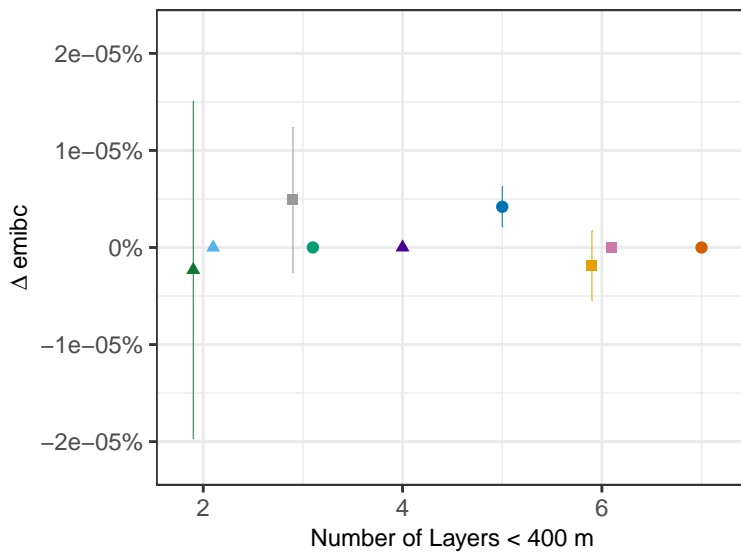
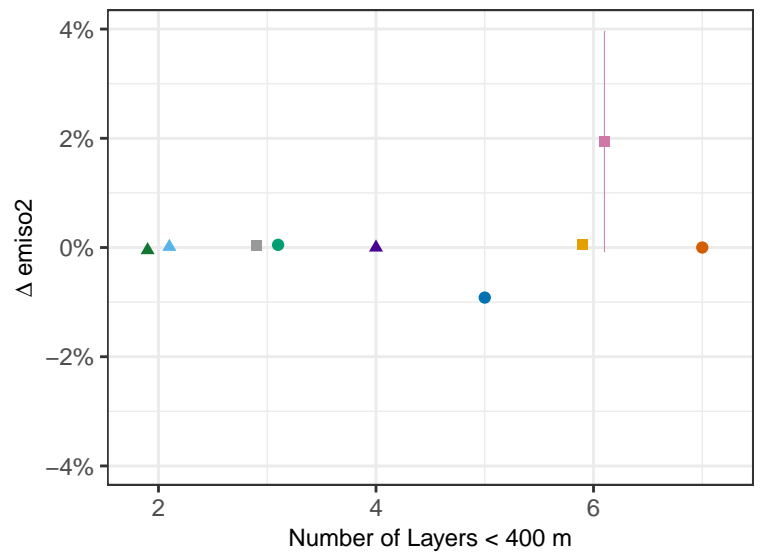


