

1 **Supporting information for**

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3 Wang et al.,

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10 **Figure S2.** Fits O₃ against NO₂ during the nocturnal time.

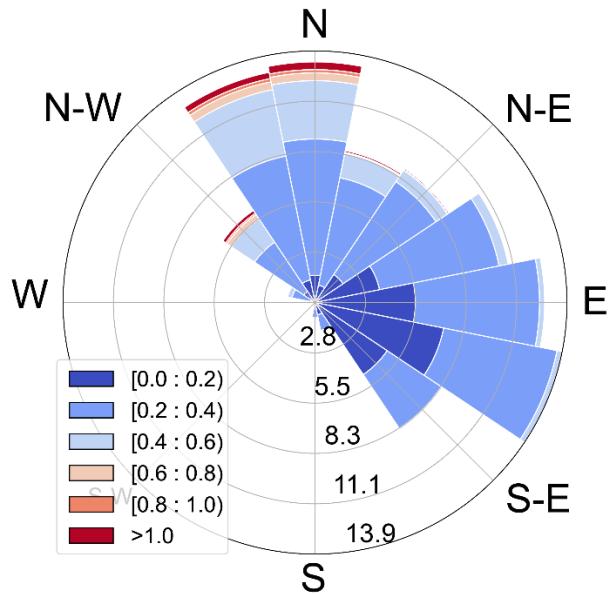
11 **Figure S3.** N₂O₅ uptake coefficients derived from the pseudo steady state method.

12 **Figure S4.** Nighttime NO mixing ratio and its contribution to NO₃ loss.

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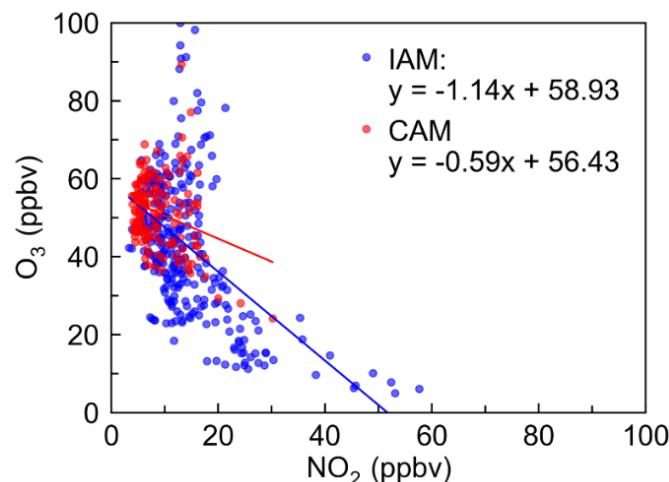
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17 Figure S1. The wind rose plot for NO concentrations (ppbv) and wind direction.

