

# UK Cable Route GT - Middlesborough - May

Latitude: 54.60 N Longitude: 0.81 E

## Weather Days

Wave Height > 6.0 ft Mean: 4.6 days Range: 2.5 - 6.8 days p50:5 days p75:3 days p90:2 days

Wave Height > 7.0 ft Mean: 2.7 days Range: 1.1 - 4.3 days p50:3 days p75:2 days p90:1 days

Wave Height > 8.0 ft Mean: 1.5 days Range: 0.3 - 2.7 days p50:1.5 days p75:1 days p90:0.5 days

Wind Speed > 15.0 knots Mean: 12.1 days Range: 8.7 - 15.6 days p50:12.5 days p75:10 days p90:8.5 days

Wind Speed > 20.0 knots Mean: 4.7 days Range: 2.4 - 7.0 days p50:5 days p75:3 days p90:2 days

Wind Speed > 25.0 knots Mean: 1.0 days Range: 0.1 - 1.9 days p50:1 days p75:0.5 days p90:0.5 days

## Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 4.0 times per month  
A 2 day or longer window will statistically occur 3.2 times per month  
A 3 day or longer window will statistically occur 2.6 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 3.2 times per month  
A 2 day or longer window will statistically occur 2.9 times per month  
A 3 day or longer window will statistically occur 2.4 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 2.2 times per month  
A 2 day or longer window will statistically occur 2.1 times per month  
A 3 day or longer window will statistically occur 2.0 times per month

## Waves

Mean Height: 2 - 4 ft

The wave heights will occasionally reach 10 - 12 ft, but rarely higher.

Mean Period: 4 - 6 sec

The wave periods will occasionally reach 10 - 12 sec, but rarely longer.

Principle Direction, from: N

WindSea/Swell: 42% / 58%

## Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 25 - 30 kts, but rarely greater.

Principle Direction, from: SSW

## Currents

Mean Speed: 0.01-0.25 kts

The currents will occasionally reach 0.50-0.75 kts, but rarely greater.

Principle Direction, to: ENE

## Weather Days

Current Speed > 1.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

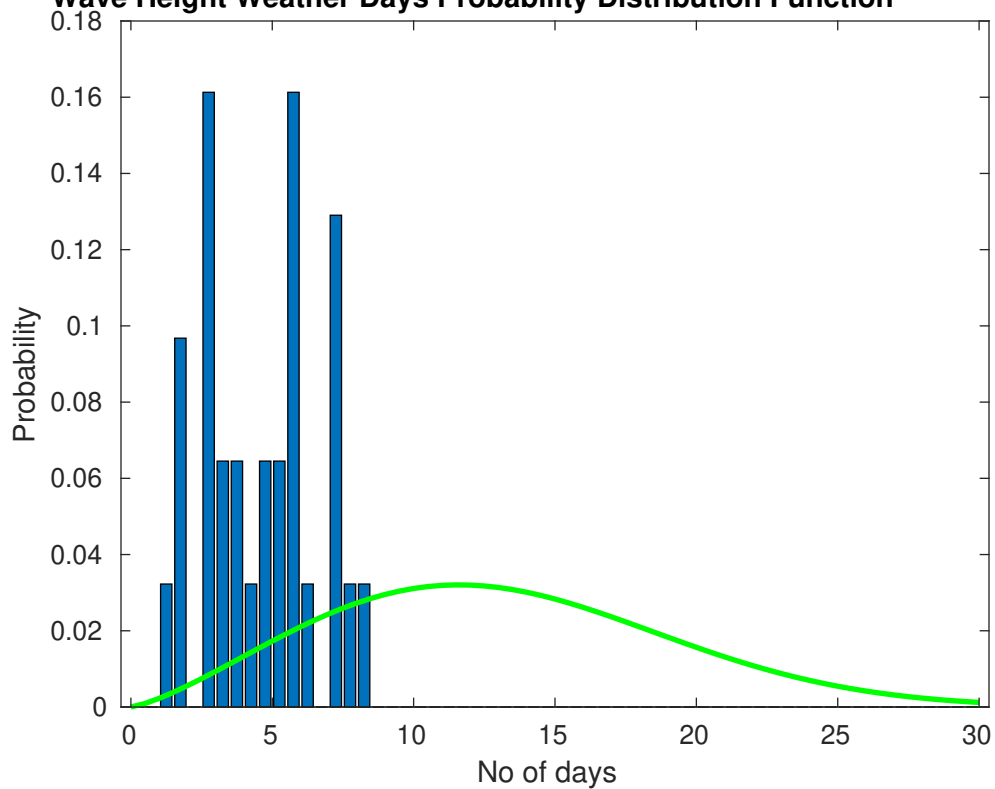
Current Speed > 1.5 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

