Supplemental Materials

Sensitivity Analysis of the Surface Ozone and Fine Particulate Matter to Meteorological Parameters in China

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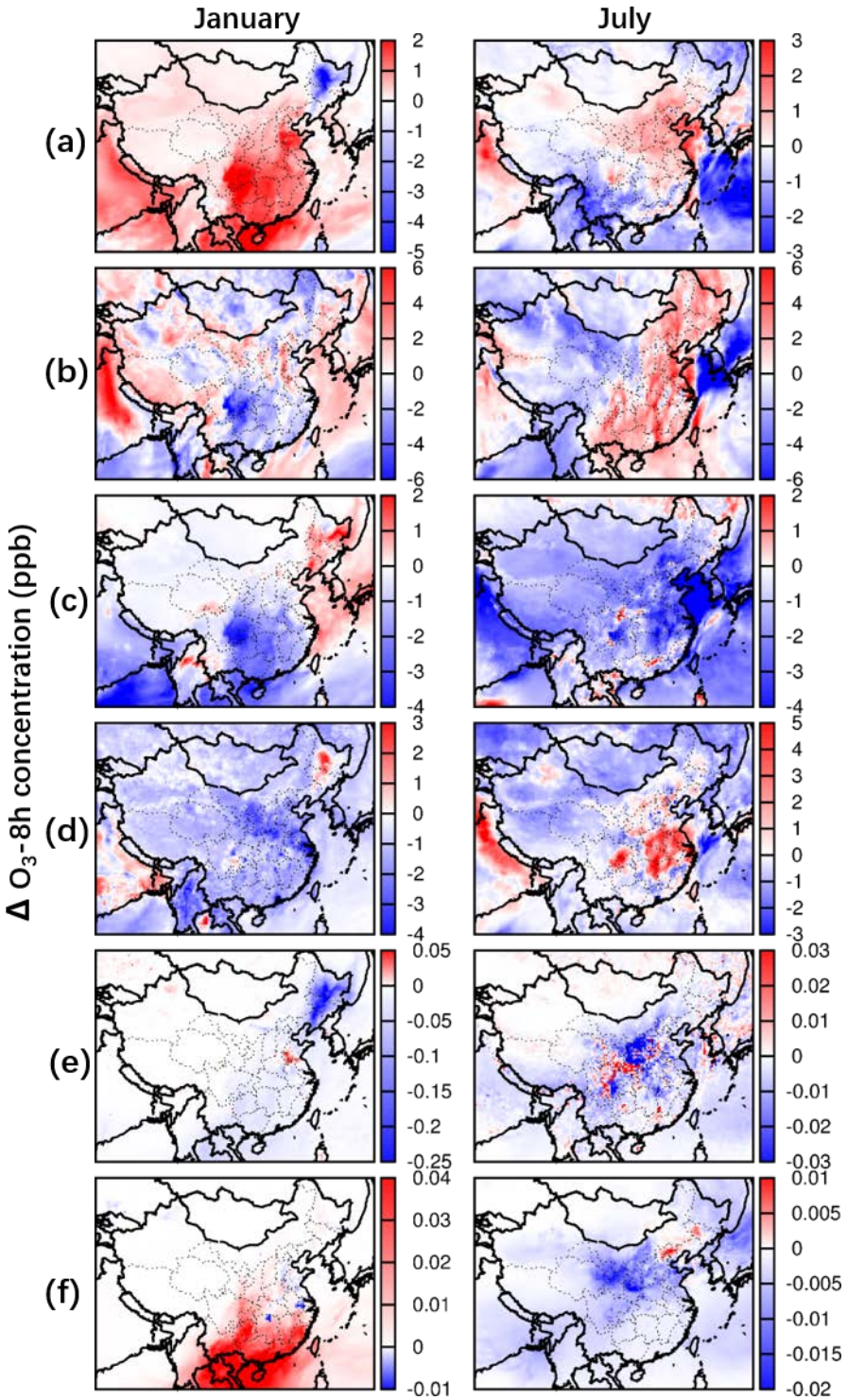

Fig.S1 Changes in monthly average O_3-8h (ppb) in January and July, 2013 due to (a) T+1.5K, (b) WS-20%, (c) AH+20%, (d) PBLH-30%, (e) CLW+20%, (f) PCP+20%.

