Supplementary Information of paper:

The key role of background sea surface temperature over the cold tongue in asymmetric responses of the Arctic stratosphere to El Niño–Southern Oscillation

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Figure S1. Same as Fig. 3a–d, but (a and c) for differences between R5 and R4 and (b and d) for differences between R6 and R4.
Figure S2. The climatology of SST (units: °C) in January to December for the period of 1979–2016.
Figure S3. Composite SST (units: °C) during El Niño events (a) and La Niña events (b). SST values are based on HadSST for 1979–2016. For the definition of ENSO events, see section 2 in the manuscript.
Figure S4. Same as Fig. S2, but SST in the region 15°S–15°N and 180°W–60°W is fixed to 28°C in each month. Note that when fixing the SST in the region 15°S–15°N and 180°W–60°W, a 9-point smoothing is applied near the boundary of the region.
Figure S5. Same as Fig. 6a–d, but (a and c) for differences between R11 and R10 and (b and d) for differences between R12 and R10.