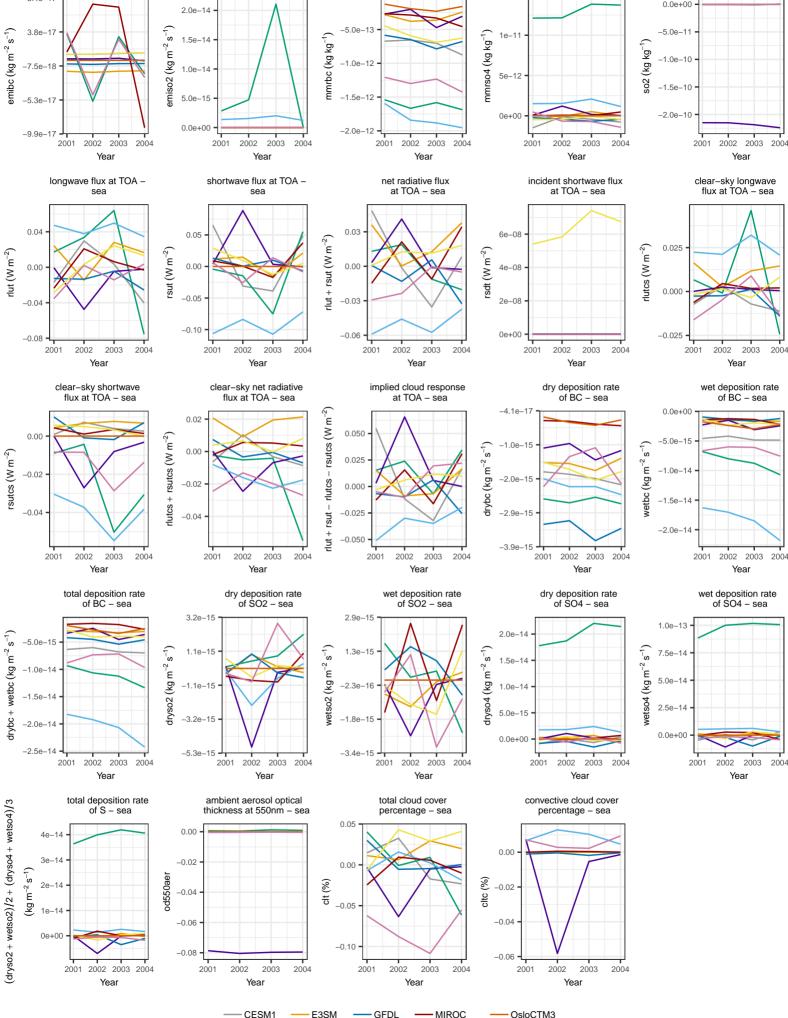
bc-no-season: absolute difference surface concentration of BC – sea surface concentration of SO4 – sea surface concentration of SO2 – sea surface flux of SO2 -0.0e+00 mmrbc (kg kg⁻¹ nmrso4 (kg kg¯ so2 (kg kg⁻ -1.0e-10 -1.0e-12 0e+00 2003 2004 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 Year Year Year Year net radiative flux at TOA – sea incident shortwave flux at TOA – sea clear-sky longwave flux at TOA - sea shortwave flux at TOA -0.03 rlut + rsut $(W m^{-2})$ 0.025 rlutcs (W m⁻²) $rsdt (W m^{-2})$ 0.00 4e-08 0.000 -0.03 2001 2003 2003 2002 2003 2001 2002 2003 Year Year Year Year clear-sky net radiative implied cloud response dry deposition rate wet deposition rate at TOA - sea flux at TOA - sea of BC - sea of BC - sea rlut + rsut – rlutcs – rsutcs (W m $^{-2}$) 0.0e + 0.00.050 wetbc $(kg m^{-2} s^{-1})$ drybc (kg m $^{-2}$ s $^{-1}$) 0.025 0.000 -0.025 -2.0e-14 -0.050 -3 9e-15 2001 2003 2001 2002 2003 2001 2003 2001 2002 2003 Year Year Year Year dry deposition rate of SO4 – sea dry deposition rate of SO2 – sea wet deposition rate wet deposition rate of SO2 - sea of SO4 - sea 2.9e-15 2.0e-14 wetso2 $(kg m^{-2} s^{-1})$ $dryso4 (kg m^{-2} s^{-1})$ wetso4 (kg m⁻² s⁻¹) 5.0e-14 2.5e-14 2001 2002 2003 2004 2001 2002 2003 2001 2002 2003 2001 2002 2003



CESM2

GEOS

GISS

NorESM2

UKESM

surface flux of BC -

sea