

ERRATUM

## **Erratum to: Heavy metals relationship with water and size-fractionated sediments in rivers using canonical correlation analysis (CCA) case study, rivers of south western Caspian Sea**

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The original version of this article unfortunately contained a mistake.

The Table 5 was published erroneously.

The corrected Table 5 is shown in the next page. The original article was corrected.

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The online version of the original article can be found at <http://dx.doi.org/10.1007/s10661-016-5611-x>.

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**Table 5** Total metal concentration in fractioned size sediment

Sampling stations		Parameter (mg/kg)									
Particle Size- $\mu\text{m}$		ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	ST9	
<38	Cu	132.96	199.41	209.37	194.35	-	238.19	322.11	258.89	163.15	
	Zn	281.80	506.09	277.04	524.78	-	335.54	288.60	538.07	339.37	
	Cr	387.57	410.04	140.07	615.64	-	189.25	126.87	347.22	792.64	
	Fe	67901.15	57728.11	69048.13	76427.57	-	89963.45	74474.61	72824.84	69081.80	
	Mn	1308.57	1310.70	1334.56	945.87	-	946.21	1725.91	1324.93	1301.28	
	Pb	13.15	19.00	19.68	31.78	-	26.27	60.50	20.89	15.15	
	Ni	194.51	196.04	87.26	343.69	-	108.00	75.78	185.78	368.00	
	Cd	0.50	1.14	1.43	1.34	-	1.36	1.41	1.75	1.06	
	Cu	85.68	121.91	173.47	179.00	124.90	171.46	283.01	216.93	148.77	
	Zn	135.30	217.18	194.18	419.00	285.45	188.80	200.58	426.62	266.58	
38-63	Cr	240.43	130.76	107.39	552.00	368.55	214.12	163.51	189.53	309.56	
	Fe	71684.92	61535.07	59453.97	79091.93	73107.75	83639.00	88513.57	92891.20	79117.97	
	Mn	981.43	883.87	958.14	1111.27	1071.60	993.38	1036.55	1569.28	1134.53	
	Pb	15.46	21.07	18.07	31.56	19.80	31.98	32.34	66.72	41.67	
	Ni	74.29	44.36	54.78	286.94	157.54	42.46	93.22	70.97	164.51	
	Cd	0.50	0.50	1.32	0.50	0.50	0.50	1.16	1.31	0.50	
	Cu	91.14	132.81	134.76	102.61	122.15	140.08	297.38	122.54	140.41	
	Zn	146.69	163.93	96.94	174.88	190.00	98.69	151.54	104.43	166.93	
	Cr	134.89	101.68	68.91	126.26	247.82	190.31	139.60	146.67	448.96	
	Fe	58640.94	54272.53	66303.95	65040.75	106113.80	65553.84	92298.55	53567.06	114002.90	
63-125	Mn	841.63	782.49	1199.34	911.67	1429.72	806.55	958.34	796.14	1282.42	
	Pb	12.38	14.75	14.26	14.14	19.08	15.46	20.70	15.00	17.93	
	Ni	63.80	34.18	25.91	33.74	44.11	31.42	42.91	31.54	56.38	
	Cd	1.22	1.29	0.50	1.36	1.83	1.26	1.89	1.03	2.76	
	Cu	85.03	91.84	102.50	89.93	103.23	93.37	202.14	83.55	109.17	
	Zn	140.73	132.18	70.32	131.37	114.38	46.93	140.68	56.98	149.99	
	Cr	225.74	172.71	35.52	124.38	184.09	62.62	333.25	32.75	625.12	
	Fe	65770.36	65546.59	44065.68	67398.17	75312.58	37331.39	106539.03	35387.59	131860.12	
	Mn	915.25	864.67	798.73	954.87	1080.07	487.53	1101.23	516.68	1381.65	
	Pb	9.48	9.75	14.56	12.10	12.17	9.36	17.74	11.24	27.10	
125-250	Ni	63.64	33.14	23.21	51.69	29.38	14.20	48.80	16.89	61.70	
	Cd	0.50	1.12	0.50	0.50	1.32	0.50	1.84	0.50	2.52	
	Cu	96.82	95.56	118.25	97.90	95.01	111.44	139.96	94.73	90.35	
	Zn	127.40	103.55	74.87	103.88	72.75	60.98	76.84	58.10	80.26	
	Cr	853.34	123.04	36.73	116.04	60.68	78.00	110.29	32.25	273.48	
	Fe	108438.86	57035.82	43464.64	64207.77	45447.54	41389.95	63120.16	34235.85	74909.54	
	Mn	1418.98	792.48	736.05	913.72	744.51	514.85	729.05	480.94	864.46	
	Pb	12.12	11.20	88.41	11.82	11.08	8.90	13.72	8.30	13.97	
	Ni	82.70	29.81	20.60	45.56	19.22	18.00	24.61	13.17	35.00	
	Cd	1.43	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.05	
500-1000	Cu	90.38	105.44	109.86	112.89	108.80	114.67	142.96	101.26	101.80	

Table 5 (continued)