# Number of Model Layers below 400 m: SO<sub>2</sub>-at-height (percent difference)

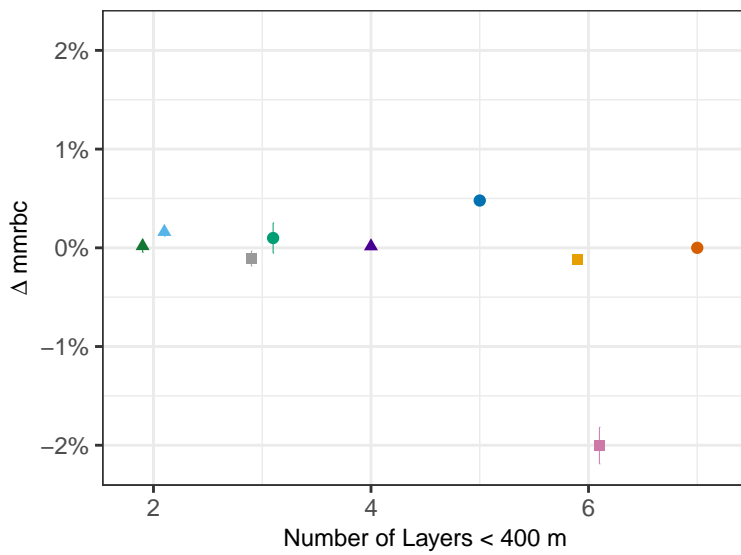
surface flux of BC – global



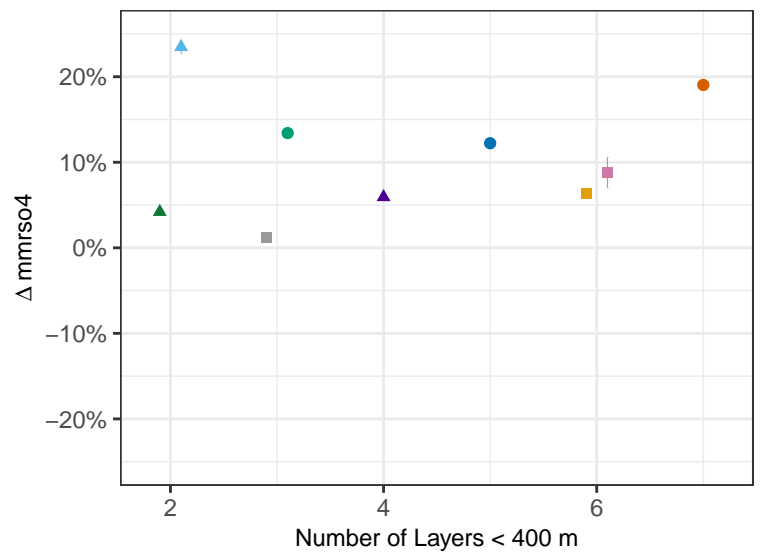
surface flux of SO<sub>2</sub> – global



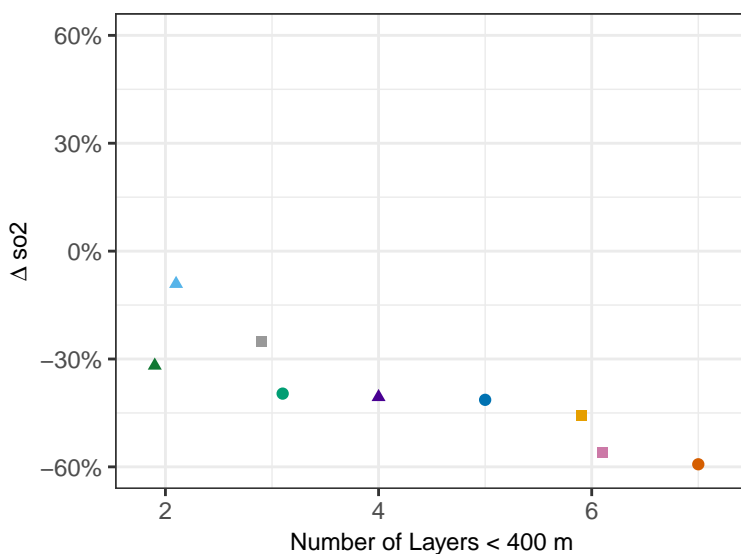
surface concentration of BC – global



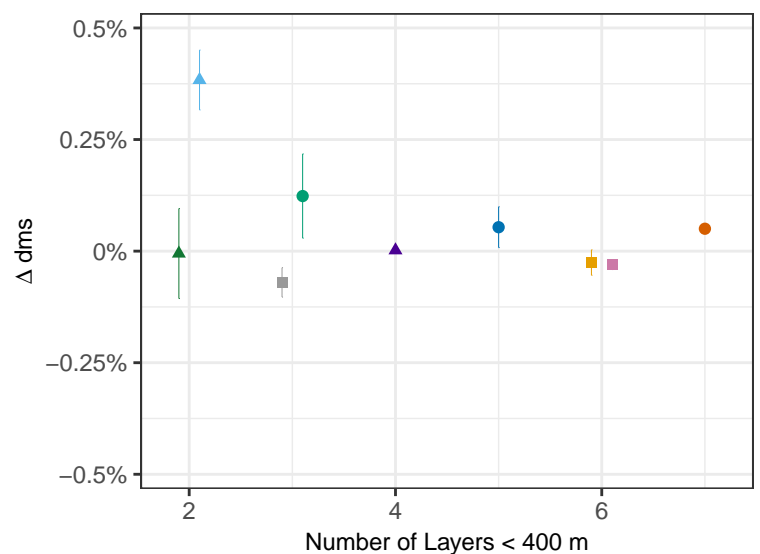
surface concentration of SO<sub>4</sub> – global



