

References:

Greenop, R., Foster, G.L., Sosdian, S.M., Hain, M.P., Oliver, K.I.C., Goodwin, P., Chalk, T.B., Lear, C.H., Wilson, P.A. (submitted to Climate of the Past 2015) A record of Neogene seawater $\delta^{11}\text{B}$ reconstructed from paired $\delta^{11}\text{B}$ analyses in benthic and planktic foraminifera.

Model scenario:

GTS2012 GTS (2012) age scale

0.201 slope Slope of the $\Delta\text{pH}/\Delta\delta^{13}\text{C}$ relationship used to calculate the output in this file (as described in Greenop et al., Climate of the Past)

Datasets:

Benthic/Planktic foram $\delta^{11}\text{B}/\delta^{13}\text{C}$ this study; Sosdian et al., (submitted to Nature); Foster et al. 2012; Martinez-Boti et al. 2015 and Haug and Tiedemann 1998

Smoothed $\delta^{11}\text{B}_{\text{sw}}$

Age (Myr)

Quantiles

	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	40.099	40.104	40.337	39.729	0.077791	39.932	40.024	40.049	40.104	40.153	40.173	40.239
1.143	40.212	40.216	40.494	39.808	0.08715	40.028	40.129	40.157	40.216	40.272	40.295	40.372
1.1564	40.215	40.219	40.499	39.809	0.087479	40.031	40.132	40.16	40.219	40.275	40.298	40.376
1.161	40.216	40.22	40.501	39.809	0.087591	40.032	40.133	40.161	40.22	40.276	40.299	40.377
1.4488	40.281	40.285	40.602	39.835	0.09526	40.079	40.192	40.221	40.285	40.347	40.372	40.457
2.2739	40.446	40.452	40.862	39.892	0.121	40.193	40.332	40.369	40.452	40.528	40.561	40.669
2.8691	40.542	40.548	41.018	39.891	0.1406	40.251	40.411	40.452	40.548	40.638	40.676	40.8
5.3735	40.542	40.553	41.221	39.284	0.21961	40.073	40.332	40.405	40.553	40.694	40.752	40.942
8.6819	39.487	39.498	40.242	38.508	0.23273	38.992	39.266	39.34	39.498	39.652	39.713	39.901
9.3346	39.279	39.291	40.067	38.209	0.24929	38.742	39.045	39.124	39.291	39.454	39.521	39.719
10.138	39.048	39.061	39.84	37.927	0.25478	38.496	38.806	38.892	39.061	39.229	39.295	39.501
11.623	38.782	38.795	39.578	37.617	0.25936	38.22	38.537	38.62	38.795	38.965	39.033	39.242
12.274	38.731	38.746	39.556	37.574	0.25745	38.181	38.487	38.569	38.746	38.912	38.981	39.191
12.799	38.707	38.72	39.53	37.566	0.25239	38.171	38.466	38.55	38.72	38.884	38.952	39.156

13.53	38.671	38.686	39.477	37.559	0.24649	38.145	38.436	38.514	38.686	38.844	38.911	39.117
16.389	38.496	38.501	39.39	37.165	0.27174	37.938	38.234	38.316	38.501	38.686	38.765	38.995
17.69	38.422	38.427	39.392	36.867	0.30632	37.811	38.125	38.217	38.427	38.637	38.729	38.985
19.006	38.36	38.365	39.482	36.586	0.35167	37.664	38.017	38.119	38.365	38.609	38.716	39.021
19.667	38.329	38.332	39.528	36.445	0.37733	37.585	37.962	38.07	38.332	38.599	38.708	39.038
22.618	38.238	38.244	39.787	35.873	0.51056	37.246	37.733	37.878	38.244	38.605	38.744	39.195
22.983	38.23	38.238	39.834	35.805	0.52886	37.204	37.707	37.856	38.238	38.608	38.756	39.222
23.083	38.228	38.236	39.847	35.786	0.53391	37.194	37.699	37.85	38.236	38.61	38.759	39.229

