

UK Cable Route GT - Berwick-upon-Tweed - July

Latitude: 55.81 N Longitude: 1.35 E

Weather Days

Wave Height > 6.0 ft Mean: 4.3 days Range: 2.0 - 6.7 days p50:4.5 days p75:2.5 days p90:1.5 days
Wave Height > 7.0 ft Mean: 2.5 days Range: 0.7 - 4.4 days p50:3 days p75:1 days p90:0.5 days
Wave Height > 8.0 ft Mean: 1.6 days Range: 0.2 - 2.9 days p50:3 days p75:1.5 days p90:1 days
Wind Speed > 15.0 knots Mean: 10.1 days Range: 6.8 - 13.4 days p50:11 days p75:8 days p90:5 days
Wind Speed > 20.0 knots Mean: 3.5 days Range: 1.8 - 5.1 days p50:4 days p75:2 days p90:1.5 days
Wind Speed > 25.0 knots Mean: 0.9 days Range: 0.0 - 1.8 days p50:0.5 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 3.9 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 2.9 times per month A 2 day or longer window will statistically occur 2.5 times per month A 3 day or longer window will statistically occur 2.2 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 2.0 times per month A 3 day or longer window will statistically occur 1.9 times per month

Waves

Mean Height: 2 - 4 ft
The wave heights will occasionally reach 12 - 14 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 30 - 35 kts, but rarely greater.
Principle Direction, from: W

Currents

Mean Speed: 0.01-0.25 kts
The currents will occasionally reach 0.75-1.00 kts, but rarely greater.
Principle Direction, to: NE