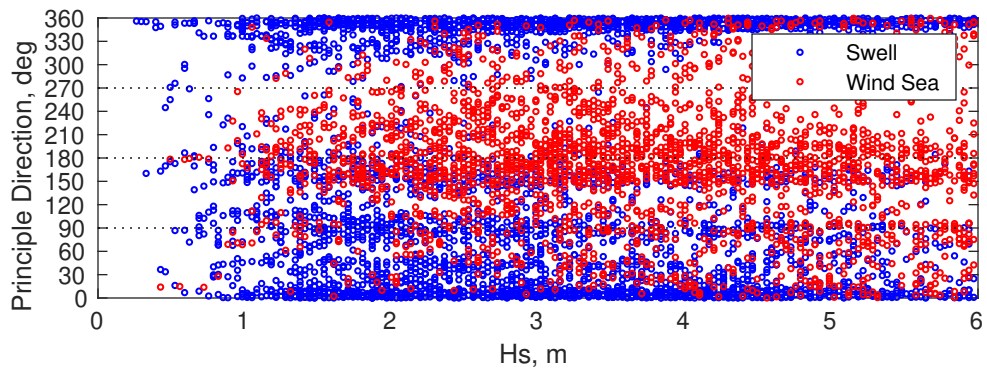
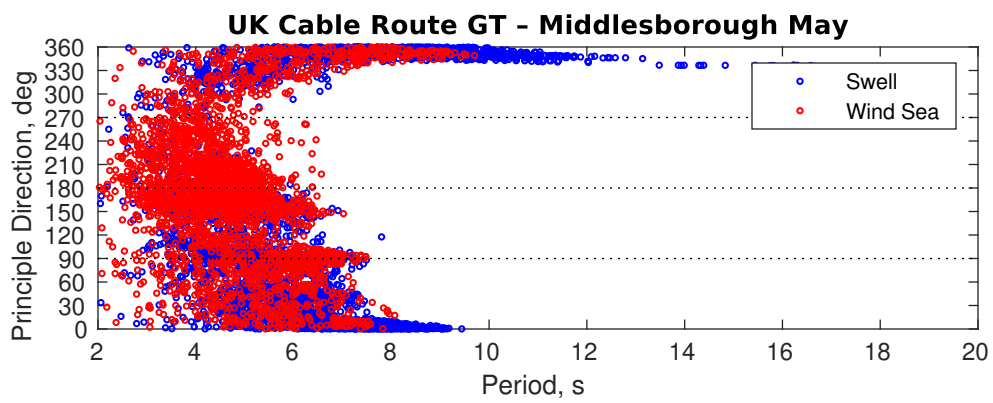
Current Speed > 2.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

## Severe Storms

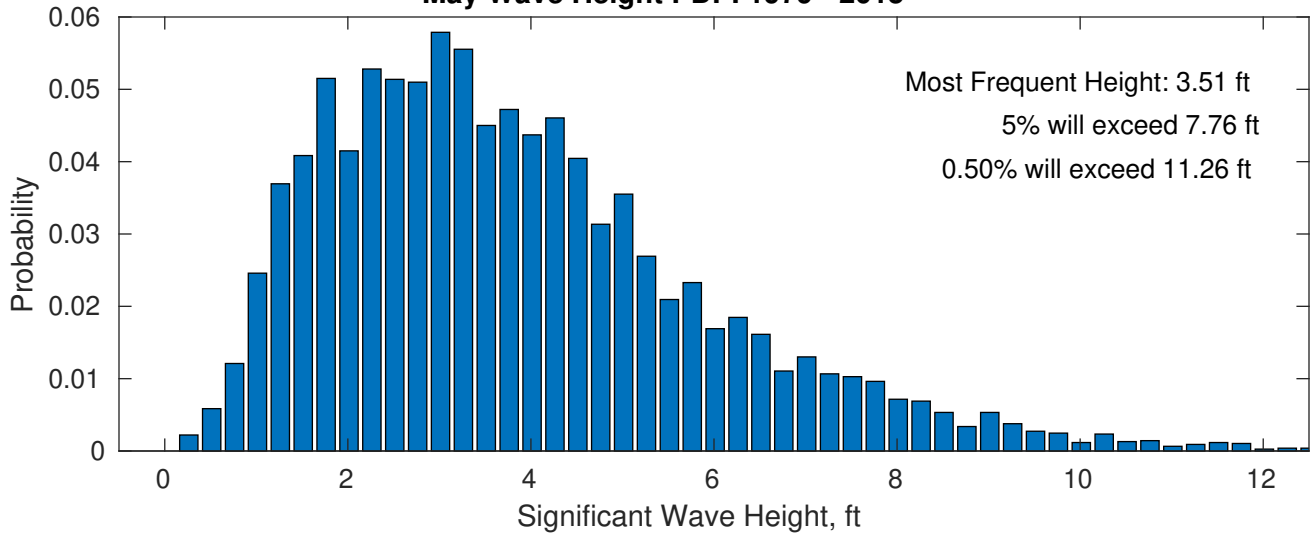
Severe storms with gale force winds and extreme waves are not expected during this month.

