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	r_squared	PredConc	Pct_error
aluminum	20.366	2.519	18.638	-2.388	4.480	2.628	0.636	25.876	27.05
arsenic	0.654	0.237	0.021	0.183	0.066	0.047	0.352	0.555	-15.11
barium	6.102	1.184	2.169	2.729	-0.830	-1.661	0.334	3.589	-41.18
bromine	3.320	1.606	-0.045	0.548	0.650	0.203	0.665	2.963	-10.75
cadmium	1.511	0.116	0.094	-0.130	0.035	-0.043	0.010	0.071	-95.29
calcium	56.174	33.309	24.572	-2.407	-0.854	-4.516	0.768	50.104	-10.80
chromium	1.634	-0.187	-0.276	-0.116	-0.239	2.848	0.193	2.030	24.26
copper	4.407	2.140	0.600	0.055	0.378	1.639	0.644	4.811	9.17
iron	111.766	26.774	33.636	7.900	0.347	39.770	0.984	108.427	-2.99
lead	3.282	2.600	0.593	0.943	0.061	-0.351	0.626	3.846	17.20
magnesium	7.476	-0.259	0.944	-0.231	2.238	-0.858	0.138	1.833	-75.47
manganese	2.375	1.686	0.831	0.107	-0.069	0.323	0.689	2.879	21.22
nickel	8.651	6.444	0.874	2.629	-1.696	-1.334	0.792	6.916	-20.05
nitrates	1822.267	1325.880	-176.760	392.781	168.870	243.104	0.599	1953.874	7.22
pm25	11803.265	3271.411	1543.040	2452.828	1506.270	1218.137	0.739	9991.686	-15.35
potassium	44.313	16.212	7.405	2.608	9.988	1.281	0.469	37.493	-15.39
selenium	0.756	0.363	0.113	0.430	0.083	-0.011	0.745	0.978	29.43
silicon	71.426	4.445	59.755	5.754	6.928	-5.595	0.874	71.286	-0.20
sulfate	2980.023	251.176	598.688	1036.671	458.501	229.117	0.646	2574.152	-13.62
titanium	3.394	0.503	2.370	0.612	-0.110	-0.133	0.704	3.243	-4.46
vanadium	4.446	2.742	1.334	1.398	-0.073	-0.020	0.714	5.381	21.02
zinc	27.030	25.873	-0.264	-0.520	1.005	-0.399	0.849	25.695	-4.94

Proportion of each element coming from each source

element	source_1	source_2	source_3	source_4	source_5
aluminum	8.91	65.94	0.00	15.85	9.30
arsenic	42.68	3.87	33.02	11.89	8.54
barium	19.46	35.66	44.87	0.00	0.00
bromine	53.41	0.00	18.23	21.61	6.75
cadmium	47.39	38.26	0.00	14.35	0.00
calcium	57.55	42.45	0.00	0.00	0.00
chromium	0.00	0.00	0.00	0.00	100.00
copper	44.47	12.47	1.15	7.85	34.06
iron	24.69	31.02	7.29	0.32	36.68
lead	61.96	14.12	22.48	1.45	0.00

element	source_1	source_2	source_3	source_4	source_5
magnesium	0.00	29.66	0.00	70.34	0.00
manganese	57.20	28.19	3.65	0.00	10.96
nickel	64.79	8.78	26.43	0.00	0.00
nitrates	62.23	0.00	18.43	7.93	11.41
pm25	32.74	15.44	24.55	15.08	12.19
potassium	43.24	19.75	6.95	26.64	3.42
selenium	36.71	11.38	43.47	8.44	0.00
silicon	5.78	77.72	7.48	9.01	0.00
sulfate	9.76	23.26	40.27	17.81	8.90
titanium	14.43	68.01	17.56	0.00	0.00
vanadium	50.10	24.37	25.53	0.00	0.00
zinc	96.26	0.00	0.00	3.74	0.00

Bar graph of above proportions