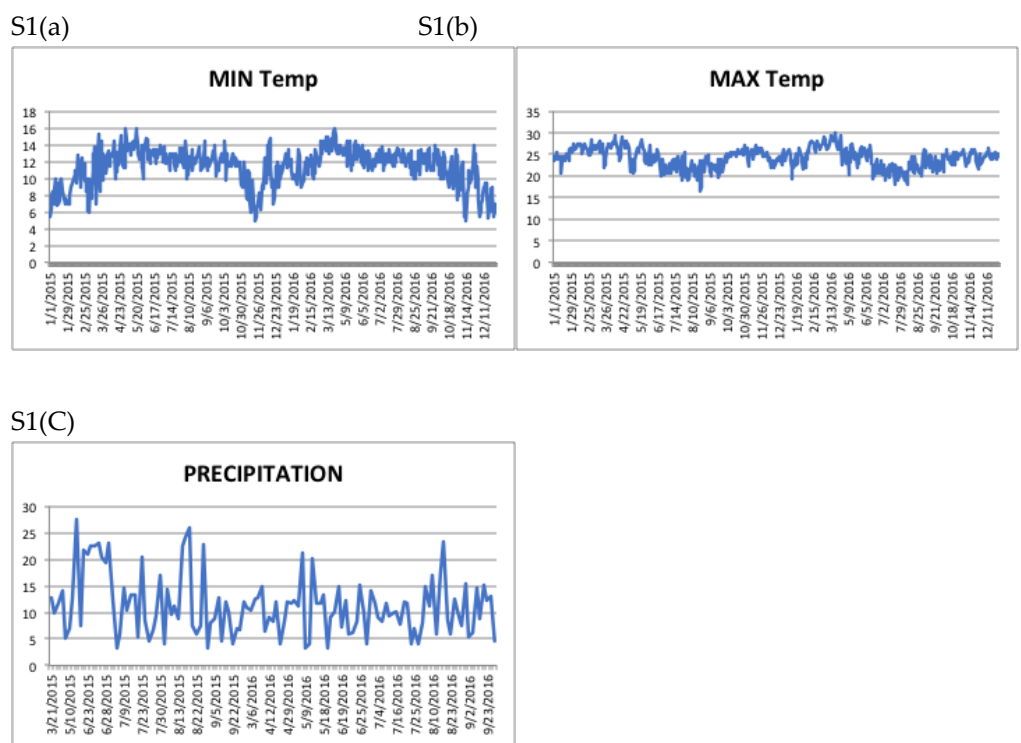
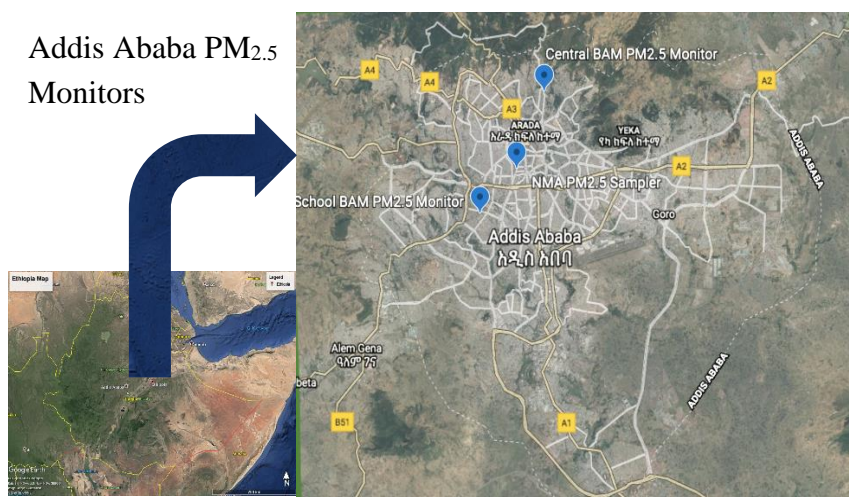


