

Supporting Information for
“Stratospheric response in a first geoengineering simulation meeting
multiple surface climate objectives”

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Supplementary Figures

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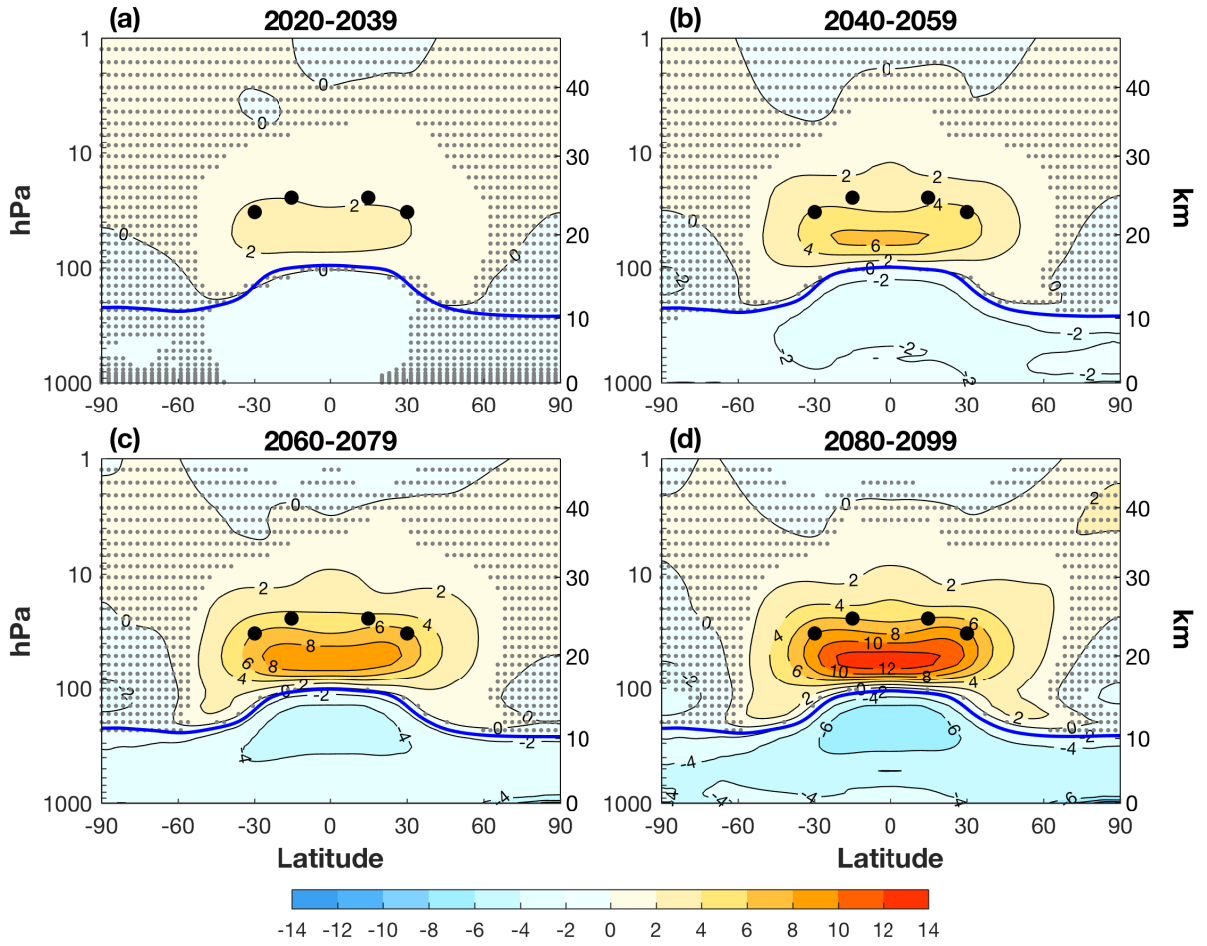


Figure S1. Stratospheric temperature difference between the feedback and RCP8.5 simulations over the same time period averaged over a) 2020 - 2039, b) 2040 - 2059, c) 2060 - 2079, and d) 2080 - 2099. Contours are in intervals of 2 K. Black circles depict the locations of SO₂ injections. Areas not statistically significant at the 95% level based on a two-sided student t-test are stippled.

