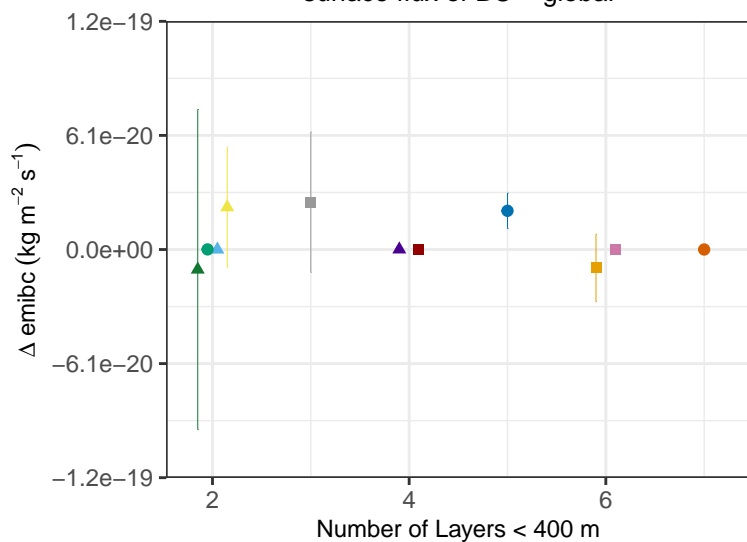
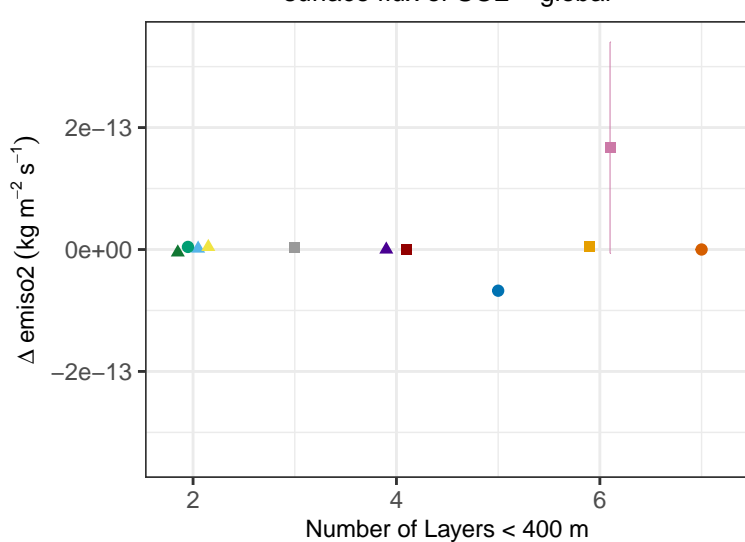


Number of Model Layers below 400 m: SO2-at-height (absolute difference)

