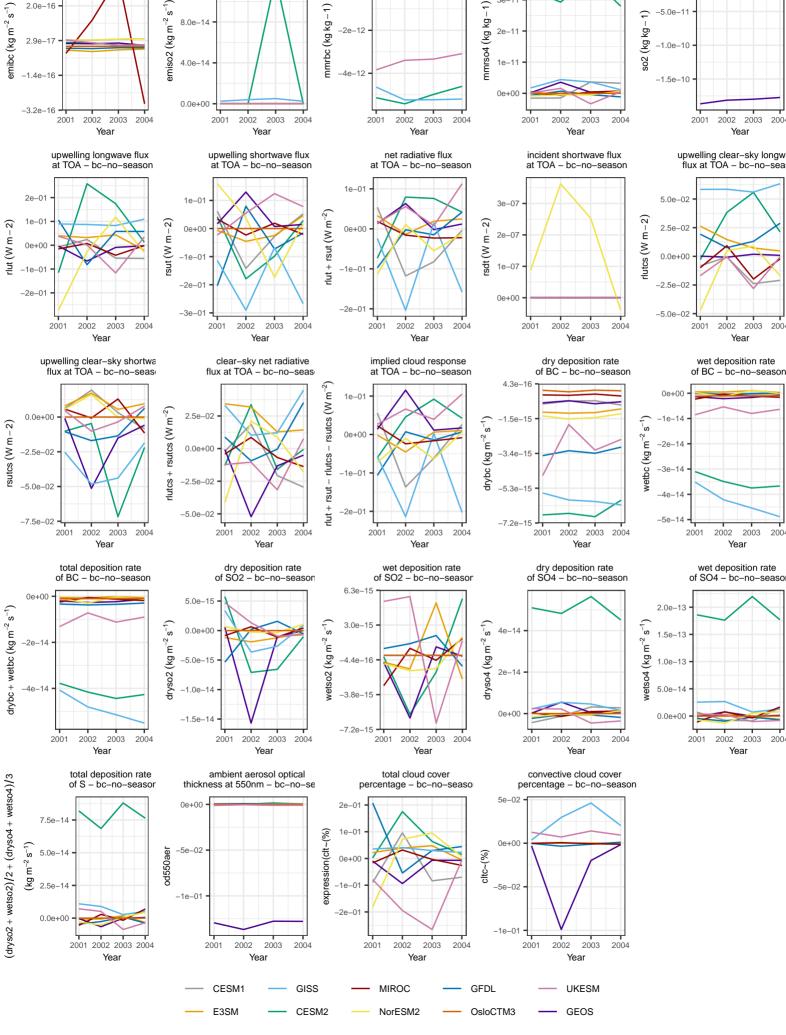
NH-atlantic: absolute difference surface flux of SO2 – bc–no–season surface flux of BC – bc–no–season surface concentration surface concentration of SO4 – bc–no–season surface concentration of SO2 – bc–no–seasor 0.0e+00 1.2e-13 mmrso4 (kg kg – 1) emiso2 (kg $\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ mmrbc (kg kg – 1) -5 0e-1 so2 (kg kg-1) -1.0e-10 -1.5e-10 0e+00 2003 2002 2003 2002 2003 2002 2003 2002 2003 2001 2001 2001 2001 Year Year Year Year Year upwelling shortwave flux at TOA – bc–no–season incident shortwave flux at TOA – bc-no-season upwelling clear-sky longwa flux at TOA - bc-no-seas net radiative flux at TOA - bc-no-season 1e-01 5.0e-02 3e-07 rlut + rsut $(W m^{-2})$ rlutcs (W m -2) rsut(Wm-2)rsdt(Wm-2)2.5e-02 0e+00 0e+00 0.0e+00 1e-07 -2 5e-02 -5.0e-02 2003 2003 2004 2003 2001 2002 2003 2001 2002 2003 2001 2002 2001 2002 Year Year Year Year dry deposition rate of BC – bc–no–season clear-sky net radiative implied cloud response wet deposition rate flux at TOA - bc-no-seas at TOA - bc-no-season of BC - bc-no-season 0e+00 1e-01 rlut + rsut - rlutcs - rsutcs (W lutcs + rsutcs (W m^{-2} 2.5e-02 wetbc $(kg m^{-2} s^{-1})$ drybc (kg $m^{-2} s^{-1}$ 0e+00 0.0e+00 -1e-01 -5.0e-02 2003 2004 2001 2002 2003 2004 2001 2003 2004 2001 2002 2003 2001 2003 Year Year Year Year Year dry deposition rate of SO2 – bc–no–season dry deposition rate of SO4 – bc–no–season wet deposition rate wet deposition rate of SO2 - bc-no-seasor of SO4 - bc-no-season 2.0e-13 wetso2 $(kg m^{-2} s^{-1})$ $dryso2 (kg m^{-2} s^{-1})$ 3.0e-15 wetso4 (kg m⁻² s⁻¹ dryso4 (kg m⁻² s⁻¹ 1.0e-13 5.0e-14 -1.5e-14 2003 2001 2003 2001 2002 2003 2001 2002 2003 2002 2003 Year Year ambient aerosol optical total cloud cover convective cloud cover percentage – bc-no-seaso percentage - bc-no-season 0e+00 2e-01 1e-01 expression(clt~(%) od550aeı 0e+00 -1e-01 -1e-01



3.8e-16

2.0e-16

2.9e-17