surface concentration of SO<sub>2</sub> – global

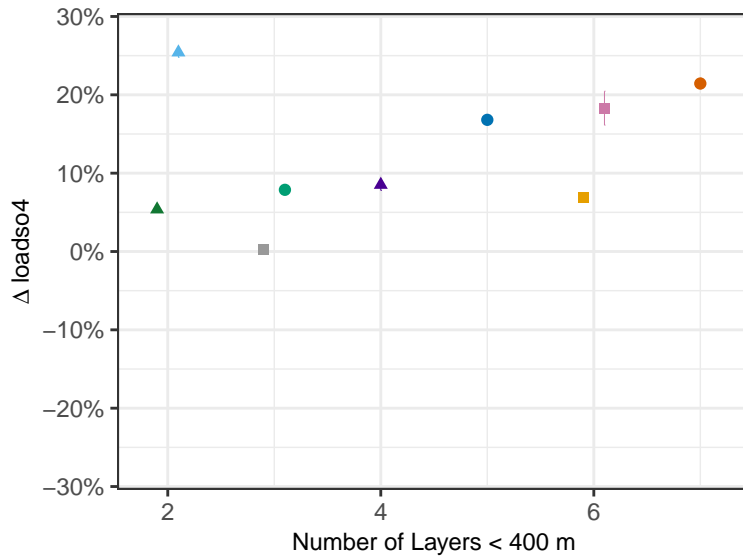


surface concentration of DMS – global

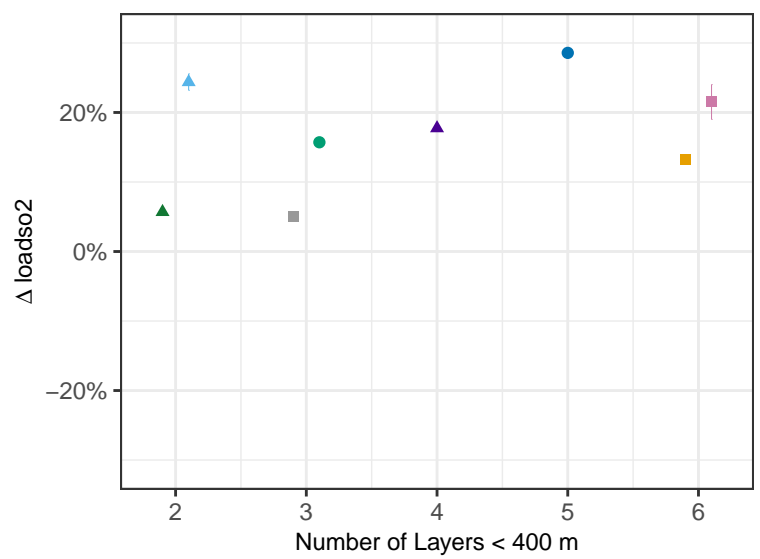


# Number of Model Layers below 400 m: SO2-at-height (percent difference)

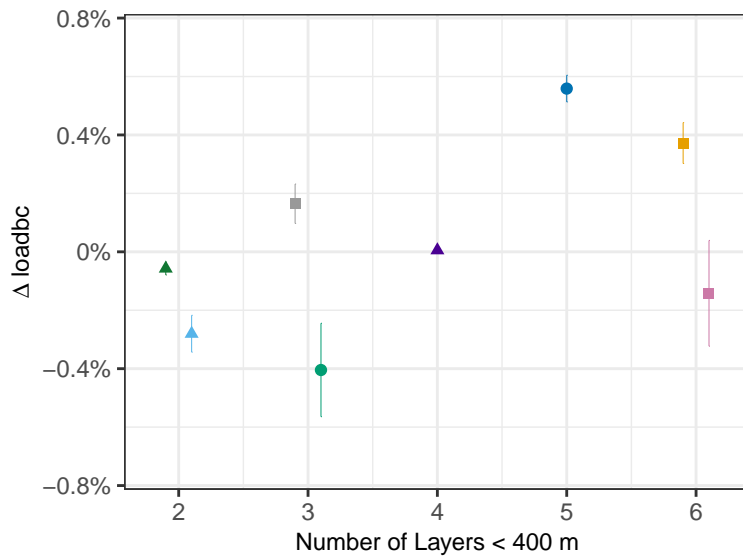
column mass burden of SO4 – global



