

Long-term trends in the contribution of PM_{2.5} sources to organic carbon (OC) in the Los Angeles basin and the effect of PM emission regulations

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Table S1. Summary of the meteorological parameters at CELA and Riverside.

Site	Type	Year	Temperature (°C)		Relative humidity (%)	
			Warm	Cold	Warm	Cold
CELA	Urban	2005	28.0±2.1	22.4±2.3	60.1±29.3	93.1±1.4
		2010	27.2±2.2	22.1±1.5	78.3±1.8	77.3±4.7
		2015	27.0±3.3	23.5±2.7	80.3±3.0	79.5±4.4
Riverside	Semi-rural	2005	31.3±3.2	22.1±2.8	70.0±16.7	88.5±5.5
		2010	31.3±3.0	21.6±2.0	76.2±3.9	78.2±5.8
		2015	31.0±4.7	23.9±3.3	70.3±7.8	69.8±7.1

Table S2. Spearman rank order correlation analysis between the PMF-resolved sources and non-tailpipe tracer species in a) CELA; and b) Riverside.

a)

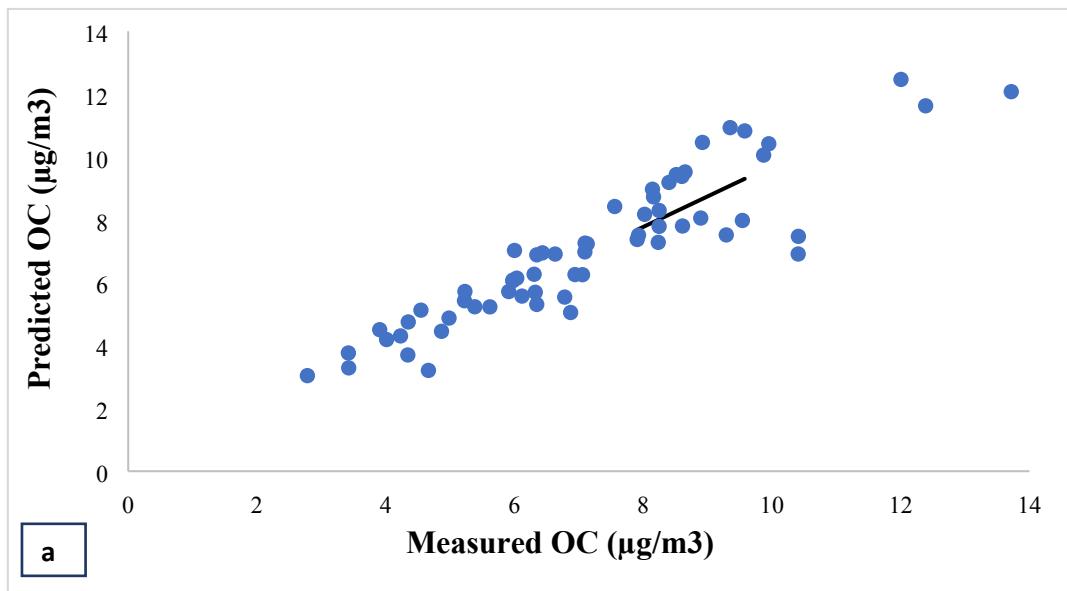
PMF-resolved sources	Fe	Cu	Al	Ti	Zn
Local industrial activities	-0.03	0.29	0.20	0.30	0.31
Non-tailpipe emissions	0.70	0.65	0.60	0.61	0.69
Tailpipe emissions	0.23	0.02	-0.01	0.13	0.25

b)

