

Supplementary File S1: Similarity percentage (SIMPER) analysis results for pairwise microbial plankton differences across pelagic depth zones. Prior to the data, the "Contrast" is displayed and shows the two pelagic depth zones that were compared in the subsequent analysis. The first column shows the microbial taxon ID from the GreenGenes database. The column labeled "average" shows the average abundance of each taxon in the two compared depth zones. The column "sd" displays the standard deviation in taxon abundance, and the column "ratio" shows the ratio of average abundance: standard deviation. Column "ava" shows the average abundance in the first term after "Contrast:" and "avb" shows the average abundance of the second term after "Contrast:" that follows the underscore. Column "cumsum" shows the cumulative variance (difference between two depth zones) explained by the taxa reading the table from top to bottom. Taxa are listed in the order corresponding to their individual explained variance beginning with the taxon that explains the most variance at the top of the table and the least variance at the bottom. Column "p" displays the p-value for each taxon comparison between depth zones based on 999 permutations.

	average	sd	ratio	ava	avb	cumsum	p	
1								
2	Contrast: Epipelagic_Bathypelagic							
3								
4								
5	355538	3.604e-02	2.605e-02	1.3836	7.221e-02	1.169e-04	0.04007	0.001 ***
6	833419	1.629e-02	7.428e-03	2.1932	6.665e-04	3.325e-02	0.05817	0.001 ***
7	226299	1.583e-02	1.903e-02	0.8318	7.616e-04	3.229e-02	0.07577	0.001 ***
8	777466	1.302e-02	2.999e-02	0.4341	2.408e-02	5.274e-03	0.09025	0.006 **
9	639502	1.246e-02	6.134e-03	2.0319	2.512e-02	1.946e-04	0.10410	0.001 ***
10	630928	1.218e-02	5.814e-03	2.0951	4.493e-04	2.481e-02	0.11764	0.001 ***
11	557211	1.159e-02	7.029e-03	1.6482	2.505e-02	1.943e-03	0.13052	0.130
12	845691	1.125e-02	5.640e-03	1.9941	5.409e-04	2.304e-02	0.14302	0.001 ***
13	427495	1.060e-02	9.083e-03	1.1668	2.205e-02	8.560e-04	0.15480	0.001 ***
14	1080410	1.041e-02	8.360e-03	1.2453	2.152e-03	2.272e-02	0.16637	1.000
15	839363	1.008e-02	5.564e-03	1.8126	7.921e-04	2.096e-02	0.17758	0.010 **
16	341618	9.158e-03	8.482e-03	1.0798	1.840e-02	8.314e-05	0.18776	0.289
17	1101488	8.471e-03	2.088e-02	0.4057	1.705e-03	1.779e-02	0.19718	0.067 .
18	New.Reference0TU446	7.458e-03	1.852e-02	0.4027	9.483e-04	1.526e-02	0.20547	0.206
19	227663	6.906e-03	4.939e-03	1.3983	1.383e-02	1.531e-05	0.21314	0.001 ***
20	1138756	6.159e-03	1.884e-02	0.3269	1.143e-04	1.230e-02	0.21999	0.118
21	228455	6.128e-03	5.747e-03	1.0663	1.228e-02	3.126e-05	0.22680	0.403
22	884345	6.102e-03	4.287e-03	1.4233	3.772e-03	1.487e-02	0.23359	0.995
23	832816	5.908e-03	3.489e-03	1.6930	1.198e-02	1.666e-04	0.24015	0.001 ***
24	225284	5.646e-03	6.654e-03	0.8485	2.129e-04	1.148e-02	0.24643	0.001 ***
25	694744	5.642e-03	3.774e-03	1.4952	1.129e-02	6.263e-06	0.25270	0.001 ***
26	539147	5.613e-03	2.989e-03	1.8781	1.125e-02	1.890e-05	0.25894	0.001 ***
27	956811	5.608e-03	1.250e-02	0.4488	9.783e-03	2.991e-03	0.26517	0.005 **
28	1106009	5.514e-03	3.836e-03	1.4374	1.261e-02	1.585e-03	0.27130	0.001 ***
29	833871	5.451e-03	3.253e-03	1.6757	1.092e-02	1.951e-05	0.27736	0.001 ***
30	320821	5.445e-03	3.242e-03	1.6794	1.090e-02	1.107e-05	0.28341	0.001 ***
31	1082059	5.378e-03	3.869e-03	1.3898	7.780e-03	1.373e-02	0.28939	0.488
32	1128468	5.024e-03	1.172e-02	0.4288	8.662e-03	2.136e-03	0.29497	0.004 **
33	1111501	4.851e-03	4.389e-03	1.1052	9.757e-03	5.587e-05	0.30037	0.001 ***
34	351294	4.838e-03	2.845e-03	1.7002	3.754e-03	1.322e-02	0.30574	0.080 .
35	141607	4.783e-03	4.988e-03	0.9589	3.419e-03	9.380e-03	0.31106	0.001 ***

36	554951	4.765e-03	2.056e-03	2.3181	2.550e-04	9.786e-03	0.31636	0.001	***
37	231191	4.677e-03	3.023e-03	1.5470	9.753e-03	3.995e-04	0.32156	0.001	***
38	826517	4.629e-03	1.761e-03	2.6287	3.346e-04	9.592e-03	0.32670	0.001	***
39	160817	4.594e-03	3.056e-03	1.5035	9.448e-04	1.013e-02	0.33181	0.001	***
40	4479015	4.537e-03	1.795e-03	2.5273	1.161e-04	9.191e-03	0.33685	0.001	***
41	509913	4.512e-03	5.564e-03	0.8109	1.238e-03	9.662e-03	0.34187	0.001	***
42	560276	4.510e-03	4.701e-03	0.9595	9.177e-03	1.797e-04	0.34688	0.001	***
43	228608	4.104e-03	3.525e-03	1.1643	8.215e-03	5.633e-06	0.35144	0.001	***
44	753560	3.856e-03	6.743e-03	0.5718	7.390e-04	8.273e-03	0.35573	0.047	*
45	268433	3.815e-03	2.093e-03	1.8224	7.685e-03	7.102e-05	0.35997	0.001	***
46	315098	3.660e-03	2.955e-03	1.2387	7.451e-03	1.726e-04	0.36404	0.001	***
47	358464	3.549e-03	9.700e-03	0.3659	2.067e-05	7.086e-03	0.36798	0.078	.
48	549048	3.516e-03	3.796e-03	0.9263	7.045e-03	1.624e-05	0.37189	0.001	***
49	592779	3.410e-03	3.164e-03	1.0780	6.824e-03	4.663e-06	0.37568	0.001	***
50	834169	3.398e-03	1.818e-03	1.8695	1.207e-05	6.808e-03	0.37946	0.001	***
51	New.Reference0TU128	3.274e-03	1.200e-03	2.7291	3.681e-04	6.916e-03	0.38310	0.001	***
52	1007856	3.232e-03	1.369e-03	2.3609	1.449e-04	6.601e-03	0.38669	0.001	***
53	310272	3.185e-03	2.373e-03	1.3424	3.581e-04	6.705e-03	0.39023	0.696	
54	250570	3.182e-03	2.523e-03	1.2611	6.862e-03	6.452e-04	0.39377	0.001	***
55	554945	3.175e-03	2.232e-03	1.4227	6.351e-03	0.000e+00	0.39730	0.001	***
56	1108577	3.150e-03	3.541e-03	0.8896	6.383e-03	8.373e-05	0.40080	0.789	
57	60638	3.136e-03	2.971e-03	1.0558	6.273e-03	0.000e+00	0.40429	0.001	***
58	323489	3.077e-03	3.040e-03	1.0123	6.590e-04	6.612e-03	0.40771	1.000	
59	711803	3.001e-03	3.963e-03	0.7572	3.467e-06	6.006e-03	0.41104	0.001	***
60	New.Reference0TU698	2.994e-03	1.106e-03	2.7060	6.008e-03	2.000e-05	0.41437	0.001	***
61	646549	2.840e-03	3.667e-03	0.7747	1.752e-03	6.182e-03	0.41753	0.810	
62	119502	2.801e-03	2.793e-03	1.0028	5.738e-03	1.612e-04	0.42064	0.001	***
63	1107076	2.735e-03	4.074e-03	0.6713	3.017e-03	4.118e-03	0.42368	0.209	
64	839203	2.679e-03	1.527e-03	1.7538	7.634e-06	5.365e-03	0.42666	0.001	***
65	536001	2.676e-03	3.400e-03	0.7870	5.700e-03	5.022e-04	0.42963	0.231	
66	New.Reference0TU882	2.668e-03	2.832e-03	0.9422	5.379e-03	4.306e-05	0.43260	0.514	
67	844663	2.635e-03	1.590e-03	1.6575	2.199e-04	5.465e-03	0.43553	0.001	***
68	110119	2.635e-03	1.818e-03	1.4488	5.074e-03	8.588e-03	0.43846	0.161	
69	581028	2.572e-03	1.713e-03	1.5015	5.844e-04	5.717e-03	0.44132	0.001	***
70	860929	2.544e-03	2.994e-03	0.8498	4.891e-04	5.299e-03	0.44414	0.001	***

71	New.Reference0TU44	2.482e-03	2.116e-03	1.1731	5.522e-04	5.494e-03	0.44690	0.551	
72	842800	2.455e-03	1.541e-03	1.5928	2.461e-04	5.150e-03	0.44963	0.987	
73	817600	2.413e-03	2.129e-03	1.1338	4.879e-03	5.665e-05	0.45231	1.000	
74	352531	2.382e-03	2.875e-03	0.8285	4.769e-03	5.535e-06	0.45496	0.578	
75	1105428	2.369e-03	3.771e-03	0.6281	4.742e-03	6.344e-06	0.45759	0.820	
76	833961	2.351e-03	1.954e-03	1.2031	4.718e-03	1.600e-05	0.46021	0.001	***
77	103709	2.314e-03	8.228e-04	2.8124	4.652e-03	2.347e-05	0.46278	0.001	***
78	3156804	2.276e-03	1.248e-03	1.8245	4.688e-03	1.620e-04	0.46531	0.005	**
79	832702	2.276e-03	8.434e-04	2.6983	6.808e-05	4.619e-03	0.46784	0.001	***
80	979107	2.265e-03	4.261e-03	0.5315	4.548e-04	4.800e-03	0.47036	0.058	.
81	834856	2.186e-03	1.256e-03	1.7403	1.844e-04	4.546e-03	0.47279	0.001	***
82	353181	2.135e-03	1.539e-03	1.3868	4.309e-03	3.941e-05	0.47516	0.579	
83	361839	2.131e-03	1.562e-03	1.3648	4.314e-03	5.215e-05	0.47753	0.001	***
84	New.Reference0TU397	2.108e-03	1.735e-03	1.2150	4.215e-03	0.000e+00	0.47987	0.001	***
85	832374	2.107e-03	9.101e-04	2.3153	2.119e-04	4.411e-03	0.48221	0.001	***
86	New.Reference0TU697	2.098e-03	7.461e-04	2.8118	7.883e-05	4.275e-03	0.48455	0.001	***
87	810040	2.048e-03	9.267e-04	2.2099	2.945e-05	4.125e-03	0.48682	0.001	***
88	542823	2.047e-03	1.970e-03	1.0389	4.143e-03	5.139e-05	0.48910	0.003	**
89	New.Reference0TU414	2.025e-03	2.051e-03	0.9872	5.024e-04	4.462e-03	0.49135	0.001	***
90	653733	1.981e-03	1.659e-03	1.1941	3.968e-03	5.712e-06	0.49355	0.001	***
91	830634	1.937e-03	1.308e-03	1.4807	6.178e-05	3.931e-03	0.49570	0.002	**
92	New.Reference0TU610	1.934e-03	2.302e-03	0.8402	3.873e-03	8.706e-06	0.49785	0.001	***
93	544313	1.907e-03	2.287e-03	0.8336	1.426e-04	3.896e-03	0.49997	0.003	**
94	838079	1.888e-03	1.015e-03	1.8600	1.270e-05	3.787e-03	0.50207	0.001	***
95	119137	1.886e-03	2.273e-03	0.8297	4.694e-03	1.326e-03	0.50417	0.005	**
96	1102212	1.878e-03	1.377e-03	1.3640	3.757e-03	0.000e+00	0.50626	0.001	***
97	147658	1.865e-03	1.405e-03	1.3276	3.887e-03	1.982e-04	0.50833	0.001	***
98	548576	1.854e-03	3.531e-03	0.5252	1.827e-04	3.759e-03	0.51039	0.019	*
99	New.Reference0TU71	1.848e-03	1.299e-03	1.4220	3.700e-03	6.332e-06	0.51244	0.001	***
100	581343	1.837e-03	8.700e-04	2.1117	3.779e-03	1.043e-04	0.51448	0.001	***
101	182418	1.810e-03	3.928e-03	0.4607	2.546e-04	3.626e-03	0.51650	0.064	.
102	108953	1.785e-03	8.113e-04	2.2000	5.980e-05	3.629e-03	0.51848	0.001	***
103	347913	1.782e-03	1.152e-03	1.5462	2.250e-04	3.779e-03	0.52046	0.388	
104	592269	1.779e-03	3.056e-03	0.5821	3.643e-03	9.686e-05	0.52244	0.990	
105	4479541	1.767e-03	1.288e-03	1.3722	3.540e-03	6.612e-06	0.52440	0.001	***

