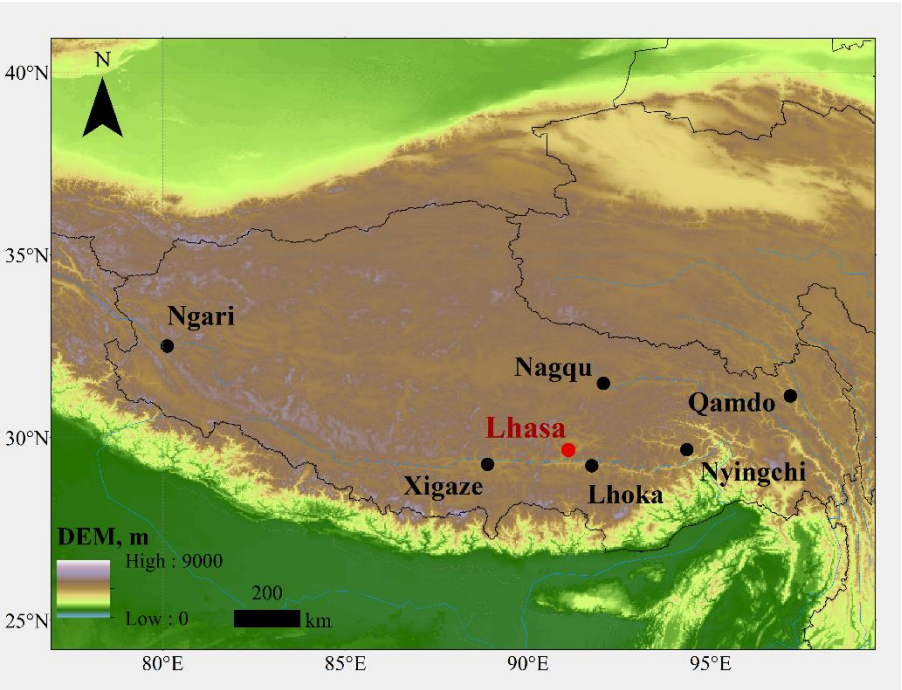

Figure S1. Location of seven major cities in Tibet

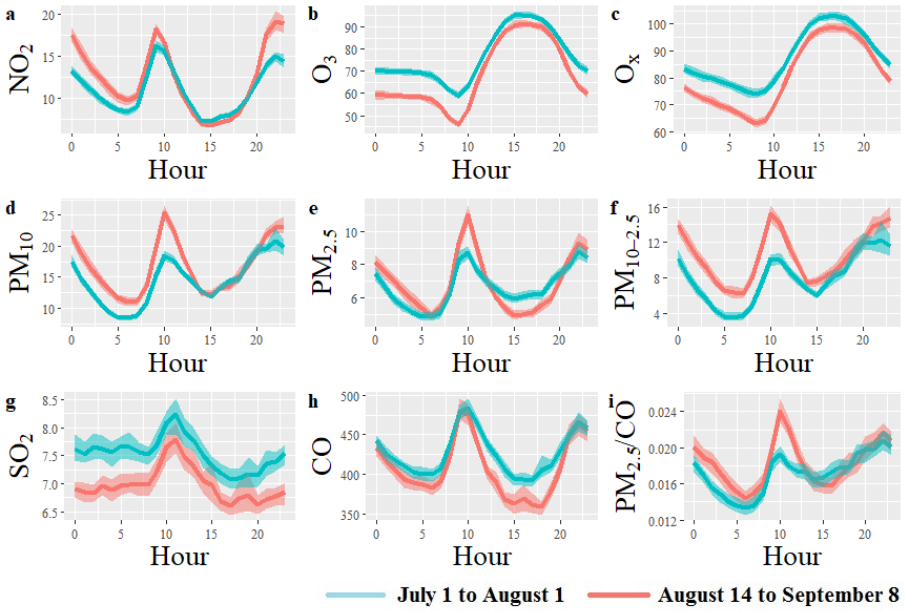

Figure S2. Diurnal variations in air pollutants during the same periods in 2019-2021 with 2022. Units are the same as in Fig. 2.