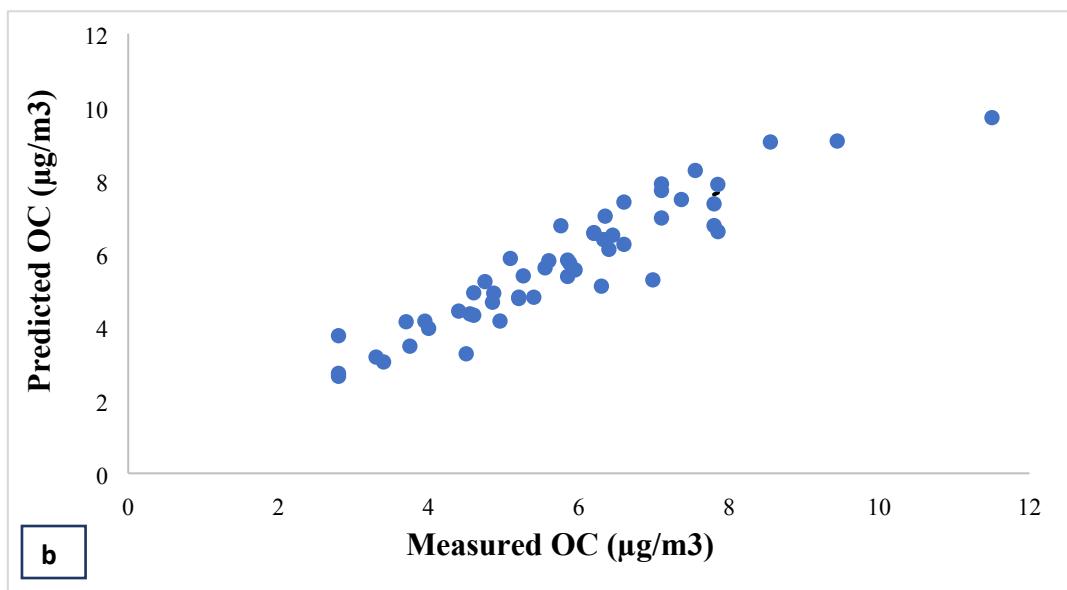
PMF-resolved sources	Fe	Cu	Al	Ti	Zn
Local industrial activities	-0.04	0.09	-0.27	-0.16	-0.17
Non-tailpipe emissions	0.80	0.60	0.61	0.90	0.53
Tailpipe emissions	0.33	0.17	0.20	0.13	0.44

Figure S1. Linear regression between the predicted vs. measured total organic carbon (OC) in CELA for a) 2005; b) 2010; and c) 2015.

a)



b)



c)

