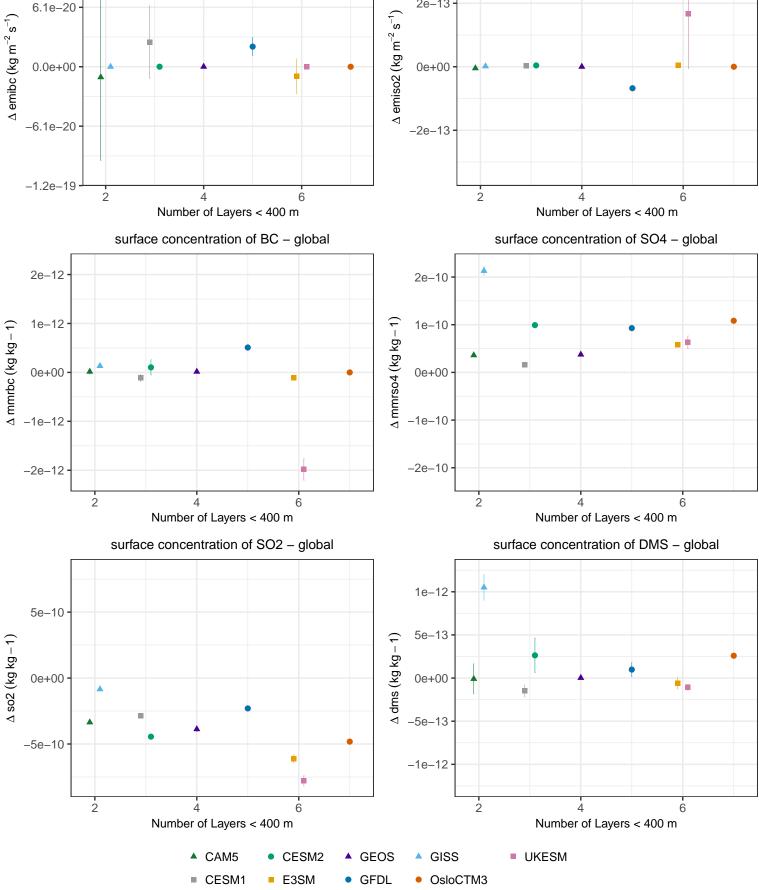
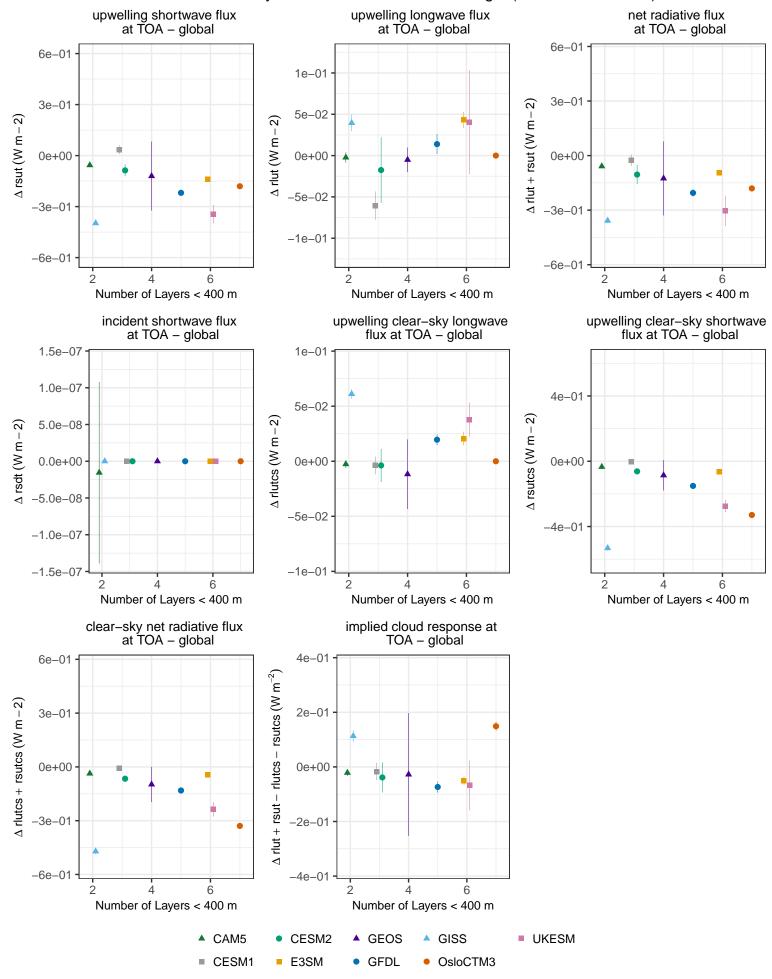
Number of Model Layers below 400 m: SO2-at-height (absolute difference) surface flux of BC - global surface flux of SO2 - global 2e-13 $\Delta \ \mathrm{emiso2} \ (\mathrm{kg} \ \mathrm{m}^{-2} \ \mathrm{s}^{-1})$ 0e+00 -2e-13 2 Number of Layers < 400 m Number of Layers < 400 m surface concentration of BC - global surface concentration of SO4 - global 2e-10 Δ mmrso4 (kg kg – 1) 1e-10 0e+00 -1e-10 -2e-10 2 2 Number of Layers < 400 m Number of Layers < 400 m surface concentration of SO2 - global surface concentration of DMS - global 1e-12 5e-13



