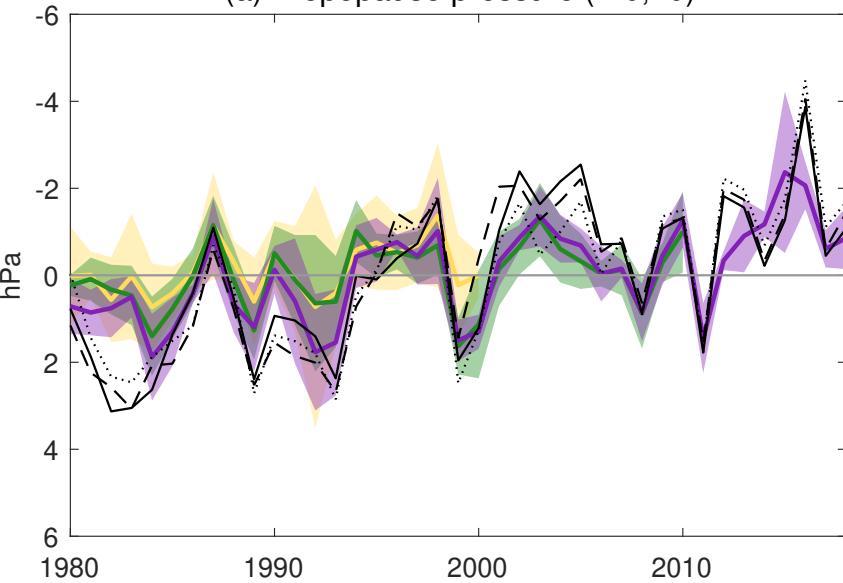
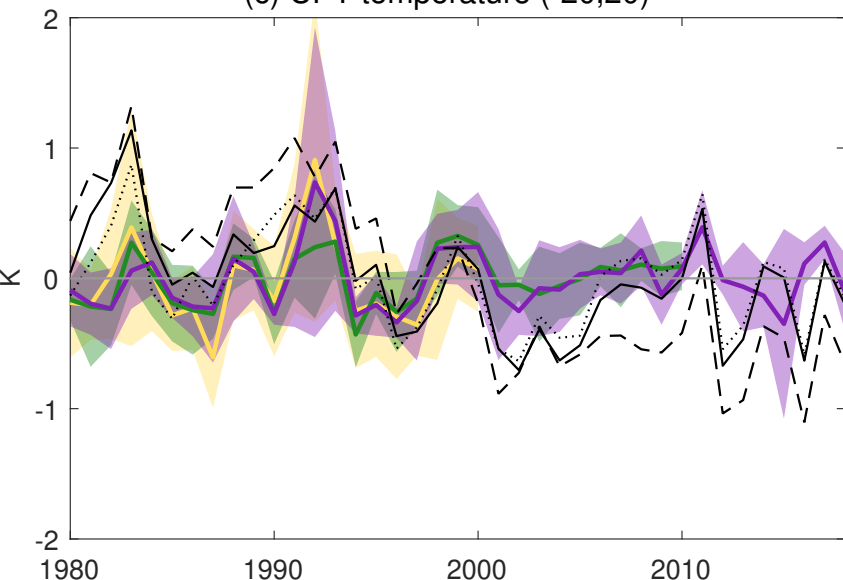


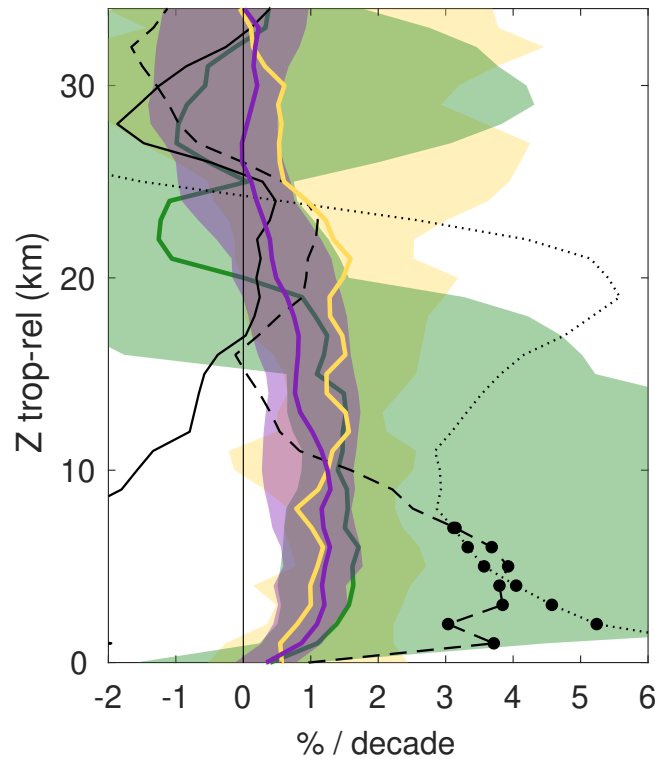
(a) Tropopause pressure (-20,20)



(c) CPT temperature (-20,20)



(b) Upward mass flux trends 1980-1999



- CCMVal-2
- CCMI-1
- CCMI-2022
- ERA5/5.1
- - JRA-3Q
- ⋯ MERRA-2