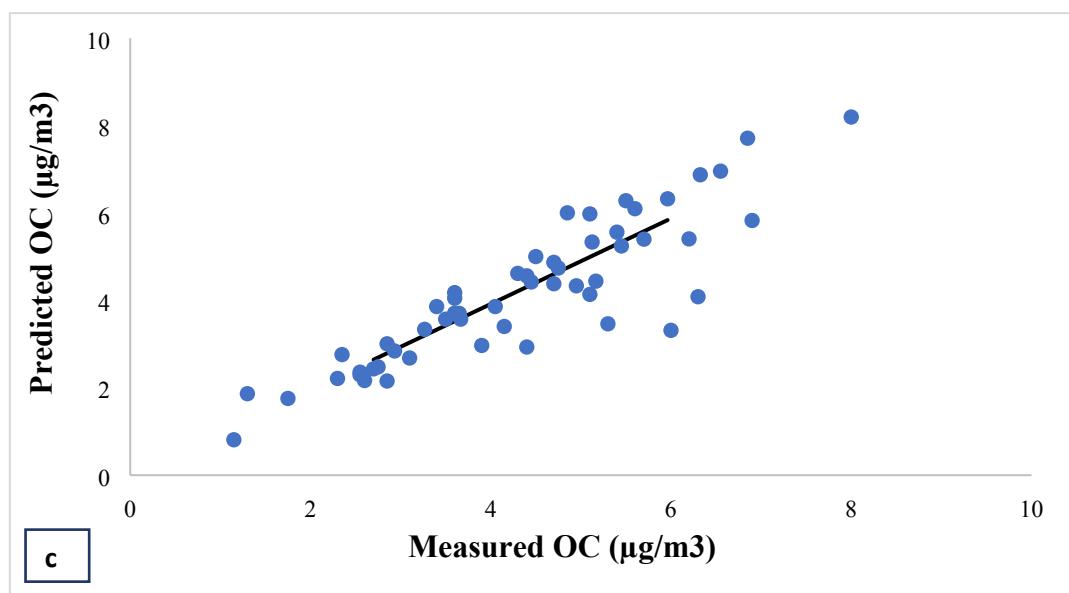
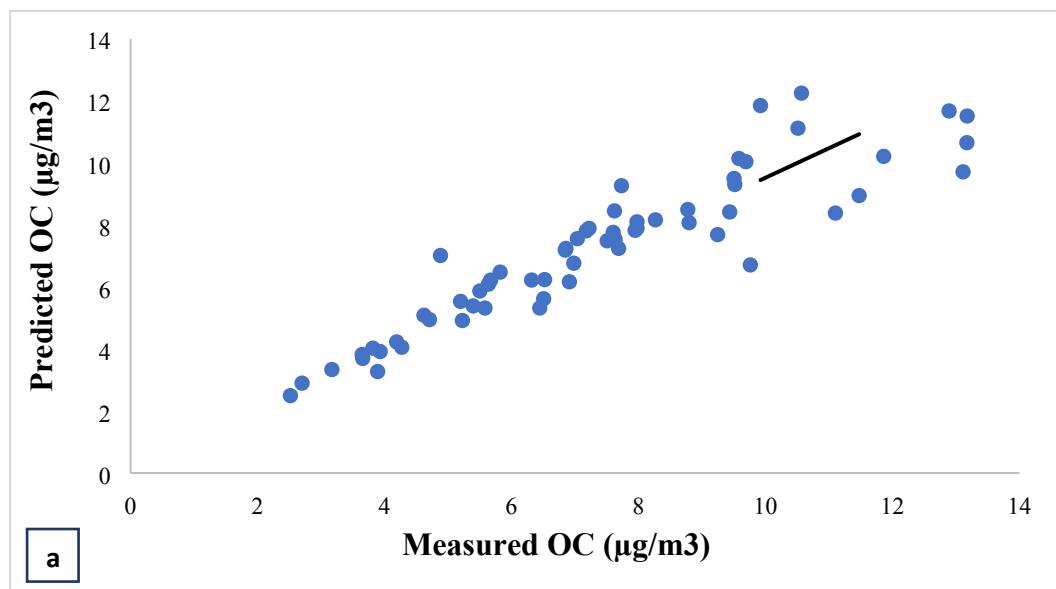
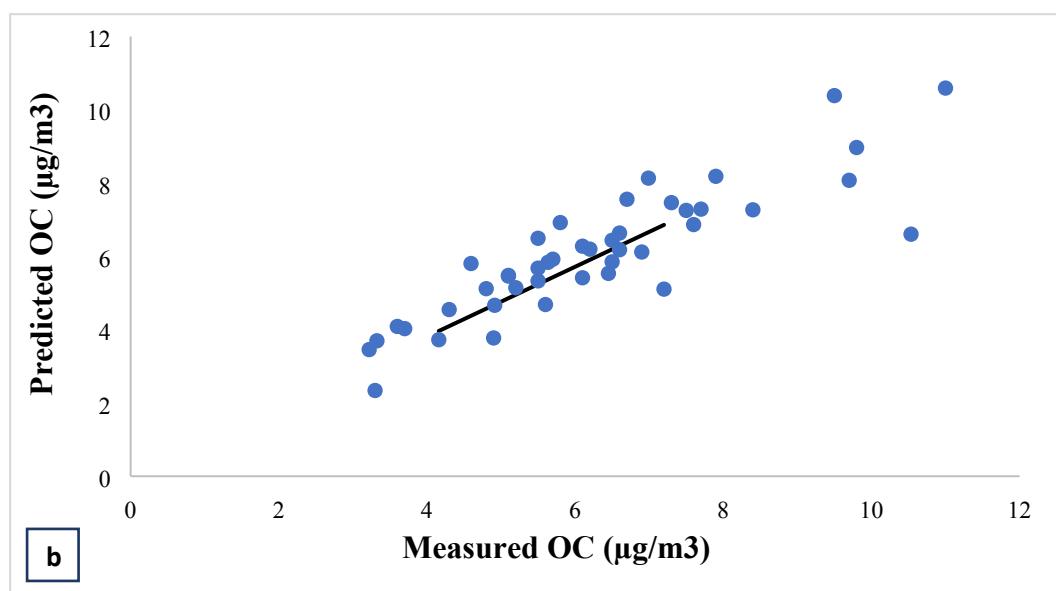


