Supplementary Information

Assessing indoor gas phase oxidation capacity through real-time measurements of HONO, and NOx in Guangzhou, China

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5 Figures

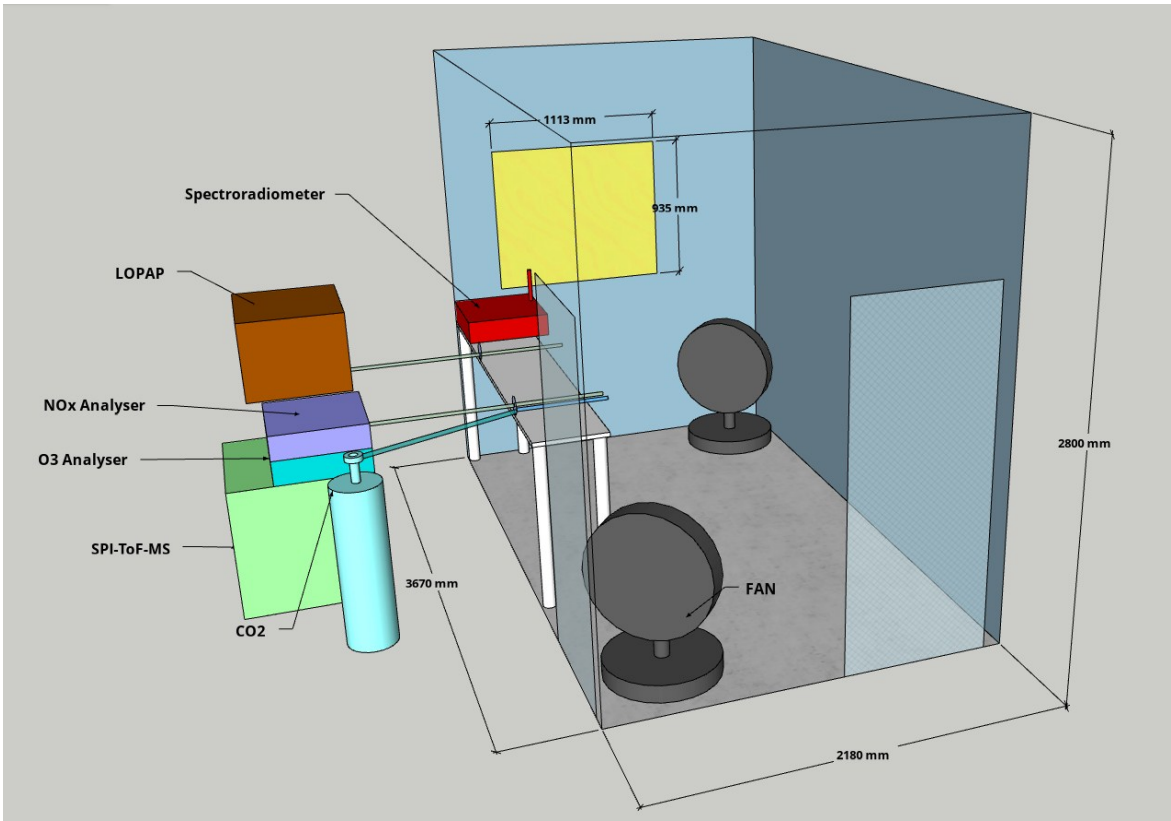

Figure S1: Schematic illustrtaion of the lab room at Jinan Univeristy including the instruments used during the campaign.