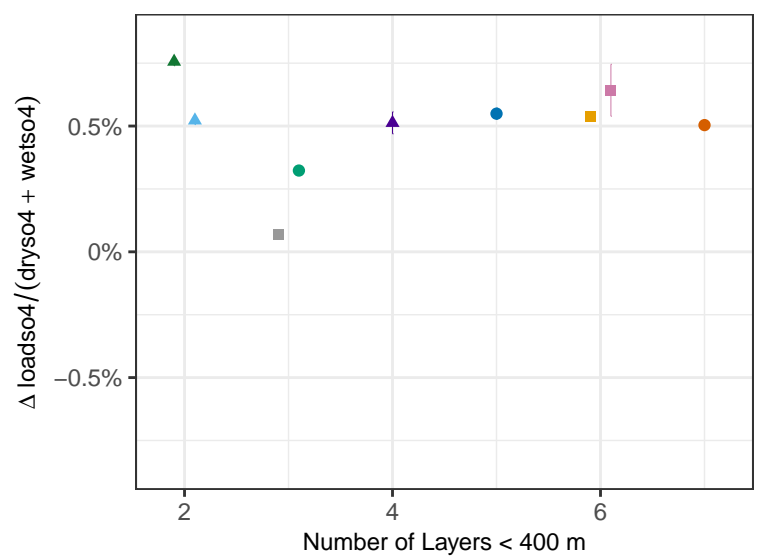
column mass burden of SO2 – global



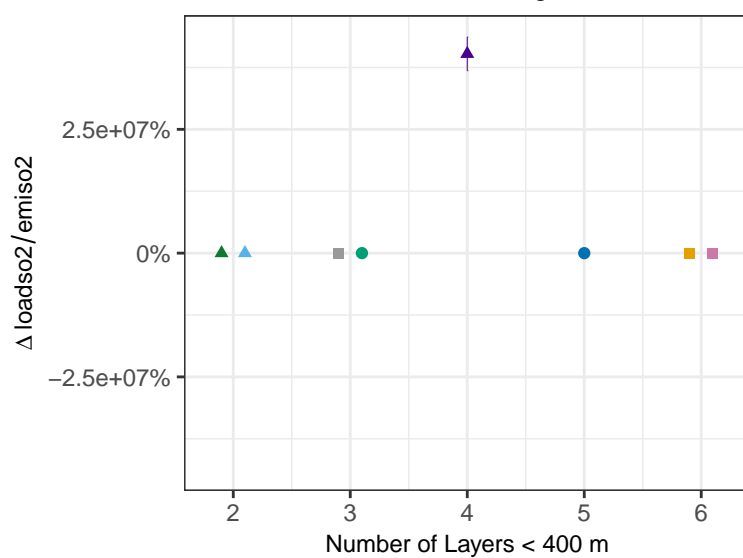
column mass burden of BC – global



SO4 lifetime – global

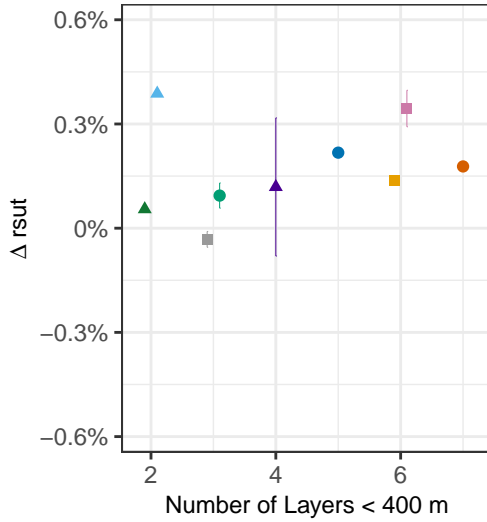


SO2 timescale – global

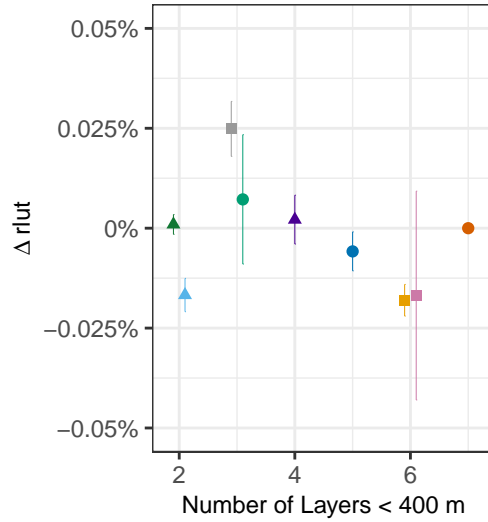


# Number of Model Layers below 400 m: SO2-at-height (percent difference)

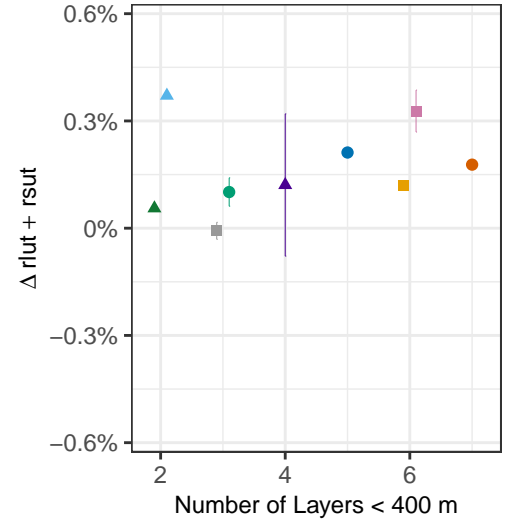
