arctic: absolute difference

global: absolute difference

land: absolute difference

NH–atlantic: absolute difference

NH–land: absolute difference

NH−pacific: absolute difference

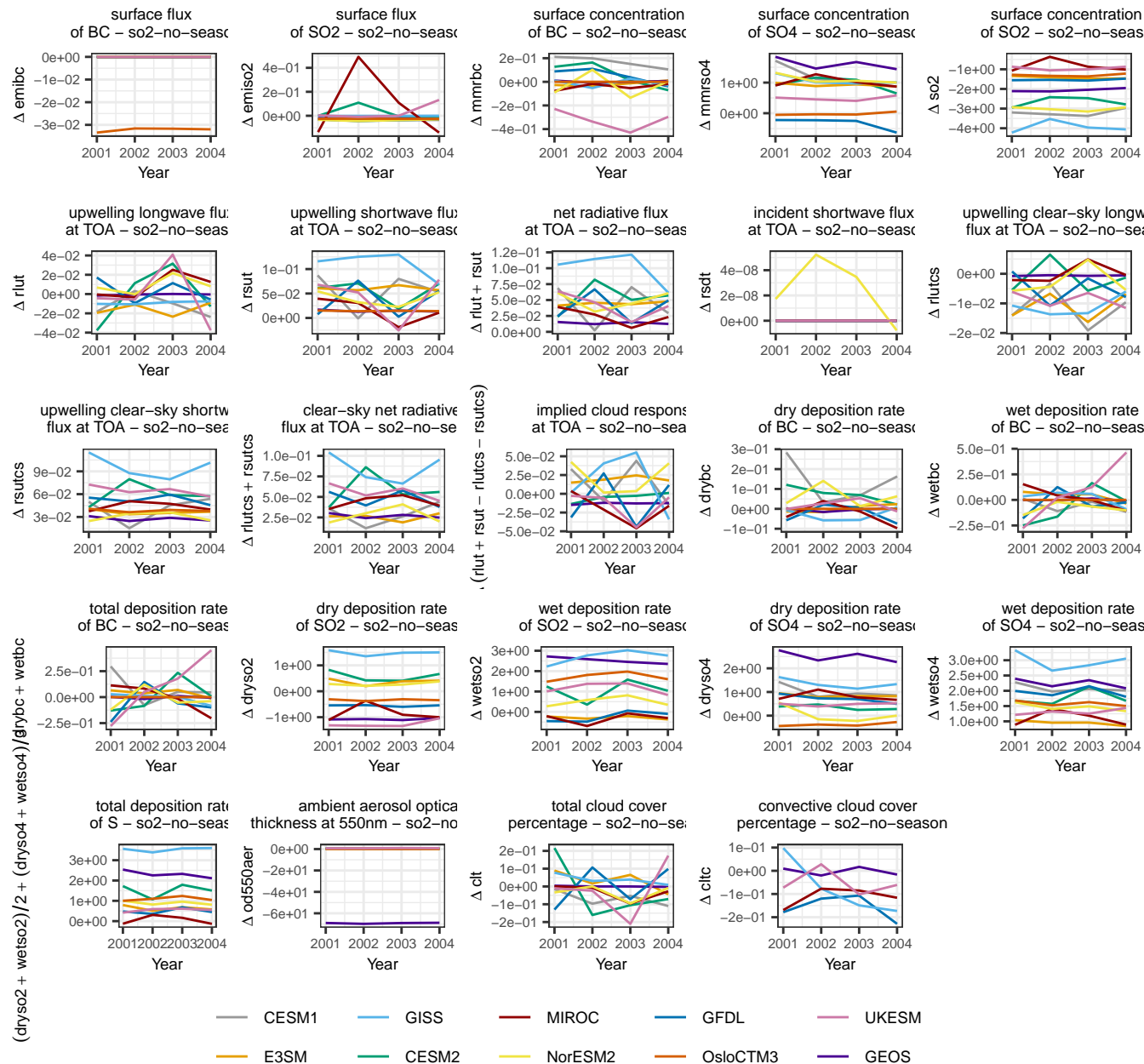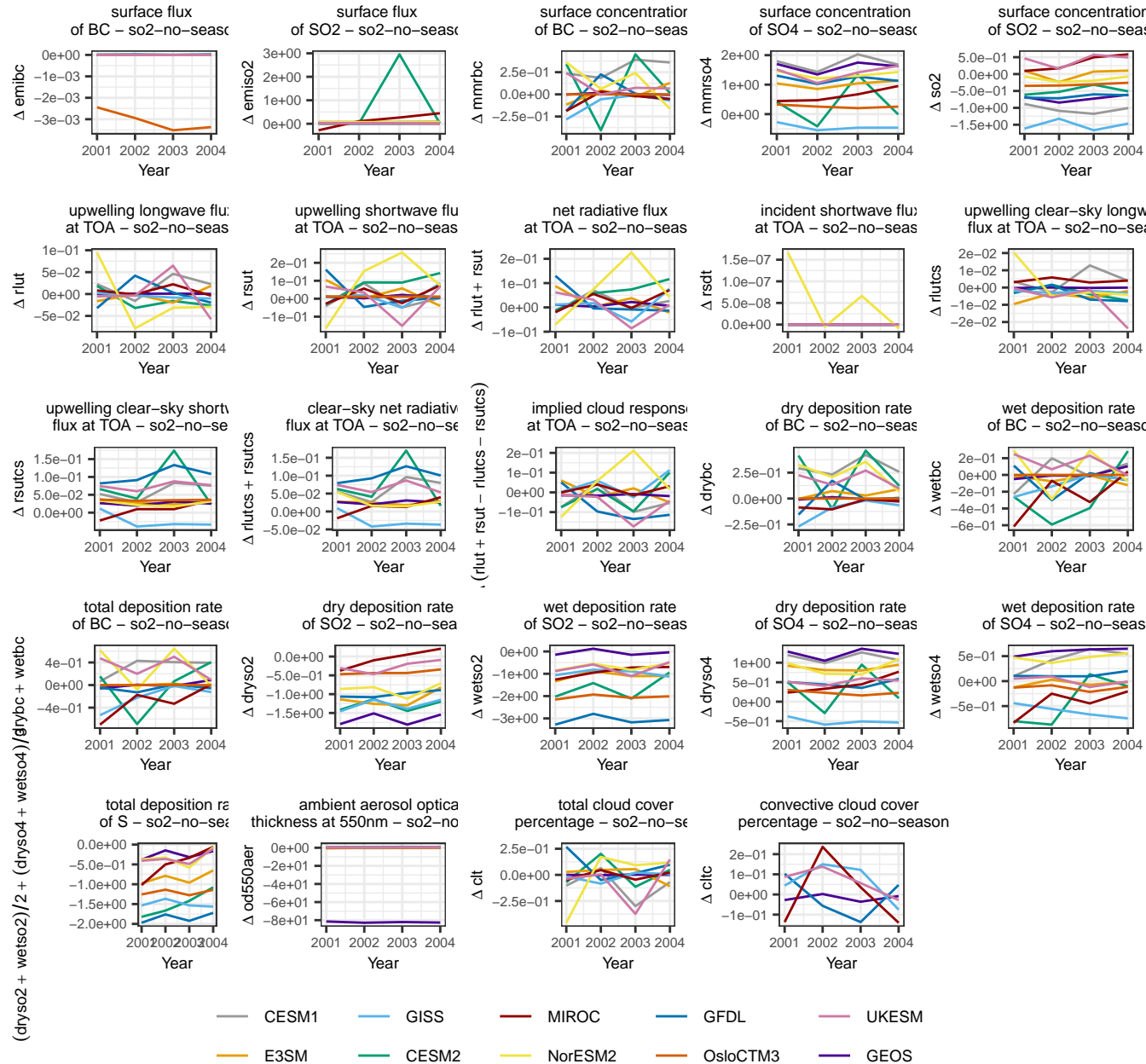