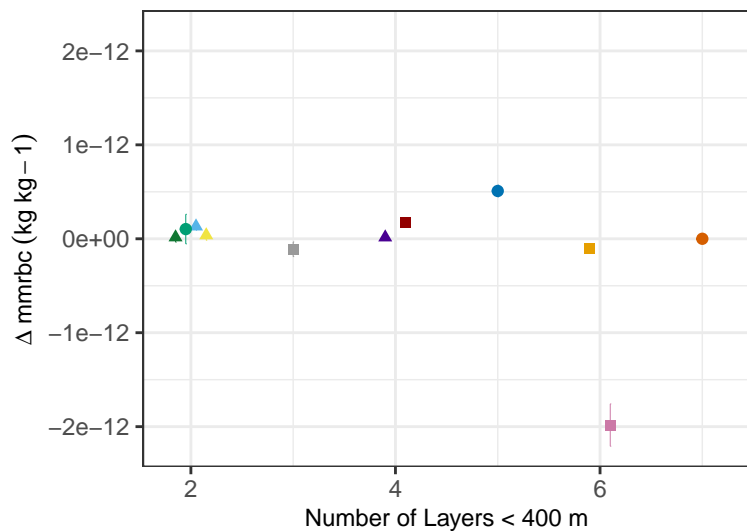
surface flux of BC – global



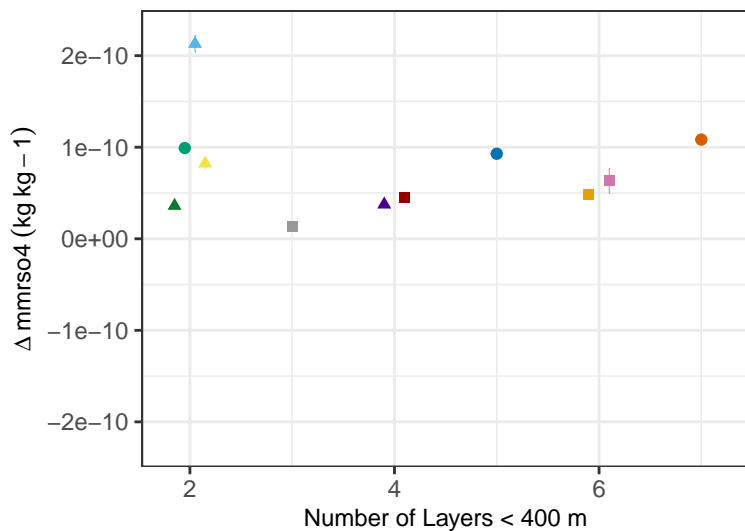
surface flux of SO2 – global



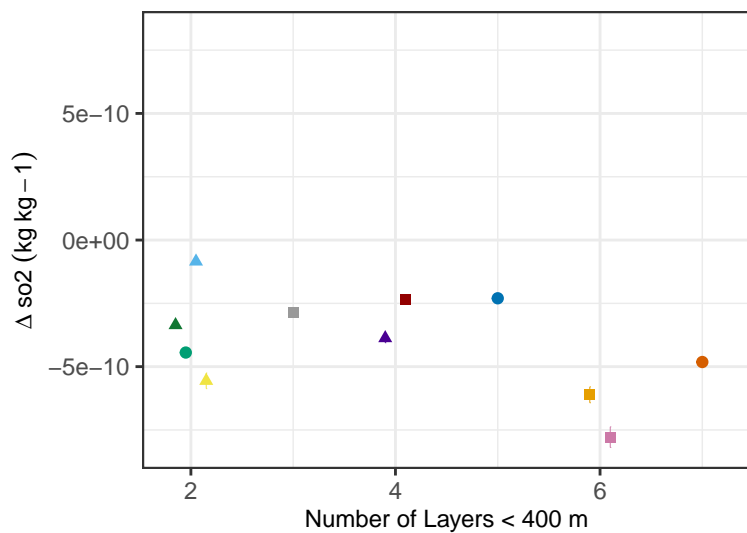
surface concentration of BC – global



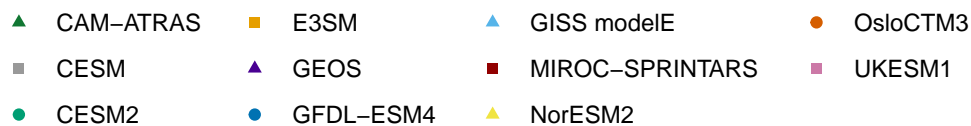
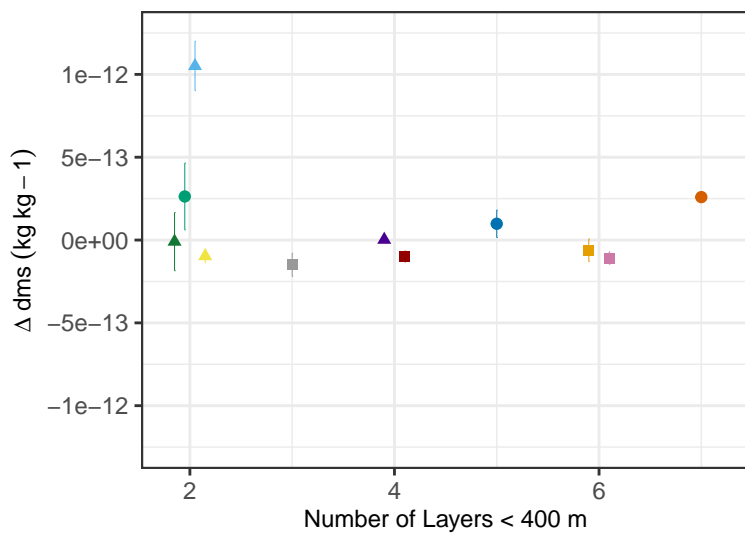
surface concentration of SO4 – global