**Planktic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	8.1627	8.1628	8.2248	8.0886	0.016331	8.131	8.1468	8.1516	8.1628	8.1738	8.1786	8.1948
1.143	8.1323	8.1323	8.2022	8.0583	0.018511	8.0961	8.1142	8.1199	8.1323	8.1446	8.15	8.1685
1.1564	8.1034	8.1033	8.1701	8.0429	0.016874	8.0706	8.0872	8.0921	8.1033	8.1144	8.1197	8.1373
1.161	8.1654	8.1652	8.2224	8.1094	0.01589	8.1346	8.15	8.1546	8.1652	8.176	8.1809	8.1971
1.4488	8.1533	8.1533	8.2203	8.079	0.01807	8.1174	8.1354	8.1409	8.1533	8.1656	8.1708	8.1882
2.2739	7.9669	7.9667	8.0482	7.8866	0.020161	7.9275	7.9474	7.9535	7.9667	7.9803	7.9861	8.0075
2.8691	7.9847	7.9845	8.0625	7.9025	0.021219	7.9439	7.9642	7.9702	7.9845	7.9992	8.0054	8.0265
5.3735	7.9173	7.9169	8.0623	7.8011	0.03124	7.8558	7.8872	7.8966	7.9169	7.9383	7.9474	7.9788
8.6819	7.8613	7.8615	8.0331	7.6871	0.03869	7.785	7.8246	7.8357	7.8615	7.8868	7.8989	7.9374
9.3346	7.9034	7.903	8.0318	7.792	0.033258	7.8395	7.8711	7.8807	7.903	7.926	7.9357	7.9702
10.138	8.053	8.0523	8.1669	7.9531	0.027131	8.0024	8.0267	8.0346	8.0523	8.0706	8.0793	8.1083
11.623	7.9112	7.9109	8.0307	7.7877	0.032987	7.8484	7.8788	7.8888	7.9109	7.933	7.9429	7.9782
12.274	8.0313	8.0306	8.147	7.9308	0.028238	7.9761	8.0041	8.0123	8.0306	8.05	8.0583	8.0883
12.799	7.9698	7.9695	8.0759	7.853	0.029656	7.9135	7.9411	7.9495	7.9695	7.9895	7.9982	8.0298
13.53	7.9374	7.9374	8.0615	7.8286	0.031057	7.8779	7.9068	7.9167	7.9374	7.958	7.9671	7.9989
16.389	7.9828	7.9827	8.097	7.8549	0.030207	7.9246	7.9533	7.9623	7.9827	8.0031	8.0121	8.0432
17.69	8.0231	8.0233	8.1794	7.9019	0.031521	7.9623	7.9915	8.001	8.0233	8.0445	8.0536	8.0844
19.006	7.9227	7.9228	8.0899	7.7817	0.040593	7.8425	7.8827	7.8949	7.9228	7.9511	7.9625	8.0002

19.667	8.099	8.099	8.2226	7.9732	0.034925	8.0313	8.0647	8.0746	8.099	8.1228	8.1334	8.1669
22.618	7.9466	7.9478	8.1566	7.7531	0.054389	7.8397	7.8925	7.9092	7.9478	7.9852	8.0009	8.0479
22.983	8.1099	8.1103	8.3048	7.9632	0.04605	8.0185	8.0642	8.0779	8.1103	8.1426	8.1556	8.197
23.083	8.0369	8.0375	8.259	7.8422	0.051905	7.9327	7.986	8.0019	8.0375	8.0734	8.0888	8.1359