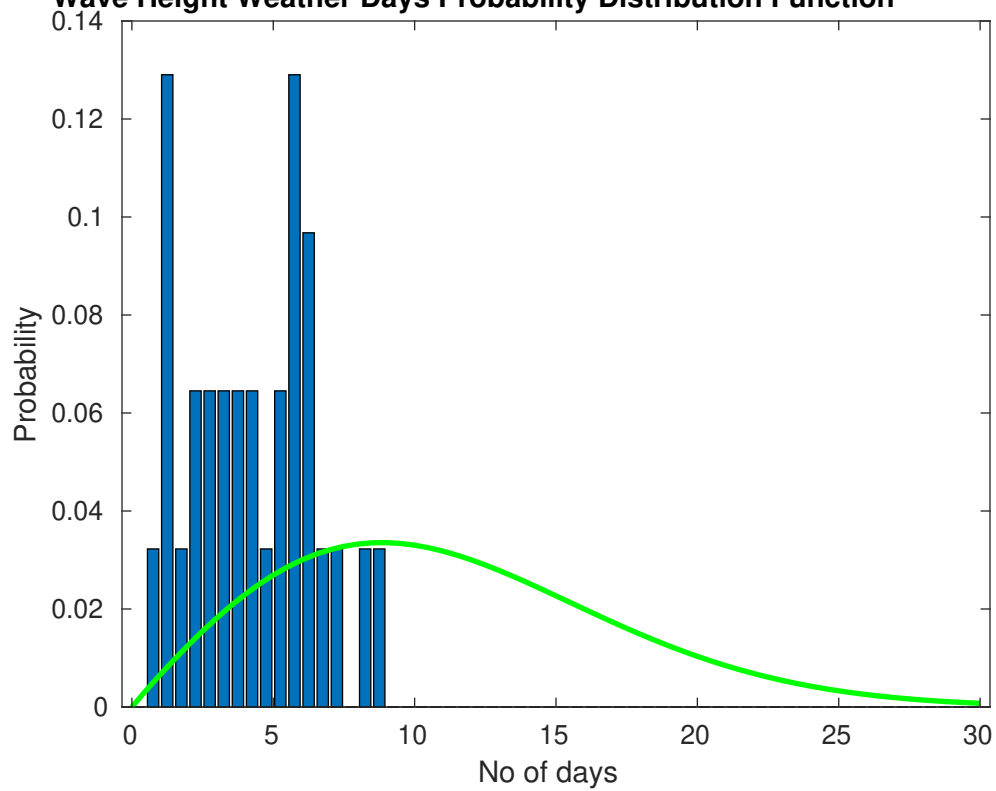
Weather Days

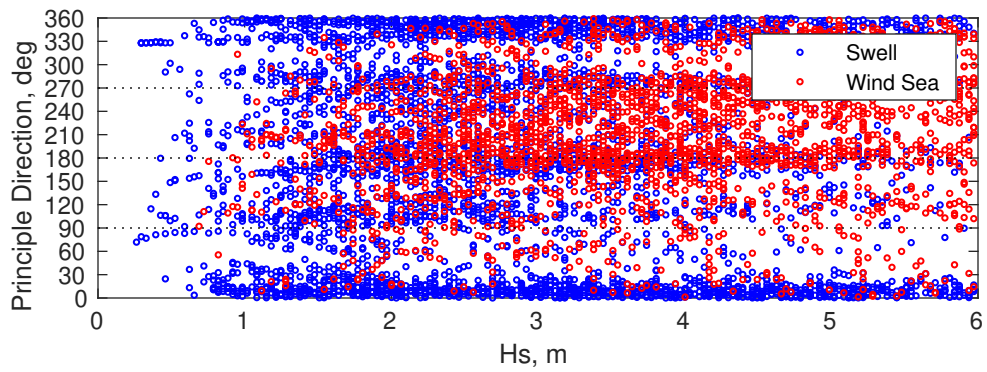
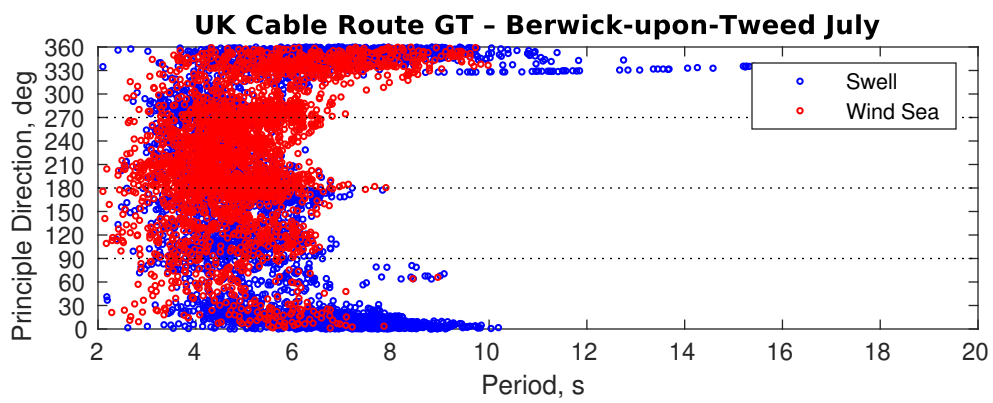
Current Speed > 1.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days
Current Speed > 1.5 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days
Current Speed > 2.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

Severe Storms

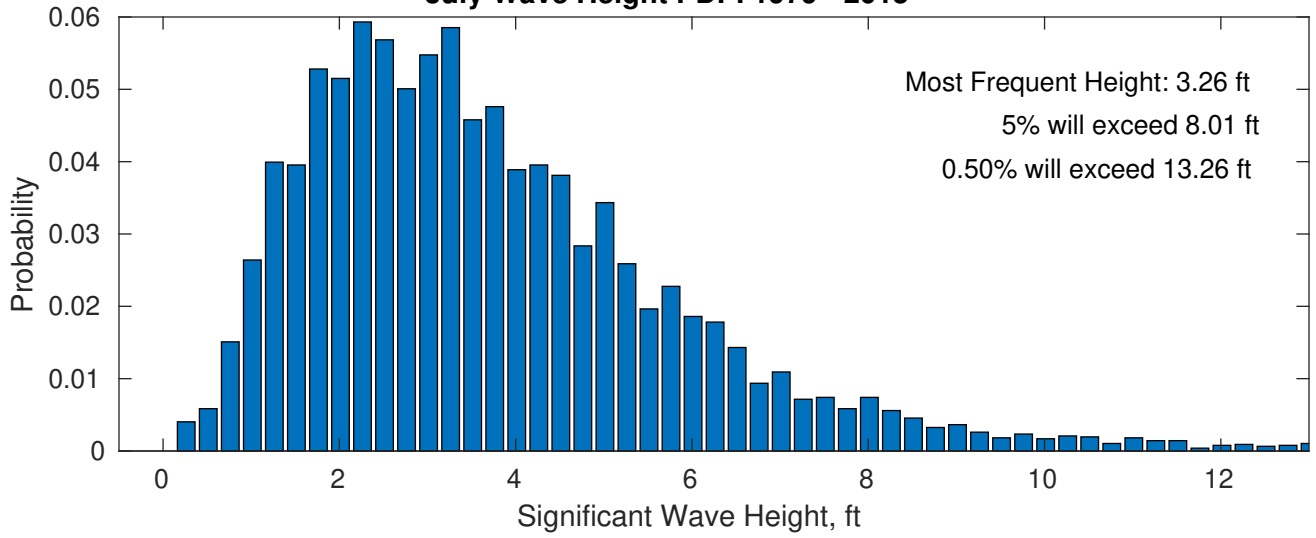
There is a 3 % chance of a storm occurring in the month with winds peaking above 34 kts.
There is a 3 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

