APCA NYC

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1/23/2021

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	20.906	1.817	19.903	-1.423	3.151	1.793	0.457	0.651	25.697	22.92
arsenic	0.657	0.213	0.030	0.037	0.033	0.031	0.195	0.334	0.539	-17.83
barium	6.227	1.782	1.413	1.755	0.691	-0.786	-0.024	0.556	4.830	-22.43
bromine	3.312	1.366	0.154	-0.056	0.200	-0.044	1.049	0.583	2.669	-19.41
cadmium	1.510	0.110	0.077	-0.061	-0.014	-0.057	-0.043	0.012	0.011	-99.25
calcium	56.074	33.944	18.572	-0.892	0.316	-2.266	-1.292	0.729	48.383	-13.72
chromium	1.628	-0.274	-0.223	0.014	-0.094	2.998	-0.177	0.195	2.245	37.94
copper	4.483	1.824	0.438	-0.047	0.728	1.694	0.387	0.707	5.024	12.07
iron	111.841	26.601	29.392	1.196	-0.121	42.003	9.418	0.983	108.490	-3.00
lead	3.293	2.594	0.427	0.289	0.192	-0.293	0.726	0.635	3.935	19.49
magnesium	7.682	-0.798	0.662	0.111	2.850	-0.652	0.034	0.217	2.207	-71.27
manganese	2.373	1.676	0.645	-0.005	0.008	0.380	0.173	0.683	2.877	21.22
nickel	8.590	7.100	0.104	1.215	-0.721	-0.597	0.589	0.812	7.691	-10.47
nitrates	1811.742	1201.014	-97.977	-24.856	-9.571	109.616	669.726	0.638	1847.952	2.00
pm25	11855.453	2567.998	1769.541	85.853	696.639	625.438	3875.671	0.784	9621.140	-18.85
potassium	47.913	10.226	6.583	2.313	25.527	2.717	2.506	0.922	49.872	4.09
selenium	0.755	0.335	0.121	0.065	-0.008	-0.073	0.501	0.771	0.942	24.69
silicon	72.073	6.637	59.646	-0.119	1.454	-7.590	8.447	0.921	68.476	-4.99
sulfate	3008.629	31.016	716.838	70.917	135.239	-25.897	1549.363	0.755	2477.476	-17.65
titanium	3.445	0.691	2.168	0.291	0.125	0.044	0.179	0.732	3.497	1.52
vanadium	4.449	2.799	0.965	0.352	0.004	0.072	1.219	0.701	5.411	21.62
zinc	26.876	24.517	-0.494	-0.911	0.646	-0.940	1.701	0.842	24.519	-8.77

Proportion of each element coming from each source

element	source_1	source_2	source_3	source_4	source_5	source_6
aluminum	6.70	73.39	0.00	11.62	6.61	1.69
arsenic	39.51	5.63	6.91	6.07	5.71	36.16
barium	31.59	25.05	31.11	12.24	0.00	0.00
bromine	49.32	5.58	0.00	7.22	0.00	37.88
cadmium	58.85	41.15	0.00	0.00	0.00	0.00
calcium	64.25	35.15	0.00	0.60	0.00	0.00
chromium	0.00	0.00	0.48	0.00	99.52	0.00
copper	35.97	8.63	0.00	14.36	33.41	7.63
iron	24.49	27.06	1.10	0.00	38.67	8.67

element	source_1	source_2	source_3	source_4	source_5	source_6
lead	61.35	10.10	6.83	4.55	0.00	17.17
magnesium	0.00	18.10	3.04	77.95	0.00	0.92
manganese	58.16	22.37	0.00	0.29	13.20	5.99
nickel	78.82	1.15	13.49	0.00	0.00	6.54
nitrates	60.65	0.00	0.00	0.00	5.54	33.82
pm25	26.69	18.39	0.89	7.24	6.50	40.28
potassium	20.50	13.20	4.64	51.19	5.45	5.03
selenium	32.76	11.86	6.36	0.00	0.00	49.01
silicon	8.71	78.29	0.00	1.91	0.00	11.09
sulfate	1.24	28.63	2.83	5.40	0.00	61.89
titanium	19.76	62.00	8.31	3.58	1.24	5.11
vanadium	51.73	17.84	6.50	0.08	1.33	22.53
zinc	91.26	0.00	0.00	2.40	0.00	6.33

Bar graph of above proportions