Supplemental for:
Comparison of Thaumarchaeotal Populations from Four Deep Sea Basins

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Supplementary Table 1: Environmental variables for each sample collected from each basin.

SampleID	Basin	Depth (m)	Temperature (°C)	DO (mg/L)	Salinity (psu)	Nitrite (µM)	Inorganic Phosphate (µM)	Silicate (µM)	Ammonia (µM)	Nitrate (µM)	TOC (mg/L)
GAB05NS	GAB	70	18.941	7.90	35.703	<0.01	0.035	<0.065	<0.02	0.0	1.14
GAB0513	GAB	600	8.308	7.59	34.552	<0.01	1.3	6.487	<0.02	16.9	0.70
GAB0523	GAB	1000	3.949	6.22	34.418	<0.01	2.111	41.631	<0.02	28.0	0.97
GAB05NB	GAB	1500	2.715	5.49	34.583	<0.01	2.442	73.951	<0.02	31.7	1.03
GAB09NS	GAB	60	18.748	7.96	35.57	<0.01	0.05	0.065	<0.02	0.0	0.84
GAB0913	GAB	670	8.276	7.61	34.548	<0.01	1.397	6.837	<0.02	18.9	0.91
GAB0923	GAB	1330	2.955	5.63	34.52	<0.01	2.445	63.684	<0.02	31.4	0.73
GAB09NB	GAB	1901	2.398	5.49	34.691	<0.01	2.018	57.354	<0.02	24.9	0.64
GAB14NS	GAB	185	12.754	8.14	35.168	<0.01	0.415	0.312	<0.02	4.9	1.13
GAB1413	GAB	699	7.939	7.29	34.52	<0.01	1.508	9.184	<0.02	19.7	0.77
GAB1423	GAB	990	4.539	6.34	34.394	<0.01	1.946	31.201	<0.02	23.3	0.94
GAB14NB	GAB	1472	2.699	5.40	34.592	<0.01	2.293	60.547	<0.02	27.9	0.97
GAB16NS	GAB	200	12.574	7.98	35.123	<0.01	0.492	0.963	<0.02	5.4	1.08
GAB1613	GAB	700	8.221	7.45	34.542	<0.01	1.437	7.71	<0.02	18.3	0.78
GAB1623	GAB	1650	2.621	5.45	34.624	<0.01	2.436	75.647	<0.02	29.1	1.20
GAB16NB	GAB	1994	2.275	5.59	34.71	<0.01	2.385	90.79	<0.02	33.1	0.77
GAB27NS	GAB	60	19.928	7.81	35.734	<0.01	0.013	0.42	<0.02	0.0	1.15
GAB2713	GAB	200	13.374	7.95	35.296	<0.01	0.322	0.459	<0.02	3.1	0.77
GAB2723	GAB	650	7.516	6.96	34.495	<0.01	1.615	11.977	<0.02	23.6	1.11
GAB27NB	GAB	974	4.337	6.21	34.397	<0.01	2.226	39.526	<0.02	31.7	0.88
CMS01NS	Caspian	50	11.258	8.06	11.309	0.105	0.037	0.243	0.044	0.2	5.74
CMS0113	Caspian	198	6.672	4.14	11.318	0.039	0.721	37.044	0.02	10.7	6.45
CMS0123	Caspian	401	6.208	1.73	11.379	0.036	1.52	69.402	0.02	12.4	6.32
CMS01NB	Caspian	575	6.088	0.53	11.404	0.043	1.65	84.724	0.03	3.8	6.14

