

# UK Cable Route GT - Berwick-upon-Tweed - April

Latitude: 55.81 N Longitude: 1.35 E

## Weather Days

Wave Height > 6.0 ft Mean: 9.9 days Range: 6.7 - 13.1 days p50:10.5 days p75:9 days p90:5 days

Wave Height > 7.0 ft Mean: 6.9 days Range: 3.9 - 9.9 days p50:7 days p75:6 days p90:4.5 days

Wave Height > 8.0 ft Mean: 4.9 days Range: 2.4 - 7.5 days p50:4.5 days p75:4 days p90:3 days

Wind Speed > 15.0 knots Mean: 14.3 days Range: 11.7 - 16.9 days p50:14.5 days p75:13 days p90:11 days

Wind Speed > 20.0 knots Mean: 6.8 days Range: 4.4 - 9.2 days p50:7 days p75:5.5 days p90:4.5 days

Wind Speed > 25.0 knots Mean: 2.5 days Range: 1.0 - 4.1 days p50:2.5 days p75:1.5 days p90:1 days

## Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 4.4 times per month  
A 2 day or longer window will statistically occur 3.1 times per month  
A 3 day or longer window will statistically occur 2.1 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 4.2 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 2.5 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 3.9 times per month  
A 2 day or longer window will statistically occur 3.0 times per month  
A 3 day or longer window will statistically occur 2.4 times per month

## Waves

Mean Height: 4 - 6 ft

The wave heights will occasionally reach > 18 ft, but rarely higher.

Mean Period: 6 - 8 sec

The wave periods will occasionally reach 14 - 16 sec, but rarely longer.

Principle Direction, from: N

WindSea/Swell: 41% / 59%

## Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 35 - 40 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: 0.1 days Range: 0.0 - 0.3 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

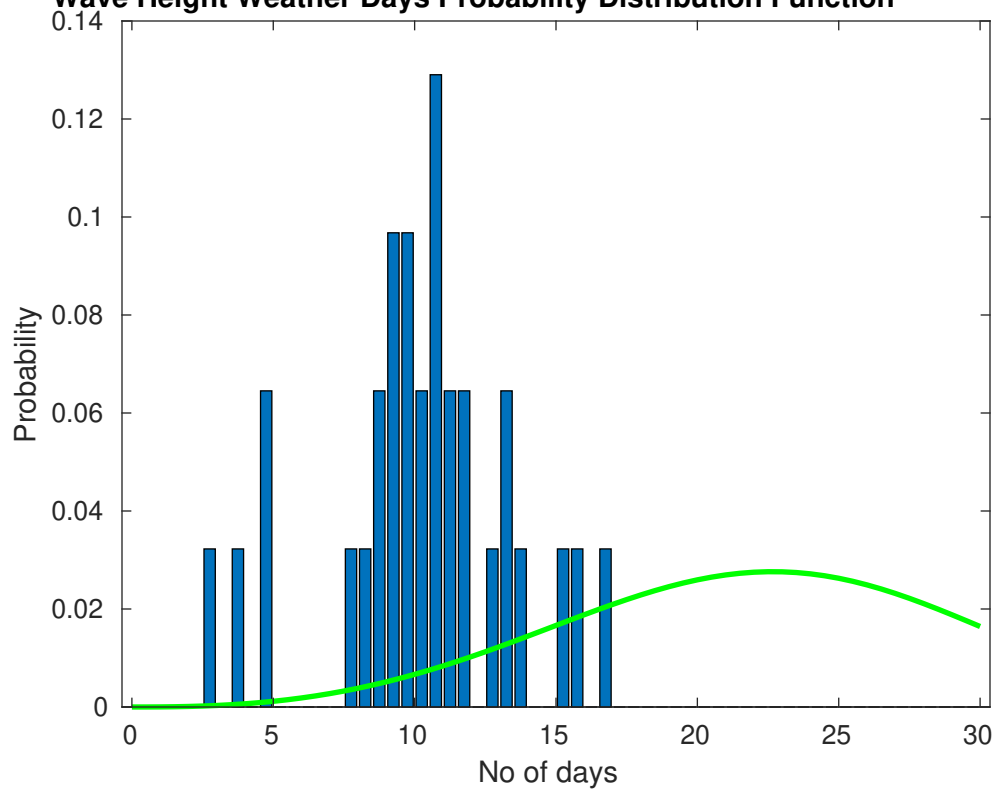
Current Speed > 2.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

