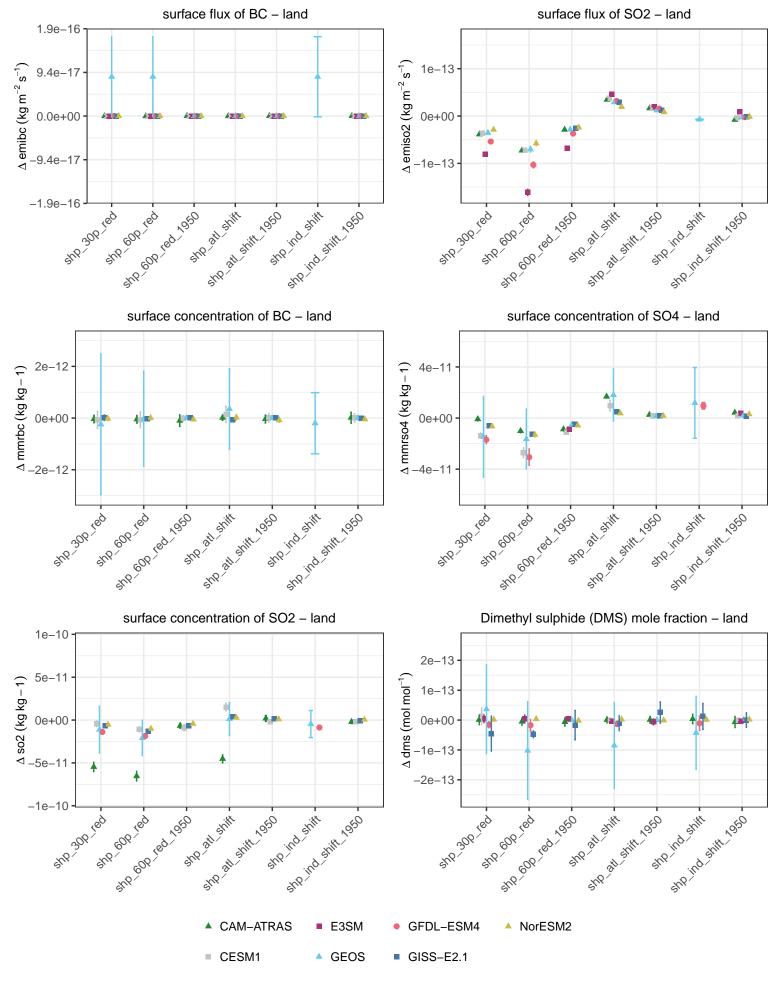
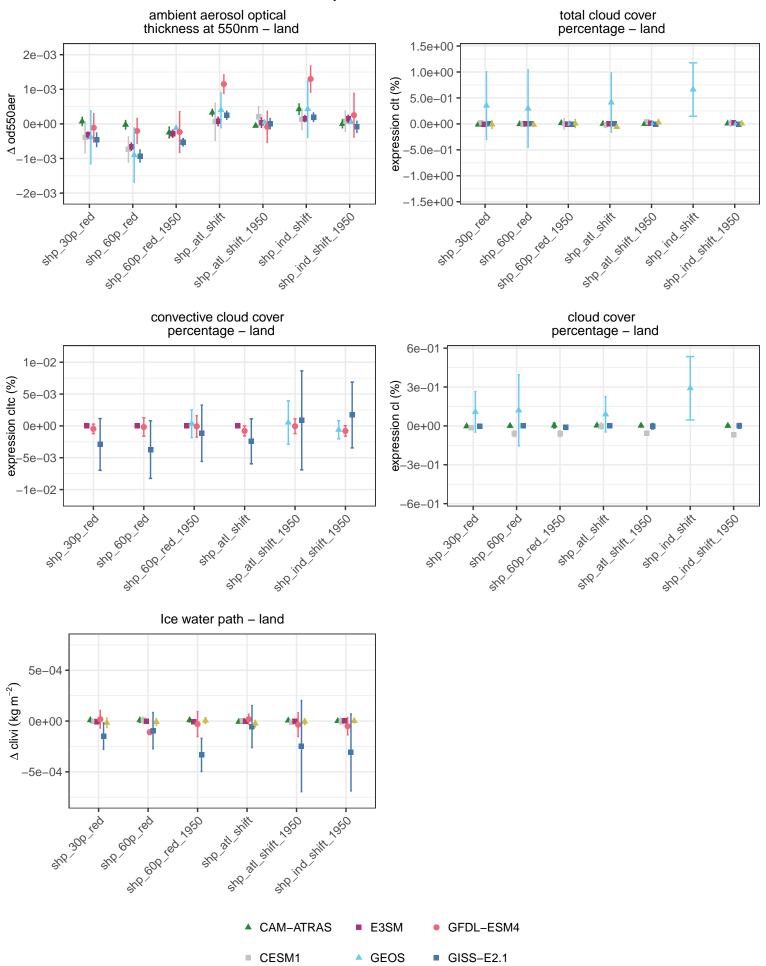
### Summary – absolute difference



