Supplementary Materials

Table S1. Analytical Condition for ICP-MS and Ion Chromatography.

ICP instrumental settings		**Analyzer/Collision cell**	
Sample uptake (mL·min^{-1})	0.4	CCT exit lens (V)	-40
Forward power (W)	1550	CCT bias potential (V)	-21
Nebulizer flow rate (L·min^{-1})	1.0	Ion energy (V)	2.4
Auxiliary flow rate (L·min^{-1})	0.8	Multiplier voltage (V)	500
Coolant flow rate (L·min^{-1})	14	He gas flow (mL·min^{-1})	4.7
Replicates	3	Energy discrimination (V)	3.0
IC instrumental setting	**Anion**		**Cation**
Columns	AERS 4 mm		CERS 4 mm
Eluent	3.5 mM Na_2CO_3 + 1 mM $NaHCO_3$		0.01 mM MSA
Flow rate	1.2 mL·min^{-1}		1.0 mL·min^{-1}
Sample roof	25 μL		
Run time	23 min		

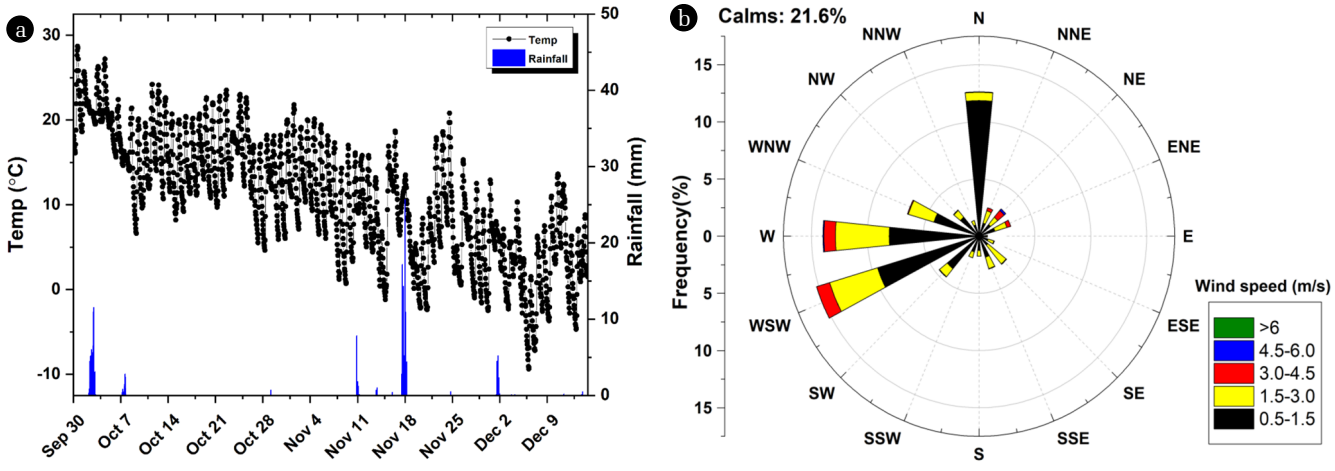

Fig. S1. Variation of Temperature, Rainfall, and Wind Speed and Direction during Study Period. The Wind Rose Plots are shown to identify the Prevailing Wind Direction (a) Temperature and Rainfall, (b) Wind Rose Plot.

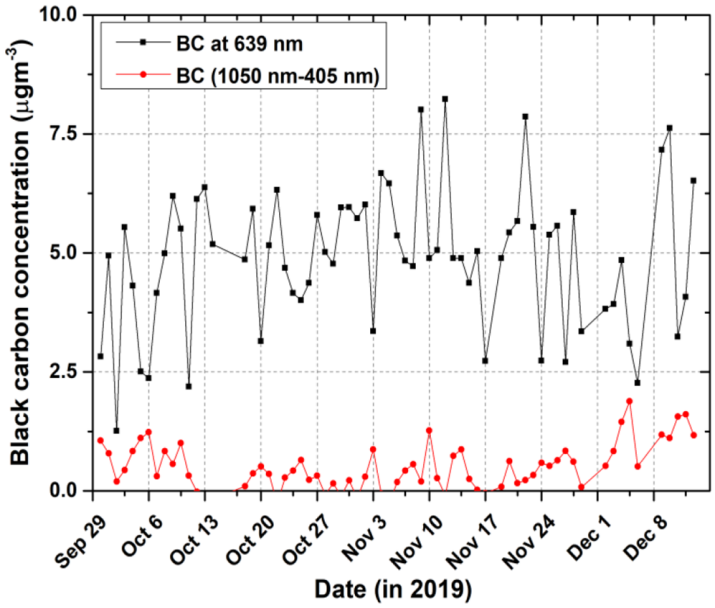

Fig. S2. Time Series of BC Concentration in the Study Area. The Total BC Concentrations (in black) Measured at 639 nm and the BC Concentrations (in red) from the Biomass Burning Evaluated Subtracting Values at 1050 nm to those at 405 nm were Compared to Discriminate Possible Sources of BC Concentrations in the Study Area.

