

UK Cable Route GT - Middlesborough - August

Latitude: 54.60 N Longitude: 0.81 E

Weather Days

Wave Height > 6.0 ft Mean: 3.3 days Range: 1.4 - 5.3 days p50:3.5 days p75:2.5 days p90:1 days

Wave Height > 7.0 ft Mean: 2.0 days Range: 0.6 - 3.5 days p50:2.5 days p75:2 days p90:1 days

Wave Height > 8.0 ft Mean: 1.2 days Range: 0.2 - 2.3 days p50:1.5 days p75:1.5 days p90:0.5 days

Wind Speed > 15.0 knots Mean: 11.3 days Range: 7.4 - 15.1 days p50:12 days p75:9 days p90:6.5 days

Wind Speed > 20.0 knots Mean: 4.4 days Range: 2.0 - 6.8 days p50:4.5 days p75:3 days p90:1.5 days

Wind Speed > 25.0 knots Mean: 1.2 days Range: 0.2 - 2.2 days p50:1.5 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 3.3 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 2.5 times per month

Wave Height < 7.0 ft
A 1 day or longer window will statistically occur 2.6 times per month
A 2 day or longer window will statistically occur 2.4 times per month
A 3 day or longer window will statistically occur 2.1 times per month

Wave Height < 8.0 ft
A 1 day or longer window will statistically occur 2.0 times per month
A 2 day or longer window will statistically occur 1.9 times per month
A 3 day or longer window will statistically occur 1.8 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 8 - 10 sec, but rarely longer.

Principle Direction, from: N

WindSea/Swell: 45% / 55%

Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 30 - 35 kts, but rarely greater.

Principle Direction, from: SW

Currents

Mean Speed: 0.01-0.25 kts

The currents will occasionally reach 0.75-1.00 kts, but rarely greater.

Principle Direction, to: NNE

Weather Days

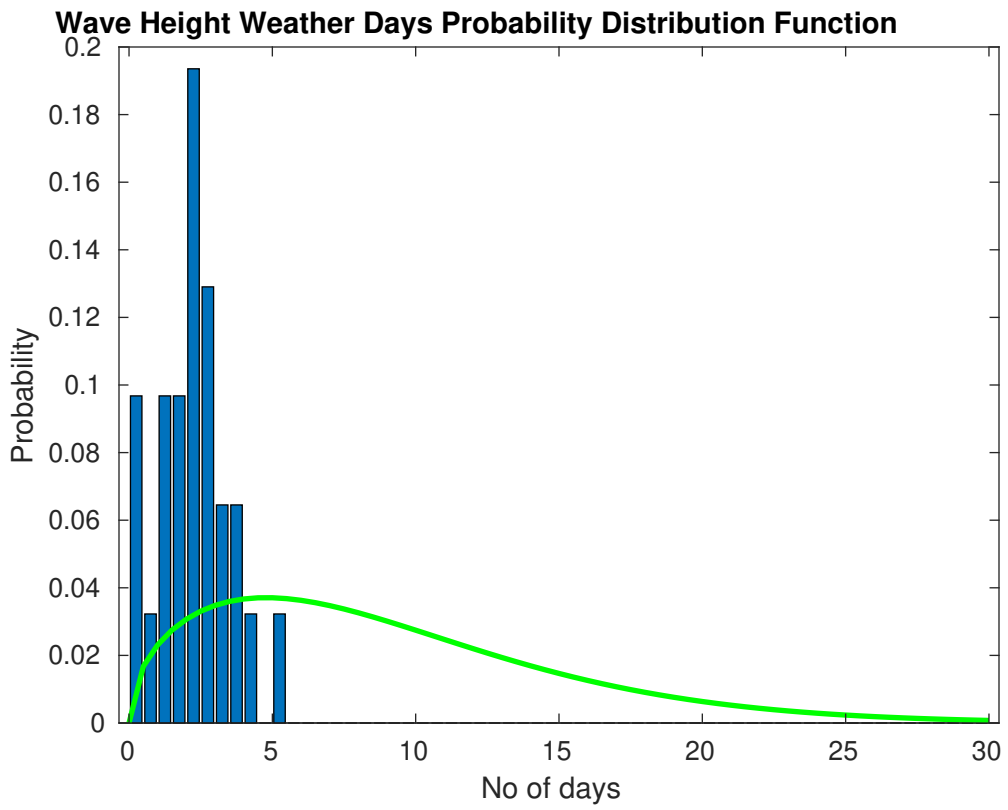
Current Speed > 1.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