CMS02NS	Caspian	30	17.747	8.31	11.156	0.047	0.03	2.488	0.02	0.2	7.42
CMS0223	Caspian	101	7.34	5.41	11.281	0.028	0.271	26.932	0.02	5.3	6.87
CMS02NB	Caspian	190	6.595	3.50	11.321	0.036	0.684	38.857	0.02	10.0	6.68
CMS03NS	Caspian	30	22.237	8.49	11.219	0.025	0.019	1.51	0.02	0.1	7.57
CMS0312	Caspian	73	9.127	6.34	11.288	0.028	0.058	11.419	0.02	1.4	6.57
CMS03NB	Caspian	130	6.96	4.79	11.304	0.023	0.406	30.376	0.02	6.7	6.60
CMS04NS	Caspian	30	24.083	8.46	11.262	0.016	0.024	1.562	0.02	0.1	7.93
CMS0423	Caspian	60	10.984	7.41	11.291	0.025	0.012	1.831	0.026	0.8	7.72
CMS04NB	Caspian	100	7.155	5.20	11.299	0.012	0.186	22.999	0.02	4.1	7.43
CMS05NS	Caspian	33	21	8.47	11.291	0.011	0.016	1.623	0.02	0.1	6.85
CMS0513	Caspian	140	7.114	5.12	11.287	0.017	0.25	26.958	0.02	5.2	6.67
CMS0523	Caspian	260	6.581	3.62	11.329	0.014	0.651	37.222	0.02	9.5	6.88
CMS05NB	Caspian	390	6.262	1.43	11.373	0.034	1.367	62.929	0.02	12.3	6.90
CMS06NS	Caspian	30	25.107	8.49	11.23	0.045	0.029	5.059	0.02	0.2	7.50
CMS06NB	Caspian	58	7.036	6.40	11.373	0.035	0.102	23.163	0.02	1.6	7.43
NDMS001	Eastern_Med	10	26.334	9.32	39.493	<0.01	0.171	0.576	0.02	0.0	1.21
NDMS002	Eastern_Med	495	13.963	6.39	38.883	<0.01	0.437	8.81	0.02	6.8	0.89
NDMS003	Eastern_Med	171	16.044	8.30	39.14	<0.01	0.16	1.388	0.02	1.9	0.96
NDMS004	Eastern_Med	346	14.48	6.92	38.994	<0.01	0.375	6.649	0.02	6.3	1.48
NDMS006	Eastern_Med	1210	13.788	5.93	38.826	<0.01	0.371	9.812	0.108	6.0	0.85
NDMS007	Eastern_Med	824	13.772	6.28	38.828	<0.01	0.381	9.635	0.02	6.5	0.68
NDMS008	Eastern_Med	250	15.565	7.95	39.148	<0.01	0.24	2.735	0.02	3.4	1.06
NDMS009	Eastern_Med	50	19.199	10.49	38.629	<0.01	0.104	0.431	0.02	0.0	1.19
NDMS011	Eastern_Med	972	13.746	6.13	38.831	<0.01	0.354	9.568	0.02	5.9	0.74
NDMS012	Eastern_Med	665	13.84	6.39	38.851	<0.01	0.367	8.97	0.028	6.6	0.70
NDMS013	Eastern_Med	250	15.535	8.04	39.158	<0.01	0.168	2.607	0.02	3.4	0.74
NDMS014	Eastern_Med	50	19.281	11.55	38.562	<0.01	0.063	0.413	0.02	0.0	1.12

NDMS016	Eastern_Med	1055	13.759	6.88	38.83	<0.01	0.327	9.985	0.02	6.4	0.75
NDMS017	Eastern_Med	720	13.815	6.40	38.839	<0.01	0.338	9.327	0.131	6.7	0.73
NDMS018	Eastern_Med	200	15.883	8.25	39.175	<0.01	0.069	1.355	0.02	2.1	0.99
NDMS019	Eastern_Med	60	17.49	10.13	38.592	<0.01	0.033	0.511	0.02	0.0	1.09
NDMS021	Eastern_Med	742	13.747	6.27	38.832	<0.01	0.298	9.737	0.02	6.3	0.83
NDMS022	Eastern_Med	511	13.935	6.63	38.877	<0.01	0.299	8.78	0.02	7.0	0.87
NDMS023	Eastern_Med	200	15.809	8.15	39.158	<0.01	0.057	1.836	0.02	2.6	0.92
NDMS024	Eastern_Med	50	18.999	10.54	38.6	<0.01	0.008	0.377	0.02	0.0	1.24
ENV14NB	Central_Med	812	13.6717	5.89	38.7417		0.196	7.593	0.042	5.1	0.92
ENV1423	Central_Med	549	13.7437	5.73	38.7564		0.224	7.362	<0.019	5.7	0.86
ENV1413	Central_Med	125	15.9371	7.05	38.5198		<0.008	0.6	<0.019	0.1	0.79
ENV14NS	Central_Med	5	17.5341	7.37	38.471		<0.008	0.711	<0.019	<0.009	0.67
ENV19NB	Central_Med	1178	13.6988	4.19	38.7373		0.167	7.443	<0.019	4.8	1.07
ENV1923	Central_Med	798	13.7063	4.08	38.7418		0.197	7.472	<0.019	5.4	0.85
ENV1913	Central_Med	173	15.0958	4.41	38.8935		<0.008	0.702	<0.019	0.7	0.71
ENV19NS	Central_Med	5	17.6931	5.12	38.4818		<0.008	0.449	<0.019	<0.009	0.66
ENV10NB	Central_Med	1792	13.7592	6.01	38.7312		0.146	7.584	<0.019	4.7	0.85
ENV1023	Central_Med	1207	13.7243	5.96	38.7357		0.175	7.38	<0.019	4.9	0.79
ENV1013	Central_Med	86	16.7904	7.15	38.5753		<0.008	0.522	0.024	0.4	0.58
ENV10NS	Central_Med	5	17.0542	7.38	38.4371		<0.008	0.677	<0.019	<0.009	0.64
ENV8NB	Central_Med	2195	13.8089	6.05	38.7284		0.167	7.435	0.097	4.6	0.91
ENV823	Central_Med	1479	13.7548	5.99	38.7359		0.084	4.171	<0.019	2.7	0.92
ENV813	Central_Med	128	15.8078	6.90	38.6665		<0.008	1.081	<0.019	1.1	0.63
ENV8NS	Central_Med	5	16.7494	7.43	38.1657		0.008	0.724	<0.019	0.0	0.59

