

Supplementary Materials

The impact of crude oil facilities on the accumulation of heavy metals and radionuclides in a coastal environment

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Table S1. Pollution factor (Cf) and pollution degree (Cd) for the determined metals in sediments.

		Cfs									Cd
Season	Site	As	Cu	Mn	Ni	Pb	Zn	Fe	Th	U	
SPR-19	A	3.94	0.19	0.14	0.35	2.30	0.50	0.20	0.8	1.78	10.19
	B	3.18	0.14	0.14	0.14	2.35	0.36	0.11	1	1.61	9.03
	C	3.03	0.13	0.21	0.09	2.40	0.30	0.15	1.3	1.10	8.72
AUT-19	A	3.36	0.16	0.10	0.15	2.23	0.41	0.13	0.6	1.21	8.34
	B	2.50	0.11	0.11	0.03	2.31	0.36	0.08	0.7	1.08	7.29
	C	2.44	0.12	0.28	0.08	2.31	0.41	0.18	1.3	1.16	8.28
SPR-20	A	3.52	0.15	0.15	0.26	2.25	0.51	0.21	0.7	1.21	8.97
	B	2.44	0.10	0.11	0.03	2.32	0.29	0.06	0.7	1.48	7.53
	C	2.44	0.12	0.12	0.08	2.28	0.23	0.10	0.8	1.30	7.47
AUT-20	A	4.94	0.25	0.16	0.64	2.39	0.59	0.27	1.1	0.85	11.20
	B	4.58	0.21	0.20	0.36	2.49	0.43	0.21	1.5	0.79	10.78
	C	4.22	0.17	0.24	0.09	2.59	0.26	0.15	1.8	0.99	10.52

Table S2. Pearson correlation coefficients (r) and statistical significance values (p) for the metals in sediments

[illegible]

Table S3. Pearson correlation coefficients (r) and statistical significance values (p) for the metals in seaweeds

	As	Cr	Cu	Fe	Mn	Ni	Pb	U	Zn
As									
Cr	0,129								
Cu	0,897***	-0,215							
Fe	0,013	0,909***	-0,254						
Mn	0,415	0,593	0,089	0,601					
Ni	0,879***	-0,247	0,989***	-0,254	0,159				
Pb	-0,124	0,904***	-0,420	0,979***	0,552	-0,427			
U	0,727**	0,124	0,725	0,174	0,104	0,684	0,055		
Zn	0,130	0,317	0,131	0,603	0,104	0,114	0,542	0,607	

*0.05<p stat. insignificant, **p<0.05 significant, ***p<0.01 highly significant

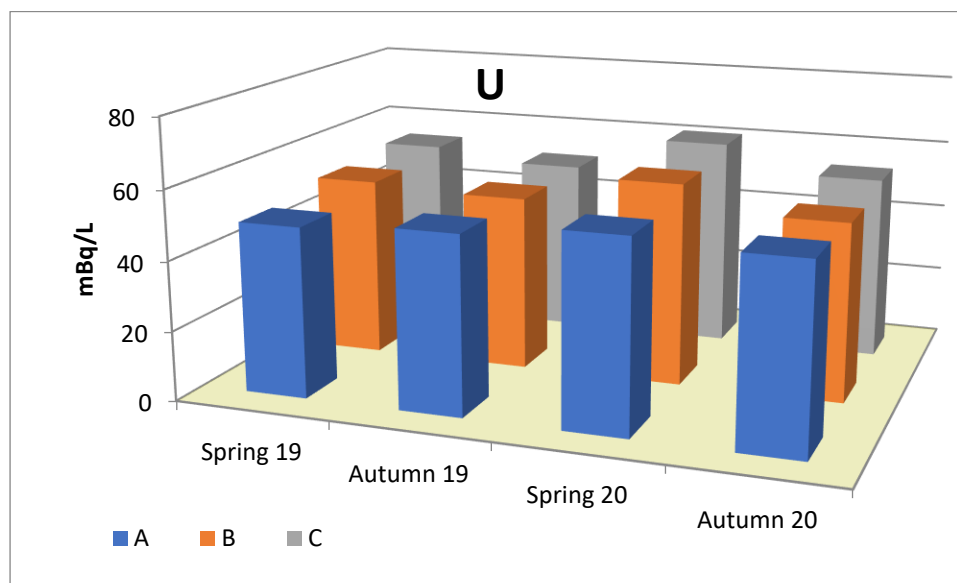


Fig. S1. Temporal variation of uranium concentration in seawater at different points.

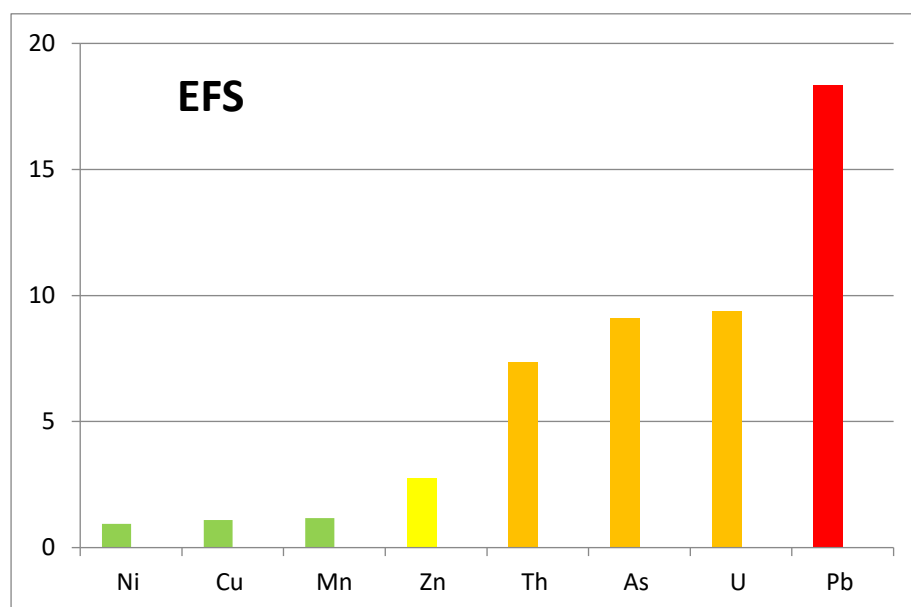


Fig. S2. Values of Enrichment factor of metals in sediments.