**Benthic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	7.9533	7.9533	8.0341	7.8756	0.020876	7.913	7.9331	7.9392	7.9533	7.9672	7.9737	7.9951
1.143	7.7712	7.772	7.8751	7.6432	0.030384	7.7097	7.7414	7.7511	7.772	7.7922	7.801	7.8286
1.1564	7.9267	7.9266	8.0142	7.8484	0.021545	7.8854	7.9056	7.9119	7.9266	7.9413	7.9478	7.9685
1.161	7.9088	7.9092	7.9985	7.8145	0.023008	7.8633	7.8863	7.8934	7.9092	7.9244	7.9311	7.953
1.4488	7.817	7.8176	7.9187	7.6958	0.029213	7.7594	7.7886	7.7972	7.8176	7.8372	7.8454	7.8728
2.2739	7.762	7.7625	7.8944	7.6356	0.032083	7.6975	7.7309	7.7404	7.7625	7.7837	7.7933	7.8229
2.8691	7.5879	7.5889	7.7462	7.4161	0.041944	7.5035	7.5471	7.5595	7.5889	7.6167	7.6286	7.6674
5.3735	7.6525	7.6527	7.8596	7.4918	0.045162	7.563	7.6089	7.6223	7.6527	7.6826	7.6957	7.7407
8.6819	7.8168	7.8162	7.9669	7.6752	0.035343	7.7487	7.7824	7.7928	7.8162	7.8403	7.8507	7.8882
9.3346	7.7293	7.7288	7.9035	7.5775	0.042656	7.647	7.6879	7.7006	7.7288	7.7571	7.7708	7.815
10.138	7.6509	7.6525	7.8795	7.3382	0.065448	7.5162	7.5873	7.6081	7.6525	7.6961	7.7147	7.7735
11.623	7.7366	7.7375	7.935	7.5501	0.050097	7.6366	7.6871	7.7028	7.7375	7.7707	7.7851	7.8326
12.274	7.7066	7.7065	7.8882	7.4983	0.048783	7.6119	7.659	7.6737	7.7065	7.7391	7.7539	7.8007
12.799	7.6213	7.6226	7.8535	7.3446	0.065566	7.488	7.5581	7.5783	7.6226	7.6654	7.6851	7.7467
13.53	7.6522	7.6528	7.8209	7.444	0.050616	7.5522	7.6031	7.6187	7.6528	7.6861	7.7017	7.7506
16.389	7.6957	7.6964	7.8701	7.5173	0.048669	7.5978	7.648	7.6633	7.6964	7.7289	7.7426	7.7883
17.69	7.7679	7.7692	7.9652	7.5771	0.046903	7.6726	7.7225	7.7372	7.7692	7.7999	7.8133	7.8571
19.006	7.8201	7.8211	8.0175	7.6319	0.047623	7.7242	7.7736	7.788	7.8211	7.853	7.8666	7.9093
19.667	7.8702	7.8713	8.0657	7.6907	0.047818	7.7757	7.8227	7.8376	7.8713	7.9037	7.9172	7.9597
22.618	7.8391	7.8412	8.085	7.5996	0.06534	7.7052	7.7743	7.7949	7.8412	7.8857	7.9038	7.959
22.983	7.7916	7.7968	8.0676	7.381	0.082577	7.6153	7.7113	7.7386	7.7968	7.8497	7.871	7.9374
23.083	7.8443	7.8468	8.086	7.5767	0.068037	7.7061	7.7764	7.7983	7.8468	7.8939	7.912	7.9676

References:

Greenop, R., Foster, G.L., Sosdian, S.M., Hain, M.P., Oliver, K.I.C., Goodwin, P., Chalk, T.B., Lear, C.H., Wilson, P.A. (submitted to Climate of the Past 2015) A record of Neogene seawater $\delta^{11}\text{B}$ reconstructed from paired $\delta^{11}\text{B}$ analyses in benthic and planktic foraminifera.

Model scenario:

GTS2012 GTS (2012) age scale

0.1655 slope Slope of the $\Delta\text{pH}/\Delta \delta^{13}\text{C}$ relationship used to calculate the output in this file (described in Greenop et al., Climate of the Past)

Datasets:

Benthic/Planktic foram $\delta^{11}\text{B}/\delta^{13}\text{C}$ this study; Sosdian et al., (submitted to Nature); Foster et al. 2012; Martinez-Boti et al. 2015 and Haug and Tiedemann 1998

Smoothed $\delta^{11}\text{B}_{\text{sw}}$

Age (Myr)