surface concentration of SO2 – global

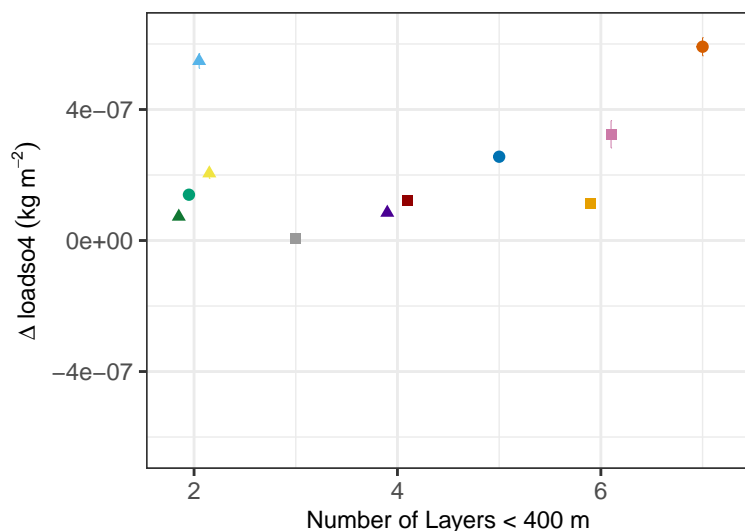


surface concentration of DMS – global

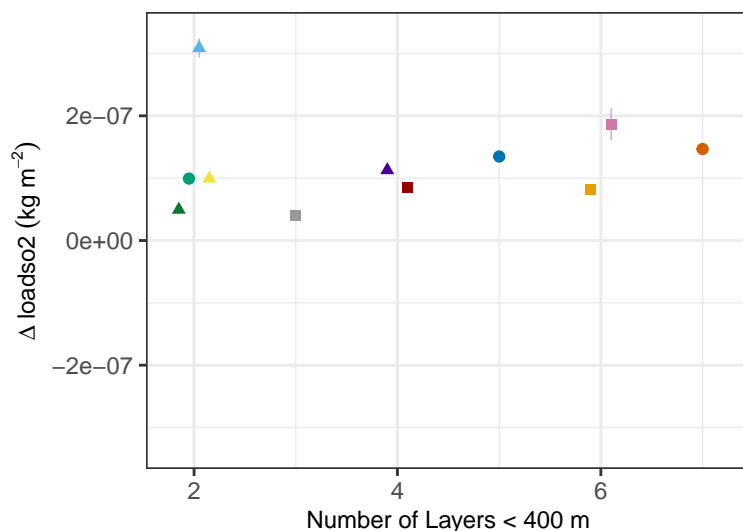


Number of Model Layers below 400 m: SO2-at-height (absolute difference)