Figure S2. Correlation between the predicted and measured total organic carbon (OC) in Riverside for a) 2005; b) 2010; and c) 2015.

a)



b)



c)

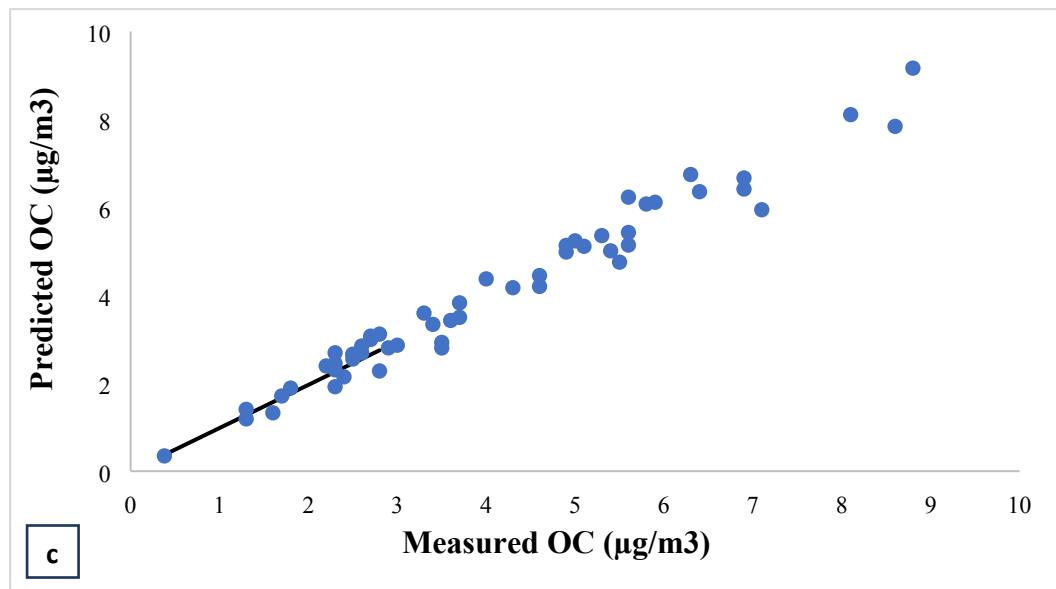


Figure S3. PMF-resolved factor profiles in a) CELA; and b) Riverside for 2005.

