shp-10p-red-1950: absolute difference surface flux of SO2 – NH–sea surface concentration of BC – NH–sea surface flux surface concentration surface concentration of BC - NH-sea of SO4 - NH-sea of SO2 - NH-sea -7.0e-13 $\mathrm{emibc}\,(\mathrm{kg}\,\mathrm{m}^{-2}\,\mathrm{s}^{-1})$ nmrbc (kg kg-1) əmiso2 (kg m $^{-2}$ s $^{-1}$ 8.1e-2 -9.0e-13 mmrso4 (kg kg (kg kg – 0e+00 3.9e-21 -3.3e-22 -4 6e-2 2000 2001 2002 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 – NH-sea upwelling clear-sky longwa flux at TOA - NH-sea upwelling longwave flux at TOA – NH-sea net radiative flux incident shortwave flux at TOA – NH–sea at TOA - NH-sea 5.0e-02 4e-02 5.0e-02 $rsut(W m^{-2})$ 1.0e-02 rlut (Wm-2)rsut (Wm-2)2.5e-02 2e-02 (Wm-2)rlutcs (W m -2.5e-02 5.0e-03 0.0e + 0.00.0e + 000e+00 0.0e+00 rsdt 0.0e+00 -2 5e-02 _2e_02 -2.5e-02 -5.0e-03 2000 2001 2002 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 dry deposition rate of BC – NH–sea wet deposition rate of BC – NH–sea upwelling clear-sky shortway clear-sky net radiative implied cloud response flux at TOA - NH-sea flux at TOA - NH-sea at TOA - NH-sea rsutcs (W m⁻²) 5e-03 5.0e-02 1.0e-02 rsutcs (W m-2) 6.0e-17 3.4e-16 drybc (kg $m^{-2} s^{-1}$ vetbc (kg m⁻² s⁻ rsutcs (W 5.0e_03 0e+00 0.0e+0.02.9erlutcs -5.0e-03 -5e-03 0.0e+00 rsut – _3 4e_1 2000 2001 2002 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 total deposition rate of BC – NH–sea dry deposition rate of SO2 – NH–sea wet deposition rate of SO2 – NH–sea dry deposition rate of SO4 – NH–sea wet deposition rate of SO4 – NH–sea 5.0e-16 -3.7e-14 -5.4e-18 $\mathrm{drybc} + \mathrm{wetbc} \, (\mathrm{kg} \, \mathrm{m}^{-2} \, \mathrm{s}^{-1})$ -2.0e-14 wetso2 (kg $\mathrm{m}^{-2} \mathrm{s}^{-1}$ dryso2 (kg $\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ 3.2e-16 dryso4 (kg m^{-2} s⁻ wetso4 $(kg m^{-2})$ 1.4e-16 -3.8e-14 -6.7e-18 -5.6e-15 -3.0e-14 -3.9e-14 -8.0e-18 2000 2001 2002 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 dryso2 + wetso2)/2 + (dryso4 + wetso4)/3Ice water path - NH-sea Dimethyl sulphide (DMS) mole fraction total deposition rate cloud cover ambient aerosol optical of S - NH-sea thickness at 550nm - NH-sea 2e-02 8 clivi (kg m^{-2}) lom lom) smb $(kg m^{-2} s^{-1})$ ctc 0e+00 od550aeı expression 0e+00 -1e-02-2.8e-14 -5e-14 20002001200220032004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 Year Year Year Year Year load load of so2 - NH-sea of bc - NH-sea 0.0e+00 1e-11 $\log \log (\log \, m^{-2})$ loadbc (kg m $^{-2}$) 5e-12 -5.0e-09 0e+00 -1.0e-08 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year