## Severe Storms

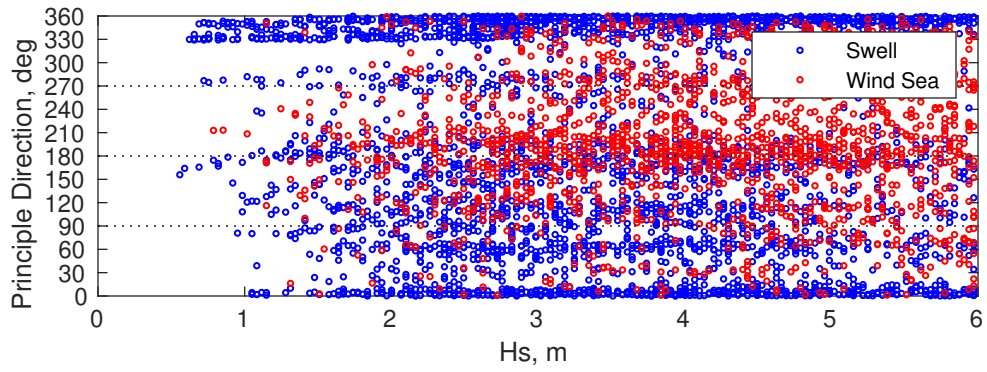
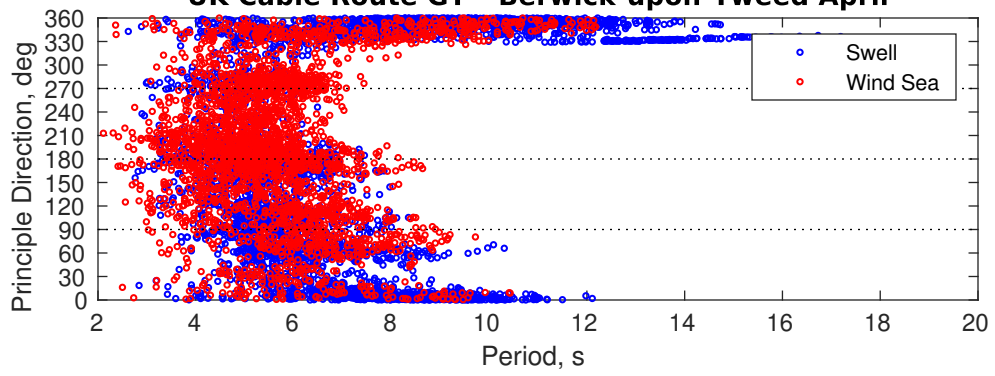
There is a 6 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 26 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

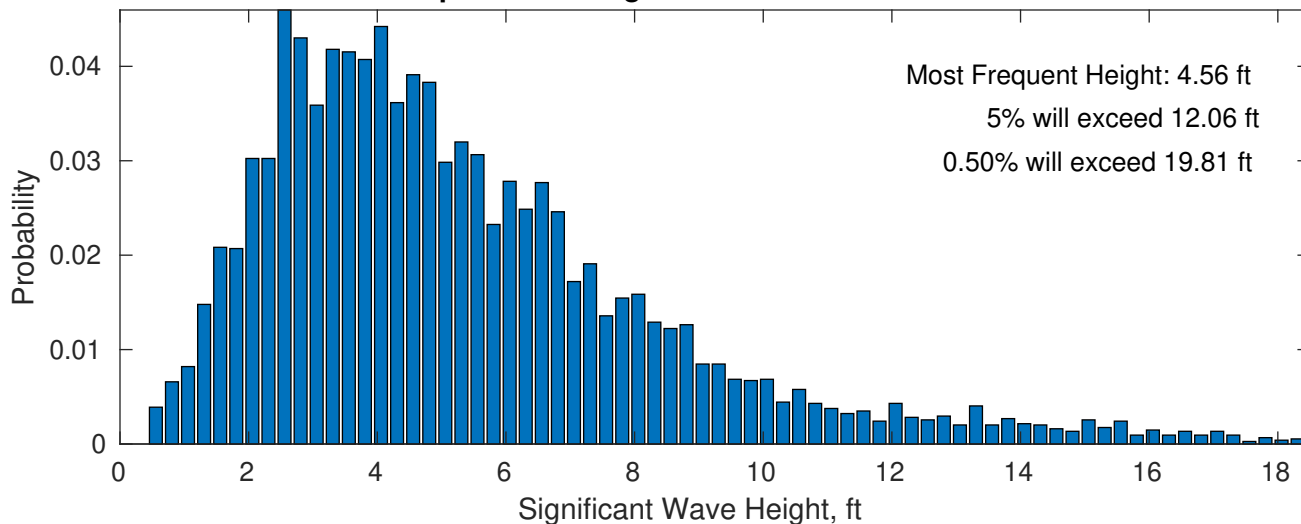
**Wave Height Weather Days Probability Distribution Function**