Supplementary Table 2: qPCR gene copy numbers for each sample

	Sample	prok_ml	Bact_ml	Arch_ml	Arch_amoA_ml
Caspian	CMS01W13	3.00E+06	2.85E+06	1.58E+05	2.32E+05
	CMS01W23	4.17E+06	3.79E+06	3.77E+05	3.92E+05
	CMS01W23	4.56E+06	4.17E+06	3.84E+05	4.21E+05
	CMS01WNB	3.13E+08	3.12E+08	8.18E+05	4.86E+05
	CMS01WNB	6.40E+07	6.31E+07	8.67E+05	6.13E+05
	CMS01WNS	2.50E+08	2.48E+08	1.54E+06	9.79E+05
	CMS01WNS	2.67E+08	2.65E+08	1.76E+06	8.11E+05
	CMS02W23	2.14E+07	2.14E+07	6.98E+04	1.84E+05
	CMS02W23	8.71E+07	8.70E+07	9.40E+04	2.37E+05
	CMS02WNB	3.76E+07	3.69E+07	7.42E+05	1.02E+06
	CMS02WNB	4.96E+07	4.84E+07	1.16E+06	1.47E+06
	CMS02WNS	2.33E+07	2.32E+07	7.11E+04	1.21E+05
	CMS02WNS	1.47E+07	1.46E+07	7.56E+04	1.45E+05
	CMS03W12	5.44E+07	5.44E+07	6.58E+03	2.25E+04
	CMS03W12	1.05E+08	1.05E+08	6.96E+03	2.27E+04
	CMS03WNS	9.75E+07	9.42E+07	3.27E+06	3.26E+06
	CMS03WNS	1.17E+08	1.15E+08	1.55E+06	3.26E+06
	CMS04W23	5.14E+07	5.14E+07	3.90E+04	3.64E+04
	CMS04W23	6.63E+07	6.63E+07	2.99E+04	3.76E+04
	CMS04WNB	4.32E+07	4.18E+07	1.34E+06	1.23E+06
	CMS04WNB	2.62E+07	2.48E+07	1.40E+06	1.11E+06
	CMS04WNS	1.10E+09	1.09E+09	1.58E+06	3.13E+03
	CMS05W13	6.28E+07	6.28E+07	2.52E+04	2.00E+03
	CMS05W13	1.90E+07	1.90E+07	2.31E+04	3.02E+04
	CMS05W23	2.58E+07	2.43E+07	1.49E+06	1.23E+06
	CMS05W23	3.40E+07	3.24E+07	1.55E+06	1.02E+06
	CMS05WNB	2.37E+07	2.26E+07	1.06E+06	1.01E+06
	CMS05WNB	1.80E+07	1.59E+07	2.09E+06	1.12E+06
	CMS05WNS	2.20E+08	2.18E+08	1.82E+06	9.21E+05
	CMS05WNS	2.24E+08	2.23E+08	1.68E+06	1.07E+06
	CMS06WNB	4.95E+07	4.72E+07	2.29E+06	1.33E+06
	CMS06WNB	3.72E+07	3.48E+07	2.42E+06	1.31E+06
	CMS06WNS	2.42E+08	2.42E+08	5.20E+04	9.52E+04
	CMS06WNS	2.26E+08	2.26E+08	5.09E+04	1.40E+05

