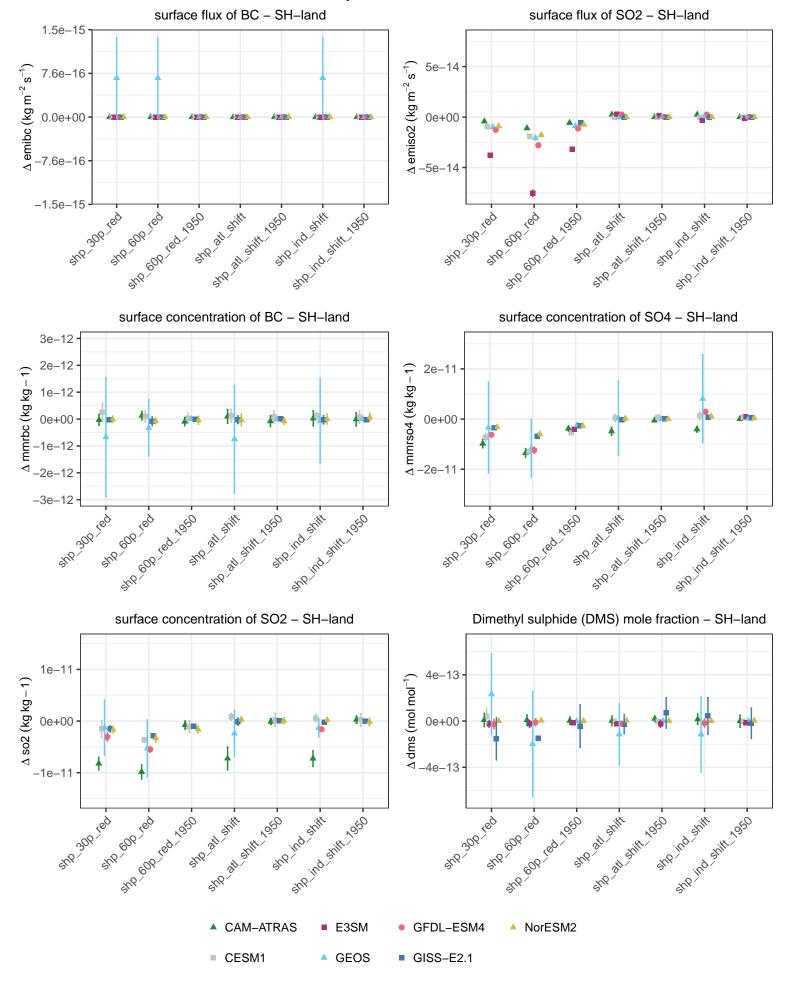
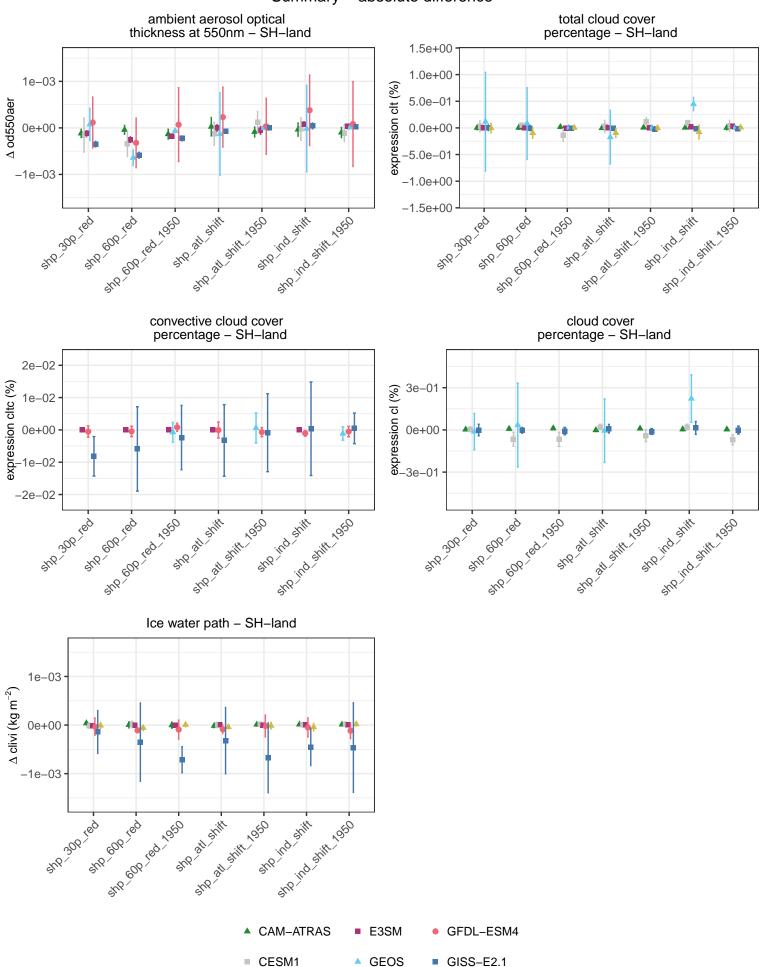
# Summary – absolute difference



