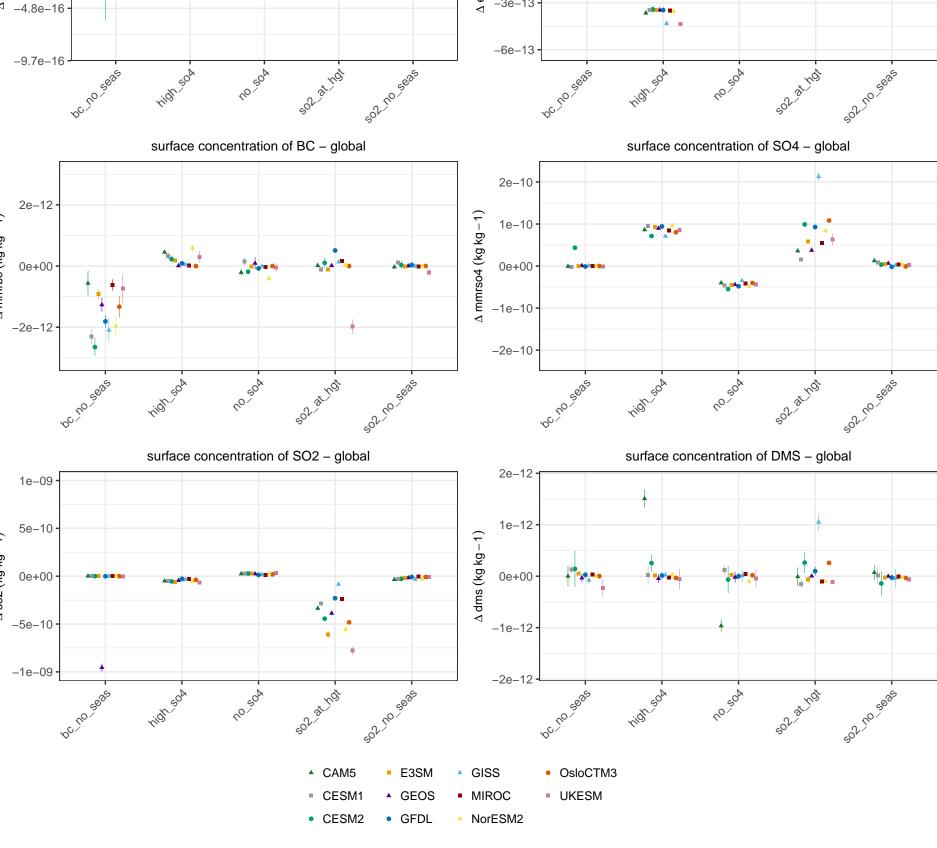
Summary - absolute difference surface flux of BC - global surface flux of SO2 - global 9.7e-16 6e-13 4.8e-16 Δ emiso2 (kg m $^{-2}$ s $^{-1}$) $\Delta\,\mathrm{emibc}\,(\mathrm{kg}\,\mathrm{m}^{-2}\,\mathrm{s}^{-1})$ 3e-13 0e+00 0.0e+00 -3e-13 -4.8e-16 -6e-13 -9.7e-16 sol at not surface concentration of BC - global surface concentration of SO4 - global 2e-10 2e-12 Δ mmrbc (kg kg – 1) Δ mmrso4 (kg kg – 1) 1e-10 0e+00 0e+00 -1e-10 -2e-12 -2e-10 1050A surface concentration of SO2 - global surface concentration of DMS - global 2e-12 1e-09 1e-12 5e-10 Δ dms (kg kg-1) Δ so2 (kg kg – 1) 0e+00 0e+00 -5e-10 -1e-12



Summary - absolute difference column mass burden of SO4 - global column mass burden of SO2 - global 4e-07 2e-07 $\Delta \log 4 (\mathrm{kg} \ \mathrm{m}^{-2})$ $\Delta \log \log ({\rm kg~m}^{-2})$ 0e+00 0e+00 -4e-07 -2e-07 sol at hot SO4 lifetime - global column mass burden of BC - global ∆ loadso4/(dryso4 + wetso4) (days) 1e-08 5e+01 $\Delta \, loadbc \, (kg \; m^{-2})$ 0e+00 0e+00 -5e+01 -1e-08 ROSOA SO2 timescale - global ∆ loadso2/emiso2 (days) 2.5e+04 0.0e+00 -2.5e+04 righ sof 10 50A