Central Mediterranean	ENV10CTDUTK13	4.84E+07	4.17E+07	6.76E+06	5.11E+04
	ENV10CTDUTK13	7.10E+07	6.30E+07	8.05E+06	7.74E+04
	ENV10CTDUTK23	3.03E+06	4.20E+05	2.61E+06	3.96E+02
	ENV10CTDUTK23	2.77E+06	1.87E+05	2.59E+06	1.34E+03
	ENV10CTDUTKNB	1.22E+07	1.28E+06	1.09E+07	1.07E+03
	ENV10CTDUTKNB	1.15E+07	1.13E+06	1.04E+07	3.39E+02
	ENV10CTDUTKNS	5.26E+07	4.56E+07	7.02E+06	1.67E+03
	ENV10CTDUTKNS	3.00E+07	2.35E+07	6.52E+06	2.43E+02
	ENV14CTDUTK13	1.62E+07	9.41E+06	6.82E+06	3.98E+04
	ENV14CTDUTK13	2.05E+07	1.14E+07	9.05E+06	6.89E+04
	ENV14CTDUTK23	1.43E+08	1.37E+08	6.28E+06	1.04E+04
	ENV14CTDUTK23	3.85E+07	3.31E+07	5.36E+06	2.73E+04
	ENV14CTDUTKNB	8.96E+05	1.35E+05	7.60E+05	2.10E+02
	ENV14CTDUTKNB	8.95E+05	1.50E+05	7.45E+05	3.75E+02
	ENV14CTDUTKNS	5.49E+07	5.41E+07	7.48E+05	1.45E+02
	ENV19CTDUTK13	6.43E+07	5.84E+07	5.82E+06	2.05E+04
	ENV19CTDUTK13	5.70E+07	5.19E+07	5.09E+06	1.96E+04
	ENV19CTDUTK23	5.38E+07	4.98E+07	3.97E+06	2.07E+04
	ENV19CTDUTK23	6.26E+07	5.85E+07	4.11E+06	3.11E+04
	ENV19CTDUTKNB	8.48E+06	6.02E+06	2.46E+06	2.10E+04
	ENV19CTDUTKNB	7.48E+06	4.89E+06	2.59E+06	2.97E+03
	ENV19CTDUTKNS	3.13E+06	2.53E+06	6.02E+05	5.90E+01
	ENV8CTDUTK13	1.06E+07	1.01E+06	9.56E+06	2.30E+03
	ENV8CTDUTK13	9.52E+06	8.48E+05	8.67E+06	1.53E+03
	ENV8CTDUTK23	7.13E+06	5.56E+06	1.57E+06	1.18E+04
	ENV8CTDUTK23	6.97E+06	5.21E+06	1.75E+06	1.18E+04
	ENV8CTDUTKNB	3.28E+07	5.24E+06	2.76E+07	8.97E+02
	ENV8CTDUTKNB	3.32E+07	2.97E+06	3.03E+07	9.88E+02
	ENV8CTDUTKNS	1.89E+07	1.09E+07	8.05E+06	1.34E+05
	ENV8CTDUTKNS	1.80E+07	1.04E+07	7.59E+06	1.31E+05

Great Australian Bight	GAB0513	9.14E+07	8.53E+07	6.14E+06	2.24E+04
	GAB0513	9.92E+07	9.15E+07	7.65E+06	4.08E+04
	GAB0523	4.37E+06	2.03E+06	2.34E+06	9.14E+03
	GAB0523	1.39E+07	2.07E+06	1.18E+07	4.41E+03
	GAB05NB	4.93E+07	4.90E+06	4.44E+07	1.37E+04
	GAB05NB	1.24E+07	2.98E+06	9.38E+06	1.14E+04
	GAB05NS	3.99E+07	4.30E+05	3.94E+07	5.48E+03
	GAB05NS	1.83E+07	8.04E+05	1.75E+07	4.89E+03
	GAB0913	4.88E+07	3.52E+07	1.36E+07	3.25E+03
	GAB0923	1.02E+08	6.41E+06	9.57E+07	3.25E+05
	GAB0923	1.78E+08	5.78E+06	1.73E+08	3.22E+05
	GAB09NB	2.65E+07	6.07E+06	2.04E+07	1.18E+04
	GAB09NB	2.93E+07	5.38E+06	2.39E+07	1.79E+04
	GAB09NS	4.99E+08	4.60E+08	3.92E+07	3.70E+03
	GAB09NS	6.14E+08	5.85E+08	2.83E+07	4.95E+03
	GAB1413	1.70E+08	7.35E+07	9.67E+07	2.32E+06
	GAB1413	2.20E+08	8.78E+07	1.32E+08	2.14E+06
	GAB1423	2.70E+08	2.95E+06	2.67E+08	4.01E+05
	GAB1423	2.91E+08	3.16E+06	2.88E+08	3.83E+05
	GAB14NB	3.51E+07	1.92E+07	1.59E+07	4.13E+04
	GAB14NB	5.03E+07	2.15E+07	2.87E+07	4.18E+04
	GAB14NS	1.30E+08	4.21E+07	8.82E+07	7.05E+03
	GAB14NS	7.66E+07	2.84E+07	4.82E+07	6.70E+03
	GAB1613	1.86E+08	8.10E+06	1.78E+08	3.28E+06
	GAB1613	1.86E+08	1.31E+07	1.73E+08	3.00E+06
	GAB1623	8.32E+07	1.21E+07	7.11E+07	1.29E+05
	GAB1623	7.92E+07	1.67E+07	6.25E+07	1.57E+05
	GAB16NB	7.42E+07	3.80E+06	7.04E+07	1.09E+04
	GAB16NB	7.59E+07	4.06E+06	7.18E+07	8.63E+03
	GAB16NS	1.46E+08	9.86E+07	4.75E+07	6.07E+03
	GAB16NS	1.13E+08	8.77E+07	2.50E+07	1.60E+03
	GAB2713	9.26E+07	6.95E+07	2.31E+07	1.86E+03
	GAB2713	6.83E+07	4.67E+07	2.16E+07	8.95E+02
	GAB2723	1.46E+08	1.36E+07	1.32E+08	2.57E+06
	GAB2723	1.36E+08	2.23E+07	1.14E+08	2.10E+06
	GAB27NB	1.30E+08	3.45E+07	9.56E+07	2.04E+05
	GAB27NB	1.50E+08	4.56E+07	1.04E+08	1.32E+05
	GAB27NS	9.80E+08	7.81E+08	2.00E+08	9.75E+04
	GAB27NS	1.06E+09	8.98E+08	1.62E+08	1.46E+05