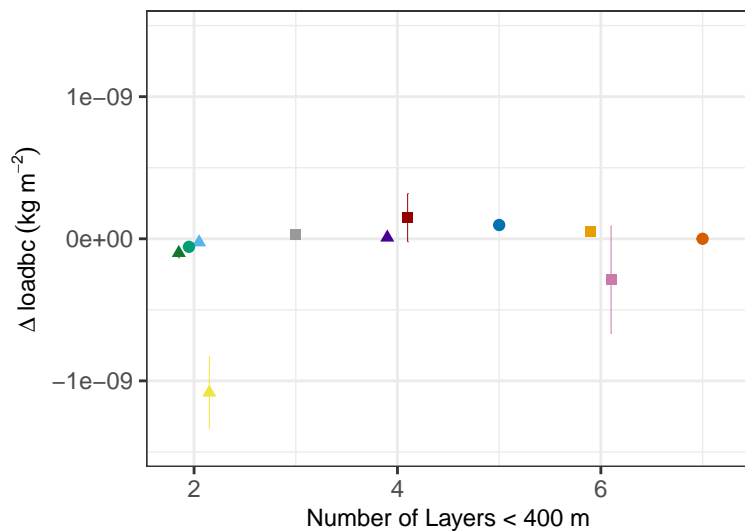
column mass burden of SO4 – global



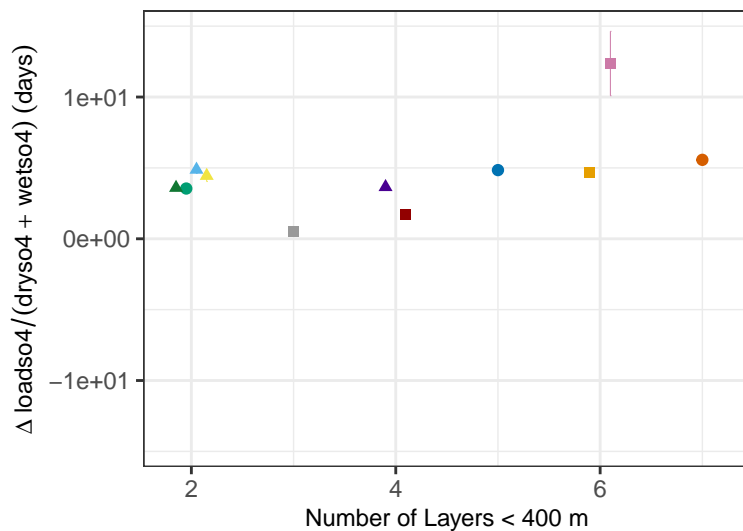
column mass burden of SO2 – global



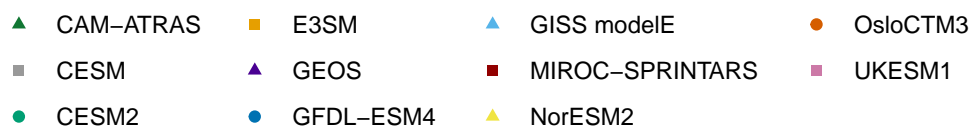
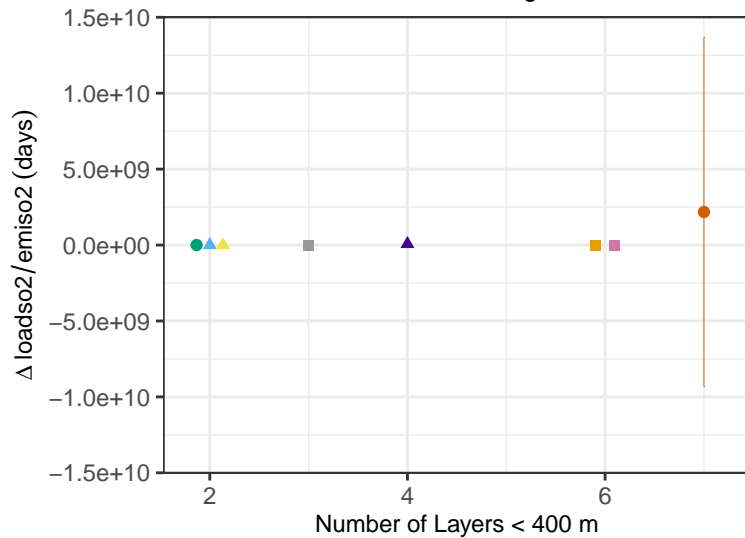
column mass burden of BC – global



SO4 lifetime – global

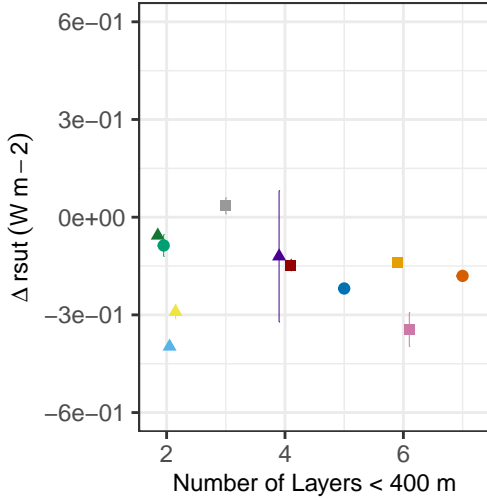


SO2 timescale – global

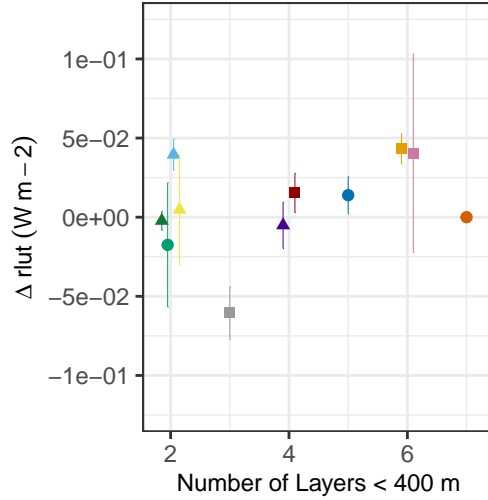


Number of Model Layers below 400 m: SO2-at-height (absolute difference)

