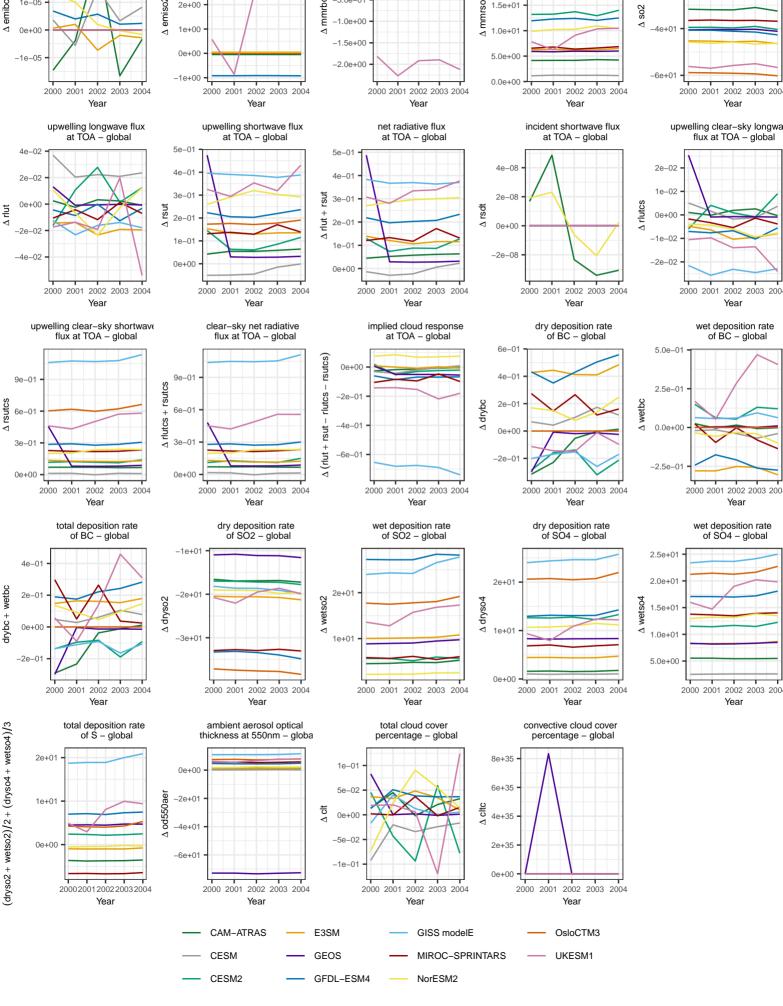
so2-at-height: absolute difference surface concentration of SO4 – global surface flux surface flux surface concentration surface concentration of BC - global of SO2 - global of BC - global of SO2 - global 2.5e+01 4e+00 0.0e+00 3e+00 2.0e+01 -2e+01 -5 0e-01 ∆ emiso2 2e+00 $\Delta so2$ -1.0e+00 1e+00 0e+00 5.00+00 -2.0e+00 _6e+01 -1e+00 0.0e + 002002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year Year upwelling shortwave flux at TOA – global upwelling clear-sky longwav flux at TOA - global net radiative flux incident shortwave flux at TOA – global at TOA – global 5e-01 5e-01 2e-02 4e-08 40_01 4e-01 1e-02 3e-01 2e-08 3e-01 2e-01 -1e-02 1e-01 -2e-08 -2e-02 0e+00 0e+00 2002 2003 2004 2002 2003 2004 2002 2003 2004 2002 2003 2004 2002 2003 2004 2001 2000 2001 2000 2001 2000 2001 2000 Year Year Year Year Year clear-sky net radiative flux at TOA - global dry deposition rate of BC – global wet deposition rate of BC – global implied cloud response at TOA - global 5.0e-01 rsutcs 9e-01 ∆ rlutcs + rsutcs 2.5e-01 Δ (rlut + rsut – rlutcs – -2e-01 2e-01 ∆ drybc 6e-01 -4e-01 0.0e+00 0e+00 3e-01 0e+00 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 Year Year Year Year Year dry deposition rate of SO2 – global wet deposition rate of SO2 – global dry deposition rate of SO4 – global wet deposition rate of SO4 – global 2e+01 -2e+01∆ dryso2 ∆ wetso2 ∆ dryso4 1.0e+01 -3e+01 1e+01 5.0e+00 2002 2003 2004 2000 2001 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year ambient aerosol optical total cloud cover convective cloud cover thickness at 550nm – globa percentage – global percentage - global 8e+35 1e-01 0e+00 5e-02



2e-05

1e-05