Supplementary data for article:

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Supplementary materials

Table 1
CF and PLI values of elements in sediment samples

SL[a]	A5	Cd	Co	Cr	Cu	Fe	Mn	Ni	Pb	V	Zn	PLI
	Contamination factor (CF)											
T1	2.96	3.95	1.22	0.96	4.16	1.35	1.97	1.13	1.66	1.44	4.95	1.998
T2	0.42	3.30	2.50	1.66	5.60	2.00	1.90	1.33	2.04	2.17	5.03	2.107
T3	1.26	3.88	2.58	1.54	6.45	1.90	2.04	1.30	2.15	2.03	5.87	2.413
T4	0.72	3.45	2.33	1.45	5.55	1.72	2.16	1.13	2.15	1.80	5.07	2.117
T5	0.37	4.98	2.75	1.70	7.68	1.89	2.66	1.37	1.94	2.01	5.39	2.301
T6	0.83	5.38	2.59	1.61	7.87	2.04	3.25	1.22	2.45	2.17	6.30	2.619
T7	0.46	4.87	2.41	1.49	6.43	1.77	2.89	1.23	1.56	1.90	5.20	2.17
T8	0.75	4.76	2.35	1.44	6.18	1.76	2.60	1.20	2.06	1.89	5.06	2.266
T9	1.35	5.47	2.62	1.55	7.57	1.91	2.80	1.33	2.42	2.04	6.17	2.67
D1	0.48	1.76	1.97	1.18	2.44	1.63	2.14	0.96	1.56	1.58	2.53	1.52
D2	3.36	1.66	1.98	1.21	2.07	1.61	1.60	1.04	1.97	1.76	2.36	1.791
D3	0.47	1.95	2.04	1.29	2.73	1.67	1.51	1.03	1.79	1.78	3.12	1.595
D4	0.37	1.84	1.87	1.22	2.51	1.53	1.38	1.01	2.27	1.58	3.30	1.518
D5	0.26	2.17	2.31	1.26	3.54	1.64	2.09	1.09	1.39	1.62	3.31	1.587
D6	0.68	4.15	2.61	1.98	3.64	1.82	1.83	2.04	2.35	1.86	3.43	2.184
S1	0.44	2.70	2.64	1.80	2.78	1.49	1.58	2.70	1.54	1.45	4.06	1.857
S2	0.53	2.36	3.47	2.47	3.17	1.89	2.71	3.63	1.99	1.78	3.20	2.241
S3	0.45	2.92	3.21	2.26	3.16	1.79	2.56	3.42	1.95	1.72	4.07	2.22
S4	0.59	3.66	3.32	2.33	2.73	1.86	2.81	3.43	1.90	1.86	3.19	2.293
I1	8.08	8.23	1.65	1.65	2.52	1.50	1.39	4.10	5.51	1.19	14.21	3.202
I2	5.96	6.50	4.40	3.71	3.43	1.94	2.09	7.89	4.55	1.67	16.43	4.272
V1	0.73	6.18	3.92	2.74	5.70	2.25	2.68	1.23	3.15	2.14	7.49	2.856
V2	1.45	5.33	3.37	2.46	4.61	1.90	1.89	4.50	3.14	1.82	6.74	3.333
Z1	1.95	2.81	1.48	1.38	13.51	1.38	1.25	2.43	1.34	1.56	3.75	2.168
Z2	1.87	5.86	3.87	3.57	4.57	1.89	1.59	6.81	3.69	1.82	9.90	3.492
JM	1.01	3.03	2.85	1.70	4.17	2.04	5.69	1.59	2.60	2.04	3.57	2.478
N1	0.44	2.07	1.98	1.39	7.39	1.58	1.13	1.03	2.39	1.84	6.16	1.86
N2	0.31	4.32	1.97	1.14	1.92	1.42	1.19	1.00	1.46	1.67	1.71	1.4
Ta	1.06	2.44	3.22	1.81	4.51	2.56	2.18	1.45	2.37	2.47	2.86	2.293
Tr	0.71	3.05	3.39	2.59	3.55	2.07	1.89	3.82	2.50	2.13	5.06	2.535
Pr	0.89	2.45	2.90	1.90	11.90	2.09	1.34	1.70	2.07	2.29	2.32	2.25
Ko	1.03	4.26	3.49	2.36	3.42	1.92	2.09	3.81	2.17	1.89	6.26	2.667
Pe	1.34	4.89	3.70	1.43	75.67	2.08	3.08	1.20	2.72	2.10	13.83	3.663
To	0.58	4.09	3.58	2.39	4.83	2.07	2.60	3.31	2.33	2.27	2.50	2.492