106	834104	1.765e-03	8.755e-04	2.0161	2.118e-04	3.732e-03	0.52636	0.001	***
107	1084865	1.749e-03	1.881e-03	0.9300	5.411e-04	3.979e-03	0.52831	0.002	**
108	583907	1.738e-03	4.468e-03	0.3889	2.741e-05	3.467e-03	0.53024	0.083	.
109	234197	1.733e-03	1.353e-03	1.2813	3.644e-03	2.186e-04	0.53217	0.001	***
110	826571	1.729e-03	7.744e-04	2.2325	6.426e-05	3.522e-03	0.53409	0.001	***
111	833273	1.727e-03	9.087e-04	1.9004	2.036e-04	3.657e-03	0.53601	0.001	***
112	355527	1.701e-03	2.819e-03	0.6032	3.442e-03	4.734e-05	0.53790	0.999	
113	112306	1.691e-03	9.739e-04	1.7358	2.970e-05	3.408e-03	0.53978	0.001	***
114	757981	1.683e-03	9.428e-04	1.7853	1.615e-05	3.382e-03	0.54165	0.001	***
115	New.Reference0TU752	1.668e-03	4.837e-03	0.3449	5.765e-04	3.229e-03	0.54350	0.216	
116	552671	1.658e-03	2.221e-03	0.7467	7.182e-05	3.380e-03	0.54535	0.001	***
117	926160	1.652e-03	8.630e-03	0.1915	7.917e-05	3.274e-03	0.54718	0.343	
118	1584736	1.642e-03	1.176e-03	1.3969	3.285e-03	1.772e-07	0.54901	0.001	***
119	823035	1.630e-03	2.082e-03	0.7829	3.478e-03	3.471e-04	0.55082	0.001	***
120	779725	1.615e-03	1.004e-03	1.6089	4.592e-04	3.613e-03	0.55262	0.001	***
121	825320	1.578e-03	1.910e-03	0.8265	3.220e-03	8.876e-05	0.55437	0.001	***
122	317124	1.576e-03	4.423e-03	0.3564	3.148e-03	8.989e-06	0.55612	0.004	**
123	231973	1.572e-03	2.246e-03	0.6999	3.165e-03	3.957e-05	0.55787	0.001	***
124	836341	1.566e-03	1.031e-03	1.5183	1.146e-03	3.798e-03	0.55961	0.001	***
125	227717	1.554e-03	1.394e-03	1.1146	3.131e-03	2.473e-05	0.56134	0.002	**
126	827407	1.550e-03	9.002e-04	1.7217	7.352e-04	3.790e-03	0.56306	0.011	*
127	830400	1.522e-03	1.352e-03	1.1256	3.473e-03	9.216e-04	0.56475	0.001	***
128	1105105	1.522e-03	7.978e-04	1.9076	3.180e-03	1.365e-04	0.56644	0.104	
129	841316	1.517e-03	8.065e-04	1.8806	6.043e-04	3.602e-03	0.56813	0.001	***

130 [reached getopt("max.print") -- omitted 7857 rows]

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132 Contrast: Epipelagic_Surface

133

134		average	sd	ratio	ava	avb	cumsum	p	
135	355538	2.931e-02	2.346e-02	1.2494	7.221e-02	5.953e-02	0.04606	0.005	**
136	557211	1.325e-02	9.795e-03	1.3527	2.505e-02	4.150e-02	0.06688	0.013	*
137	777466	1.206e-02	3.087e-02	0.3906	2.408e-02	1.433e-03	0.08583	0.050	*
138	817600	1.204e-02	1.110e-02	1.0850	4.879e-03	2.864e-02	0.10475	0.001	***
139	341618	1.196e-02	7.224e-03	1.6556	1.840e-02	3.711e-02	0.12354	0.002	**
140	228455	9.238e-03	1.086e-02	0.8505	1.228e-02	2.176e-02	0.13806	0.002	**

141	639502	8.740e-03	7.036e-03	1.2423	2.512e-02	3.588e-02	0.15179	0.630	
142	427495	8.172e-03	7.645e-03	1.0691	2.205e-02	2.029e-02	0.16464	0.045	*
143	355527	7.999e-03	7.910e-03	1.0113	3.442e-03	1.774e-02	0.17721	0.001	***
144	315563	7.553e-03	1.109e-02	0.6812	1.147e-03	1.501e-02	0.18908	0.001	***
145	1082059	6.900e-03	9.401e-03	0.7339	7.780e-03	1.195e-02	0.19992	0.035	*
146	1108577	5.623e-03	3.723e-03	1.5104	6.383e-03	1.501e-02	0.20876	0.001	***
147	592269	5.426e-03	3.458e-03	1.5691	3.643e-03	1.256e-02	0.21728	0.001	***
148	227663	5.267e-03	4.319e-03	1.2194	1.383e-02	7.264e-03	0.22556	0.001	***
149	694744	5.221e-03	3.634e-03	1.4368	1.129e-02	1.245e-03	0.23376	0.001	***
150	1105428	5.127e-03	5.070e-03	1.0112	4.742e-03	1.106e-02	0.24182	0.001	***
151	956811	4.969e-03	1.296e-02	0.3834	9.783e-03	8.836e-04	0.24963	0.054	.
152	833871	4.953e-03	3.147e-03	1.5736	1.092e-02	2.102e-03	0.25741	0.001	***
153	539147	4.845e-03	2.794e-03	1.7342	1.125e-02	3.961e-03	0.26503	0.001	***
154	320821	4.599e-03	3.075e-03	1.4954	1.090e-02	2.987e-03	0.27225	0.001	***
155	1109816	4.551e-03	3.350e-03	1.3583	2.097e-03	1.076e-02	0.27940	0.001	***
156	1128468	4.357e-03	1.213e-02	0.3593	8.662e-03	1.694e-04	0.28625	0.055	.
157	592771	4.275e-03	2.744e-03	1.5579	2.233e-03	9.343e-03	0.29297	0.001	***
158	New.Reference0TU882	4.212e-03	3.967e-03	1.0616	5.379e-03	1.050e-02	0.29959	0.001	***
159	151344	4.065e-03	4.034e-03	1.0078	2.807e-04	8.360e-03	0.30598	0.001	***
160	560276	4.063e-03	4.499e-03	0.9031	9.177e-03	1.875e-03	0.31236	0.001	***
161	536001	4.050e-03	3.739e-03	1.0830	5.700e-03	7.657e-03	0.31872	0.001	***
162	352531	4.044e-03	3.314e-03	1.2205	4.769e-03	9.698e-03	0.32508	0.001	***
163	1111501	3.986e-03	3.202e-03	1.2448	9.757e-03	1.046e-02	0.33134	0.029	*
164	231191	3.954e-03	3.348e-03	1.1809	9.753e-03	8.234e-03	0.33756	0.003	**
165	341734	3.844e-03	2.672e-03	1.4389	8.622e-04	8.276e-03	0.34360	0.001	***
166	228608	3.824e-03	3.296e-03	1.1602	8.215e-03	1.919e-03	0.34961	0.001	***
167	338106	3.688e-03	5.263e-03	0.7008	2.694e-04	7.414e-03	0.35540	0.001	***
168	343231	3.667e-03	3.042e-03	1.2054	2.305e-03	8.194e-03	0.36117	0.001	***
169	1106009	3.551e-03	2.839e-03	1.2507	1.261e-02	1.295e-02	0.36675	0.422	
170	268433	3.491e-03	2.043e-03	1.7083	7.685e-03	1.157e-03	0.37223	0.001	***
171	106179	3.447e-03	1.976e-03	1.7442	1.701e-03	8.257e-03	0.37765	0.001	***
172	315098	3.438e-03	2.858e-03	1.2028	7.451e-03	9.621e-04	0.38305	0.001	***
173	549048	3.418e-03	3.683e-03	0.9280	7.045e-03	5.514e-04	0.38842	0.001	***
174	832816	3.358e-03	2.685e-03	1.2510	1.198e-02	9.769e-03	0.39370	0.401	
175	592779	3.207e-03	3.064e-03	1.0468	6.824e-03	7.887e-04	0.39874	0.001	***