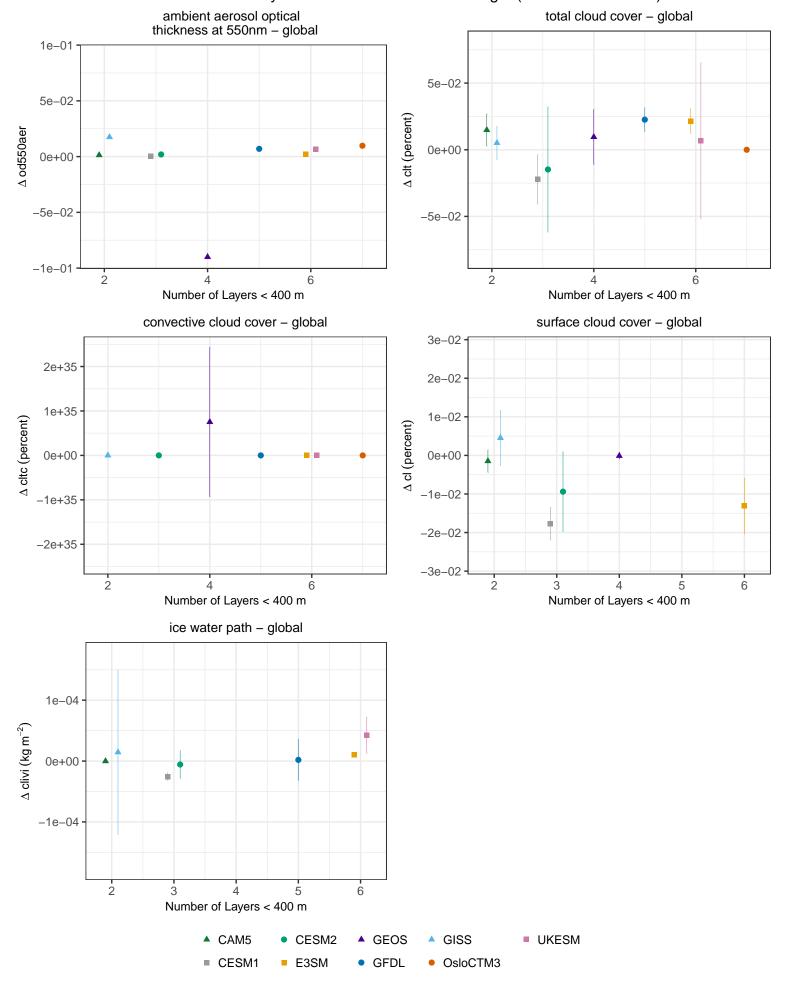
1.2e-19

Number of Model Layers below 400 m: SO2-at-height (absolute difference) column mass burden of SO4 - global column mass burden of SO2 - global 4e-07 2e-07 Δ loadso4 (kg $\mathrm{m}^{-2})$ Δ loadso2 (kg $\mathrm{m}^{-2})$ 0e+00 0e+00 -2e-07 -4e-07 2 2 6 Number of Layers < 400 m Number of Layers < 400 m column mass burden of BC - global SO4 lifetime - global ∆ loadso4/(dryso4 + wetso4) (days) 1e+01 4e-10 Δ loadbc (kg m⁻²) 0e+00 0e+00 -4e-10 -1e+01 2 3 6 2 6 Number of Layers < 400 m Number of Layers < 400 m SO2 timescale - global 5e+07 ∆ loadso2/emiso2 (days) 0e+00 -5e+07 2 3 5 6 Number of Layers < 400 m ▲ CAM5 CESM2 GEOS GISS UKESM CESM1 GFDL OsloCTM3 E3SM

Number of Model Layers below 400 m: SO2-at-height (absolute difference)



Number of Model Layers below 400 m: SO2-at-height (absolute difference)



Number of Model Layers below 400 m: SO2-at-height (absolute difference)