Wave Height Weather Days Probability Distribution Function

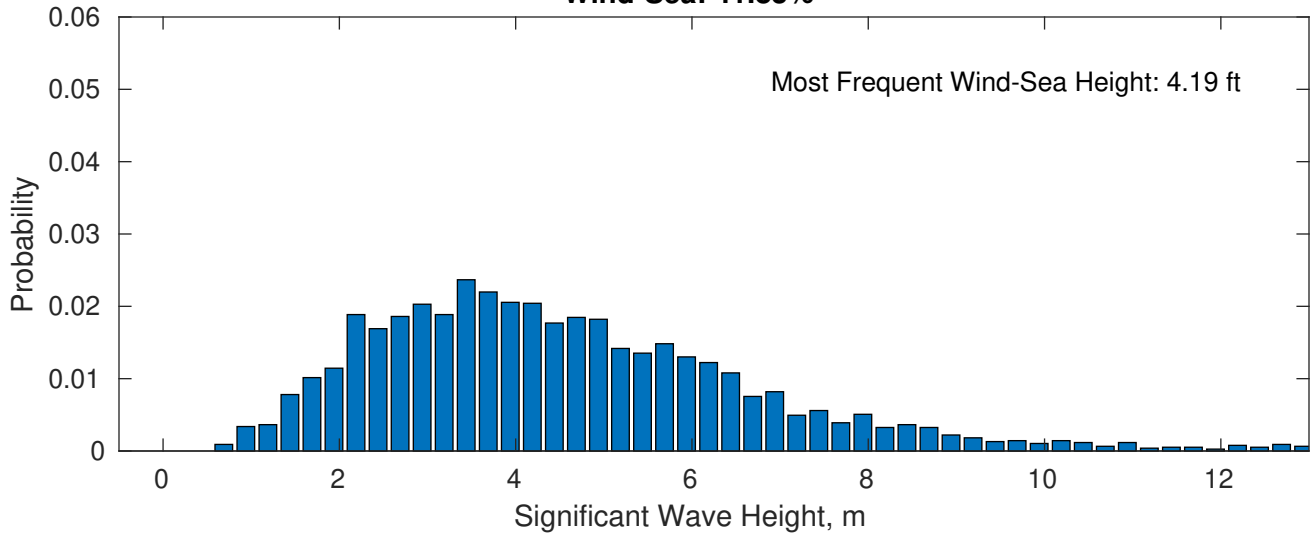




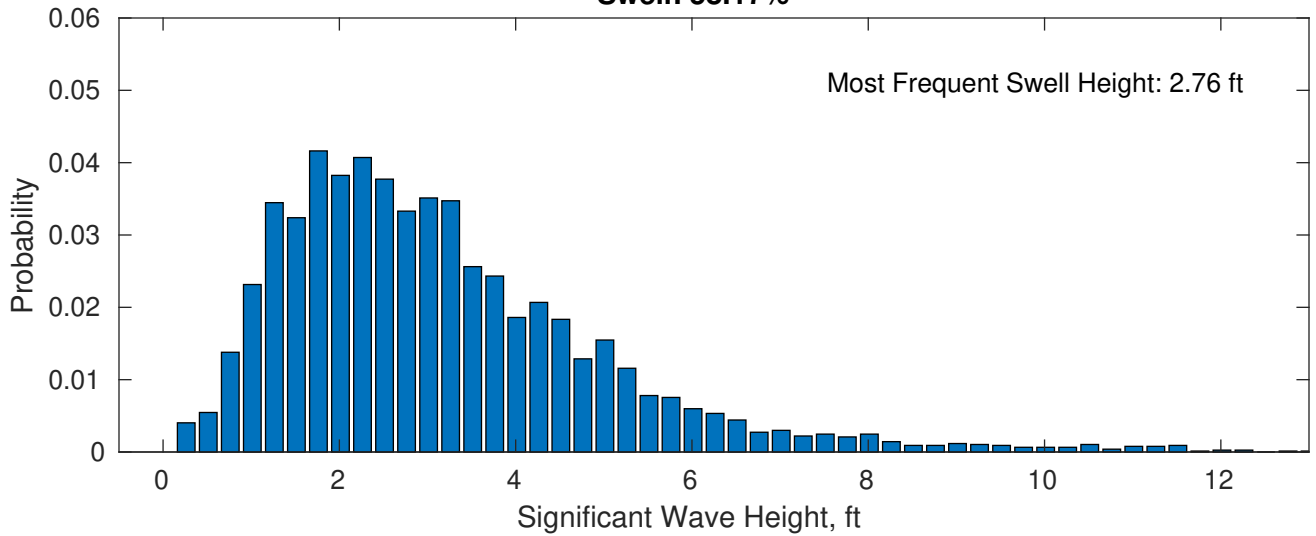
July Wave Height PDF: 1979 - 2015



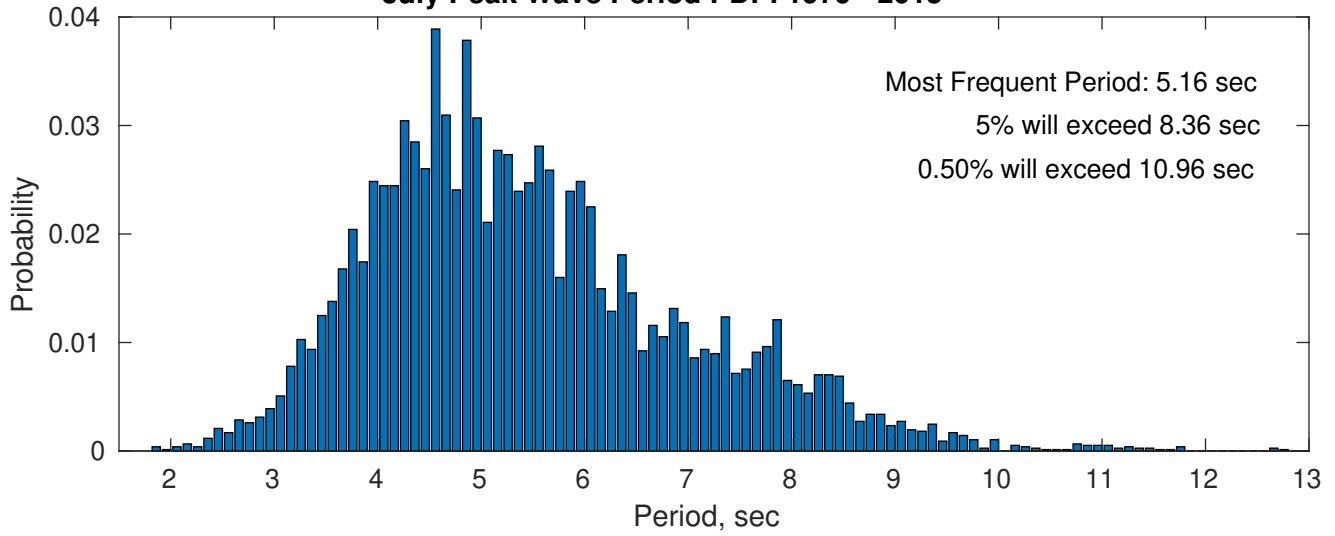
Wind-Sea: 41.83%



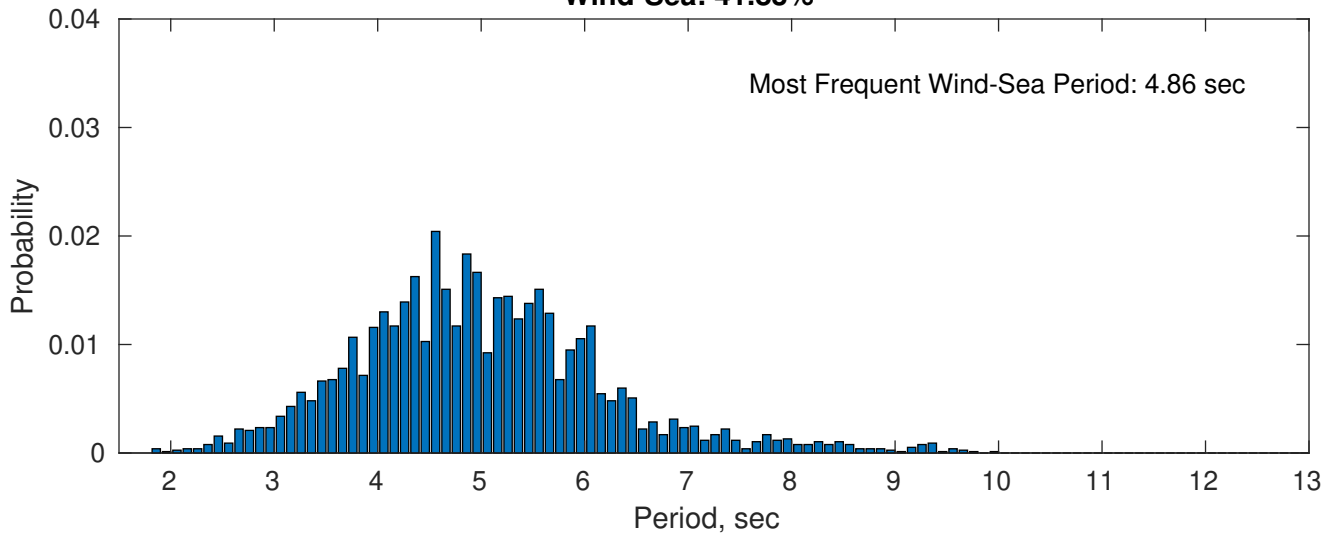
Swell: 58.17%



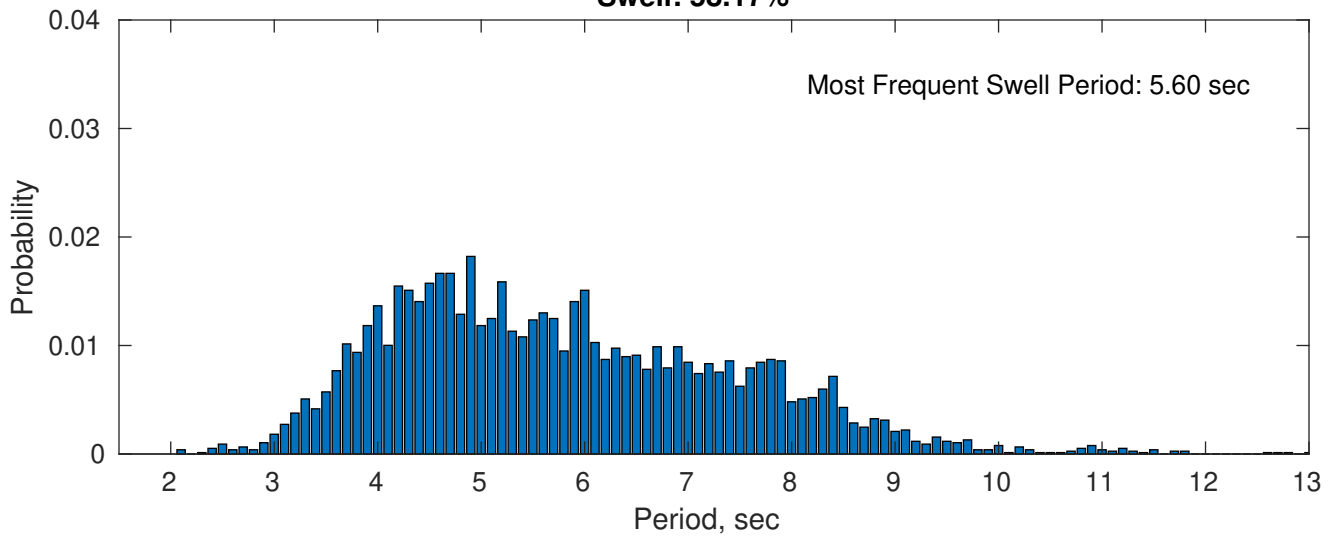