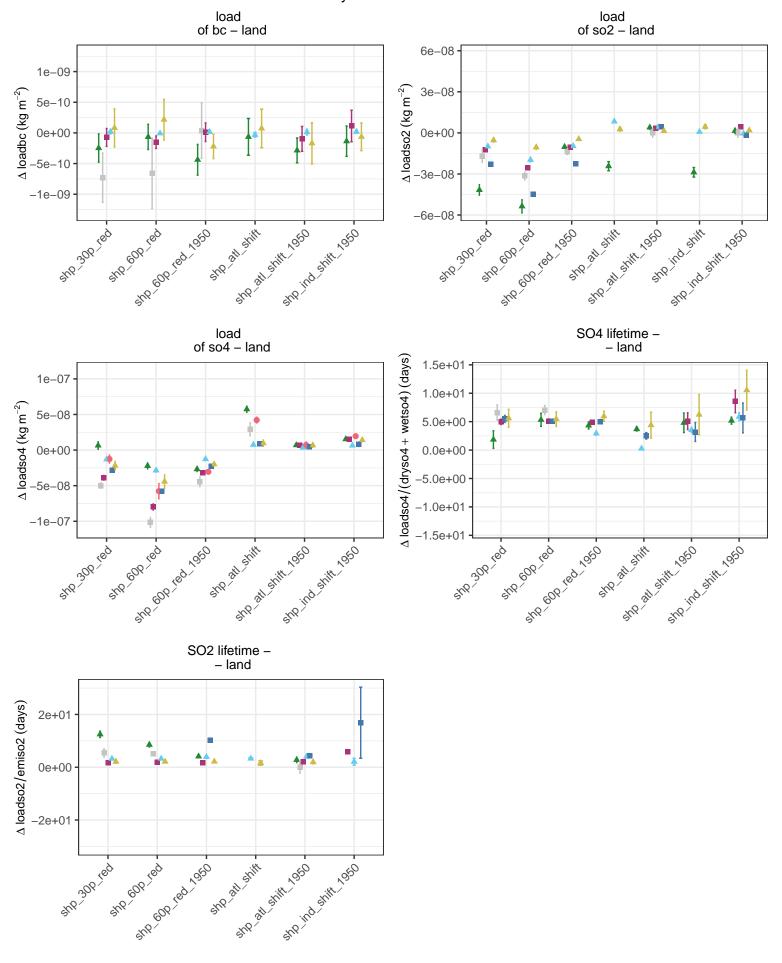
#### Summary - absolute difference upwelling longwave flux upwelling shortwave flux net radiative flux at TOA - land at TOA - land at TOA - land 1.0 1.0 1.0 $\Delta$ rlut + rsut (W m – 2) $\Delta$ rlut (W m – 2) $\Delta \operatorname{rsut}(\operatorname{Wm}-2)$ 0.5 0.5 0.5 0.0 0.0 0.0 -0.5 0.5-0.5-1.0-1.0-1.0sho ind shift 1950 +10 600 red 1950 ste all stift, 1950 310 600 red 1950 sho ind shift 1950 sto all still, oso stip all stift. Jose she ind shift snP at shift she ind shift STR all STIFF she ind shift sub end ing snp at shift elb log sub end ing clear-sky net radiative flux implied cloud response at TOA incident shortwave flux ať TOA - land at TOA - 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. and ind shift 1950 + 1050 + SHP all SHIR. \$18 600 led 1950 arry and Stiff 1950 Str. ind Stift 1950 Storid Still 950 STR ind shift snP at shift sno ind shift STP all shift she ind shift Sub end leg STR all STIFF SUB OB Tog sub en leg upwelling clear-sky shortwave upwelling clear-sky longwave flux at TOA - land flux at TOA - 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 -1.0-1.0+10 600 red 1050 SHP all SHIP. sho ind shift 1950 +10 600 red 1050 SHP all SHIT, Jobo Str. Ind. Stift. 1950 STR at Shift snp ind shift SIRP all SHIFT stp.ind.shift Sub edb leg \$10<sup>300</sup> Jed sub en leg 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 - land of BC - land of BC - land 7.3e-15 $\Delta$ drybc + wetbc (kg m – 2 s – 1) 2e-14 2e-14 $\Delta$ wetbc (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ drybc (kg m<sup>-2</sup> s<sup>-1</sup>) 3.6e-15 1e-14 1e-14 0.0e+00 0e+00 0e+00 --1e-14 3.6e-15 -2e-14 STR 3th Strik, 1000 Strik, 100 St -1e-14 SHO IND SHIP JOSO and led lay 318 608 led 1950 Sto of Stiff, 1989 Str. ind Stift 1950 STR ON STITE OF STREET she ind shift -7.3e-15 sub 300 leg - 1600 reg dry deposition rate wet deposition rate dry deposition rate of so2 - land of so2 - land of so4 - land 1e-13 $\Delta$ dryso2 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ dryso4 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ wetso2 (kg m<sup>-2</sup> s<sup>-</sup> 1e-13 4e-14 5e-14 0e+00 0e+00 0e+00 5e-14 4e-14 1e-13 Sto and Stiff, OSO Stiff, of Store of S 410 600 fed 1950 Stop ind shift 1950 314,600 led 1,030 or of the state of SHO OH SHIP LANDS SHO JIN SHIRL JOSO and on they have -1e-13 , 600 leg STR at STIFF sno ind shift SUB TOO (dryso2 + wetso2)/2 + (dryso4 + wetso4)/3wet deposition rate total deposition rate of so4 - land of S - land 4e-13 6e-13 $\Delta$ wetso4 (kg m<sup>-2</sup> s<sup>-1</sup>) 3e-13 2e-13 $(kg m^{-2} s^{-1})$ 0e+00 0e+00 3e-13 Sto 3d Stiff, 350 Stiff, 350 and on the the strike of the s -2e-13 -6e-13 S.W. del drift, 1950 \$10 00 100 mg 10 she jud shift Stop ind Shift 1950 , 600 leg sing 300 fed CAM-ATRAS ■ E3SM GFDL-ESM4 NorESM2 CESM1 GEOS GISS-E2.1

# Summary - absolute difference



▲ CAM-ATRAS

CESM1

■ E3SM

GEOS

NorESM2