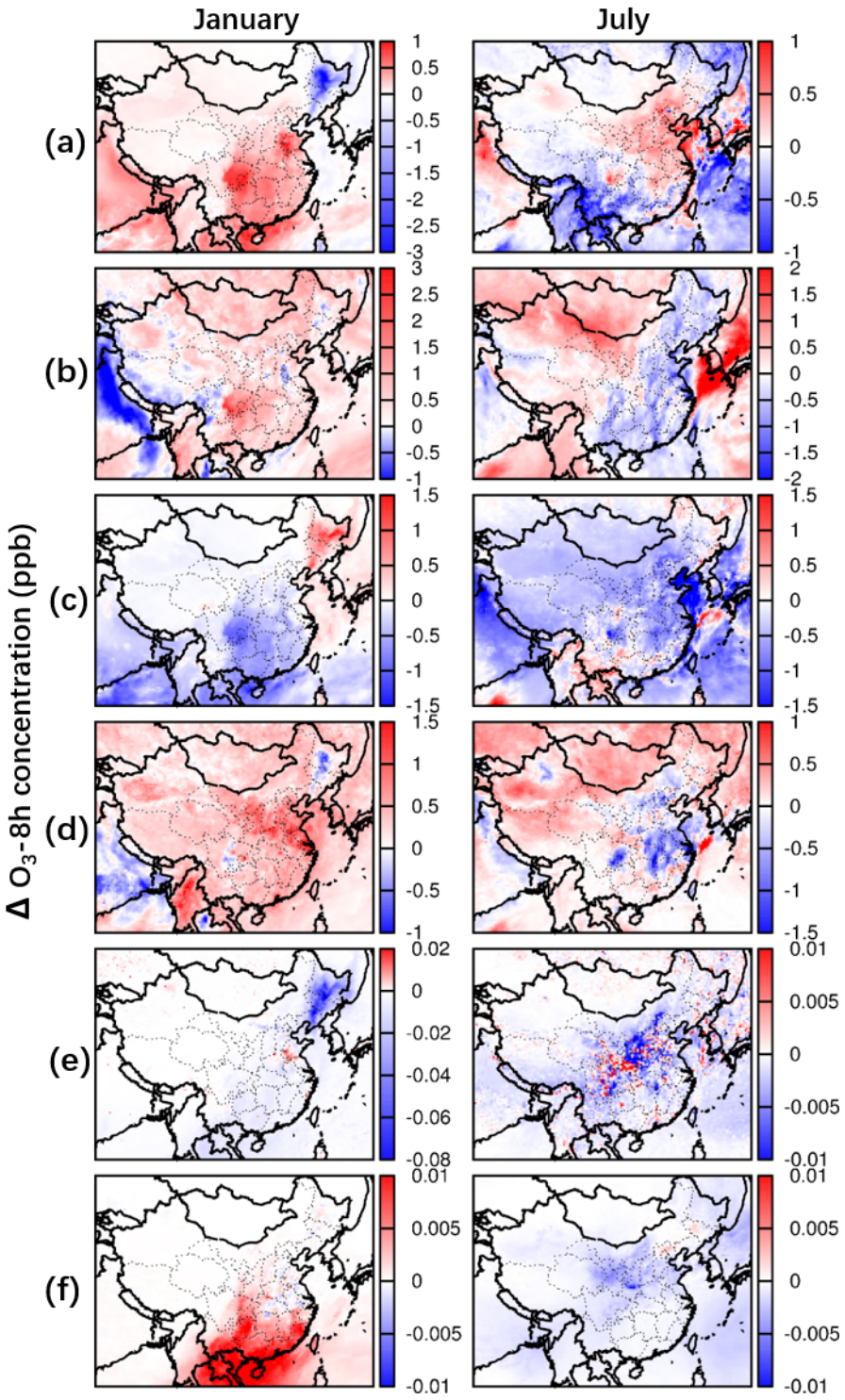

Fig.S2 Changes in monthly average O_3-8h (ppb) in January and July, 2013 due to (a) T+0.5K, (b) WS+5%, (c) AH+5%, (d) PBLH+10%, (e) CLW+5%, (f) PCP+5%.

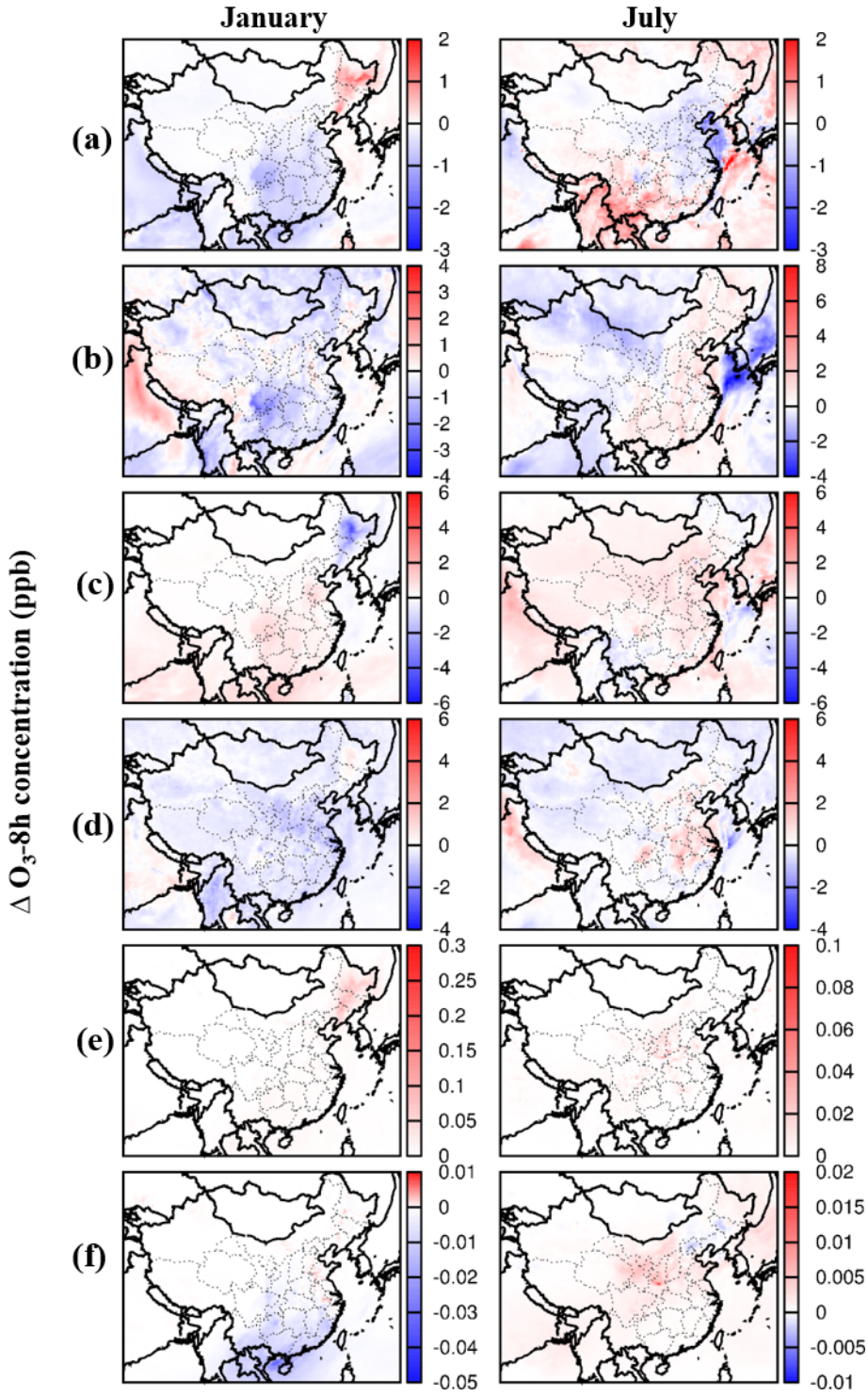

Fig. S3 Changes in monthly average O_3-8h (ppb) in January and July, 2013 due to (a) T-0.5K, (b) WS-5%, (c) AH-5%, (d) PBLH-10%, (e) CLW-5%, (f) PCP-5%.