July Peak Wave Period PDF: 1979 - 2015



Wind-Sea: 41.83%

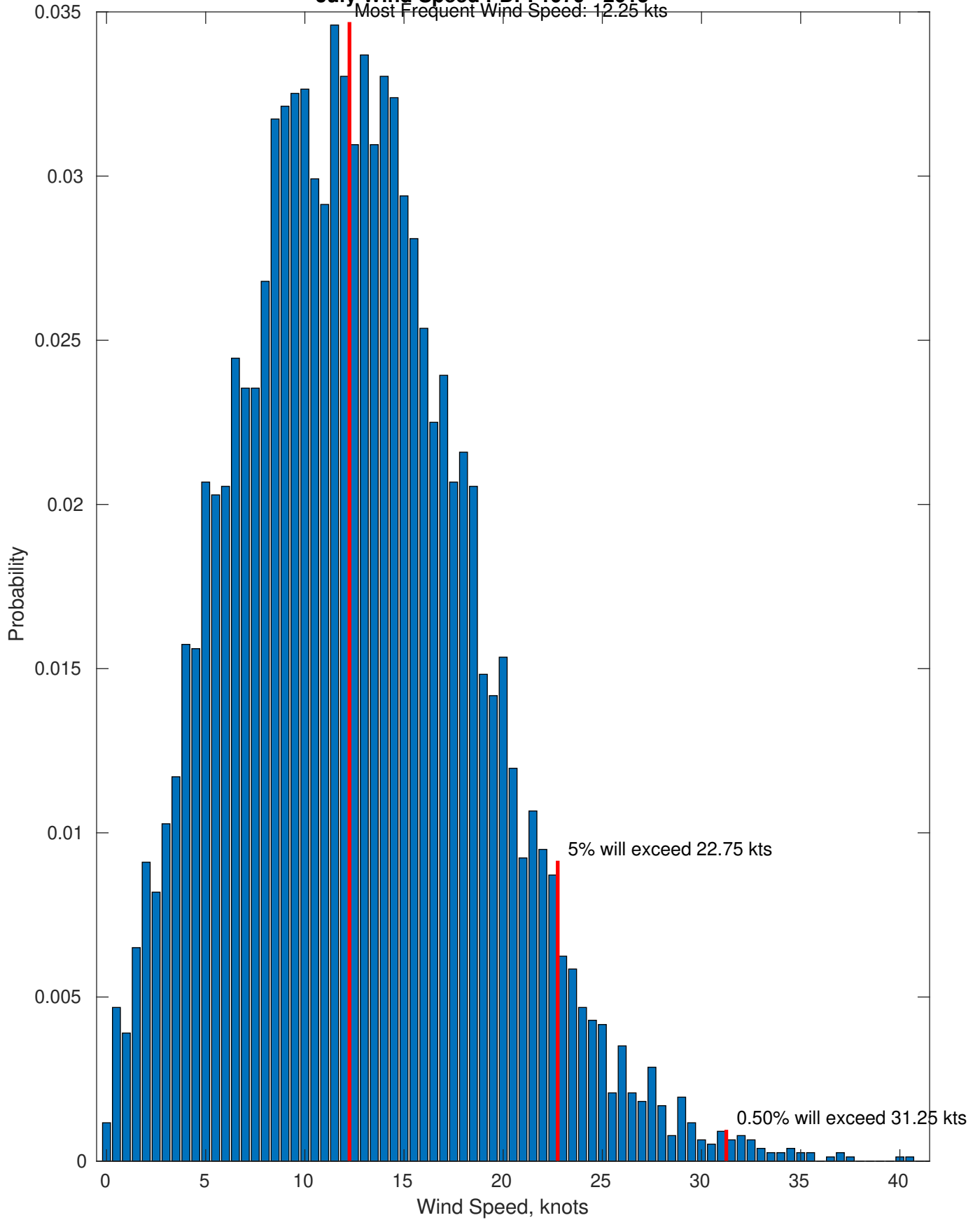


Swell: 58.17%

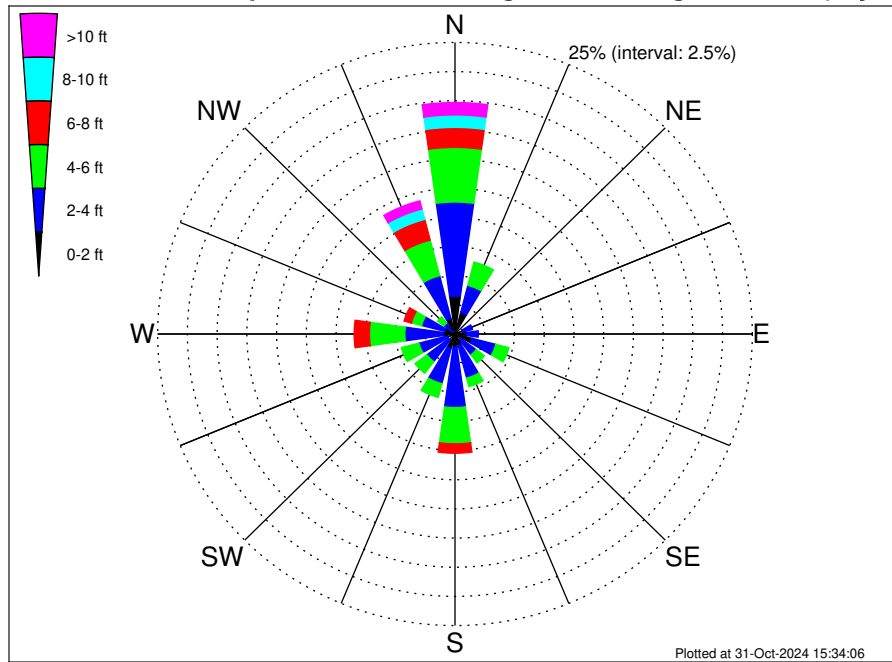


July Wind Speed PDF: 1979 - 2015

Most Frequent Wind Speed: 12.25 kts



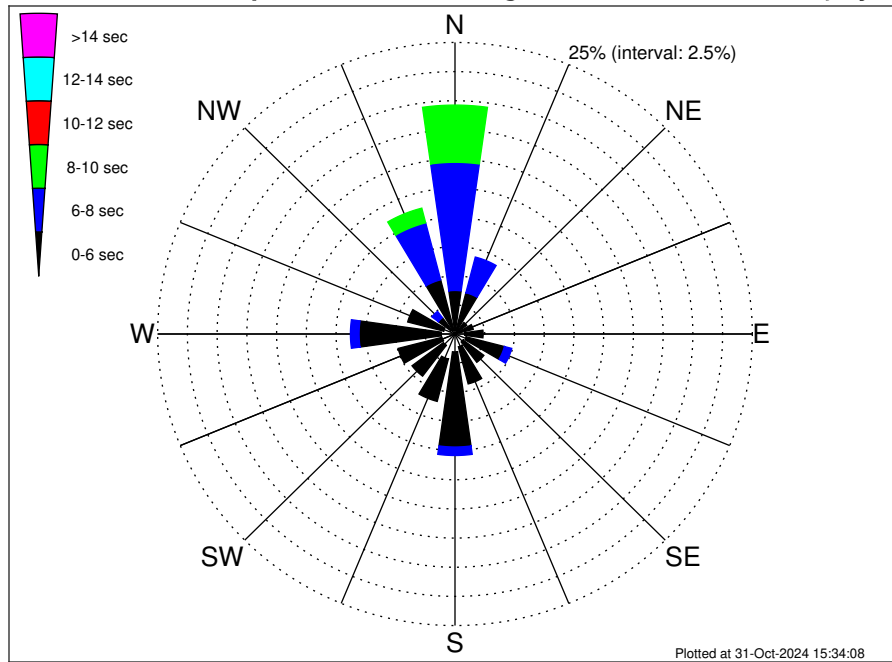
UK Cable Route GT - Berwick-upon-Tweed Climatological WaveHeight Rose for