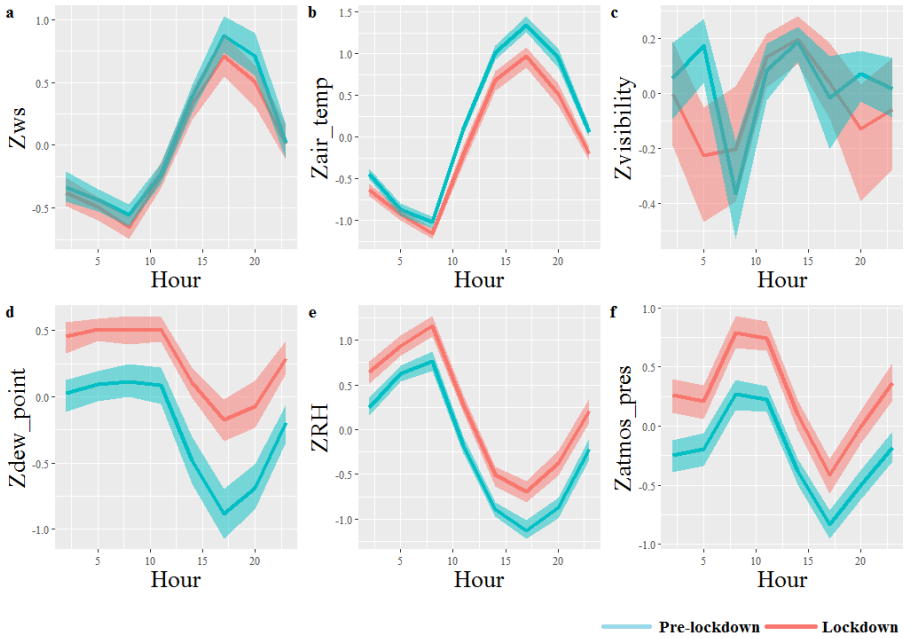

Figure S3. Diurnal variations in meteorological condition during the pre-lockdown and lockdown in 2022. The zero-mean method (Z_i) normalized the differences among the ISD observation sites: (a) wind speed (Zws), (b) air temperature (Zair_temp), (c) visibility (Zvisibility), (d) dew point (Zdew_point), (e) relative humidity (ZRH), (f) sea level pressure atmospheric pressure (Zatmos_pres).

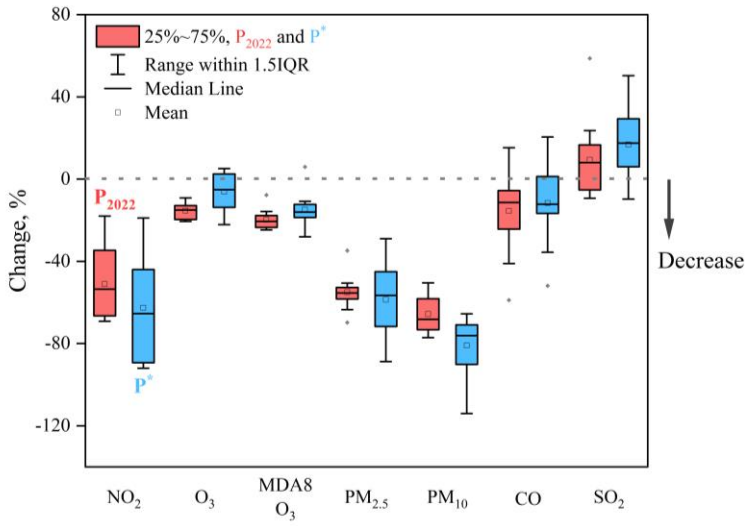

Figure S4. Percent change rate of air pollutants. Boxplots of the statistical results of observation sites in hourly time resolution except 8-hour daily maximum O_3 (MDA8 O_3, daily resolution)

