

## SUPPLEMENTARY MATERIAL

Table S1: The statistical performance of 50 models was evaluated using 4 indicators: Pearson's correlation coefficient (r), mean bias (MB; in  $\mu\text{g m}^{-3}$ ), normalised mean bias (NMB), and normalised root-mean-square error (NRMSE);

	Training set				Test set			
	R2	Mb	NMB	NRMSE	R2	Mb	NMB	NRMSE
RF model	0.34	0.01	0.00	0.79	0.36	0.10	0.02	0.76
95 Confidence Interval	0.01	0.00	0.00	0.01	0.02	0.06	0.01	0.03

Table S2. Variable importance for the chronological and meteorological variables.

	date_unix	day_julian	weekday	air_temp	rh	ws	Pressure	visibility
Variable importance	11.60	4.26	3.21	5.13	3.95	2.53	3.85	1.85
95 Confidence Interval	0.18	0.13	0.09	0.25	0.17	0.09	0.11	0.20