## bc-no-season: percent difference surface flux of SO2 – NH–atlantic surface concentration of BC – NH–atlantic surface concentration of SO4 – NH–atlantic surface flux of BC – NH–atlantic surface concentration of SO2 – NH–atlantic 0% 0.4% \_25% 0.2% 2% Percent \_5% Percent Percent Percent Percent 0% 2% -10% -75% -0.2% 0% 0% -100% 2001 2002 2003 2001 2002 2003 2001 2002 2003 2001 2002 2003 2004 2001 2002 2003 Year Year Year Year Year upwelling longwave flux at TOA – NH-atlantic upwelling shortwave flux at TOA – NH–atlantic net radiative flux at TOA – NH–atlantic upwelling clear–sky longwav flux at TOA – NH–atlantic incident shortwave flux at TOA - NH-atlantic 1e-07% 0.1% 0.2% 0.01% 0.2% 7 56-08% 0.05% Percent 0.1% 0% 0.1 -0.01% 2.5e-08% 0% -0.05% -0.1% 0% -0.02% -0.1 -0.1% -0.2° 2003 2001 2002 2003 2001 2003 2001 2002 2003 2001 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-atlantic flux at TOA - NH-atlantic of BC - NH-atlantic of BC - NH-atlantic of BC - NH-atlantic 0.15% 0.15% 5% 0.1% 0.1% Percent Percent 0% -10% 0.05% 0.05% -20% -10% -0.05% -0.05% 2003 2001 2003 2001 2003 2001 2002 2001 2003 2001 2002 2003 Year Year Year Year Year total deposition rate of S – NH–atlantic dry deposition rate wet deposition rate dry deposition rate wet deposition rate of SO2 - NH-atlantic of SO2 - NH-atlantic of SO4 - NH-atlantic of SO4 - NH-atlantic 4% 0.4% 0.4 0% 3% Percent Percent Percent Percent 0% 0% -0.1% 2% 1% -0.2% -0.4% -0.4%0% -0.3% 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 2004 2001 2002 2003 Year Year ambient aerosol optical convective cloud cover total cloud cover percentage - NH-atlantic 0% 0.2% 0.5% -20% Percent Percent 0% 0.25% -40% -0.2% -60% 0% -80% -0.4% 2002 2002 2003 2002 2003 2004 2003 2004 2004 2001 2001 2001 Year Year Year

CFSM1

CESM2

F3SM

**GEOS** 

**GFDI** 

**GISS** 

MIROC

NorESM2

OsloCTM3

**UKESM**