

Table 1

Correlation value (R) between PM_{2.5}, SO₂, CO, NO₂, O₃, OC and EC.

Green: R>0.8; Yellow: R<0.6; Crimson: 0.8>R>0.6

	PM _{2.5}					
SO ₂	0.85					
CO	0.88	0.74				
NO ₂	0.69	0.80	0.59			
O ₃	0.66	0.48	0.52	0.15		
OC	0.92	0.86	0.80	0.70	0.67	
EC	0.90	0.87	0.85	0.74	0.57	0.94

Table 2

Total average concentration of aldehydes, alkanols, sterols in three time periods (ng/m³).

	Aldehydes	Alkanols	Sterols
before	472.84	150.57	13.13
during	227.91	115.59	10.55
after	381.19	158.19	12.47

Table 3

WRF simulation performance assessments. OM represents observation mean value. SM represents simulation mean value. R represents the Pearson correlation value. RMSE represents Root Mean Squared Error and MAE represents mean absolute error.

	temperature	wind speed	dew point temperature
OM	23.82	2.31	16.62
SM	28.85	3.67	8.33
R	0.88	0.47	0.46
RMSE	5.36	2.12	9.01
MAE	5.04	1.58	8.64

Table 4

Contribution percentage (%) of long-range transport paths. SW represents the southeast path. NE represents the northeast path. Others contains all not significant transport contribution. Local represents the transport within Beijing domain. The total column represents the whole sampling period. Only significant transport paths in CFA fields were calculated.

		total	before	during	after
PM _{2.5}	SW	52.7	52.57	-	68.56
	NE	-	-	60.54	-
	others	34.79	35.69	18.42	21.79
	local	12.51	11.74	21.04	9.65
OC	SW	42.39	43.87	-	59.19
	NE	-	-	62.66	-
	others	43.47	40.53	12.56	29.39
	local	14.14	15.60	24.78	11.42
EC	SW	44.11	43.01	-	59.58
	NE	-	-	54.68	-
	others	40.64	41.11	20.58	27.35
	local	15.25	15.88	24.74	11.07