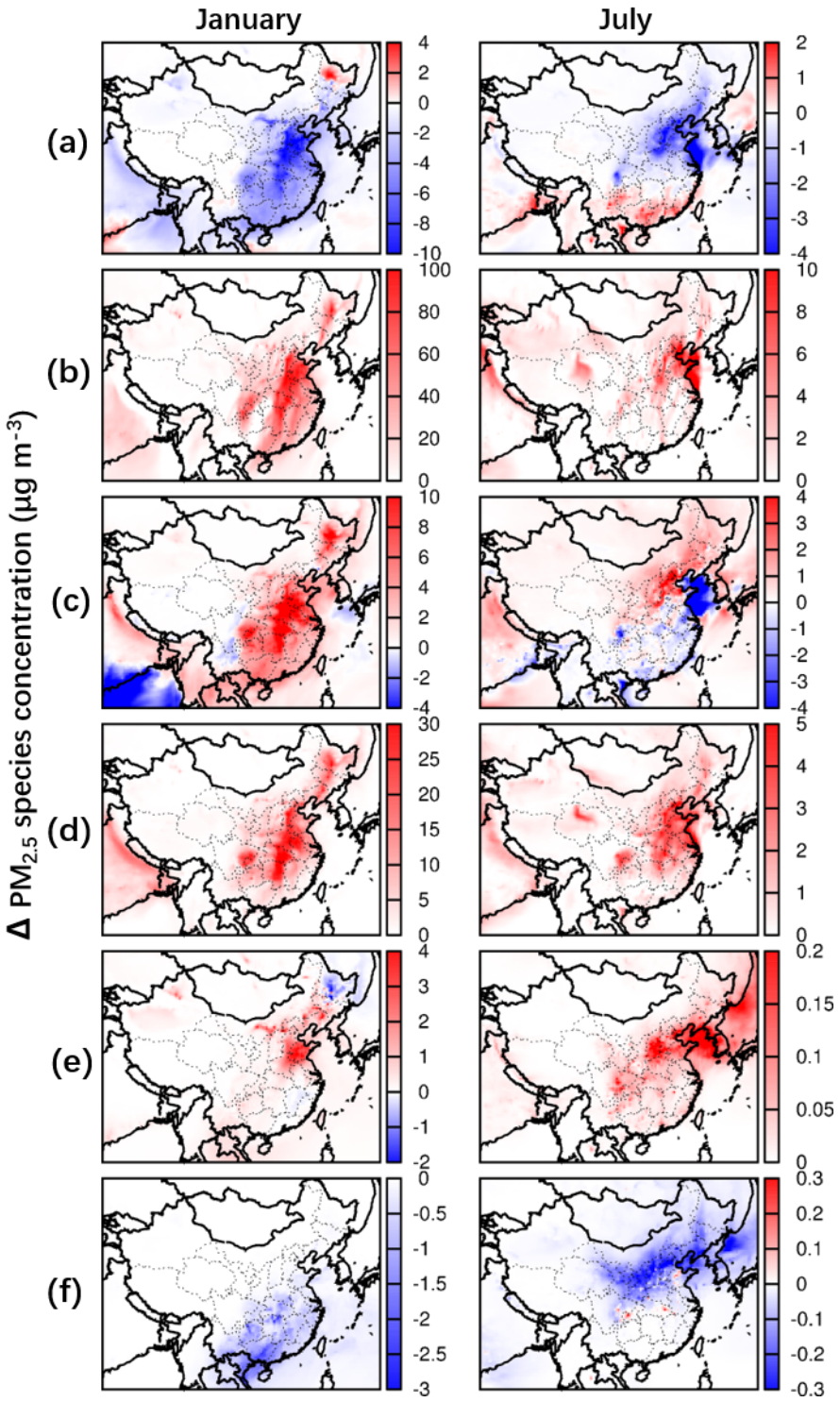

Fig.S4 Changes in monthly average $PM_{2.5}$ concentration (μg m^{-3}) in January and July, 2013 due to (a) T+1.5K, (b) WS-20%, (c) AH+20%, (d) PBLH-30%, (e) CLW+20%, (f) PCP+20%.

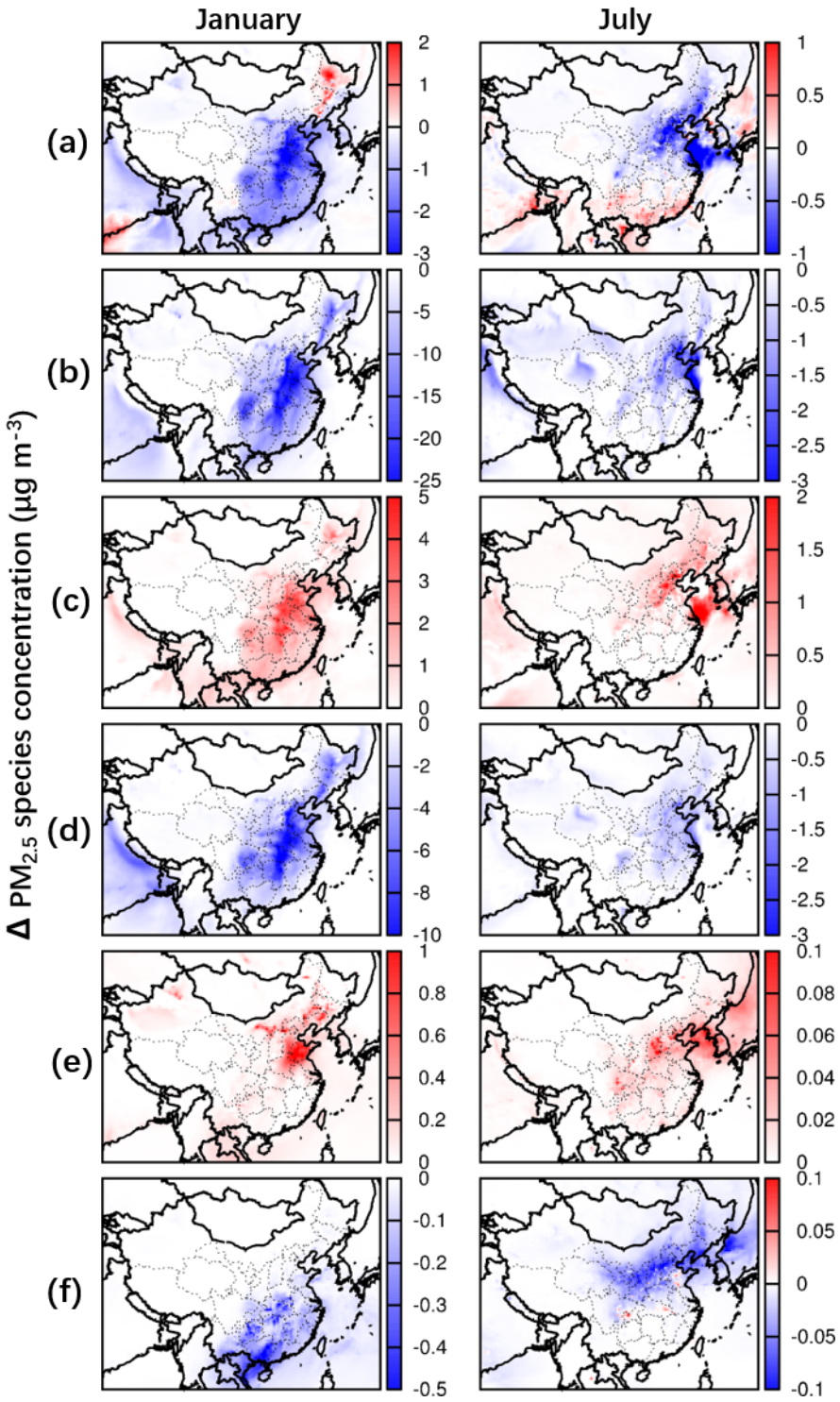

Fig.S5 Changes in monthly average $PM_{2.5}$ concentration (μg m^{-3}) in January and July, 2013 due to (a) T+0.5K, (b) WS+5%, (c) AH+5%, (d) PBLH +10%, (e) CLW+5%, (f) PCP+5%.