[a]Sample labels

Table 2
EF values of elements in sediment samples

SL[a]	As	Cd	Co	Cr	Cu	Fe	Mn	Ni	Pb	V	Zn
	Enrichment factor (EF)										
T1	1.981	2.637	0.815	0.643	2.779	0.901	1.316	0.755	1.106	0.966	3.312
T2	0.238	1.877	1.418	0.944	3.183	1.136	1.081	0.757	1.161	1.235	2.855
T3	0.630	1.935	1.288	0.769	3.213	0.948	1.019	0.647	1.071	1.012	2.927
T4	0.345	1.653	1.116	0.697	2.662	0.825	1.036	0.542	1.031	0.865	2.432
T5	0.344	4.596	2.543	1.569	7.089	1.748	2.454	1.270	1.794	1.862	4.981
T6	0.443	2.879	1.384	0.859	4.211	1.092	1.741	0.653	1.311	1.164	3.367
T7	0.640	6.719	3.322	2.062	8.882	2.442	3.985	1.703	2.157	2.629	7.175
T8	0.382	2.408	1.191	0.729	3.128	0.892	1.314	0.606	1.045	0.960	2.558
T9	0.587	2.371	1.136	0.672	3.283	0.828	1.215	0.579	1.047	0.886	2.675
D1	0.395	1.440	1.616	0.968	1.996	1.339	1.754	0.784	1.276	1.297	2.069
D2	1.371	0.675	0.807	0.492	0.843	0.658	0.652	0.423	0.803	0.717	0.960
D3	0.313	1.287	1.352	0.851	1.804	1.102	0.999	0.682	1.185	1.178	2.065
D4	0.218	1.072	1.090	0.715	1.467	0.892	0.808	0.588	1.328	0.924	1.927
D5	0.408	3.360	3.566	1.953	5.473	2.544	3.229	1.690	2.149	2.506	5.123
D6	0.458	2.789	1.755	1.331	2.450	1.224	1.229	1.372	1.579	1.256	2.303
S1	0.357	2.214	2.162	1.474	2.279	1.217	1.295	2.210	1.261	1.189	3.322
S2	0.330	1.479	2.174	1.548	1.984	1.186	1.701	2.275	1.249	1.120	2.006
S3	0.286	1.837	2.017	1.419	1.988	1.123	1.610	2.150	1.226	1.086	2.561
S4	0.392	2.431	2.201	1.548	1.808	1.237	1.863	2.275	1.260	1.239	2.117
I1	8.040	8.183	1.641	1.640	2.508	1.493	1.387	4.083	5.482	1.189	14.13
I2	3.660	3.989	2.699	2.275	2.102	1.190	1.280	4.839	2.791	1.028	10.08
V1	0.888	7.543	4.790	3.346	6.957	2.750	3.267	1.500	3.847	2.613	9.146
V2	0.863	3.162	2.003	1.457	2.733	1.126	1.123	2.672	1.864	1.083	3.997
Z1	1.501	2.159	1.136	1.058	10.369	1.058	0.957	1.862	1.026	1.203	2.876
Z2	1.186	3.710	2.453	2.262	2.894	1.198	1.009	4.311	2.335	1.154	6.267
JM	0.495	1.487	1.399	0.833	2.043	1.001	2.793	0.779	1.274	1.005	1.752
N1	0.267	1.267	1.212	0.850	4.526	0.966	0.691	0.633	1.461	1.131	3.770
N2	0.262	3.664	1.670	0.966	1.631	1.205	1.007	0.845	1.235	1.418	1.448
Ta	0.403	0.924	1.222	0.685	1.709	0.969	0.826	0.550	0.900	0.939	1.084
Tr	0.491	2.117	2.350	1.796	2.463	1.432	1.311	2.649	1.732	1.477	3.509
Pr	0.445	1.220	1.446	0.948	5.938	1.042	0.669	0.848	1.031	1.144	1.159
Ko	0.602	2.496	2.047	1.382	2.007	1.128	1.223	2.230	1.274	1.109	3.670
Pe	0.619	2.264	1.715	0.661	35.026	0.961	1.427	0.555	1.259	0.973	6.399
To	0.613	4.303	3.775	2.513	5.090	2.179	2.739	3.489	2.455	2.392	2.634

