Supplementary material

Trends in global tropospheric hydroxyl radical and methane lifetime since 1850 from AerChemMIP

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Figure S1 The same as Figure 3, but for CH₄ mixing ratio (ppm) and the relative changes.
Figure S2 The same as Figure 2, but comparing the historical runs (solid) with corresponding histSST runs (dashed). Red for CESM2-WACCM, green for UKESM-0-LL and blue for GFDL-ESM4.
Figure S3  The same as Figure 3, but for CH₄ loss rate (kg cm⁻³ yr⁻¹) and the relative changes. See Figure S7 for changes in absolute values.
Figure S4 The same format as Figure 5, but for CH$_4$ loss rate (Tg yr$^{-1}$), integrated in the troposphere (left) and the whole atmosphere (right).
Figure S5 Percentage changes in OH, CH₄, CH₄ loss rate and CH₄ lifetime, calculated relative to PD in histSST run, derived from GFDL-ESM4. Left for PD-piCH₄ and right for PD-piO₃.
Figure S6 As Figure 2 (OH), but with changes reported as absolute changes.
Figure S7 As Figure S3 (CH₄ loss rate), but with changes reported as absolute changes.
Figure S8 As Figure 4 (CH₄ lifetime), but with changes reported as absolute changes.