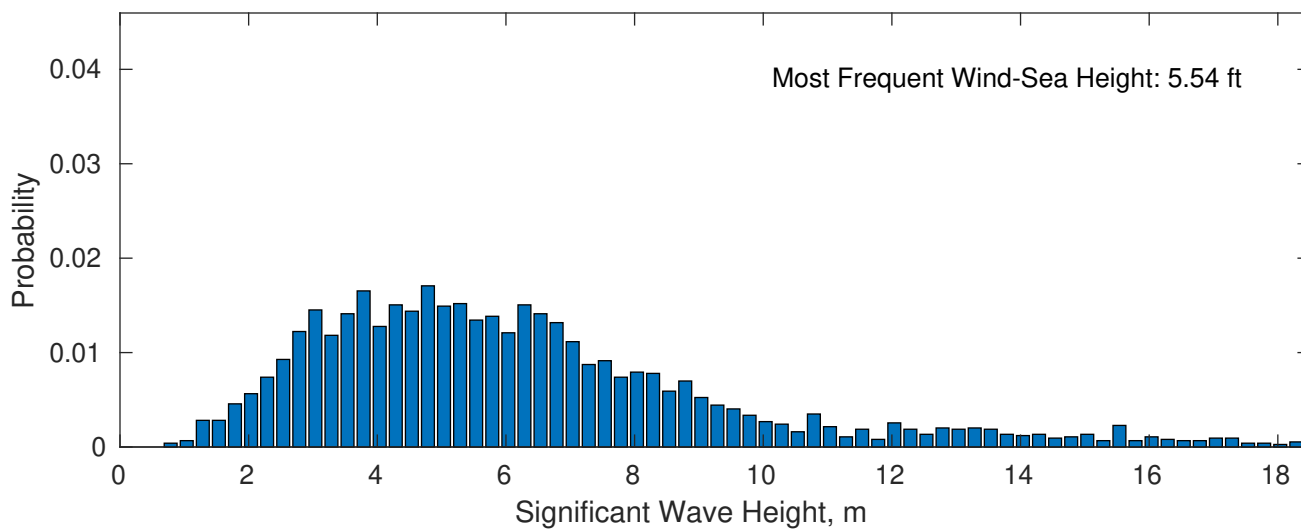
### UK Cable Route GT - Berwick-upon-Tweed April



