## bc-no-season: percent difference surface flux of SO2 – NH–pacific surface concentration of BC – NH–pacific surface concentration of SO4 – NH–pacific surface flux of BC – NH–pacific surface concentration of SO2 – NH–pacific 0% 0.4% 0.9% \_25% 0.2% 2% Percent Percent Percent 0.6% Per 0% 0.3% -75% -0.2% 0% -8% -100% 2001 2002 2003 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 Year Year Year Year Year upwelling longwave flux at TOA – NH-pacific upwelling shortwave flux at TOA – NH–pacific upwelling clear-sky longway flux at TOA - NH-pacific net radiative flux incident shortwave flux at TOA - NH-pacific at TOA - NH-pacific 0.025% 0.4% 0.3% 0% 0.2% 0% Percent 0.2% Percent 2e-08% 0% 0% 0% -2e-08% -0.1% -0.1% -0.05% 2001 2002 2003 2004 2001 2002 2003 2001 2003 2001 2002 2003 2004 2002 2003 Year Year Year Year Year upwelling clear-sky shortway clear-sky net radiative dry deposition rate wet deposition rate total deposition rate flux at TOA - NH-pacific flux at TOA - NH-pacific of BC - NH-pacific of BC - NH-pacific of BC - NH-pacific 0.2% 0% 0.15% 0.15% 0% 0.1% 0.05% 0.05% 0% 0% -15% -0.05% -0.05% 2001 2002 2003 2004 2001 2002 2003 2001 2002 2003 2001 2003 2001 2002 2003 Year Year Year Year Year dry deposition rate of SO4 – NH–pacific total deposition rate of S – NH–pacific dry deposition rate wet deposition rate wet deposition rate of SO2 - NH-pacific of SO2 - NH-pacific of SO4 - NH-pacific 0.6% 0.5% 0% 0.2% 0.4% -0.5% 29 0% Percent Percent Percent Percent 0.2% 0% -1.5% -0.5% -0.2% -0.2% -0.4% 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 Year Year ambient aerosol optical convective cloud cover total cloud cover thickness at 550nm - NH-pac percentage - NH-pacific percentage - NH-pacific 0% 0.2% -20% 0.1% 0.1% Percent 0% -40% 0% -0.1% -60% -0.2%

2002

**GFDI** 

**GISS** 

2001

2003

Year

2004

MIROC

NorESM2

OsloCTM3

**UKESM** 

Percent

Percent

Percent

2002

2001

2003

Year

2004

2002

2001

2003

Year

CFSM1

CESM2

2004

F3SM

**GEOS**