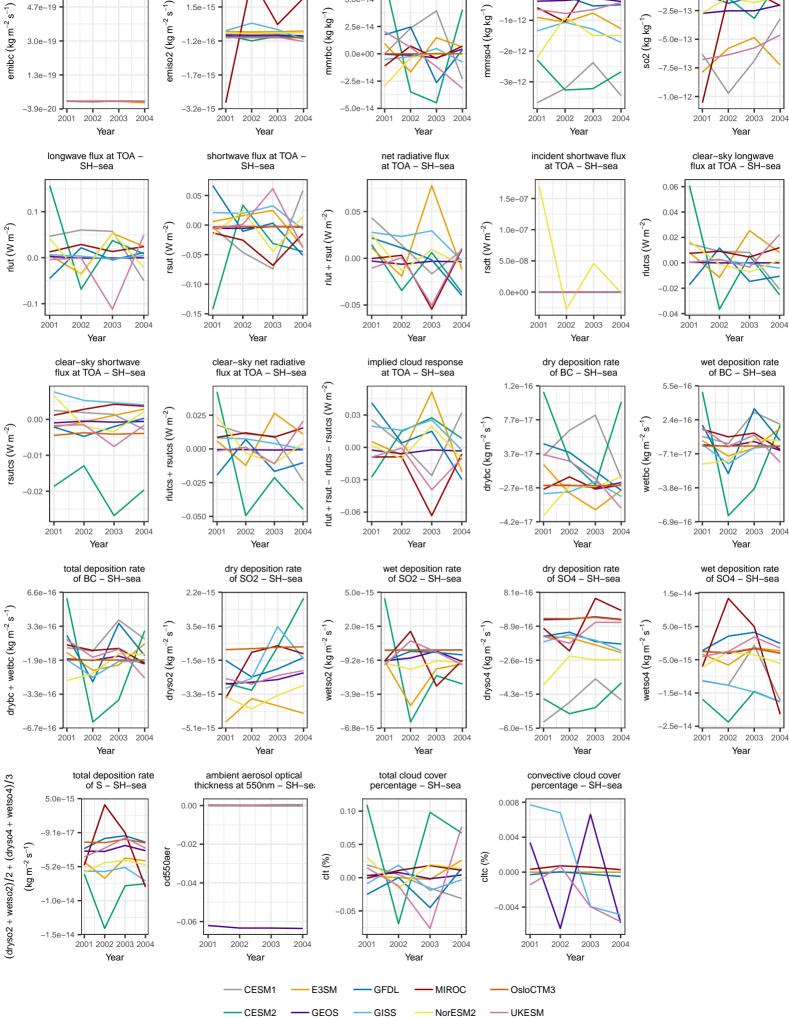
so2-no-season: absolute difference surface flux of SO2 – SH–sea surface concentration of SO4 – SH–sea surface concentration of SO2 – SH–sea surface concentration 0.0e+00 0e+00 mmrbc (kg kg⁻¹) mmrso4 (kg kg $^{ extstyle{-}1})$ so2 (kg kg^{_′} 2.5e--5.0e-13 -1.2e-16 -2e-12 0.0e+00 -1.7e-15 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 2004 Year Year Year Year shortwave flux at TOA -SH-sea net radiative flux at TOA – SH–sea incident shortwave flux at TOA – SH–sea clear-sky longwave flux at TOA - SH-sea 0.05 1.5e-07 0.05 0.04 rlut + rsut $(W m^{-2})$ 0.00 rlutcs (W m⁻²) $rsdt (W m^{-2})$ 1 0e-07 0.02 -0.05 0.00 0.00 -0.02 0.0e+00 -0.05-0.15 2001 2003 2001 2003 2001 2002 2003 2001 2003 Year Year Year Year dry deposition rate of BC – SH–sea clear-sky net radiative implied cloud response wet deposition rate flux at TOA - SH-sea at TOA - SH-sea of BC - SH-sea 1.2e-16 5.5e-16 rlut + rsut - rlutcs - rsutcs (W m⁻²) 0.03 0.025 7.7e-17 2.4e-16 $drybc (kg m^{-2} s^{-1})$ wetbc $(kg m^{-2} s^{-1})$ 0.000 0.00 3.7e-17 -0.03 -0.025 -0.06 -0.050 -6.9e-16 2001 2002 2003 2001 2003 2001 2002 2003 2001 2003 Year Year Year Year dry deposition rate of SO4 – SH–sea wet deposition rate of SO4 – SH–sea dry deposition rate wet deposition rate of SO2 - SH-sea of SO2 - SH-sea 2.2e-15 5.0e-15 8.1e-16 $dryso4 (kg m^{-2} s^{-1})$ 3.5e-16 wetso2 $(kg m^{-2} s^{-1})$ 2.0e-15 -8.9e-16 wetso4 (kg m⁻² s⁻¹) 5.0e-15 -1.5e-15 -9.2e-16 -2.6e-15 -5 0e-15 -3 9e-15 -5.1e-15 -6.8e-15 -6.0e-15 2001 2002 2003 2004 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 Year ambient aerosol optical convective cloud cover total cloud cover thickness at 550nm percentage - SH-sea percentage - SH-sea 0.008 0.00 0.004 0.05



surface flux of BC – SH–sea