**Wave Height Weather Days Probability Distribution Function**

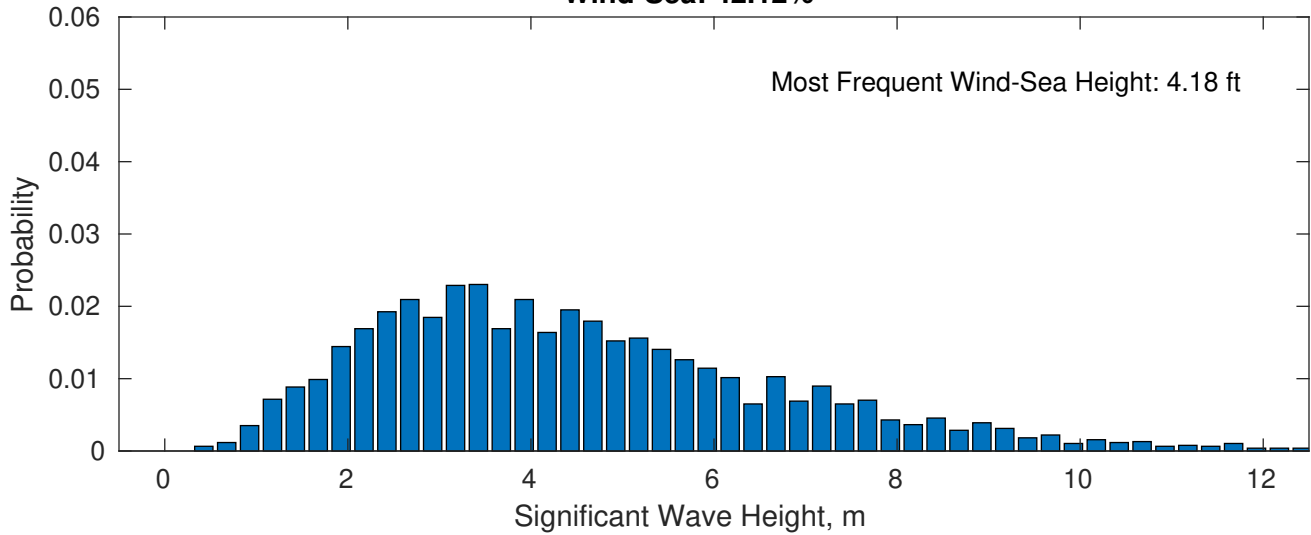




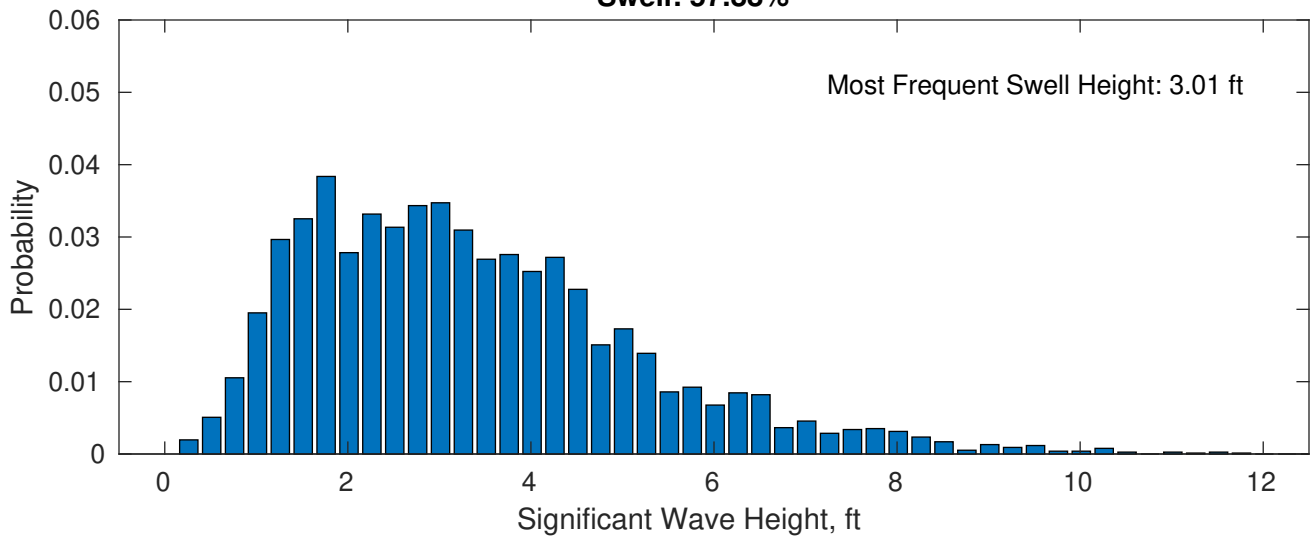