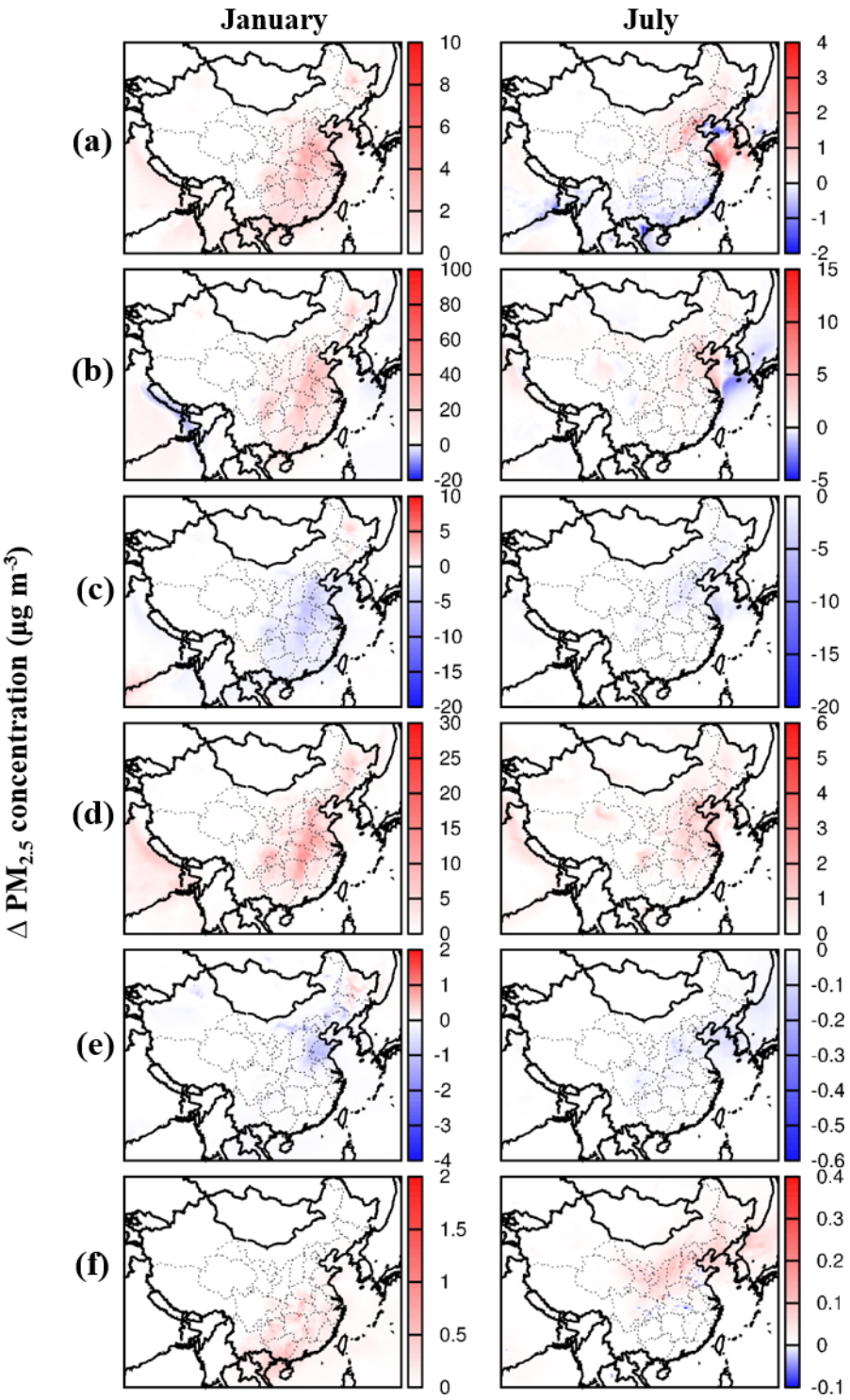

Fig.S6 Changes in monthly average $PM_{2.5}$ concentration (μg m^{-3}) in January and July, 2013 due to (a) T-0.5K, (b) WS-5%, (c) AH-5%, (d) PBLH-10%, (e) CLW-5%, (f) PCP-5%.