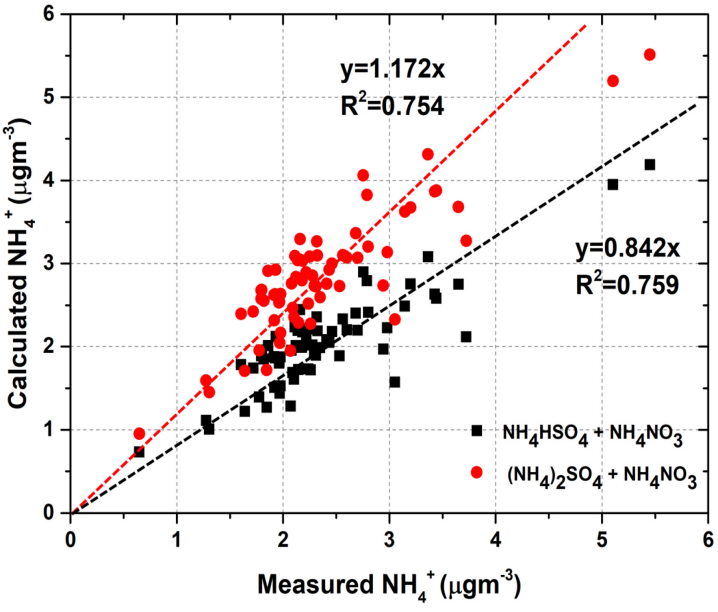

Fig. S3. Comparison Between Calculated and Measured Ammonium Concentration in $PM_{1.0}$. Calculated Ammoniums were Evaluated Followed Stoichiometric Equations: $[(NH_4)_2SO_4 + NH_4NO_3 = 0.38x\ SO_4^{-2} + 0.29\ NO_3^-]$; and $[NH_4HSO_4 + NH_4NO_3 = 0.19SO_4^{-2} + 0.29NO_3^-]$

