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Increased temperature causes different carbon and nitrogen processing patterns in two common intertidal foraminifera (*Ammonia tepida* and *Haynesina germanica*)

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LABELS	
2d	2 days
4d	4 days
7d	7 days
14d	14 days
1	20°C
2	25°C
3	30°C
A	Haynesina germanica
B	Ammonia tepida

Supplementary Table 1. δ 13C, δ15N values and atomic ratios of 13C/12C and 15N/14N of the samples.

Background	δ15N/14N	AT% 15N/14N	δ13C/12C	AT% 13C/12C	µg N	µg C
Haynesina	12.58	0.371	-13.56	1.091	4.20	21.28
Ammonia	13.38	0.371	-13.95	1.090	7.04	29.41
Dunaliella	16.22	0.372	-18.30	1.086	16.10	108.58
Dunaliella gelabelt	213298.3	44.067	30267.7	25.895	3.39	20.62
Dunaliella excess		43.694		24.809		

Sample	Nr/Ind		[mg]	δ5N/14N	AT% 15N/14N	δ 13C/12C	AT% 13C/12C	µg N	µg C
2d1A 1		60	0.756	1000.8	0.750	213.6	1.339	3.95	18.93
2d1A 2		60	0.781	1174.0	0.816	275.7	1.406	3.99	19.69
2d1A 3		60	0.782	1087.0	0.783	255.1	1.384	3.89	17.83
2d2A 1		60	0.764	662.6	0.619	90.1	1.204	4.49	21.73
2d2A 2		60	0.807	856.4	0.692	128.2	1.246	4.61	23.61
2d2A 3		60	0.788	833.5	0.682	134.7	1.253	5.08	23.35
2d3A 1		60	0.813	919.8	0.714	120.2	1.237	5.51	25.59
2d3A 2		60	0.857	855.8	0.689	119.4	1.236	5.92	26.74
2d3A 3		60	0.805	860.5	0.693	109.0	1.225	4.95	24.15
4d1A 1		60	0.848	1340.0	0.877	238.9	1.366	4.42	22.03
4d1A 2		60	0.863	1594.9	0.972	305.0	1.438	4.64	22.66
4d1A 3		60	0.836	1421.5	0.905	307.0	1.440	4.97	19.96
4d2A 1		60	0.912	1150.7	0.802	133.3	1.251	5.20	24.93
4d2A 2		60	0.907	853.4	0.690	108.1	1.224	5.24	21.11
4d2A 3		60	0.895	1036.3	0.761	119.5	1.236	4.51	19.65

