so2-no-season: percent difference surface flux of SO2 – SH–sea surface concentration surface concentration of SO4 – SH–sea surface concentration of SO2 – SH–sea 0.5% 0% 0.2% 0.25% -0.25% Percent Percent Percent Percent 0% 0% -0.5% -0.25% 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 Year Year Year Year upwelling shortwave flux at TOA – SH-sea net radiative flux at TOA – SH–sea upwelling clear-sky longway flux at TOA - SH-sea incident shortwave flux at TOA - SH-sea 0.06% 4e-08% 0.005% 0.03% 3e-08% Percent 0% 0% 2e-08% 1e-08% -0.005% -0.04% -0.03% -0.01% 2001 2002 2003 2001 2002 2003 2001 2002 2003 2002 2003 Year Year Year Year dry deposition rate of BC – SH–sea clear-sky net radiative wet deposition rate total deposition rate flux at TOA - SH-sea of BC - SH-sea of BC - SH-sea 0.4% 0.5% 0.2% Percent 0.25% -0.02% 0% 0% -0.25% -0.04% -0.2% 2001 2002 2003 2001 2002 2003 2001 2003 2001 2002 2003 Year Year Year Year total deposition rate of S – SH–sea wet deposition rate of SO4 – SH-sea wet deposition rate dry deposition rate of SO2 - SH-sea of SO4 - SH-sea -0.2% 0% -0.25% Percent Percent -0.4%-0.5% -0.2% -0.4% -0.6% -0.75% -0.4% 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 Year total cloud cover convective cloud cover percentage - SH-sea percentage - SH-sea 0.05% 0.1% 0.025% 0.05% 0%