**May Wave Height PDF: 1979 - 2015**



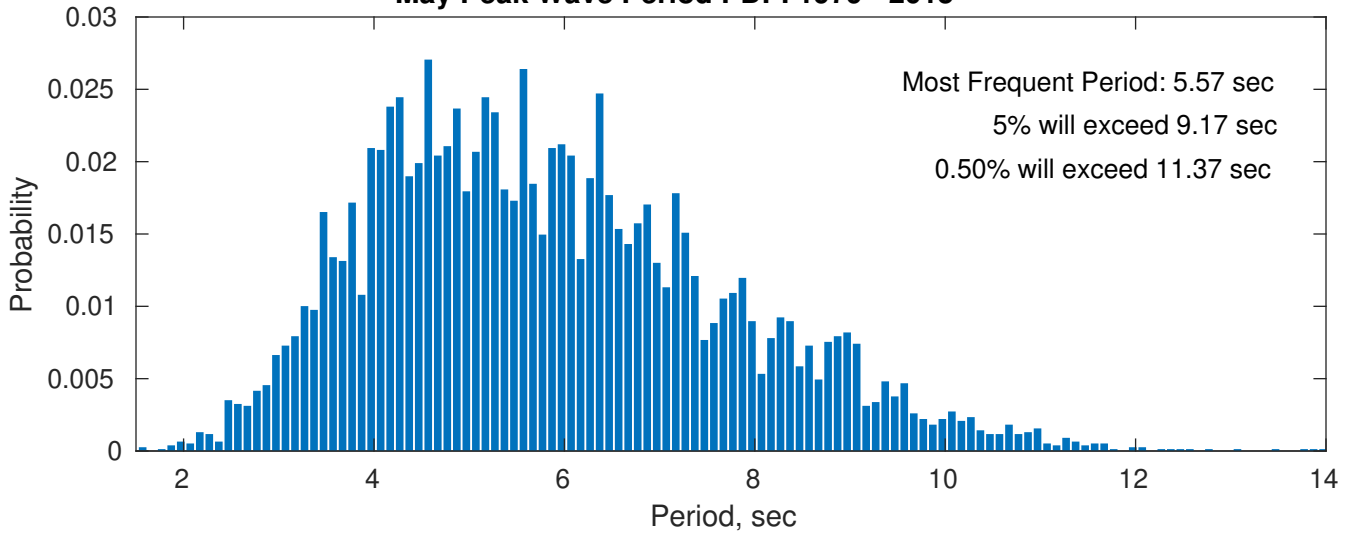
**Wind-Sea: 42.12%**