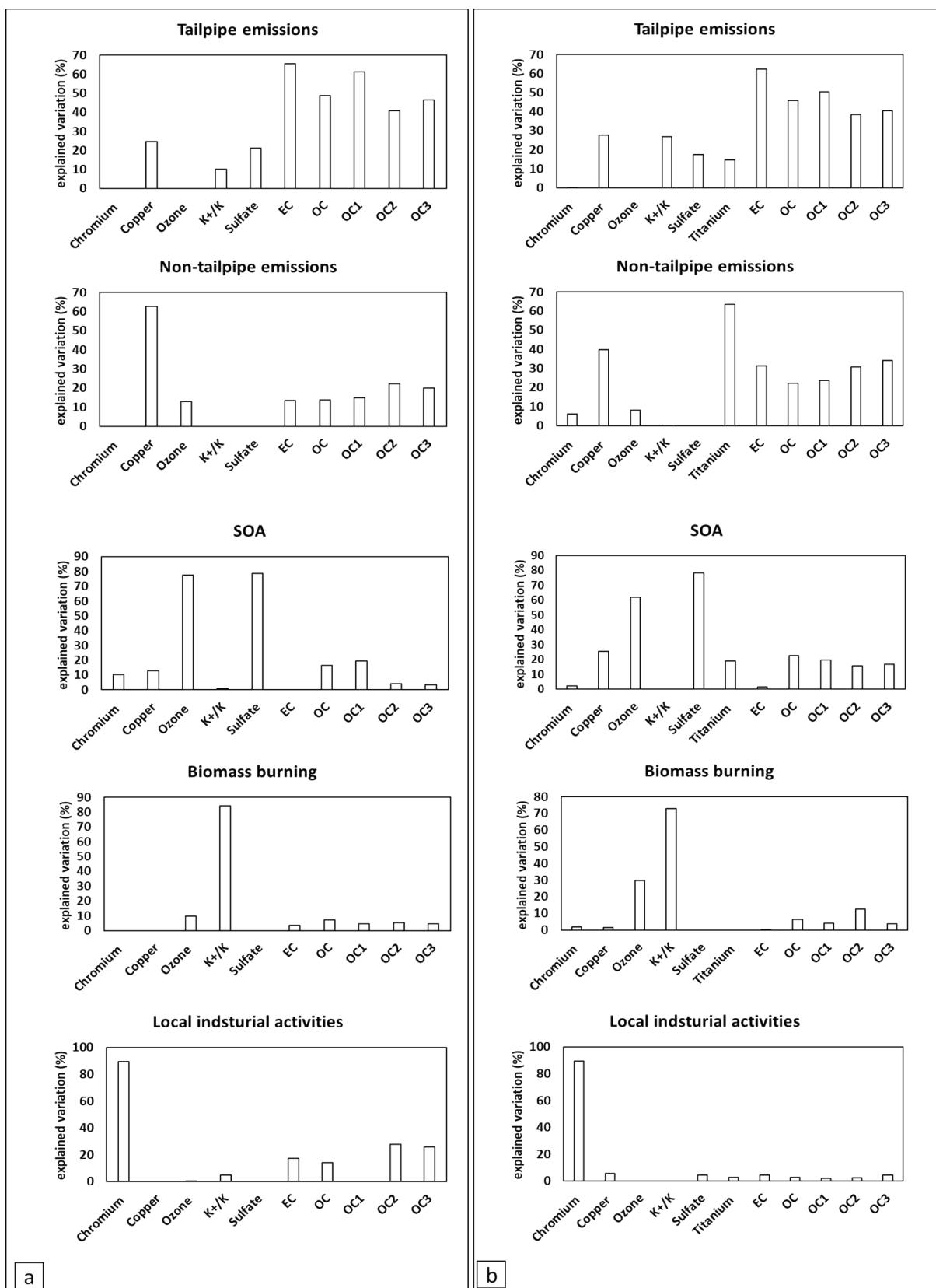


Figure S4. PMF-resolved factor profiles in a) CELA; and b) Riverside for 2015.