176	250570	3.111e-03	2.446e-03	1.2721	6.862e-03	1.694e-03	0.40363	0.001	***
177	353181	3.030e-03	2.228e-03	1.3599	4.309e-03	9.260e-03	0.40839	0.001	***
178	554945	2.967e-03	2.144e-03	1.3837	6.351e-03	1.121e-03	0.41305	0.001	***
179	119502	2.780e-03	2.693e-03	1.0324	5.738e-03	9.477e-04	0.41742	0.001	***
180	60638	2.749e-03	2.841e-03	0.9677	6.273e-03	1.380e-03	0.42174	0.001	***
181	551207	2.500e-03	2.838e-03	0.8808	1.362e-03	5.539e-03	0.42567	0.001	***
182	740763	2.497e-03	2.340e-03	1.0672	1.383e-03	5.397e-03	0.42960	0.001	***
183	110119	2.315e-03	1.850e-03	1.2516	5.074e-03	1.083e-03	0.43323	0.902	
184	774258	2.292e-03	2.937e-03	0.7804	7.779e-04	4.616e-03	0.43683	0.001	***
185	234994	2.290e-03	2.139e-03	1.0706	1.263e-03	4.802e-03	0.44043	0.001	***
186	833961	2.217e-03	1.890e-03	1.1728	4.718e-03	1.154e-03	0.44392	0.001	***
187	773487	2.185e-03	1.359e-03	1.6077	7.327e-04	4.799e-03	0.44735	0.001	***
188	119137	2.160e-03	1.856e-03	1.1634	4.694e-03	3.876e-03	0.45074	0.001	***
189	1107422	2.130e-03	2.883e-03	0.7390	8.287e-04	4.023e-03	0.45409	0.001	***
190	591130	2.115e-03	2.465e-03	0.8580	1.281e-03	5.109e-03	0.45742	0.001	***
191	234927	2.115e-03	1.397e-03	1.5131	1.749e-03	5.574e-03	0.46074	0.001	***
192	884345	2.080e-03	2.664e-03	0.7808	3.772e-03	1.926e-03	0.46401	1.000	
193	147658	2.012e-03	1.523e-03	1.3210	3.887e-03	1.212e-03	0.46717	0.001	***
194	New.Reference0TU252	2.006e-03	3.001e-03	0.6685	8.859e-05	3.987e-03	0.47032	0.001	***
195	New.Reference0TU397	1.979e-03	1.685e-03	1.1745	4.215e-03	4.020e-04	0.47343	0.001	***
196	3156804	1.957e-03	1.645e-03	1.1898	4.688e-03	6.879e-03	0.47651	0.178	
197	232905	1.953e-03	1.132e-03	1.7252	9.775e-04	4.573e-03	0.47958	0.001	***
198	314474	1.946e-03	1.253e-03	1.5531	5.172e-04	4.322e-03	0.48263	0.001	***
199	592350	1.888e-03	2.229e-03	0.8470	2.360e-03	5.104e-03	0.48560	0.002	**
200	New.Reference0TU610	1.883e-03	2.232e-03	0.8435	3.873e-03	3.240e-04	0.48856	0.001	***
201	361839	1.867e-03	1.488e-03	1.2551	4.314e-03	9.049e-04	0.49149	0.001	***
202	4475220	1.847e-03	1.594e-03	1.1586	6.060e-04	4.066e-03	0.49440	0.001	***
203	542823	1.837e-03	1.608e-03	1.1425	4.143e-03	5.397e-03	0.49728	0.042	*
204	227866	1.827e-03	1.899e-03	0.9618	1.386e-03	3.985e-03	0.50015	0.001	***
205	1102212	1.825e-03	1.340e-03	1.3612	3.757e-03	9.821e-04	0.50302	0.001	***
206	653733	1.770e-03	1.576e-03	1.1228	3.968e-03	7.598e-04	0.50580	0.001	***
207	356368	1.740e-03	9.645e-04	1.8046	4.898e-04	3.878e-03	0.50854	0.001	***
208	243160	1.739e-03	1.737e-03	1.0013	1.441e-04	3.596e-03	0.51127	0.001	***
209	1108696	1.730e-03	1.291e-03	1.3400	5.208e-04	3.868e-03	0.51399	0.001	***
210	563843	1.704e-03	1.298e-03	1.3132	2.919e-03	5.795e-03	0.51667	0.015	*

211	1109402	1.671e-03	1.369e-03	1.2206	6.559e-04	3.585e-03	0.51929	0.001	***
212	141607	1.661e-03	3.741e-03	0.4439	3.419e-03	6.523e-04	0.52190	0.995	
213	823035	1.658e-03	2.076e-03	0.7987	3.478e-03	3.427e-04	0.52451	0.001	***
214	830400	1.643e-03	1.472e-03	1.1164	3.473e-03	3.754e-04	0.52709	0.001	***
215	1105105	1.612e-03	1.157e-03	1.3929	3.180e-03	5.839e-03	0.52962	0.040	*
216	249226	1.606e-03	1.023e-03	1.5695	1.587e-03	4.293e-03	0.53215	0.001	***
217	569884	1.605e-03	1.499e-03	1.0709	1.484e-03	3.815e-03	0.53467	0.001	***
218	4479541	1.604e-03	1.237e-03	1.2971	3.540e-03	6.244e-04	0.53719	0.001	***
219	317124	1.598e-03	4.405e-03	0.3629	3.148e-03	7.802e-05	0.53970	0.001	***
220	323305	1.595e-03	2.221e-03	0.7182	5.686e-04	3.273e-03	0.54221	0.001	***
221	234197	1.591e-03	1.284e-03	1.2396	3.644e-03	6.669e-04	0.54471	0.001	***
222	New.Reference0TU238	1.590e-03	1.062e-03	1.4970	1.487e-03	4.406e-03	0.54721	0.001	***
223	344865	1.559e-03	8.783e-04	1.7752	8.894e-04	3.706e-03	0.54966	0.001	***
224	344629	1.557e-03	1.455e-03	1.0698	9.589e-04	3.378e-03	0.55210	0.001	***
225	1584736	1.538e-03	1.142e-03	1.3464	3.285e-03	3.070e-04	0.55452	0.001	***
226	1011088	1.536e-03	1.852e-03	0.8294	1.784e-04	3.224e-03	0.55693	0.074	.
227	New.Reference0TU698	1.528e-03	1.207e-03	1.2664	6.008e-03	3.668e-03	0.55934	0.261	
228	New.Reference0TU71	1.524e-03	1.072e-03	1.4215	3.700e-03	2.081e-03	0.56173	0.001	***
229	825320	1.507e-03	1.881e-03	0.8014	3.220e-03	3.630e-04	0.56410	0.001	***
230	245143	1.500e-03	1.926e-03	0.7786	5.752e-04	2.856e-03	0.56646	0.001	***
231	899488	1.491e-03	2.292e-03	0.6505	2.232e-03	1.304e-03	0.56880	0.001	***
232	1107076	1.481e-03	1.390e-03	1.0652	3.017e-03	8.876e-04	0.57113	0.984	
233	351294	1.477e-03	1.150e-03	1.2849	3.754e-03	1.923e-03	0.57345	1.000	
234	231973	1.431e-03	2.125e-03	0.6737	3.165e-03	7.665e-04	0.57570	0.001	***
235	579841	1.407e-03	1.056e-03	1.3318	2.934e-03	3.549e-03	0.57791	0.002	**
236	2138725	1.397e-03	1.499e-03	0.9318	2.938e-03	3.445e-04	0.58010	0.001	***
237	575540	1.396e-03	1.154e-03	1.2093	1.805e-04	2.949e-03	0.58230	0.001	***
238	929908	1.393e-03	1.614e-03	0.8632	2.557e-03	2.703e-03	0.58449	0.002	**
239	548737	1.393e-03	1.786e-03	0.7799	1.415e-03	2.322e-03	0.58668	0.001	***
240	147786	1.384e-03	1.256e-03	1.1024	2.435e-03	3.066e-03	0.58885	0.001	***
241	581343	1.338e-03	8.631e-04	1.5504	3.779e-03	1.481e-03	0.59096	0.001	***
242	1080410	1.335e-03	2.159e-03	0.6184	2.152e-03	1.865e-03	0.59305	1.000	
243	825365	1.319e-03	1.675e-03	0.7876	1.904e-03	1.191e-03	0.59513	0.001	***
244	4160085	1.313e-03	2.107e-03	0.6232	1.205e-03	2.472e-03	0.59719	0.002	**
245	585911	1.293e-03	9.779e-04	1.3221	4.194e-04	2.811e-03	0.59922	0.001	***

246	227717	1.289e-03	9.738e-04	1.3241	3.131e-03	3.492e-03	0.60125	0.024	*
247	354725	1.261e-03	6.597e-04	1.9113	8.373e-04	3.170e-03	0.60323	0.001	***
248	New.Reference0TU787	1.259e-03	1.144e-03	1.1010	2.259e-03	1.067e-03	0.60521	0.001	***
249	264786	1.246e-03	2.074e-03	0.6007	7.107e-05	2.529e-03	0.60717	0.001	***
250	551347	1.241e-03	9.150e-04	1.3559	1.029e-03	2.719e-03	0.60912	0.001	***
251	848082	1.212e-03	1.555e-03	0.7793	6.694e-04	2.387e-03	0.61102	0.001	***
252	New.Reference0TU399	1.211e-03	8.619e-04	1.4046	2.076e-03	4.131e-03	0.61292	0.005	**
253	846727	1.203e-03	1.022e-03	1.1771	2.555e-03	3.506e-04	0.61481	0.994	
254	179922	1.174e-03	8.504e-04	1.3803	7.055e-04	2.423e-03	0.61666	0.001	***
255	New.Reference0TU874	1.171e-03	1.315e-03	0.8905	2.451e-03	2.759e-04	0.61850	0.001	***
256	1543166	1.160e-03	9.415e-04	1.2325	1.617e-03	2.283e-03	0.62032	0.001	***
257	137211	1.159e-03	9.838e-04	1.1783	2.761e-03	8.139e-04	0.62214	0.001	***
258	349161	1.158e-03	7.273e-04	1.5916	1.009e-03	2.715e-03	0.62396	0.001	***
259	229118	1.143e-03	8.278e-04	1.3808	2.091e-03	3.207e-03	0.62576	0.004	**

260 [reached getOption("max.print") -- omitted 7857 rows]

261

262 Contrast: Epipelagic_Mesopelagic

263

264		average	sd	ratio	ava	avb	cumsum	p	
265	1080410	3.471e-02	1.593e-02	2.1785	2.152e-03	7.157e-02	0.04076	0.001	***
266	355538	3.440e-02	2.595e-02	1.3257	7.221e-02	3.879e-03	0.08115	0.001	***
267	323489	1.979e-02	1.313e-02	1.5074	6.590e-04	4.023e-02	0.10439	0.001	***
268	34469	1.677e-02	7.751e-03	2.1642	7.590e-04	3.431e-02	0.12408	0.001	***
269	839363	1.469e-02	7.123e-03	2.0623	7.921e-04	3.017e-02	0.14133	0.001	***
270	884345	1.378e-02	7.603e-03	1.8132	3.772e-03	3.115e-02	0.15752	0.001	***
271	777466	1.364e-02	2.954e-02	0.4616	2.408e-02	7.329e-03	0.17353	0.004	**
272	639502	1.119e-02	6.436e-03	1.7381	2.512e-02	2.811e-03	0.18667	0.004	**
273	557211	1.096e-02	7.025e-03	1.5601	2.505e-02	3.492e-03	0.19954	0.312	
274	427495	1.042e-02	9.081e-03	1.1474	2.205e-02	1.237e-03	0.21177	0.001	***
275	833419	9.663e-03	4.055e-03	2.3831	6.665e-04	1.999e-02	0.22312	0.175	
276	341618	8.676e-03	8.497e-03	1.0211	1.840e-02	1.082e-03	0.23330	0.493	
277	845691	7.528e-03	4.374e-03	1.7212	5.409e-04	1.560e-02	0.24214	0.044	*
278	351294	6.962e-03	3.074e-03	2.2650	3.754e-03	1.762e-02	0.25032	0.001	***
279	630928	6.845e-03	3.383e-03	2.0236	4.493e-04	1.414e-02	0.25836	0.420	
280	108965	6.620e-03	3.477e-03	1.9041	3.714e-04	1.361e-02	0.26613	0.001	***