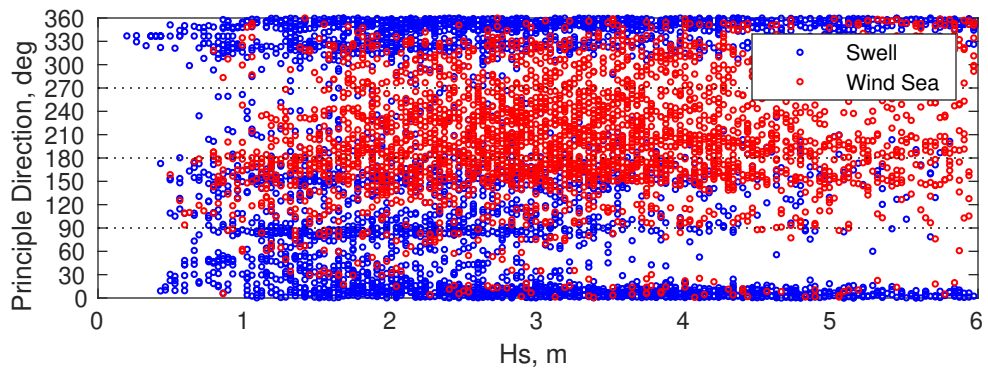
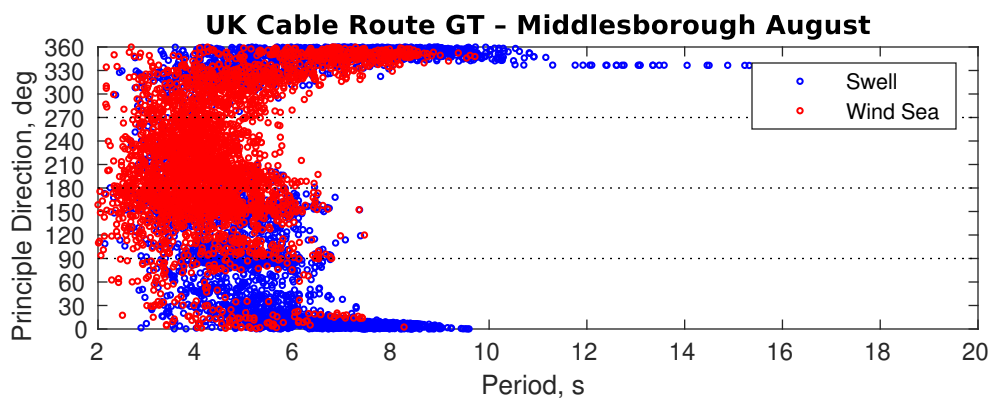
Current Speed > 1.5 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

