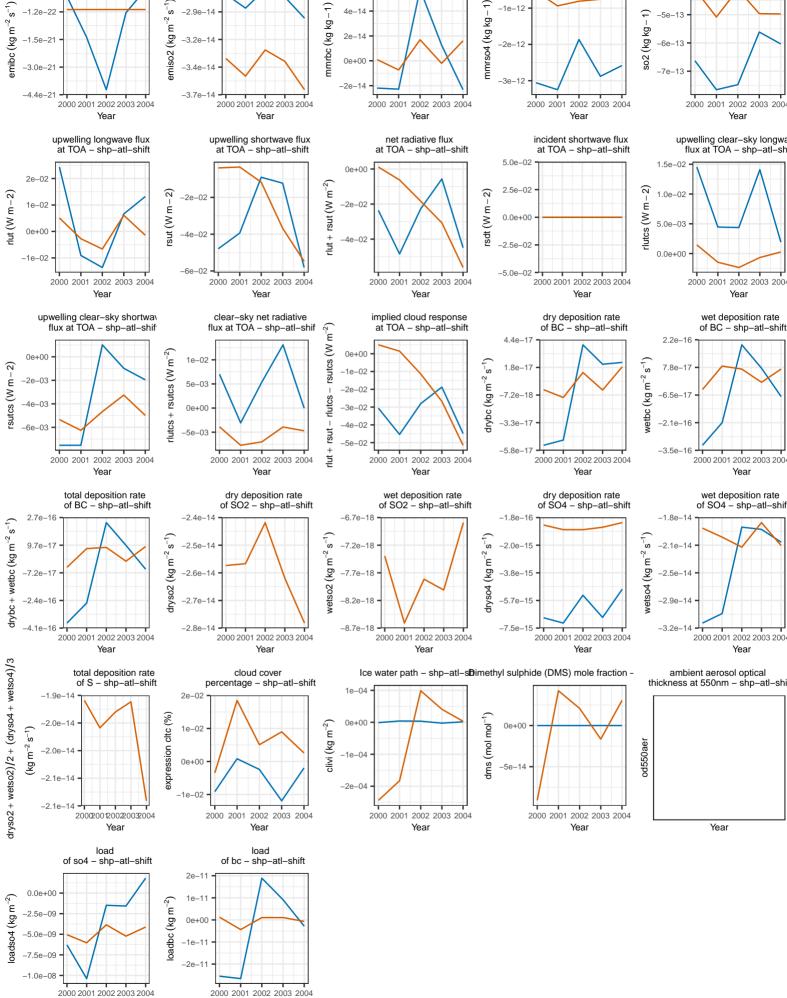
sea: absolute difference surface flux of SO2 – shp–atl–shift surface concentration of BC – shp-atl-shift surface concentration of SO4 – shp-atl-shift surface concentration of SO2 - shp-atl-shift mmrso4 (kg kg – 1) nmrbc (kg kg-1) so2 (kg kg – 1) 0e+00 2000 2001 2002 2003 2004 2002 2003 2004 2002 2003 2004 2002 2003 2004 2000 2001 2000 2001 2000 2001 Year Year Year Year upwelling shortwave flux at TOA – shp-atl-shift net radiative flux at TOA – shp-atl-shift upwelling clear-sky longway flux at TOA - shp-atl-shit incident shortwave flux at TOA – shp-atl-shift 5 0e-02 0e+00 -1ut + rsut (W m⁻²) rlutcs (W m-2) rsdt (Wm-2)1.0e-02 0.0e + 0.05.0e-03 -2 5e-02 0.0e+00 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year implied cloud response dry deposition rate wet deposition rate clear-sky net radiative flux at TOA - shp-atl-shif $\rm rsutcs \, (W \, \, m^{-2})$ at TOA - shp-atl-shift of BC - shp-atl-shift of BC - shp-atl-shift 2.2e-16 1.8e-17 wetbc (kg ${\sf m}^{-2}\,{\sf s}^{-1}$ drybc (kg $m^{-2} s^{-1}$ -1e-02 -2e-02 rlutes rsut -5e-02 _5 8e_1 Ė 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year dry deposition rate of SO4 – shp–atl–shift wet deposition rate of SO4 – shp-atl-shift dry deposition rate of SO2 – shp-atl-shift wet deposition rate of SO2 – shp-atl-shift -6.7e-18 -1.8e-16 -1.8e-14 wetso2 (kg m^{-2} s⁻¹ dryso4 (kg m^{-2} s⁻ wetso4 $(kg m^{-2})$ -3.8e-15 -2.5e-14 -8.7e--3.2e-2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Ice water path - shp-atl-shimethyl sulphide (DMS) mole fraction cloud cover ambient aerosol optical thickness at 550nm - shp-atl-shift clivi (kg m⁻²) 0e+00_lom lom) smb 0e+00 od550aer -2e-04 2002 2003 2004 2000 2001 2002 2003 2004 2002 2003 2004 2000 2001 Year Year Year Year



surface flux of BC – shp–atl–shift

Year

-1.2e-22

Year