281	227663	6.491e-03	4.901e-03	1.3243	1.383e-02	1.079e-03	0.27375	0.001	***
282	228455	6.023e-03	5.713e-03	1.0542	1.228e-02	3.306e-04	0.28082	0.451	
283	310272	5.752e-03	2.797e-03	2.0566	3.581e-04	1.186e-02	0.28758	0.001	***
284	832816	5.656e-03	3.489e-03	1.6213	1.198e-02	7.112e-04	0.29422	0.001	***
285	842800	5.609e-03	3.083e-03	1.8195	2.461e-04	1.146e-02	0.30081	0.001	***
286	694744	5.575e-03	3.749e-03	1.4869	1.129e-02	1.926e-04	0.30735	0.001	***
287	956811	5.461e-03	1.263e-02	0.4323	9.783e-03	2.568e-03	0.31377	0.006	**
288	539147	5.276e-03	2.916e-03	1.8091	1.125e-02	8.619e-04	0.31996	0.001	***
289	320821	5.273e-03	3.221e-03	1.6368	1.090e-02	4.113e-04	0.32615	0.001	***
290	833871	5.148e-03	3.160e-03	1.6290	1.092e-02	8.267e-04	0.33220	0.001	***
291	1106009	4.875e-03	3.863e-03	1.2620	1.261e-02	2.894e-03	0.33792	0.001	***
292	1128468	4.720e-03	1.188e-02	0.3974	8.662e-03	1.317e-03	0.34347	0.009	**
293	1111501	4.504e-03	4.353e-03	1.0347	9.757e-03	9.192e-04	0.34876	0.001	***
294	646549	4.418e-03	6.371e-03	0.6935	1.752e-03	9.228e-03	0.35394	0.079	.
295	231191	4.304e-03	2.993e-03	1.4383	9.753e-03	1.200e-03	0.35900	0.001	***
296	560276	3.875e-03	4.534e-03	0.8548	9.177e-03	1.953e-03	0.36355	0.001	***
297	228608	3.810e-03	3.387e-03	1.1249	8.215e-03	9.005e-04	0.36802	0.001	***
298	268433	3.761e-03	2.074e-03	1.8137	7.685e-03	2.199e-04	0.37244	0.001	***
299	125125	3.635e-03	1.386e-03	2.6225	3.956e-04	7.662e-03	0.37671	0.001	***
300	New.Reference0TU446	3.592e-03	6.469e-03	0.5553	9.483e-04	7.663e-03	0.38092	0.876	
301	826517	3.534e-03	1.524e-03	2.3195	3.346e-04	7.403e-03	0.38507	0.001	***
302	549048	3.505e-03	3.792e-03	0.9243	7.045e-03	5.023e-05	0.38919	0.001	***
303	250570	3.405e-03	2.605e-03	1.3071	6.862e-03	5.750e-05	0.39319	0.001	***
304	837317	3.369e-03	2.095e-03	1.6083	3.652e-04	7.094e-03	0.39714	0.001	***
305	592779	3.352e-03	3.128e-03	1.0717	6.824e-03	2.909e-04	0.40108	0.001	***
306	1082059	3.342e-03	3.614e-03	0.9248	7.780e-03	6.702e-03	0.40500	0.999	
307	New.Reference0TU44	3.218e-03	5.739e-03	0.5608	5.522e-04	6.929e-03	0.40878	0.129	
308	554945	3.130e-03	2.218e-03	1.4115	6.351e-03	1.367e-04	0.41246	0.001	***
309	347913	3.128e-03	1.246e-03	2.5098	2.250e-04	6.481e-03	0.41613	0.001	***
310	60638	3.105e-03	2.967e-03	1.0465	6.273e-03	7.284e-05	0.41978	0.001	***
311	1108577	3.084e-03	3.543e-03	0.8704	6.383e-03	2.150e-04	0.42340	0.808	
312	325965	2.990e-03	1.292e-03	2.3146	2.416e-04	6.220e-03	0.42691	0.001	***
313	832374	2.928e-03	1.023e-03	2.8630	2.119e-04	6.062e-03	0.43035	0.001	***
314	New.Reference0TU698	2.872e-03	1.137e-03	2.5248	6.008e-03	2.650e-04	0.43372	0.001	***
315	834856	2.866e-03	9.784e-04	2.9295	1.844e-04	5.917e-03	0.43709	0.001	***

316	315098	2.792e-03	2.140e-03	1.3042	7.451e-03	5.723e-03	0.44036	0.005	**
317	154513	2.719e-03	2.047e-03	1.3282	3.253e-04	5.746e-03	0.44356	0.001	***
318	536001	2.614e-03	3.361e-03	0.7776	5.700e-03	7.741e-04	0.44663	0.308	
319	New.Reference0TU882	2.581e-03	2.829e-03	0.9122	5.379e-03	2.413e-04	0.44966	0.600	
320	826533	2.551e-03	5.780e-03	0.4414	7.708e-04	4.987e-03	0.45265	0.127	
321	837714	2.439e-03	1.007e-03	2.4207	9.407e-04	5.786e-03	0.45552	0.001	***
322	825985	2.417e-03	1.018e-03	2.3736	3.223e-04	5.150e-03	0.45835	0.001	***
323	110119	2.412e-03	1.668e-03	1.4463	5.074e-03	8.296e-03	0.46119	0.741	
324	1105428	2.344e-03	3.739e-03	0.6268	4.742e-03	2.092e-04	0.46394	0.824	
325	817600	2.338e-03	2.100e-03	1.1135	4.879e-03	2.826e-04	0.46668	1.000	
326	119502	2.334e-03	2.567e-03	0.9092	5.738e-03	1.743e-03	0.46942	0.001	***
327	352531	2.327e-03	2.864e-03	0.8125	4.769e-03	1.493e-04	0.47216	0.653	
328	554951	2.326e-03	1.189e-03	1.9561	2.550e-04	4.902e-03	0.47489	0.919	
329	1007856	2.323e-03	8.298e-04	2.7992	1.449e-04	4.783e-03	0.47762	0.001	***
330	New.Reference0TU421	2.305e-03	7.257e-04	3.1760	2.713e-04	4.881e-03	0.48032	0.001	***
331	831163	2.276e-03	1.425e-03	1.5974	4.096e-04	4.951e-03	0.48300	0.001	***
332	833961	2.271e-03	1.932e-03	1.1756	4.718e-03	2.810e-04	0.48566	0.001	***
333	573845	2.260e-03	4.851e-03	0.4659	2.874e-05	4.528e-03	0.48832	0.138	
334	827407	2.241e-03	9.047e-04	2.4767	7.352e-04	5.217e-03	0.49095	0.001	***
335	141607	2.230e-03	3.718e-03	0.5999	3.419e-03	2.648e-03	0.49357	0.945	
336	3156804	2.143e-03	1.260e-03	1.7000	4.688e-03	4.141e-04	0.49608	0.024	*
337	103709	2.127e-03	8.633e-04	2.4633	4.652e-03	4.817e-04	0.49858	0.001	***
338	253327	2.112e-03	2.971e-03	0.7108	1.484e-03	4.478e-03	0.50106	0.013	*
339	347857	2.107e-03	9.338e-04	2.2566	1.014e-04	4.310e-03	0.50353	0.001	***
340	119137	2.091e-03	2.374e-03	0.8807	4.694e-03	5.858e-04	0.50599	0.001	***
341	361839	2.078e-03	1.557e-03	1.3343	4.314e-03	1.745e-04	0.50843	0.001	***
342	New.Reference0TU397	2.074e-03	1.722e-03	1.2042	4.215e-03	1.003e-04	0.51086	0.001	***
343	353181	2.020e-03	1.520e-03	1.3285	4.309e-03	4.774e-04	0.51324	0.755	
344	1107076	1.979e-03	1.433e-03	1.3811	3.017e-03	5.312e-03	0.51556	0.817	
345	New.Reference0TU610	1.930e-03	2.299e-03	0.8397	3.873e-03	2.500e-05	0.51783	0.001	***
346	653733	1.927e-03	1.649e-03	1.1680	3.968e-03	1.507e-04	0.52009	0.001	***
347	542823	1.915e-03	1.953e-03	0.9801	4.143e-03	3.862e-04	0.52234	0.009	**
348	825733	1.853e-03	9.637e-04	1.9226	1.365e-03	4.945e-03	0.52451	0.001	***
349	1102212	1.845e-03	1.361e-03	1.3561	3.757e-03	9.797e-05	0.52668	0.001	***
350	834286	1.825e-03	9.359e-04	1.9502	6.925e-05	3.720e-03	0.52882	0.001	***

351	161219	1.803e-03	8.250e-04	2.1855	9.167e-05	3.692e-03	0.53094	0.001	***
352	592269	1.797e-03	3.035e-03	0.5921	3.643e-03	2.179e-04	0.53305	0.991	
353	New.Reference0TU71	1.786e-03	1.270e-03	1.4063	3.700e-03	2.226e-04	0.53515	0.001	***
354	581343	1.752e-03	8.849e-04	1.9803	3.779e-03	3.192e-04	0.53720	0.001	***
355	4479541	1.740e-03	1.282e-03	1.3574	3.540e-03	7.409e-05	0.53925	0.001	***
356	1101488	1.735e-03	2.140e-03	0.8103	1.705e-03	3.782e-03	0.54128	0.965	
357	823035	1.711e-03	2.103e-03	0.8134	3.478e-03	1.460e-04	0.54329	0.001	***
358	355527	1.668e-03	2.809e-03	0.5939	3.442e-03	1.656e-04	0.54525	0.997	
359	101670	1.666e-03	9.501e-04	1.7536	6.366e-04	3.872e-03	0.54721	0.001	***
360	581028	1.662e-03	9.841e-04	1.6887	5.844e-04	3.866e-03	0.54916	0.417	
361	834243	1.648e-03	1.715e-03	0.9609	1.667e-04	3.398e-03	0.55110	0.001	***
362	1584736	1.632e-03	1.172e-03	1.3925	3.285e-03	2.652e-05	0.55301	0.001	***
363	830634	1.630e-03	1.883e-03	0.8659	6.178e-05	3.309e-03	0.55493	0.182	
364	1074804	1.623e-03	7.755e-04	2.0929	1.160e-04	3.362e-03	0.55683	0.001	***
365	234197	1.621e-03	1.299e-03	1.2483	3.644e-03	5.968e-04	0.55874	0.001	***
366	147658	1.612e-03	1.291e-03	1.2479	3.887e-03	9.641e-04	0.56063	0.001	***
367	6258	1.603e-03	1.038e-03	1.5448	1.510e-03	4.325e-03	0.56251	0.001	***
368	846727	1.595e-03	1.177e-03	1.3551	2.555e-03	4.824e-03	0.56438	0.041	*
369	317124	1.574e-03	4.425e-03	0.3557	3.148e-03	8.706e-07	0.56623	0.004	**
370	231973	1.573e-03	2.246e-03	0.7005	3.165e-03	3.556e-05	0.56808	0.001	***
371	830400	1.567e-03	1.418e-03	1.1052	3.473e-03	6.134e-04	0.56992	0.001	***
372	838996	1.517e-03	8.355e-04	1.8151	2.805e-05	3.061e-03	0.57170	0.001	***
373	753560	1.475e-03	2.092e-03	0.7051	7.390e-04	3.340e-03	0.57343	0.972	
374	227717	1.474e-03	1.373e-03	1.0741	3.131e-03	2.750e-04	0.57516	0.001	***
375	825320	1.442e-03	1.863e-03	0.7742	3.220e-03	5.119e-04	0.57686	0.001	***
376	1105105	1.432e-03	8.111e-04	1.7648	3.180e-03	3.208e-04	0.57854	0.295	
377	834104	1.429e-03	7.004e-04	2.0399	2.118e-04	3.069e-03	0.58022	0.001	***
378	579841	1.416e-03	1.152e-03	1.2288	2.934e-03	1.887e-04	0.58188	0.002	**
379	837497	1.402e-03	7.796e-04	1.7986	2.866e-03	7.700e-05	0.58353	0.001	***
380	555348	1.397e-03	1.196e-03	1.1679	6.989e-05	2.862e-03	0.58517	0.001	***
381	2138725	1.389e-03	1.511e-03	0.9194	2.938e-03	2.988e-04	0.58680	0.001	***
382	593056	1.378e-03	9.014e-04	1.5291	3.948e-04	3.116e-03	0.58842	0.001	***
383	563843	1.375e-03	9.886e-04	1.3907	2.919e-03	2.318e-04	0.59003	0.436	
384	160817	1.374e-03	9.154e-04	1.5011	9.448e-04	3.503e-03	0.59164	1.000	
385	830429	1.372e-03	9.089e-04	1.5094	5.734e-04	3.208e-03	0.59325	0.001	***