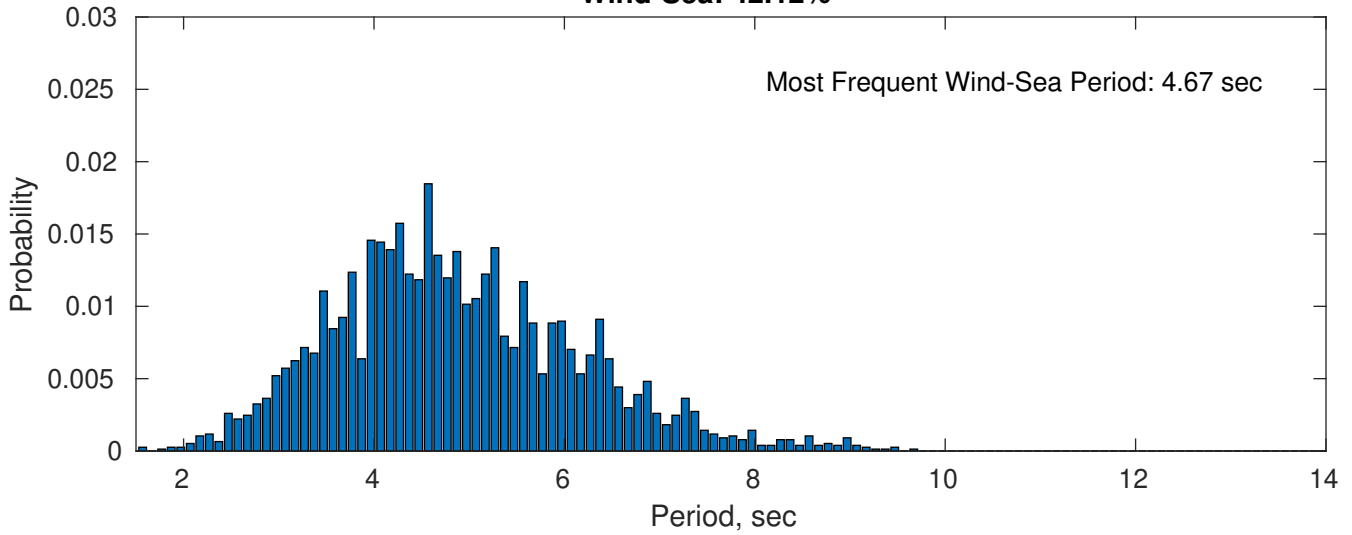
**Swell: 57.88%**



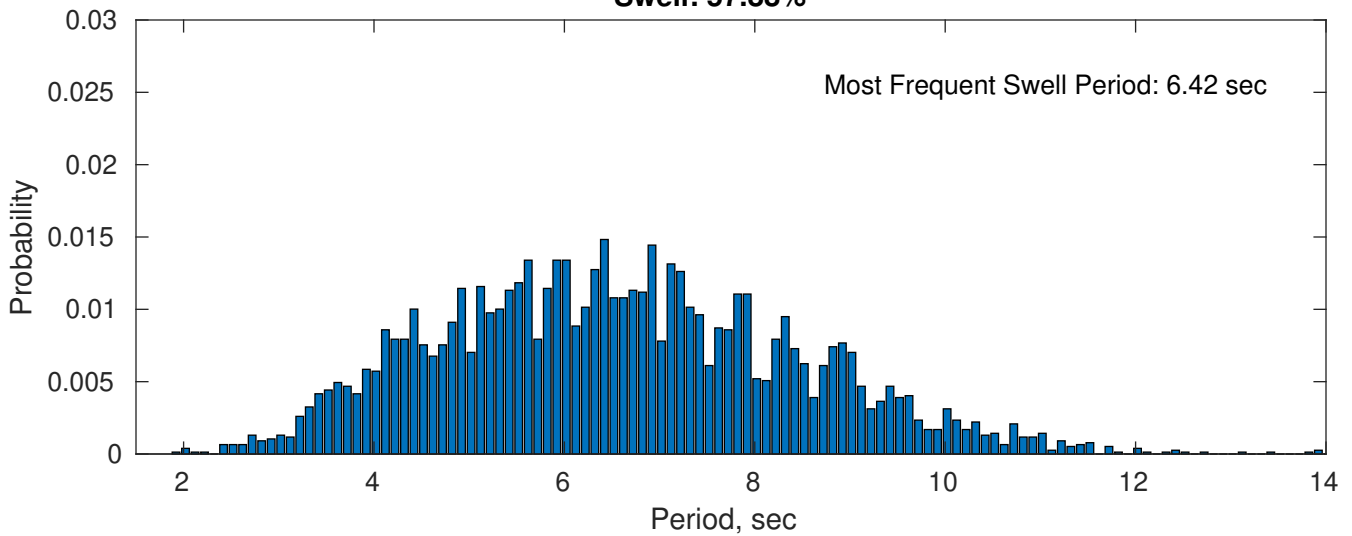
**May Peak Wave Period PDF: 1979 - 2015**



