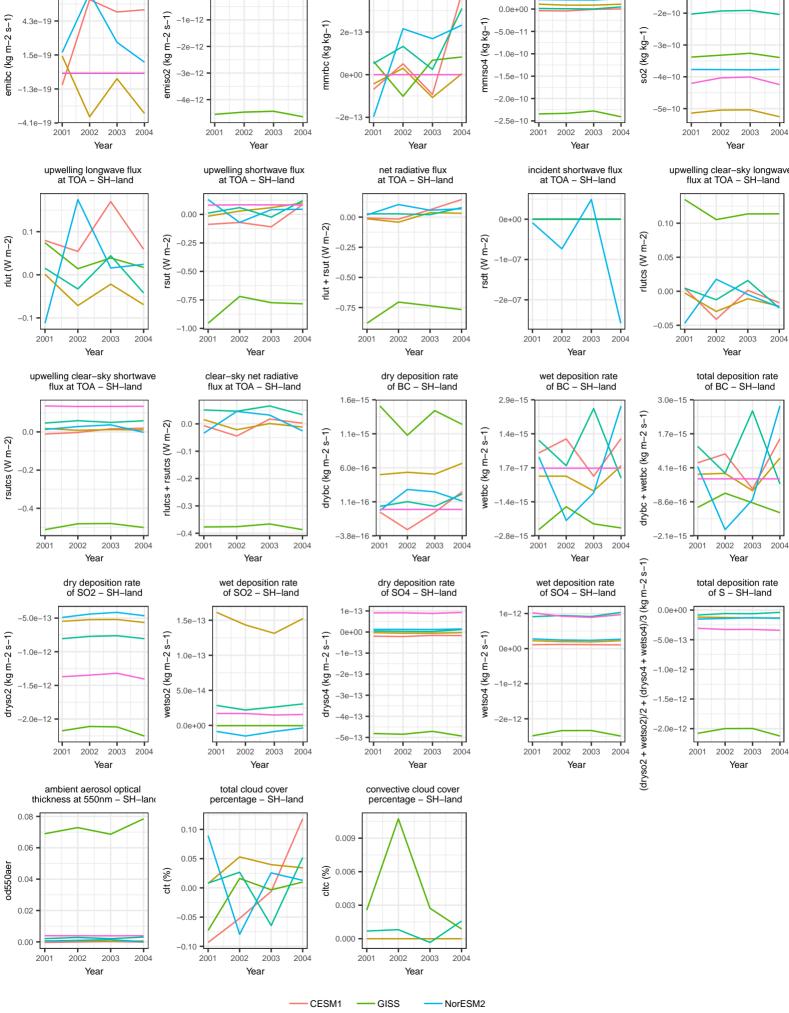
so2-at-height: absolute difference surface flux of SO2 – SH–land surface concentration of BC – SH–land surface concentration of SO4 – SH–land surface concentration of SO2 – SH–land 0e+00 0.0e+00 mmrbc (kg kg-1) so2 (kg kg-1) ķg 0e+00 -5e-10 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 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 longwave flux at TOA - SH-land 0.00 rlut + rsut (W m-2) rlutcs (W m-2) .sdt (W m-2) -0.250.05 _1e_07 -0.500.00 -2e-07 -0.75 -0.05 2001 2003 2001 2003 2001 2002 2003 2001 2003 Year Year Year Year dry deposition rate of BC – SH–land wet deposition rate of BC – SH–land clear-sky net radiative total deposition rate flux at TOA - SH-land of BC - SH-land 2.9e-15 3.0e-15 1.6e-15 drybc + wetbc (kg m-2 s-1) drybc (kg m-2 s-1) wetbc (kg m-2 s-1) 1.4e-15 6.0e-16 2002 2003 2001 2003 2001 2003 2001 2003 Year Year Year Year wetso4)/3 (kg m-2 s-1) total deposition rate of S – SH–land dry deposition rate of SO4 – SH–land wet deposition rate of SO4 – SH–land wet deposition rate of SO2 - SH-land 0.0e+00 0e+00 dryso4 (kg m-2 s-1) wetso4 (kg m-2 s-1 -5.0e-13 0e+00 (dryso2 + wetso2)/2 + (dryso4 + -1.0e-12 -2e-13 -3e-13 -5e-13 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2001 2002 2003 Year Year Year total cloud cover convective cloud cover 0.009



E3SM

MIROC

OsloCTM3

surface flux of BC – SH–land