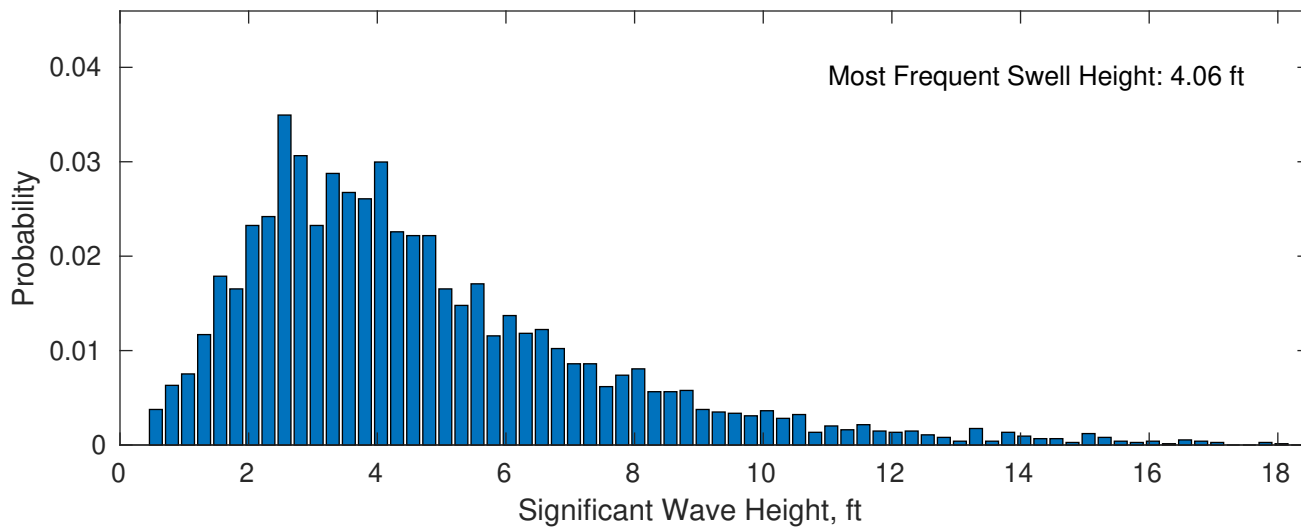
**April Wave Height PDF: 1979 - 2015**



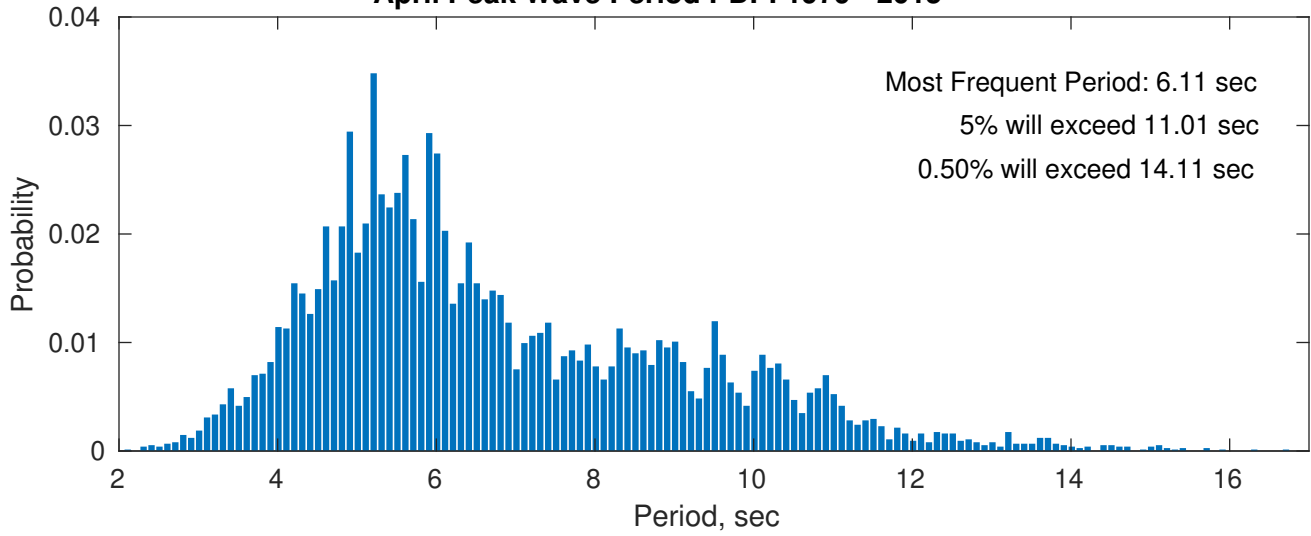
**Wind-Sea: 40.91%**