Quantiles

	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	39.763	39.77	40.123	39.289	0.113	39.518	39.655	39.695	39.77	39.842	39.871	39.962
1.143	39.802	39.808	40.236	39.263	0.12593	39.531	39.68	39.724	39.808	39.889	39.923	40.027
1.1564	39.803	39.809	40.239	39.263	0.12639	39.531	39.68	39.724	39.809	39.891	39.925	40.029
1.161	39.803	39.81	40.24	39.262	0.12654	39.531	39.681	39.725	39.81	39.891	39.925	40.029
1.4488	39.824	39.832	40.315	39.234	0.13733	39.533	39.691	39.737	39.832	39.92	39.957	40.071
2.2739	39.871	39.882	40.5	39.059	0.17396	39.501	39.704	39.762	39.882	39.991	40.038	40.181
2.8691	39.89	39.904	40.601	38.925	0.20205	39.453	39.697	39.764	39.904	40.028	40.084	40.25
5.3735	39.738	39.76	40.819	38.215	0.31539	39.058	39.436	39.54	39.76	39.959	40.043	40.291
8.6819	38.569	38.584	39.631	37.206	0.3245	37.903	38.252	38.359	38.584	38.8	38.892	39.162
9.3346	38.339	38.351	39.479	36.872	0.3449	37.634	38.001	38.11	38.351	38.586	38.684	38.968
10.138	38.072	38.087	39.279	36.639	0.35269	37.342	37.726	37.839	38.087	38.323	38.422	38.705
11.623	37.75	37.768	39.008	36.296	0.36253	36.994	37.393	37.514	37.768	38.005	38.109	38.404
12.274	37.691	37.711	38.936	36.245	0.36147	36.931	37.337	37.457	37.711	37.944	38.047	38.343
12.799	37.67	37.69	38.881	36.243	0.35464	36.927	37.325	37.438	37.69	37.916	38.018	38.311

13.53	37.643	37.662	38.796	36.241	0.34449	36.924	37.305	37.419	37.662	37.885	37.981	38.268
16.389	37.505	37.521	38.582	36.037	0.3497	36.787	37.167	37.277	37.521	37.749	37.85	38.15
17.69	37.448	37.463	38.674	35.828	0.37743	36.673	37.086	37.2	37.463	37.714	37.82	38.14
19.006	37.406	37.424	38.849	35.597	0.41881	36.533	37.005	37.131	37.424	37.697	37.813	38.166
19.667	37.384	37.403	38.937	35.481	0.44377	36.456	36.957	37.093	37.403	37.69	37.816	38.197
22.618	37.345	37.365	39.397	34.879	0.58059	36.139	36.792	36.971	37.365	37.748	37.908	38.413
22.983	37.344	37.364	39.459	34.799	0.59995	36.097	36.773	36.954	37.364	37.759	37.925	38.446
23.083	37.344	37.365	39.476	34.772	0.6053	36.086	36.768	36.952	37.365	37.763	37.93	38.456

**Planktic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	8.1882	8.1881	8.2696	8.1253	0.017259	8.1544	8.1711	8.1764	8.1881	8.1999	8.205	8.2221
1.143	8.1656	8.1654	8.2455	8.096	0.019513	8.1279	8.1466	8.1525	8.1654	8.1787	8.1846	8.2042
1.1564	8.1368	8.1367	8.2085	8.0715	0.01807	8.1017	8.119	8.1249	8.1367	8.1488	8.1541	8.173
1.161	8.1972	8.1969	8.2796	8.1382	0.016962	8.1641	8.1808	8.1858	8.1969	8.2085	8.2135	8.2309
1.4488	8.1894	8.1892	8.2643	8.1148	0.019517	8.1511	8.1706	8.1762	8.1892	8.2026	8.2084	8.2281
2.2739	8.0209	8.0206	8.1069	7.9256	0.022533	7.978	7.9991	8.0056	8.0206	8.0357	8.0427	8.0666
2.8691	8.0453	8.0451	8.1403	7.9554	0.024048	7.9991	8.0219	8.029	8.0451	8.0612	8.0685	8.0935
5.3735	7.9978	7.9972	8.1475	7.8765	0.035587	7.9305	7.9635	7.9735	7.9972	8.0212	8.0321	8.0704
8.6819	7.9586	7.9585	8.118	7.811	0.040159	7.8798	7.9196	7.9318	7.9585	7.9858	7.9977	8.0376
9.3346	7.997	7.9966	8.1372	7.8503	0.037344	7.9243	7.9606	7.9713	7.9966	8.0219	8.0333	8.0707
10.138	8.1348	8.1342	8.2677	8.0206	0.031728	8.0752	8.1034	8.1129	8.1342	8.1559	8.1658	8.199
11.623	8.0141	8.0134	8.1644	7.8671	0.037611	7.9408	7.9775	7.9884	8.0134	8.0399	8.0512	8.088
12.274	8.1194	8.1189	8.2521	7.998	0.033204	8.0559	8.0868	8.0966	8.1189	8.1415	8.1513	8.1855
12.799	8.0634	8.0624	8.2177	7.9349	0.034385	7.9984	8.0301	8.0398	8.0624	8.0867	8.0972	8.1332
13.53	8.0341	8.0336	8.1733	7.9157	0.035166	7.9678	7.9994	8.0103	8.0336	8.0578	8.0685	8.1048
16.389	8.0706	8.0699	8.2074	7.9495	0.033537	8.0066	8.0383	8.0476	8.0699	8.093	8.1035	8.138
17.69	8.1044	8.1041	8.2534	7.9759	0.033868	8.0385	8.0717	8.0814	8.1041	8.1267	8.1369	8.1723
19.006	8.0156	8.0152	8.1859	7.8625	0.041787	7.9349	7.9745	7.987	8.0152	8.0436	8.0565	8.0977

