Chemical and climatic drivers of radiative forcing due to changes in stratospheric and tropospheric ozone over the 21st century - *Supplementary Material*

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	$\Delta[CH_4]_{ss}$[1] [ppmv]	RF-$CH4_{ss}$[2] [Wm^{-2}]	RF-$O3_{ss}$[3] [Wm^{-2}]
ΔCC4.5	-0.25	-0.10	0.08 (-0.02)
ΔCC8.5	-0.54	-0.22	0.04 (-0.04)
ΔODS	0.09	0.03	0.07 (0.01)
ΔO3pre	0.08	0.03	-0.09 (0.01)

Table S1. Estimates of changes in the global abundance of tropospheric CH_4 ($\Delta[CH_4]_{ss}$) from its imposed concentration of 1.75 ppmv to steady state after accounting for adjustments through changes in the CH_4 lifetime. Also reported are the associated tropospheric RF due to CH_4 (RF-$CH4_{ss}$) and ozone (RF-$O3_{ss}$).

[1]$\Delta[CH_4]_{ss}$ [ppmv] has been estimated following the methodology detailed in Banerjee et al. (2014, 2016) (and references therein) using the model-specific feedback factor of 1.52.

[2]RF-$CH4_{ss}$ [Wm^{-2}] corresponds to the direct RF of CH_4 that would result from $\Delta[CH_4]_{ss}$ relative to a baseline concentration of 1.75 ppmv, and is calculated using the simple expression in Myhre et al. (1998) (using $[N_2O]$ = 327 ppbv).

[3]RF-$O3_{ss}$ [Wm^{-2}] is the estimate of the tropospheric ozone RF that would result at steady state (bracketed values indicate the difference from Table S1 where CH_4 feedbacks are neglected). This is obtained by first scaling $\Delta[CH_4]_{ss}$ as in Banerjee et al. (2014, 2016) on a gridbox and monthly mean basis to obtain the corresponding change in ozone abundance. A steady state ozone field ($[O_3]_{ss}$) is calculated as the sum of this change and the simulated ozone. RF-$O3_{ss}$ is then calculated by applying $[O_3]_{ss}$ as a perturbation within the offline RTM.