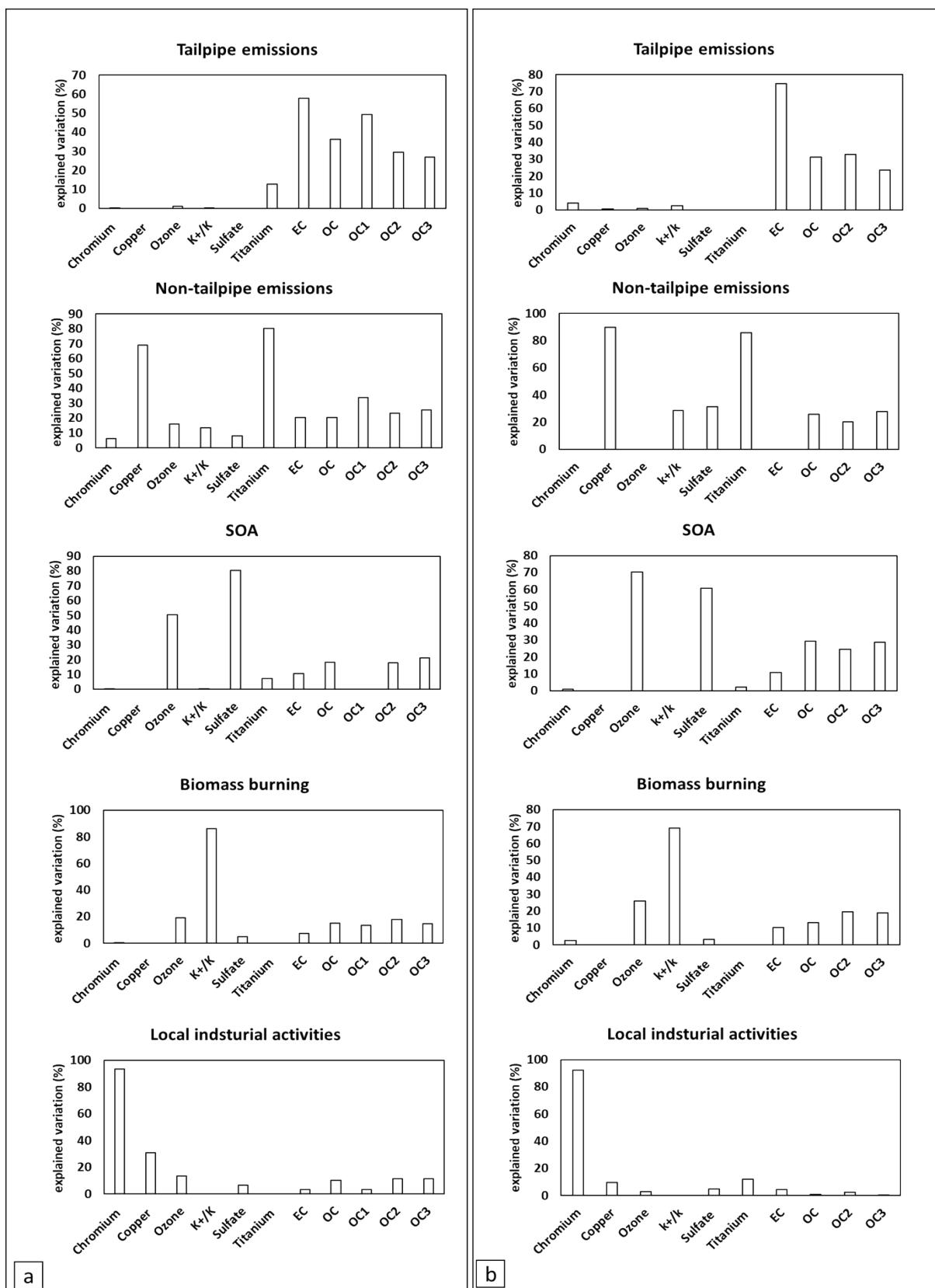


Figure S5: Temporal values of the obtained K+/K ratio along with the PMF-resolved biomass burning absolute contribution during the warm months of 2010.