19.667	8.1734	8.1728	8.326	8.0323	0.037103	8.1027	8.1377	8.1482	8.1728	8.1979	8.209	8.2478
22.618	8.0308	8.0309	8.2629	7.8047	0.054173	7.9273	7.9781	7.9942	8.0309	8.0671	8.0827	8.1381
22.983	8.1793	8.1787	8.3667	7.9912	0.048095	8.0866	8.133	8.1471	8.1787	8.2107	8.2256	8.2756
23.083	8.1119	8.1116	8.3241	7.8977	0.052646	8.0105	8.0607	8.0766	8.1116	8.147	8.1626	8.2151

**Benthic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	7.9921	7.9922	8.0833	7.9105	0.022045	7.9496	7.9706	7.977	7.9922	8.0068	8.0134	8.0353
1.143	7.8363	7.8361	7.953	7.732	0.030507	7.776	7.8067	7.816	7.8361	7.857	7.8659	7.8959
1.1564	7.9754	7.9753	8.0699	7.8828	0.022959	7.9307	7.9531	7.96	7.9753	7.9906	7.9978	8.0209
1.161	7.9588	7.9589	8.0567	7.8665	0.024366	7.9104	7.9352	7.9425	7.9589	7.9749	7.9824	8.0065
1.4488	7.8844	7.8841	8.0029	7.7757	0.02994	7.8264	7.8548	7.864	7.8841	7.9048	7.9141	7.9436
2.2739	7.8461	7.8464	7.9801	7.7214	0.03257	7.7815	7.8146	7.8246	7.8464	7.8678	7.8774	7.9103
2.8691	7.7112	7.7113	7.8772	7.5567	0.041774	7.6282	7.6713	7.6843	7.7113	7.7387	7.7508	7.7926
5.3735	7.7766	7.7754	7.9592	7.6033	0.048518	7.6838	7.7296	7.7441	7.7754	7.8088	7.8239	7.8749
8.6819	7.925	7.9241	8.0616	7.7519	0.039317	7.8497	7.8864	7.8983	7.9241	7.9518	7.964	8.0024
9.3346	7.8555	7.8559	8.0176	7.6826	0.045715	7.767	7.81	7.8241	7.8559	7.8868	7.9003	7.9451
10.138	7.7994	7.8009	8.0091	7.5416	0.060713	7.6782	7.7402	7.7589	7.8009	7.8409	7.8589	7.9139
11.623	7.875	7.8751	8.0539	7.6717	0.050188	7.7753	7.8257	7.8416	7.8751	7.9094	7.9239	7.9715
12.274	7.8532	7.8536	8.0204	7.6163	0.050169	7.7548	7.8037	7.8195	7.8536	7.8875	7.9025	7.9493
12.799	7.8127	7.8134	7.9989	7.537	0.060691	7.6936	7.7529	7.7713	7.8134	7.8541	7.8726	7.9295
13.53	7.8061	7.8068	7.9973	7.6221	0.050489	7.7082	7.7558	7.7718	7.8068	7.8404	7.8554	7.9051
16.389	7.8316	7.832	8.0088	7.6516	0.047557	7.7388	7.7845	7.7986	7.832	7.8636	7.8783	7.9246
17.69	7.8874	7.8878	8.0512	7.6826	0.046487	7.7961	7.842	7.8563	7.8878	7.9182	7.9327	7.9781
19.006	7.9276	7.9278	8.1002	7.7556	0.047208	7.8363	7.8812	7.8959	7.9278	7.9595	7.9728	8.0217
19.667	7.9705	7.9703	8.1714	7.7957	0.047605	7.8771	7.9239	7.938	7.9703	8.0024	8.0172	8.0647
22.618	7.9404	7.9403	8.1716	7.6806	0.06338	7.8139	7.8791	7.8985	7.9403	7.9832	8.0013	8.0632
22.983	7.8994	7.9018	8.17	7.585	0.07674	7.7422	7.8254	7.8494	7.9018	7.9516	7.9745	8.0441
23.083	7.9437	7.9446	8.1905	7.687	0.065389	7.8137	7.8807	7.9005	7.9446	7.9873	8.0064	8.0714

