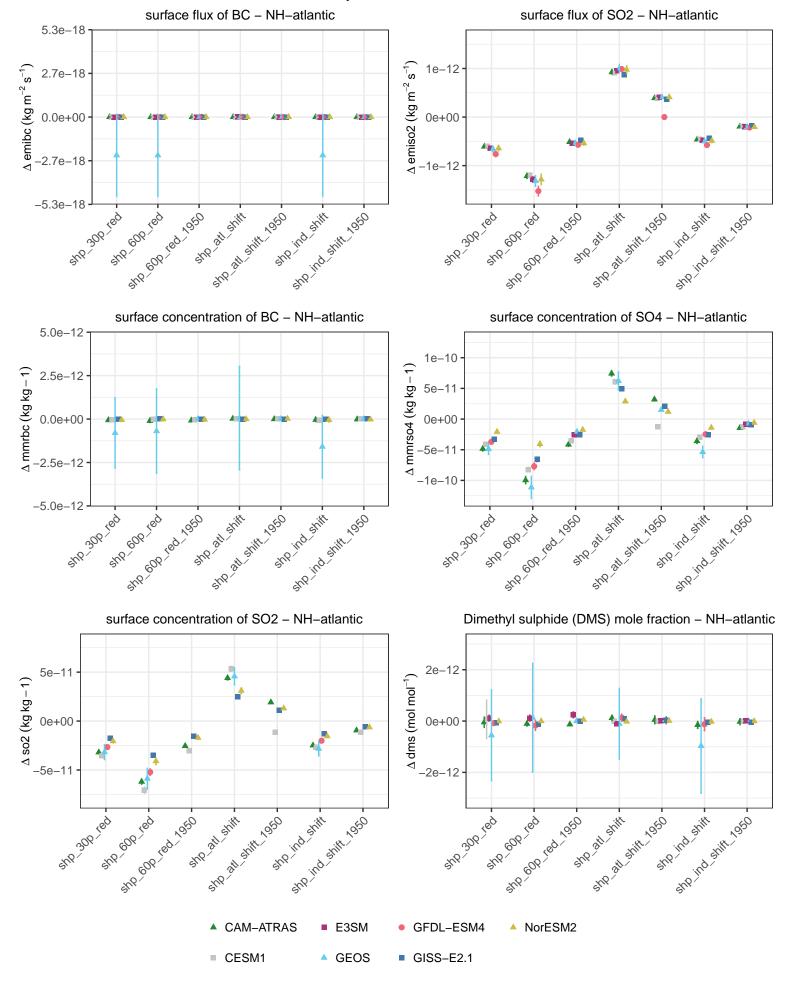
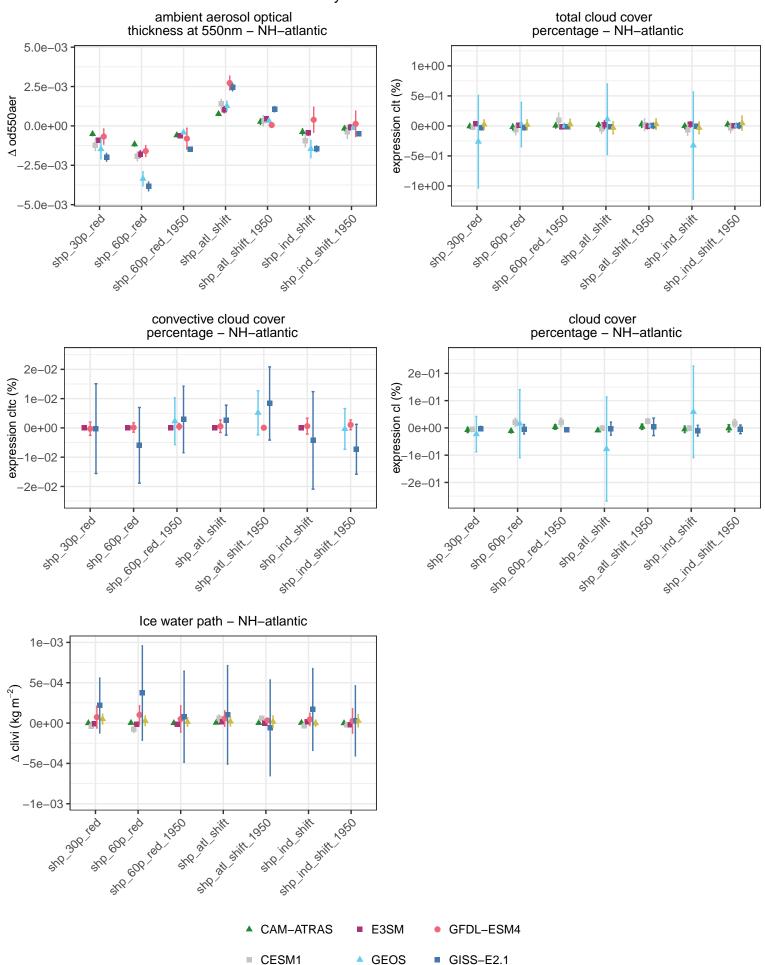
### Summary – absolute difference



