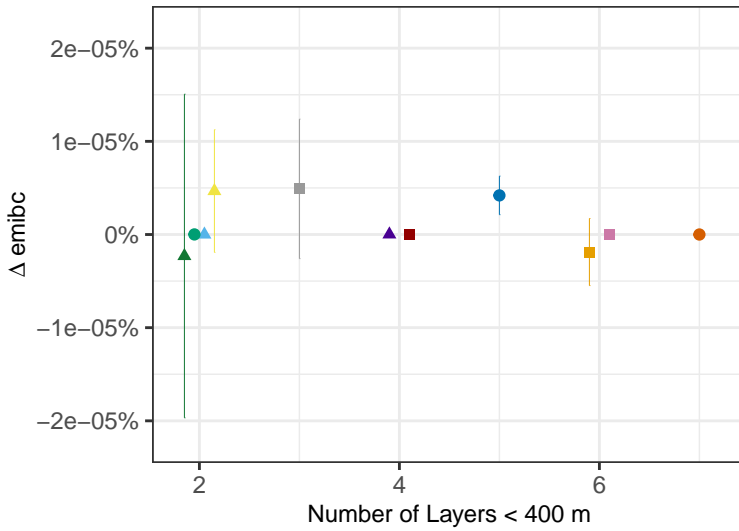
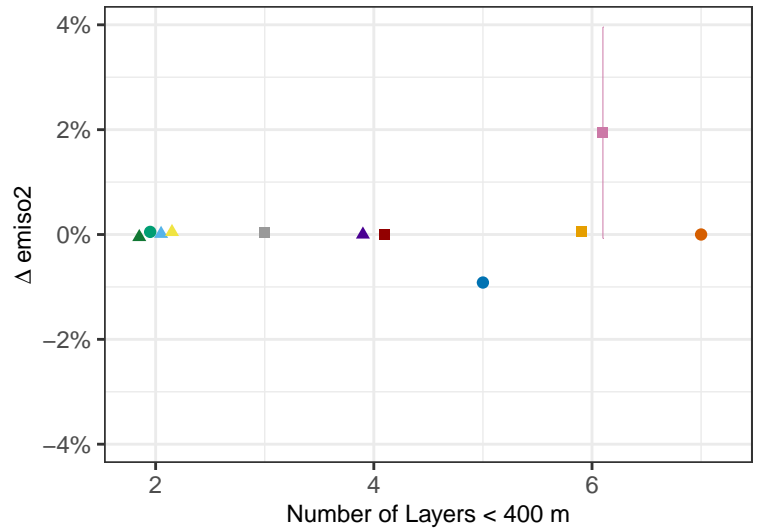


