shp-ind-shift: absolute difference surface flux of BC – NH–indian surface flux surface concentration of BC – NH–indian surface concentration surface concentration of SO2 – NH-indian of SO4 - NH-indian of SO2 - NH-indian 3.6e-12 emibc (kg $\mathrm{m}^{-2} \mathrm{s}^{-1}$) nmrbc (kg kg-1) nmrso4 (kg kg – 1 emiso2 (kg m⁻² s⁻¹ so2 (kg kg – 1) 0e+00 -8.9e-2 2 0e-10 3 2e-12 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2000 2001 Year Year Year Year Year upwelling longwave flux at TOA – NH–indian upwelling shortwave flux at TOA – NH-indian net radiative flux at TOA – NH-indian upwelling clear-sky longway flux at TOA - NH-indian incident shortwave flux at TOA – NH–indian 5.0e-02 0.0e+00 rlut + rsut $(W m^{-2})$ rlutes (W m-2) rlut (Wm-2)rsdt (Wm-2)0e+00 -2.5e-01 4e-01 rsut (W m-0.0e + 0.0-5.0e-0 2e-01 -2 5e-02 -1e-01 0e+00 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-indian flux at TÓA - NH-indian at TOA - NH-indian of BC - NH-indian of BC - NH-indian rsutcs (W m^{-2}) 6.8e-16 3e-01 3e-01 lutcs + rsutcs (W m $^{-2}$) rsutcs (W m-2) 2.5e-01 1.2e-16 wetbc (kg $\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ drybc (kg $m^{-2} s^{-1}$ 2e-01 2e-01 2.0e-01 rlutcs -1e-0 1e-01 1.5e-01 rsut – 0e+001.0e-01 0e+00 rlut + 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 wet deposition rate of SO4 – NH-indian total deposition rate of BC – NH–indian dry deposition rate of SO2 – NH–indian wet deposition rate of SO2 – NH–indian dry deposition rate of SO4 – NH–indian 9.4e-15 2.2e-16 $\mathrm{drybc} + \mathrm{wetbc} \, (\mathrm{kg} \, \mathrm{m}^{-2} \, \mathrm{s}^{-1})$ wetso4 (kg m⁻² s⁻¹) wetso2 (kg m^{-2} s⁻¹ dryso2 (kg $\mathrm{m}^{-2}\,\mathrm{s}^{-1}$ dryso4 (kg m^{-2} s⁻ 1.9e-15 2.0e-16 1 96-12 2.2e-12 2.0e 1.8e-12 1.9e-16 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-indiarDimethyl sulphide (DMS) mole fraction total deposition rate cloud cover ambient aerosol optical of S - NH-indian percentage - NH-indian thickness at 550nm - NH-indian 6e-02 expression cltc (%) clivi (kg m^{-2}) _lom lom) smb 4e-02 $(kg m^{-2} s^{-1})$ od550aer 0e+00 2e-02 1.8e-12 0e+00 -1e-03 1.8e-12 -2e-02 0.0e+00 20002001200220032004 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2000 2001 Year Year Year Year Year load load of so2 – NH-indian of bc - NH-indian 5.5e-07 0.0e+00 $loadso4 (kg m^{-2})$ oadbc (kg m 4.5e-07 -1.0e-10 4.0e-07 3.5e-07 3.0e-07 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year