July: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.30	0.42	0.08	0.03	0.20	0.23	0.12	0.17	0.08	0.14	0.10	0.01	0.05	0.13	0.01	0.43	2.50
1 - 2 ft	2.94	1.48	0.51	0.62	0.75	1.26	0.51	0.88	1.04	1.12	0.56	0.62	0.92	0.75	0.30	0.95	15.23
2 - 4 ft	8.08	2.41	0.51	0.87	1.01	2.06	1.61	2.85	5.19	3.13	2.30	2.50	3.24	2.02	0.86	3.79	42.42
4 - 6 ft	4.68	2.07	0.26	0.31	0.42	1.13	0.86	0.75	3.11	1.21	1.25	1.52	2.98	0.88	0.66	3.15	25.25
6 - 8 ft	1.72	0.44	0.08	0.12	0.21	0.22	0.16	0.16	0.81	0.60	0.33	0.34	1.29	0.64	0.35	1.83	9.27
8 - 10 ft	1.07	0.12	0.01	0.05	0.01	0.03	•	0.05	0.14	0.05	0.01	0.09	0.27	0.14	0.17	0.92	3.15
10 - 12 ft	0.74	•	•	0.05	0.03	•	•	•	0.03	•	•	•	0.04	0.01	0.03	0.27	1.20
12 - 14 ft	0.22	•	•	•	•	•	•	•	0.03	•	•	•	•	•	0.13	0.27	0.65
14 - 16 ft	0.09	•	•	0.03	•	•	•	•	•	•	•	•	•	•	0.03	0.10	0.25
16 - 18 ft	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.05	0.07
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.03	0.03
Total	19.85	6.93	1.44	2.08	2.63	4.93	3.25	4.86	10.42	6.26	4.55	5.09	8.79	4.58	2.54	11.80	100.00