Sampling stations												
Particle Size-µm	Parameter (mg/kg)	ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	ST9	ST10	ST11
	Zn	96.30	72.03	71.59	86.43	78.35	69.18	65.84	62.90	51.00		
	Cr	521.08	119.84	53.72	52.25	45.68	127.02	28.59	26.23	61.11		
	Fe	70591.31	51977.16	43276.87	50488.95	45756.57	45940.07	45240.67	36249.24	39691.13		
	Mn	1098.15	791.41	621.25	751.39	745.56	690.00	621.96	537.56	557.92		
	Pb	8.88	12.55	22.47	13.30	11.30	12.00	12.31	11.77	10.49		
	Ni	70.49	28.02	22.21	17.67	16.96	22.24	14.44	12.59	16.35		
	Cd	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50		
Sampling stations												
Particle Size-µm	ST10	ST11	ST12	ST13	ST14	ST15	ST16	ST17	ST18			
<38	195.94	125.45	111.70	162.36	-	196.82	-	225.98	82.98			
	650.00	186.38	268.62	317.66	-	565.87	-	347.14	259.02			
	292.44	115.89	115.89	194.47	-	626.00	-	335.00	130.35			
	59756.12	59167.94	59167.94	70761.11	-	75069.51	-	65201.41	63276.90			
	859.14	1628.05	1628.05	804.39	-	1347.11	-	1185.75	1710.82			
	9.98	16.41	16.41	17.73	-	20.29	-	24.09	22.75			
	148.28	85.63	85.63	116.86	-	348.00	-	191.59	71.22			
	1.07	1.33	1.33	1.69	-	1.11	-	1.24	1.31			
38-63	-	99.92	86.77	112.63	-	76.78	-	208.26	59.93			
	-	94.76	267.10	196.42	-	168.74	-	269.82	140.17			
	-	97.50	1124.40	115.77	-	267.20	-	390.58	115.27			
	-	56988.31	147453.77	57772.26	-	77156.62	-	95322.04	63258.05			
	-	670.36	1991.59	489.72	-	1270.45	-	1176.91	1294.80			
	-	17.27	28.03	24.44	-	22.79	-	20.61	26.85			
	-	34.50	97.28	61.74	-	97.56	-	144.73	56.01			
	-	0.50	1.72	0.50	-	0.50	-	1.13	0.50			
63-125	166.69	117.35	28.41	114.92	58.63	70.85	52.85	250.67	36.49			
	199.34	148.92	92.19	167.34	144.43	174.33	253.60	340.77	98.50			
	192.00	293.00	293.12	62.39	367.43	553.67	2032.49	351.62	187.50			
	77991.08	85520.56	62535.00	59185.75	80710.10	100473.30	254697.06	136288.00	61214.58			
	1222.23	990.86	1809.63	564.16	1238.56	1709.86	3584.16	1505.77	1513.86			
	15.20	18.01	13.25	16.21	11.41	23.22	26.72	24.29	14.05			

Table 5 (continued)

Sampling stations	ST10	ST11	ST12	ST13	ST14	ST15	ST16	ST17	ST18
Particle Size- $\mu\text{m}$									
125–250	55.77	38.40	63.10	37.22	83.10	65.47	164.42	83.66	57.83
	1.52	1.50	1.19	1.74	1.91	2.28	4.78	3.30	0.50
	117.14	71.63	30.20	145.82	47.21	51.85	37.51	162.77	29.07
	94.66	101.31	49.21	190.44	101.21	118.69	110.63	159.10	59.28
	162.93	260.20	119.74	90.80	312.50	326.89	796.02	301.08	84.35
	49206.69	76838.16	39435.85	71233.84	71255.31	78060.32	100405.42	105465.36	38008.53
	871.10	825.76	1124.07	826.44	1349.95	1130.48	1782.38	1326.30	950.09
	11.56	10.21	10.59	17.91	11.76	6.83	13.01	14.91	9.89
	31.33	29.11	36.35	33.67	53.46	85.49	91.39	59.50	36.79
	0.50	1.30	0.50	1.43	1.32	1.45	1.59	1.97	0.50
250–500	95.46	52.67	67.19	120.91	48.86	51.17	54.37	-	40.64
	65.87	54.88	73.30	92.28	67.08	95.06	59.83	-	63.79
	135.84	112.24	107.34	108.36	260.81	271.64	468.44	-	186.32
	53437.98	43871.71	43608.51	59209.35	48532.13	75259.35	63585.09	-	44090.32
	960.00	586.95	775.29	771.42	864.13	1102.45	1261.35	-	785.69
	12.81	8.77	10.45	13.46	8.43	8.13	8.27	-	29.42
	27.09	19.08	28.77	22.91	40.87	79.65	69.79	-	41.23
	0.50	0.50	0.50	0.50	0.50	1.13	0.50	-	0.50
500–1000	96.67	59.46	95.78	125.02	67.23	53.20	53.28	122.13	50.89
	62.15	51.38	196.68	74.19	60.69	86.36	60.56	92.37	65.06
	71.50	62.20	262.00	24.85	152.56	194.48	179.59	72.24	195.37
	52773.36	36985.01	55361.39	41953.98	43650.28	71288.87	58084.37	53007.05	40126.96
	900.14	522.31	914.14	664.99	718.11	1002.08	877.73	932.12	713.19
	10.78	9.15	10.83	15.06	12.80	7.84	10.78	17.67	279.98
	25.88	15.07	45.16	12.55	29.80	80.41	39.52	22.30	34.61
	0.50	0.50	0.50	0.50	0.50	1.12	0.50	0.50	0.50