Supplementary material

Trophic state of sediments from two deep continental margins off Iberia: a biomimetic approach

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Supplementary Tables S1-S4

Table S1. Output of the three-way analysis of variance and pair-wise comparison testing for differences in the bioavailability of organic matter and its nutritional value between sediments collected in different habitats (open slope *vs* canyon), at different depths and in different sampling periods in the Catalan margin. *** P<0.001, **P<0.01, *P<0.05, ns=not significant. na=not available. C= Canyon, S=Slope, M=May 2004, O=October 2005, A=August 2006.

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[illegible]

	H x D	1	13.7	1.9	ns																
	T x H x D	2	35.0	4.8	*																
	Res	24	7.2																		
	Total	35																			
Hydrolysable proteins to BAOC pools	Time (T)	2	2968.2	98.0	***	O>M >A	M> O=A	M= O>A	M> O=A	ns	C> S	ns	ns	C> S	S> C	1900> 1000	ns	1900> 1000	1000 > 1900	1900> 1000	ns
	Habitat (H)	1	274.1	9.0	**																
	Depth (D)	1	20.6	0.7	ns																
	T x H	2	22.1	0.7	ns																
	T x D	2	1259.0	41.6	***																
	H x D	1	307.3	10.1	**																
	T x H x D	2	78.3	2.6	ns																
	Res	24	30.3																		
	Total	35																			

Table S2. Total protein (TPRT), total carbohydrate (TCHO), total lipid (TLIP) and biopolymeric C (BPC) concentrations in surface sediments of the Cap de Creus canyon and adjacent open slope of the Catalan margin collected in the different sampling periods. Standard deviations ($\pm$) are reported.

Habitat	Sampling period	Depth (m)	TPRT mg g ⁻¹	TCHO mg g ⁻¹	TLIP mg g ⁻¹	BPC mg g ⁻¹
Open slope	May 2004	1000	1.72 $\pm$ 0.37	3.07 $\pm$ 1.04	1.37 $\pm$ 0.58	3.10 $\pm$ 1.03
	October 2005	"	0.34 $\pm$ 0.03	1.33 $\pm$ 0.19	0.28 $\pm$ 0.06	0.91 $\pm$ 0.14
	August 2006	"	0.98 $\pm$ 0.06	0.77 $\pm$ 0.39	0.47 $\pm$ 0.04	1.14 $\pm$ 0.21
	May 2004	1900	1.27 $\pm$ 0.46	2.40 $\pm$ 0.85	0.86 $\pm$ 0.22	2.22 $\pm$ 0.73
	October 2005	"	0.78 $\pm$ 0.13	1.98 $\pm$ 0.22	0.22 $\pm$ 0.05	1.34 $\pm$ 0.19
	August 2006	"	0.63 $\pm$ 0.08	0.89 $\pm$ 0.05	0.27 $\pm$ 0.04	0.86 $\pm$ 0.08
Cap de Creus canyon	May 2004	1000	1.48 $\pm$ 0.54	1.79 $\pm$ 0.52	1.11 $\pm$ 0.43	2.28 $\pm$ 0.80
	October 2005	"	1.28 $\pm$ 0.09	3.37 $\pm$ 0.51	0.90 $\pm$ 0.08	2.65 $\pm$ 0.31
	August 2006	"	1.39 $\pm$ 0.25	1.27 $\pm$ 0.32	1.05 $\pm$ 0.17	1.98 $\pm$ 0.38
	May 2004	1900	1.06 $\pm$ 0.24	1.79 $\pm$ 0.65	0.82 $\pm$ 0.14	1.85 $\pm$ 0.48
	October 2005	"	1.07 $\pm$ 0.22	1.86 $\pm$ 0.17	0.22 $\pm$ 0.05	1.43 $\pm$ 0.22
	August 2006	"	0.73 $\pm$ 0.15	0.55 $\pm$ 0.16	0.19 $\pm$ 0.01	0.72 $\pm$ 0.14

Table S3. Output of the two-way analysis of variance and pair-wise comparison testing for differences in the bioavailability of organic matter and its nutritional value between sediments collected in different habitats (open slope *vs* canyon) and at different depths in the Portuguese margin. *** P<0.001, **P<0.01, *P<0.05, ns=not significant. C=Canyon, S=Slope.

[illegible]

	Total	23									
Bioavailable C pool	Habitat (H)	1	322610	14.3	**	C>S	ns	C>S	C>S	400 < others	ns
	Depth (D)	3	7815	0.3	ns						
	H x D	3	44877	2.0	*						
	Residual	16	22597								
	Total	23									
Bioavailable C to total biopolymeric C pool	Habitat (H)	1	1108	74.0	***	S>C	S>C	ns	C>S	400 > 960 > 3200 > 4200	960 < others
	Depth (D)	3	588	39.3	***						
	H x D	3	789	52.7	***						
	Residual	16	15								
	Total	23									
Hydrolysable proteins to BAOC pools	Habitat (H)	1	648	65.8	***	ns	S>C	C>S	C>S	400=960 > 4200 > 3200	960 < others
	Depth (D)	3	567	57.6	***						
	H x D	3	1362	138.3	***						
	Residual	16	10								
	Total	23									

Table S4. Total protein (TPRT), total carbohydrate (TCHO), total lipid (TLIP) and biopolymeric C (BPC) concentrations in surface sediments of the Nazarè canyon and adjacent open slope of the Portuguese margin. Standard deviations ($\pm$) are reported.

Habitat	Depth (m)	TPRT mg g ⁻¹	TCHO mg g ⁻¹	TLIP mg g ⁻¹	BPC mg g ⁻¹
Open slope	400	0.32 $\pm$ 0.05	0.36 $\pm$ 0.03	0.10 $\pm$ 0.02	0.37 $\pm$ 0.05
	960	0.72 $\pm$ 0.13	0.68 $\pm$ 0.12	0.11 $\pm$ 0.01	0.71 $\pm$ 0.12
	3200	1.43 $\pm$ 0.17	1.20 $\pm$ 0.12	0.20 $\pm$ 0.05	1.33 $\pm$ 0.17
	4200	1.53 $\pm$ 0.26	2.60 $\pm$ 0.74	0.58 $\pm$ 0.07	2.22 $\pm$ 0.48
Nazarè canyon	400	2.59 $\pm$ 0.90	1.94 $\pm$ 0.31	0.73 $\pm$ 0.11	2.59 $\pm$ 0.65
	960	2.43 $\pm$ 0.18	2.28 $\pm$ 0.63	0.77 $\pm$ 0.17	2.68 $\pm$ 0.47
	3200	1.63 $\pm$ 0.32	1.78 $\pm$ 0.14	0.81 $\pm$ 0.13	2.12 $\pm$ 0.31
	4200	1.88 $\pm$ 0.41	2.49 $\pm$ 0.51	0.20 $\pm$ 0.08	2.07 $\pm$ 0.46