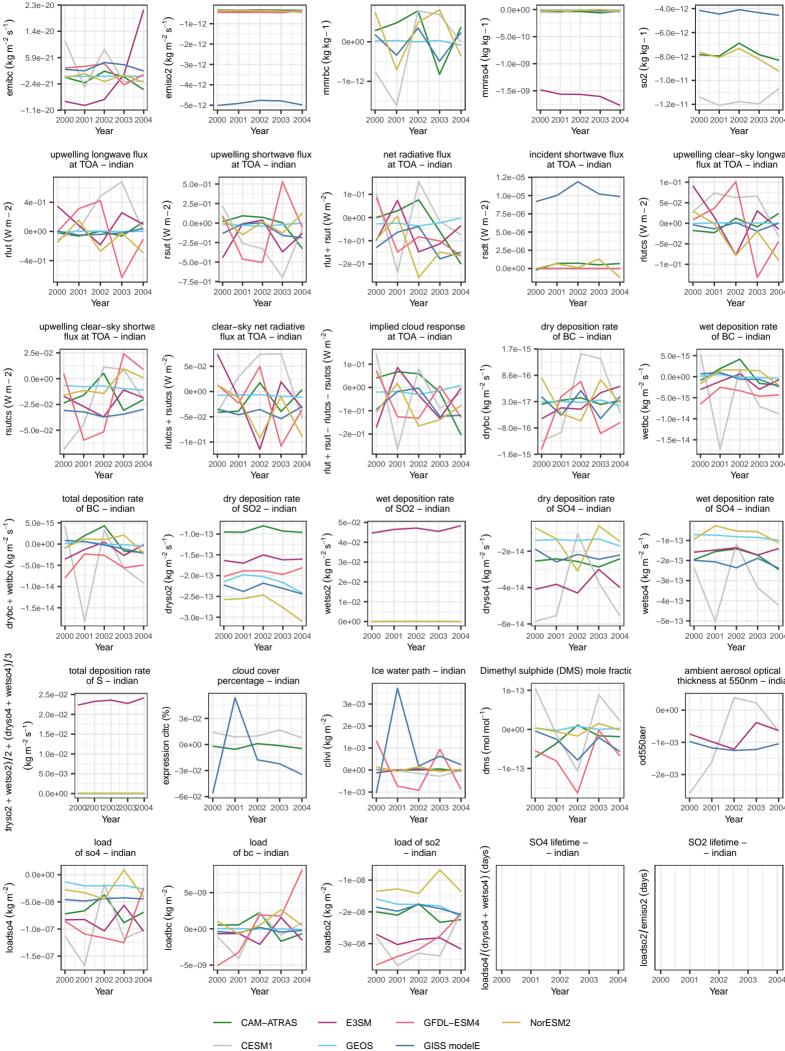
## shp-30p-red: absolute difference surface flux of SO2 – indian surface concentration surface concentration of SO4 – indian surface concentration of SO2 – indian -4 0e-12 (kg kg - 1)nmrbc (kg kg-1) (kg kg – 1) 0e+00 -8.0e-12 -1.0e-09 mmrso4 -1.5e-092000 2001 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 Year Year Year Year upwelling shortwave flux at TOA – indian incident shortwave flux at TOA – indian upwelling clear-sky longway flux at TOA – indian net radiative flux at TOA – indian 1.2e-05 1e-01 $rsut (W m^{-2})$ rlutcs (Wm-2)5e-02 (Wm-2)0e+00 5.0e-06 -1e-01 -5e-02 ± ≒ -1e-01 -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 clear-sky net radiative flux at TOA - indian implied cloud response dry deposition rate of BC – indian wet deposition rate of BC – indian rsutcs (W $\mathrm{m}^{-2}$ ) at TOA – indian 1 7e-15 5.0e-15 1e-01 wetbc (kg m<sup>-2</sup> s<sup>-1</sup>) 8.6e-16 drybc (kg m<sup>-2</sup> s<sup>-</sup> 0e+00 rlutcs -3.0e-17 -2e-01 rsutrlut + 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 – indian wet deposition rate of SO2 – indian dry deposition rate of SO4 – indian wet deposition rate of SO4 – indian vetso2 (kg m<sup>-2</sup> s<sup>-1</sup> 4e-02 dryso4 (kg m $^{-2}$ s $^{-1}$ $\text{wetso4} (\text{kg m}^{-2}$ 3e-02 2e-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 Dimethyl sulphide (DMS) mole fraction cloud cover Ice water path - indian ambient aerosol optical percentage - indian thickness at 550nm – india 3e-03 clivi (kg m<sup>-2</sup>) \_lom lom) smb 2e-03 0e+00 od550aei 1e-03 0e+00 -2e-03 2002 2003 2004 2000 2001 2002 2003 2004 2002 2003 2004 2000 2001 2000 2001 2000 2001 2002 2003 2004 Year Year Year Year load of so2 SO4 lifetime SO<sub>2</sub> lifetime load of bc - indian - indian - indian - indian wetso4) (days



surface flux of BC – indian