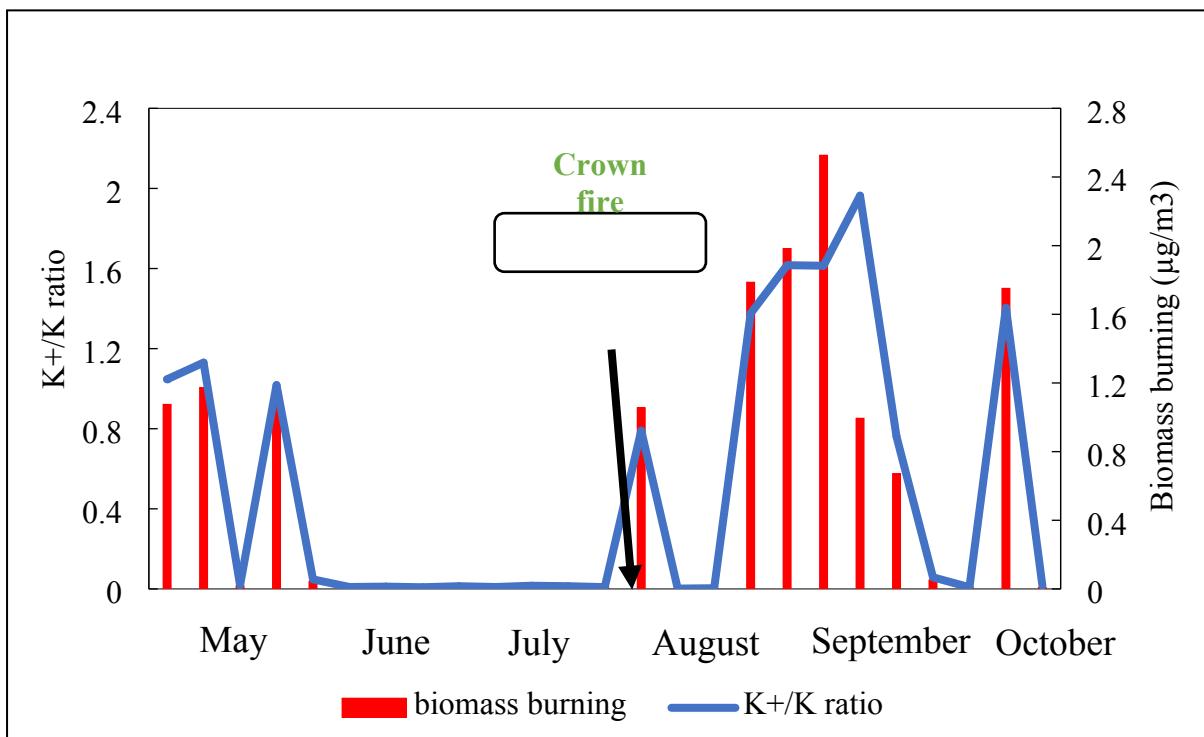
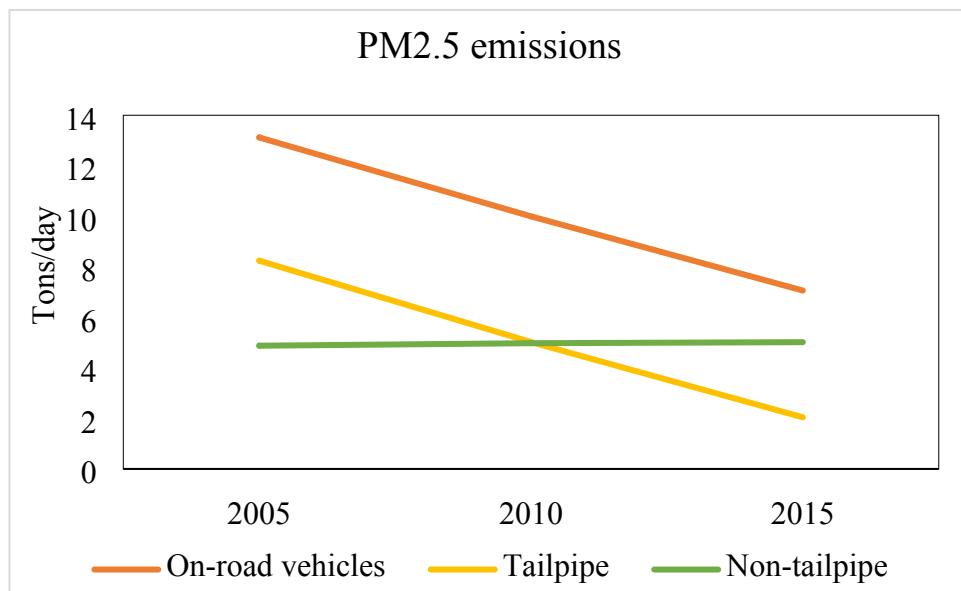


Figure S6: PM_{2.5} inventory data for on road vehicles emission between the years of 2005 and 2015 for a) CELA, and b) Riverside.

a) Los Angeles



b) Riverside