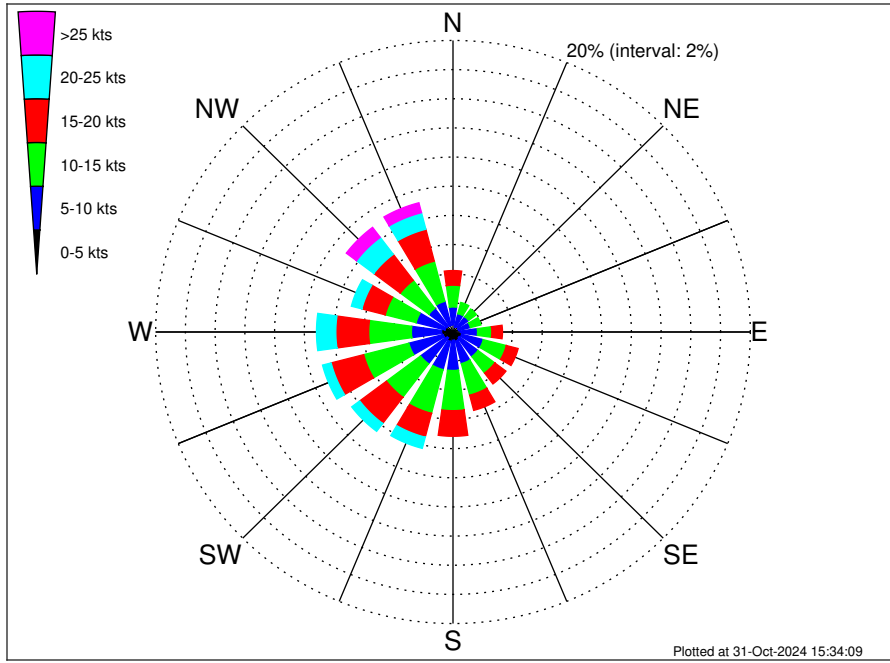
UK Cable Route GT - Berwick-upon-Tweed Climatological WavePeriod Rose for July: 1979 - 2015



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	•	•	0.01	•	0.01	0.01	•	•	•	•	•	•	•	•	0.01	•	0.05
2 - 4 sec	0.33	0.36	0.25	0.39	0.81	0.96	0.86	1.13	1.53	2.21	1.22	1.13	1.16	0.99	0.43	0.35	14.11
4 - 6 sec	3.41	3.29	0.98	1.20	1.55	3.32	2.19	3.29	8.16	3.76	3.30	3.81	6.91	3.12	1.31	4.45	54.03
6 - 8 sec	10.99	3.16	0.21	0.36	0.23	0.64	0.21	0.44	0.73	0.29	0.03	0.14	0.73	0.47	0.68	5.05	24.35
8 - 10 sec	4.90	0.12	•	0.13	0.03	•	•	•	•	•	•	•	•	•	0.10	1.30	6.58
10 - 12 sec	0.22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.42	0.64
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.12	0.12
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.12	0.12
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	19.85	6.93	1.44	2.08	2.63	4.93	3.25	4.86	10.42	6.26	4.55	5.09	8.79	4.58	2.54	11.80	100.00

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



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.07	0.05	0.05	0.04	0.07	•	0.03	0.04	0.03	0.05	•	0.01	0.07	0.01	0.05	0.03	0.59
0 - 5 kts	0.43	0.31	0.39	0.35	0.43	0.60	0.51	0.60	0.55	0.61	0.51	0.66	0.70	0.55	0.47	0.44	8.10
5 - 10 kts	1.22	0.94	0.87	0.82	1.16	1.51	1.57	1.60	2.07	2.00	2.22	2.39	2.03	2.00	1.51	1.70	25.62
10 - 15 kts	1.50	0.79	0.66	0.73	0.96	1.60	1.42	2.24	2.76	3.10	2.87	3.13	2.87	2.15	2.41	2.85	32.04
15 - 20 kts	1.00	0.43	0.44	0.39	0.72	0.82	0.94	1.08	1.76	1.69	2.25	2.26	2.21	1.63	2.24	2.26	22.11
20 - 25 kts	0.48	0.20	0.12	0.09	0.07	0.21	0.12	0.22	0.43	0.79	0.68	0.60	1.30	0.73	1.46	1.17	8.65
25 - 30 kts	0.14	0.03	0.01	0.03	0.01	•	0.04	0.04	0.03	0.12	0.08	0.25	0.23	0.12	0.57	0.52	2.21
30 - 35 kts	0.01	•	•	•	•	•	•	•	•	0.01	•	0.01	0.05	0.07	0.21	0.18	0.55
35 - 40 kts	•	•	•	•	•	•	•	•	0.01	•	•	•	•	0.04	0.05	•	0.10
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.03	•	0.03
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	4.85	2.74	2.55	2.45	3.41	4.73	4.62	5.81	7.62	8.38	8.61	9.33	9.47	7.28	8.99	9.16	100.00