# Number of Model Layers below 400 m: SO<sub>2</sub>-at-height (percent difference)

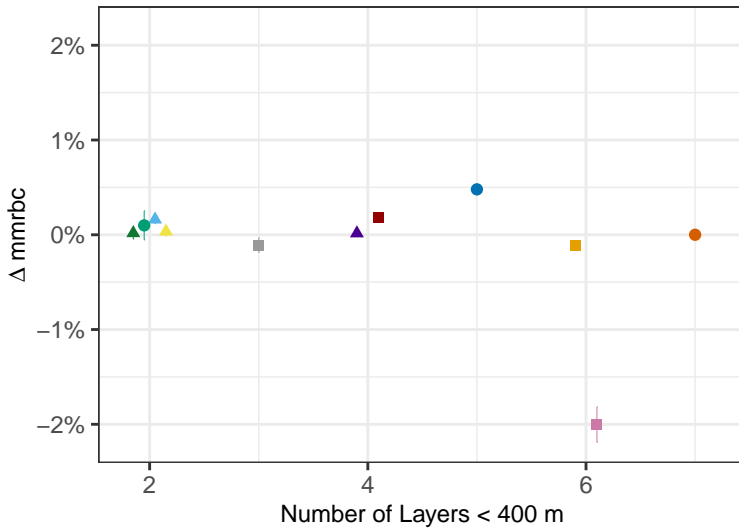
surface flux of BC – global



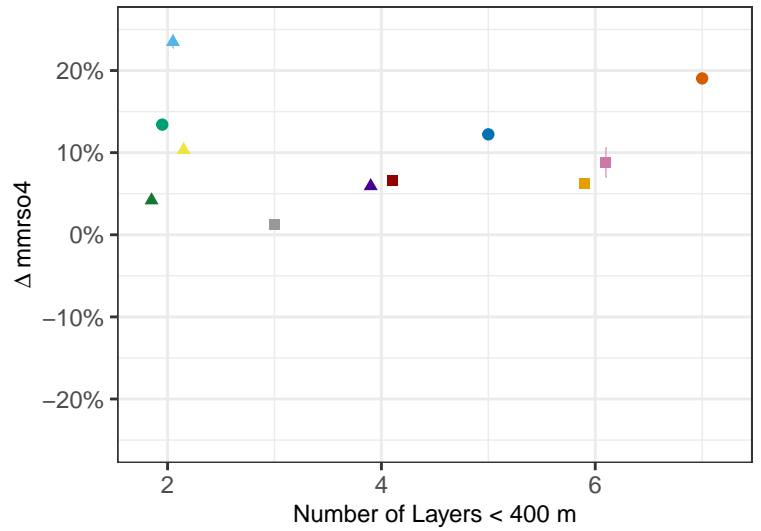
surface flux of SO<sub>2</sub> – global



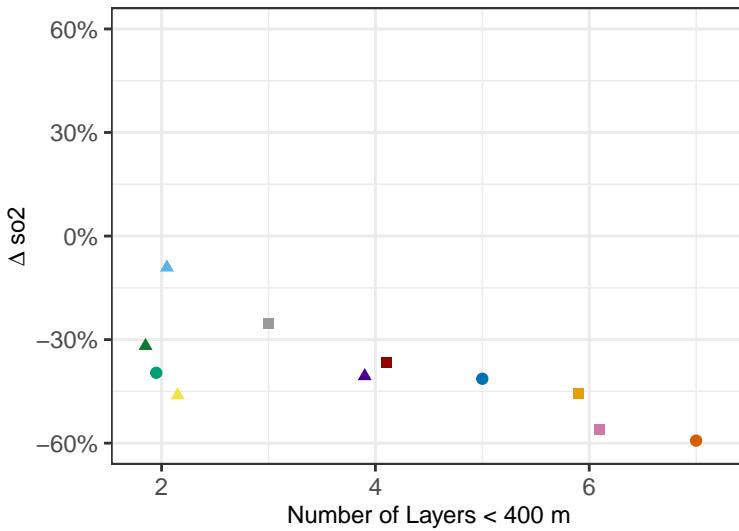
surface concentration of BC – global



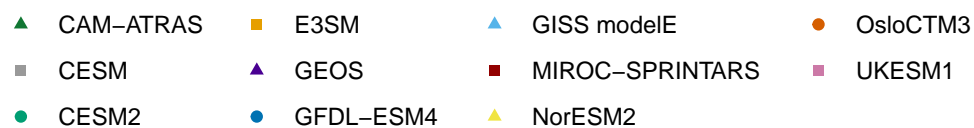
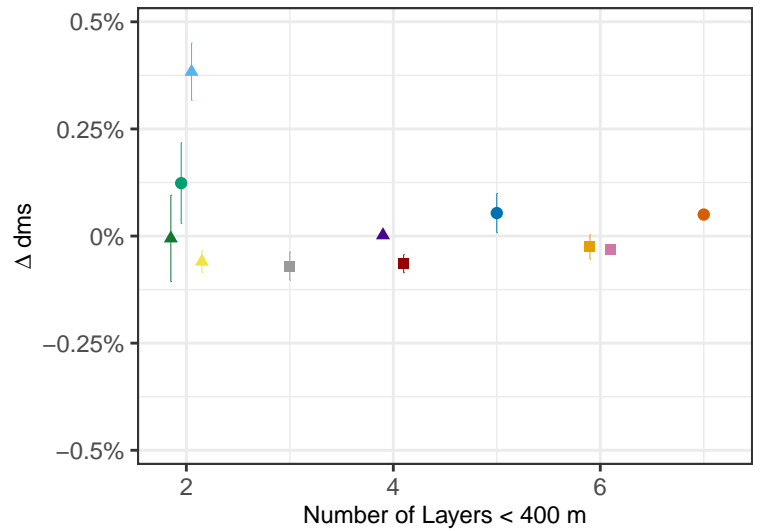
surface concentration of SO<sub>4</sub> – global