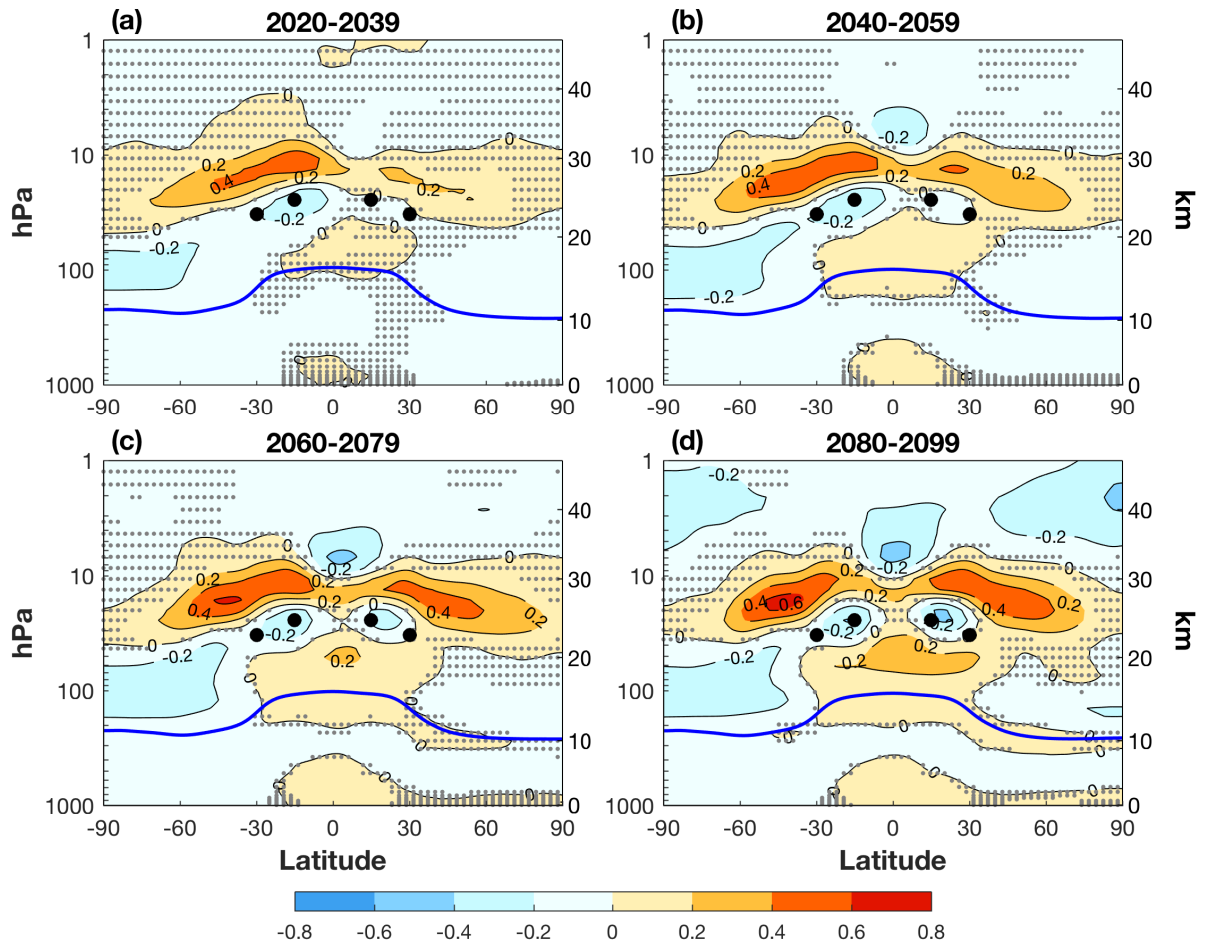


Figure S2. Stratospheric ozone concentration differences between the feedback simulation and RCP8.5 simulation over the same time period averaged over a) 2020 - 2039, b) 2040 - 2059, c) 2060 - 2079, and d) 2080 - 2099. Contour interval is 0.2 ppmv. Areas not statistically significant at the 95% level based on a two-sided student t-test are stippled.