Eastern Mediterranean	NDMS001	2.13E+08	2.13E+08	3.07E+03	9.28E+00
	NDMS001	3.27E+08	3.27E+08	3.71E+03	9.88E+00
	NDMS002	3.18E+07	2.05E+07	1.14E+07	7.18E+03
	NDMS002	4.03E+07	2.91E+07	1.12E+07	5.36E+03
	NDMS003	1.55E+07	8.14E+06	7.36E+06	4.04E+04
	NDMS003	1.90E+07	1.11E+07	7.90E+06	4.45E+04
	NDMS004	3.30E+06	5.40E+05	2.76E+06	2.53E+03
	NDMS004	3.73E+06	1.09E+06	2.64E+06	1.19E+03
	NDMS006	3.21E+06	1.45E+06	1.76E+06	6.24E+03
	NDMS006	4.32E+06	2.33E+06	1.99E+06	2.73E+03
	NDMS007	2.10E+06	6.77E+05	1.42E+06	2.85E+02
	NDMS007	2.15E+06	6.90E+05	1.46E+06	2.98E+02
	NDMS008	2.24E+07	1.01E+07	1.23E+07	8.15E+04
	NDMS008	1.56E+07	3.47E+06	1.22E+07	6.25E+04
	NDMS009	1.76E+08	1.75E+08	3.97E+05	1.63E+02
	NDMS009	1.93E+08	1.92E+08	4.56E+05	2.69E+01
	NDMS011	6.56E+04	5.74E+02	6.50E+04	7.29E+01
	NDMS012	3.19E+07	1.53E+07	1.66E+07	4.73E+03
	NDMS012	3.43E+07	2.00E+07	1.43E+07	4.89E+03
	NDMS013	1.72E+08	8.98E+07	8.22E+07	2.62E+05
	NDMS013	1.77E+08	1.01E+08	7.64E+07	2.61E+05
	NDMS014	4.02E+08	4.02E+08	2.53E+05	7.06E+00
	NDMS014	2.73E+08	2.73E+08	2.59E+05	9.30E+01
	NDMS016	1.28E+05	7.64E+03	1.20E+05	3.85E+01
	NDMS016	3.68E+05	6.26E+04	3.05E+05	3.10E+02
	NDMS017	2.14E+07	5.05E+06	1.64E+07	1.03E+03
	NDMS017	2.32E+07	5.94E+06	1.73E+07	1.60E+03
	NDMS018	3.66E+07	2.58E+07	1.08E+07	1.24E+05
	NDMS018	3.53E+07	2.38E+07	1.15E+07	1.03E+05
	NDMS019	4.19E+08	4.18E+08	9.87E+05	8.42E+02
	NDMS019	3.75E+08	3.74E+08	1.01E+06	3.30E+02
	NDMS021	6.90E+05	2.36E+05	4.54E+05	2.61E+02
	NDMS021	7.40E+05	2.02E+05	5.38E+05	7.68E+01
	NDMS022	4.66E+06	1.09E+06	3.57E+06	5.41E+02
	NDMS022	5.91E+06	1.09E+06	4.82E+06	7.37E+02
	NDMS023	3.58E+07	1.45E+07	2.13E+07	9.41E+04
	NDMS023	3.86E+07	1.76E+07	2.10E+07	9.67E+04
	NDMS024	3.88E+08	3.87E+08	5.05E+05	9.20E+02
	NDMS024	4.22E+08	4.22E+08	5.17E+05	9.62E+02

Supplementary Table 3: Statistics comparing log abundance of gene copy numbers as determined by qPCR.