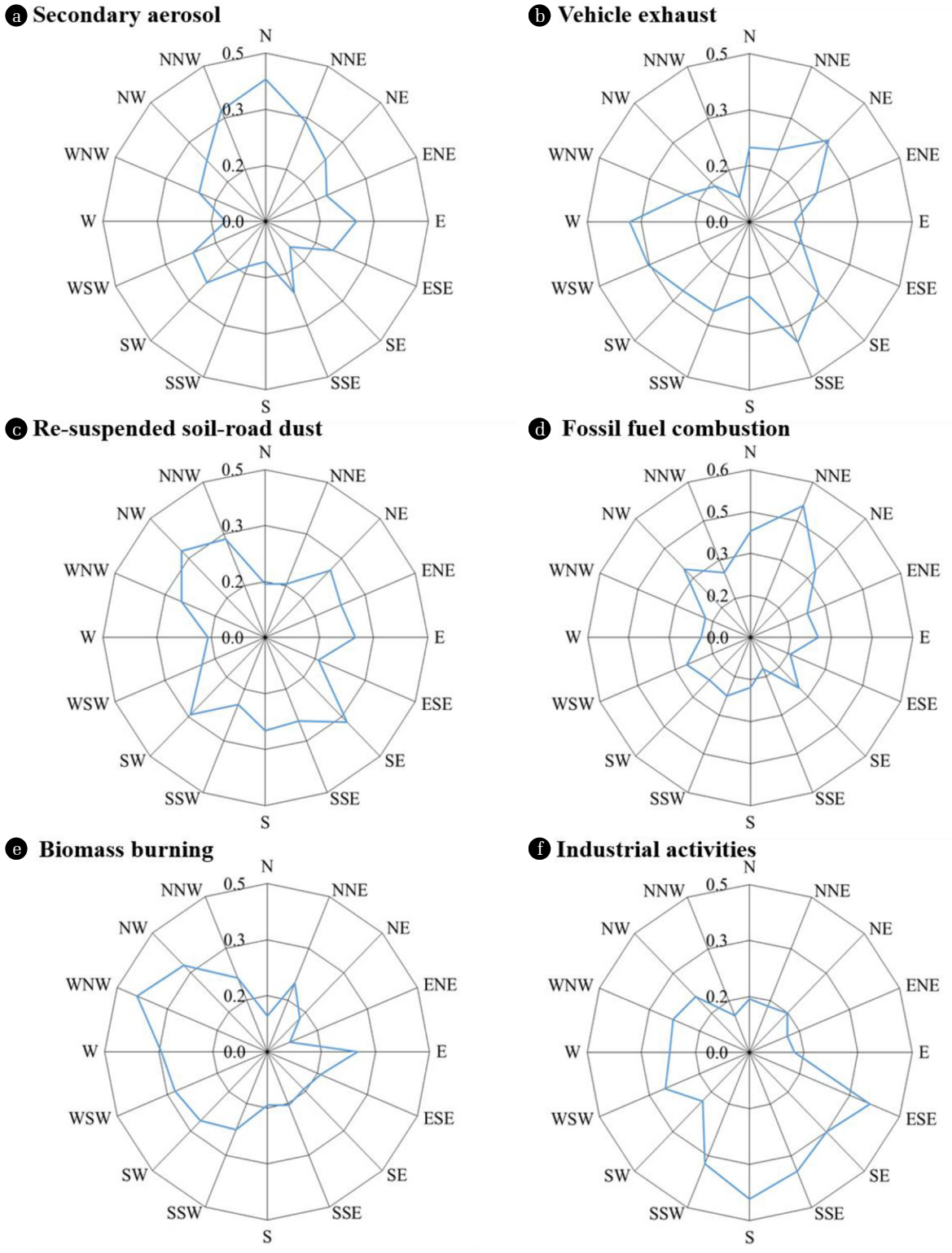

Fig. S4. The CPF Plot for Source Contributions from PMF. The Threshold Criterion of Upper 25th Percentile Value used to show Clear Directionality.\

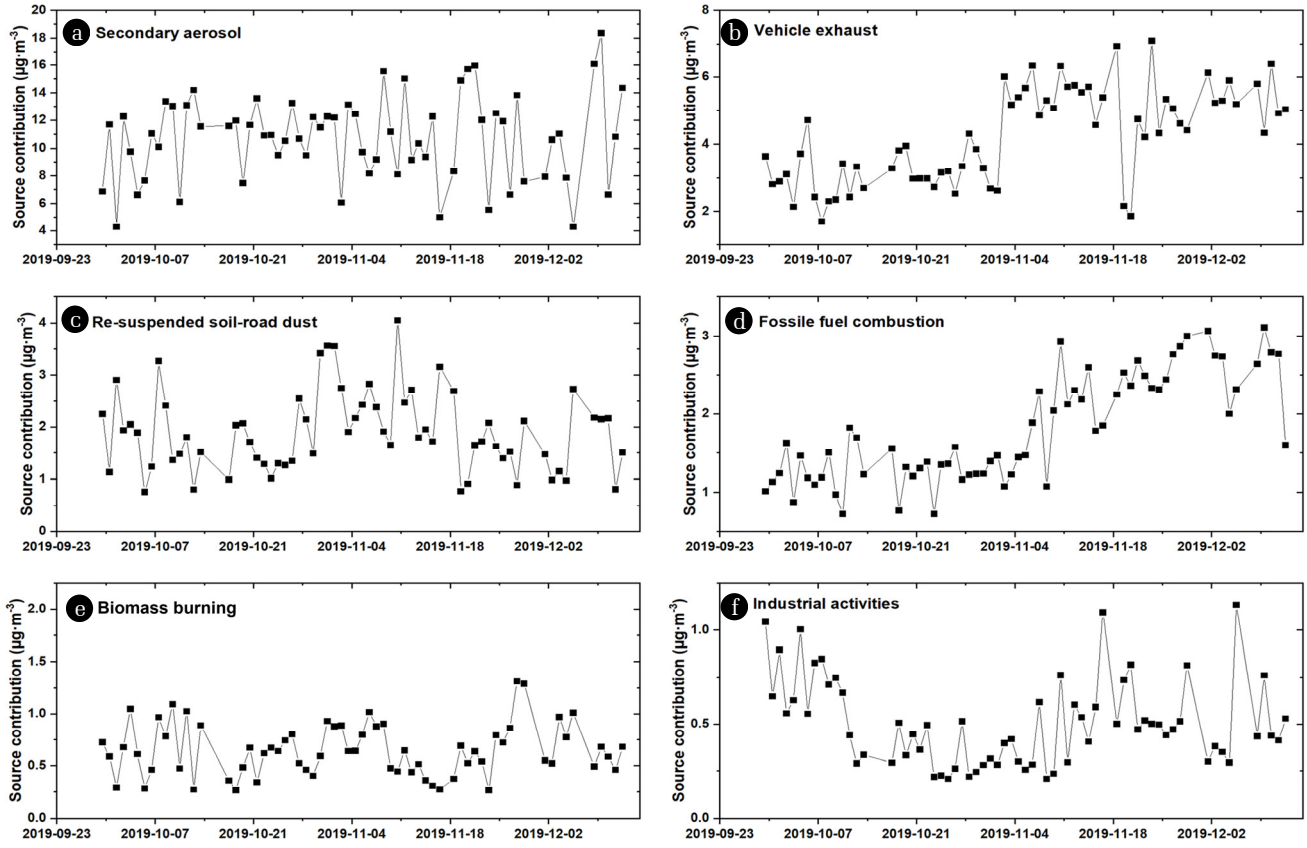

Fig. S5. The Time-series Plot for Source Contributions from PMF.