APCA 8 - remove 7/2 - 7/6

Rachel Tao

1/23/2021

Loadings

element	MeanCor	acsource_1	source_2	source_3	source_4	source_5	source_6	source_7	source_8	r_squared	PredCond	Pct_error
aluminum	20.37	1.36	18.60	1.44	0.39	4.81	1.83	-0.42	-3.72	0.89	24.29	19.26
arsenic	0.65	0.38	0.03	0.00	0.03	0.04	0.05	0.02	0.05	0.34	0.59	-9.80
barium	6.10	1.58	-0.22	-0.06	0.38	-1.69	1.09	0.24	4.52	0.56	5.85	-4.13
bromine	3.32	1.82	0.22	0.16	0.12	0.19	0.38	0.06	-0.03	0.62	2.93	-11.74
cadmium	1.51	-0.09	0.10	0.06	0.00	-0.03	-0.07	0.03	-0.05	0.01	-0.06	-103.97
calcium	56.17	8.37	8.74	2.11	2.94	-1.91	1.88	32.20	1.04	0.99	55.38	-1.41
chromium	1.63	-0.15	0.04	-0.06	-0.07	3.24	-0.03	-0.20	-0.57	0.21	2.20	34.63
copper	4.41	1.23	0.39	0.31	-0.01	1.83	0.12	0.68	0.03	0.61	4.58	3.93
iron	111.77	20.90	16.72	0.97	-1.84	46.36	-0.05	18.22	8.90	0.99	110.18	-1.42
lead	3.28	1.93	0.18	0.44	0.29	-0.35	-0.04	0.27	1.13	0.78	3.84	17.02
magnesium	7.48	-0.02	-0.19	-0.39	-0.01	0.07	7.77	-0.13	0.84	0.84	7.93	6.08
manganese	2.37	0.86	0.31	0.14	0.10	0.52	-0.12	0.90	0.08	0.65	2.80	17.91
nickel	8.65	4.11	-0.31	0.29	2.95	-0.20	-0.39	1.85	1.39	0.94	9.70	12.13
nitrates	1822.27	1347.74	-85.62	50.57	118.38	256.38	-22.35	374.44	-173.17	0.65	1866.38	2.42
pm25	11803.26	6286.55	1471.99	-293.13	47.33	674.05	152.95	1067.63	-86.42	0.79	9320.95	-21.03
potassium	44.31	14.42	7.63	2.56	1.29	3.76	11.10	0.05	1.15	0.49	41.97	-5.29
selenium	0.76	0.81	0.10	-0.04	0.04	-0.12	-0.05	0.08	0.10	0.75	0.91	20.41
silicon	71.43	12.21	42.55	-0.03	0.72	-3.47	-0.11	7.69	6.53	0.84	66.10	-7.46
sulfate	2980.02	2117.38	582.43	-302.87	-64.47	-188.09	-104.06	187.79	7.38	0.76	2235.49	-24.98
titanium	3.39	0.59	1.34	0.03	0.03	-0.10	-0.18	0.47	1.04	0.78	3.22	-5.14
vanadium	4.45	2.96	0.46	-0.06	0.32	0.11	-0.02	1.30	0.57	0.69	5.64	26.85
zinc	27.03	9.82	-0.70	5.02	2.48	2.10	-0.55	5.24	0.64	0.92	24.06	-10.99

Source proportions

element	source_1	source_2	source_3	source_4	source_5	source_6	source_7	source_8
aluminum	4.79	65.43	5.06	1.38	16.92	6.44	0.00	0.00
arsenic	63.61	5.06	0.00	4.82	6.33	8.83	3.48	7.87
barium	20.28	0.00	0.00	4.82	0.00	13.97	3.05	57.88
bromine	61.58	7.57	5.49	4.22	6.43	12.78	1.92	0.00
cadmium	0.00	51.21	30.92	0.00	0.00	0.00	17.87	0.00
calcium	14.60	15.26	3.69	5.13	0.00	3.28	56.21	1.82
chromium	0.00	1.22	0.00	0.00	98.78	0.00	0.00	0.00
copper	26.72	8.42	6.85	0.00	39.79	2.72	14.78	0.71
iron	18.65	14.92	0.87	0.00	41.37	0.00	16.26	7.94
lead	45.62	4.30	10.39	6.74	0.00	0.00	6.41	26.54
magnesium	0.00	0.00	0.00	0.00	0.79	89.55	0.00	9.66
manganese	29.61	10.75	4.80	3.44	17.71	0.00	31.04	2.64
nickel	38.82	0.00	2.74	27.83	0.00	0.00	17.46	13.14
nitrates	62.76	0.00	2.35	5.51	11.94	0.00	17.44	0.00
pm25	64.81	15.17	0.00	0.49	6.95	1.58	11.01	0.00
potassium	34.35	18.18	6.11	3.08	8.97	26.46	0.11	2.74
selenium	71.59	8.66	0.00	3.46	0.00	0.00	7.21	9.08
silicon	17.52	61.04	0.00	1.03	0.00	0.00	11.03	9.37
sulfate	73.14	20.12	0.00	0.00	0.00	0.00	6.49	0.25
titanium	16.93	38.26	0.84	0.94	0.00	0.00	13.39	29.64
vanadium	51.70	8.13	0.00	5.57	1.89	0.00	22.79	9.92
zinc	38.82	0.00	19.82	9.81	8.31	0.00	20.69	2.54

Bar graph of the above proportions