386	137211	1.363e-03	1.047e-03	1.3025	2.761e-03	3.907e-05	0.59486	0.001	***	
387	2188457	1.356e-03	9.793e-04	1.3850	6.067e-04	3.282e-03	0.59645	0.001	***	
388	254226	1.317e-03	1.295e-03	1.0171	2.701e-03	7.780e-05	0.59800	0.001	***	
389	4479015	1.273e-03	8.822e-04	1.4427	1.161e-04	2.652e-03	0.59949	1.000		
390	[reached getOption("max.print") -- omitted 7857 rows]									
391										
392	Contrast: Bathypelagic_Surface									
393										
394		average	sd	ratio	ava	avb	cumsum	p		
395	355538	2.971e-02	2.629e-02	1.1300	1.169e-04	5.953e-02	0.03196	0.001	***	
396	557211	1.978e-02	1.252e-02	1.5800	1.943e-03	4.150e-02	0.05324	0.001	***	
397	341618	1.852e-02	5.984e-03	3.0942	8.314e-05	3.711e-02	0.07315	0.001	***	
398	639502	1.784e-02	7.706e-03	2.3155	1.946e-04	3.588e-02	0.09235	0.001	***	
399	833419	1.632e-02	7.459e-03	2.1880	3.325e-02	6.119e-04	0.10990	0.001	***	
400	226299	1.603e-02	1.907e-02	0.8406	3.229e-02	2.474e-04	0.12714	0.001	***	
401	817600	1.429e-02	1.106e-02	1.2924	5.665e-05	2.864e-02	0.14252	0.001	***	
402	630928	1.214e-02	5.854e-03	2.0730	2.481e-02	5.465e-04	0.15557	0.001	***	
403	845691	1.126e-02	5.650e-03	1.9937	2.304e-02	5.102e-04	0.16769	0.001	***	
404	228455	1.086e-02	1.216e-02	0.8936	3.126e-05	2.176e-02	0.17938	0.001	***	
405	1080410	1.059e-02	8.321e-03	1.2729	2.272e-02	1.865e-03	0.19077	1.000		
406	839363	1.012e-02	5.601e-03	1.8073	2.096e-02	7.233e-04	0.20166	0.002	**	
407	427495	9.719e-03	6.522e-03	1.4901	8.560e-04	2.029e-02	0.21211	0.001	***	
408	355527	8.846e-03	8.215e-03	1.0769	4.734e-05	1.774e-02	0.22163	0.001	***	
409	1101488	8.342e-03	2.099e-02	0.3975	1.779e-02	1.221e-03	0.23060	0.069	.	
410	1082059	8.196e-03	7.641e-03	1.0727	1.373e-02	1.195e-02	0.23942	0.001	***	
411	New.Reference0TU446	7.507e-03	1.842e-02	0.4076	1.526e-02	1.490e-03	0.24749	0.199		
412	315563	7.490e-03	1.141e-02	0.6565	3.564e-05	1.501e-02	0.25555	0.001	***	
413	1108577	7.462e-03	3.791e-03	1.9686	8.373e-05	1.501e-02	0.26358	0.001	***	
414	884345	6.690e-03	4.248e-03	1.5750	1.487e-02	1.926e-03	0.27077	0.976		
415	592269	6.232e-03	3.489e-03	1.7860	9.686e-05	1.256e-02	0.27748	0.001	***	
416	1138756	6.151e-03	1.885e-02	0.3263	1.230e-02	5.513e-05	0.28409	0.108		
417	351294	5.730e-03	2.903e-03	1.9740	1.322e-02	1.923e-03	0.29026	0.001	***	
418	225284	5.700e-03	6.660e-03	0.8558	1.148e-02	7.780e-05	0.29639	0.001	***	
419	1106009	5.682e-03	2.513e-03	2.2609	1.585e-03	1.295e-02	0.30250	0.001	***	
420	1105428	5.527e-03	5.271e-03	1.0485	6.344e-06	1.106e-02	0.30845	0.001	***	

421	1109816	5.358e-03	3.457e-03	1.5501	4.536e-05	1.076e-02	0.31421	0.001	***
422	New.Reference0TU882	5.229e-03	4.348e-03	1.2026	4.306e-05	1.050e-02	0.31983	0.001	***
423	1111501	5.202e-03	2.603e-03	1.9981	5.587e-05	1.046e-02	0.32543	0.001	***
424	160817	4.883e-03	3.037e-03	1.6080	1.013e-02	3.633e-04	0.33068	0.001	***
425	352531	4.846e-03	3.606e-03	1.3441	5.535e-06	9.698e-03	0.33590	0.001	***
426	554951	4.813e-03	2.057e-03	2.3395	9.786e-03	1.640e-04	0.34107	0.001	***
427	832816	4.801e-03	2.268e-03	2.1165	1.666e-04	9.769e-03	0.34624	0.001	***
428	592771	4.660e-03	2.800e-03	1.6642	2.209e-05	9.343e-03	0.35125	0.001	***
429	826517	4.618e-03	1.784e-03	2.5885	9.592e-03	3.585e-04	0.35622	0.001	***
430	353181	4.610e-03	2.379e-03	1.9375	3.941e-05	9.260e-03	0.36118	0.001	***
431	509913	4.598e-03	5.692e-03	0.8078	9.662e-03	4.726e-04	0.36612	0.001	***
432	4479015	4.522e-03	1.805e-03	2.5045	9.191e-03	1.475e-04	0.37099	0.001	***
433	141607	4.385e-03	4.913e-03	0.8926	9.380e-03	6.523e-04	0.37570	0.001	***
434	151344	4.146e-03	4.046e-03	1.0247	7.725e-05	8.360e-03	0.38016	0.001	***
435	341734	4.131e-03	2.685e-03	1.5385	1.469e-05	8.276e-03	0.38461	0.001	***
436	106179	4.114e-03	1.884e-03	2.1837	2.988e-05	8.257e-03	0.38903	0.001	***
437	343231	4.083e-03	3.546e-03	1.1516	3.533e-05	8.194e-03	0.39342	0.001	***
438	753560	4.028e-03	6.779e-03	0.5941	8.273e-03	2.445e-04	0.39776	0.017	*
439	231191	3.917e-03	4.144e-03	0.9454	3.995e-04	8.234e-03	0.40197	0.001	***
440	110119	3.821e-03	1.919e-03	1.9912	8.588e-03	1.083e-03	0.40608	0.001	***
441	338106	3.705e-03	5.323e-03	0.6961	8.527e-06	7.414e-03	0.41007	0.001	***
442	536001	3.689e-03	4.102e-03	0.8992	5.022e-04	7.657e-03	0.41404	0.001	***
443	227663	3.625e-03	3.352e-03	1.0812	1.531e-05	7.264e-03	0.41793	0.386	
444	358464	3.548e-03	9.700e-03	0.3657	7.086e-03	1.722e-05	0.42175	0.075	.
445	834169	3.382e-03	1.819e-03	1.8591	6.808e-03	4.418e-05	0.42539	0.001	***
446	3156804	3.365e-03	1.974e-03	1.7049	1.620e-04	6.879e-03	0.42901	0.001	***
447	New.Reference0TU128	3.328e-03	1.190e-03	2.7960	6.916e-03	2.603e-04	0.43259	0.001	***
448	1007856	3.234e-03	1.371e-03	2.3582	6.601e-03	1.401e-04	0.43607	0.001	***
449	310272	3.219e-03	2.368e-03	1.3595	6.705e-03	2.796e-04	0.43953	0.645	
450	323489	3.043e-03	3.049e-03	0.9980	6.612e-03	7.299e-04	0.44280	1.000	
451	711803	2.999e-03	3.963e-03	0.7566	6.006e-03	8.411e-06	0.44603	0.001	***
452	563843	2.878e-03	1.238e-03	2.3248	3.910e-05	5.795e-03	0.44912	0.001	***
453	1105105	2.851e-03	1.243e-03	2.2934	1.365e-04	5.839e-03	0.45219	0.001	***
454	646549	2.802e-03	3.751e-03	0.7470	6.182e-03	7.881e-04	0.45521	0.839	
455	551207	2.741e-03	3.011e-03	0.9104	6.036e-05	5.539e-03	0.45815	0.001	***

456	234927	2.726e-03	1.465e-03	1.8603	1.256e-04	5.574e-03	0.46109	0.001	***
457	581028	2.726e-03	1.706e-03	1.5979	5.717e-03	2.692e-04	0.46402	0.001	***
458	740763	2.696e-03	2.527e-03	1.0669	4.015e-06	5.397e-03	0.46692	0.001	***
459	844663	2.677e-03	1.598e-03	1.6753	5.465e-03	1.203e-04	0.46980	0.001	***
460	839203	2.675e-03	1.528e-03	1.7510	5.365e-03	1.516e-05	0.47268	0.001	***
461	542823	2.673e-03	1.300e-03	2.0562	5.139e-05	5.397e-03	0.47555	0.001	***
462	860929	2.569e-03	3.049e-03	0.8425	5.299e-03	2.123e-04	0.47831	0.001	***
463	New.Reference0TU44	2.558e-03	2.118e-03	1.2078	5.494e-03	3.896e-04	0.48106	0.495	
464	592350	2.540e-03	2.415e-03	1.0518	2.453e-05	5.104e-03	0.48380	0.001	***
465	591130	2.495e-03	2.577e-03	0.9683	1.517e-04	5.109e-03	0.48648	0.001	***
466	842800	2.474e-03	1.529e-03	1.6186	5.150e-03	2.605e-04	0.48914	0.973	
467	777466	2.431e-03	3.333e-03	0.7295	5.274e-03	1.433e-03	0.49176	0.987	
468	234994	2.397e-03	2.323e-03	1.0317	8.137e-06	4.802e-03	0.49434	0.001	***
469	773487	2.379e-03	1.363e-03	1.7455	4.273e-05	4.799e-03	0.49689	0.001	***
470	979107	2.329e-03	4.290e-03	0.5429	4.800e-03	1.963e-04	0.49940	0.037	*
471	832702	2.273e-03	8.449e-04	2.6899	4.619e-03	7.485e-05	0.50184	0.001	***
472	232905	2.268e-03	1.117e-03	2.0299	3.988e-05	4.573e-03	0.50428	0.001	***
473	774258	2.203e-03	2.898e-03	0.7601	4.456e-04	4.616e-03	0.50665	0.001	***
474	1107076	2.181e-03	4.508e-03	0.4838	4.118e-03	8.876e-04	0.50900	0.709	
475	834856	2.162e-03	1.260e-03	1.7157	4.546e-03	2.394e-04	0.51132	0.001	***
476	314474	2.160e-03	1.247e-03	1.7322	1.297e-06	4.322e-03	0.51365	0.001	***
477	249226	2.146e-03	1.014e-03	2.1171	1.462e-06	4.293e-03	0.51596	0.001	***
478	832374	2.124e-03	9.182e-04	2.3131	4.411e-03	1.809e-04	0.51824	0.001	***
479	New.Reference0TU697	2.115e-03	7.445e-04	2.8411	4.275e-03	4.448e-05	0.52052	0.001	***
480	New.Reference0TU238	2.076e-03	1.076e-03	1.9301	2.631e-04	4.406e-03	0.52275	0.001	***
481	846727	2.056e-03	8.294e-04	2.4785	4.433e-03	3.506e-04	0.52496	0.001	***
482	810040	2.050e-03	9.258e-04	2.2144	4.125e-03	2.497e-05	0.52717	0.001	***
483	4475220	2.028e-03	1.623e-03	1.2494	9.714e-06	4.066e-03	0.52935	0.001	***
484	1107422	2.012e-03	3.019e-03	0.6663	1.959e-07	4.023e-03	0.53151	0.001	***
485	New.Reference0TU252	1.994e-03	3.035e-03	0.6569	0.000e+00	3.987e-03	0.53366	0.001	***
486	227866	1.986e-03	2.015e-03	0.9857	1.304e-05	3.985e-03	0.53579	0.001	***
487	539147	1.974e-03	3.013e-03	0.6551	1.890e-05	3.961e-03	0.53792	0.963	
488	New.Reference0TU414	1.947e-03	2.014e-03	0.9671	4.462e-03	8.273e-04	0.54001	0.001	***
489	New.Reference0TU399	1.947e-03	8.042e-04	2.4206	2.384e-04	4.131e-03	0.54211	0.001	***
490	356368	1.934e-03	9.331e-04	2.0726	9.767e-06	3.878e-03	0.54419	0.001	***

