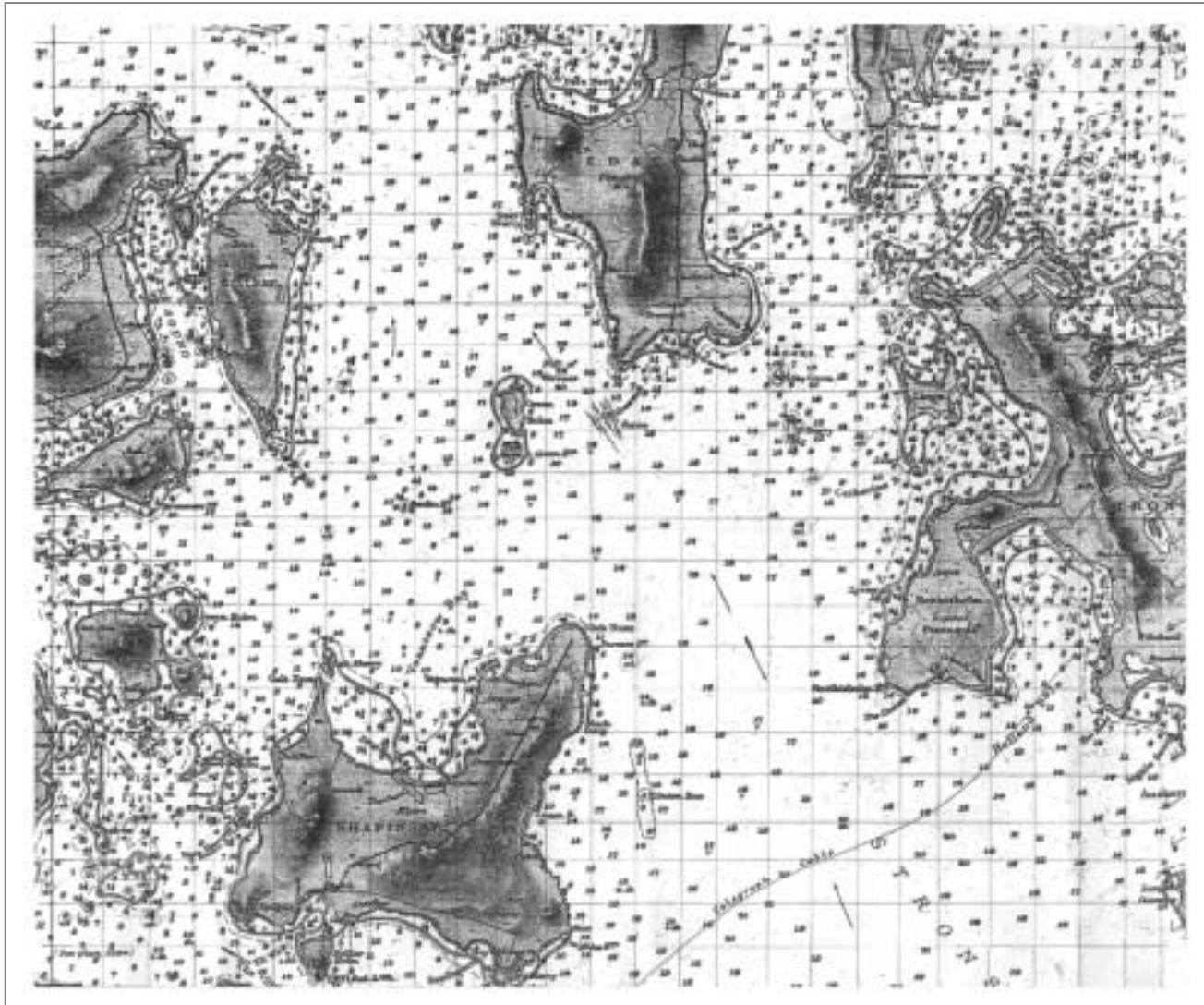
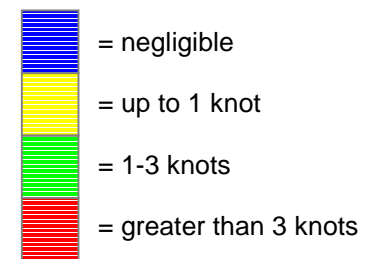