References:

Greenop, R., Foster, G.L., Sosdian, S.M., Hain, M.P., Oliver, K.I.C., Goodwin, P., Chalk, T.B., Lear, C.H., Wilson, P.A. (submitted to Climate of the Past 2015) A record of Neogene seawater $\delta^{11}\text{B}$ reconstructed from paired $\delta^{11}\text{B}$ analyses in benthic and planktic foraminifera.

Model scenario:

GTS2012 GTS (2012) age scale

0.1797 slope Slope of the $\Delta\text{pH}/\Delta \delta^{13}\text{C}$ relationship used to calculate the output in this file (described in Greenop et al., Climate of the Past)

Datasets:

Benthic/Planktic foram $\delta^{11}\text{B}/\delta^{13}\text{C}$ this study; Sosdian et al., (submitted to Nature); Foster et al. 2012; Martinez-Boti et al. 2015 and Haug and Tiedemann 1998

Smoothed $\delta^{11}\text{B}_{\text{sw}}$

Age (Myr)

Quantiles

	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	39.911	39.918	40.184	39.464	0.096027	39.703	39.82	39.85	39.918	39.978	40.005	40.083
1.143	39.983	39.988	40.318	39.477	0.10738	39.755	39.881	39.914	39.988	40.058	40.088	40.176
1.1564	39.985	39.99	40.322	39.477	0.10778	39.756	39.882	39.916	39.99	40.06	40.091	40.179
1.161	39.986	39.99	40.323	39.476	0.10791	39.757	39.883	39.917	39.99	40.061	40.091	40.18
1.4488	40.026	40.031	40.4	39.464	0.11722	39.779	39.915	39.951	40.031	40.11	40.141	40.237
2.2739	40.125	40.132	40.636	39.265	0.14852	39.813	39.982	40.03	40.132	40.229	40.271	40.392
2.8691	40.178	40.187	40.807	39.073	0.17238	39.815	40.013	40.069	40.187	40.298	40.347	40.489
5.3735	40.094	40.112	41.157	38.316	0.26915	39.51	39.834	39.929	40.112	40.284	40.351	40.567
8.6819	38.97	38.99	39.766	37.675	0.28651	38.354	38.695	38.787	38.99	39.17	39.247	39.479
9.3346	38.748	38.769	39.592	37.377	0.3065	38.089	38.451	38.555	38.769	38.961	39.045	39.289
10.138	38.497	38.518	39.363	37.15	0.31404	37.834	38.193	38.297	38.518	38.715	38.803	39.057
11.623	38.199	38.218	39.112	36.816	0.32377	37.519	37.886	37.993	38.218	38.425	38.513	38.78
12.274	38.144	38.162	39.059	36.797	0.32291	37.469	37.831	37.936	38.162	38.37	38.458	38.72
12.799	38.121	38.14	39.031	36.81	0.31678	37.458	37.815	37.917	38.14	38.342	38.428	38.685

