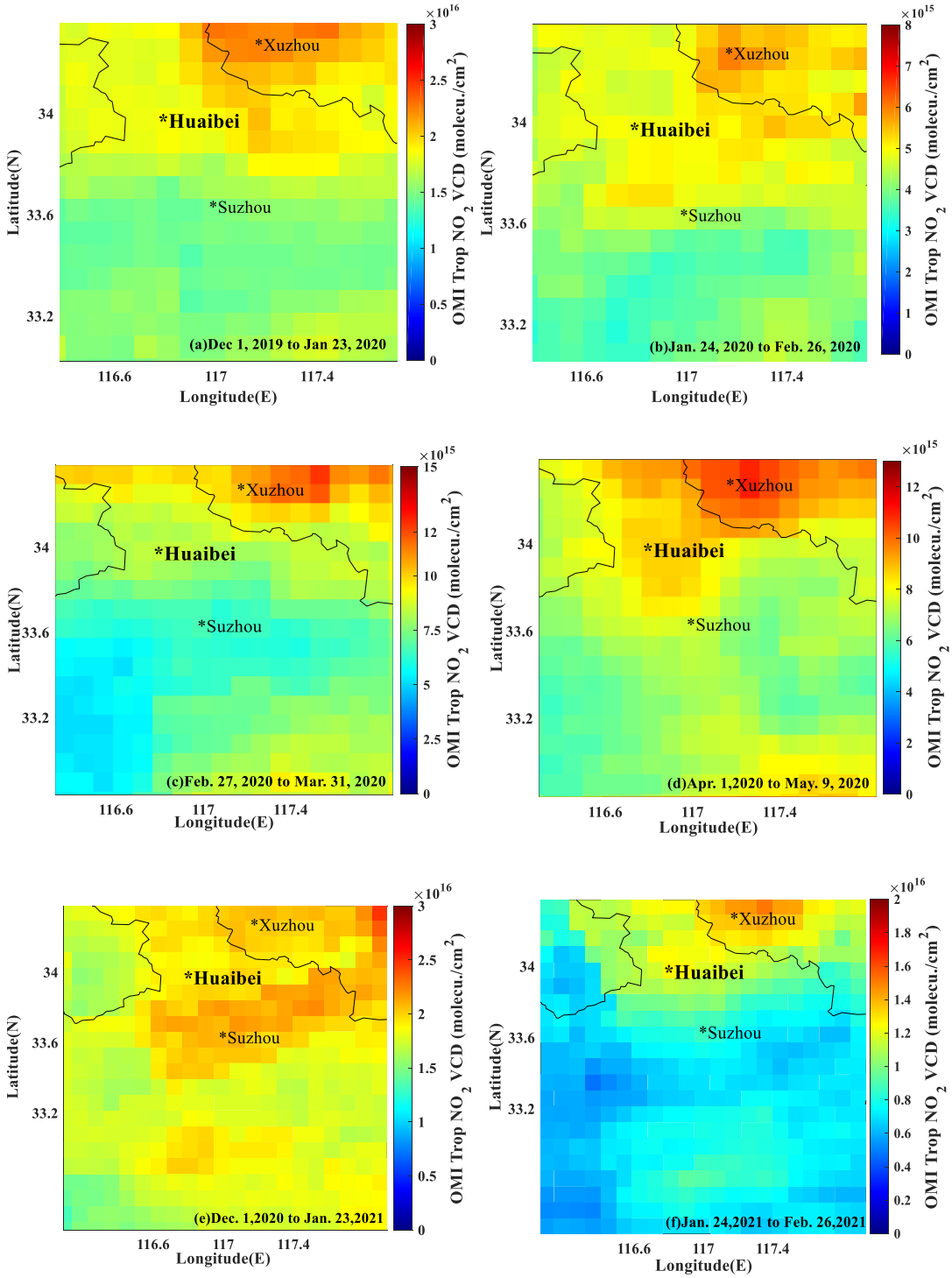
atmosphere

MDPI

Supplementary Materials:

Fusheng Mou [1,2], Jing Luo [1,2], Qijin Zhang [1,2], Chuang Zhou [1,2] , Song Wang [1,2], Fan Ye [1,2],Suwen Li [1,2] and Youwen Sun [3,*]