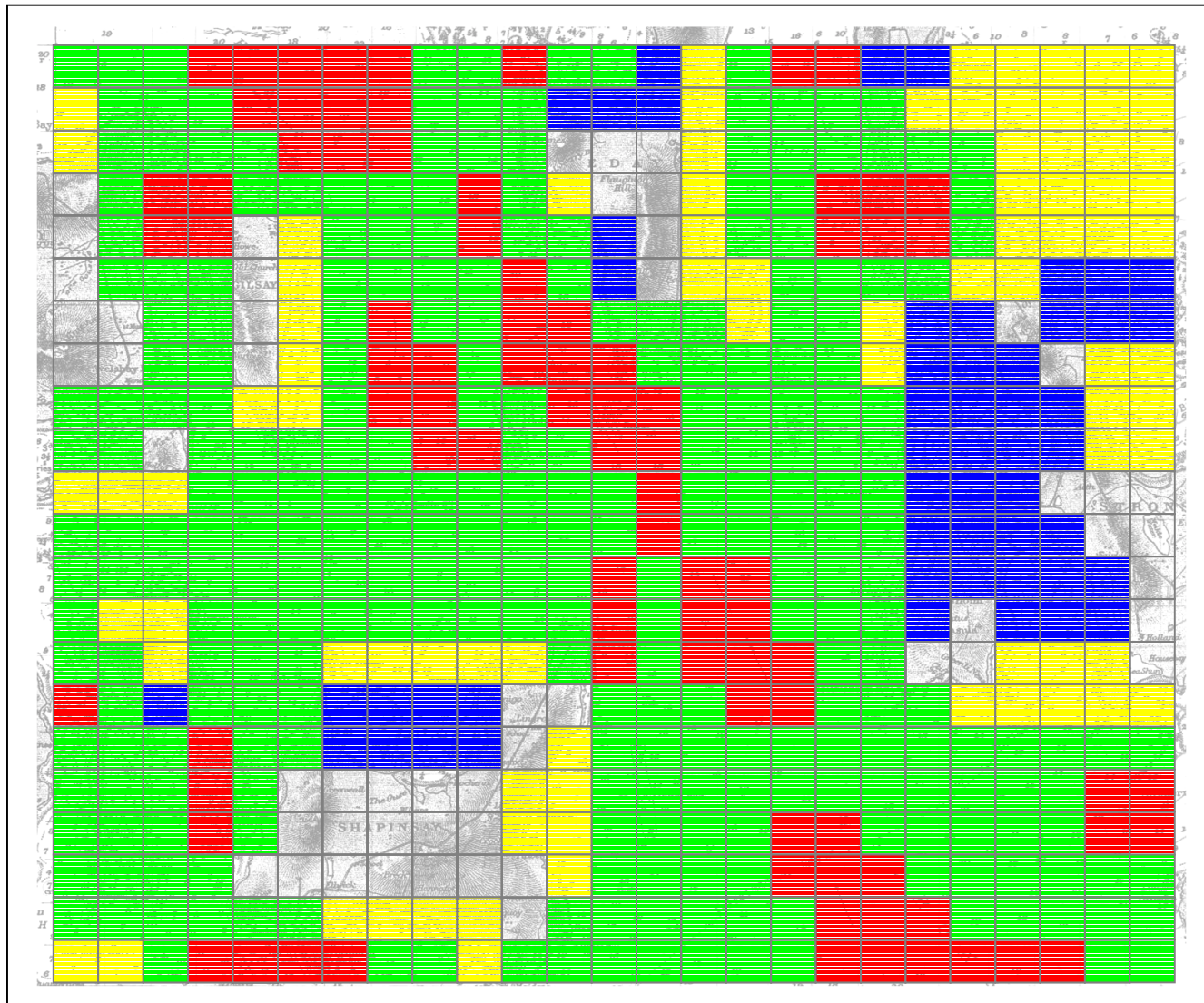