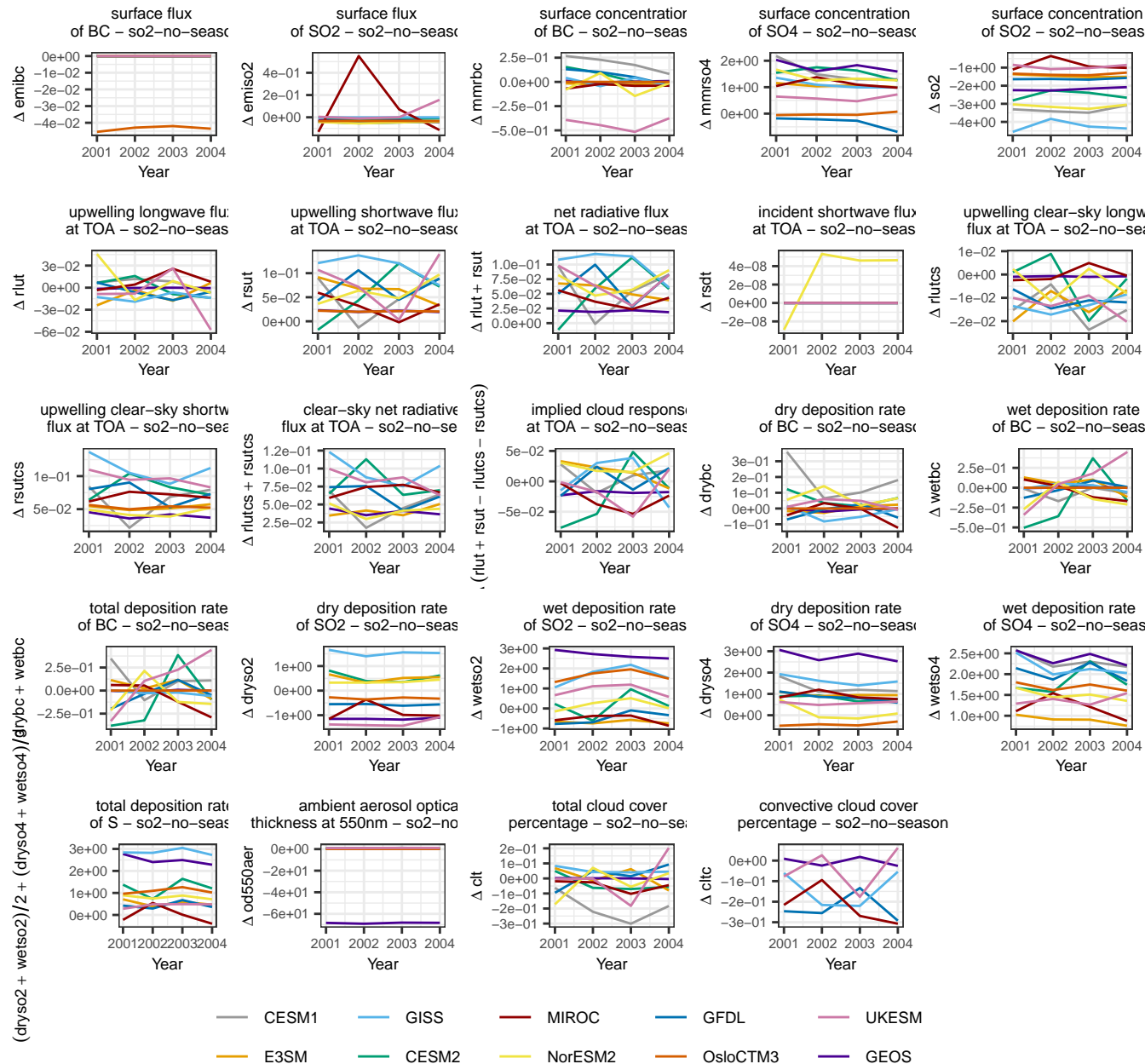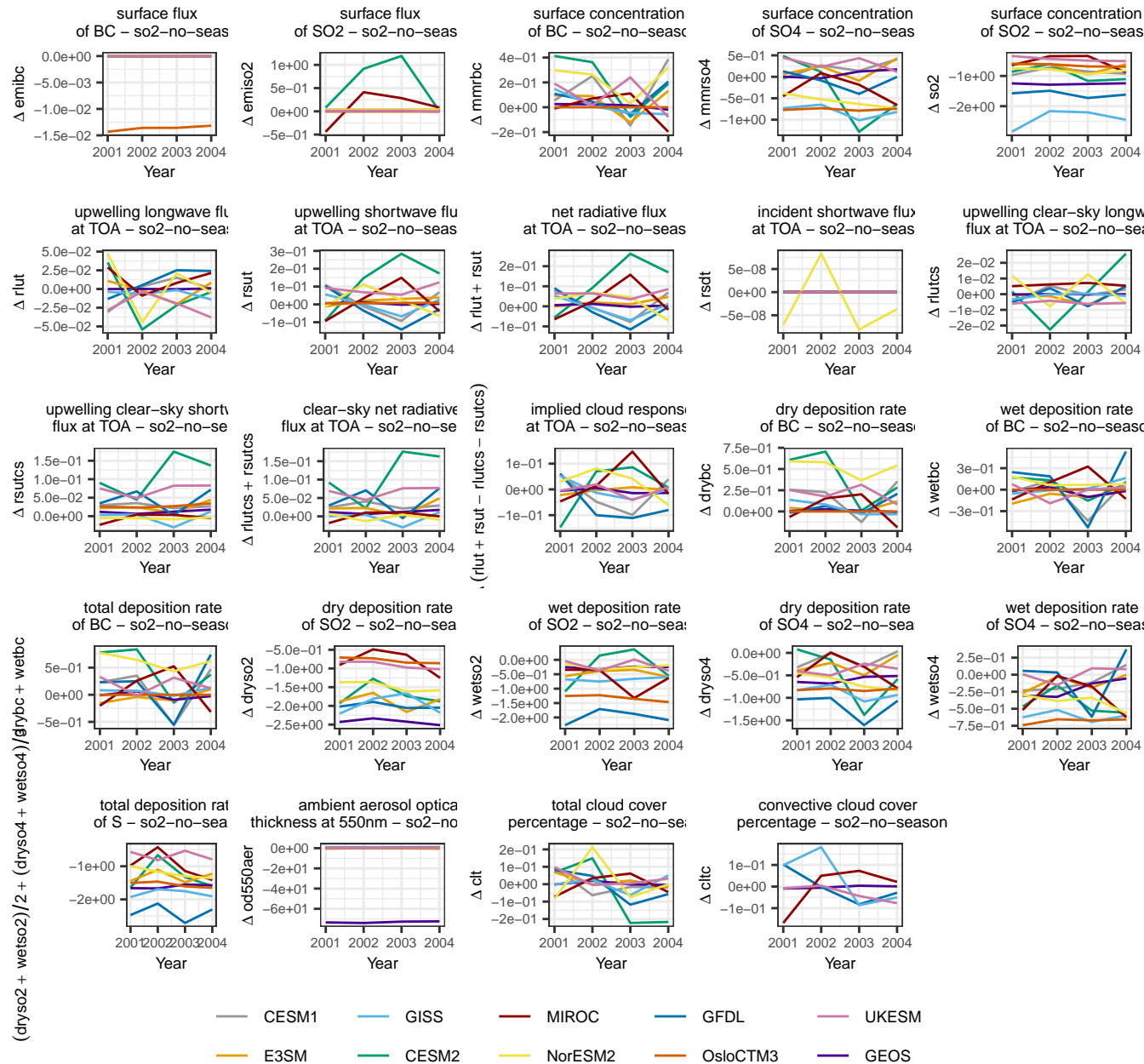