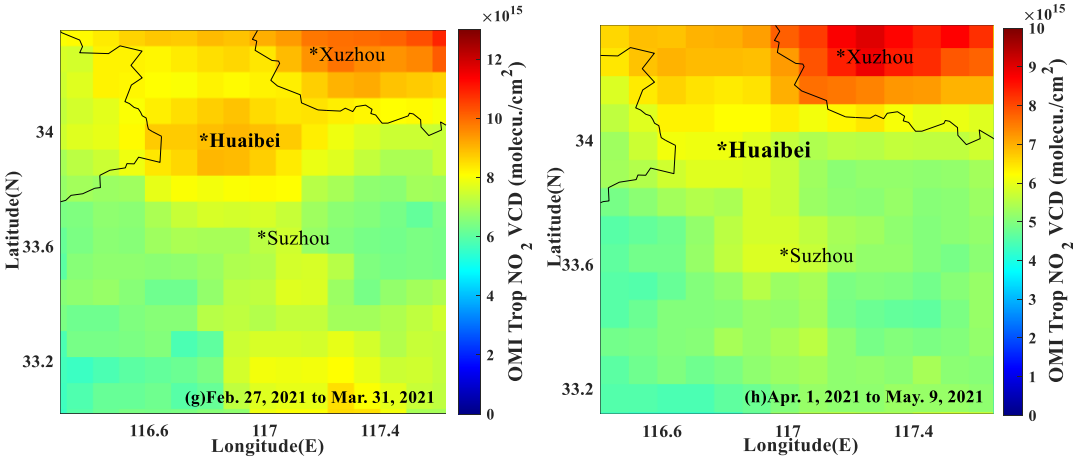


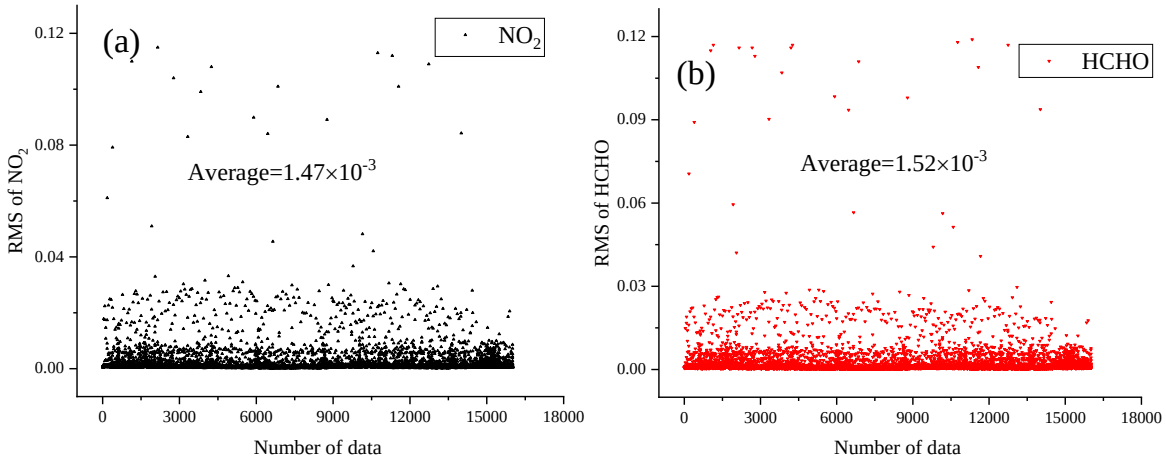
Figure S1. Daily average results of NO_2 from OMI satellites in different time periods. (a)-(d) is result of the four stages from 1 December 2019 to 9 May 2020. (e)-(h) is result of the four stages from 1 December 2020 to 9 May 2021.

Table S1. Different filters and corresponding thresholds applied to the retrieved SCDs.

NO_2		**HCHO**		**SO_2**	
Fiter	Percentage	Fiter	Percentage	Fiter	Percentage
SZA<75°	22.7%	SZA<75°	22.8%	SZA<75°	22.7%
RMS<0.003	0.6%	RMS<0.003	0.4%	RMS<0.005	2.6%

Table S2. The average concentration changes of three gases in four time periods in 2021 compared with the same period in 2020.

2021 vs 2020	Pre-lockdown	Phase 1	Phase 2	Post-lockdown
NO_2	+6%	+41%	+1%	-9%
HCHO	+20%	+14%	+5%	-8%
SO_2	+32%	+14%	0%	-16%



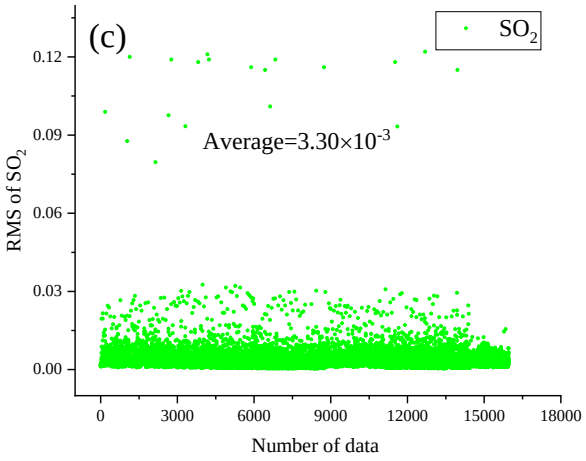


Figure S2. The RMS results of measured spectra during the entire observation period.

