

Supplementary Information

• Archaeological samples

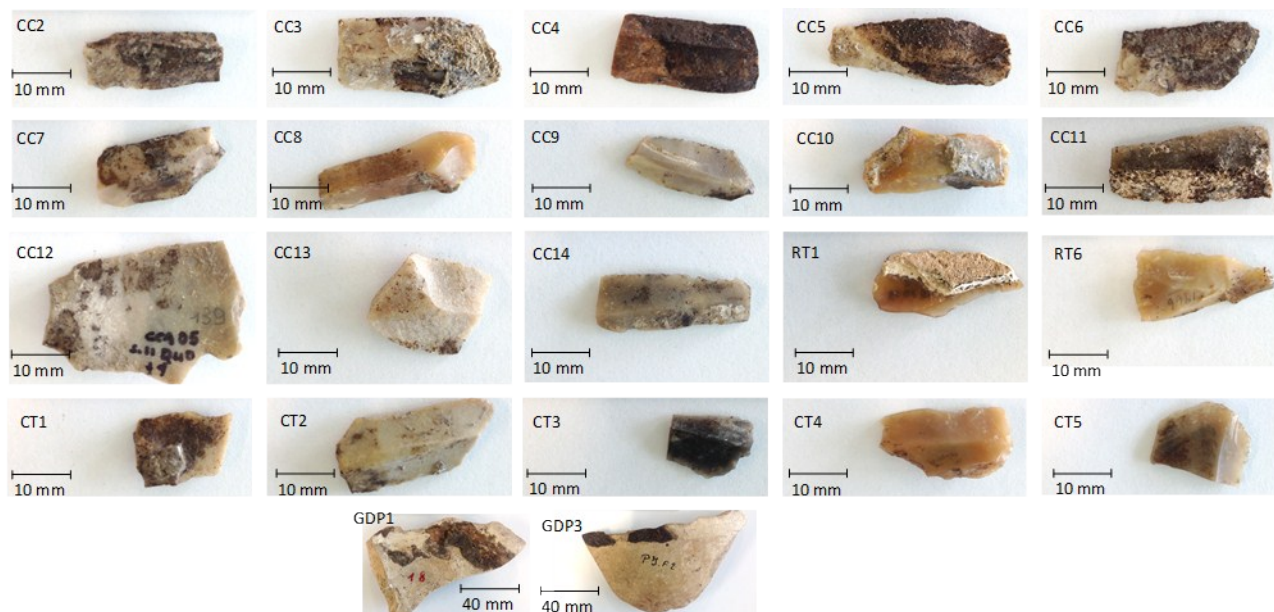


Figure S11 – Pictures of the archaeological samples examined. More information is reported in Table 1

• Biomarker parameters

Biomarker parameters were calculated according to Peters *et. al*¹. Abbreviations refer to Table 2.

Table S11 – Biomarker parameters for terpanes and steranes. Reg steranes/17 α -hopanes= measured on total regular sterane ($\alpha\alpha\alpha$ and $\alpha\beta\beta$ cholestane, ergostane and stigmastane) and 17 α -hopanes (from H29 to H33); % C27= relative abundance of C27 regular steranes (cholestane); % C28= relative abundance of C28 regular steranes (ergostane); % C29= relative abundance of C29 regular steranes (stigmastane); TA/MA+TA= calculated considering the sum of all known C-ring monoaromatic steranes peaks for MA (m/z 253) and the sum of all C26–C28 triaromatic steranes peaks for TA (m/z 231)

Sample	Reg steranes/ 17 α -hopanes	Ts/Tm	GAM/ H31R	H29/ H30	TR23/ H30	% C27	% C28	% C29	TA/ MA+TA
A1	0.11	0.14	1.07	1.54	0.15	46.2	22.4	31.4	0.14
A2	0.19	0.10	1.93	2.67	0.34	41.7	12.9	45.4	0.16
A3	0.04	0.15	1.84	2.21	0.08	27.7	37.7	34.6	0.27
A4	0.14	0.30	0.39	1.22	0.02	34.9	18.5	46.6	0.83
A5	0.16	0.73	0.23	1.35	0.05	29.9	24.4	45.7	0.74
A6	0.10	0.16	1.04	1.83	0.13	44.1	24.6	31.2	0.36
F	0.11	0.07	4.84	0.91	0.14	53.4	0.0	46.6	0.10
R1	0.17	0.68	13.84	1.42	0.15	33.7	49.0	17.3	0.43
R2	0.16	0.61	12.13	1.82	0.15	39.0	30.3	30.7	0.50
R3	0.14	0.63	5.21	0.78	0.10	41.5	24.2	34.3	0.51
CC2	0.08	0.21	1.52	1.21	0.06	14.0	21.0	65.1	-
CC3	0.00	0.22	0.47	1.65	0.00	-	-	-	-
CC4	0.00	0.00	1.81	0.61	0.00	-	-	-	-
CC5	0.12	0.26	1.83	1.18	0.02	5.4	17.6	77.0	-
CC6	0.10	0.24	1.91	1.12	0.00	9.1	19.6	71.4	-

CC7	0.08	0.21	1.78	1.08	0.01	55.0	15.1	29.9	-
CC8	0.10	0.26	2.29	1.83	0.04	7.3	64.3	28.4	-
CC9	0.10	0.25	1.70	1.30	0.03	8.3	18.1	73.5	-
CC10	0.00	0.23	1.89	1.14	0.00	-	-	-	-
CC11	0.02	0.21	2.05	1.06	0.00	19.9	12.1	68.0	-
CC12	0.07	0.25	1.74	1.17	0.09	8.5	15.8	75.7	-
CC13	0.00	0.15	1.49	3.34	0.00	-	-	-	-
CC14	0.00	0.24	1.93	1.12	0.00	-	-	-	-
CT1	0.04	0.15	1.46	1.52	0.09	2.2	22.2	75.5	-
CT2	0.06	0.13	1.66	1.50	0.24	14.8	12.3	72.9	-
CT3	0.00	0.20	3.09	6.86	0.00	-	-	-	-
CT4	0.00	0.24	1.60	1.27	0.00	-	-	-	-
CT5	0.00	0.17	1.56	1.43	0.00	-	-	-	-
GDP1	0.07	0.13	1.21	2.06	0.02	27.2	20.0	52.8	-
GDP3	0.03	0.09	1.36	1.48	0.00	18.4	35.1	46.5	-
RT1	0.00	0.11	2.84	4.96	0.80	-	-	-	-
RT6	0.00	0.11	3.11	3.42	0.57	-	-	-	-

References

1. K. Peters, C. Walters and J. Moldowan, *University of Cambridge*, 2005, **471**.