Appendix Ia: Admiralty chart for the study region, which is approximately 20km x 20 km. Figures on the chart indicate depth in fathoms (1 fathom = 6 feet).



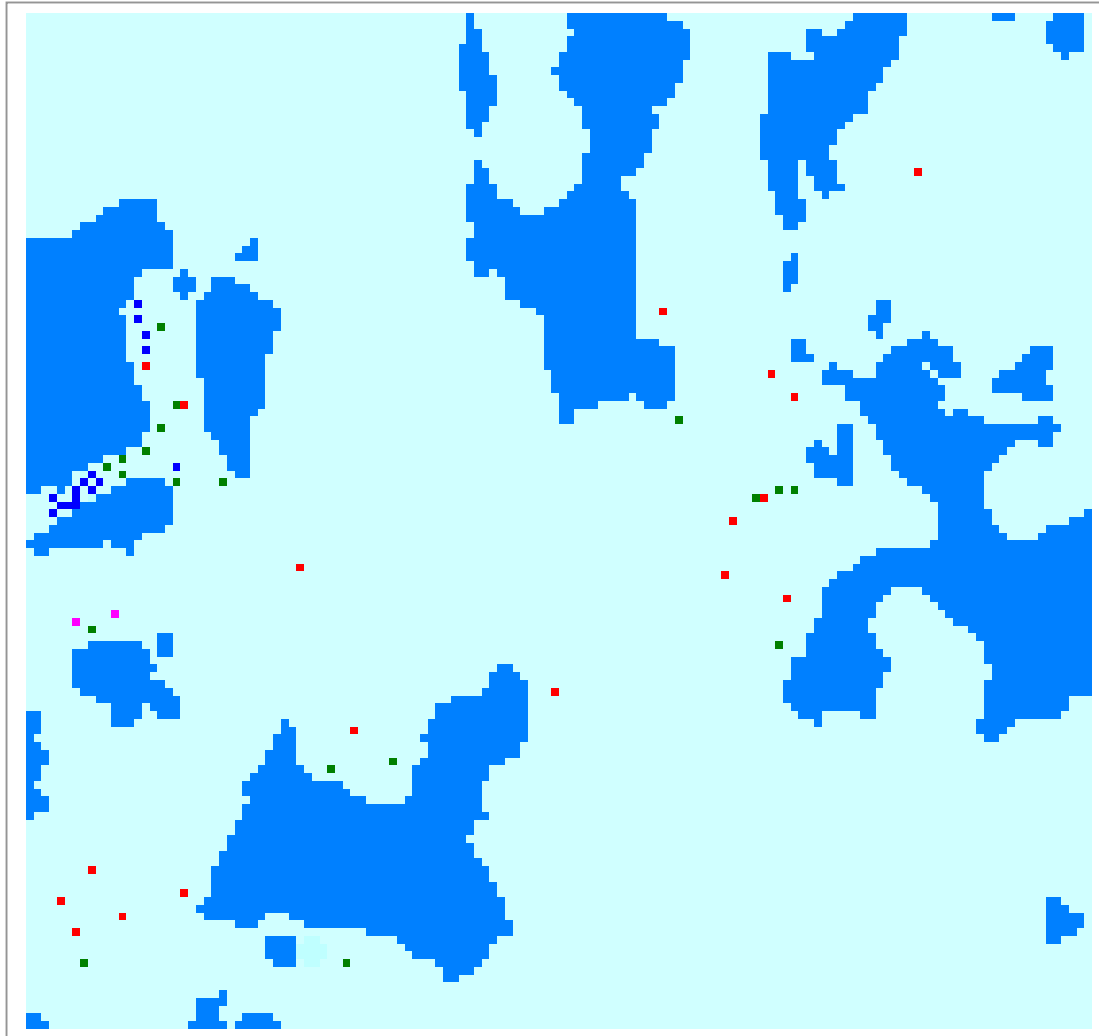
Appendix Ib: map of the study area showing the distribution of maximum tidal velocity.