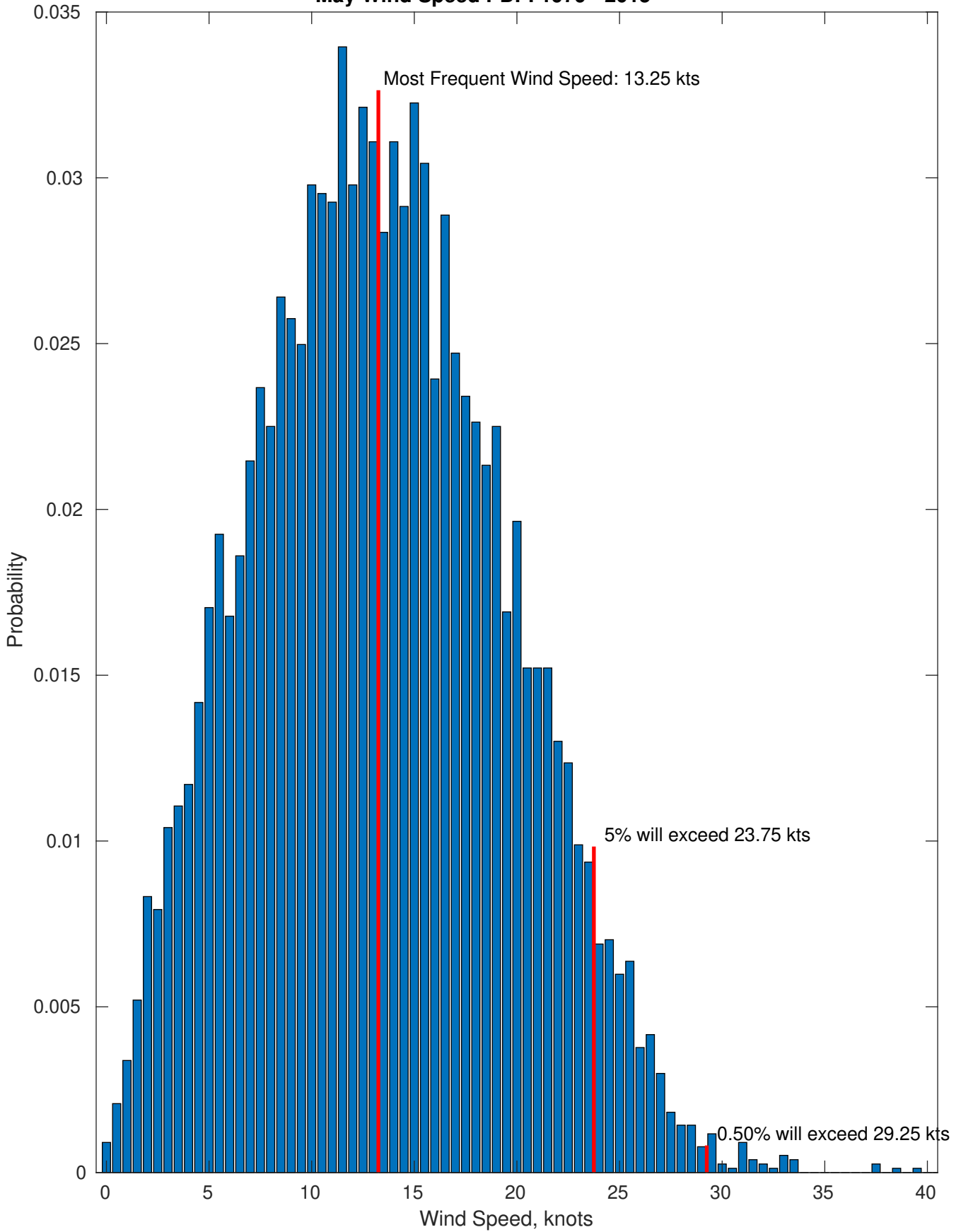
**Wind-Sea: 42.12%**



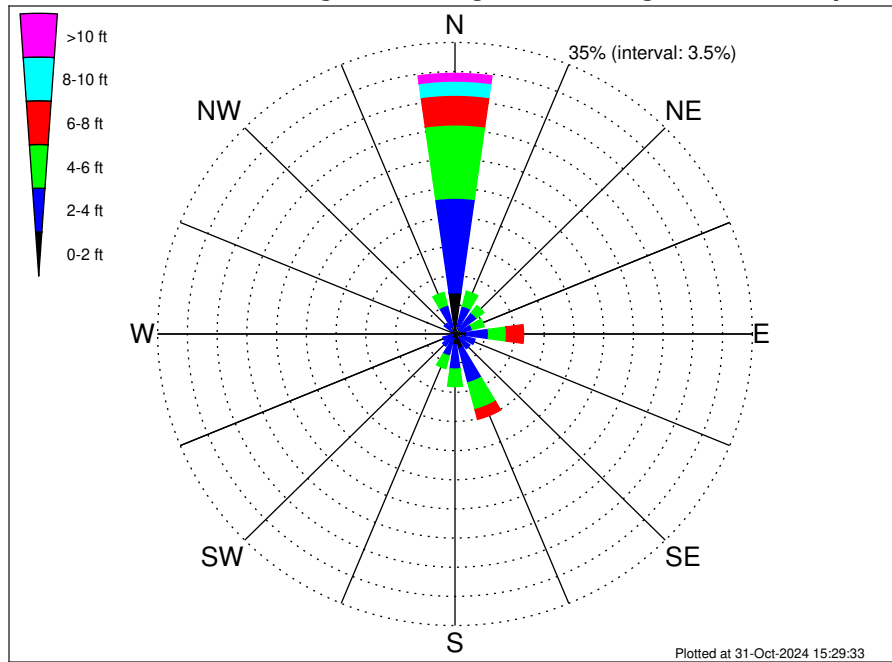
**Swell: 57.88%**



May Wind Speed PDF: 1979 - 2015



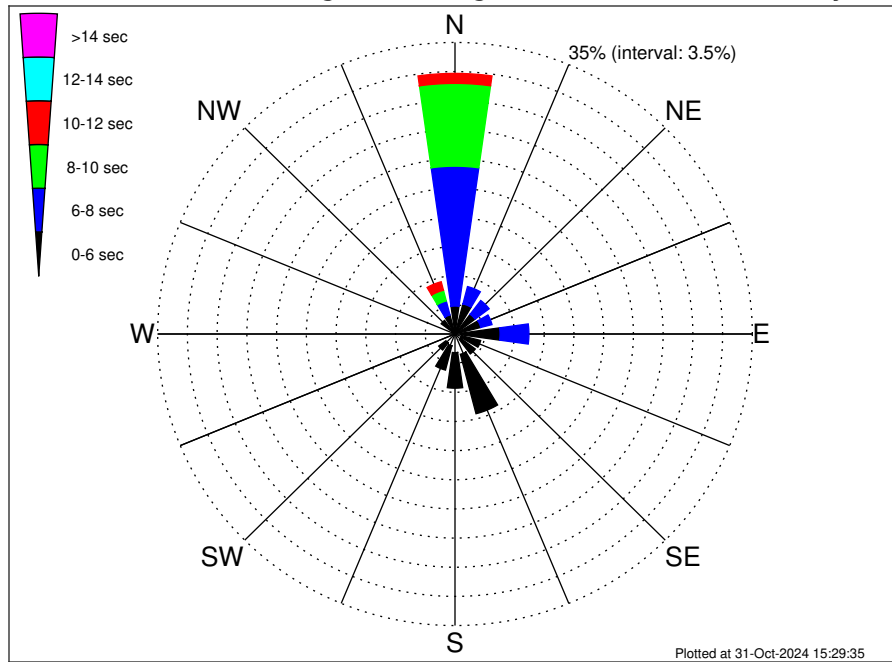
**UK Cable Route GT - Middlesborough Climatological WaveHeight Rose for May: 1979 - 2015**



**Joint Frequency Distribution Table**

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.43	0.17	0.10	0.14	0.14	0.14	0.03	0.17	0.23	0.07	0.07	0.04	0.05	0.05	•	0.18	2.02
1 - 2 ft	4.53	0.79	0.62	0.64	1.18	0.75	0.60	1.63	1.05	0.51	0.51	0.25	0.13	0.29	0.52	0.75	14.75
2 - 4 ft	11.36	2.51	2.47	1.34	2.63	1.53	1.57	4.25	2.93	2.16	1.25	1.18	0.75	0.61	1.07	2.64	40.26
4 - 6 ft	8.79	1.83	1.07	1.43	2.11	0.64	0.75	3.33	2.11	1.56	0.56	0.44	0.22	0.31	0.49	1.59	27.24
6 - 8 ft	3.56	0.42	0.52	0.86	2.02	0.34	0.31	1.21	0.22	0.16	0.03	0.09	0.03	0.08	0.17	0.70	10.70
8 - 10 ft	1.69	0.14	0.22	0.08	0.60	0.03	0.04	0.08	0.07	0.07	•	0.03	0.03	•	•	0.72	3.77
10 - 12 ft	0.73	0.03	0.03	0.01	0.03	•	•	•	•	•	0.01	0.01	0.01	•	•	0.17	1.03
12 - 14 ft	0.18	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.01	0.20
14 - 16 ft	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.03	0.04
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	31.28	5.89	5.03	4.50	8.70	3.43	3.30	10.67	6.61	4.51	2.42	2.04	1.22	1.34	2.25	6.79	100.00

