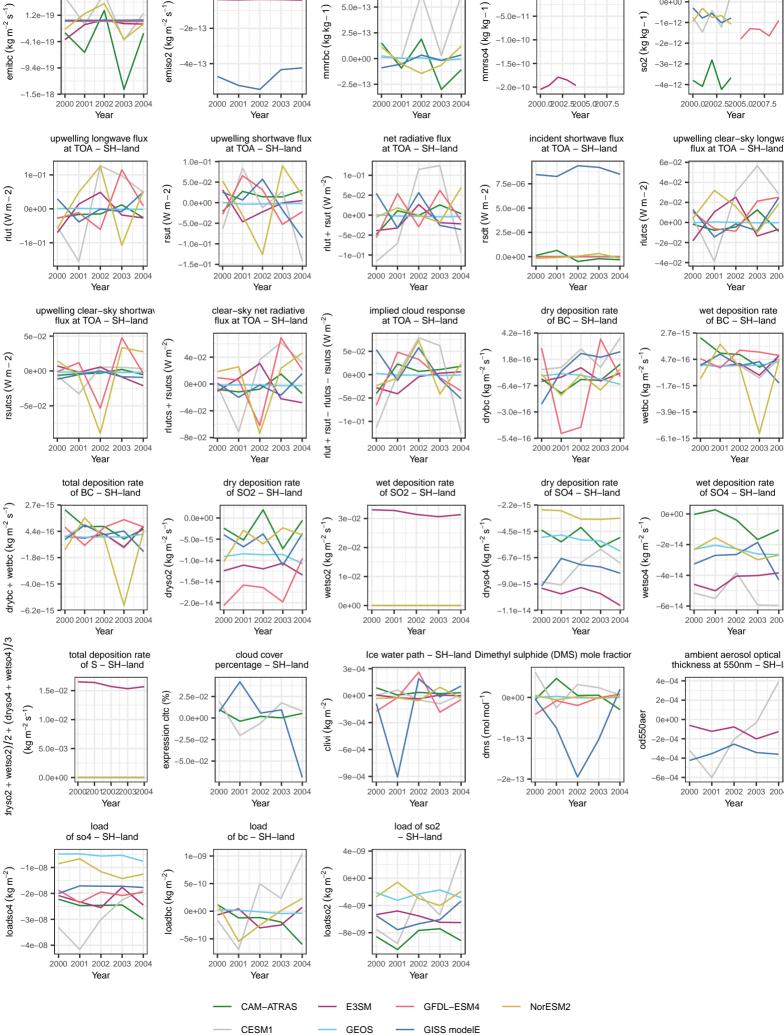
shp-30p-red: absolute difference surface flux of SO2 – SH–land surface concentration of SO4 – SH–land surface concentration surface concentration of SO2 – SH–land 0e+00 0e+00 5.0e-13 nmrbc (kg kg-1) so2 (kg kg – 1) 2.5e-13 ķď 0.0e+00 -1.5e-10 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000.02002.52005.02007.5 2000.02002.52005.02007.5 Year Year Year Year upwelling shortwave flux at TOA – SH–land net radiative flux at TOA – SH–land incident shortwave flux at TOA – SH-land upwelling clear-sky longway flux at TOA - SH-land 1e-01 $rsut (W m^{-2})$ rlutcs (W m-2) 5e-02 -sdt (W m-20-02 0e+00 -thu 2 5e-06 -5e-02-1e-0 2000 2001 2002 2003 2004 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 2002 2003 2004 2000 2001 Year Year Year Year clear-sky net radiative flux at TOA - SH-land implied cloud response at TOA – SH-land dry deposition rate of BC – SH–land wet deposition rate of BC – SH–land rsutcs (W m^{-2}) 4 2e-16 1.8e-16 vetbc (kg m⁻² s^{-'} drybc (kg m⁻² s⁻ 0e+00 0e+00 rlutcs --4e-02 rsut--8e-02rlut + 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 – SH-land wet deposition rate of SO2 – SH-land dry deposition rate of SO4 – SH-land wet deposition rate of SO4 – SH-land -2 2e-15 wetso2 $(kg m^{-2} s^{-1})$ wetso4 $(kg m^{-2} s^{-1})$ $dryso4 (kg m^{-2} s^{-1}$ -6.7e-15 1e-02 -9 0e-15 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 - SH-land Dimethyl sulphide (DMS) mole fraction ambient aerosol optical thickness at 550nm - SH-la percentage - SH-land 3e-04 4e-04 0e+002e-04 dms (mol mol⁻¹ clivi (kg m^{-2}) -6e-04 2000 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 - SH-land of bc - SH-land 1e-09 0e+00 5e-10 -4e-09 0e+00



surface flux of BC – SH–land

6.6e-19