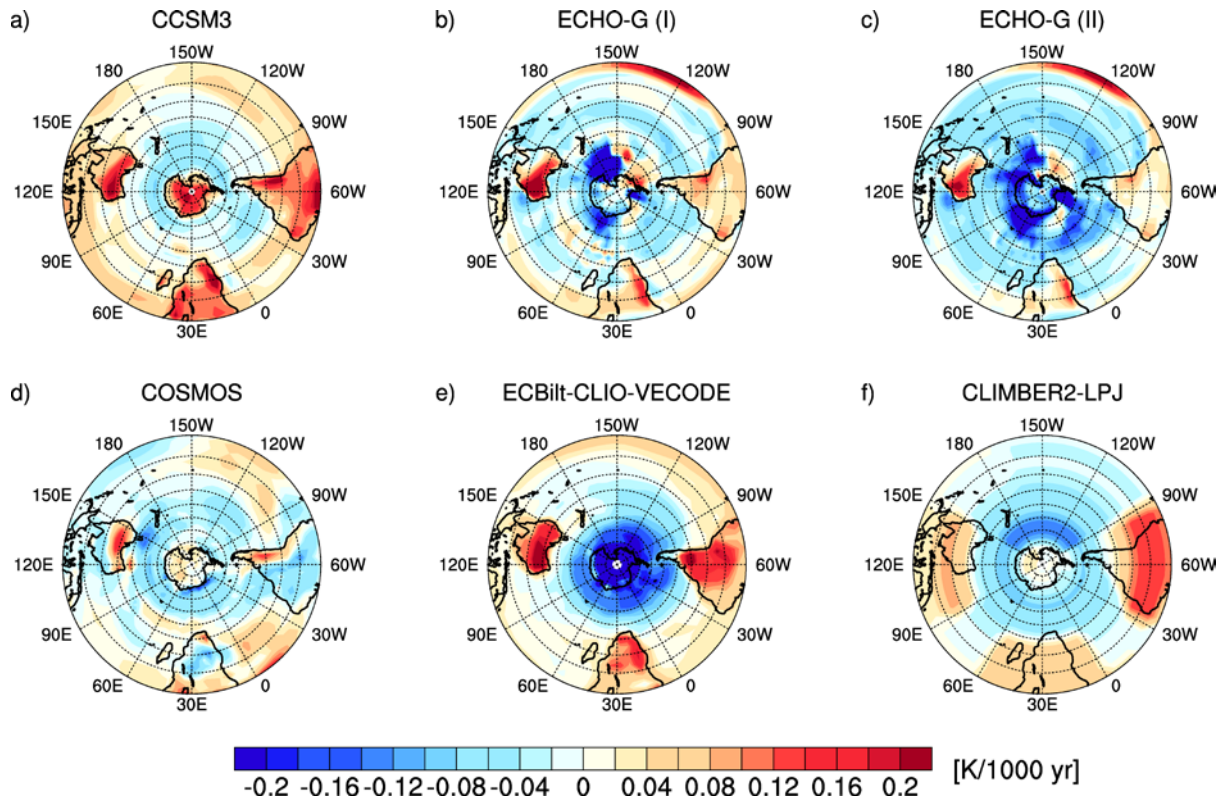
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69 Figure 7. Same as Figure 6 but for the SON season.

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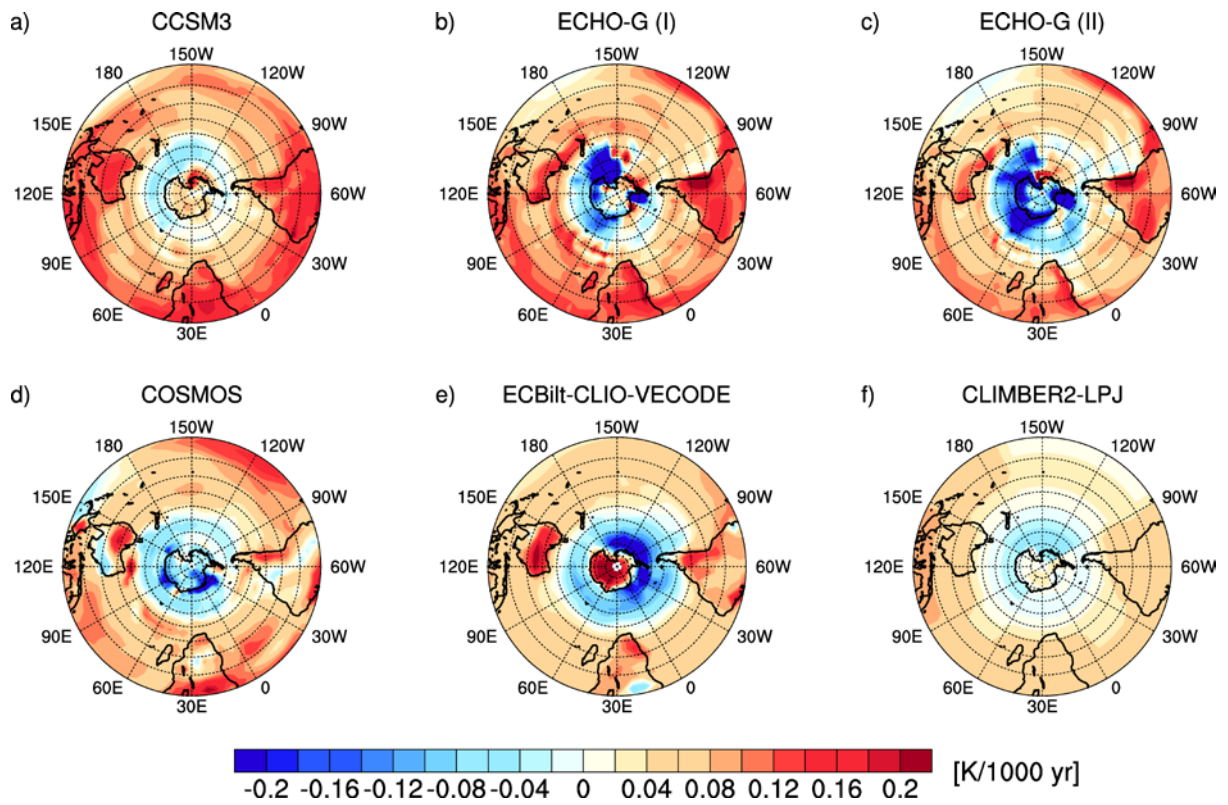
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75 Figure 8. Same as Figure 6 but for the DJF season.

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81 Figure 9. Same as Figure 6 but for the MAM season.