Influence of relative humidity on heterogeneous kinetics of NO₂ on kaolin and hematite

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Supporting information

Figure S1. Diagram of the flow tube

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Figure S2. Evolution of NO concentrations with time during uptake of NO\textsubscript{2} on kaolin and hematite at RH of (A) 47 \% and (B) 7 \%. At other relative humidities, the signal responses of NO on both kaolin and hematite were similar to those shown in (A).

Figure S3. Modelling result assuming a Langmuir adsorption isotherm of water vapor and Langmuir-Hinshelwood reaction mechanism of NO\textsubscript{2} on the particles.
Figure S4. Comparison of the uptake curves of NO\textsubscript{2} with or without Na\textsubscript{2}CO\textsubscript{3} denuder at 298 K and at 47 \% of RH. The time resolution is 1 min.

Figure S5. The relative ratio of NO\textsubscript{2} removed by Na\textsubscript{2}CO\textsubscript{3} denuder to the initial NO\textsubscript{2} concentration (%) at different relative humidity (%).
concentration at different RH.

Figure S6. Linear mass dependence for integrated uptake capacity of NO₂ within 30 min on kaolin and hematite at 298 K. The first row is for kaolin and the second row is for hematite.