13.53	38.09	38.109	39.015	36.817	0.30793	37.443	37.79	37.89	38.109	38.303	38.389	38.642
16.389	37.935	37.95	39	36.553	0.31833	37.27	37.623	37.731	37.95	38.16	38.243	38.52
17.69	37.87	37.882	39.061	36.372	0.34777	37.157	37.532	37.646	37.882	38.113	38.207	38.511
19.006	37.819	37.828	39.16	36.198	0.39001	37.029	37.441	37.563	37.828	38.092	38.202	38.549
19.667	37.794	37.8	39.21	36	0.41499	36.959	37.394	37.519	37.8	38.084	38.203	38.567
22.618	37.731	37.734	39.618	35.129	0.5494	36.625	37.206	37.367	37.734	38.11	38.27	38.768
22.983	37.727	37.73	39.673	35.02	0.56822	36.583	37.182	37.351	37.73	38.118	38.283	38.803
23.083	37.726	37.73	39.688	34.99	0.57342	36.57	37.176	37.347	37.73	38.12	38.289	38.812

**Planktic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	8.1771	8.1771	8.2427	8.1093	0.016866	8.1439	8.1606	8.1658	8.1771	8.1887	8.1934	8.2101
1.143	8.1509	8.151	8.2382	8.0789	0.019026	8.1139	8.1324	8.138	8.151	8.1639	8.1695	8.1882
1.1564	8.1224	8.1223	8.1867	8.0536	0.017142	8.0884	8.1057	8.1109	8.1223	8.1339	8.1393	8.1556
1.161	8.1834	8.1832	8.2535	8.1252	0.016436	8.1513	8.1674	8.1721	8.1832	8.1944	8.1992	8.2159
1.4488	8.1736	8.1736	8.2478	8.1027	0.018493	8.137	8.1556	8.1611	8.1736	8.1859	8.1916	8.2099
2.2739	7.998	7.998	8.0865	7.9124	0.021292	7.957	7.9769	7.9835	7.998	8.0122	8.0187	8.0407
2.8691	8.0193	8.0192	8.1322	7.9312	0.022721	7.975	7.9974	8.004	8.0192	8.0346	8.0414	8.0647
5.3735	7.9634	7.9624	8.1134	7.8505	0.033579	7.8993	7.9309	7.9406	7.9624	7.9856	7.996	8.0306
8.6819	7.9179	7.9173	8.0836	7.7568	0.039423	7.8416	7.8797	7.891	7.9173	7.9447	7.9566	7.995
9.3346	7.9576	7.9568	8.0923	7.8331	0.036284	7.8878	7.9224	7.9329	7.9568	7.9822	7.9929	8.0309
10.138	8.1	8.0995	8.2133	7.9897	0.030041	8.0441	8.0706	8.0792	8.0995	8.1199	8.1291	8.1599
11.623	7.9708	7.9703	8.1084	7.8549	0.036294	7.9014	7.9355	7.9458	7.9703	7.995	8.0061	8.044
12.274	8.0817	8.0809	8.1961	7.9581	0.031544	8.023	8.0509	8.0598	8.0809	8.1027	8.1123	8.1457
12.799	8.024	8.023	8.1526	7.9109	0.032941	7.9618	7.9924	8.0014	8.023	8.0457	8.0558	8.0917
13.53	7.9934	7.9929	8.13	7.8671	0.033797	7.9302	7.9602	7.97	7.9929	8.0164	8.0263	8.061
16.389	8.0336	8.0331	8.1567	7.9112	0.032496	7.9726	8.0017	8.0108	8.0331	8.0554	8.0651	8.0987
17.69	8.07	8.0696	8.2116	7.9409	0.032804	8.0064	8.038	8.0476	8.0696	8.092	8.1024	8.1337
19.006	7.9769	7.9769	8.1277	7.8196	0.041423	7.8953	7.9373	7.949	7.9769	8.0049	8.0169	8.0583