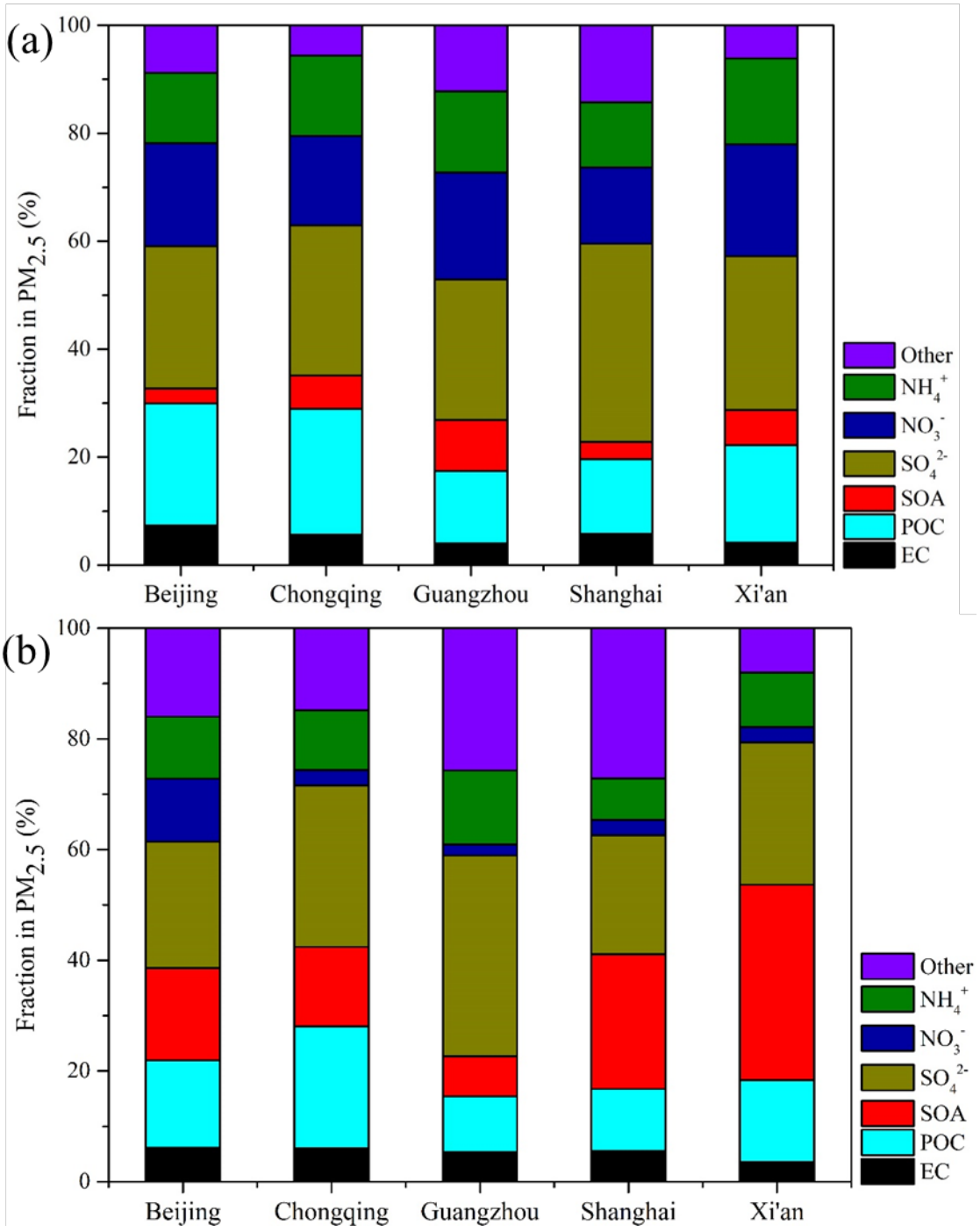

Fig.S7 The monthly average fraction of different components in $PM_{2.5}$ in (a) January and (b) July.

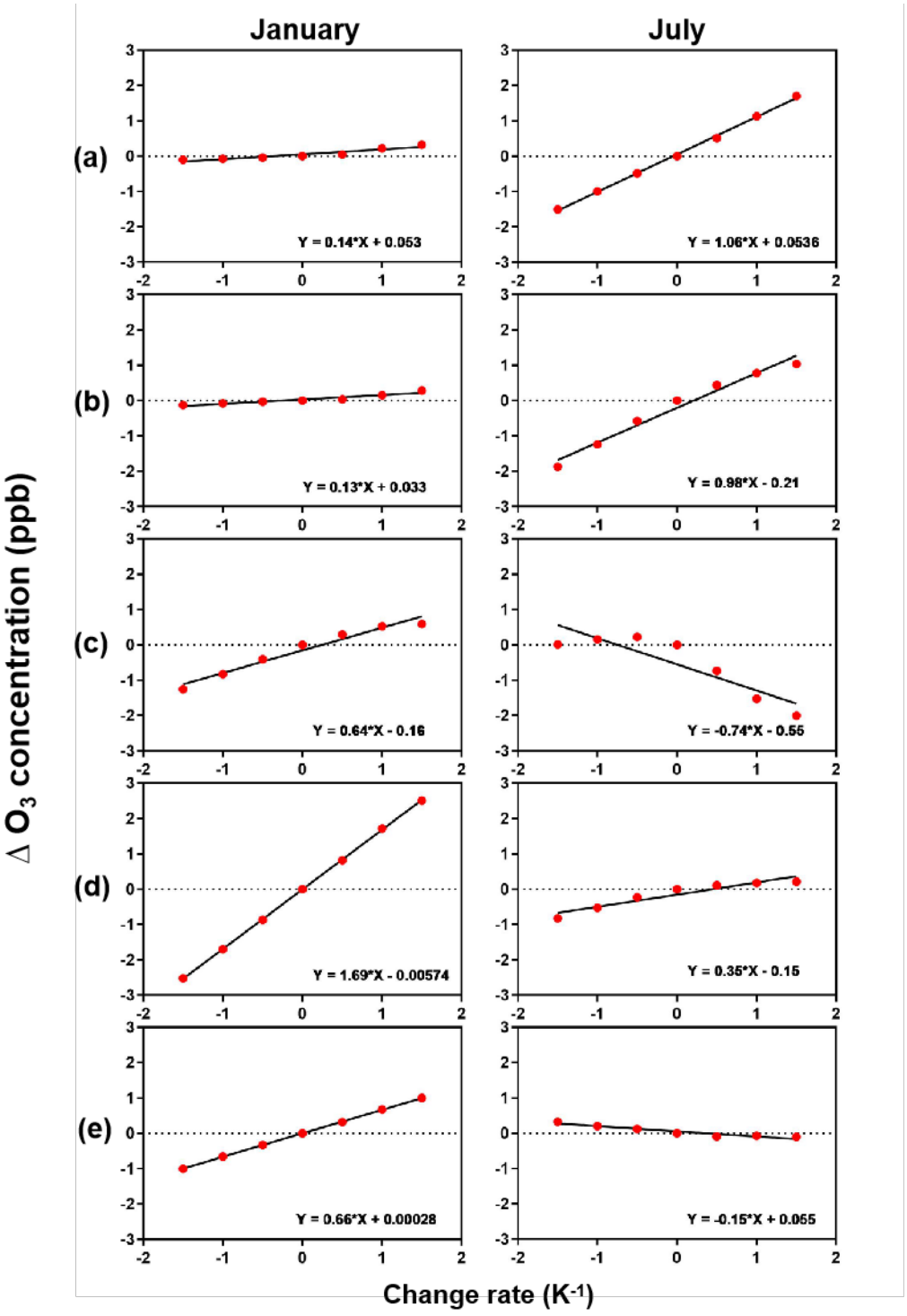

Fig.S8 Changes of O_3-8h concentration (ppb) in January and July 2013 caused by temperature perturbation: (a) is Beijing; (b) is Shanghai; (c) is Guangzhou; (d) is Chongqing; (e) is Xi'an