[a] Sample labels

Table 3
Igeo values of elements in sediment samples

SL[a]	As	Cd	Co	Cr	Cu	Fe	Mn	Ni	Pb	V	Zn
	Index of geoaccumation (Igeo)										
T1	0.68	0.97	< 0	< 0	1.02	< 0	0.27	< 0	0.10	< 0	1.19
T2	< 0	0.79	0.51	< 0	1.32	0.29	0.24	< 0	0.31	0.37	1.21
T3	< 0	0.95	0.54	< 0	1.46	0.24	0.31	< 0	0.36	0.30	1.36
T4	< 0	0.83	0.44	< 0	1.31	0.14	0.36	< 0	0.36	0.18	1.22
T5	< 0	1.20	0.61	< 0	1.63	0.23	0.57	< 0	0.26	0.29	1.28
T6	< 0	1.28	0.54	< 0	1.66	0.31	0.77	< 0	0.49	0.37	1.43
T7	< 0	1.18	0.47	< 0	1.46	0.17	0.65	< 0	0.04	0.24	1.24
T8	< 0	1.15	0.45	< 0	1.42	0.16	0.55	< 0	0.32	0.23	1.22
T9	< 0	1.29	0.56	< 0	1.62	0.24	0.63	< 0	0.48	0.31	1.41
D1	< 0	0.16	0.27	< 0	0.49	0.09	0.36	< 0	0.04	0.05	0.52
D2	0.81	0.10	0.28	< 0	0.32	0.07	0.06	< 0	0.27	0.16	0.45
D3	< 0	0.26	0.31	< 0	0.60	0.11	0.01	< 0	0.18	0.17	0.73
D4	< 0	0.20	0.22	< 0	0.52	0.02	< 0	< 0	0.42	0.05	0.79
D5	< 0	0.37	0.43	< 0	0.86	0.09	0.33	< 0	< 0	0.07	0.79
D6	< 0	1.02	0.55	< 0	0.89	0.19	0.20	0.31	0.45	0.22	0.83
S1	< 0	0.59	0.57	< 0	0.62	< 0	0.05	0.59	0.03	< 0	0.99
S2	< 0	0.45	0.84	< 0	0.75	0.23	0.59	0.88	0.28	0.17	0.76
S3	< 0	0.67	0.76	< 0	0.75	0.17	0.54	0.82	0.26	0.14	1.00
S4	< 0	0.89	0.79	< 0	0.60	0.22	0.63	0.83	0.24	0.22	0.75
I1	1.68	1.70	0.10	< 0	0.52	0.00	< 0	1.01	1.30	< 0	2.25
I2	1.38	1.47	1.08	0.20	0.83	0.26	0.33	1.66	1.11	0.11	2.39
V1	< 0	1.42	0.96	< 0	1.34	0.41	0.58	< 0	0.74	0.35	1.61
V2	< 0	1.27	0.81	< 0	1.12	0.24	0.23	1.10	0.74	0.19	1.50
Z1	0.26	0.63	< 0	< 0	2.20	< 0	< 0	0.48	< 0	0.04	0.92
Z2	0.22	1.36	0.95	0.16	1.11	0.23	0.06	1.51	0.90	0.19	1.89
JM	< 0	0.70	0.64	< 0	1.02	0.31	1.33	0.06	0.55	0.31	0.87
N1	< 0	0.32	0.28	< 0	1.60	0.05	< 0	< 0	0.46	0.21	1.41
N2	< 0	1.06	0.27	< 0	0.25	< 0	< 0	< 0	< 0	0.11	0.13
Ta	< 0	0.49	0.77	< 0	1.10	0.53	0.37	< 0	0.46	0.50	0.65
Tr	< 0	0.71	0.82	< 0	0.86	0.32	0.23	0.94	0.51	0.35	1.22
Pr	< 0	0.49	0.66	< 0	2.07	0.33	< 0	0.13	0.32	0.42	0.44
Ko	< 0	1.04	0.85	< 0	0.83	0.25	0.33	0.93	0.37	0.23	1.43
Pe	< 0	1.18	0.90	< 0	3.92	0.32	0.72	< 0	0.59	0.34	2.22
To	< 0	1.00	0.87	< 0	1.17	0.32	0.55	0.79	0.44	0.41	0.51