**UK Cable Route GT - Middlesborough Climatological WavePeriod Rose for May: 1979 - 2015**

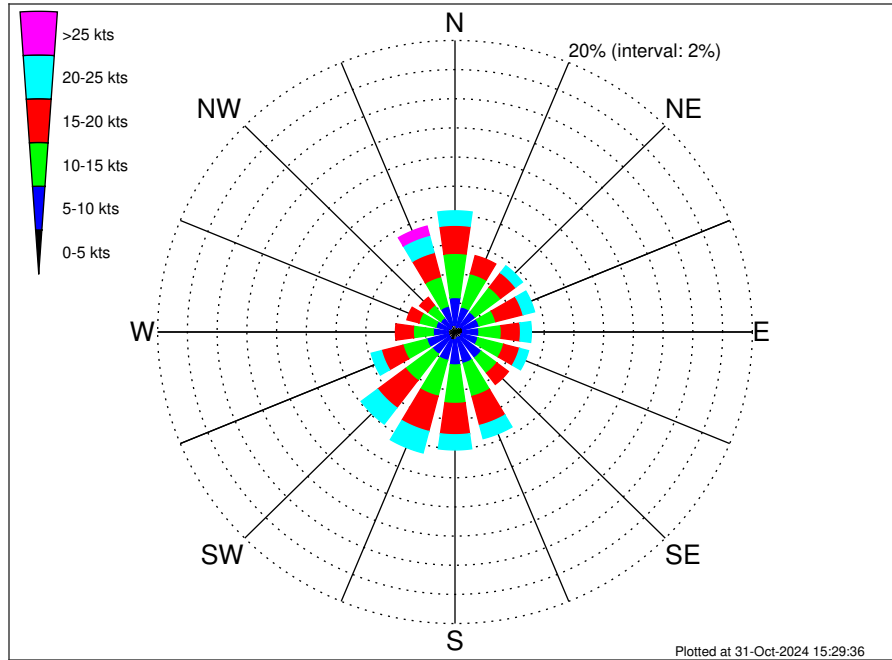


**Joint Frequency Distribution Table**

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	0.04	0.01	•	•	•	•	•	0.03	•	•	•	•	•	•	•	0.08
2 - 4 sec	0.29	0.30	0.29	0.59	0.65	0.79	0.83	2.51	2.21	1.47	1.34	1.18	0.68	0.57	0.27	0.34	14.31
4 - 6 sec	3.07	3.39	2.67	2.55	4.66	2.33	2.16	7.38	4.27	3.00	1.07	0.83	0.52	0.75	1.77	2.02	42.43
6 - 8 sec	16.79	2.15	2.07	1.37	3.39	0.31	0.31	0.78	0.10	0.04	0.01	0.03	0.03	0.01	0.21	1.74	29.34
8 - 10 sec	9.94	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	1.33	11.28
10 - 12 sec	1.20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1.05	2.25
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.18	0.18
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.09	0.09
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.04	0.04
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	31.28	5.89	5.03	4.50	8.70	3.43	3.30	10.67	6.61	4.51	2.42	2.04	1.22	1.34	2.25	6.79	100.00



**UK Cable Route GT - Middlesborough Climatological Wind Rose for May: 1979 - 2015**



**Joint Frequency Distribution Table**

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.03	0.03	0.07	0.01	•	0.01	0.01	0.04	0.03	0.01	0.01	0.01	0.01	•	0.01	0.01	0.30
0 - 5 kts	0.44	0.33	0.39	0.53	0.52	0.44	0.47	0.38	0.49	0.56	0.48	0.46	0.46	0.46	0.35	0.47	7.22
5 - 10 kts	1.90	1.43	1.25	1.13	1.09	1.14	1.73	1.81	1.74	1.44	1.39	1.50	1.00	0.88	0.85	1.35	21.64
10 - 15 kts	3.03	2.35	2.13	1.16	1.51	1.78	1.31	2.34	2.64	2.54	2.28	1.65	1.34	1.17	1.09	2.08	30.41
15 - 20 kts	1.93	1.27	1.26	1.90	1.29	1.11	0.98	2.06	2.15	2.50	2.35	1.50	1.20	0.83	0.68	1.72	24.70
20 - 25 kts	0.99	0.40	0.59	0.79	0.73	0.62	0.44	0.94	1.04	1.52	1.39	0.72	0.34	0.22	0.43	1.22	12.38
25 - 30 kts	0.35	0.12	0.07	0.01	0.08	0.04	0.09	0.36	0.26	0.26	0.29	0.13	0.04	0.09	0.18	0.62	2.99
30 - 35 kts	0.03	•	•	•	0.01	•	•	0.01	0.05	0.05	0.03	0.07	0.01	0.01	•	0.03	0.30
35 - 40 kts	•	•	•	•	•	•	•	•	•	0.01	0.01	0.03	•	•	•	•	0.05
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	8.69	5.93	5.75	5.54	5.23	5.15	5.03	7.93	8.40	8.90	8.23	6.05	4.40	3.67	3.59	7.51	100.00