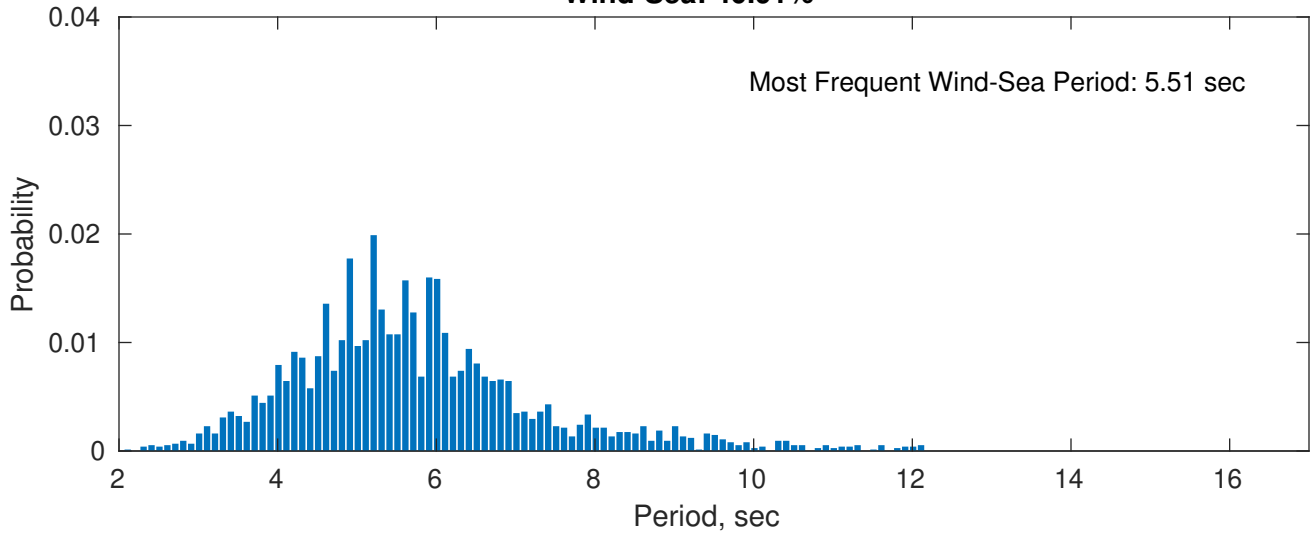
**Swell: 59.09%**



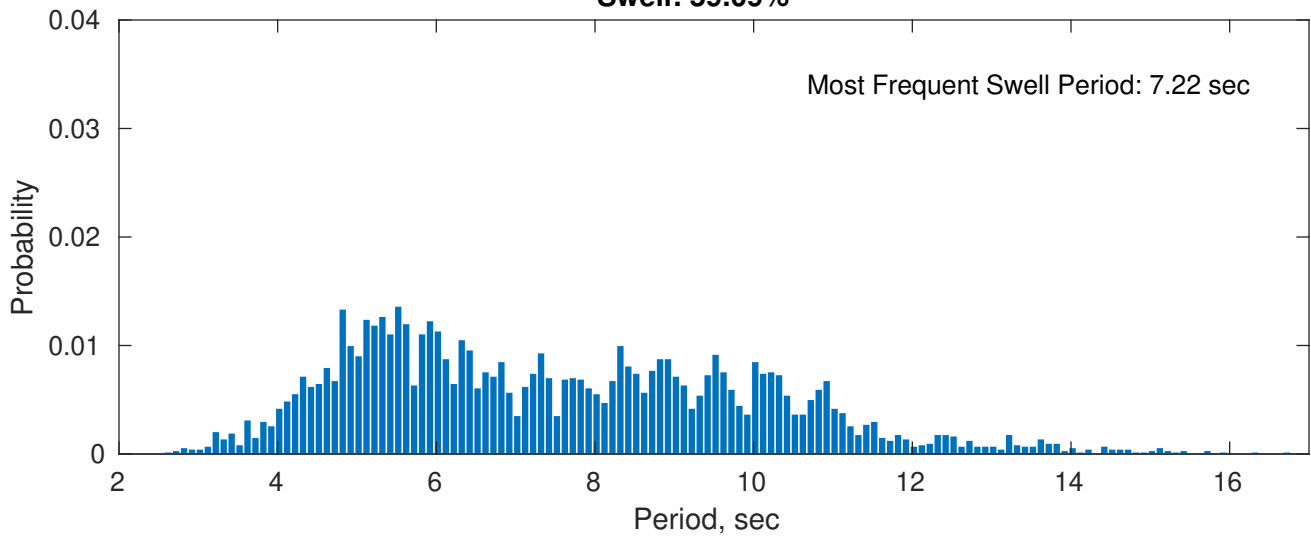
### April Peak Wave Period PDF: 1979 - 2015