[a] Sample labels

Table 4
Er, RI and CPI values of elements in sediment samples

SL[a]	As	Cd	Cr	Cu	Ni	Pb	Zn	RI	CPI (mCd)
	Ecological risk factor (Er)								
T1	29.6	118.5	1.92	20.8	5.65	8.3	4.95	189.72	2.341
T2	4.2	99	3.32	28	6.65	10.2	5.03	156.4	2.541
T3	12.6	116.4	3.08	32.25	6.5	10.75	5.87	187.45	2.818
T4	7.2	103.5	2.9	27.75	5.65	10.75	5.07	162.82	2.503
T5	3.7	149.4	3.4	38.4	6.85	9.7	5.39	216.84	2.976
T6	8.3	161.4	3.22	39.35	6.1	12.25	6.3	236.92	3.246
T7	4.6	146.1	2.98	32.15	6.15	7.8	5.2	204.98	2.746
T8	7.5	142.8	2.88	30.9	6	10.3	5.06	205.44	2.732
T9	13.5	164.1	3.1	37.85	6.65	12.1	6.17	243.47	3.203
D1	4.8	52.8	2.36	12.2	4.8	7.8	2.53	87.29	1.657
D2	33.6	49.8	2.42	10.35	5.2	9.85	2.36	113.58	1.875
D3	4.7	58.5	2.58	13.65	5.15	8.95	3.12	96.65	1.762
D4	3.7	55.2	2.44	12.55	5.05	11.35	3.3	93.59	1.716
D5	2.6	65.1	2.52	17.7	5.45	6.95	3.31	103.63	1.880
D6	6.8	124.5	3.96	18.2	10.2	11.75	3.43	178.84	2.399
S1	4.4	81	3.6	13.9	13.5	7.7	4.06	128.16	2.107
S2	5.3	70.8	4.94	15.85	18.15	9.95	3.2	128.19	2.473
S3	4.5	87.6	4.52	15.8	17.1	9.75	4.07	143.34	2.501
S4	5.9	109.8	4.66	13.65	17.15	9.5	3.19	163.85	2.516
I1	80.8	246.9	3.3	12.6	20.5	27.55	14.21	405.86	4.548
I2	59.6	195	7.42	17.15	39.45	22.75	16.43	357.8	5.325
V1	7.3	185.4	5.48	28.5	6.15	15.75	7.49	256.07	3.474
V2	14.5	159.9	4.92	23.05	22.5	15.7	6.74	247.31	3.383
Z1	19.5	84.3	2.76	67.55	12.15	6.7	3.75	196.71	2.985
Z2	18.7	175.8	7.14	22.85	34.05	18.45	9.9	286.89	4.131
JM	10.1	90.9	3.4	20.85	7.95	13	3.57	149.77	2.754
N1	4.4	62.1	2.78	36.95	5.15	11.95	6.16	129.49	2.491
N2	3.1	129.6	2.28	9.6	5	7.3	1.71	158.59	1.646
Ta	10.6	73.2	3.62	22.55	7.25	11.85	2.86	131.93	2.448
Tr	7.1	91.5	5.18	17.75	19.1	12.5	5.06	158.19	2.796
Pr	8.9	73.5	3.8	59.5	8.5	10.35	2.32	166.87	2.895
Ko	10.3	127.8	4.72	17.1	19.05	10.85	6.26	196.08	2.973
Pe	13.4	146.7	2.86	378.35	6	13.6	13.83	574.74	10.185
To	5.8	122.7	4.78	24.15	16.55	11.65	2.5	188.13	2.777

[a] Sample labels