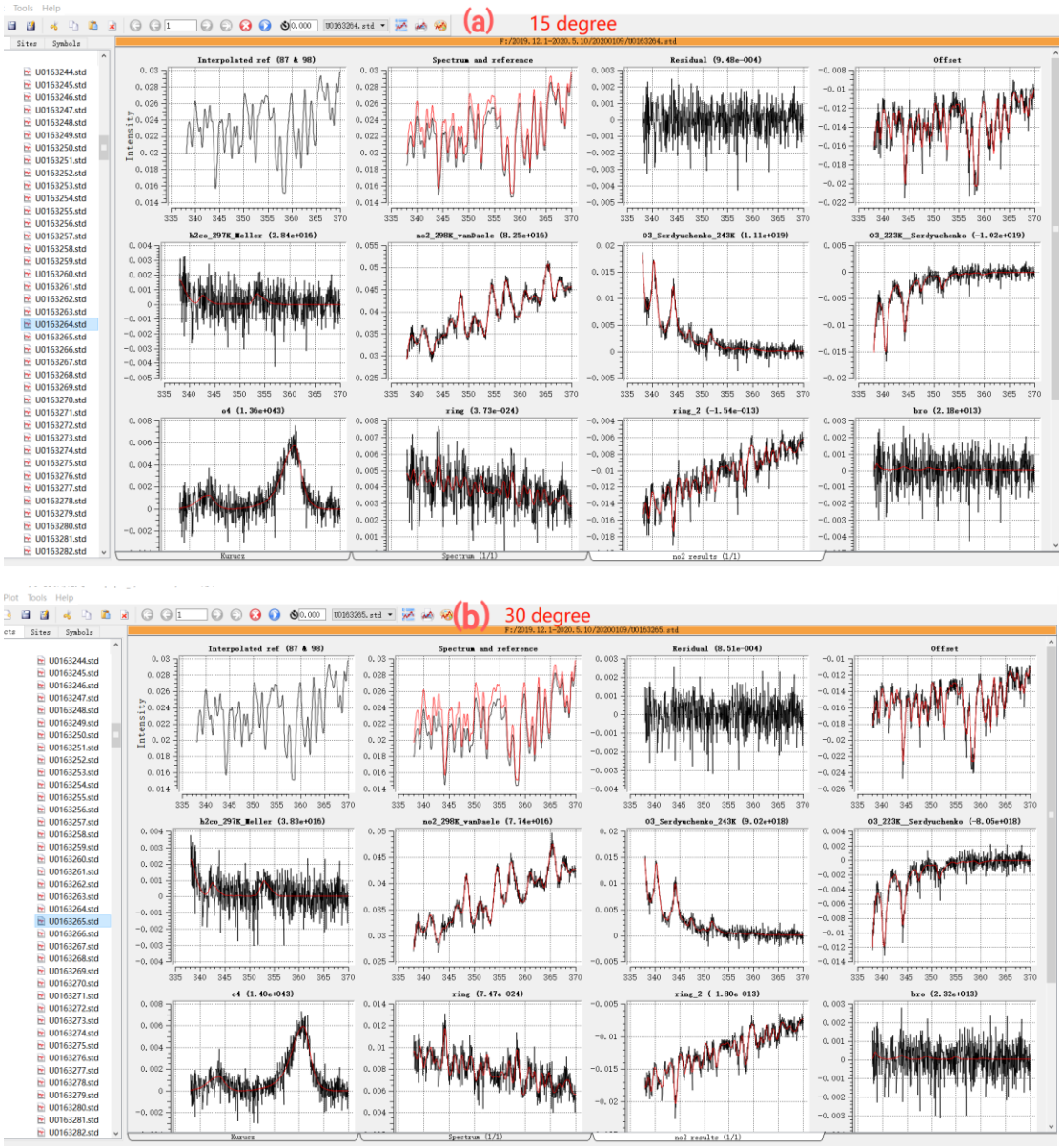


Figure S3. The result of the (a) 15° and (b) 30° angles in the same measurement cycle for NO2 gas in Figure 2 in the main manuscript.