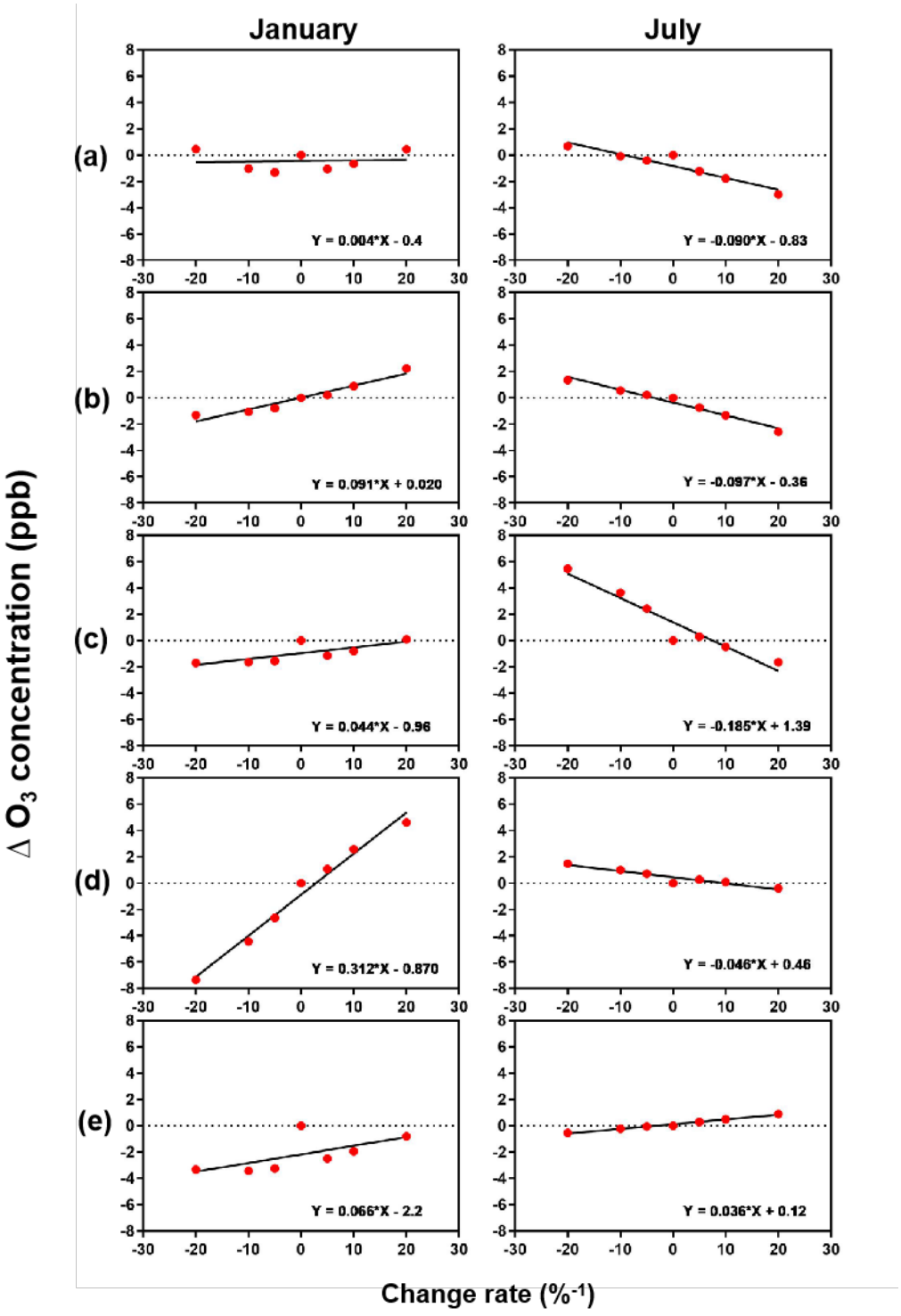

Fig.S9 Same as Fig. S8, but meteorological perturbation is wind speed.

