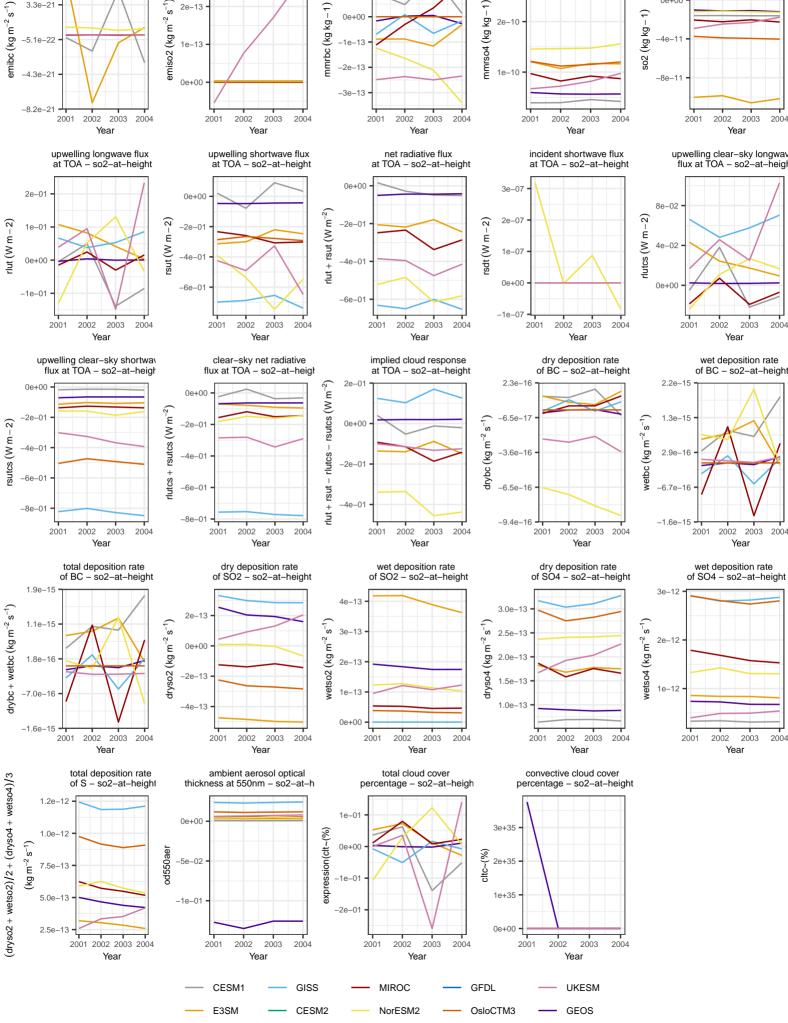
NH-atlantic: absolute difference surface flux of SO2 – so2–at–height surface concentration surface concentration of SO2 – so2–at–height surface concentration of BC - so2-at-height of SO4 - so2-at-height 00+00 emiso2 (kg $m^{-2} s^{-1}$) mmrso4 (kg kg – 1) nmrbc (kg kg – 1) so2 (kg kg-1) 1e-13 -8e-11 00+00 2002 2003 2002 2003 2002 2003 2002 2003 2001 2001 2001 2001 Year Year Year Year net radiative flux at TOA – so2–at–height upwelling shortwave flux at TOA – so2–at–height incident shortwave flux at TOA – so2–at–height upwelling clear-sky longway flux at TOA - so2-at-heigh 0e+00 8e-02 rlut + rsut $(W m^{-2})$ 2e-07 rlutcs (W m-2) rsdt(Wm-2)rsut(Wm-2)-2e-0 4e-02 1e-07 -4e-01 0e+00 -6e-01 _6e_01 _1e_07 2003 2002 2003 2003 2003 2001 2002 2001 2001 2002 2001 2002 Year Year Year Year clear-sky net radiative implied cloud response dry deposition rate wet deposition rate flux at TOA - so2-at-heigh at TOA - so2-at-height of BC - so2-at-height of BC - so2-at-height 2e-0 + rsut - rlutcs - rsutcs (W m⁻²) 0e+00 lutcs + rsutcs (W m^{-2} wetbc $(kg m^{-2} s^{-1})$ drybc (kg $\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ -4e-01 -2e-01 4e-01 -8e-02003 2001 2002 2004 2001 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year dry deposition rate wet deposition rate dry deposition rate wet deposition rate of SO2 - so2-at-height of SO2 - so2-at-height of SO4 - so2-at-height of SO4 - so2-at-height 4e - 133.0e-13 2e-13 wetso2 (kg m⁻² s⁻¹) wetso4 $(kg m^{-2} s^{-1})$ $dryso2 (kg m^{-2} s^{-1})$ dryso4 (kg m⁻² s⁻¹ 0e+00 2e-13 -2e-13 1.0e-13 -4e-13 0e+00 2001 2002 2003 2002 2003 2002 2003 2002 2003 Year Year Year ambient aerosol optical total cloud cover convective cloud cover thickness at 550nm - so2-at-h percentage - so2-at-heigh percentage - so2-at-height 1e-01 0e+00 expression(clt~(%) od550aeı 2e+35 -1e-01 -1e-01



surface flux

7.1e-21

3.3e-2