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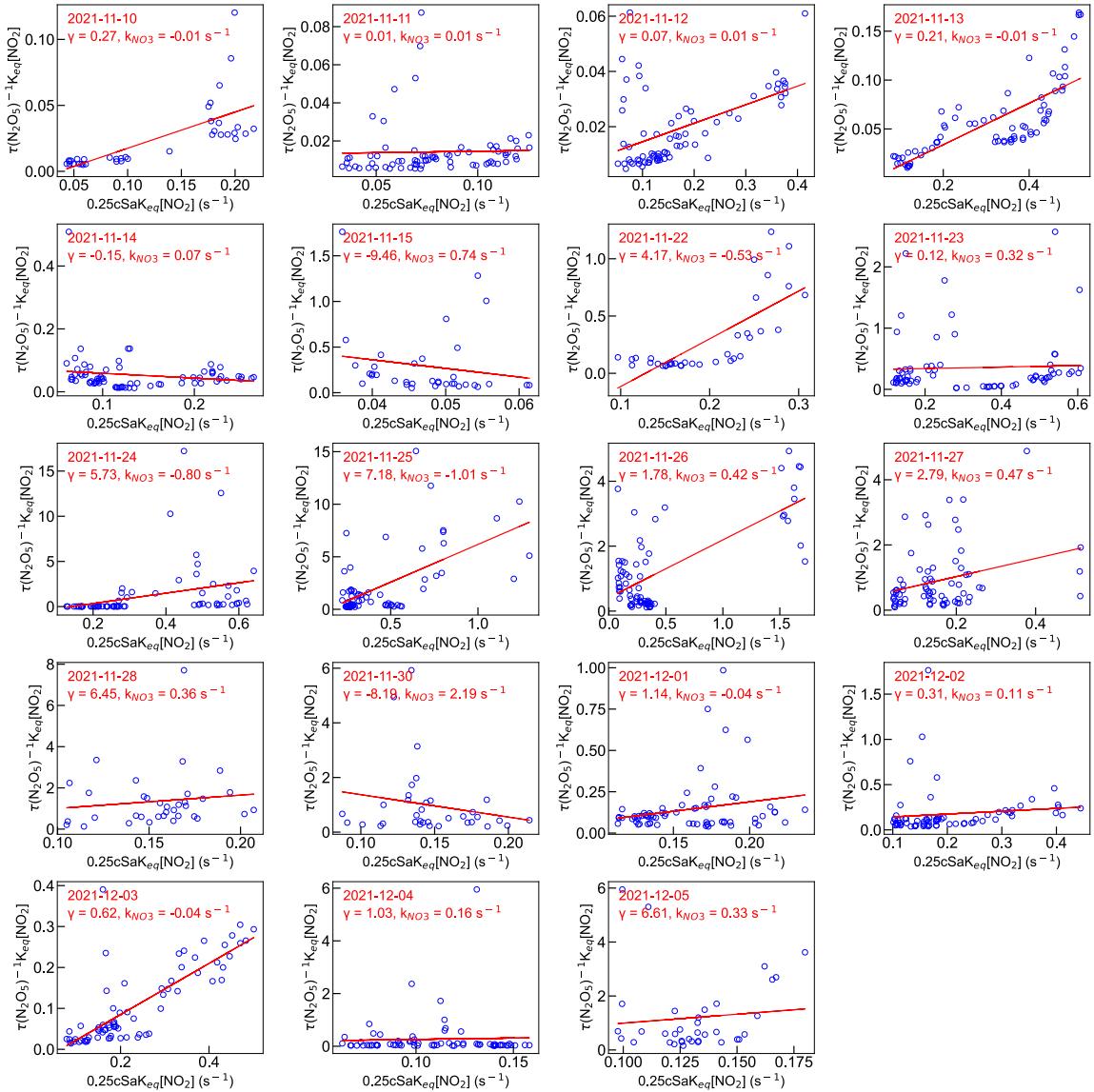


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20 Figure S2. Fits O3 against NO2 during the nocturnal time with a time resolution of 1 hour
21 for airmass from inland China (IAM) and coastal areas (CAM).

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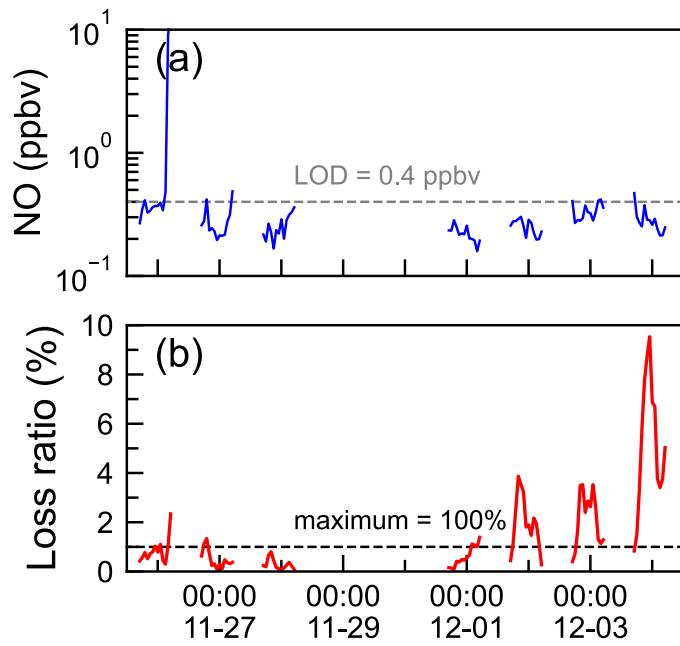


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25 Figure S3. N_2O_5 uptake coefficients derived from scatter plots of $K_{\text{eq}}[\text{NO}_2]\tau(\text{N}_2\text{O}_5)^{-1}$
26 versus $0.25c\text{Sa}K_{\text{eq}}[\text{NO}_2]$, K_{eq} : the equilibrium constant between N_2O_5 , NO_2 , and NO_3 ; c :
27 the mean molecular speed of N_2O_5 ; Sa : the aerosol surface area density; γ : the N_2O_5 uptake
28 coefficient; k_{NO_3} : the indirect NO_3 loss frequency.

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32 Figure S4. (a) Nighttime NO mixing ratio with the gray dashed line denoting the detection
 33 limit of the instrument (0.4 ppbv). (b) The fraction ratio of NO to NO_3 loss, with the black
 34 dashed line representing a maximum of 100%.