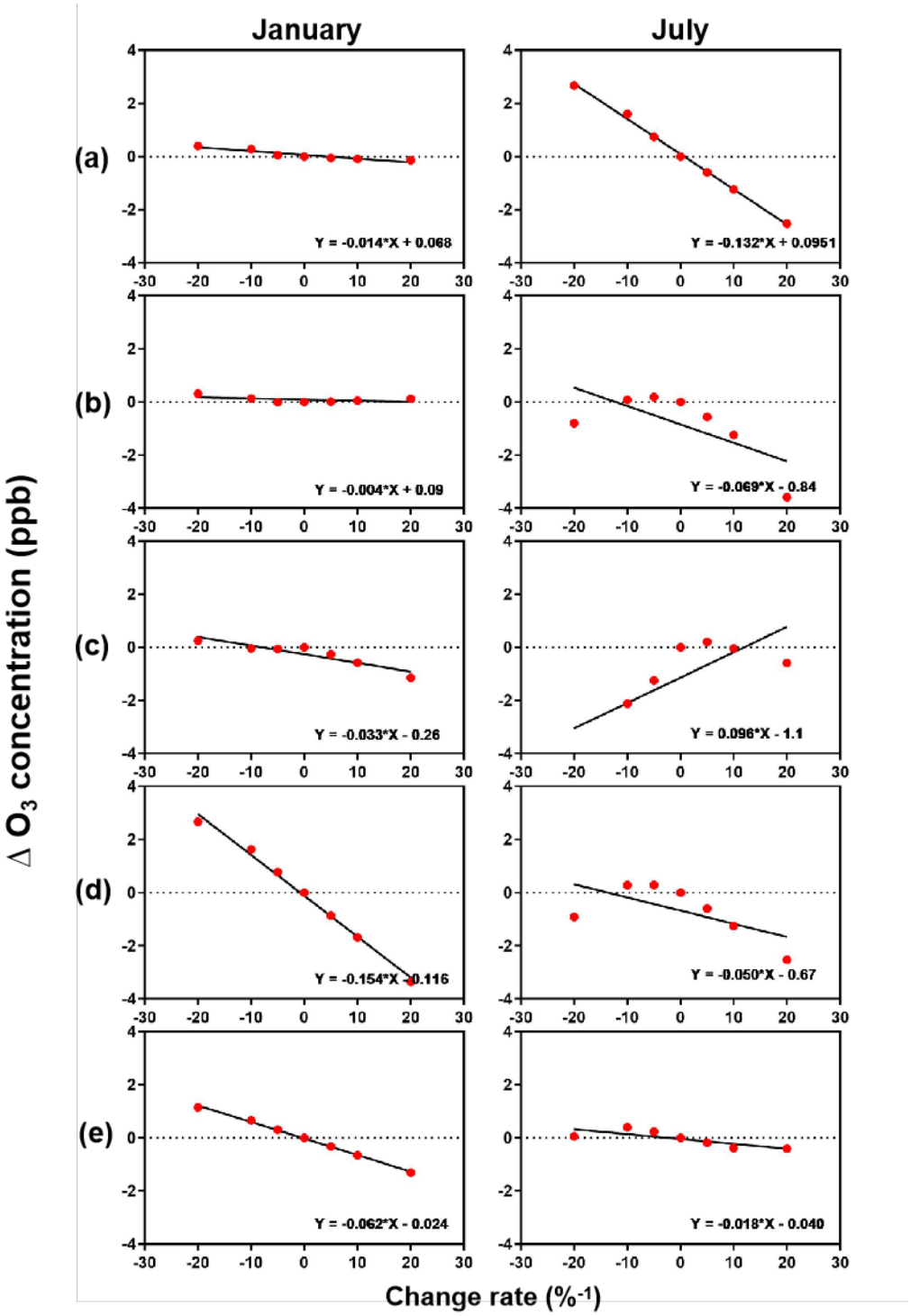

Fig.S10 Same as Fig. S8, but meteorological perturbation is relative humidity.

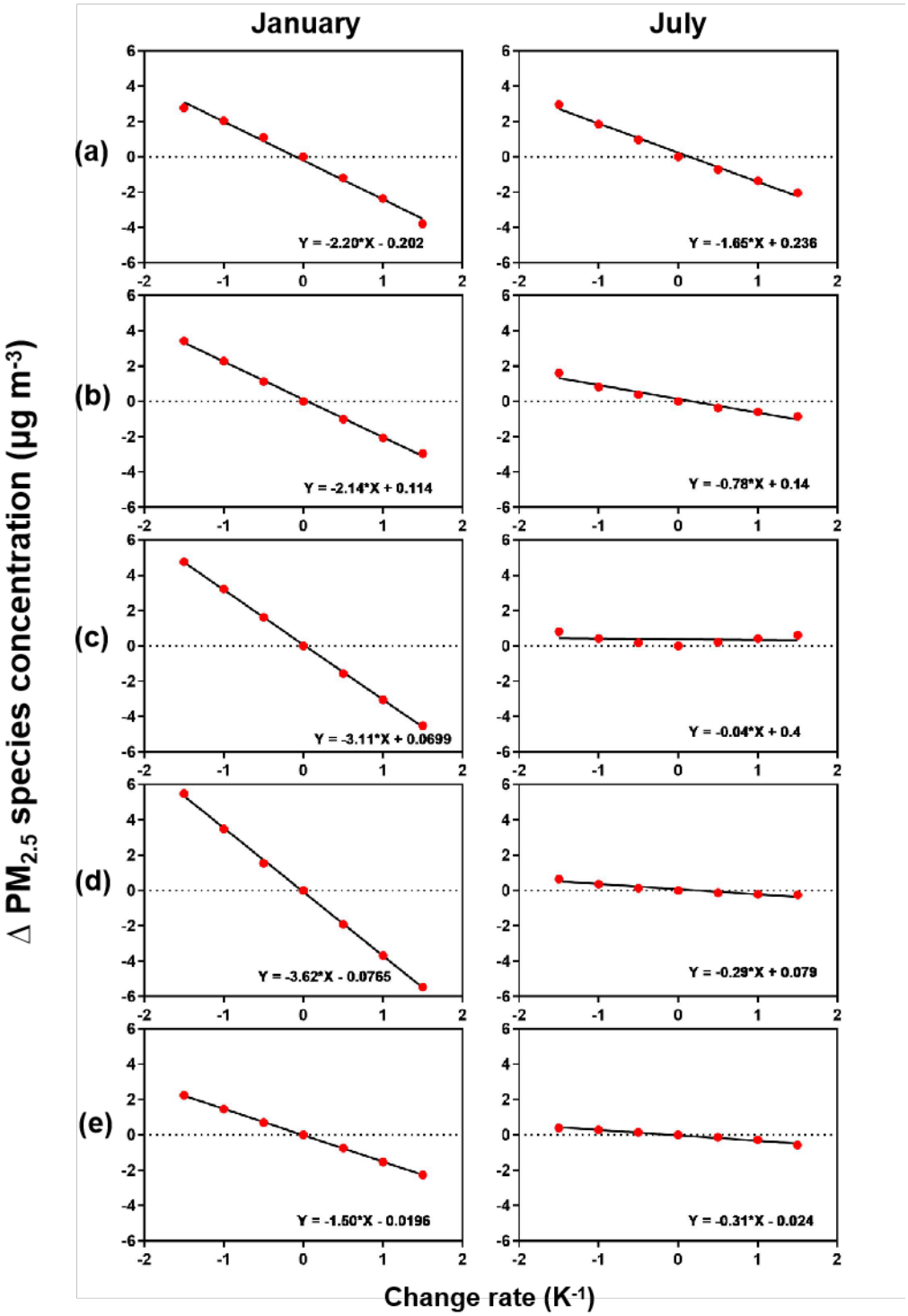

Fig.S11 Change of total $PM_{2.5}$ concentration (μg m^{-3}) in January and July 2013 caused by temperature perturbation: (a) is Beijing; (b) is Shanghai; (c) is Guangzhou; (d) is Chongqing; (e) is Xi'an.