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

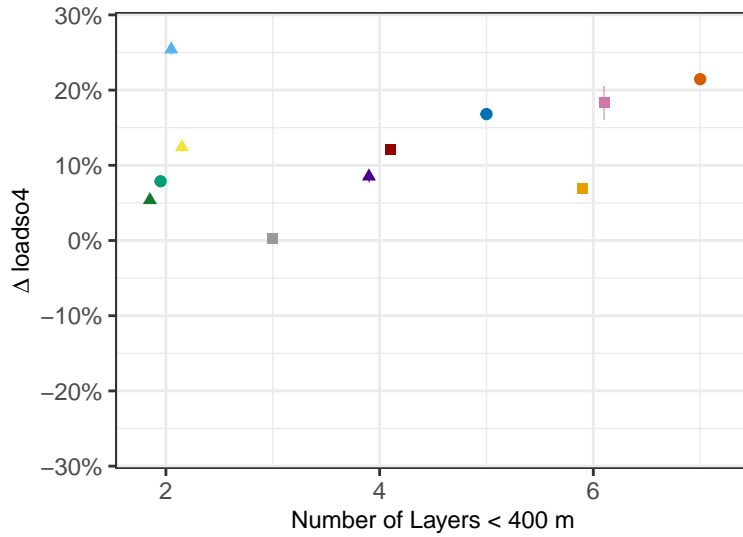


surface concentration of DMS – global

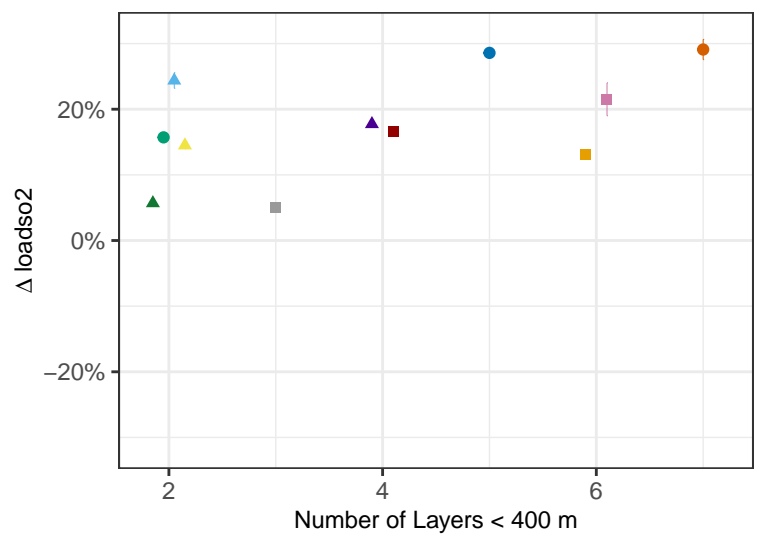


# Number of Model Layers below 400 m: SO<sub>2</sub>-at-height (percent difference)

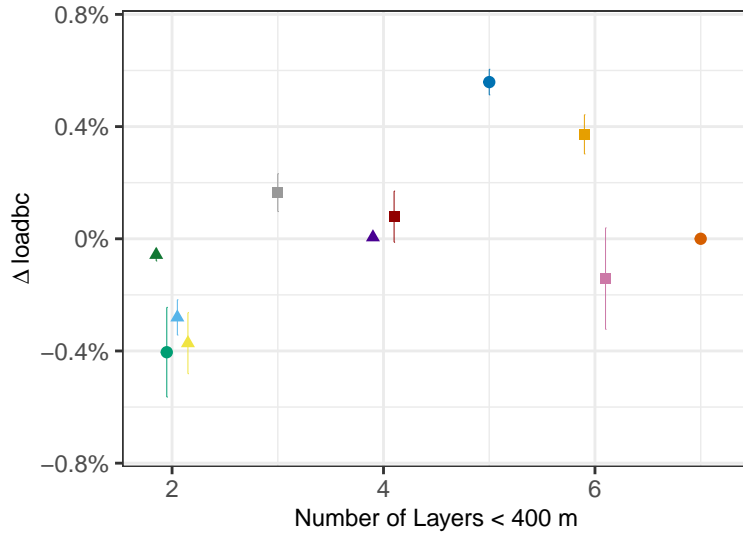
column mass burden of SO<sub>4</sub> – global



