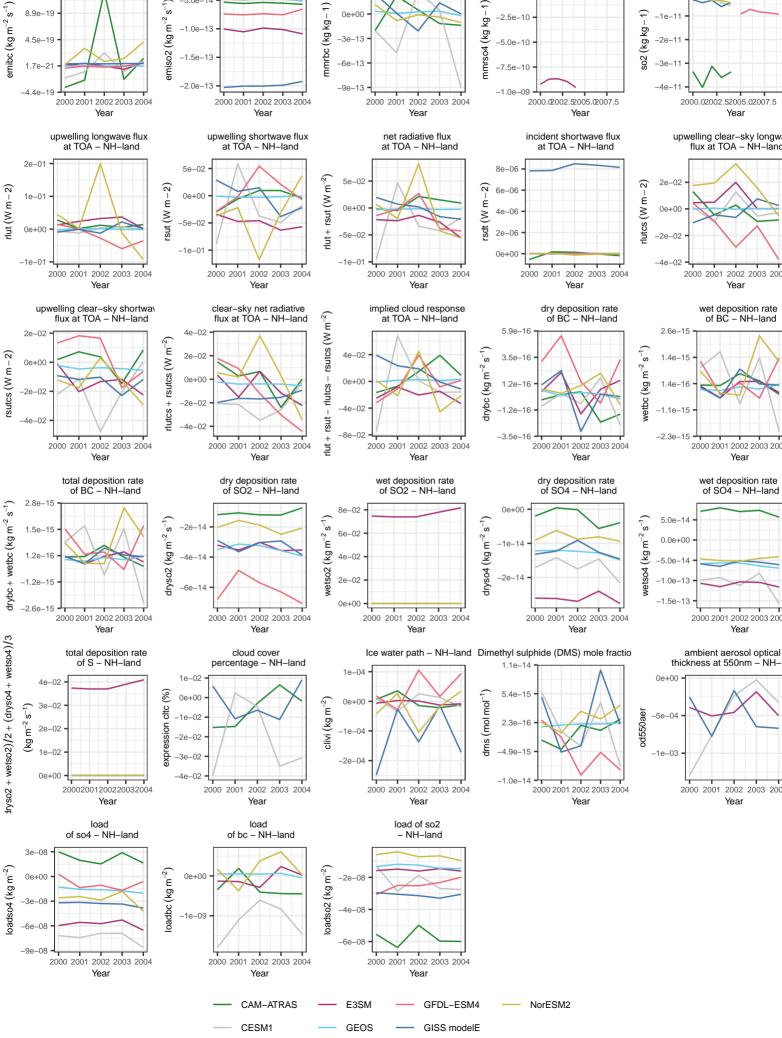
## shp-30p-red: absolute difference surface flux of SO2 – NH–land surface concentration surface concentration of SO4 – NH–land surface concentration of SO2 – NH–land 0.0e+00 (kg kg - 1)nmrbc (kg kg-1) so2 (kg kg – 1) -5.0e-10 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000.02002.52005.02007.5 2000.02002.52005.02007.5 Year Year Year Year upwelling shortwave flux at TOA – NH–land net radiative flux at TOA – NH–land incident shortwave flux at TOA – NH-land upwelling clear-sky longway flux at TOA - NH-land $rsut (W m^{-2})$ 5e-02 2e-02 rlutcs (W m-2) 0e+00 -sdt (W m-0e+00 4e-06 -5e-02 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 - NH-land implied cloud response at TOA – NH-land dry deposition rate of BC – NH–land wet deposition rate of BC – NH–land rlutcs - rsutcs (W m<sup>-2</sup>) 2 6e-15 wetbc (kg $m^{-2}$ s<sup>-1</sup>) 2e-02 3.5e-16 1.4e-15 drybc (kg m<sup>-2</sup> s<sup>-</sup> 0e+00 1.2e-16 -2e-02 -4e-02 rsut – rlut + 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 – NH-land wet deposition rate of SO2 - NH-land dry deposition rate of SO4 – NH-land wet deposition rate of SO4 – NH-land 8e-02 0e+00 wetso2 (kg m $^{-2}$ s $^{-1}$ $dryso4 (kg m^{-2} s^{-1})$ $^{-2}$ s<sup>-1</sup> 66-02 0.0e+00 4e-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 cloud cover Ice water path - NH-land Dimethyl sulphide (DMS) mole fractio ambient aerosol optical thickness at 550nm - NH-la percentage - NH-land 0e+00 1e-02 5 4e-15 0e+00 dms (mol mol<sup>-</sup> clivi (kg ${\sf m}^{-2}$ ) 0e+00 od550ae -1e-04 -1e-03 -3e-02 -2e-042000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 Year Year Year Year load load of so2 - NH-land of bc - NH-land -4e-08 1e-09



surface flux of BC – NH–land

1.3e-18