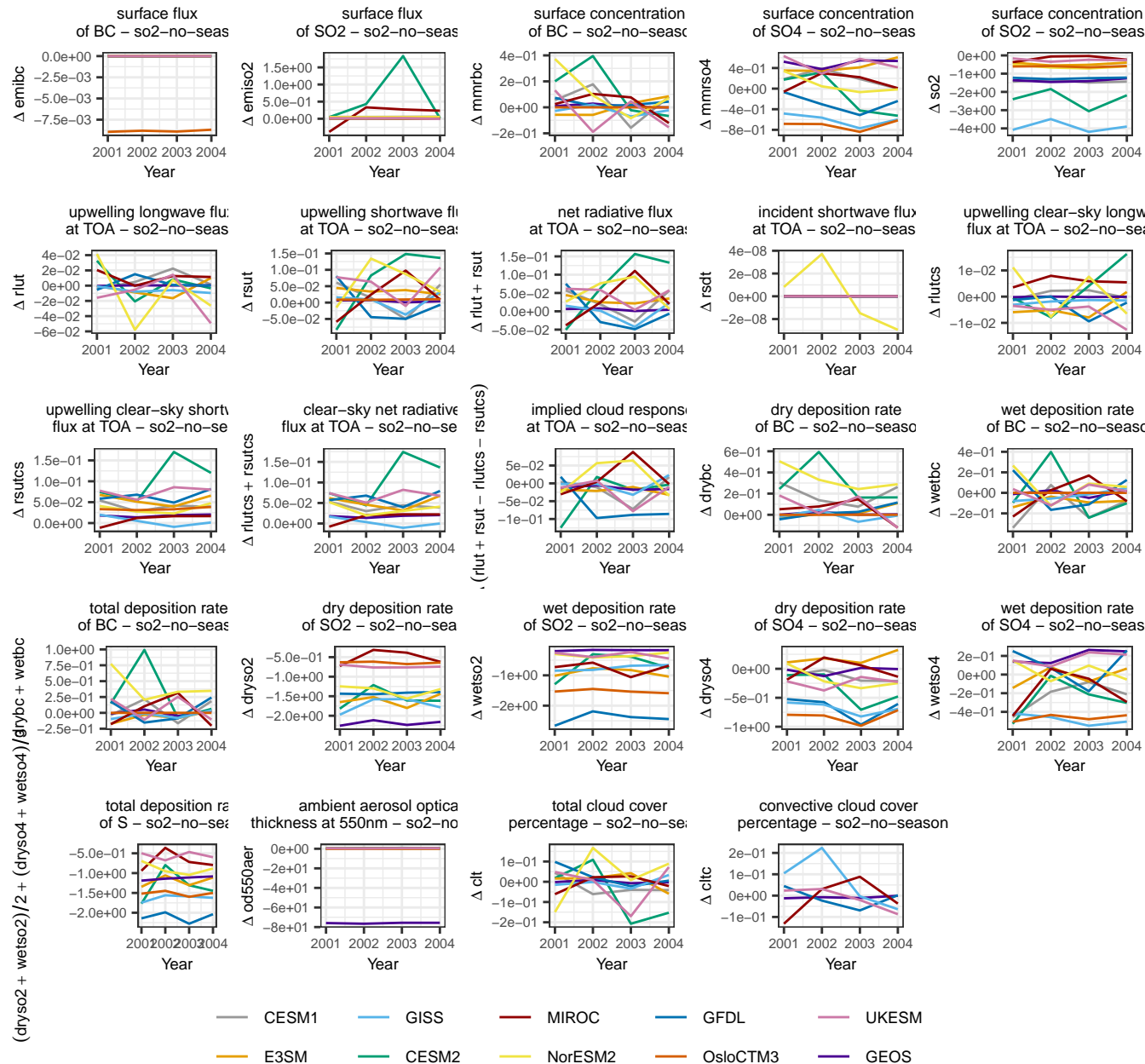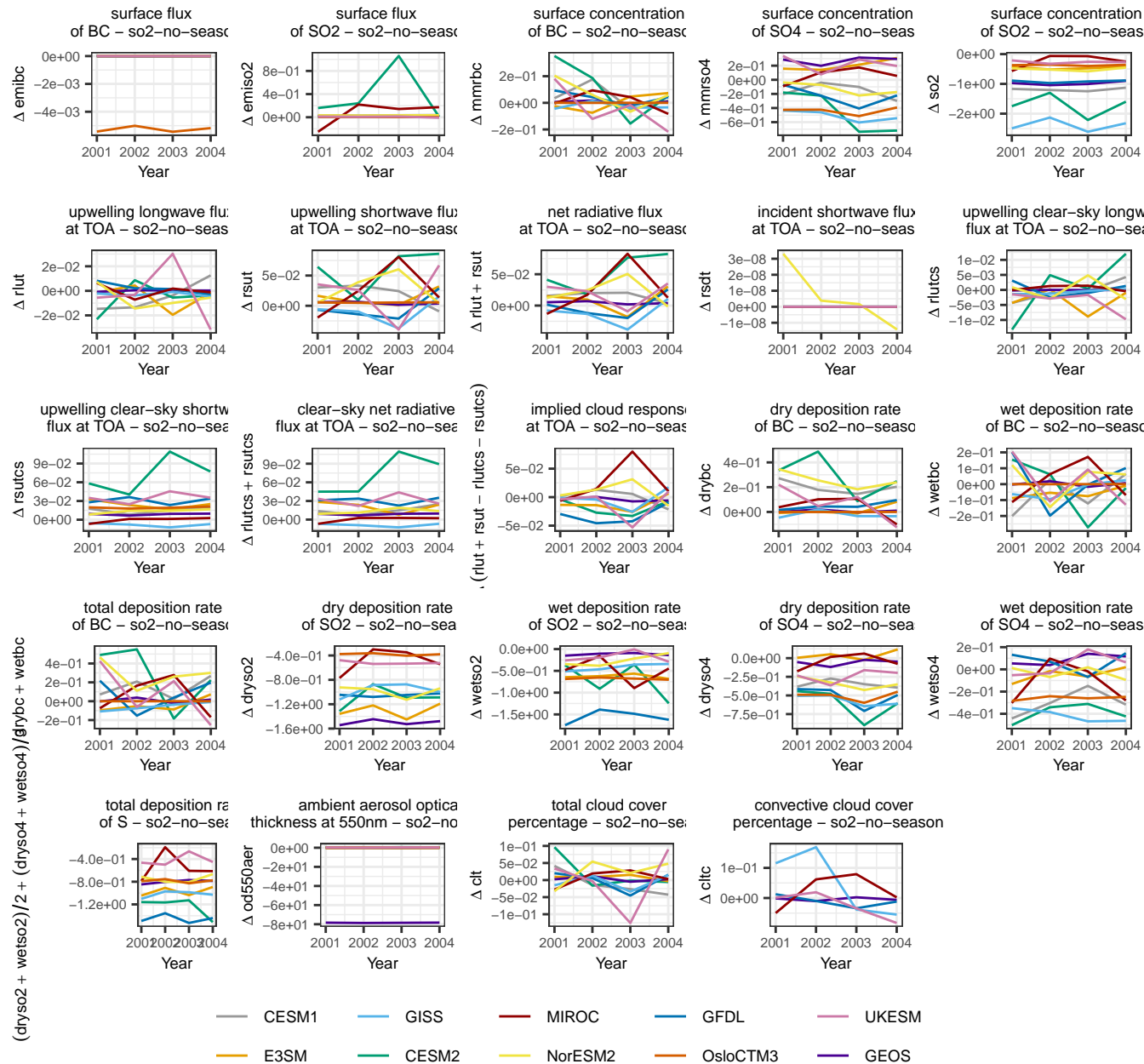