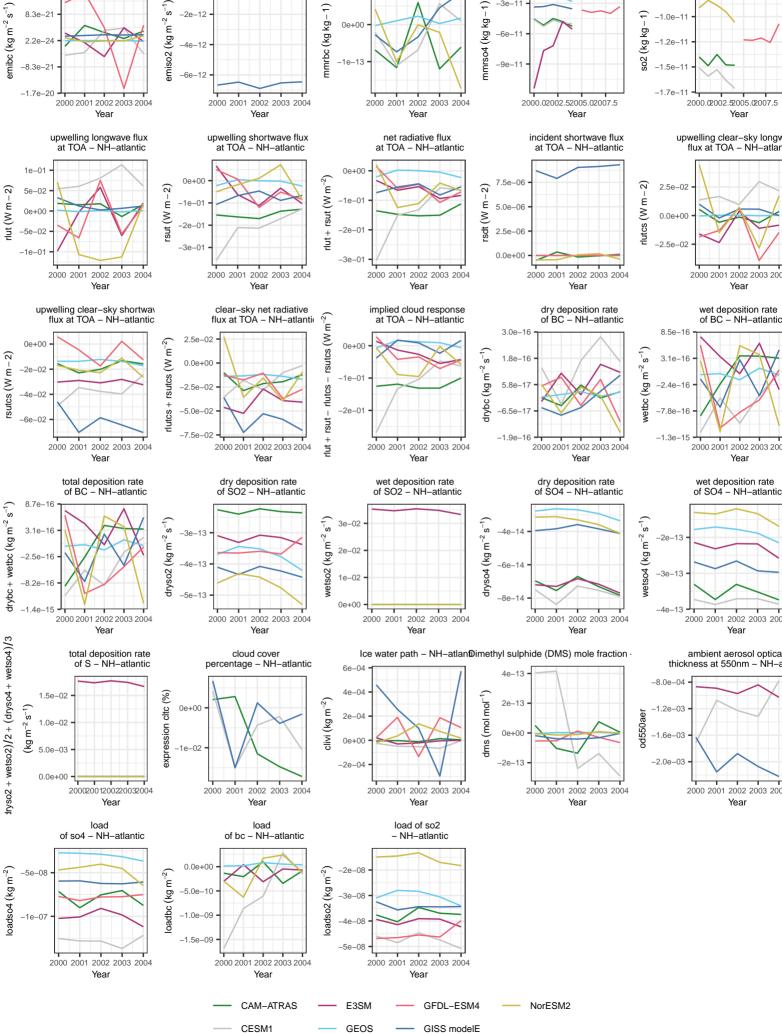
shp-30p-red: absolute difference surface flux of SO2 – NH–atlantic surface concentration surface concentration of SO4 – NH–atlantic surface concentration of SO2 – NH–atlantic -7.5e-12 (kg kg - 1)nmrbc (kg kg-1) (kg kg – 1) -1.0e-1 0e+00 mmrso4 2000 2001 2002 2003 2004 2002 2003 2004 2000.02002.52005.02007.5 2000.02002.52005.02007.5 2000 2001 Year Year Year Year upwelling shortwave flux at TOA – NH-atlantic net radiative flux at TOA – NH–atlantic incident shortwave flux at TOA – NH–atlantic upwelling clear–sky longwa flux at TOA – NH–atlanti 0e+00 $rlut + rsut (W m^{-2})$ 7.5e-06 rlutcs (Wm-2)2.5e-02 sdt (Wm-2)-1e-01 0.0e+00-2e-01 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 at TOA – NH–atlantic clear-sky net radiative flux at TOA - NH-atlantic dry deposition rate of BC – NH-atlantic wet deposition rate of BC – NH-atlantic m^{-2} 3 0e-16 8.5e-16 rsutcs (W 2.5e-02 0e+00 wetbc (kg $\,\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ 1.8e-16 3.1e-16 drybc (kg m⁻² s⁻ 0.0e+00 -1e-01 rlutcs --2.5e-02 -5 0e-02 -2e-01 rsut – 2000 2001 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 Year Year Year Year dry deposition rate of SO2 – NH-atlantic wet deposition rate of SO2 – NH-atlantic dry deposition rate of SO4 – NH–atlantic wet deposition rate of SO4 – NH-atlantic wetso2 (kg m⁻² s⁻¹. wetso4 (kg ${\sf m}^{-2}\,{\sf s}^{-1}$ dryso4 (kg m⁻² s¯ 1e-02 0e+002000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year cloud cover percentage – NH-atlantic Ice water path - NH-atlan@imethyl sulphide (DMS) mole fraction ambient aerosol optical thickness at 550nm – NH-atl 6e-04 -8.0e-04 clivi (kg m⁻²) _lom lom) smp 2e-13 2e-04 0e+00 -1.6e-03 -2.0e-03 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2000 2001 2002 2003 2004 Year Year Year Year load load of so2 - NH-atlantic of bc - NH-atlantic 0.0e + 00-2e-08



surface flux of BC – NH–atlantic

1.7e-20