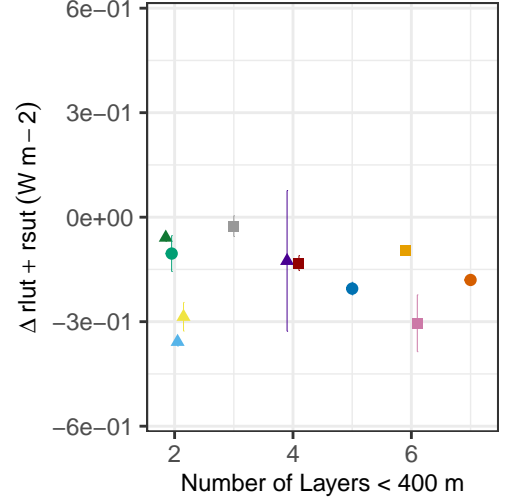
upwelling shortwave flux
at TOA – global



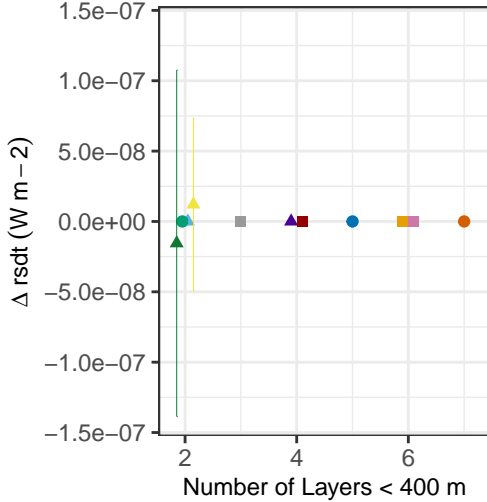
upwelling longwave flux
at TOA – global



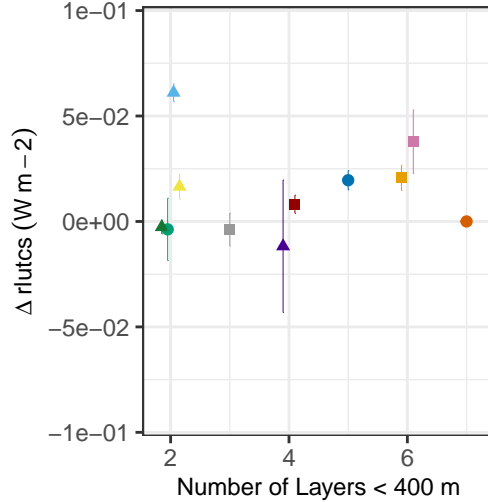
net radiative flux
at TOA – global



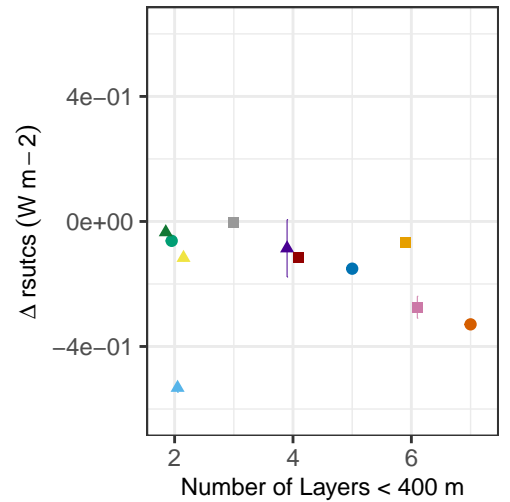
incident shortwave flux
at TOA – global



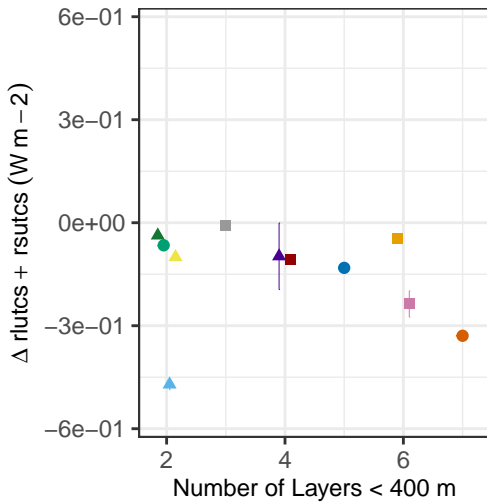
upwelling clear-sky longwave
flux at TOA – global