491	830634	1.921e-03	1.312e-03	1.4649	3.931e-03	1.159e-04	0.54625	0.002	**
492	544313	1.901e-03	2.294e-03	0.8288	3.896e-03	1.185e-04	0.54830	0.001	***
493	569884	1.900e-03	1.510e-03	1.2580	1.509e-05	3.815e-03	0.55034	0.001	***
494	838079	1.889e-03	1.015e-03	1.8616	3.787e-03	9.425e-06	0.55237	0.001	***
495	548576	1.868e-03	3.552e-03	0.5260	3.759e-03	6.854e-05	0.55438	0.009	**
496	1011088	1.852e-03	2.683e-03	0.6904	1.824e-03	3.224e-03	0.55637	0.001	***
497	1084865	1.838e-03	1.890e-03	0.9728	3.979e-03	3.225e-04	0.55835	0.001	***
498	836341	1.832e-03	1.005e-03	1.8234	3.798e-03	1.366e-04	0.56032	0.001	***
499	New.Reference0TU698	1.824e-03	1.096e-03	1.6646	2.000e-05	3.668e-03	0.56228	0.001	***
500	344865	1.817e-03	8.415e-04	2.1586	9.963e-05	3.706e-03	0.56424	0.001	***
501	347913	1.805e-03	1.144e-03	1.5773	3.779e-03	2.107e-04	0.56618	0.321	
502	834104	1.801e-03	8.841e-04	2.0375	3.732e-03	1.405e-04	0.56812	0.001	***
503	182418	1.797e-03	3.957e-03	0.4542	3.626e-03	1.113e-04	0.57005	0.049	*
504	243160	1.793e-03	1.746e-03	1.0269	1.101e-05	3.596e-03	0.57198	0.001	***
505	1109402	1.789e-03	1.423e-03	1.2568	7.672e-06	3.585e-03	0.57390	0.001	***
506	833273	1.787e-03	9.082e-04	1.9676	3.657e-03	8.430e-05	0.57583	0.001	***
507	579841	1.773e-03	1.273e-03	1.3921	3.447e-06	3.549e-03	0.57773	0.001	***
508	827407	1.772e-03	8.938e-04	1.9820	3.790e-03	2.704e-04	0.57964	0.001	***
509	108953	1.757e-03	8.166e-04	2.1511	3.629e-03	1.219e-04	0.58153	0.001	***
510	826571	1.748e-03	7.713e-04	2.2669	3.522e-03	2.501e-05	0.58341	0.001	***
511	841316	1.741e-03	8.070e-04	2.1573	3.602e-03	1.264e-04	0.58528	0.001	***
512	583907	1.738e-03	4.467e-03	0.3891	3.467e-03	3.168e-05	0.58715	0.073	.
513	103709	1.737e-03	8.418e-04	2.0630	2.347e-05	3.497e-03	0.58902	0.001	***
514	227717	1.734e-03	7.979e-04	2.1728	2.473e-05	3.492e-03	0.59088	0.001	***
515	779725	1.723e-03	1.005e-03	1.7138	3.613e-03	1.714e-04	0.59274	0.001	***
516	1108696	1.712e-03	1.272e-03	1.3454	1.551e-03	3.868e-03	0.59458	0.001	***
517	112306	1.680e-03	9.740e-04	1.7253	3.408e-03	5.439e-05	0.59639	0.001	***
518	757981	1.678e-03	9.431e-04	1.7789	3.382e-03	2.772e-05	0.59819	0.001	***
519	926160	1.675e-03	8.624e-03	0.1943	3.274e-03	1.245e-04	0.59999	0.325	
520	[reached getOption("max.print") -- omitted 7857 rows]								
521									
522	Contrast: Bathypelagic_Mesopelagic								
523									
524		average	sd	ratio	ava	avb	cumsum	p	
525	1080410	2.555e-02	1.625e-02	1.5723	2.272e-02	7.157e-02	0.04170	0.001	***

526	323489	1.709e-02	1.311e-02	1.3036	6.612e-03	4.023e-02	0.06959	0.001	***
527	34469	1.577e-02	7.799e-03	2.0218	2.774e-03	3.431e-02	0.09533	0.001	***
528	226299	1.537e-02	1.901e-02	0.8086	3.229e-02	1.765e-03	0.12041	0.001	***
529	884345	9.498e-03	6.841e-03	1.3885	1.487e-02	3.115e-02	0.13591	0.001	***
530	New.Reference0TU446	9.024e-03	1.797e-02	0.5022	1.526e-02	7.663e-03	0.15064	0.003	**
531	833419	8.381e-03	6.698e-03	1.2512	3.325e-02	1.999e-02	0.16432	0.899	
532	1101488	8.300e-03	2.064e-02	0.4021	1.779e-02	3.782e-03	0.17787	0.020	*
533	839363	7.906e-03	6.309e-03	1.2533	2.096e-02	3.017e-02	0.19077	0.911	
534	630928	6.659e-03	5.388e-03	1.2358	2.481e-02	1.414e-02	0.20164	0.648	
535	845691	6.430e-03	4.801e-03	1.3394	2.304e-02	1.560e-02	0.21213	0.777	
536	1138756	6.352e-03	1.869e-02	0.3399	1.230e-02	7.556e-04	0.22250	0.023	*
537	108965	6.150e-03	3.513e-03	1.7504	1.332e-03	1.361e-02	0.23254	0.001	***
538	225284	5.413e-03	6.620e-03	0.8177	1.148e-02	8.007e-04	0.24137	0.001	***
539	646549	4.692e-03	6.192e-03	0.7577	6.182e-03	9.228e-03	0.24903	0.003	**
540	1082059	4.335e-03	3.268e-03	1.3268	1.373e-02	6.702e-03	0.25610	0.946	
541	509913	4.099e-03	5.513e-03	0.7435	9.662e-03	2.193e-03	0.26279	0.001	***
542	141607	4.050e-03	4.802e-03	0.8434	9.380e-03	2.648e-03	0.26940	0.002	**
543	753560	4.048e-03	6.365e-03	0.6360	8.273e-03	3.340e-03	0.27601	0.003	**
544	842800	3.681e-03	2.859e-03	1.2874	5.150e-03	1.146e-02	0.28202	0.001	***
545	358464	3.678e-03	9.595e-03	0.3833	7.086e-03	3.925e-04	0.28802	0.012	*
546	351294	3.677e-03	2.799e-03	1.3139	1.322e-02	1.762e-02	0.29402	1.000	
547	310272	3.660e-03	2.555e-03	1.4326	6.705e-03	1.186e-02	0.30000	0.032	*
548	777466	3.654e-03	4.454e-03	0.8203	5.274e-03	7.329e-03	0.30596	0.945	
549	160817	3.462e-03	3.004e-03	1.1524	1.013e-02	3.503e-03	0.31161	0.001	***
550	1107076	3.427e-03	3.568e-03	0.9606	4.118e-03	5.312e-03	0.31721	0.001	***
551	New.Reference0TU44	3.391e-03	5.147e-03	0.6588	5.494e-03	6.929e-03	0.32274	0.013	*
552	4479015	3.343e-03	1.869e-03	1.7880	9.191e-03	2.652e-03	0.32820	0.001	***
553	834169	3.068e-03	1.853e-03	1.6556	6.808e-03	7.042e-04	0.33320	0.001	***
554	711803	2.983e-03	3.963e-03	0.7527	6.006e-03	3.929e-05	0.33807	0.001	***
555	826533	2.889e-03	5.875e-03	0.4918	1.710e-03	4.987e-03	0.34279	0.004	**
556	554951	2.886e-03	1.790e-03	1.6117	9.786e-03	4.902e-03	0.34750	0.011	*
557	315098	2.775e-03	1.662e-03	1.6695	1.726e-04	5.723e-03	0.35203	0.003	**
558	573845	2.759e-03	4.835e-03	0.5707	1.794e-03	4.528e-03	0.35653	0.002	**
559	New.Reference0TU128	2.535e-03	1.239e-03	2.0457	6.916e-03	1.868e-03	0.36067	0.001	***
560	839203	2.531e-03	1.538e-03	1.6457	5.365e-03	3.051e-04	0.36480	0.001	***

561	837317	2.527e-03	2.025e-03	1.2477	2.500e-03	7.094e-03	0.36893	0.001	***
562	125125	2.496e-03	1.408e-03	1.7726	2.803e-03	7.662e-03	0.37300	0.001	***
563	860929	2.463e-03	2.975e-03	0.8279	5.299e-03	6.726e-04	0.37702	0.001	***
564	154513	2.459e-03	2.029e-03	1.2119	9.039e-04	5.746e-03	0.38103	0.001	***
565	979107	2.420e-03	4.077e-03	0.5934	4.800e-03	1.909e-03	0.38498	0.001	***
566	831163	2.255e-03	1.411e-03	1.5979	4.451e-04	4.951e-03	0.38866	0.001	***
567	844663	2.248e-03	1.508e-03	1.4910	5.465e-03	1.195e-03	0.39233	0.001	***
568	253327	2.216e-03	3.182e-03	0.6963	4.464e-04	4.478e-03	0.39595	0.001	***
569	325965	2.163e-03	1.318e-03	1.6405	2.118e-03	6.220e-03	0.39948	0.001	***
570	6258	2.162e-03	1.064e-03	2.0317	1.485e-06	4.325e-03	0.40301	0.001	***
571	826517	2.019e-03	1.546e-03	1.3057	9.592e-03	7.403e-03	0.40630	1.000	
572	347857	1.954e-03	9.238e-04	2.1151	4.328e-04	4.310e-03	0.40949	0.001	***
573	355538	1.907e-03	3.247e-03	0.5875	1.169e-04	3.879e-03	0.41261	1.000	
574	837714	1.878e-03	9.646e-04	1.9465	2.098e-03	5.786e-03	0.41567	0.001	***
575	583907	1.875e-03	4.346e-03	0.4315	3.467e-03	4.776e-04	0.41873	0.006	**
576	544313	1.863e-03	2.223e-03	0.8384	3.896e-03	9.077e-04	0.42177	0.001	***
577	182418	1.853e-03	3.817e-03	0.4855	3.626e-03	8.281e-04	0.42480	0.003	**
578	110119	1.850e-03	1.418e-03	1.3045	8.588e-03	8.296e-03	0.42782	1.000	
579	548576	1.849e-03	3.465e-03	0.5336	3.759e-03	5.187e-04	0.43083	0.001	***
580	810040	1.815e-03	9.622e-04	1.8861	4.125e-03	5.172e-04	0.43380	0.001	***
581	New.Reference0TU414	1.803e-03	1.981e-03	0.9103	4.462e-03	1.182e-03	0.43674	0.001	***
582	838079	1.775e-03	1.015e-03	1.7487	3.787e-03	2.508e-04	0.43964	0.001	***
583	830634	1.768e-03	1.498e-03	1.1802	3.931e-03	3.309e-03	0.44252	0.005	**
584	926160	1.752e-03	8.591e-03	0.2040	3.274e-03	3.758e-04	0.44538	0.145	
585	347913	1.750e-03	1.252e-03	1.3978	3.779e-03	6.481e-03	0.44824	0.488	
586	New.Reference0TU697	1.732e-03	8.293e-04	2.0880	4.275e-03	9.513e-04	0.45106	0.001	***
587	New.Reference0TU752	1.692e-03	4.784e-03	0.3537	3.229e-03	9.303e-04	0.45383	0.013	*
588	956811	1.640e-03	2.217e-03	0.7401	2.991e-03	2.568e-03	0.45650	0.940	
589	557211	1.624e-03	2.075e-03	0.7824	1.943e-03	3.492e-03	0.45915	1.000	
590	161219	1.611e-03	8.233e-04	1.9568	5.035e-04	3.692e-03	0.46178	0.001	***
591	552671	1.588e-03	2.192e-03	0.7246	3.380e-03	3.395e-04	0.46438	0.001	***
592	1074804	1.571e-03	7.838e-04	2.0037	2.226e-04	3.362e-03	0.46694	0.001	***
593	581028	1.561e-03	1.496e-03	1.0429	5.717e-03	3.866e-03	0.46949	0.721	
594	1084865	1.543e-03	1.716e-03	0.8992	3.979e-03	1.987e-03	0.47200	0.001	***
595	825733	1.513e-03	9.170e-04	1.6504	2.119e-03	4.945e-03	0.47447	0.001	***