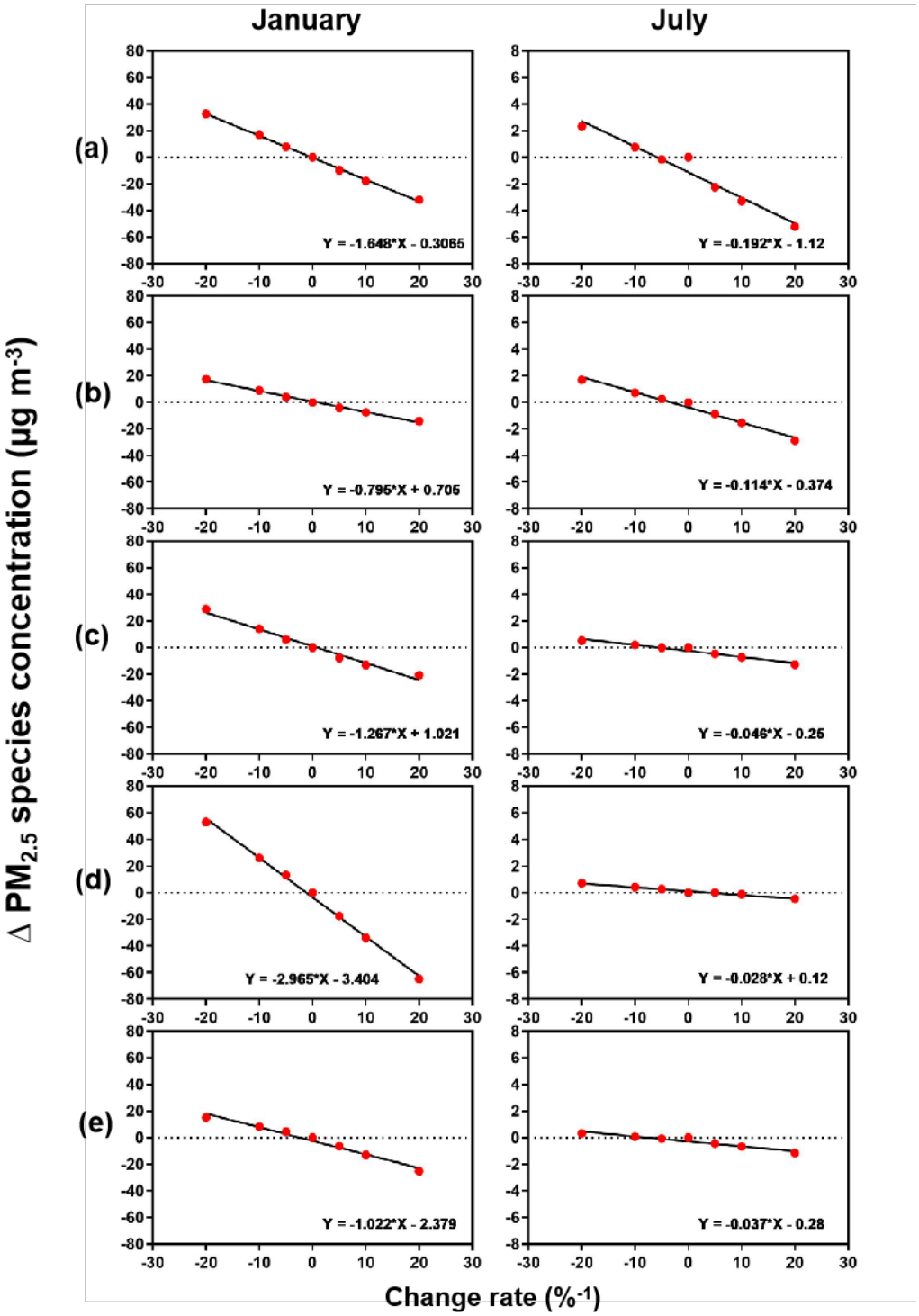

Fig.S12 Same as Fig.S11, but meteorological perturbation is wind speed.

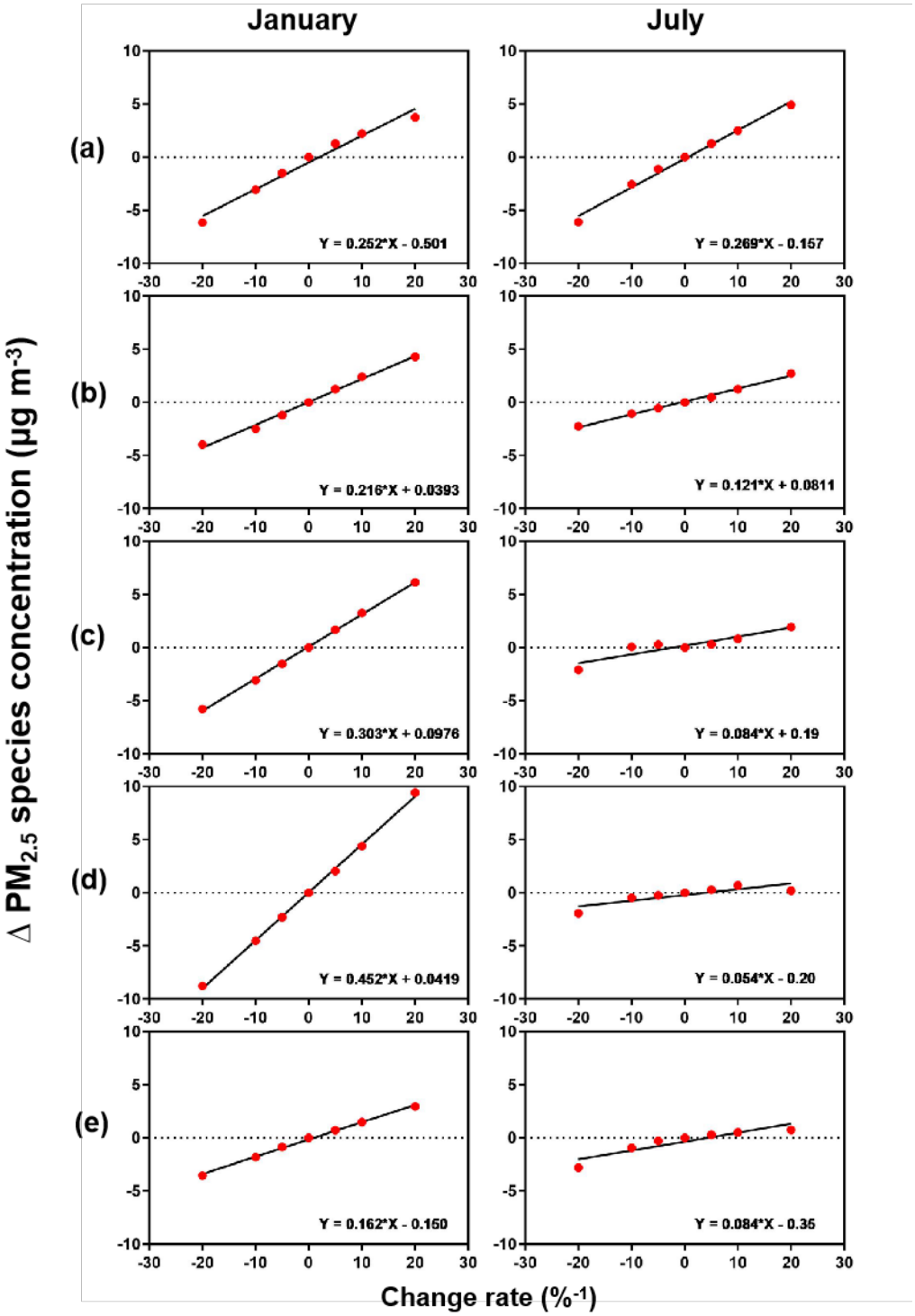

Fig.S13 Same as Fig. S11, but meteorological perturbation is relative humidity.