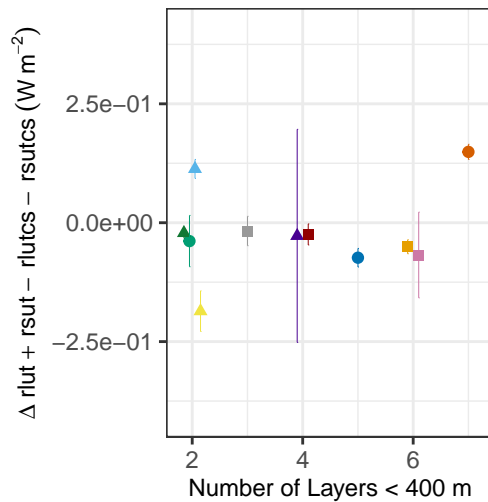
upwelling clear-sky shortwave
flux at TOA – global



clear-sky net radiative flux
at TOA – global



implied cloud response at
TOA – global



▲ CAM-ATRAS

■ E3SM

▲ GISS modelE

● OsloCTM3

■ CESM

▲ GEOS

■ MIROC-SPRINTARS

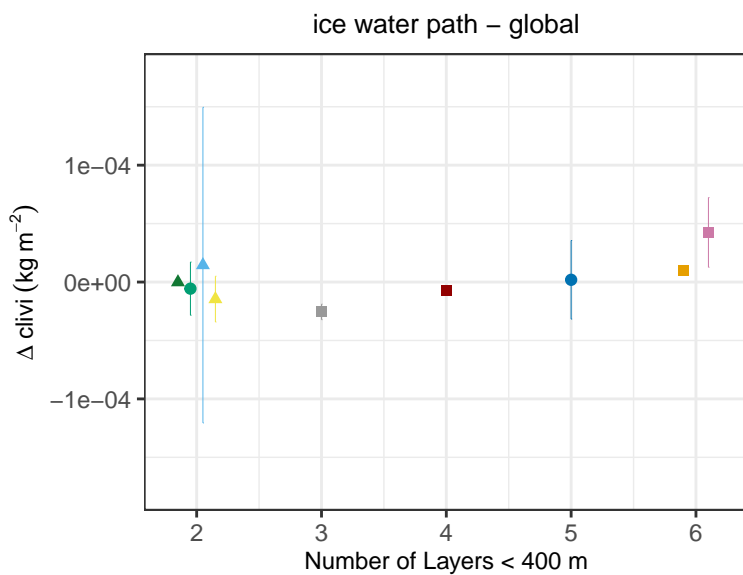
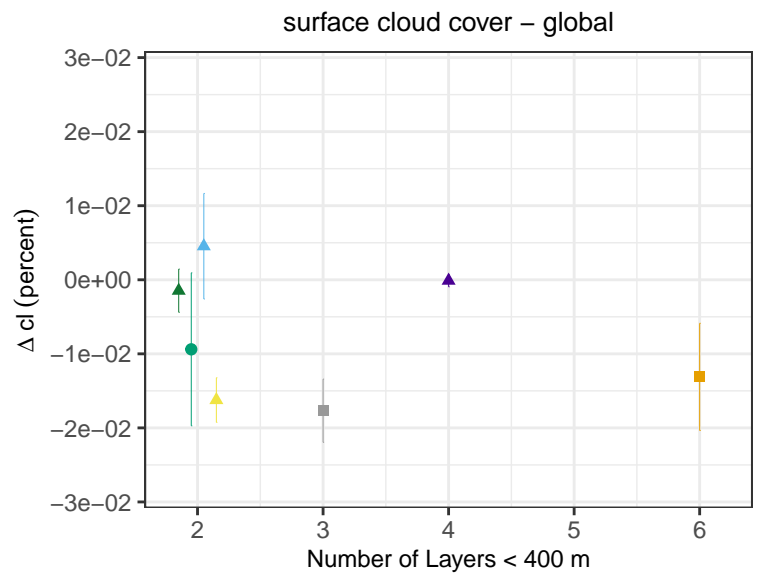
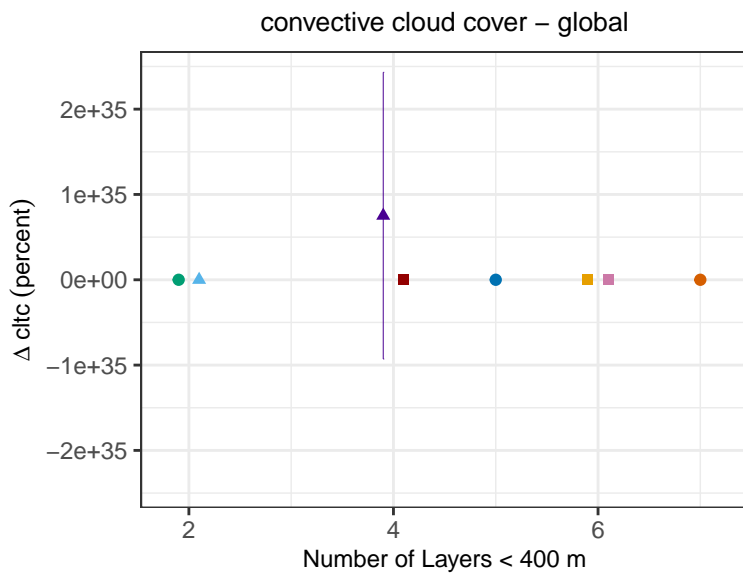
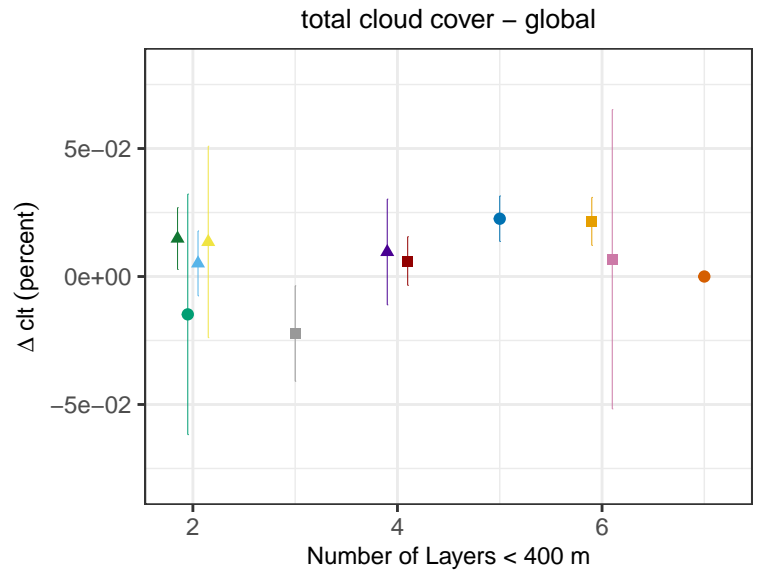
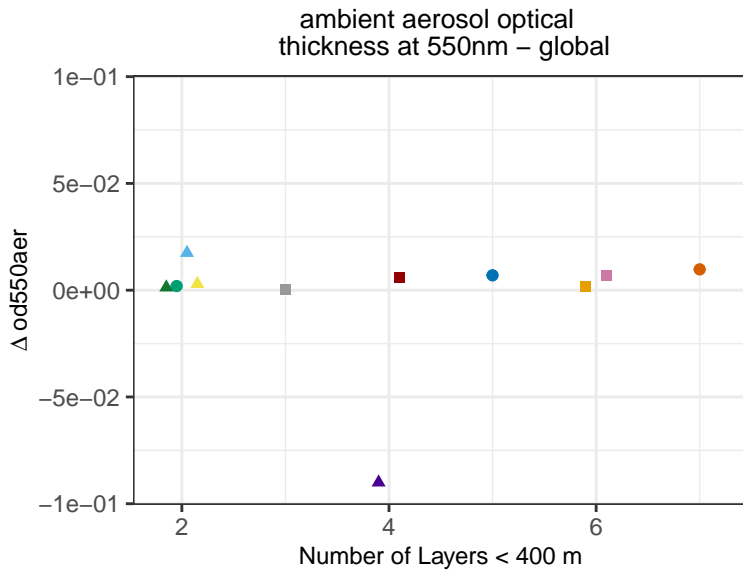
■ UKESM1

