

Table S1

**Table S1.** Mean temperatures (°C) by depth and period

	12 m	15 m	18 m	21 m	24 m	Mean
21 feb-20 mar 2021		15.7		15.6	15.7	15.7
4-21 dec 2021	15.6	15.5	15.5	15.5	15.4	15.5
15-31 jan 2022		15.1	15.1	15.1		15.1

**Table S2.** Mean maximum daily illuminance

Depth	Depth		Depth		Depth	
	lux	variation (%)	lux	variation (%)	lux	variation (%)
	21 feb-20 mar 2021		4-14 dec 2021		15-31 jan 2022	
12 m			6630.2	100		
15 m	6252.3	100	5734.6	86.5	4883.7	100
18 m			2882.4	43.5	4569.2	93.6
21 m	3905.3	62.5	3543.7	53.5	2998.8	61.4
24 m	2220.6	35.5	1376.0	20.8		

Table S3

**Table S3.** Proportion of rhodoliths and grain-size classes (% cover)

	9 m	12 m	15 m	18 m	21 m	24 m	Mean $\pm$ SD
Rhodoliths	1.6	5.2	8.1	15.9	5.0	1.4	6.2 $\pm$ 5.4
Cobbles (>60 mm)	20.3	34.8	22.5	19.8	15.5	33.5	24.4 $\pm$ 8.0
Pebbles (20-60 mm)	77.6	57.5	65.9	58.1	71.2	41.5	62.0 $\pm$ 12.7
Sand (<20 mm)	0.5	2.5	3.5	6.2	8.3	23.7	7.4 $\pm$ 8.4
<b>composition of finer elements</b>							
very coarse sand +	76.0	45.6	54.2	42.7	39.1	25.9	47.3 $\pm$ 16.9
coarse sand	5.7	16.1	8.7	9.9	26.1	16.8	13.9 $\pm$ 7.4
medium sand	9.4	30.2	15.2	15.5	24.9	36.9	22.0 $\pm$ 10.4
fine sand	1.8	2.6	2.1	2.5	2.7	4.1	2.7 $\pm$ 0.8
very fine sand -	7.0	5.6	19.8	29.4	7.2	16.2	14.2 $\pm$ 9.4

**Table S4.** Shape classes and maximum projections of rhodolith sphericity by depth

Depth	Shape classes (%)			Sphericity projection $\pm$ SD
	Spheroidal	Discoidal	Ellipsoidal	
9 m	37.9	33.7	28.4	0.65 $\pm$ 0.12
12 m	61.1	25.6	13.3	0.72 $\pm$ 0.11
15 m	70.3	15.8	13.9	0.73 $\pm$ 0.10
18 m	70.2	18.2	11.6	0.73 $\pm$ 0.11
21 m	71.8	12.6	15.5	0.74 $\pm$ 0.10
24 m	63.6	13.6	22.7	0.71 $\pm$ 0.10

**Table S5.** Rhodolith morphotypes. Abundance and proportions

		number of thodoliths					
<b>Depth (m)</b>	<b>9</b>	<b>12</b>	<b>15</b>	<b>18</b>	<b>21</b>	<b>24</b>	
Praline	15	44	102	94	64	10	
Other	76	42	38	71	25	4	
Boxwork	4	4	9	5	9	8	
Branches	0	0	16	11	5	0	

  

		proportion (%)					
<b>Depth (m)</b>	<b>9</b>	<b>12</b>	<b>15</b>	<b>18</b>	<b>21</b>	<b>24</b>	<b>Total</b>
Praline	15.8	48.9	61.8	51.9	62.1	45.5	47.7
Other	80.0	46.7	23.0	39.2	24.3	18.2	38.6
Boxwork	4.2	4.4	5.5	2.8	8.7	36.4	10.3
Branches	0.0	0.0	9.7	6.1	4.9	0.0	3.4