upwelling shortwave flux  
at TOA – global



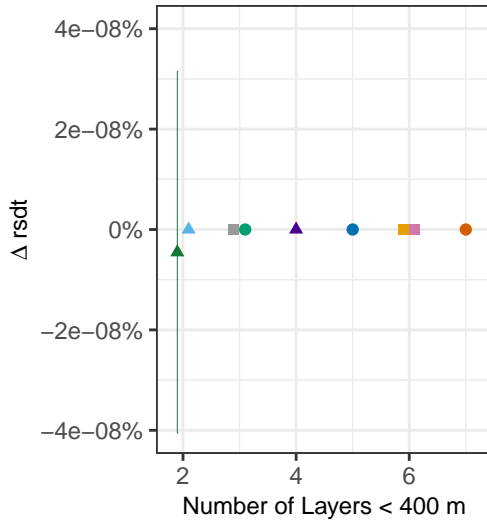
upwelling longwave flux  
at TOA – global



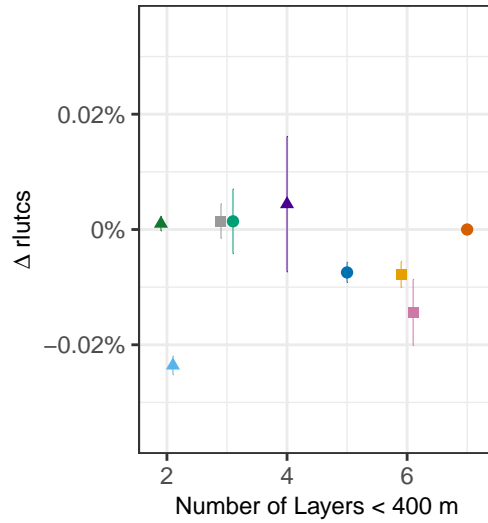
net radiative flux  
at TOA – global



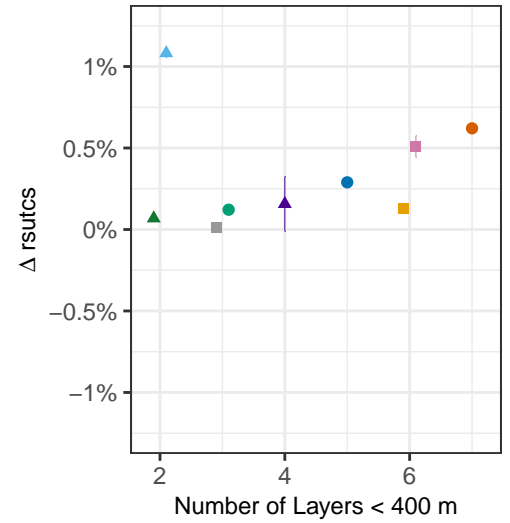
incident shortwave flux  
at TOA – global