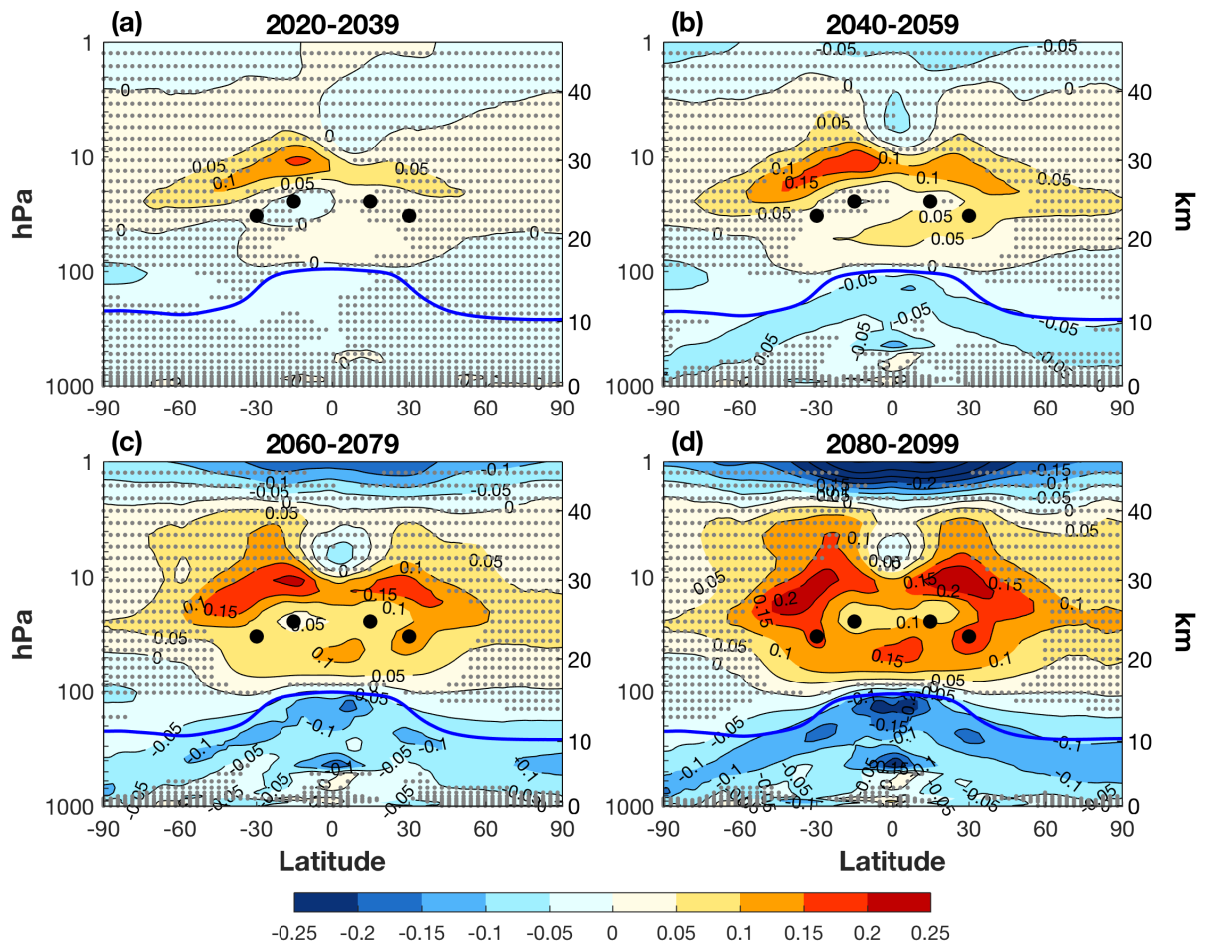


Figure S3. Same as Figure S2 but for SW heating rate. Contours are in intervals of 2 K. Black circles depict the locations of SO₂ injections. Contours are in intervals of 0.05 K day⁻¹. Areas not statistically significant at the 95% level based on a two-sided student t-test are stippled.