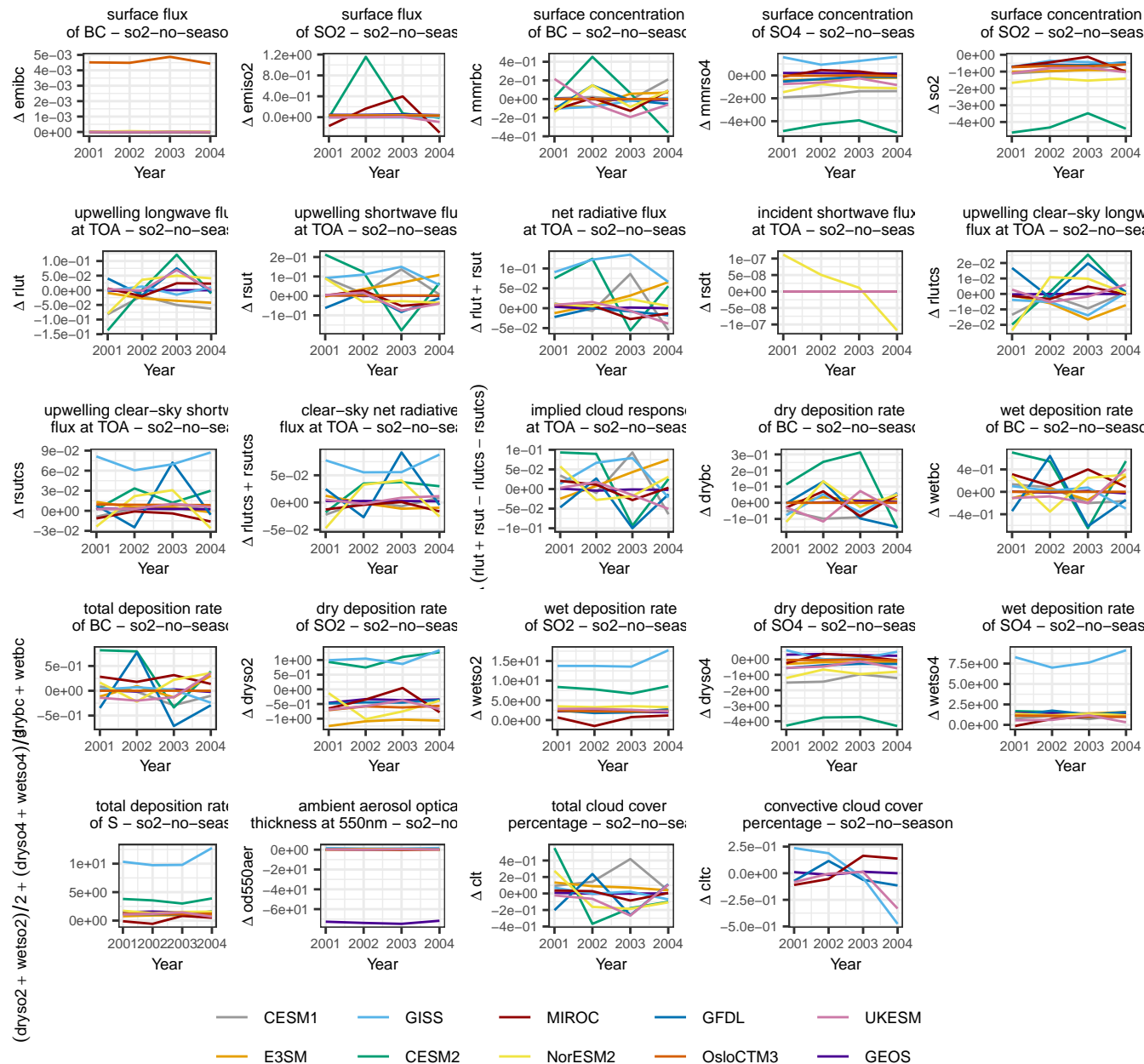NH–sea: absolute difference

