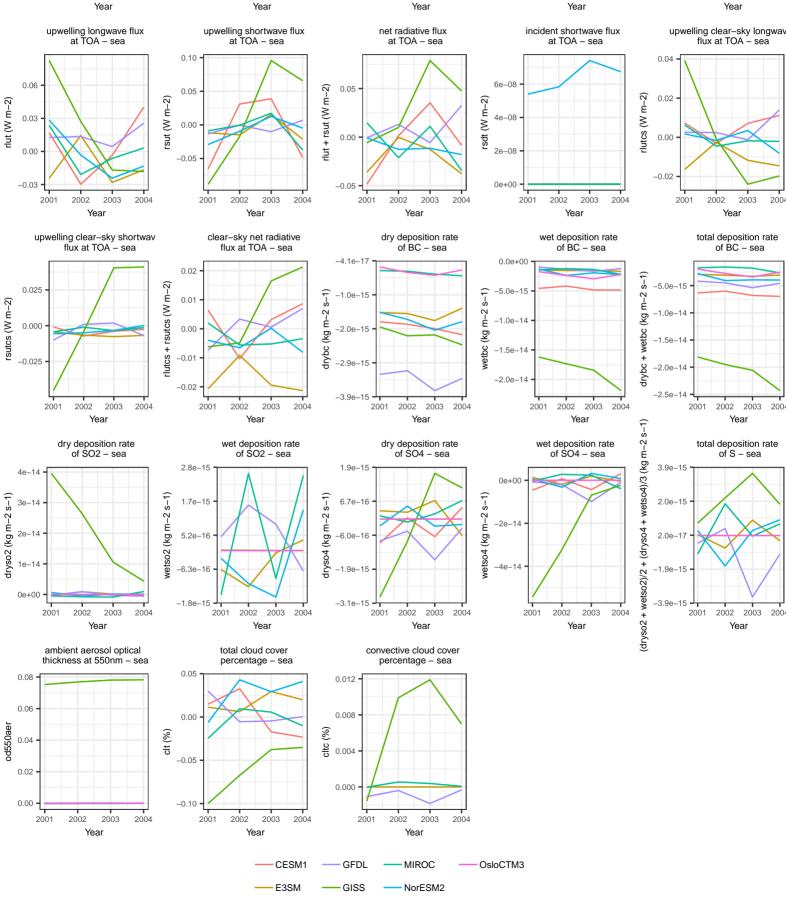
## bc-no-season: absolute difference surface flux of BC – sea surface flux of SO2 – sea surface concentration surface concentration of SO4 – sea surface concentration of SO2 – sea emiso2 (kg m-2 s-1) mmrso4 (kg kg-1) nmrbc (kg kg-1) so2 (kg kg-1) 0e+00 9.0e-16 0e+00 \_2 0e\_12 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year upwelling shortwave flux at TOA – sea incident shortwave flux at TOA – sea upwelling clear-sky longwave flux at TOA - sea net radiative flux at TOA - sea 0.04 rlut + rsut (W m-2) 0.05 0.05 rlutcs (W m-2) 0.02 rsut (W m-2) rsdt (W m-2) 4e-08 0.00 0.00 0.00 -0.05 -0.02 -0.0 2001 2003 2001 2003 2001 2003 2001 2002 2003 Year Year Year Year clear-sky net radiative dry deposition rate wet deposition rate total deposition rate flux at TOA - sea of BC - sea of BC - sea of BC - sea 0.0e + 0.00.02 (kg m-2 s-1 rlutcs + rsutcs (W m-2) -5.0e-15 drybc (kg m-2 s-1) 0.01 vetbc (kg m-2 -1.0e-14 0.00 wetbc -1.5e-14 -0.01 -2 9e -0.02 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year (dryso2 + wetso2)/2 + (dryso4 + wetso4)/3 (kg m-2 s-1)wet deposition rate dry deposition rate wet deposition rate total deposition rate of SO2 - sea of SO4 - sea of SO4 - sea of S - sea 2.8e-15 1.9e-15 3.9e-15 wetso4 (kg m-2 s-1) wetso2 (kg m-2 s-1) dryso4 (kg m-2 s-1) 1.7e-15 6.7e-16 2.0e-15 5.2e-16 2004 2001 2002 2003 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 2004 Year Year total cloud cover convective cloud cover percentage - sea percentage - sea 0.05 0.008 0.00 % clt (%) 0.004



emibc (kg m-2 s-1)

-5.3e-17

-9.9e

2001

2002