#### Summary - absolute difference upwelling longwave flux upwelling shortwave flux net radiative flux at TOA - SH-land at TOA - SH-land at TOA - SH-land 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 -0.50.5-1.0-1.0-1.0+ 1000 red 1950 sho ind shift 1950 ste all stift. Joso 310 600 led 1950 sho ind shift 1950 STR 21 STIFL 250 sho ind shift loso ste all stift. Jose snP at shift she ind shift snP at shift she ind shift snP at shift she ind shift sub end ing elb log sub end ing clear-sky net radiative flux implied cloud response at TOA incident shortwave flux – SH-land at TOA - SH-land at TOA - SH-land $\Delta$ 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 -1.0SHR all SHIP. 470 600 red 1950 \$18 600 led 1950 Stopind Shit 1950 Sto ind shift 1950 Stopind Shit 1950 STR 3H SHIP. 1980 STR all SHIP. JOSO snp ind shift STR ind Shift STP at shift STR 2H STIFF sno ind shift Sub, end leg STR all STIFF Sub log sub en leg upwelling clear-sky shortwave upwelling clear-sky longwave flux at TOA - SH-land flux at TOA - SH-land 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 -1.0-1.0and all arith. \$10,000 ted 1950 +10 600 red 1050 sho ind shift 1960 SHP all SHIT, Jobo Stopind Shit 1950 sno all shift snp ind shift SIRP all SHIFT she jud shift sub 300 leg sub en lag sub en lag CAM-ATRAS ■ E3SM GFDL-ESM4 NorESM2 CESM1 GEOS GISS-E2.1

# Summary - absolute difference



### Summary - absolute difference dry deposition rate of BC – SH–land wet deposition rate total deposition rate of BC - SH-land of BC - SH-land 8.9e-15 8.2e-15 $\Delta$ drybc + wetbc (kg m – 2 s – 1) 1e-14 $\Delta$ wethc (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ drybc (kg m<sup>-2</sup> s<sup>-1</sup>) 4.4e-15 3.5e-15 5e-15 0e+00 0.0e + 001.2e-15 -5e-15 4.4e-15 -5.9e-15 STR att STR. A S -1e-14 3.14.600 181. 1950 ... SHO IND SHIP JOSO 214 90 184 1850 + and de distriction of STR 201 STILL STR SHO IND SHIP DEO she ind shift -8.9e-15 sub 300 leg \$10<sup>300</sup> teg -1.1e-14 stre 300 teg dry deposition rate wet deposition rate dry deposition rate of so2 - SH-land of so2 - SH-land of so4 - SH-land $\Delta$ dryso2 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ wetso2 (kg m<sup>-2</sup> s<sup>-1</sup>) 5e-05 4e-14 $\Delta$ dryso4 (kg m $^{-2}$ s $^{-1}$ 3e-14 0e+00 0e+00 -3e-14 -5e-05 4e-14 SHO SHELL SH Sto off Stiff, 1969 410 600 fed 1950 3.14 600 18d 1. J.1600 181 1850 Sta Statistic 1980 SHO JIN SHIRL JOSO sur ind shift 1950 , 600 leg STR at STIFT snp ind shift sno ind shift Sub leg (dryso2 + wetso2)/2 + (dryso4 + wetso4)/3wet deposition rate total deposition rate of so4 - SH-land of S - SH-land 2e-13 $\Delta$ wetso4 (kg m<sup>-2</sup> s<sup>-1</sup>) 2.5e-05 1e-13 $(kg m^{-2} s^{-1})$ 0.0e + 000e+00 2.5e-05 1e-13 Pred Strain of S -5.0e-05 -2e-13 Stopped Stift 1950 31490 Fire 4 sno ind shift sub 300 teg -7.5e-05 CAM-ATRAS ■ E3SM GFDL-ESM4 NorESM2 CESM1 GEOS GISS-E2.1

# Summary - absolute difference

