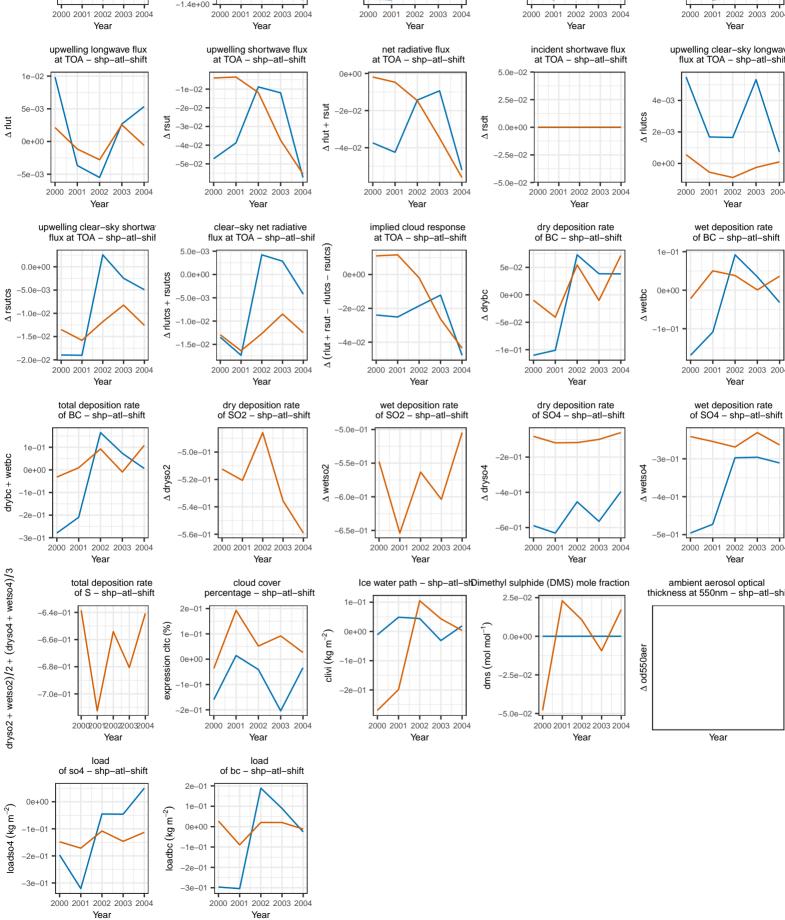
## sea: absolute difference surface flux of SO2 – shp–atl–shift surface concentration surface concentration surface concentration of BC - shp-atl-shift of SO4 - shp-atl-shift of SO2 - shp-atl-shift -3e-01 -1e-01 -6 0e-01 -4e-01 1e-01 -8.0e-01 802 -5e-01 -1.0e+00-1.2e+00 -4e-01 2000 2001 2002 2003 2004 2002 2002 2003 2004 2002 2003 2004 2000 2001 2000 2001 Year Year Year Year upwelling shortwave flux at TOA – shp–atl–shift upwelling clear-sky longwave flux at TOA - shp-atl-shift net radiative flux at TOA – shp–atl–shift incident shortwave flux at TOA - shp-atl-shift 5 0e-02 rlut + rsut 0.0e + 002e-03 -02 -2 5e-02 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 at TOA - shp-atl-shift of BC - shp-atl-shift of BC - shp-atl-shift 1e-01 0e+00 rlutcs -0e+00 △ wetbc △ drybc -2e-02 rsut -5e-02 -1e-01 rlut + 4e-02 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 SO2 – shp-atl-shift wet deposition rate of SO2 – shp-atl-shift dry deposition rate of SO4 – shp-atl-shift wet deposition rate of SO4 – shp-atl-shift -5.0e-01 -2e-01 wetso4 -6e-01 -6.5e-01 -5e-01 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-shDimethyl sulphide (DMS) mole fraction cloud cover ambient aerosol optical thickness at 550nm - shp-atl-shift 0e+00 clivi (kg m<sup>-2</sup>) \_lom lom) smp 0.0e + 00∆ od550aer -1e-01 -2e-0 2000 2001



surface flux of BC – shp–atl–shift

2.5e-06

0.0e+00

\_2 5e\_06

-5.0e-06

-7.5e-06