596	101670	1.488e-03	9.077e-04	1.6398	1.031e-03	3.872e-03	0.47690	0.001	***
597	825985	1.479e-03	1.015e-03	1.4577	2.469e-03	5.150e-03	0.47932	0.003	**
598	834243	1.473e-03	1.508e-03	0.9772	1.243e-03	3.398e-03	0.48172	0.001	***
599	1007856	1.469e-03	1.113e-03	1.3190	6.601e-03	4.783e-03	0.48412	1.000	
600	757981	1.447e-03	9.389e-04	1.5406	3.382e-03	5.319e-04	0.48648	0.001	***
601	404788	1.442e-03	2.621e-03	0.5503	2.662e-03	9.214e-04	0.48883	0.015	*
602	826571	1.439e-03	7.993e-04	1.8001	3.522e-03	6.593e-04	0.49118	0.001	***
603	834856	1.402e-03	1.004e-03	1.3956	4.546e-03	5.917e-03	0.49347	1.000	
604	832702	1.388e-03	8.493e-04	1.6337	4.619e-03	1.983e-03	0.49573	0.001	***
605	2188457	1.362e-03	9.824e-04	1.3860	5.916e-04	3.282e-03	0.49796	0.001	***
606	639502	1.349e-03	2.098e-03	0.6430	1.946e-04	2.811e-03	0.50016	1.000	
607	631576	1.333e-03	1.933e-03	0.6899	1.875e-03	1.763e-03	0.50233	0.002	**
608	837290	1.313e-03	7.775e-04	1.6893	3.028e-03	4.114e-04	0.50448	0.001	***
609	824150	1.309e-03	1.976e-03	0.6624	2.666e-03	9.795e-04	0.50662	0.001	***
610	1128468	1.309e-03	2.101e-03	0.6228	2.136e-03	1.317e-03	0.50875	0.937	
611	278985	1.283e-03	1.232e-03	1.0417	2.592e-03	2.086e-03	0.51085	0.001	***
612	832374	1.270e-03	9.513e-04	1.3353	4.411e-03	6.062e-03	0.51292	1.000	
613	779725	1.240e-03	9.455e-04	1.3112	3.613e-03	1.461e-03	0.51494	0.001	***
614	836341	1.229e-03	1.008e-03	1.2189	3.798e-03	1.574e-03	0.51695	0.006	**
615	112306	1.220e-03	8.640e-04	1.4125	3.408e-03	1.372e-03	0.51894	0.001	***
616	794237	1.195e-03	5.873e-04	2.0344	2.595e-03	2.160e-04	0.52089	0.001	***
617	833273	1.184e-03	8.951e-04	1.3224	3.657e-03	1.432e-03	0.52282	0.001	***
618	739517	1.177e-03	6.140e-04	1.9170	2.733e-03	4.111e-04	0.52474	0.001	***
619	833556	1.171e-03	8.024e-04	1.4588	2.788e-03	6.371e-04	0.52665	0.001	***
620	New.Reference0TU900	1.169e-03	3.708e-03	0.3153	2.202e-03	4.304e-04	0.52856	0.002	**
621	846727	1.149e-03	9.123e-04	1.2599	4.433e-03	4.824e-03	0.53044	1.000	
622	827407	1.134e-03	8.405e-04	1.3495	3.790e-03	5.217e-03	0.53229	1.000	
623	1108205	1.107e-03	2.574e-03	0.4298	2.237e-03	3.004e-04	0.53410	0.002	**
624	New.Reference0TU421	1.102e-03	7.517e-04	1.4659	3.068e-03	4.881e-03	0.53589	0.998	
625	822991	1.096e-03	1.693e-03	0.6474	1.372e-03	1.188e-03	0.53768	0.005	**
626	834796	1.074e-03	1.153e-03	0.9310	3.623e-06	2.151e-03	0.53944	0.001	***
627	830429	1.066e-03	8.434e-04	1.2636	1.469e-03	3.208e-03	0.54118	0.001	***
628	838996	1.058e-03	8.344e-04	1.2676	1.006e-03	3.061e-03	0.54290	0.001	***
629	555348	1.053e-03	1.043e-03	1.0090	1.332e-03	2.862e-03	0.54462	0.001	***
630	New.Reference0TU219	1.052e-03	7.011e-04	1.5011	3.758e-04	2.435e-03	0.54634	0.001	***

631	834286	1.039e-03	8.648e-04	1.2013	2.521e-03	3.720e-03	0.54803	0.736	
632	838426	9.714e-04	8.708e-04	1.1155	2.867e-03	1.083e-03	0.54962	0.001	***
633	344394	9.690e-04	1.932e-03	0.5017	6.130e-06	1.939e-03	0.55120	0.003	**
634	593056	9.457e-04	7.019e-04	1.3473	2.741e-03	3.116e-03	0.55274	0.878	
635	108953	9.412e-04	6.764e-04	1.3915	3.629e-03	2.447e-03	0.55428	0.956	
636	834104	9.337e-04	6.998e-04	1.3341	3.732e-03	3.069e-03	0.55580	1.000	
637	841316	9.271e-04	7.002e-04	1.3240	3.602e-03	2.122e-03	0.55732	0.631	
638	948029	9.202e-04	9.731e-04	0.9457	1.938e-03	8.273e-04	0.55882	0.073	.
639	1660169	9.174e-04	7.856e-04	1.1677	2.593e-03	1.215e-03	0.56032	0.003	**
640	New.Reference0TU521	9.088e-04	6.251e-04	1.4539	2.499e-03	1.141e-03	0.56180	0.001	***
641	833549	9.064e-04	5.469e-04	1.6573	1.846e-03	3.735e-05	0.56328	0.001	***
642	New.Reference0TU305	8.977e-04	5.713e-04	1.5713	2.908e-04	2.067e-03	0.56474	0.001	***
643	560276	8.905e-04	5.765e-04	1.5448	1.797e-04	1.953e-03	0.56620	1.000	
644	309877	8.708e-04	1.080e-03	0.8060	1.995e-03	6.582e-04	0.56762	0.019	*
645	1127320	8.686e-04	6.625e-04	1.3112	3.928e-05	1.769e-03	0.56904	0.001	***
646	829681	8.649e-04	4.348e-04	1.9894	4.727e-05	1.773e-03	0.57045	0.001	***
647	New.Reference0TU17	8.629e-04	8.994e-04	0.9594	6.228e-05	1.776e-03	0.57186	0.001	***
648	1108696	8.554e-04	1.027e-03	0.8329	1.551e-03	1.046e-03	0.57325	0.990	
649	1011088	8.525e-04	2.553e-03	0.3340	1.824e-03	3.677e-04	0.57464	0.789	
650	[reached getOption("max.print") -- omitted 7857 rows]								
651									
652	Contrast: Surface_Mesopelagic								
653									
654		average	sd	ratio	ava	avb	cumsum	p	
655	1080410	3.485e-02	1.594e-02	2.1868	1.865e-03	7.157e-02	0.03879	0.001	***
656	355538	2.819e-02	2.611e-02	1.0798	5.953e-02	3.879e-03	0.07017	0.002	**
657	323489	1.975e-02	1.313e-02	1.5045	7.299e-04	4.023e-02	0.09215	0.001	***
658	557211	1.911e-02	1.248e-02	1.5309	4.150e-02	3.492e-03	0.11342	0.001	***
659	341618	1.802e-02	6.029e-03	2.9880	3.711e-02	1.082e-03	0.13347	0.001	***
660	34469	1.681e-02	7.762e-03	2.1662	6.814e-04	3.431e-02	0.15219	0.001	***
661	639502	1.654e-02	7.989e-03	2.0698	3.588e-02	2.811e-03	0.17059	0.001	***
662	839363	1.472e-02	7.156e-03	2.0576	7.233e-04	3.017e-02	0.18698	0.001	***
663	884345	1.467e-02	7.408e-03	1.9800	1.926e-03	3.115e-02	0.20330	0.001	***
664	817600	1.418e-02	1.106e-02	1.2819	2.864e-02	2.826e-04	0.21909	0.001	***
665	228455	1.072e-02	1.216e-02	0.8813	2.176e-02	3.306e-04	0.23101	0.001	***

666	833419	9.695e-03	4.105e-03	2.3618	6.119e-04	1.999e-02	0.24180	0.155	
667	427495	9.534e-03	6.531e-03	1.4598	2.029e-02	1.237e-03	0.25242	0.001	***
668	355527	8.787e-03	8.217e-03	1.0694	1.774e-02	1.656e-04	0.26220	0.001	***
669	351294	7.867e-03	3.133e-03	2.5109	1.923e-03	1.762e-02	0.27095	0.001	***
670	845691	7.544e-03	4.388e-03	1.7192	5.102e-04	1.560e-02	0.27935	0.041	*
671	315563	7.486e-03	1.141e-02	0.6562	1.501e-02	4.518e-05	0.28768	0.001	***
672	1108577	7.396e-03	3.793e-03	1.9501	1.501e-02	2.150e-04	0.29591	0.001	***
673	630928	6.824e-03	3.410e-03	2.0012	5.465e-04	1.414e-02	0.30351	0.458	
674	108965	6.649e-03	3.471e-03	1.9154	3.123e-04	1.361e-02	0.31091	0.001	***
675	1082059	6.266e-03	9.018e-03	0.6949	1.195e-02	6.702e-03	0.31788	0.136	
676	592269	6.179e-03	3.498e-03	1.7666	1.256e-02	2.179e-04	0.32476	0.001	***
677	310272	5.790e-03	2.789e-03	2.0763	2.796e-04	1.186e-02	0.33120	0.001	***
678	842800	5.606e-03	3.091e-03	1.8138	2.605e-04	1.146e-02	0.33744	0.001	***
679	1105428	5.445e-03	5.263e-03	1.0346	1.106e-02	2.092e-04	0.34350	0.001	***
680	1109816	5.155e-03	3.454e-03	1.4927	1.076e-02	5.120e-04	0.34924	0.001	***
681	New.Reference0TU882	5.131e-03	4.353e-03	1.1787	1.050e-02	2.413e-04	0.35495	0.001	***
682	1106009	5.029e-03	2.580e-03	1.9493	1.295e-02	2.894e-03	0.36055	0.001	***
683	1111501	4.777e-03	2.675e-03	1.7861	1.046e-02	9.192e-04	0.36586	0.001	***
684	352531	4.774e-03	3.608e-03	1.3234	9.698e-03	1.493e-04	0.37118	0.001	***
685	592771	4.606e-03	2.805e-03	1.6416	9.343e-03	1.320e-04	0.37630	0.001	***
686	832816	4.536e-03	2.303e-03	1.9699	9.769e-03	7.112e-04	0.38135	0.001	***
687	353181	4.413e-03	2.413e-03	1.8285	9.260e-03	4.774e-04	0.38626	0.001	***
688	646549	4.405e-03	6.525e-03	0.6752	7.881e-04	9.228e-03	0.39117	0.075	.
689	151344	4.151e-03	4.047e-03	1.0257	8.360e-03	6.489e-05	0.39579	0.001	***
690	341734	4.115e-03	2.686e-03	1.5324	8.276e-03	4.504e-05	0.40037	0.001	***
691	106179	4.051e-03	1.887e-03	2.1463	8.257e-03	1.558e-04	0.40487	0.001	***
692	343231	4.019e-03	3.502e-03	1.1478	8.194e-03	3.035e-04	0.40935	0.001	***
693	125125	3.704e-03	1.373e-03	2.6985	2.566e-04	7.662e-03	0.41347	0.001	***
694	338106	3.701e-03	5.300e-03	0.6983	7.414e-03	9.064e-05	0.41759	0.001	***
695	536001	3.646e-03	4.035e-03	0.9036	7.657e-03	7.741e-04	0.42165	0.001	***
696	110119	3.644e-03	1.666e-03	2.1866	1.083e-03	8.296e-03	0.42570	0.001	***
697	New.Reference0TU446	3.609e-03	6.381e-03	0.5657	1.490e-03	7.663e-03	0.42972	0.898	
698	826517	3.527e-03	1.544e-03	2.2836	3.585e-04	7.403e-03	0.43365	0.001	***
699	231191	3.524e-03	4.144e-03	0.8502	8.234e-03	1.200e-03	0.43757	0.017	*
700	837317	3.424e-03	2.075e-03	1.6500	3.439e-04	7.094e-03	0.44138	0.001	***

