

APCA NYC

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Source contributions to each component of PM2.5

element	MeanConc	source_1	source_2	source_3	source_4	source_5	source_6	r_squared	PredConc	Pct_error
aluminum	20.366	1.505	18.815	-1.684	4.689	2.318	0.339	0.624	25.983	27.58
arsenic	0.654	0.239	0.020	0.059	0.099	0.053	0.136	0.361	0.605	-7.43
barium	6.102	1.429	1.553	2.349	1.331	-0.631	-0.382	0.619	5.650	-7.40
bromine	3.320	1.500	0.033	0.035	0.663	0.144	0.685	0.633	3.060	-7.83
cadmium	1.511	0.093	0.109	-0.077	-0.014	-0.068	-0.034	0.012	0.008	-99.44
calcium	56.174	32.437	24.595	-1.760	-1.870	-5.111	-1.281	0.793	47.010	-16.31
chromium	1.634	-0.231	-0.353	0.032	-0.079	3.051	-0.164	0.201	2.257	38.10
copper	4.407	1.956	0.618	-0.108	0.432	1.655	0.301	0.635	4.855	10.17
iron	111.766	26.010	33.601	1.935	0.539	41.167	6.733	0.987	109.986	-1.59
lead	3.282	2.611	0.495	0.411	0.366	-0.203	0.450	0.650	4.130	25.87
magnesium	7.476	-0.788	0.464	0.365	4.734	-0.190	-0.532	0.295	4.054	-45.77
manganese	2.375	1.665	0.859	-0.052	-0.214	0.267	0.167	0.727	2.693	13.39
nickel	8.651	6.860	0.394	1.550	-0.857	-0.728	0.306	0.806	7.525	-13.01
nitrate	1822.267	1310.063	-	-8.384	-1.727	139.007	500.506	0.633	1825.641	0.19
			113.823							
pm25	11803.265	3092.121	1961.000	66.333	670.757	569.402	3236.791	0.804	9596.405	-18.70
potassium	44.313	14.096	5.794	1.071	18.475	3.192	2.658	0.676	45.286	2.19
selenium	0.756	0.400	0.158	0.084	-0.023	-0.084	0.394	0.754	0.930	23.02
silicon	71.426	4.592	60.483	0.706	5.715	-6.924	6.272	0.870	70.844	-0.81
sulfate	2980.023	225.974	818.858	29.608	-	-	1382.689	0.827	2263.002	-24.06
					78.766	115.361				
titanium	3.394	0.596	2.303	0.311	0.028	-0.055	0.201	0.704	3.384	-0.30
vanadium	4.446	2.856	1.360	0.381	-0.217	-0.118	1.015	0.710	5.277	18.67
zinc	27.030	24.257	-0.453	-0.604	1.637	0.243	0.232	0.822	25.311	-6.36

Proportion of each element coming from each source

element	source_1	source_2	source_3	source_4	source_5	source_6
aluminum	5.44	68.01	0.00	16.95	8.38	1.22
arsenic	39.44	3.23	9.72	16.32	8.81	22.49
barium	21.45	23.32	35.26	19.98	0.00	0.00
bromine	49.01	1.07	1.16	21.67	4.70	22.39
cadmium	46.06	53.94	0.00	0.00	0.00	0.00
calcium	56.88	43.12	0.00	0.00	0.00	0.00
chromium	0.00	0.00	1.05	0.00	98.95	0.00
copper	39.42	12.46	0.00	8.71	33.35	6.06
iron	23.65	30.55	1.76	0.49	37.43	6.12

element	source_1	source_2	source_3	source_4	source_5	source_6
lead	60.25	11.43	9.49	8.45	0.00	10.38
magnesium	0.00	8.35	6.57	85.09	0.00	0.00
manganese	56.28	29.03	0.00	0.00	9.04	5.66
nickel	75.30	4.33	17.01	0.00	0.00	3.36
nitrate	67.20	0.00	0.00	0.00	7.13	25.67
pm25	32.22	20.43	0.69	6.99	5.93	33.73
potassium	31.13	12.79	2.37	40.80	7.05	5.87
selenium	38.62	15.22	8.10	0.00	0.00	38.07
silicon	5.91	77.77	0.91	7.35	0.00	8.07
sulfate	9.20	33.33	1.21	0.00	0.00	56.27
titanium	17.32	66.96	9.05	0.81	0.00	5.86
vanadium	50.89	24.23	6.78	0.00	0.00	18.09
zinc	91.99	0.00	0.00	6.21	0.92	0.88

Bar graph of above proportions