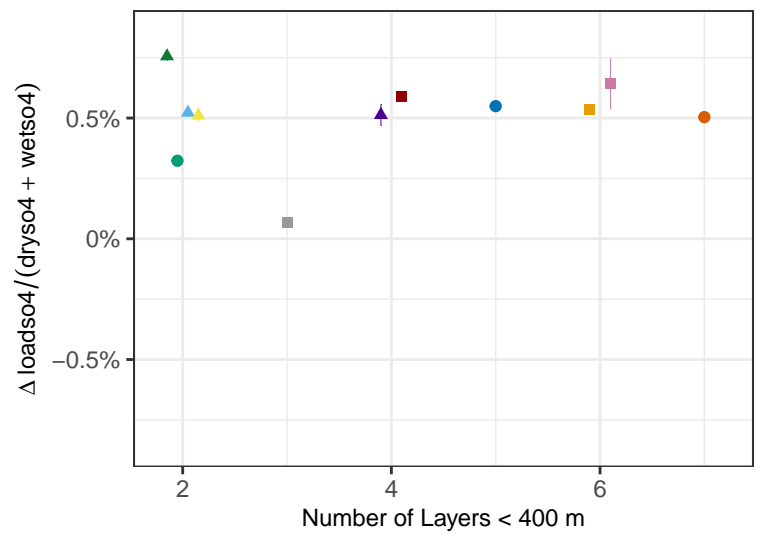
column mass burden of SO<sub>2</sub> – global



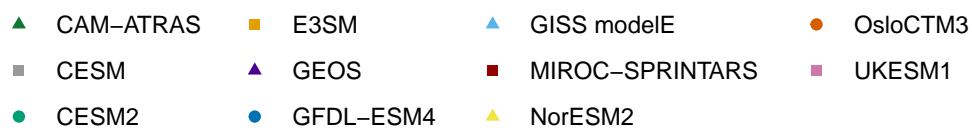
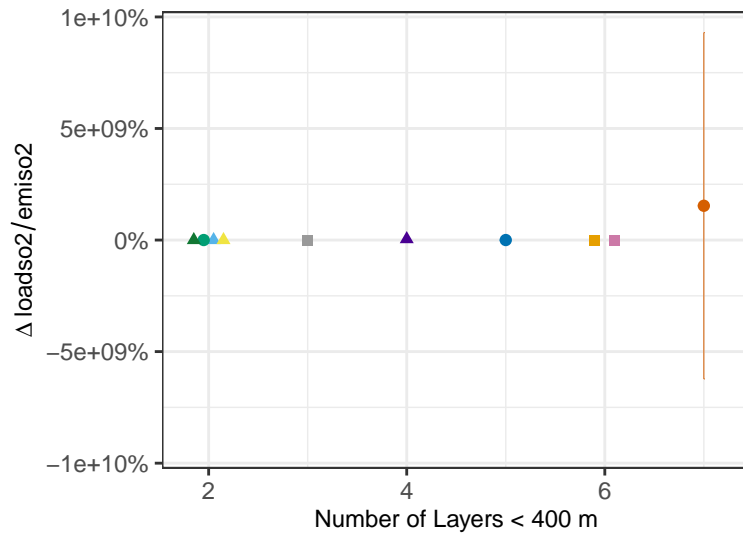
column mass burden of BC – global