#### Summary - absolute difference upwelling longwave flux upwelling shortwave flux net radiative flux at TOA - NH-atlantic at TOA - NH-atlantic at TOA - NH-atlantic 1.0 1.0 1.0 $\Delta$ rlut + rsut (W m – 2) $\Delta$ rlut (W m – 2) $\Delta \operatorname{rsut}(\operatorname{Wm}-2)$ 0.5 0.5 0.5 0.0 0.0 0.0 -0.5 -0.50.5-1.0-1.0-1.0sho ind shift 1960 +10 600 red 1950 ste all stift, 1950 310 600 led 1950 sho ind shift 1950 STR 21 STIFL 250 sho ind shift loso stip all stift. Jose snP at shift SNP att shift she ind shift snP at shift she ind shift sing 300 leg sub end ing she ind shift Sub log sub end ing clear-sky net radiative flux implied cloud response at TOA incident shortwave flux at TOA - NH-atlantic NH–atlantic at TOA - NH-atlantic $\Delta$ rlut + rsut - rlutcs - rsutcs (W m<sup>-2</sup>) $\Delta$ rlutcs + rsutcs (W m – 2) 1.0 1.0 1.0 $\Delta \operatorname{rsdt} (\operatorname{Wm} - 2)$ 0.5 0.5 0.5 0.0 0.0 0.0 -0.5 -0.5 -0.5 -1.01.0 -1.0SHO ALL SHIP. 1950 470 600 red 1950 SHO all SHIP. \$18 600 led 1950 Str. ind Stift 1950 Stopind Shit 1950 STR ind shift Sto all Stiff 1950 snP at shift sno ind shift STP all shift sno ind shift Sub end leg STR all STIFF and end tog sub en leg upwelling clear-sky shortwave upwelling clear-sky longwave flux at TOA - NH-atlantic flux at TOA - NH-atlantic 1.0 1.0 $\Delta \operatorname{rsutcs} (\operatorname{Wm} - 2)$ $\Delta$ rlutcs (W m-2) 0.5 0.5 0.0 0.0 -0.5 -0.5 -1.0-1.0+10 600 red 1950 +10 600 red 1050 SHP all SHIP. sho ind shift 1950 SHP all SHIT, Jobo Stopind Shit 1950 STR at Shift snp ind shift sno ind shift sub out ing snP att shift sub 300 leg sub en lag CAM-ATRAS ■ E3SM GFDL-ESM4 NorESM2 CESM1 GEOS GISS-E2.1