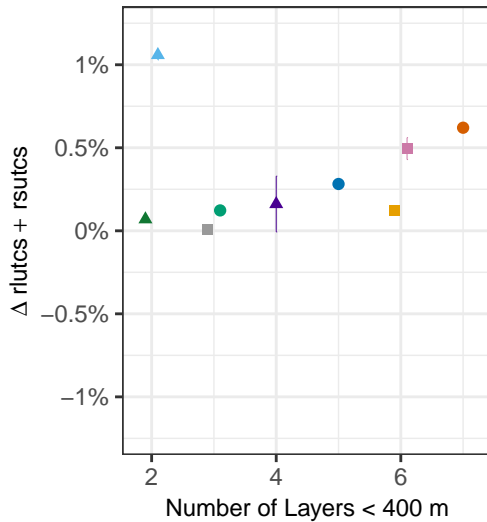
upwelling clear-sky longwave  
flux at TOA – global



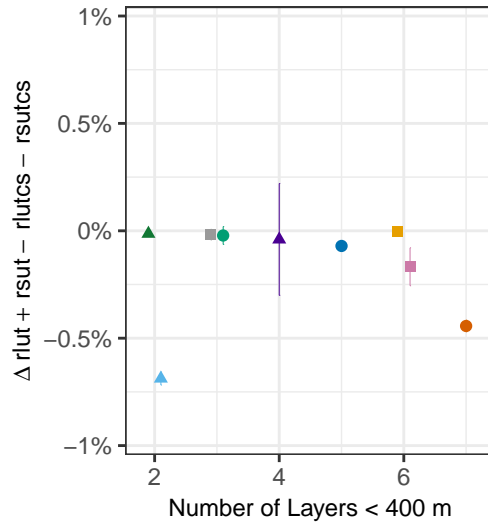
upwelling clear-sky shortwave  
flux at TOA – global



clear-sky net radiative flux  
at TOA – global



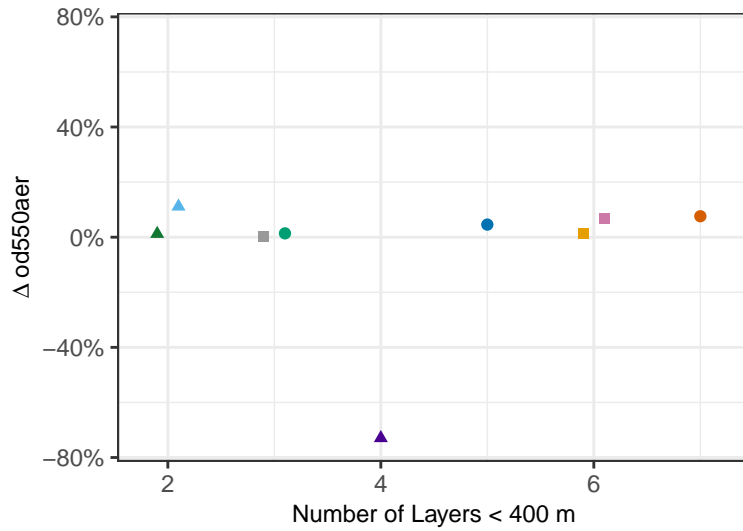
implied cloud response at  
TOA – global



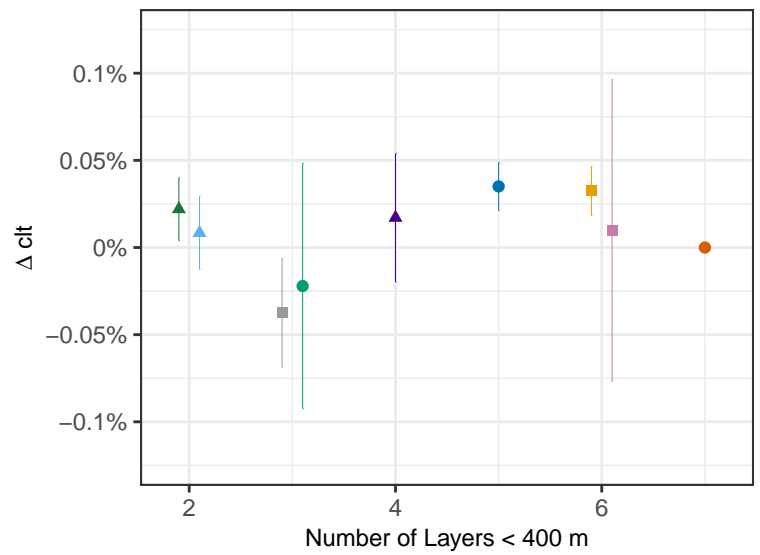
▲ CAM5    ● CESM2    ▲ GEOS    ▲ GISS    ■ UKESM  
 ■ CESM1    ■ E3SM    ● GFDL    ● OsloCTM3