	F Stat	p-value	Caspian v. GAB	Caspian v. E. Med	Caspian v. C. Med	GAB v. E. Med	GAB v. C. Med	E. Med v C. Med
Total Prokaryotes	9.339	<0.0001	0.43	0.057	0.021	0.0002	<0.0001	0.95
Bacterial 16S rRNA	5.916	0.0008	0.233	0.0038	0.0018	0.36	0.2	0.97
Archaeal 16S rRNA	53.05	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.21
Archaeal *amoA*	32.46	<0.0001	0.006	<0.0001	<0.0001	<0.0001	0.0009	0.34

Supplementary Table 4: Statistics comparing alpha diversity metrics for each basin

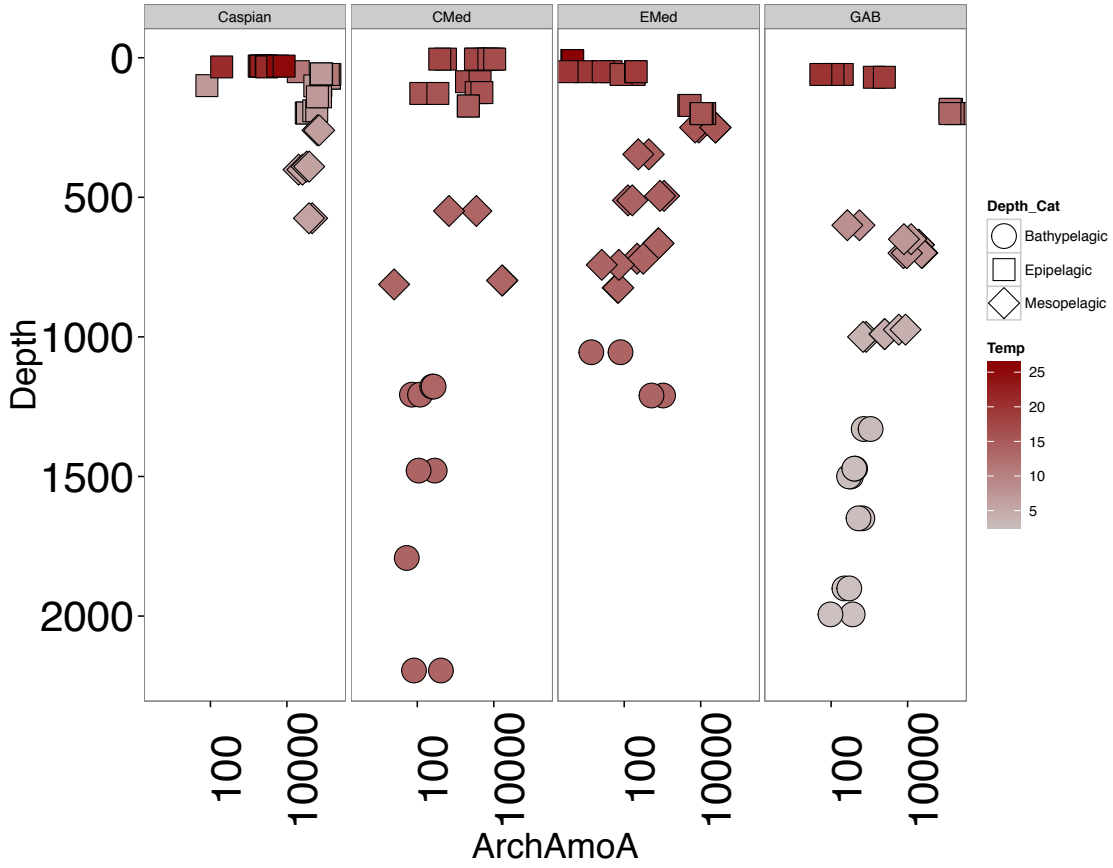
	F Stat	p value	Caspian v. E. Med	Caspian v. C. Med	Caspian v. GAB	E. Med v. GAB	E. Med v. C. Med	C. Med v. GAB
Faiths' PD	76.98	<0.0001	0	<0.0001	0	0.44	0.005	0.08
Chao1	83.86	<0.0001	0	<0.0001	0	0.15	0.001	<0.0001
Simpson	36.08	<0.0001	0	<0.0001	0	0.99	0.97	0.97
Shannon	116.9	<0.0001	0	0	0	0.96	0.017	0.037

Supplementary Table 5: Pairwise PERMANOVA comparing basins. Lower triangle is PERMANOVA p values and upper triangle is R^2 values.