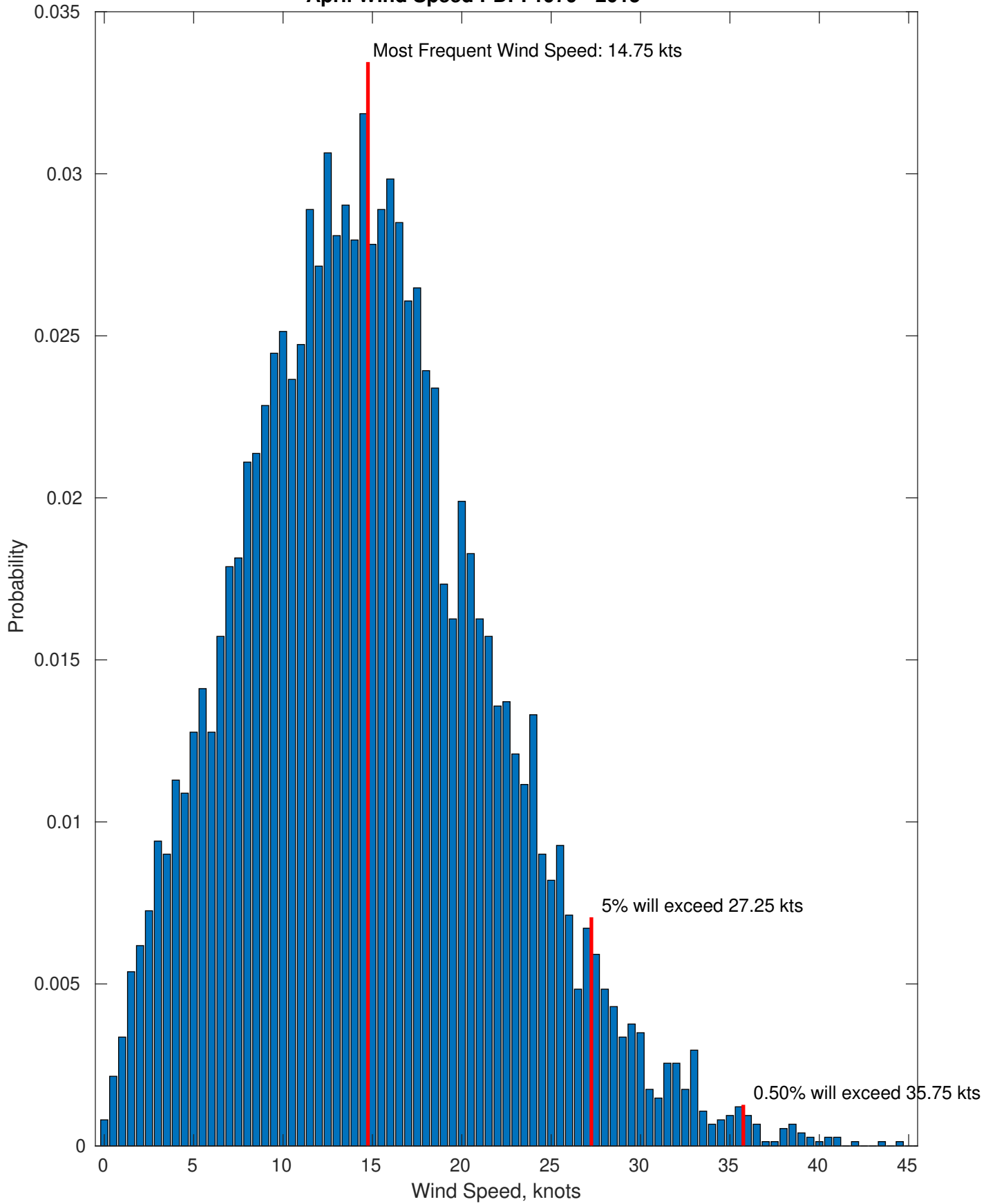
### Wind-Sea: 40.91%



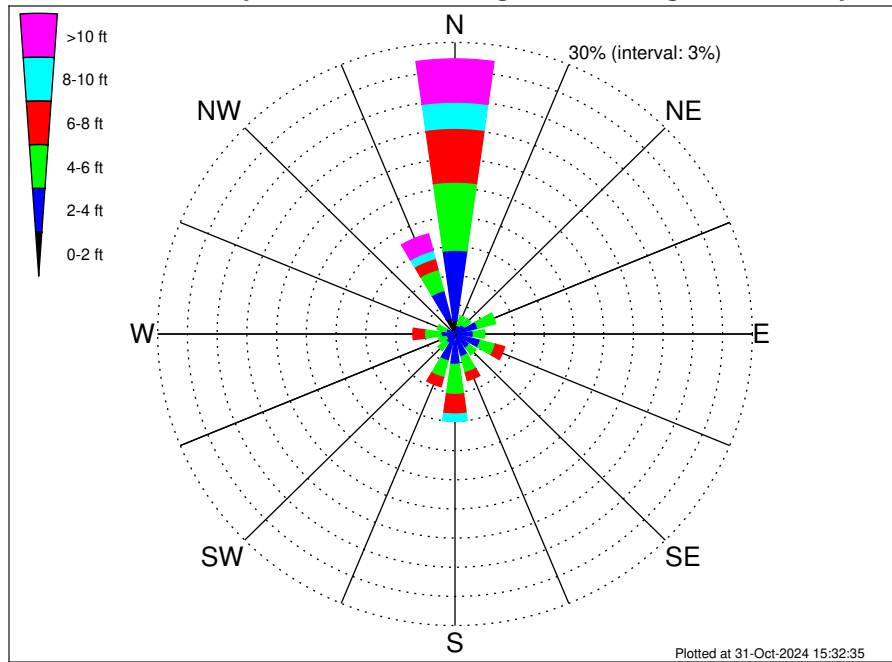
### Swell: 59.09%



### April Wind Speed PDF: 1979 - 2015



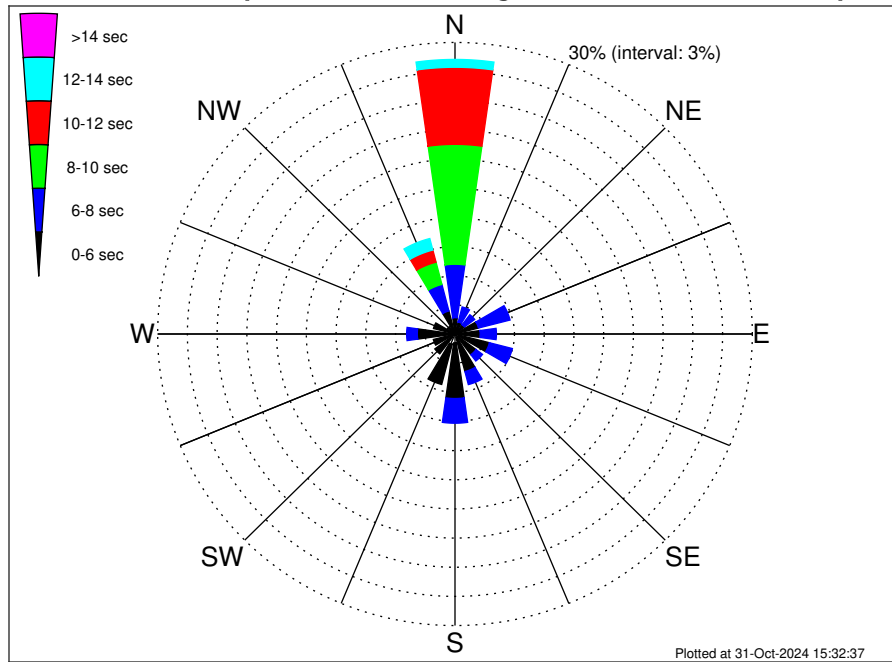
**UK Cable Route GT - Berwick-upon-Tweed Climatological WaveHeight Rose for April: 1979 - 2015**



**Joint Frequency Distribution Table**

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.19	•	•	•	0.01	0.01	0.03	0.05	0.05	0.03	•	•	0.04	•	•	0.40	0.82
1 - 2 ft	1.24	0.11	0.15	0.24	0.35	0.40	0.31	0.28	0.69	0.36	0.17	0.13	0.16	0.13	•	1.32	6.05
2 - 4 ft	7.20	0.81	1.02	2.14	1.49	2.23	1.47	2.07	2.39	2.46	0.95	0.78	1.22	0.83	0.51	2.88	30.46
4 - 6 ft	7.00	1.02	0.82	1.87	1.14	1.57	0.86	1.71	3.09	1.77	0.99	0.78	1.67	0.89	0.47	2.24	27.90