701	227663	3.354e-03	3.266e-03	1.0269	7.264e-03	1.079e-03	0.44511	0.626	
702	777466	3.303e-03	4.330e-03	0.7629	1.433e-03	7.329e-03	0.44879	0.902	
703	New.Reference0TU44	3.287e-03	5.744e-03	0.5723	3.896e-04	6.929e-03	0.45245	0.095	.
704	3156804	3.235e-03	1.978e-03	1.6352	6.879e-03	4.141e-04	0.45605	0.001	***
705	347913	3.136e-03	1.259e-03	2.4906	2.107e-04	6.481e-03	0.45954	0.001	***
706	325965	3.025e-03	1.281e-03	2.3604	1.710e-04	6.220e-03	0.46290	0.001	***
707	832374	2.944e-03	1.030e-03	2.8574	1.809e-04	6.062e-03	0.46618	0.001	***
708	834856	2.839e-03	9.894e-04	2.8690	2.394e-04	5.917e-03	0.46934	0.001	***
709	563843	2.782e-03	1.264e-03	2.2004	5.795e-03	2.318e-04	0.47244	0.001	***
710	837714	2.774e-03	8.507e-04	3.2604	2.389e-04	5.786e-03	0.47552	0.001	***
711	154513	2.773e-03	2.046e-03	1.3553	2.065e-04	5.746e-03	0.47861	0.001	***
712	1105105	2.759e-03	1.254e-03	2.2002	5.839e-03	3.208e-04	0.48168	0.001	***
713	234927	2.706e-03	1.465e-03	1.8473	5.574e-03	1.729e-04	0.48469	0.001	***
714	551207	2.678e-03	3.002e-03	0.8918	5.539e-03	2.209e-04	0.48767	0.001	***
715	740763	2.672e-03	2.526e-03	1.0578	5.397e-03	5.884e-05	0.49065	0.001	***
716	315098	2.525e-03	1.623e-03	1.5555	9.621e-04	5.723e-03	0.49346	0.102	
717	542823	2.505e-03	1.325e-03	1.8911	5.397e-03	3.862e-04	0.49624	0.001	***
718	591130	2.505e-03	2.584e-03	0.9692	5.109e-03	1.051e-04	0.49903	0.001	***
719	825985	2.480e-03	1.015e-03	2.4426	1.946e-04	5.150e-03	0.50179	0.001	***
720	827407	2.474e-03	8.815e-04	2.8061	2.704e-04	5.217e-03	0.50454	0.001	***
721	826533	2.459e-03	5.872e-03	0.4188	2.813e-04	4.987e-03	0.50728	0.144	
722	592350	2.424e-03	2.415e-03	1.0034	5.104e-03	2.691e-04	0.50998	0.001	***
723	573845	2.410e-03	4.844e-03	0.4975	5.011e-04	4.528e-03	0.51266	0.084	.
724	1107076	2.410e-03	1.562e-03	1.5426	8.876e-04	5.312e-03	0.51534	0.486	
725	773487	2.394e-03	1.363e-03	1.7558	4.799e-03	1.128e-05	0.51801	0.001	***
726	234994	2.379e-03	2.318e-03	1.0264	4.802e-03	5.808e-05	0.52065	0.001	***
727	554951	2.373e-03	1.196e-03	1.9839	1.640e-04	4.902e-03	0.52330	0.895	
728	831163	2.359e-03	1.407e-03	1.6762	2.362e-04	4.951e-03	0.52592	0.001	***
729	New.Reference0TU421	2.340e-03	7.350e-04	3.1832	2.038e-04	4.881e-03	0.52853	0.001	***
730	1007856	2.325e-03	8.339e-04	2.7883	1.401e-04	4.783e-03	0.53111	0.001	***
731	825733	2.314e-03	9.434e-04	2.4531	3.288e-04	4.945e-03	0.53369	0.001	***
732	232905	2.262e-03	1.118e-03	2.0236	4.573e-03	5.023e-05	0.53621	0.001	***
733	846727	2.256e-03	1.249e-03	1.8058	3.506e-04	4.824e-03	0.53872	0.001	***
734	774258	2.207e-03	2.851e-03	0.7741	4.616e-03	7.058e-04	0.54117	0.001	***
735	253327	2.192e-03	3.039e-03	0.7214	1.397e-03	4.478e-03	0.54361	0.002	**

736	314474	2.148e-03	1.247e-03	1.7215	4.322e-03	2.708e-05	0.54600	0.001	***
737	New.Reference0TU238	2.123e-03	1.064e-03	1.9947	4.406e-03	1.645e-04	0.54837	0.001	***
738	347857	2.108e-03	9.363e-04	2.2511	1.001e-04	4.310e-03	0.55071	0.001	***
739	249226	2.092e-03	1.023e-03	2.0449	4.293e-03	1.104e-04	0.55304	0.001	***
740	1107422	2.010e-03	3.016e-03	0.6666	4.023e-03	1.282e-05	0.55528	0.001	***
741	4475220	1.996e-03	1.624e-03	1.2288	4.066e-03	7.846e-05	0.55750	0.001	***
742	New.Reference0TU252	1.994e-03	3.033e-03	0.6574	3.987e-03	5.910e-06	0.55972	0.001	***
743	6258	1.989e-03	1.070e-03	1.8583	3.601e-04	4.325e-03	0.56193	0.001	***
744	227866	1.959e-03	2.006e-03	0.9765	3.985e-03	9.696e-05	0.56411	0.001	***
745	356368	1.934e-03	9.331e-04	2.0724	3.878e-03	1.038e-05	0.56626	0.001	***
746	New.Reference0TU399	1.899e-03	8.068e-04	2.3541	4.131e-03	3.350e-04	0.56838	0.001	***
747	539147	1.880e-03	2.900e-03	0.6482	3.961e-03	8.619e-04	0.57047	0.982	
748	101670	1.876e-03	9.348e-04	2.0070	1.281e-04	3.872e-03	0.57256	0.001	***
749	569884	1.871e-03	1.511e-03	1.2384	3.815e-03	7.257e-05	0.57464	0.001	***
750	834286	1.808e-03	9.440e-04	1.9152	1.062e-04	3.720e-03	0.57665	0.001	***
751	581028	1.804e-03	9.857e-04	1.8298	2.692e-04	3.866e-03	0.57866	0.128	
752	161219	1.787e-03	8.223e-04	2.1732	1.248e-04	3.692e-03	0.58065	0.001	***
753	1109402	1.786e-03	1.423e-03	1.2554	3.585e-03	1.455e-05	0.58264	0.001	***
754	243160	1.779e-03	1.734e-03	1.0262	3.596e-03	8.884e-05	0.58462	0.001	***
755	344865	1.779e-03	8.457e-04	2.1036	3.706e-03	1.877e-04	0.58660	0.001	***
756	New.Reference0TU698	1.720e-03	1.098e-03	1.5657	3.668e-03	2.650e-04	0.58851	0.005	**
757	579841	1.710e-03	1.260e-03	1.3575	3.549e-03	1.887e-04	0.59042	0.001	***
758	119137	1.686e-03	1.457e-03	1.1577	3.876e-03	5.858e-04	0.59229	0.052	.
759	834243	1.661e-03	1.724e-03	0.9632	1.134e-04	3.398e-03	0.59414	0.001	***
760	830634	1.631e-03	1.873e-03	0.8710	1.159e-04	3.309e-03	0.59596	0.150	
761	1074804	1.631e-03	7.754e-04	2.1030	1.008e-04	3.362e-03	0.59777	0.001	***
762	323305	1.630e-03	2.324e-03	0.7013	3.273e-03	1.401e-05	0.59958	0.001	***
763	227717	1.614e-03	8.327e-04	1.9378	3.492e-03	2.750e-04	0.60138	0.001	***
764	344629	1.607e-03	1.576e-03	1.0198	3.378e-03	3.624e-04	0.60317	0.001	***
765	160817	1.593e-03	9.416e-04	1.6924	3.633e-04	3.503e-03	0.60494	1.000	
766	103709	1.582e-03	8.505e-04	1.8596	3.497e-03	4.817e-04	0.60670	0.001	***
767	753560	1.571e-03	2.170e-03	0.7239	2.445e-04	3.340e-03	0.60845	0.957	
768	2188457	1.569e-03	9.800e-04	1.6008	1.445e-04	3.282e-03	0.61020	0.001	***
769	354725	1.557e-03	6.018e-04	2.5869	3.170e-03	5.867e-05	0.61193	0.001	***
770	1108696	1.556e-03	1.232e-03	1.2628	3.868e-03	1.046e-03	0.61366	0.001	***

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771 830429      1.542e-03 9.113e-04 1.6920 1.327e-04 3.208e-03 0.61538 0.001 ***
772 229118      1.519e-03 8.174e-04 1.8589 3.207e-03 1.692e-04 0.61707 0.001 ***
773 593056      1.508e-03 8.982e-04 1.6786 1.123e-04 3.116e-03 0.61875 0.001 ***
774 147786      1.505e-03 1.627e-03 0.9246 3.066e-03 1.165e-04 0.62042 0.001 ***
775 1011088     1.504e-03 1.811e-03 0.8306 3.224e-03 3.677e-04 0.62209 0.062 .
776 1101488     1.503e-03 2.086e-03 0.7206 1.221e-03 3.782e-03 0.62377 0.986
777 838996      1.496e-03 8.424e-04 1.7753 8.678e-05 3.061e-03 0.62543 0.001 ***
778 834104      1.468e-03 7.058e-04 2.0796 1.405e-04 3.069e-03 0.62707 0.001 ***
779 546944      1.461e-03 7.533e-04 1.9389 2.941e-03 1.961e-05 0.62869 0.001 ***
780 [ reached getOption("max.print") -- omitted 7857 rows ]
781 ---
782 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
783 Permutation: free
784 Number of permutations: 999
785
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