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

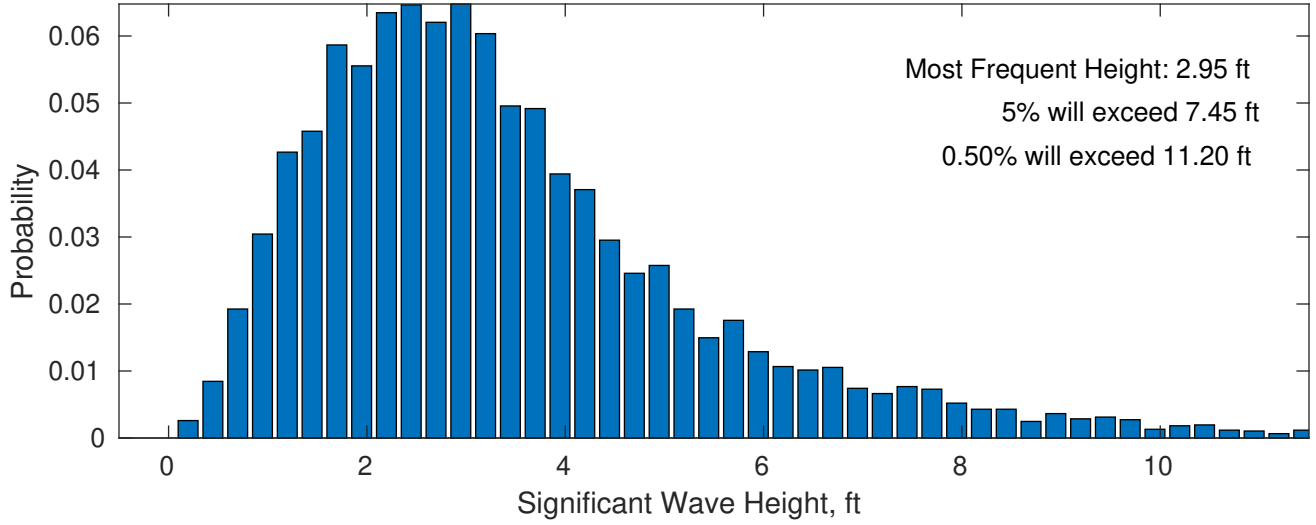
Severe Storms

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