SO<sub>4</sub> lifetime – global

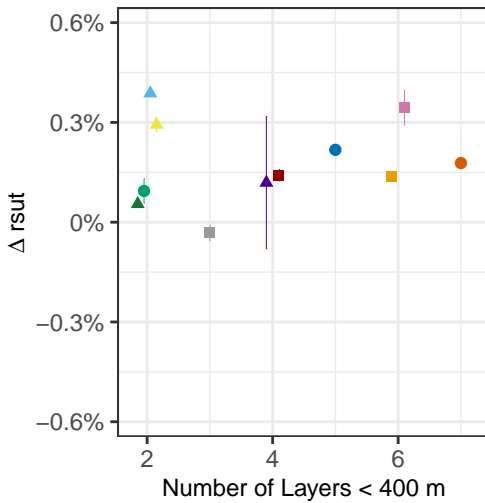


SO<sub>2</sub> timescale – global

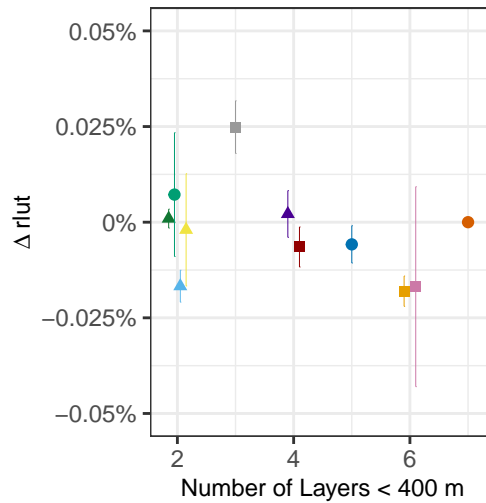


# Number of Model Layers below 400 m: SO2-at-height (percent difference)

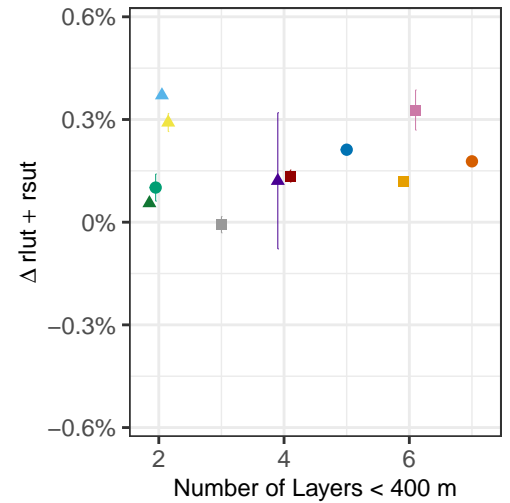
upwelling shortwave flux  
at TOA – global



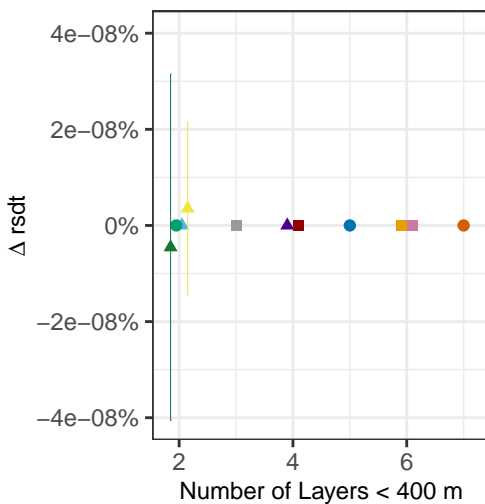
upwelling longwave flux  
at TOA – global



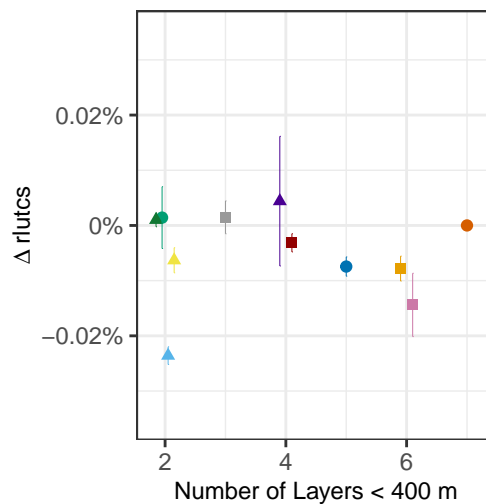
net radiative flux  
at TOA – global



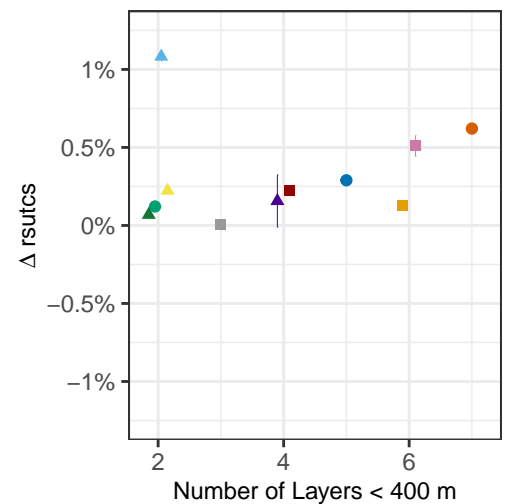
incident shortwave flux  
at TOA – global



