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ON THE ROLE OF SEDIMENT COMPACTION AND TECTONIC SUBSIDENCE IN RELATIVE SEA-LEVEL RECONSTRUCTIONS – A CASE STUDY FROM THE APUO-VERSILIAN COASTAL PLAIN (NW MEDITERRANEAN) SUPPLEMENTARY MATERIAL

TABLE S1 - Geochemical parameters measured in samples from core LUN_6.1.

Depth (m bsl)	Corg in %	pH	EC (μ S/cm)	K ⁺ (mg/l)	Mg ²⁺	Na ⁺ (mg/L)	Ca ²⁺ (mg/L)	Fe ^{2+/3+} (mg/L)
0.70	9.03	5.00	1470	11.104	1.209	17.091	3.30	163.48
1.65	2.00	7.88	1129	20.078	19.343	24.646	173.29	131.83
2.50	1.62	7.38	2270					
2.85	2.18	8.19	490	28.660	12.526	76.600	155.65	137.01
3.67	6.22	7.72	602					
3.85	2.04	8.11	530	26.556	25.200	48.562	183.99	147.81
4.32	3.71	8.12	526	24.051	5.320	32.029	106.61	166.86
4.88	1.91	8.15	625	29.529	34.090	40.192	264.41	187.43
5.30	2.38	8.18	880	22.582	27.060	33.027	218.11	147.31
5.74	2.24	7.71	1685	24.281	9.477	41.486	60.20	117.79
5.84	7.07	7.83	1236	22.993	5.731	26.815	94.44	209.46
6.65	3.54	8.11	1050					
6.78	8.63							
7.45	5.16	7.79	1080	18.489	8.272	21.912	101.43	212.90
7.73	2.16	8.05	1567					
8.80	2.09	8.09	983	12.086	8.673	13.366	146.81	117.63
10.45	1.95	8.17	1445	25.329	15.823	31.641	171.77	127.47
10.85	3.60	7.81	2800	15.179	11.890	25.003	187.30	144.55
11.88	1.54	8.34	1462					

TABLE S2 - Spreadsheet for RSL calculations based on index/limiting points retrieved from cores LUN_6 and LUN_6A. The spreadsheet structure is modified after Vacchi & alii (2016).

Sample code	Lab code	Calibrated date (cal AD)	AMS d13C	Type of RSL Indicator	Indicator description	Upper limit of modern analog (m asl)	Lower limit of modern analog (m asl)	Quantification of indicative meaning	Sea level datum	Elevation measurement technique	Upper elevation of indicator (m bsl)	Lower elevation of indicator (m bsl)	Upper/Lower elevation measurement error ($\pm 1\sigma$) (m)	Indicator elevation (m asl)	Indicator elevation error (m)	Reference Water Level (m asl)	Indicative Range (m)	Paleo Relative Sea Level (m asl)	Paleo Relative Sea Level Uncertainty (\pm m)	Published VLM rate (m/ky) subs	
P4	LUN_6A_165_174	DSH9302_PE	1036 - 1184	-31 (2)	poorly decomposed plant remains	plant remains in pebbly-sandy layer (lower delta plain)	?	0	Chelli & alii, 2017; Pratellesi & alii, 2018	Italian ordnance datum (Genova 42)	DGPS (top of drilling hole) + measuring tape	0.65	0.75	0.10	-0.7	0.10	NA	NA	-0.75 (TLP)	NA	0.9
P3	LUN_6A_340_353	DSH9303_PE	1028 - 1186	-39 (2)	poorly decomposed plant remains	plant remains in pebbly-sandy layer (flood in distributary channel)	0	-3	Chelli & alii, 2017; Pratellesi & alii, 2018	Italian ordnance datum (Genova 42)	DGPS (top of drilling hole) + measuring tape	2.4	2.5	0.10	-2.45	0.10	-1.5	3	-0.95	1.5	0.9
P2	LUN6_16H	DSH3613	902-1051	-18 \pm 1‰	decomposed organic matter	organic matter accumulation on top of a sandy layer (flood in distributary channel)	0	?	Chelli & alii, 2017; Pratellesi & alii, 2018	Italian ordnance datum (Genova 42)	DGPS (top of drilling hole) + measuring tape	3.2	3.4	0.10	-3.3	0.10	NA	NA	-3.2 (MLP)	NA	0.9
P1	LUN6_36H	DSH3612	85-312	-34 \pm 2‰	decomposed organic matter	organic matter between littoral (below) and distributary channel (above)	-4	-6	Chelli & alii, 2017; Pratellesi & alii, 2018	Italian ordnance datum (Genova 42)	DGPS (top of drilling hole) + measuring tape	7.6	7.7	0.10	-7.65	0.10	-5	2	-2.65	1	0.9

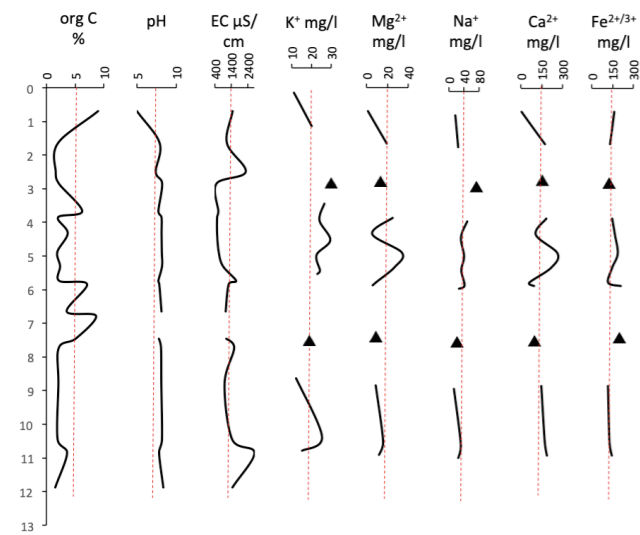


FIG. S1 Geochemical parameters measured in samples from core LUN_6.1.