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

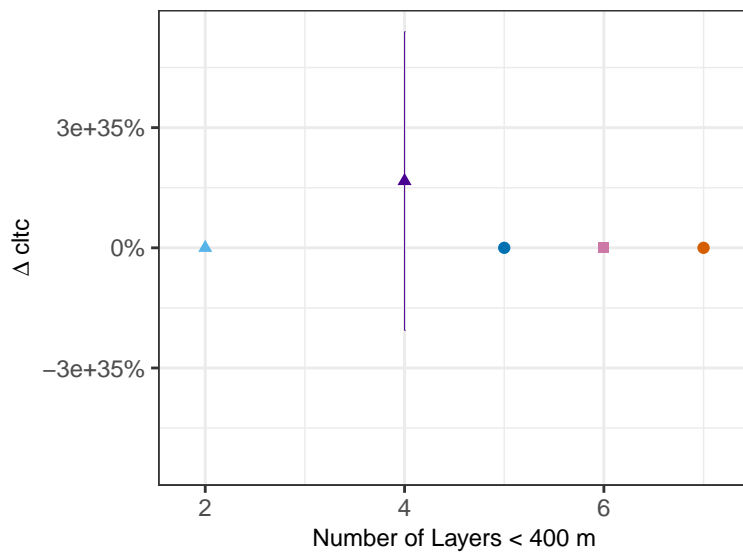
ambient aerosol optical  
thickness at 550nm – global