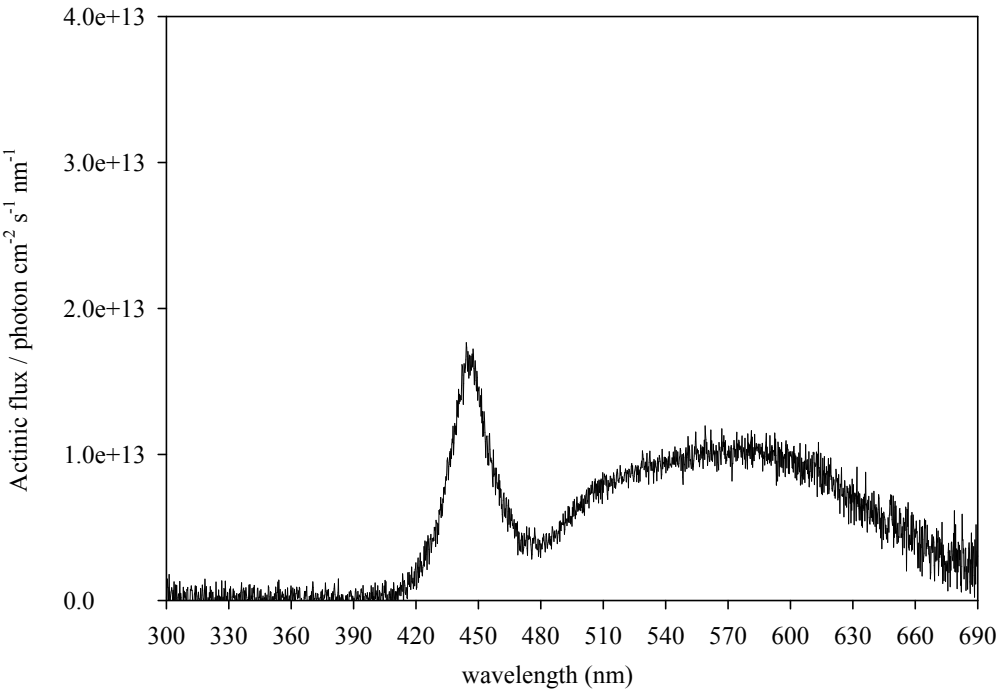

Figure S2: Actinic flux of the fluorescence lamps in the lab room measured at 1 m distance from the lamps in the middle of the room.

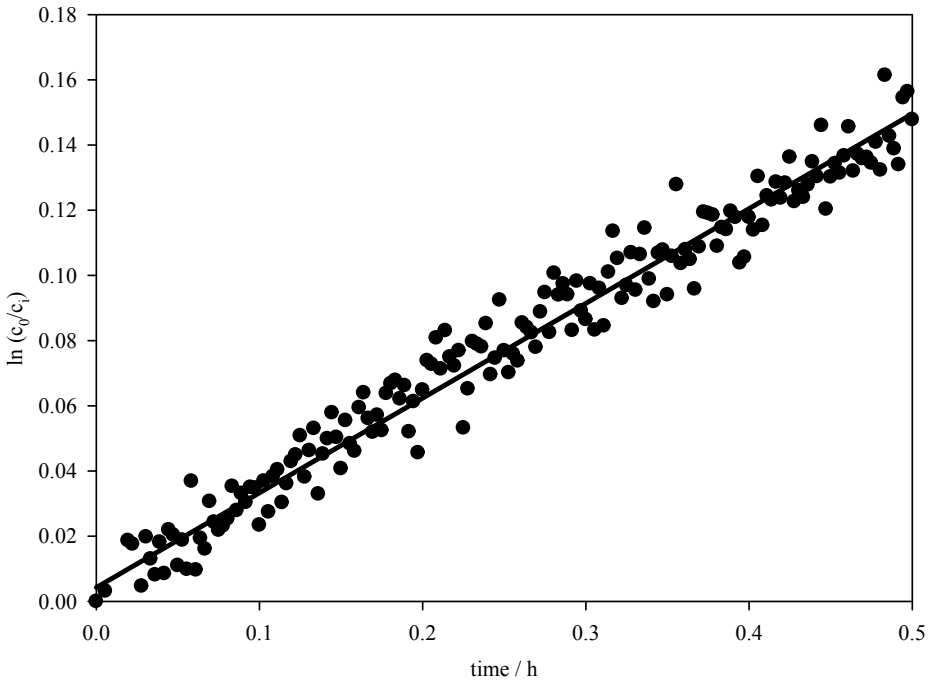

Figure S3: The plot of c_0/c_i versus time obtained from the decay of CO_2.