# Summary - absolute difference



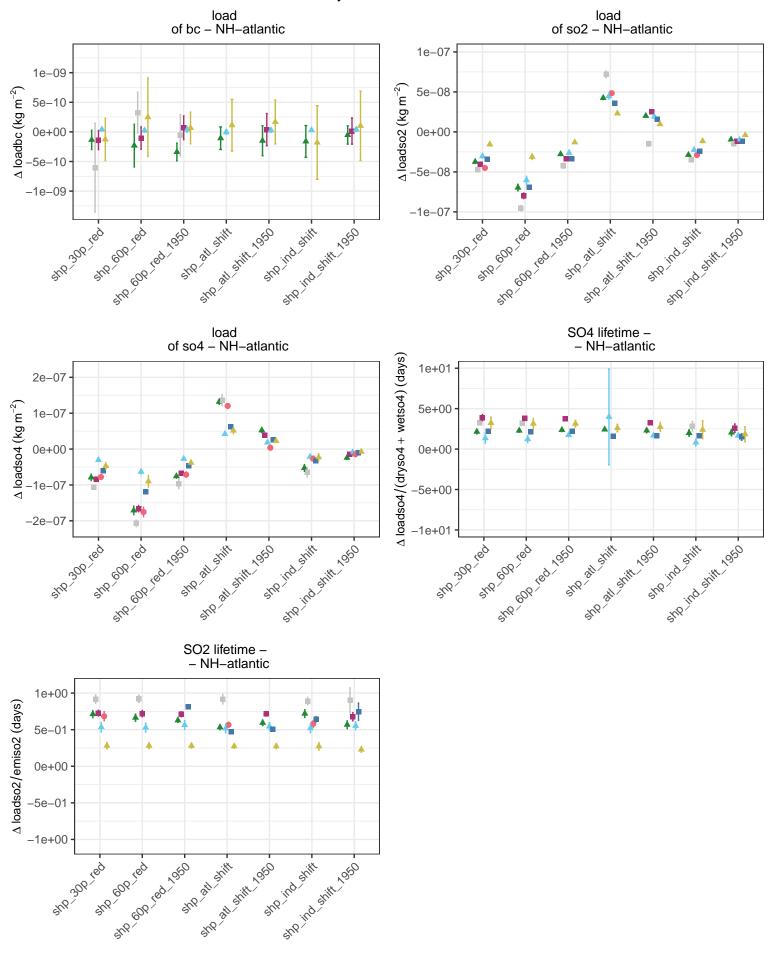
#### Summary - absolute difference dry deposition rate wet deposition rate total deposition rate of BC - NH-atlantic of BC - NH-atlantic of BC - NH-atlantic 4.1e-15 3.7e-15 $\Delta$ drybc + wetbc (kg m – 2 s – 1) 1e-14 $\Delta$ wetbc (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ drybc (kg m<sup>-2</sup> s<sup>-1</sup>) 2.1e-15 4.6e-16 5e-15 0.0e+00 0e+00 4.6e-15 -5e-15 2.1e-15 -8.8e-15 sing att stiff, of o stiff, of o STR att Strate and str -1e-14 314 600 181 1950 -"14 90 184" 1 she ind shift -4.1e-15 sub 300 leg -1.3e-14 stp 300 teg dry deposition rate wet deposition rate dry deposition rate of so4 - NH-atlantic of so2 - NH-atlantic of so2 - NH-atlantic 2e-13 2e-13 1e-12 $\Delta$ dryso2 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ wetso2 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ dryso4 (kg m<sup>-2</sup> s<sup>-1</sup> 1e-13 1e-13 5e-13 0e+00 0e+00 0e+00 5e-13 -1e-13 -1e-13 one att stift, and stift, and att st -1e-12 Sto off Stiff 1960 orth of Still Stil 318 600 Feb. 1950 3.14 600 18d 1. SHO JIN SHIRL JOSO sir ind shift 1950 214 90 to 1 -2e-13 , 806 lag -2e-13 SIRP all SHIFT she ind shift sing 300 fed SUB TOO (dryso2 + wetso2)/2 + (dryso4 + wetso4)/3total deposition rate wet deposition rate of so4 - NH-atlantic of S - NH-atlantic 1e-12 4e-13 $\Delta$ wetso4 (kg m<sup>-2</sup> s<sup>-1</sup>) 5e-13 $(kg m^{-2} s^{-1})$ 0e+00 0e+00 4e-13 5e-13 one att stift, job o stift, job SINGOD END SHIP OF SHI SIN ON SHIP JOSO 4 60 18 × 19 0 Str. ind stift 1950 snP ind shift -8e-13 -1e-12 , 600 leg CAM-ATRAS ■ E3SM GFDL-ESM4 NorESM2

CESM1

GEOS

GISS-E2.1

# Summary - absolute difference



▲ CAM-ATRAS

CESM1

■ E3SM

GEOS

NorESM2

