shp-10p-red-1950: absolute difference surface flux of BC – NH–atlantic surface flux of SO2 – NH–atlantic surface concentration of BC – NH–atlantic surface concentration surface concentration of SO4 - NH-atlantic of SO2 - NH-atlantic -2e-01 3e-05 1e-01 2e-05 _2e+00 $\Delta so2$ _8 0e_01 1e-05 -3e+00 0e+00 -1.0e+00 0e+00 -5e-01 _5e+00 -1e-05 -1.2e+00 2000 2001 2002 2003 2004 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2000 2001 2000 2001 2002 2003 Year Year Year Year Year upwelling longwave flux at TOA – NH–atlantic upwelling shortwave flux at TOA – NH–atlantic upwelling clear-sky longwav flux at TOA - NH-atlantic incident shortwave flux at TOA – NH-atlantic net radiative flux at TOA - NH-atlantic 5 0e-02 0e+00 1.0e-01 56-02 rsut -2e-02 5.0e-02 0.0e + 0.0e +₽ 0e+00 0.0e+0.0-4e-02-2 5e-02 -5 0e-02 -1e-02 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 clear-sky shortway clear-sky net radiative implied cloud response dry deposition rate wet deposition rate flux at TOA - NH-atlantic flux at TOA - NH-atlantic at TOA - NH-atlantic of BC - NH-atlantic of BC - NH-atlantic rsutcs) 2e-02 1e-01 4e-01 ∆ rlutcs + rsutcs rlutcs -0e+00 ∆ rsutcs wetbc 0e+00 Δ drybα 2e-01 rsut 00+00 _2e_02 -2e-02 -1e-01 (rlut + -4e-02-4e-02 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–atlantic 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 -3.9e-01 -7.2e-014e-0 -3e-01 drybc + wetbc ∆ dryso2 ∆ dryso4 2e-01 -5e-01 0e+00 -5e-01 -6e-01 -2e-01 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 $\frac{dryso2 + wetso2}{2 + (dryso4 + wetso4)/3}$ total deposition rate Ice water path - NH-atlantDimethyl sulphide (DMS) mole fraction cloud cover ambient aerosol optical of S - NH-atlantic percentage - NH-atlantic thickness at 550nm - NH-atlantic 5.0e-01 -7.5e-01 1e+00 expression cltc (%) clivi (kg m⁻²) _lom lom) smp 2.5e-01 0e+00 -8.0e-01 ∆ od550aeı 5e-01 0.0e+00 -8.5e-01 -9.0e-01 -2.5e-01 0e+00 -8e-02 20002001200220032004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year Year load load - NH-atlantic of bc - NH-atlantic 3e-01 0e+00 loadso4 (kg m⁻²) 2e-01 oadbc (kg m^{-2}) -1e-01 1e-01 -3e-010e+00-4e-01 -1e-01 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year