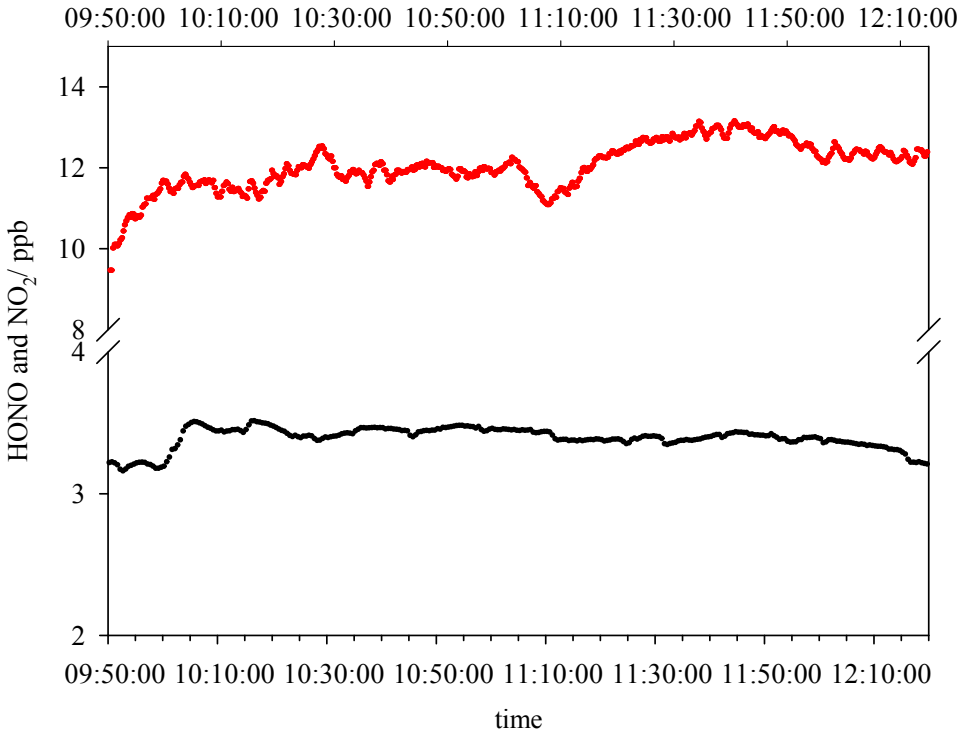

Figure S4: The background mixing ratios of NO_2 (red line) and HONO (black line) at December 12 2018 in the lab room on the campus at JNU, Guangzhou, China

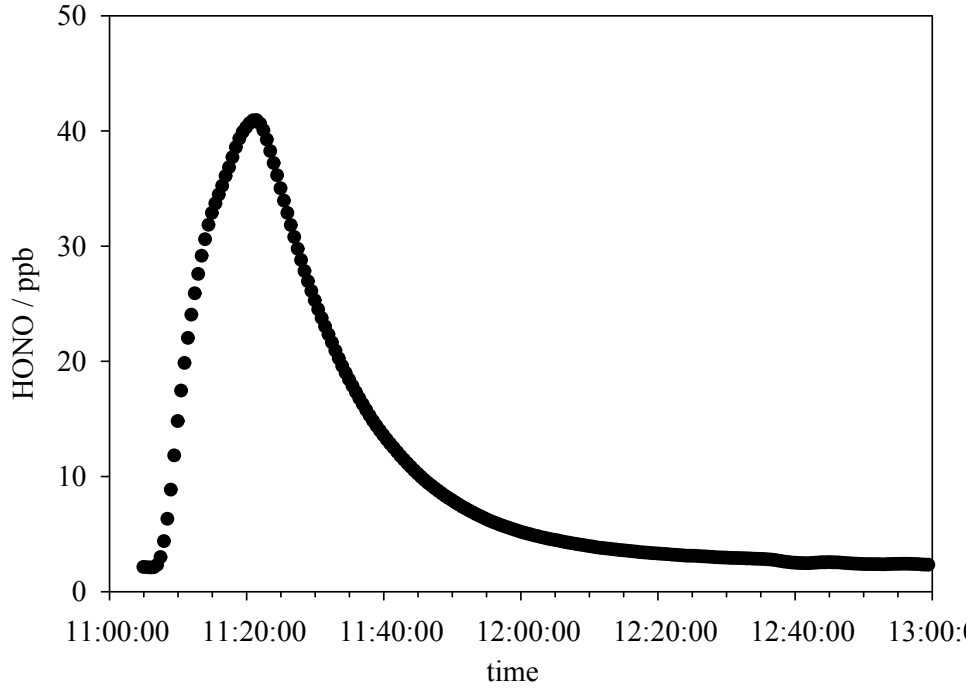

Figure S5: The mixing ratio of HONO durimg a cooking event at December 05 2018 in the lab room on the campus at JNU, Guangzhou, China

Estimation of error on HONO measurements

The instrument runs for 6 hours with 0.5 h high purity N_2 as blank (zero).The detection limit is obtained by the deviation of the zero value, the calculation is as follows:

Detection limits-$MDL = \sqrt{[2 \times STDEV(ch1 - zero)]^2 + [2 \times STDEV(ch2 - zero)]^2}$

Where *MDL* is method detection limits; STDEV is the standard deviation; *ch1-zero* and *ch2-zero* are the measured value when high purity N_2 was inlet for channel 1 and channel 2, respectively.

$Error(+/-) = c(HONO) \times 10\% + MDL$

Where c(HONO) is the concentrations of HONO, we select 10% as the relative error.