

Number	Specimen		Location		Depth (m)	Temp. (°C)	$\delta^{13}\text{C}$ PDB	$\delta^{18}\text{O}$ PDB
	Species	Place	Latitude	Longitude				
1	<i>Caryophyllia aleutica</i>	Aleutian trench	45°26'N	154°12'E	1680	2	-0.60	-0.27
2	<i>Fungiacyathus aleuticus</i>	Aleutian trench	45°26'N	154°12'E	5220	1.25	0.20	-0.27
3a	<i>Lophelia pertusa</i>	Great Meteor Bank	30°N	28.5°W	960	8	0.80	0.01
3b	<i>Desmophyllum cristagalli</i>	Great Meteor Bank	30°N	28.5°W	960	8	0.80	0.01
4a	<i>Deltocyathus moseleyi</i>	Great Meteor Bank	30°N	28.5°W	510	12.5	0.90	0.28
4b	<i>Flabellum chunii</i>	Great Meteor Bank	30°N	28.5°W	510	12.5	0.90	0.28
5	<i>Caryophyllia calvery</i>	Great Meteor Bank	30°N	28.5°W	310	15	1.00	0.66
6	<i>Desmophyllum cristagalli</i>	Tirrenian Sea	40°53'N	10°26'E	815	11	0.50	0.66
7	<i>Desmophyllum cristagalli</i>	Tirrenian Sea	40°52'N	10°25'E	700	11	0.50	0.66
8	<i>Desmophyllum cristagalli</i>	Tirrenian Sea	40°51'N	10°24'E	635	11	0.50	0.66
9	<i>Flabellum alabastrum</i>	Sierra Leone Rise	6°55'N	21°52'W	1170	4.5	0.60	0.01
10	<i>Gardineria antarctica</i>	Antarctic shores	66°26'S	59°16'E	410	1	0.50	-0.59
11	<i>Flabellum impensum</i>	Antarctic shores	65°59'S	57°08'E	265	1	0.60	-0.59
12	<i>Flabellum apertum</i>	Southwest Atlantic	35°44'S	22°33'E	1400	3	0.40	0.01
13	<i>Gardineria antarctica</i>	Antarctic shores	64°03'S	98°33'E	525	1	0.50	-0.59
14	<i>Gardineria antarctica</i>	Antarctic shores	67°21'S	179°53'E	500-900	1.75	0.6-0.9	-0.59
15	<i>Flabellum thouarsii</i>	Argentinian shores	42°33'S	60°58'W	80	8	1.50	0.37
16	<i>Flabellum thouarsii</i>	Falkland Islands	52°40'S	56°08'W	1660	2.5	0.40	0.01
17a	<i>Balanophyllia malouinensis</i>	Falkland Islands	52°08'S	57°16'W	720	3	0.50	0.28
17b	<i>Flabellum thouarsii</i>	Falkland Islands	52°08'S	57°16'W	720	3	0.50	0.28
18	<i>Caryophyllia ambrosia</i>	Reykjanes Ridge	58°45'N	27°13'W	2190	3.5	1.10	0.01
19	<i>Caryophyllia calvery</i>	Reykjanes Ridge	58°23'N	31°47'W	1700	3.5	1.10	0.01
20	<i>Desmophyllum cristagalli</i>	Reykjanes Ridge	35°07'N	12°51'W?	1000	8	1.10	0.01
21	<i>Desmophyllum cristagalli</i>	Lydonia Canyon	40°21'N	67°39'W	905	6	0.80	0.01
22	<i>Desmophyllum cristagalli</i>	Lydonia Canyon	40°11'N	67°38'W	1984	3.5	1.00	0.01
23	<i>Desmophyllum cristagalli</i>	Baltimore Canyon	38°05'N	73°47'W	1024	5.5	0.80	0.01
24	<i>Dendrophyllia sp.</i>	Manado, Indonesia	2°32'N	124°58'E	10	28	1.50	0.09
25	<i>Solenosmilia variabilis</i>	Iceland shelf	60°58'N	29°15'W	128	8	1.50	0.47
26	<i>Desmophyllum cristagalli</i>	Mid-Atlantic Ridge	45°N	29°W	800	8.5	0.90	0.28
27	<i>Desmophyllum cristagalli</i>	Mid-Atlantic Ridge	45°N	29°W	900	7.5	0.90	0.28
28	<i>Desmophyllum cristagalli</i>	Mid-Atlantic Ridge	45°N	29°W	1200	5.5	0.90	0.01
29	<i>Desmophyllum cristagalli</i>	Nova Scotia shelf	43°58'N	58°59'W	549	7	1.10	0.28
30	<i>Desmophyllum cristagalli</i>	Bahamas	26°28'N	78°42'W	253	18	1.00	0.66
31	<i>Desmophyllum cristagalli</i>	Bahamas	25°07'N	77°16'W	295	20	1.00	0.66
32	<i>Lophelia pertusa</i>	Sula Ridge	64°05'N	8°03'E	270	7.2	1.10	0.47

Table 1: List of coral specimen used for isotopic analyses with environmental information