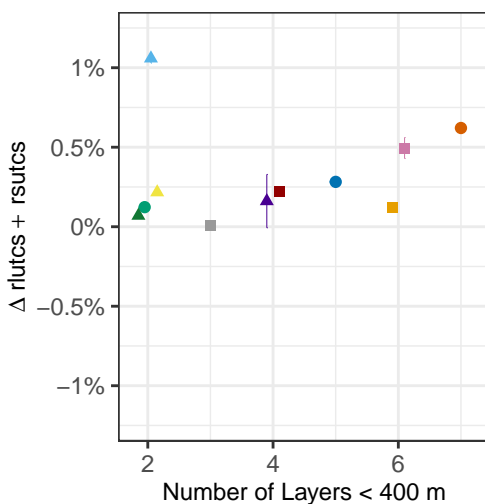
upwelling clear-sky longwave  
flux at TOA – global



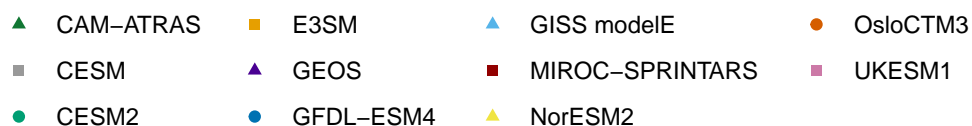
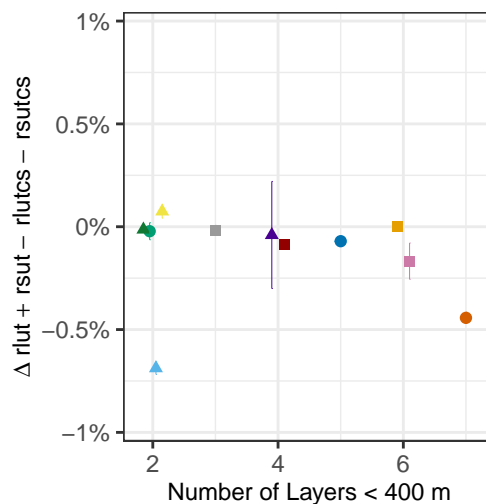
upwelling clear-sky shortwave  
flux at TOA – global