Appendix Ic: calculation of wave exposure.

Site	Wind direction frequency/%												Exposure	Scale
	5.3	3.0	3.2	4.1	8.8	10.7	10.9	9.7	14.6	14.1	8.1	6.1		
	Distance to (degrees) (nautical miles)													
	0/360	30	60	90	120	150	180	210	240	270	300	330		
1	4.27	4.54	4.70	5.87	7.47	2.03	0.80	0.96	2.67	53.36	53.36	53.36	1732	9
2	1.60	3.26	2.40	3.84	2.51	32.02	7.47	2.13	2.13	53.36	53.36	4.80	1755	9
3	2.93	1.23	0.85	2.24	0.91	1.60	8.54	4.00	3.74	53.36	0.27	0.27	999	9
4	1.23	7.04	1.17	0.96	1.33	4.38	14.14	1.60	1.07	0.53	0.53	0.64	295	6
5	2.19	1.92	2.19	53.36	53.36	2.93	2.40	11.21	4.27	1.17	0.80	0.85	965	9
6	5.34	4.91	3.20	3.79	0.96	0.85	0.96	0.27	0.27	0.43	0.69	53.36	441	9
7	2.72	1.60	3.47	1.71	2.03	3.47	8.00	1.33	1.55	2.67	53.36	5.87	722	9
8	4.00	1.33	0.80	1.92	0.91	2.19	11.79	1.60	1.23	1.28	1.39	2.19	272	6
9	0.80	0.53	0.48	0.69	0.80	7.04	0.91	0.43	0.32	0.32	0.43	0.64	123	3
10	2.40	0.80	0.64	0.80	4.80	3.20	2.03	0.27	0.16	0.16	0.80	1.07	139	3
11	6.14	2.67	2.40	2.24	1.17	3.74	5.12	9.07	1.87	1.55	1.60	9.34	371	8
12	5.07	2.40	2.03	1.49	1.87	2.83	10.03	4.27	6.03	2.88	1.07	0.64	385	8
13	2.40	6.14	8.54	7.74	3.20	1.49	3.20	0.85	0.96	0.53	2.40	1.65	228	5
14	4.27	2.83	4.48	4.27	8.16	1.07	0.91	1.60	2.77	7.15	3.74	12.01	416	9
15	8.00	3.20	3.26	1.12	1.17	1.49	7.74	8.27	2.93	10.14	3.84	2.93	493	9
16	10.25	4.80	6.67	0.69	0.80	1.12	1.07	1.12	1.12	1.07	4.27	3.20	220	5
17	1.07	6.94	4.54	6.94	53.36	53.36	4.43	1.49	0.43	0.16	0.11	0.16	1179	9
18	9.87	2.67	1.07	4.27	5.07	53.36	5.60	5.07	3.63	2.67	7.47	11.21	1025	9
19	11.47	2.83	6.40	4.80	53.36	53.36	4.00	3.74	5.50	2.40	3.09	6.14	1402	9
20	0.32	0.37	0.64	1.07	5.87	3.09	3.47	1.07	1.60	0.48	0.96	0.53	183	4
21	3.63	2.24	3.20	53.36	1.33	53.36	53.36	7.47	6.40	6.40	10.67	2.40	1775	9
22	1.07	0.80	0.85	0.91	0.96	4.00	53.36	1.07	0.32	0.43	0.80	0.91	682	9
23	2.93	1.60	0.43	1.17	4.80	0.80	2.13	1.87	1.71	9.07	2.40	3.63	313	7
24	2.40	10.14	2.13	1.92	6.35	2.40	2.56	2.35	3.74	1.01	1.07	1.33	275	6
A(25)	2.56	0.80	0.96	0.75	0.64	0.85	0.85	0.96	0.75	1.55	0.69	0.96	100	2
B(26)	1.17	0.53	1.55	0.80	1.17	1.12	4.27	7.47	8.80	1.12	2.13	3.31	339	7

Appendix 1e: map of the survey region showing sites where maerl has already been recorded. Colours relate to different information sources.