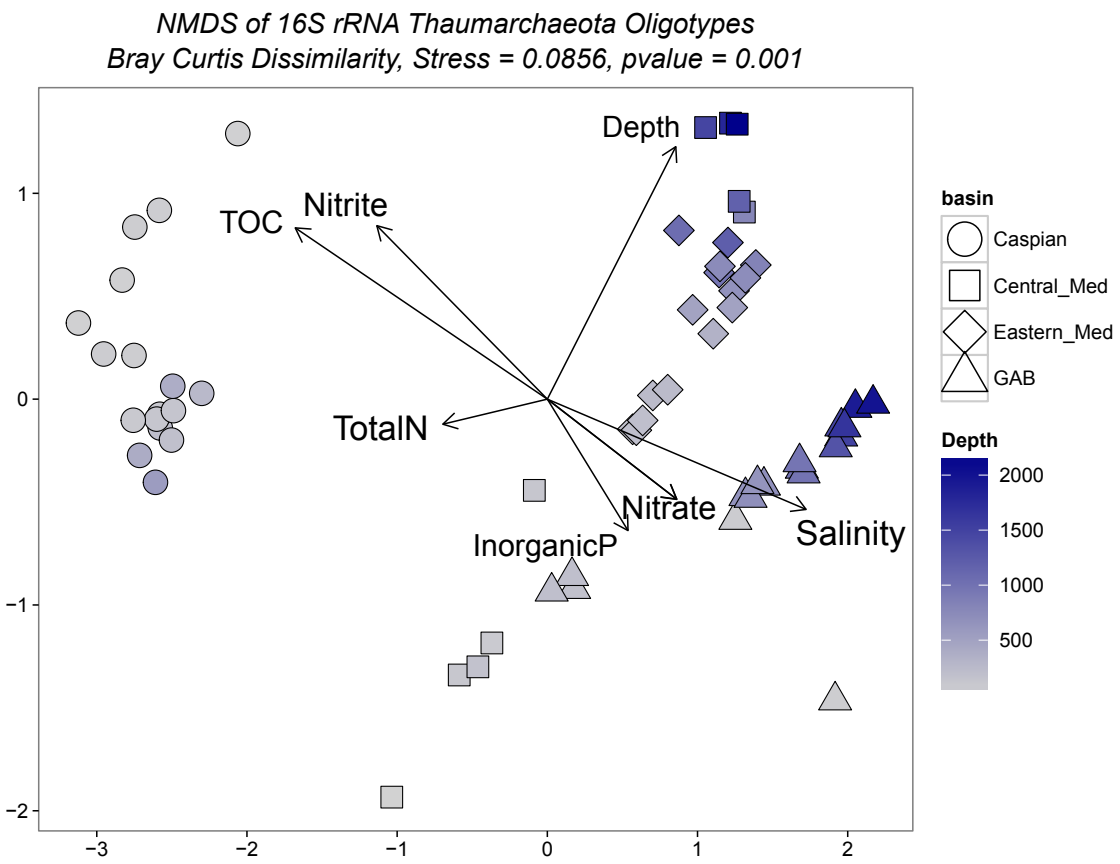
	CMS	C. Med.	E. Med.	GAB
CMS		0.5069	0.5884	0.4952
C. Med.	0.001		0.1344	0.2943
E. Med.	0.001	0.055		0.3455
GAB	0.001	0.001	0.001	

Supplementary Table 6: PERMANOVA Comparison of Geochemistry of samples from the Eastern Mediterranean with the Central Mediterranean

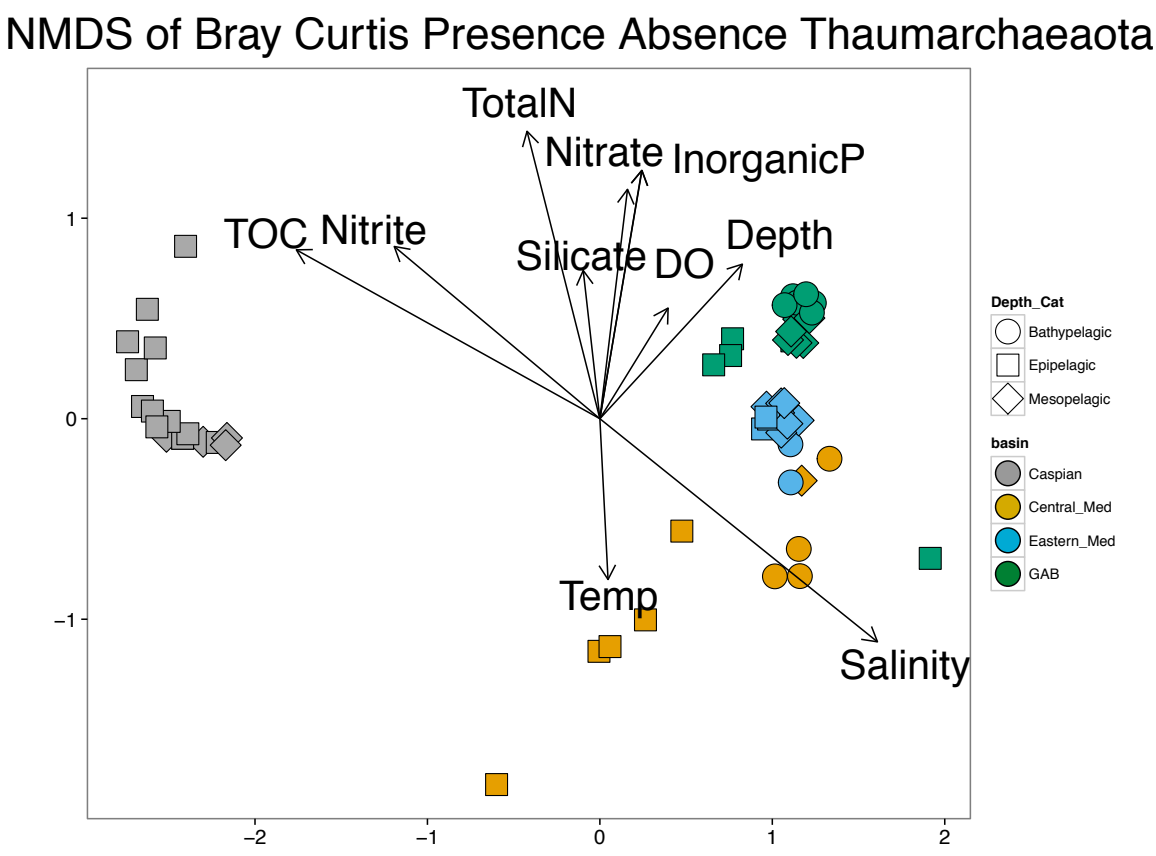
	F Model	R2	p value
E. Med versus C. Med	1.0324	0.02947	0.331