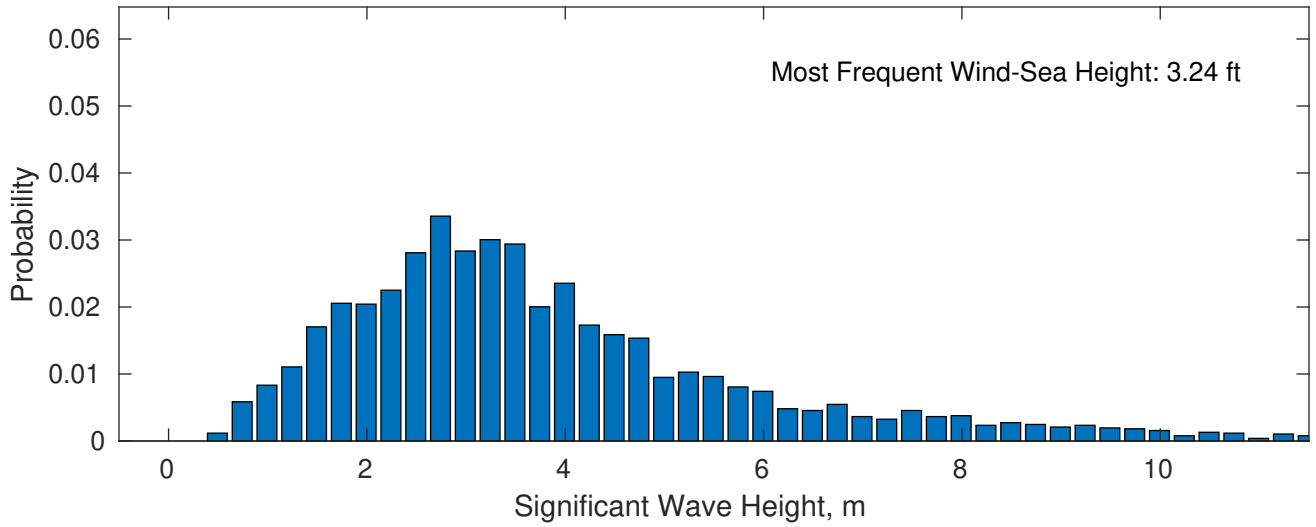




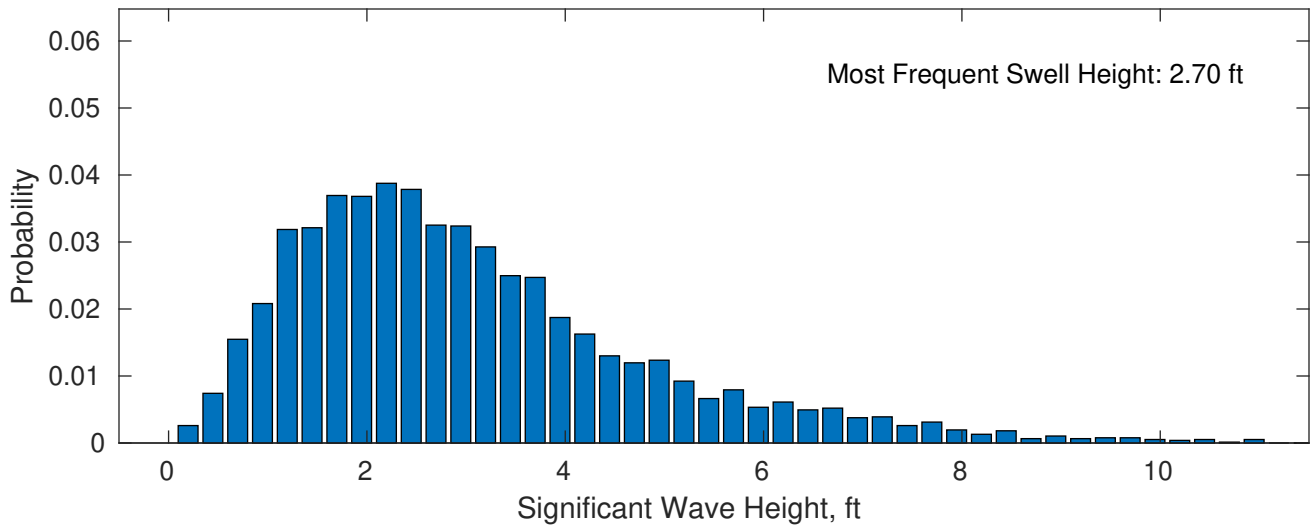
August Wave Height PDF: 1979 - 2015



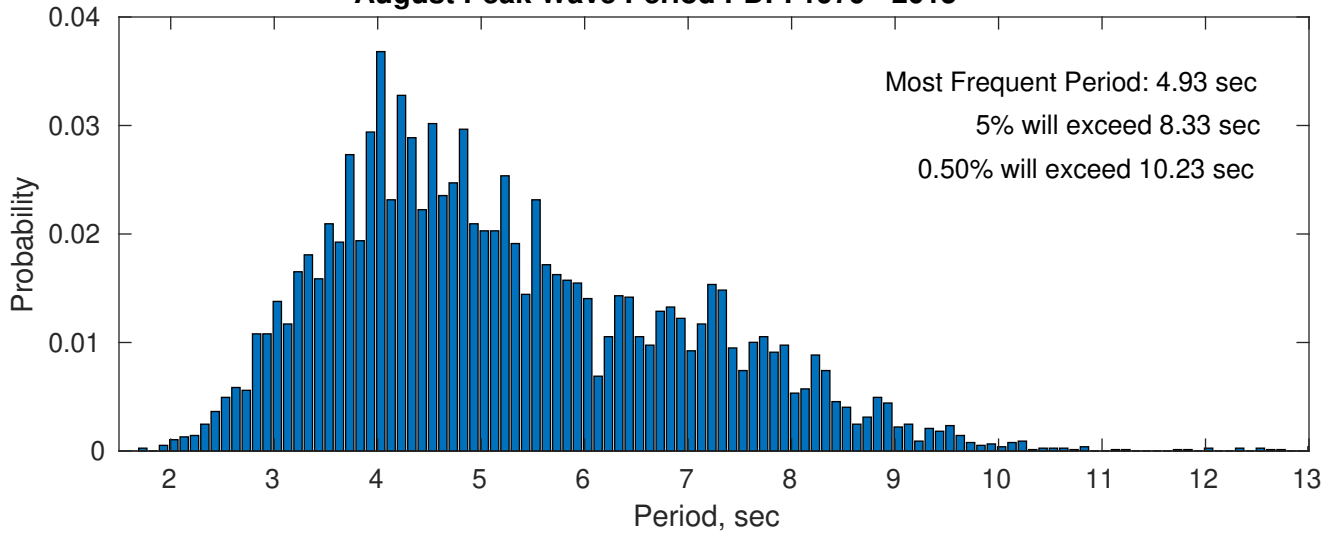
