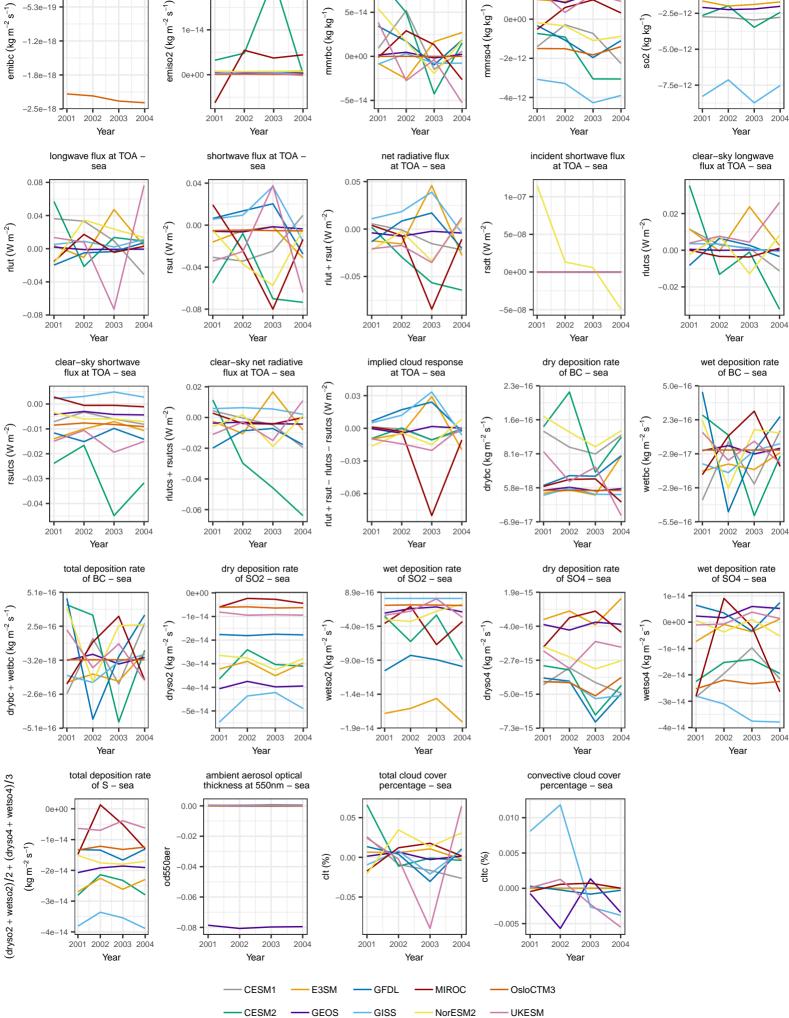
so2-no-season: absolute difference surface flux of SO2 surface concentration surface concentration of SO4 – sea surface concentration of SO2 – sea 0.0e+00 2e-12 mmrso4 (kg kg⁻¹) nmrbc (kg kg⁻¹ 0e+00 so2 (kg kg⁻¹ -5.0e-12 2003 2004 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 Year Year Year Year incident shortwave flux at TOA – sea clear-sky longwave flux at TOA - sea shortwave flux at TOA net radiative flux at TOA - sea 0.05 1e-07 0.02 -lut + rsut $(W m^{-2})$ rlutcs $(W m^{-2})$ $rsdt (W m^{-2})$ 0.00 5e-08 0.00 0e+00 -0.05 -0.02 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year clear-sky net radiative implied cloud response dry deposition rate wet deposition rate flux at TOA - sea at TOA - sea of BC - sea of BC - sea 2.3e-16 5.0e-16 rlutcs - rsutcs (W m⁻²) 0.03 1.6e-16 2.3e-16 $drybc (kg m^{-2} s^{-1})$ wetbc $(kg m^{-2} s^{-1})$ 0.00 8.1e-17 -0.03 rsut – 5 8e--0.06 rlut + I -6 9e-1 -5.5e-16 2001 2002 2003 2001 2003 2001 2002 2003 2001 Year Year Year Year dry deposition rate of SO4 – sea dry deposition rate wet deposition rate wet deposition rate of SO2 - sea of SO2 - sea of SO4 - sea 8.9e-16 1.9e-15 1e-14 0e+00 wetso2 $(kg m^{-2} s^{-1})$ $dryso4 (kg m^{-2} s^{-1})$ wetso4 $(kg m^{-2} s^{-1})$ -1e-14 -9.0e -2e-14 -5 0e-15



surface flux of BC -

sea