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A study of the effect of aerosols on surface ozone through meteorology feedbacks over China

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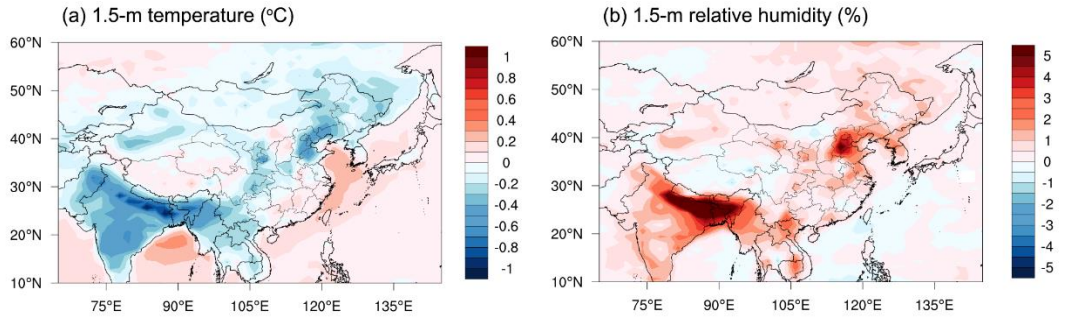
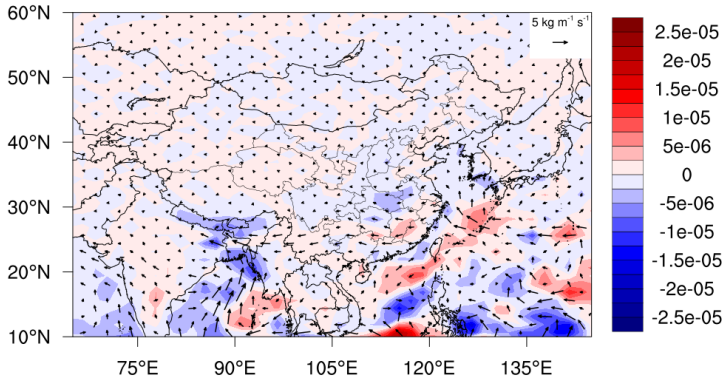
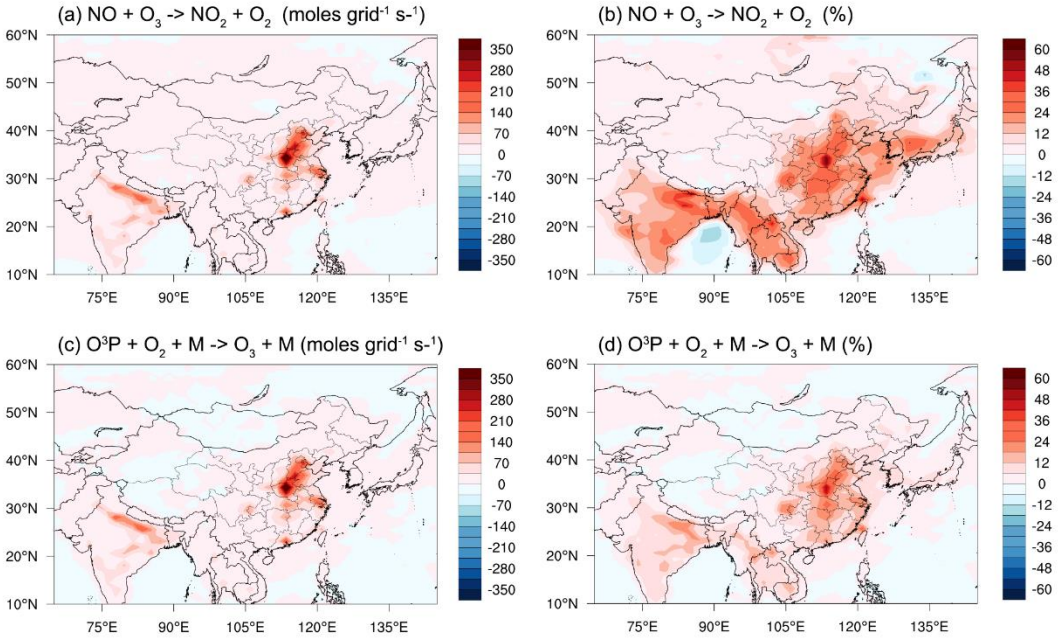


Supplementary Figure S1: Changes in (a) temperature at 1.5 m (ºC) and (b) relative humidity (%) at 1.5 m due to aerosol direct radiative effect. Differences are calculated as the annual mean of EXP_{radon} minus EXP_{radoff}.



Supplementary Figure S2: Changes in annual mean total column horizontal water vapor flux (vector) and its divergence (shadow) due to aerosol direct radiative effect. Differences are calculated as the annual mean of EXP_{radon} minus EXP_{radoff}.



Supplementary Figure S3: Changes in reaction flux due to aerosol direct radiative effect, (a,b) O_3 loss: NO + O_3 -> NO_2 + O_2; (c,d) O_3 production: O^3P + O_2 + M -> O_3 + M. The left panels show the reaction flux changes in moles grid^{-1} s^{-1}, which are calculated as EXP_{radon} minus EXP_{radoff}. The right panels show the percentage changes, which are calculated as (EXP_{radon}-EXP_{radoff})/ EXP_{radoff}.