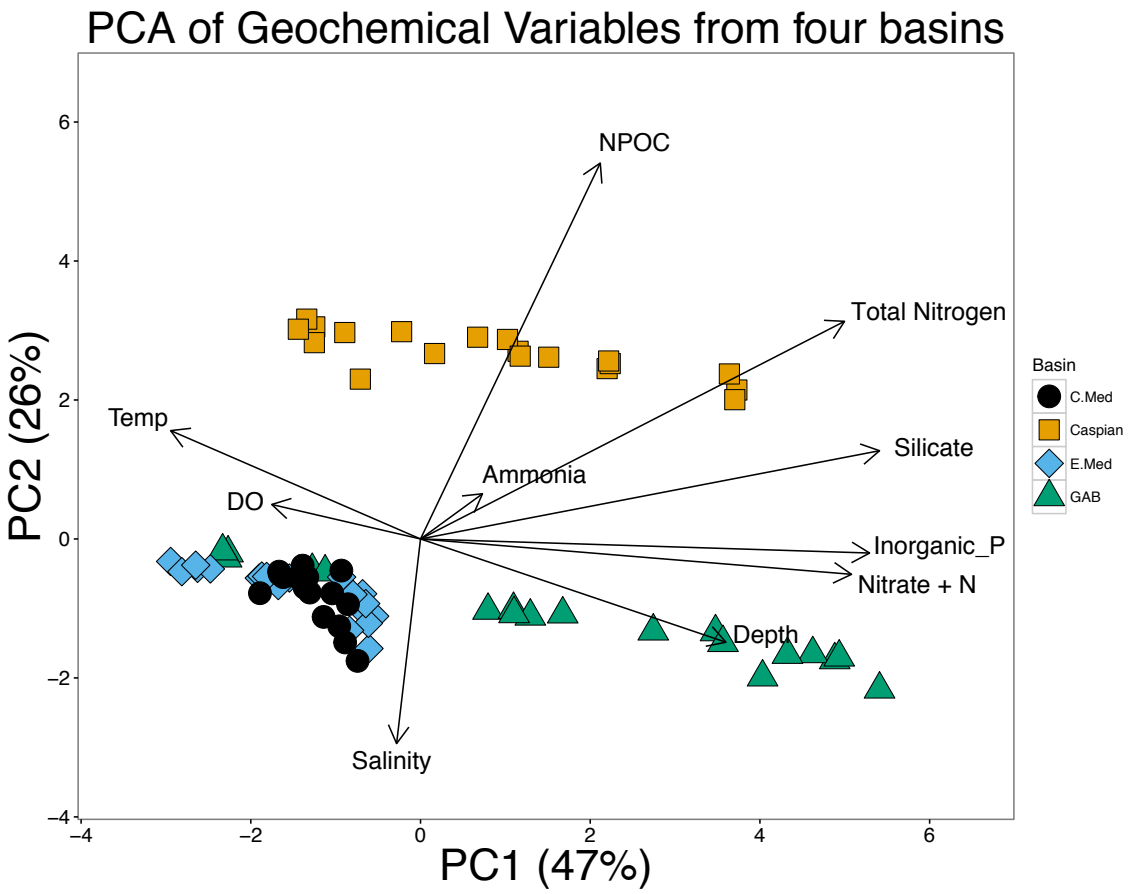
Supplementary Figure 1: Abundance of Archaeal amoA genes as function of depth in each basin.



Supplementary Figure 2: Non-metric multidimensional scaling plot with samples colored according to depth.



Supplementary Figure 3: Non-metric multidimensional scaling of Bray Curtis dissimilarity determined from an oligotype presence absence matrix. Samples colored according to basin.



Supplementary Figure 4: Principle component analysis of Euclidian distances comparing physical and chemical variables between these four basins.