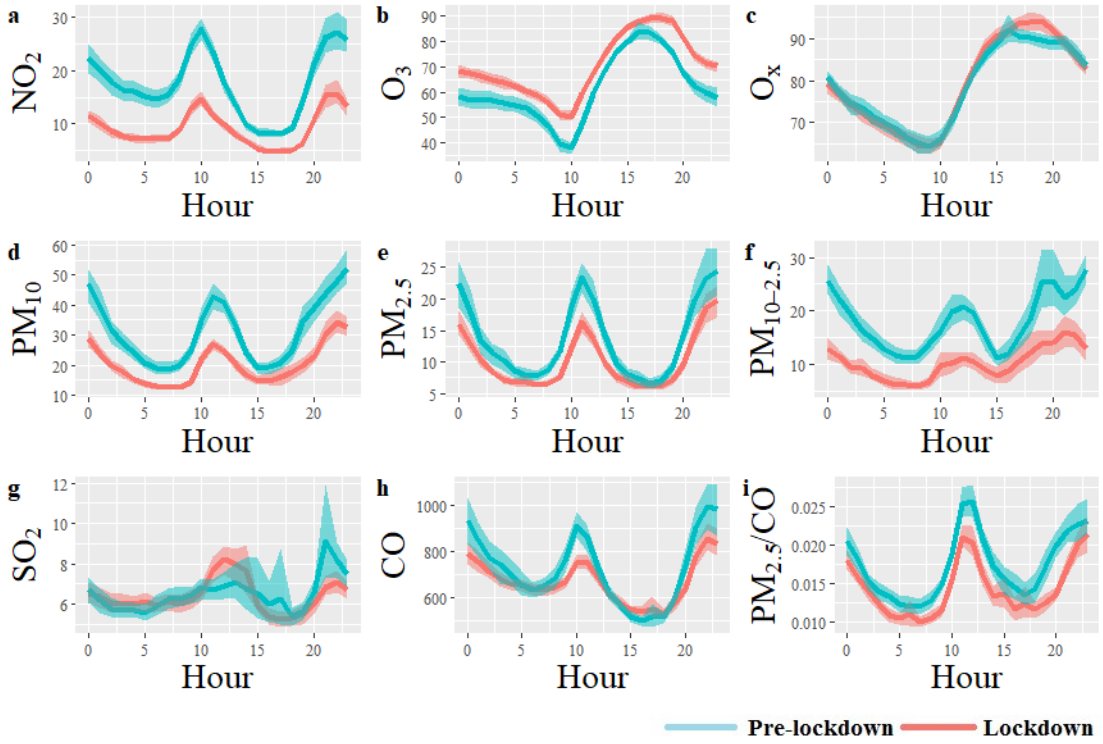

Figure S5. Diurnal variations in air pollutants during the pre-lockdown and lockdown in 2020. Units: μg/m^3 for NO_2 (a), O_3 (b), total gaseous oxidant (O_x = NO_2 + O_3) (c), PM_{10} (d), $PM_{2.5}$ (e), Coarse particles ($PM_{10-2.5}$ = PM_{10} - $PM_{2.5}$) (f), SO_2 (g); CO (h); Dimensionless for the rate of $PM_{2.5}$/CO (i). Error bars represent the 95% confidence interval of the hourly mean via "openair" R-package.

Table S1. Correlation coefficients between predicted values and observation values

Date	City	$PM_{2.5}$	PM_{10}	CO	SO_2	O_x	O_3	NO_2	$PM_{10-2.5}$	$PM_{2.5}$/CO
2022/07/01-2022/09/30	Ngari	0.91	0.59	0.95	0.96	0.96	0.96	0.89	0.89	0.89
	Qamdo	0.72	0.86	0.94	0.93	0.96	0.96	0.92	0.90	0.89
	Lhasa	0.92	0.93	0.91	0.90	0.97	0.96	0.94	0.90	0.90
	Nyingchi	0.90	0.88	0.99	0.96	0.96	0.95	0.90	0.87	0.88
	Xigaze	0.81	0.84	0.94	0.94	0.95	0.94	0.90	0.90	0.85
	Nagqu	0.93	0.91	0.94	0.93	0.95	0.95	0.93	0.91	0.94
2020/01/01-2020/02/29	Ngari	0.87	0.70	0.87	0.85	0.95	0.95	0.92	0.62	0.92
	Qamdo	0.88	0.91	0.93	0.89	0.96	0.94	0.93	0.89	0.87
	Lhasa	0.94	0.92	0.95	0.94	0.95	0.95	0.92	0.87	0.90
	Nyingchi	0.92	0.88	0.96	0.96	0.97	0.96	0.93	0.92	0.90
	Xigaze	0.94	0.91	0.94	0.88	0.93	0.95	0.93	0.90	0.92
	Nagqu	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.91	0.93