6 - 8 ft	5.54	0.71	0.42	0.74	0.62	0.95	0.32	0.83	2.02	0.98	0.42	0.62	1.16	0.62	0.15	1.17	17.26
8 - 10 ft	2.69	0.26	0.24	0.59	0.43	0.59	0.39	0.24	0.75	0.26	0.20	0.16	0.55	0.28	0.13	0.85	8.62
10 - 12 ft	1.69	0.15	0.03	0.35	0.05	0.17	0.07	0.15	0.13	0.04	0.03	0.03	0.08	0.03	0.05	0.44	3.49
12 - 14 ft	1.05	0.05	0.01	0.19	0.09	0.13	0.04	0.04	0.08	0.03	•	0.03	•	•	0.04	0.56	2.35
14 - 16 ft	0.77	•	0.05	0.08	0.13	0.01	0.01	0.03	0.04	•	•	•	•	•	•	0.39	1.52
16 - 18 ft	0.46	0.01	•	0.03	0.08	•	•	0.01	0.01	•	•	•	•	•	0.01	0.19	0.81
> 18 ft	0.48	•	•	0.01	0.03	•	•	•	•	•	•	•	•	•	•	0.20	0.73
Total	28.31	3.12	2.74	6.24	4.44	6.09	3.49	5.42	9.26	5.93	2.77	2.53	4.88	2.78	1.37	10.65	100.00