4d3A 1	60	0.835	759.1	0.655	90.3	1.204	4.92	18.41
4d3A 2	60	0.869	740.4	0.646	83.1	1.196	5.68	17.91
4d3A 3	60	0.872	877.3	0.699	78.0	1.191	4.90	19.88
7d1A 1	60	0.807	1922.6	1.096	243.1	1.371	4.45	21.73
7d1A 2	34	0.881	1387.2	0.894	204.8	1.329	4.15	16.49
7d1A 3	60	0.959	1833.9	1.059	242.0	1.370	5.09	24.66
7d2A 1	60	0.966	1201.7	0.820	97.8	1.212	5.40	22.30
7d2A 2	60	0.917	1496.6	0.933	165.4	1.286	4.88	21.20
7d2A 3	60	1.021	1462.8	0.918	101.3	1.216	5.42	24.63
7d3A 1	60	0.801	1291.0	0.853	101.2	1.216	5.51	22.95
7d3A 2	60	0.778	1640.6	0.991	99.0	1.214	4.36	21.25
7d3A 3	60	0.727	1798.3	1.052	88.3	1.202	4.16	20.70
14d1A 1	60	0.816	2229.2	1.214	197.9	1.322	4.19	20.57
14d1A 2	60	0.841	2603.4	1.349	193.3	1.317	4.87	24.82
14d1A 3	60	0.799	2615.0	1.361	234.6	1.361	4.08	20.87
14d2A 1	60	0.853	2501.8	1.315	77.8	1.191	4.43	20.59
14d2A 2	60	0.832	2010.6	1.125	96.0	1.211	5.19	19.62
14d2A 3	60	0.796	2371.8	1.272	102.3	1.217	3.89	17.67
14d3A 1	60	0.907	2530.4	1.315	91.4	1.205	5.70	26.08
14d3A 2	60	0.852	2618.4	1.349	113.1	1.229	5.59	23.81
14d3A 3	60	0.836	2713.0	1.389	75.4	1.188	4.88	22.91
2d1B 1	50	1.044	7032.8	2.869	1990.7	3.235	6.10	29.38
2d1B 2	50	1.073	8857.5	3.499	1463.1	2.680	5.68	34.94
2d1B 3	50	1.116	5940.8	2.489	1771.5	3.005	6.58	32.89
2d2B 1	50	0.967	4882.1	2.118	882.7	2.061	6.76	37.05
2d2B 2	50	0.919	4623.5	2.027	1263.1	2.468	5.58	28.13
2d2B 3	50	0.952	7769.4	3.125	1661.8	2.890	7.88	42.81
2d3B 1	50	0.998	4531.8	1.994	833.6	2.009	7.65	38.98
2d3B 2	50	1.026	3756.9	1.720	542.5	1.695	7.37	52.08
2d3B 3	50	0.915	4037.5	1.819	743.8	1.912	5.78	30.20
4d1B 1	31	0.789	8487.7	3.3721	1829.6	3.0665	3.25	15.58
4d1B 2	50	0.871	9684.7	3.781	1835.4	3.073	5.26	26.08
4d1B 3	50	0.923	7000.7	2.859	1151.2	2.349	6.98	37.03
4d2B 1	50	0.953	13224.1	4.972	2001.6	3.247	6.47	31.72
4d2B 2	50	0.997	8653.6	3.429	1200.4	2.401	7.63	37.71
4d2B 3	50	0.993	14831.4	5.503	2667.1	3.938	7.17	36.36
4d3B 1	50	0.903	10776.2	4.152	1359.8	2.570	6.65	35.82
4d3B 2	50	1.014	8847.3	3.495	895.7	2.075	7.13	44.24
4d3B 3	50	1.007	9759.3	3.807	1228.2	2.431	6.70	36.90
7d1B 1	49	0.904	11595.7	4.428	1247.3	2.451	5.72	34.13
7d1B 2	50	0.746	14796.9	5.491	1938.0	3.180	6.74	34.74
7d1B 3	43	0.821	12165.4	4.619	1630.9	2.857	4.25	20.36
7d2B 1	50	0.998	13276.5	4.989	1201.3	2.402	7.70	41.77
7d2B 2	50	0.943	19883.3	7.133	2094.9	3.344	7.21	38.61

7d2B 3	50	0.839	22176.8	7.855	2582.2	3.851	6.91	41.65
7d3B 1	50	0.990	13170.5	4.954	1328.5	2.537	6.69	33.19
7d3B 2	50	0.956	13682.6	5.124	1473.9	2.691	6.99	35.34
7d3B 3	50	0.980	13940.0	5.209	1576.0	2.799	7.02	34.66
14d1B 1	60	1.281	17149.9	6.258	1525.6	2.746	7.43	37.20
14d1B 2	62	1.277	19784.7	7.102	2071.6	3.320	7.93	37.91
14d1B 3	23	0.756	13755.7	5.148	2738.5	4.012	3.96	12.16
14d2B 1	42	0.839	31382.1	10.643	4127.6	5.422	4.67	18.58
14d2B 2	40	0.903	28696.7	9.847	4570.2	5.862	4.14	14.64
14d2B 3	41	0.825	24060.0	8.440	2664.1	3.935	5.19	23.96
14d3B 1	43	0.893	13886.8	5.191	1044.9	2.235	5.06	23.78
14d3B 2	45	0.961	20923.6	7.462	2445.3	3.709	6.18	24.23
14d3B 3	47	0.941	16462.6	6.0354	1453.1	2.669	5.42	24.92