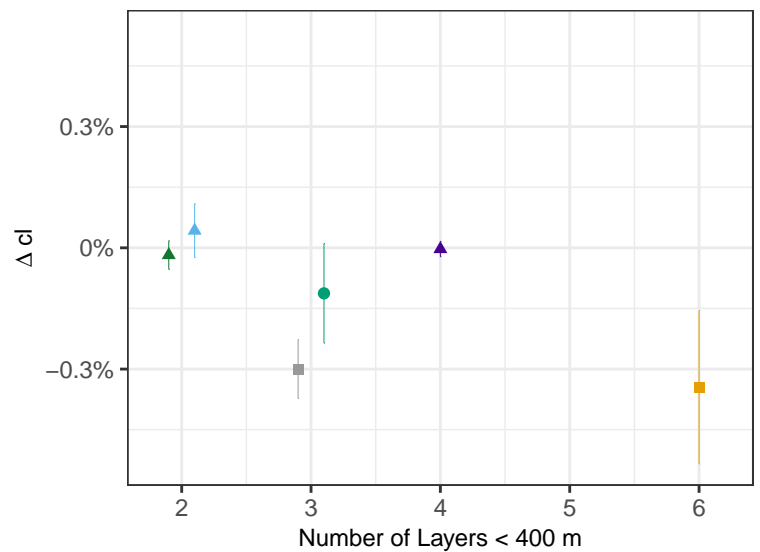
total cloud cover – global



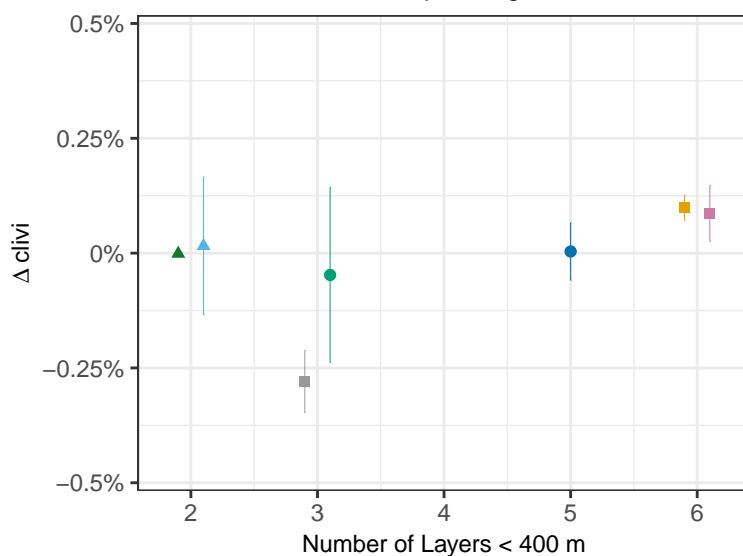
convective cloud cover – global



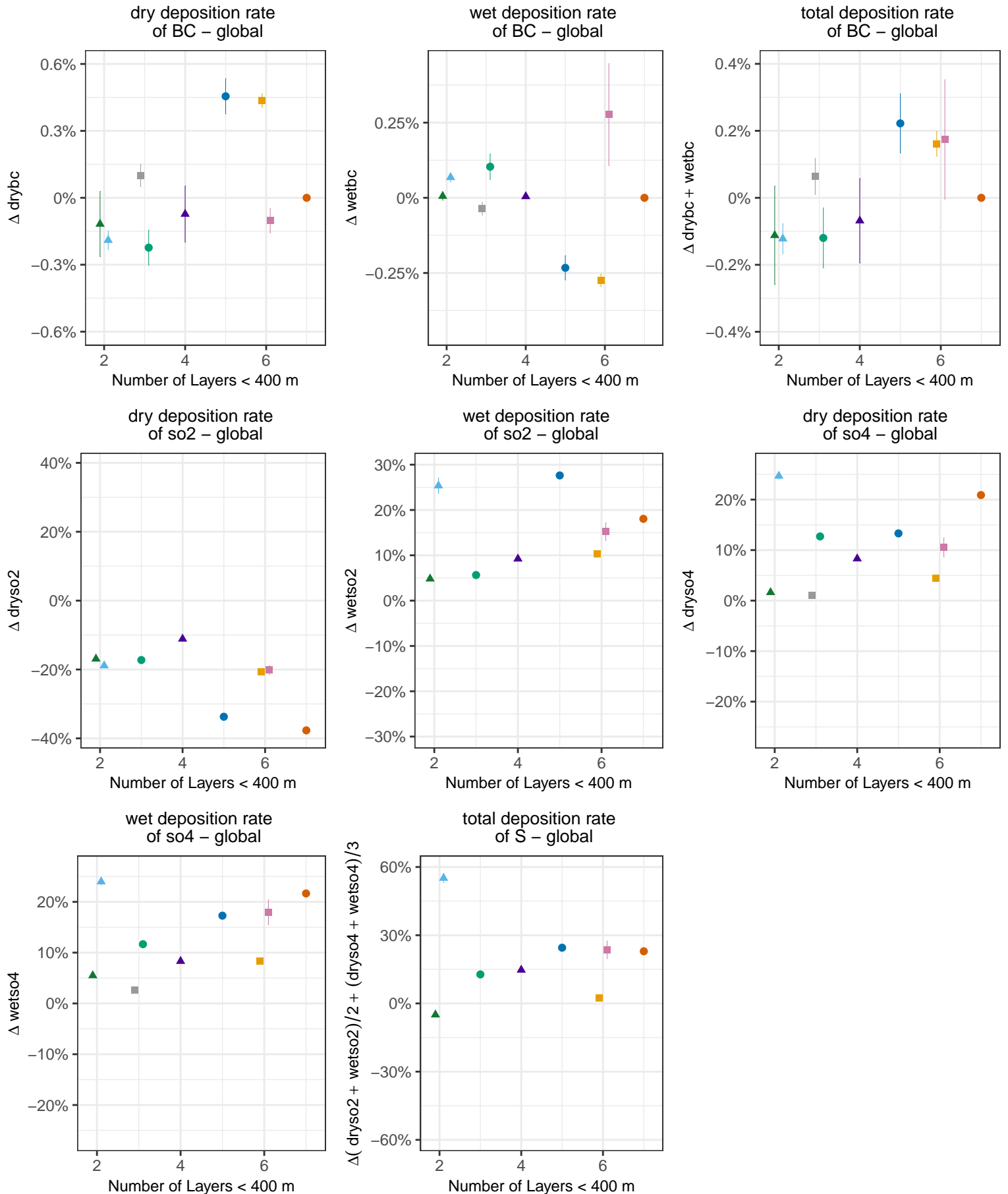
surface cloud cover – global



ice water path – global



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



▲ CAM5    ● CESM2    ▲ GEOS    ▲ GISS    ■ UKESM  
 ■ CESM1    ■ E3SM    ● GFDL    ● OsloCTM3