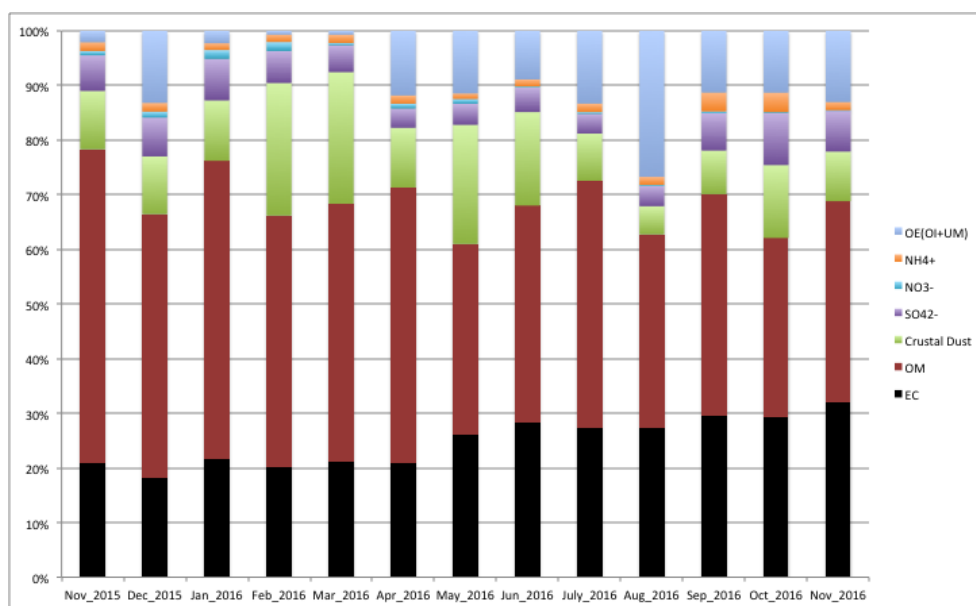
Supplementary Information



**Supplemental Figure S1.** Mean daily Minimum Temperature ( $^{\circ}\text{C}$ ) (a), Maximum Temperature ( $^{\circ}\text{C}$ ) (b) and Precipitation (mm) (C) in Central Addis Ababa during 2015-2016.



**Supplemental Figure S2.** Fine PM Monitoring stations in Addis Ababa, Ethiopia. NMA PM<sub>2.5</sub> Sampler (Met Station site - this study); US Diplomatic Post BAM Monitors (Central and School sites) are shown in figure with blue pin.



**Supplementary Figure S3.** The percentage contribution of major mass constituents of PM<sub>2.5</sub> in Central Addis Ababa; EC=Elemental carbon. OM=Organic matter; Other Ions= ws Na<sup>+</sup>, ws Cl<sup>-</sup>, ws K<sup>+</sup>, Ca<sup>2+</sup>; UM= Unidentified matter.

**Supplemental Table S1**

**Table S1.** Crustal Enrichment Factor(CEF>10) of 15 trace-elements identified from PM<sub>2.5</sub>. samples in central Addis Ababa.

Element	<sup>a</sup> Mean CEF	STDEV CEF	MIN CEF	MAX CEF
Thallium (Tl)	11	10	1	21
Nickel (Ni)	14	14	0	28
Phosphorous (P)	15	84	0	99
Vanadium (V)	21	17	4	38
Molybdenum (Mo)	37	48	0	85
Boron (B)	69	92	0	161
Zinc (Zn)	87	72	15	159
Copper (Cu)	<b>115</b>	675	0	790
Arsenic (As)	<b>121</b>	124	0	245
Lead (Pb)	<b>124</b>	191	0	315
Tin (Sn)	<b>193</b>	909	0	1102
Sulfur (S)	<b>245</b>	174	71	419
Silver (Ag)	<b>648</b>	1905	0	2553
Antimony (Sb)	<b>3796</b>	11347	0	15143
Selenium (Se)	<b>19180</b>	40393	0	59573

<sup>a</sup> CEF>100 are listed in bold, showing significant PM toxic metal contamination from anthropogenic sources.