bc-no-season: absolute difference surface flux of SO2 – bc–no–season surface concentration of SO4 – bc–no–season surface flux of BC – bc–no–season surface concentration surface concentration of SO2 – bc–no–season 3e+00 0.0e+00 5e+00 0e+00 emibc (kg m-2 s-1) -2.5e+01 2e+00 nmrbc (kg kg-' (kg kg-1) -50+00 Ŕď -5.0e+01 mmrso4 so2 1e+00 _7 5e+01 0e+00 2001 2001 2002 2003 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year upwelling shortwave flux at TOA – bc–no–season incident shortwave flux at TOA – bc–no–season upwelling clear-sky longwav flux at TOA - bc-no-seaso net radiative flux at TOA - bc-no-season 3e-01 1.0e-07 2e-01 1e-02 2e-01 rlut + rsut (W m-2) rlutcs (W m-2) sut (W m-2) rsdt (W m-2) 1e-01 0e+00 1e-01 5.0e-08 0e+00 2.5e-08 -2e-02 2002 2002 2003 2002 2003 2001 2002 2003 2001 2003 2004 2001 2001 Year Year Year clear-sky net radiative dry deposition rate wet deposition rate total deposition rate flux at TOA - bc-no-seaso of BC - bc-no-season of BC - bc-no-season of BC - bc-no-season 1.5e-01 1.0e+01 drybc + wetbc (kg m-2 s-1) 0e+00 ·lutcs + rsutcs (W m-2) drybc (kg m-2 s-1 wetbc (kg m-2 s-1 5.0e+00 1.0e-01 -5e+00 -1e+01 5 0e-02 -5 0e+00 -1e+01 -2e+01 0.0e+00 -5 0e-02 2004 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 2001 2002 2003 Year Year Year Year (dryso2 + wetso2)/2 + (dryso4 + wetso4)/3 (kg m-2 s-1)dry deposition rate of SO4 – bc–no–season wet deposition rate wet deposition rate total deposition rate of SO2 - bc-no-season of SO4 - bc-no-season of S - bc-no-season 4e+00 4e-01 wetso2 (kg m-2 s-1) (kg m-2 s-1)wetso4 (kg m-2 s-1 -1e+00 3e+00 0e+00 0e+00dryso4 1e+00 -4e-01 0e+00 -8e-01 2001 2002 2003 2001 2002 2003 2001 2002 2003 2002 2003 Year Year Year convective cloud cover percentage – bc-no-season total cloud cover 2e-01 5.0e-01 cltc (%) 0e+00 2.5e-01 -2e-01 0.0e+00

