



Fig. S1. Spatial distribution of mean annual NO<sub>x</sub> emission change under RCP 4.5 and RCP 8.5 in relative to historical period (2001-2010).

Table S1. The ACCMIP model used in this study as well as the simulation years over each period, including RCP 8.5 and climate change only: Em2000Cl2030 and Em2000Cl2100.

Model	Historical	RCP		Em2000Cl2030	Em2000Cl2100
CICERO-OsloCTM2	2000	2030	2100	/	/
EMAC	2000-2009	2031-2039	2101-2109	/	
GFDL-AM3	2001-2009	2031-2039	2101-2109	2031-2039	2101-2109
GISS-E2-R	2000-2005	2030-2039	2100	2030	2100
CESM-CAM-superfast	2000-2009	2030-2039	2100-2109	2030-2039	2100-2109
MOCAGE	2000-2003	2030-2033	2100-2103	2030-2033	2100-2103
NCAR-CAM3.5	2002-2009	2032-2039	2102-2109	2032-2039	2102-2109
MIROC-CHEM	2000-2009	2030-2034	2100-2104	2030-2034	2100-2104
UM-CAM	2000-2005	2030-2036	/	2030-2036	/
STOC-HadAM3	2000-2009	2030-2039	/	2030-2039	/
HadGEM2	2000-2009	2030-2039	2100-2109	/	2100-2109