Source	Key	Number of sites where maerl is recorded in study area
Admiralty charts	■	18
SUMARE project	■	16
ICIT student	■	2
MNCR	■	18
Total		54

Appendix If: calculation of the frequency of occurrence of maerl using the number of occurrences of maerl under different conditions of depth, tide and wave exposure and the total number of observed points that share those characteristics.

$$\Pr\{p\} = \frac{N_{maerl,\chi(p)}}{N_{\chi(p)}} \quad \text{where :}$$

$N_{maerl,\chi(p)}$ = the number of occurrences of maerl at points with characteristics $\chi(p)$

$N_{\chi(p)}$ = the total number of observed points that share those characteristics.

$N_{maerl,\chi(p)} / N_{\chi(p)}$				
Depth Range (m)	Current	Exposure		
		1	2	3
0-5	1	0/42	1/51	0/6
	2	0/8	0/54	0/11
	3	3/44	1/67	0/11
	4	0/10	0/11	0/0
6-10	1	0/8	0/57	0/14
	2	0/4	0/61	1/32
	3	13/59	5/122	2/32
	4	0/9	0/23	0/8
11-15	1	0/0	1/9	0/8
	2	0/6	1/53	1/55
	3	7/29	6/116	4/57
	4	0/3	0/24	0/19
16-20	1	0/0	0/0	0/0
	2	0/5	0/13	0/19
	3	2/12	1/92	0/46
	4	0/1	0/13	0/22
21-25	1	0/0	0/0	0/1
	2	0/2	0/1	0/12
	3	0/3	1/31	2/50
	4	0/0	0/2	0/12
26-30	1	0/0	0/0	0/0
	2	0/0	0/0	0/4
	3	0/0	0/23	0/83
	4	0/0	0/5	0/16
31-35	1	0/0	0/0	0/0
	2	0/0	0/0	0/1

Frequency				
Depth Range (m)	Current	Exposure		
		1	2	3
0-5	1	0.000	0.020	0.000
	2	0.000	0.000	0.000
	3	0.068	0.015	0.000
	4	0.000	0.000	0.000
6-10	1	0.000	0.000	0.000
	2	0.000	0.000	0.031
	3	0.220	0.041	0.063
	4	0.000	0.000	0.000
11-15	1	0.000	0.111	0.000
	2	0.000	0.019	0.018
	3	0.241	0.052	0.070
	4	0.000	0.000	0.000
16-20	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.167	0.011	0.000
	4	0.000	0.000	0.000
21-25	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.032	0.040
	4	0.000	0.000	0.000
26-30	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000
	4	0.000	0.000	0.000
31-35	1	0.000	0.000	0.000
	2	0.000	0.000	0.000

	3	0/0	0/4	0/84
	4	0/0	0/0	0/35
36-40				
36-40	1	0/0	0/0	0/0
	2	0/0	0/0	0/0
	3	0/0	0/0	0/9
	4	0/0	0/0	0/16

	3	0.000	0.000	0.000
	4	0.000	0.000	0.000
36-40				
36-40	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000
	4	0.000	0.000	0.000

41-45	1	0/0	0/0	0/0
	2	0/0	0/0	0/0
	3	0/0	0/0	0/0
	4	0/0	0/0	0/6

41-45	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000
	4	0.000	0.000	0.000

46-50	1	0/0	0/0	0/0
	2	0/0	0/0	0/0
	3	0/0	0/0	0/0
	4	0/0	0/0	0/4

46-50	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000
	4	0.000	0.000	0.000

51-55	1	0/0	0/0	0/0
	2	0/0	0/0	0/0
	3	0/0	0/0	0/0
	4	0/0	0/0	0/1

51-55	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000
	4	0.000	0.000	0.000