▲ CAM5

CESM1

• CESM2

E3SM

GEOS

• GFDL

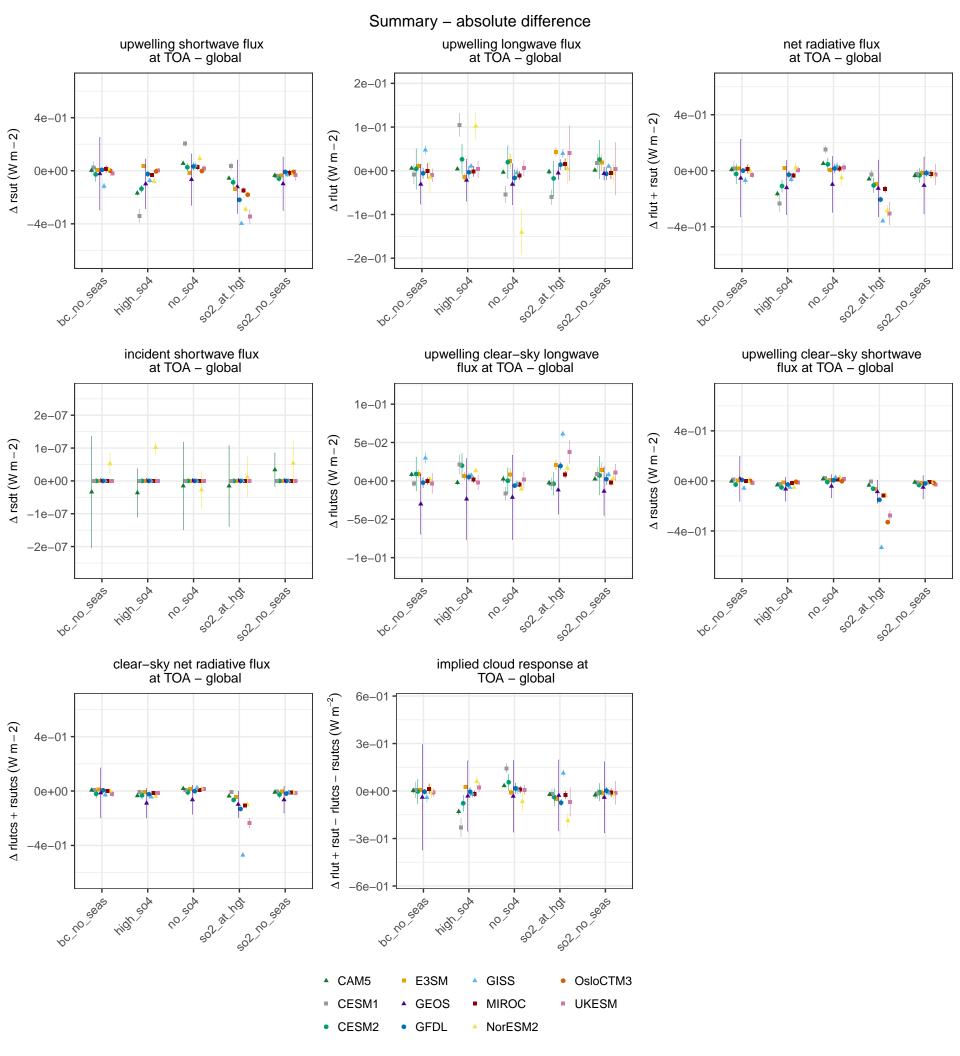
GISS

MIROC

NorESM2

OsloCTM3

UKESM



Summary - absolute difference total cloud cover - global ambient aerosol optical thickness at 550nm - global 1e-01 1e-01 5e-02 Δ clt (percent) Δ od550aer 0e+00 0e+00 -5e-02 -1e-01 -1e-01sol at hot convective cloud cover - global surface cloud cover - global 1e-01 4e-02 5e-02 Δ cltc (percent) Δ cl (percent) 0e+00 0e+00 -5e-02 -4e-02 -1e-01 sol at hot 1050A sol at hot ice water path - global 4e-04 2e-04 Δ clivi (kg m $^{-2}$) 0e+00 -2e-04 -4e-04 bc no seas 10 50A right soa GISS OsloCTM3 ▲ CAM5 E3SM

CESM1

• CESM2

GEOS

• GFDL

MIROC

NorESM2

UKESM