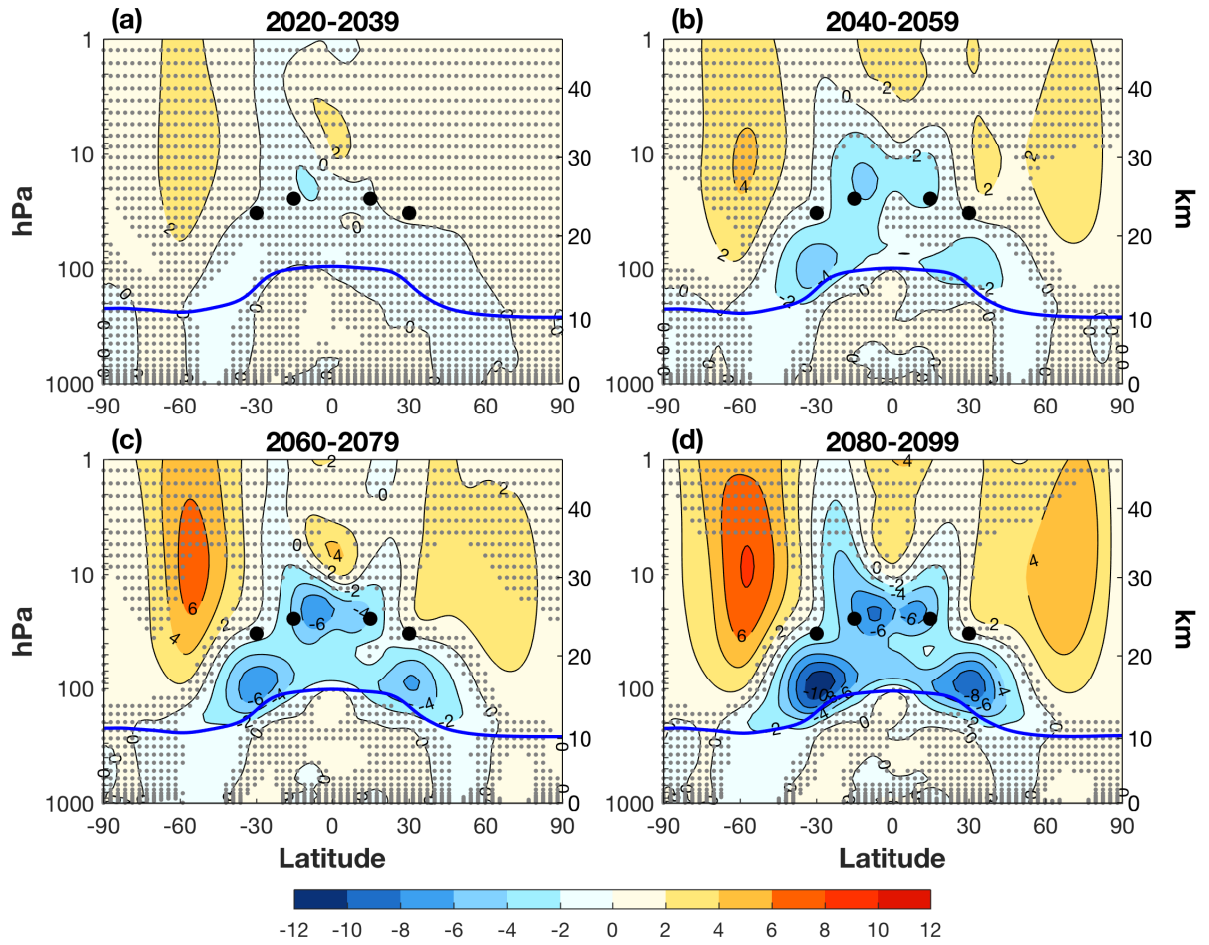


Figure S4. Same as Figure S2 but for annually averaged zonal mean wind. Contour interval is 2 m s^{-1} .