sea: absolute difference

# SH–land: absolute difference

# SH−sea: absolute difference



Figure showing a 5×5 grid of line plots comparing absolute differences for various atmospheric and radiative variables (so2-no-season) across Years 2001–2004.

Row 1:
- surface flux of BC − so2-no-seaso ($\Delta$ emibc)
- surface flux of SO2 − so2-no-seas ($\Delta$ emiso2)
- surface concentration of BC − so2-no-seas ($\Delta$ mmrbc)
- surface concentration of SO4 − so2-no-seas ($\Delta$ mmrso4)
- surface concentration of SO2 − so2-no-seas ($\Delta$ so2)

Row 2:
- upwelling longwave flux at TOA − so2-no-seas ($\Delta$ rlut)
- upwelling shortwave flux at TOA − so2-no-seaso ($\Delta$ rsut)
- net radiative flux at TOA − so2-no-seas ($\Delta$ rlut + rsut)
- incident shortwave flux at TOA − so2-no-seas ($\Delta$ rsdt)
- upwelling clear−sky longw flux at TOA − so2-no-seas ($\Delta$ rlutcs)

Row 3:
- upwelling clear−sky short flux at TOA − so2-no-se ($\Delta$ rsutcs)
- clear−sky net radiative flux at TOA − so2-no-se ($\Delta$ rlutcs + rsutcs)
- implied cloud respons at TOA − so2-no-seas ($\Delta$ (rlut + rsut − rlutcs − rsutcs))
- dry deposition rate of BC − so2-no-seas ($\Delta$ drybc)
- wet deposition rate of BC − so2-no-seaso ($\Delta$ wetbc)

Row 4:
- total deposition rate of BC − so2-no-seaso ($\Delta$ (drybc + wetbc))
- dry deposition rate of SO2 − so2-no-sea ($\Delta$ dryso2)
- wet deposition rate of SO2 − so2-no-seas ($\Delta$ wetso2)
- dry deposition rate of SO4 − so2-no-seas ($\Delta$ dryso4)
- wet deposition rate of SO4 − so2-no-seas ($\Delta$ wetso4)

Row 5:
- total deposition ra of S − so2-no-sea ($\Delta$ ((dryso2 + wetso2)/2 + (dryso4 + wetso4)/2 + (drybc + wetbc)))
- ambient aerosol optica thickness at 550nm − so2-no ($\Delta$ od550aer)
- total cloud cover percentage − so2-no-sea ($\Delta$ clt)
- convective cloud cover percentage − so2-no-season ($\Delta$ cltc)

Legend:
CESM1, GISS, MIROC, GFDL, UKESM, E3SM, CESM2, NorESM2, OsloCTM3, GEOS