**UK Cable Route GT - Berwick-upon-Tweed Climatological WavePeriod Rose for April: 1979 - 2015**

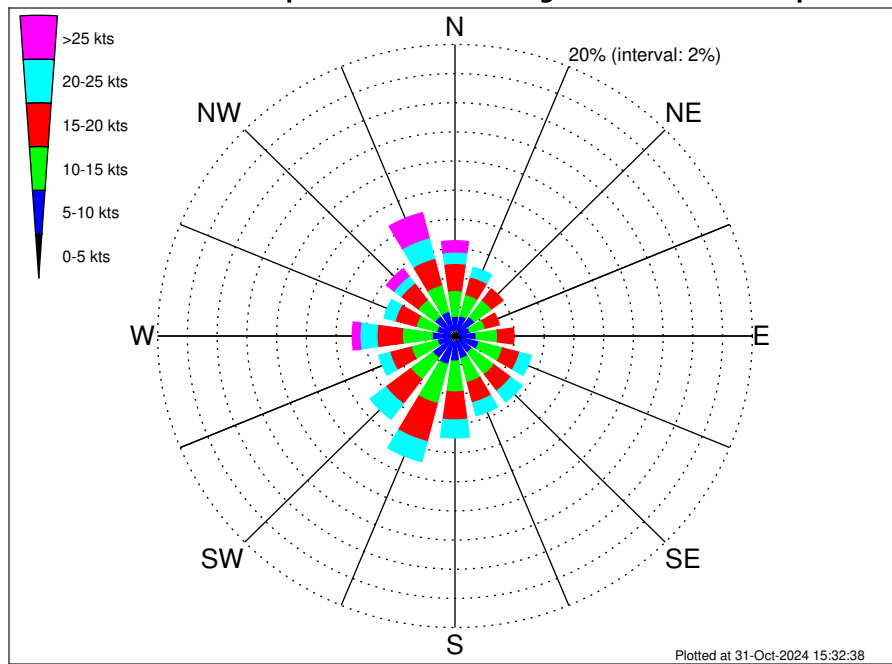


**Joint Frequency Distribution Table**

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 sec	0.23	0.15	0.05	0.15	0.17	0.36	0.43	0.38	0.91	1.09	0.44	0.26	0.34	0.20	0.07	0.20	5.43
4 - 6 sec	1.45	1.13	1.14	2.30	2.37	3.23	2.23	3.62	5.73	4.27	2.11	2.00	3.47	2.04	0.87	2.24	40.20
6 - 8 sec	5.50	1.60	1.29	3.29	1.64	2.39	0.82	1.38	2.54	0.56	0.22	0.27	1.08	0.54	0.40	2.82	26.34
8 - 10 sec	12.34	0.24	0.26	0.47	0.26	0.11	0.01	0.04	0.08	•	•	•	•	•	0.03	2.37	16.20
10 - 12 sec	7.93	•	•	0.03	•	•	•	•	•	•	•	•	•	•	•	1.29	9.25
12 - 14 sec	0.81	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1.22	2.03
14 - 16 sec	0.05	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.46	0.51
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.04	0.04
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	28.31	3.12	2.74	6.24	4.44	6.09	3.49	5.42	9.26	5.93	2.77	2.53	4.88	2.78	1.37	10.65	100.00



### UK Cable Route GT - Berwick-upon-Tweed Climatological Wind Rose for April: 1979 - 2015



### Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.01	0.04	0.03	0.01	•	•	0.03	0.01	•	•	0.03	0.01	•	0.01	0.07	0.04	0.30
0 - 5 kts	0.40	0.46	0.39	0.31	0.34	0.51	0.36	0.36	0.42	0.50	0.38	0.31	0.40	0.36	0.36	0.42	6.28
5 - 10 kts	0.94	0.94	1.22	0.73	1.09	1.16	1.03	1.22	1.32	1.52	1.47	0.91	1.13	0.90	1.26	1.28	18.12
10 - 15 kts	1.77	1.51	1.44	1.06	1.45	1.64	1.87	1.69	2.11	2.77	1.85	1.81	2.02	1.42	1.41	1.88	27.72
15 - 20 kts	1.85	1.25	0.97	0.97	1.09	1.20	1.41	1.44	1.92	2.70	2.10	1.48	1.71	1.47	1.42	1.88	24.85
20 - 25 kts	0.78	0.67	0.48	0.47	0.48	0.81	0.95	0.91	1.22	1.42	1.33	0.77	1.14	0.77	0.62	1.47	14.30
25 - 30 kts	0.50	0.22	0.16	0.23	0.26	0.24	0.31	0.19	0.36	0.34	0.39	0.34	0.48	0.39	0.38	1.06	5.83
30 - 35 kts	0.24	0.15	0.08	0.09	0.16	0.09	0.07	0.08	0.08	0.07	0.04	0.07	0.03	0.03	0.16	0.47	1.91
35 - 40 kts	0.03	0.07	0.01	•	0.03	•	0.03	0.07	0.04	0.03	•	0.01	•	0.01	0.08	0.19	0.59
40 - 45 kts	•	•	•	•	0.03	•	•	•	•	0.01	•	•	•	•	0.01	0.05	0.11
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	6.53	5.30	4.78	3.87	4.92	5.65	6.06	5.98	7.47	9.35	7.58	5.71	6.91	5.36	5.78	8.74	100.00