19.667	8.1418	8.1421	8.2781	7.994	0.036237	8.0718	8.1059	8.1169	8.1421	8.1661	8.1771	8.2118
22.618	7.9952	7.997	8.2106	7.7697	0.054141	7.8863	7.9423	7.9591	7.997	8.0317	8.0467	8.0994
22.983	8.1499	8.1511	8.34	7.9703	0.047094	8.0562	8.1039	8.1183	8.1511	8.1814	8.1956	8.2419
23.083	8.0806	8.0817	8.292	7.8731	0.052395	7.9744	8.0294	8.046	8.0817	8.1158	8.1321	8.1821

**Benthic pH
Age (Myr)**

	Quantiles											
	mean	median	max	min	stand. dev.	2.5%	16.5%	25.0%	50.0%	75.0%	83.5%	97.5%
0.67965	7.9756	7.9754	8.0623	7.9045	0.021202	7.9346	7.955	7.9612	7.9754	7.9899	7.9963	8.0169
1.143	7.8083	7.8084	7.9408	7.6979	0.029721	7.7498	7.7793	7.788	7.8084	7.8286	7.8373	7.8654
1.1564	7.9543	7.9543	8.0442	7.8634	0.02238	7.9104	7.9326	7.9393	7.9543	7.9697	7.9762	7.9979
1.161	7.937	7.9369	8.0196	7.8426	0.02423	7.8895	7.9135	7.9204	7.9369	7.9531	7.961	7.9836
1.4488	7.8552	7.8554	7.9713	7.7352	0.029379	7.7971	7.8268	7.8357	7.8554	7.875	7.8838	7.9126
2.2739	7.8102	7.8104	7.9356	7.6856	0.031806	7.7469	7.7792	7.7888	7.8104	7.8318	7.8413	7.8723
2.8691	7.6604	7.6613	7.8372	7.4812	0.04153	7.5779	7.62	7.6326	7.6613	7.6879	7.6999	7.7409
5.3735	7.7249	7.7244	7.9717	7.5525	0.046001	7.636	7.6797	7.694	7.7244	7.7559	7.7692	7.8171
8.6819	7.8799	7.8789	8.0286	7.7529	0.037394	7.8101	7.8437	7.8543	7.8789	7.9043	7.9159	7.9561
9.3346	7.8038	7.8033	7.9773	7.662	0.044251	7.7198	7.7611	7.7734	7.8033	7.8333	7.8472	7.8925
10.138	7.7395	7.7416	7.9566	7.4328	0.06274	7.6115	7.6786	7.6983	7.7416	7.7822	7.7998	7.8579
11.623	7.8183	7.8183	7.9991	7.6245	0.050485	7.7185	7.7698	7.7844	7.8183	7.8521	7.8675	7.9183
12.274	7.7938	7.7938	7.9735	7.6124	0.050004	7.6954	7.7451	7.7604	7.7938	7.8273	7.8421	7.8927
12.799	7.7373	7.7382	7.9713	7.4803	0.062868	7.6105	7.6757	7.6955	7.7382	7.7801	7.7989	7.8591
13.53	7.744	7.7437	7.9313	7.5406	0.050774	7.6456	7.6955	7.7097	7.7437	7.7786	7.7929	7.8438
16.389	7.7761	7.7762	7.949	7.5935	0.047915	7.6828	7.7298	7.7436	7.7762	7.8087	7.8226	7.8689
17.69	7.8379	7.8383	8.0016	7.657	0.046942	7.7435	7.7926	7.8068	7.8383	7.8696	7.8839	7.9296
19.006	7.883	7.8834	8.0568	7.6802	0.046914	7.792	7.8372	7.8509	7.8834	7.9149	7.9286	7.9741
19.667	7.9289	7.9295	8.1141	7.7218	0.047364	7.8354	7.8828	7.8972	7.9295	7.9611	7.9754	8.0187
22.618	7.8987	7.9008	8.1351	7.6336	0.064209	7.767	7.8359	7.8562	7.9008	7.9425	7.9598	8.0202
22.983	7.8551	7.8593	8.1351	7.4853	0.07847	7.6907	7.7811	7.8057	7.8593	7.9085	7.9304	7.9987
23.083	7.9023	7.9045	8.14	7.6365	0.066559	7.7666	7.8374	7.8588	7.9045	7.9486	7.9657	8.0276