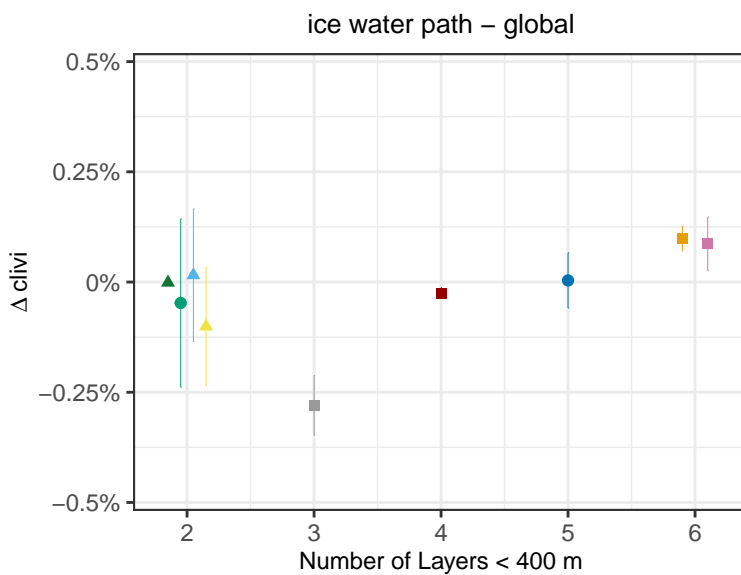
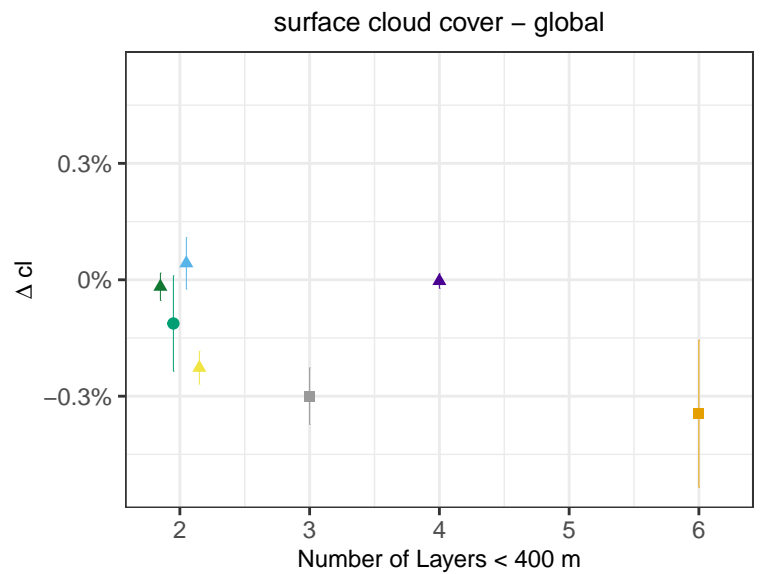
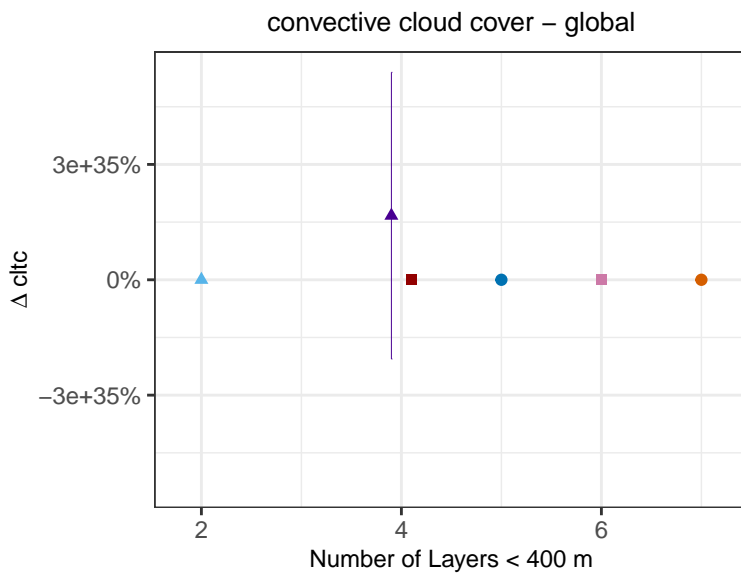
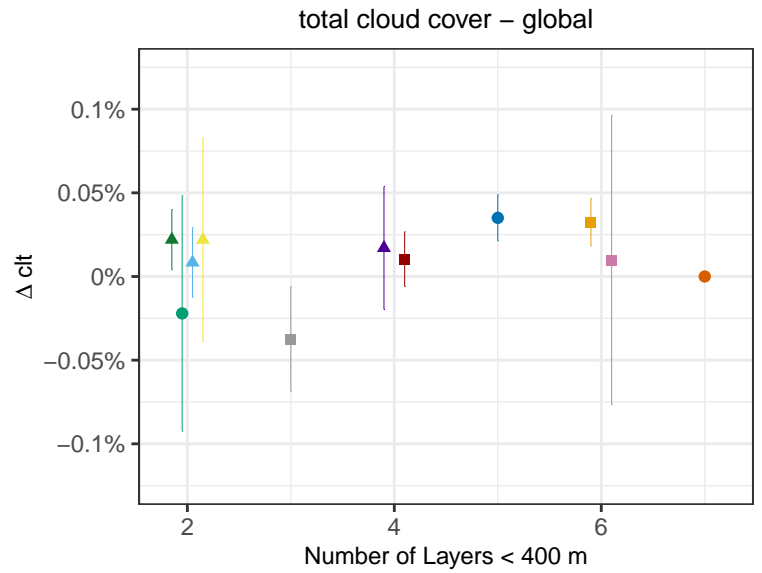
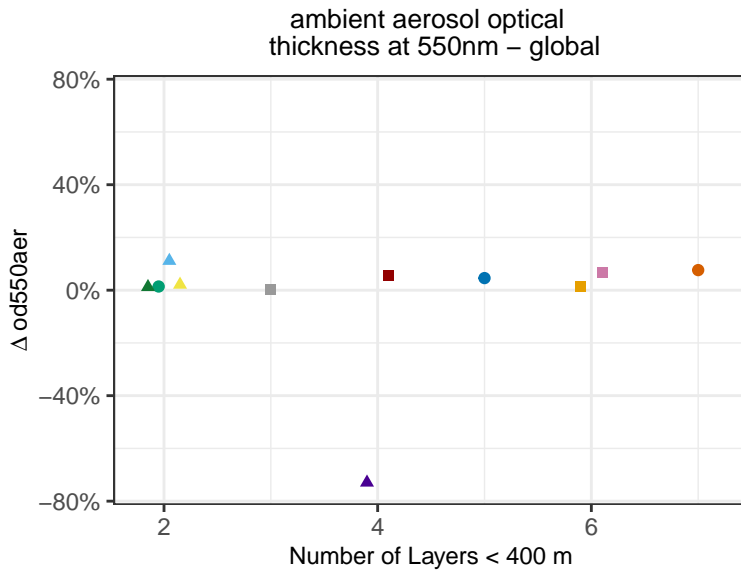
clear-sky net radiative flux  
at TOA – global