● CESM2

● GFDL-ESM4

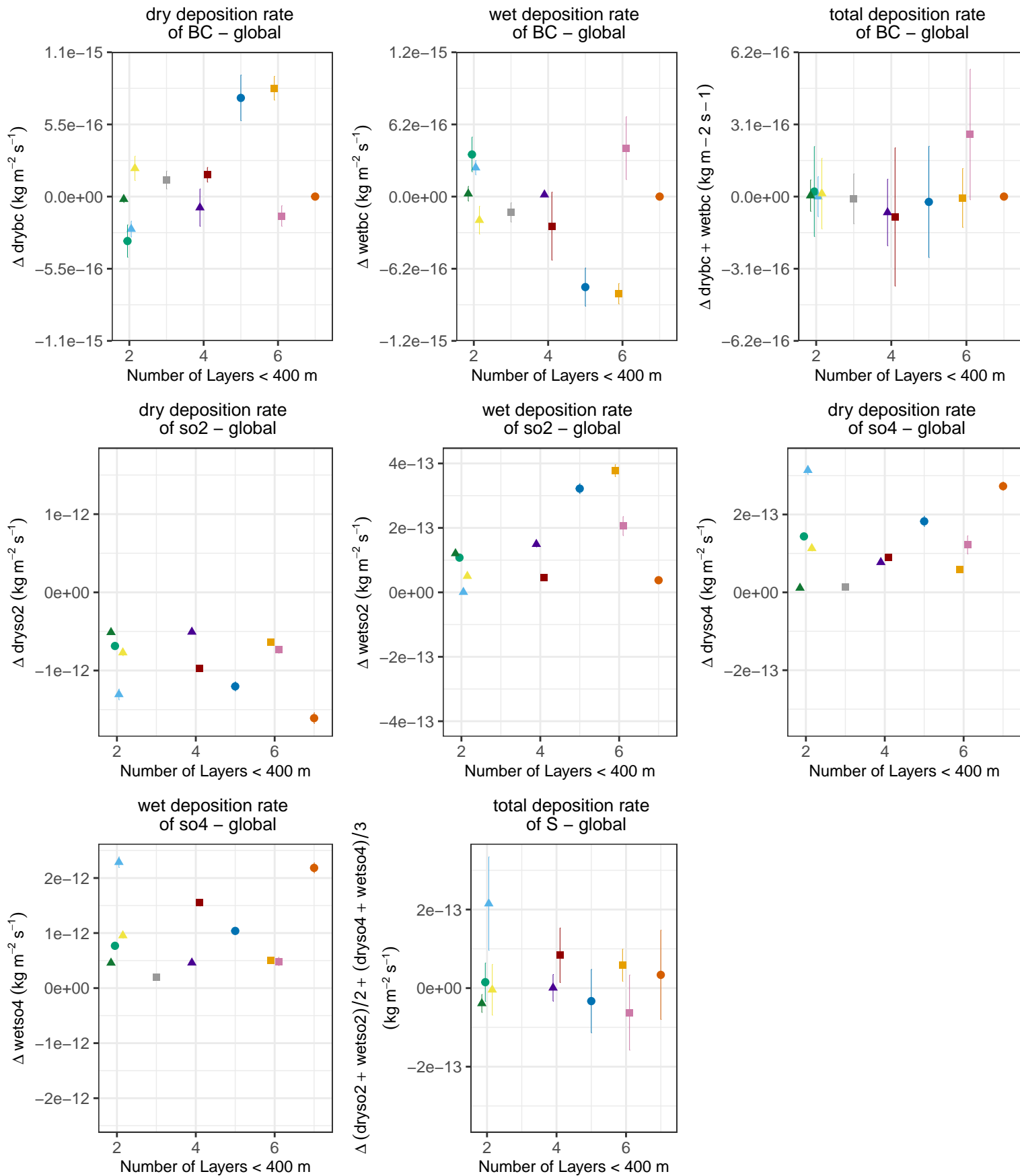
▲ NorESM2

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



- | | | | |
|-------------|-------------|-------------------|------------|
| ▲ CAM-ATRAS | ■ E3SM | ▲ GISS modelE | ● OsloCTM3 |
| ■ CESM | ▲ GEOS | ■ MIROC-SPRINTARS | ■ UKESM1 |
| ● CESM2 | ● GFDL-ESM4 | ▲ NorESM2 | |

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



▲ CAM-ATRAS

■ E3SM

▲ GISS modelE

● OsloCTM3

■ CESM

▲ GEOS

■ MIROC-SPRINTARS

■ UKESM1

● CESM2

● GFDL-ESM4

▲ NorESM2