Suplementary Table 2. Foraminiferal uptake rates of carbon and nitrogen.

uptake rates

Sample	C Rates [ng C mg-1- h-1]	N Rates [ng N mg-1- h-1]
2d1A 1	4.992	0.936
2d1A 2	6.396	1.074
2d1A 3	5.375	0.969
2d2A 1	2.592	0.690
2d2A 2	3.644	0.868
2d2A 3	3.860	0.948
2d3A 1	3.700	1.098
2d3A 2	3.645	1.039
2d3A 3	3.230	0.935
4d1A 1	2.878	0.623
4d1A 2	3.668	0.764
4d1A 3	3.356	0.750
4d2A 1	1.764	0.580
4d2A 2	1.243	0.435
4d2A 3	1.284	0.465
4d3A 1	1.006	0.395
4d3A 2	0.876	0.425
4d3A 3	0.917	0.436
7d1A 1	1.733	0.540
7d1A 2	1.025	0.332
7d1A 3	1.647	0.493
7d2A 1	0.645	0.339
7d2A 2	1.038	0.404
7d2A 3	0.696	0.392
7d3A 1	0.826	0.448

7d3A 2	0.772	0.469
7d3A 3	0.728	0.526
14d1A 1	0.668	0.292
14d1A 2	0.766	0.382
14d1A 3	0.812	0.341
14d2A 1	0.277	0.331
14d2A 2	0.324	0.317
14d2A 3	0.323	0.297
14d3A 1	0.379	0.401
14d3A 2	0.444	0.433
14d3A 3	0.306	0.401
2d1B 1	48.557	6.902
2d1B 2	41.639	7.826
2d1B 3	45.409	5.902
2d2B 1	29.931	5.771
2d2B 2	33.922	4.756
2d2B 3	65.101	10.772
2d3B 1	28.856	5.883
2d3B 2	24.700	4.580
2d3B 3	21.823	4.327
4d1B 1	15.696	2.918
4d1B 2	23.875	4.866
4d1B 3	20.307	4.446
4d2B 1	28.877	7.383
4d2B 2	19.940	5.529
4d2B 3	41.950	8.764
4d3B 1	23.619	6.582
4d3B 2	17.288	5.192
4d3B 3	19.752	5.401
7d1B 1	11.807	3.469
7d1B 2	22.371	6.253
7d1B 3	10.071	2.971
7d2B 1	12.619	4.814
7d2B 2	21.213	6.988
7d2B 3	31.498	8.323
7d3B 1	11.150	4.182
7d3B 2	13.605	4.695
7d3B 3	13.895	4.680
14d1B 1	5.526	2.305
14d1B 2	7.608	2.824
14d1B 3	5.403	1.691
14d2B 1	11.022	3.861
14d2B 2	8.893	2.931
14d2B 3	9.495	3.430

14d3B 1	3.503	1.845
14d3B 2	7.588	3.080
14d3B 3	4.806	2.203

Supplementary Table 3. Δ13C – DIC, atomic ratios of 13C/12C and O2 values of the water samples.

Sample ID	delta_13C	atomp_13C	Sample ID	O2 [mg L-1]
2d1A	1922.7	3.164	2d1A	5.05
2d1A	1742.6	2.975	2d1A	4.61
2d1A	1870.6	3.110	2d1A	5.22
2d2A	2266.1	3.523	2d2A	5.16
2d2A	2173.5	3.426	2d2A	5.14
2d2A	2120	3.371	2d2A	5.39
2d3A	2148.2	3.400	2d3A	6.21
2d3A	2280.2	3.538	2d3A	6.51
2d3A	1477.4	2.695	2d3A	**7.7**

Supplementary Figure. Regressions of the residuals vs. fitted values for foraminiferal C and N data for visual exploration of heteroscedasticity.