implied cloud response at  
TOA – global

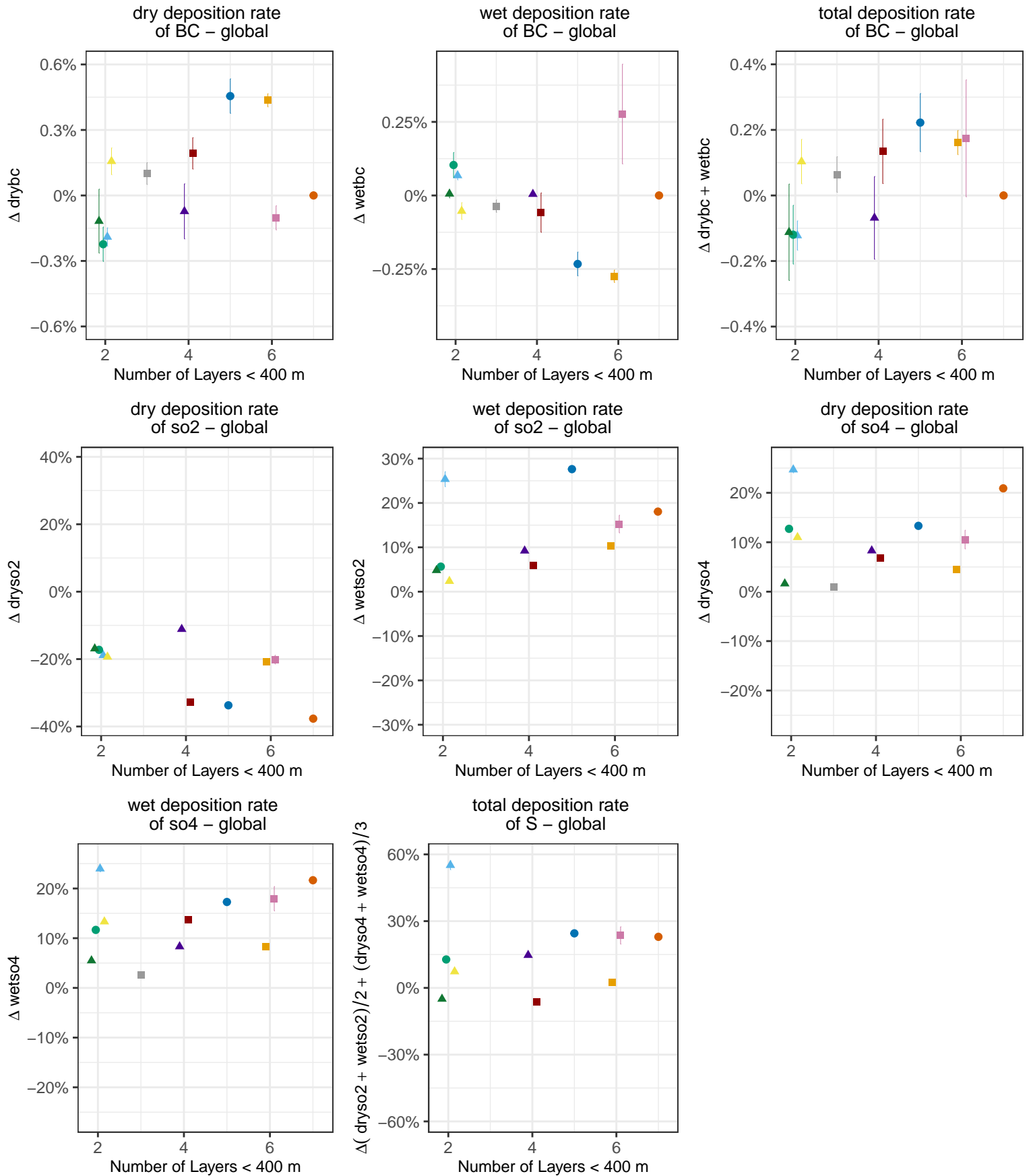


# Number of Model Layers below 400 m: SO2-at-height (percent difference)



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

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



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