Wind-Sea: 45.24%



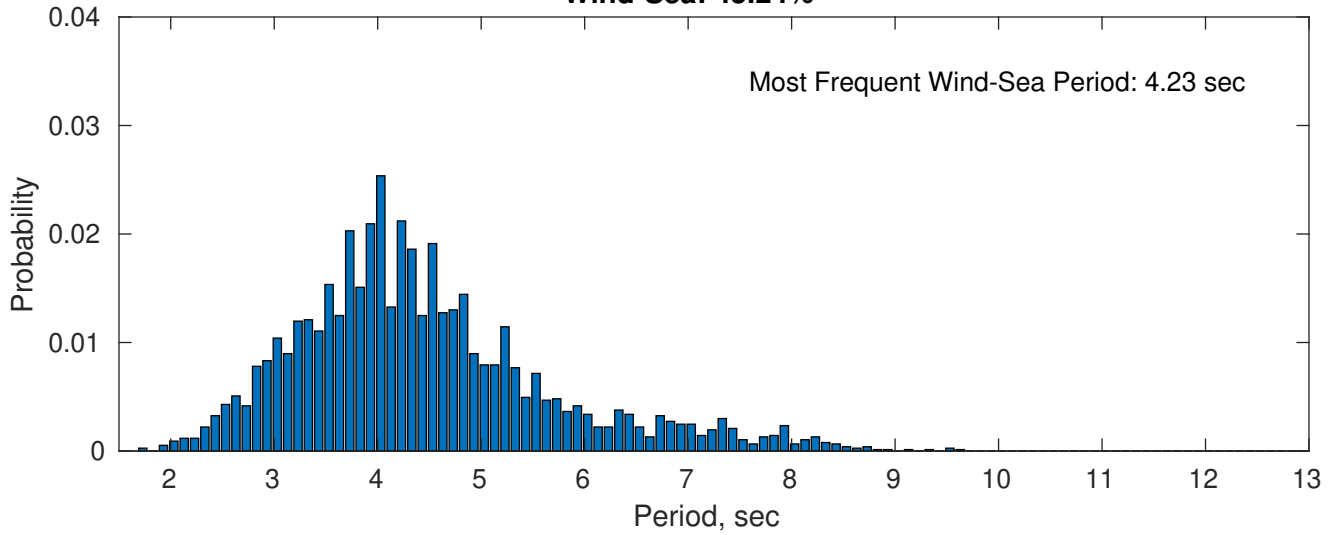
Swell: 54.76%



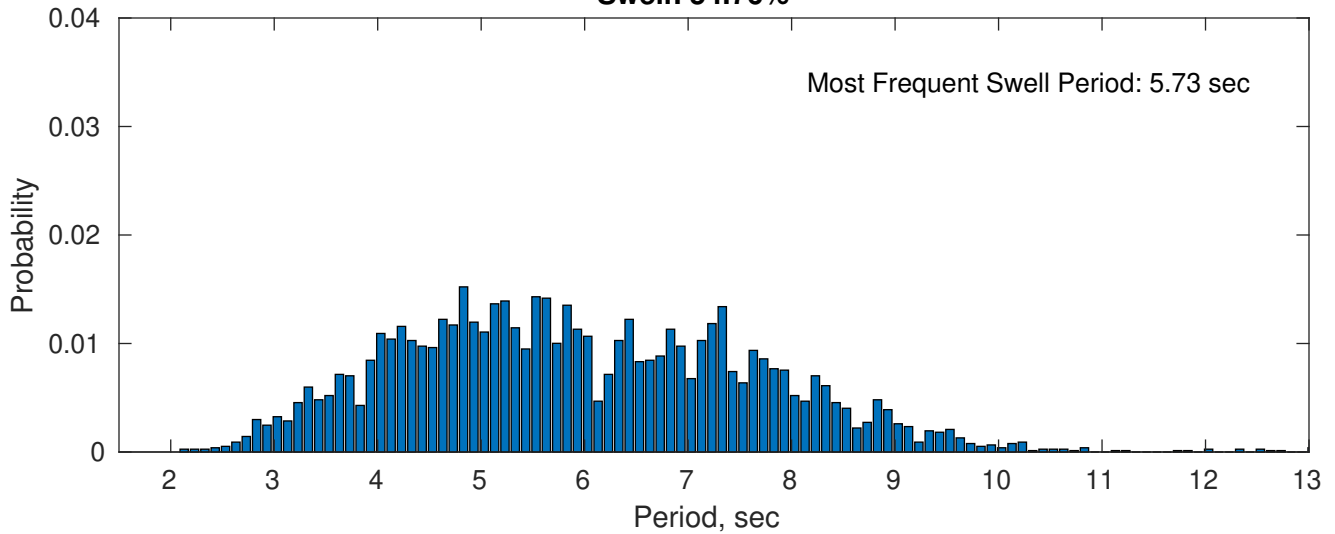
August Peak Wave Period PDF: 1979 - 2015



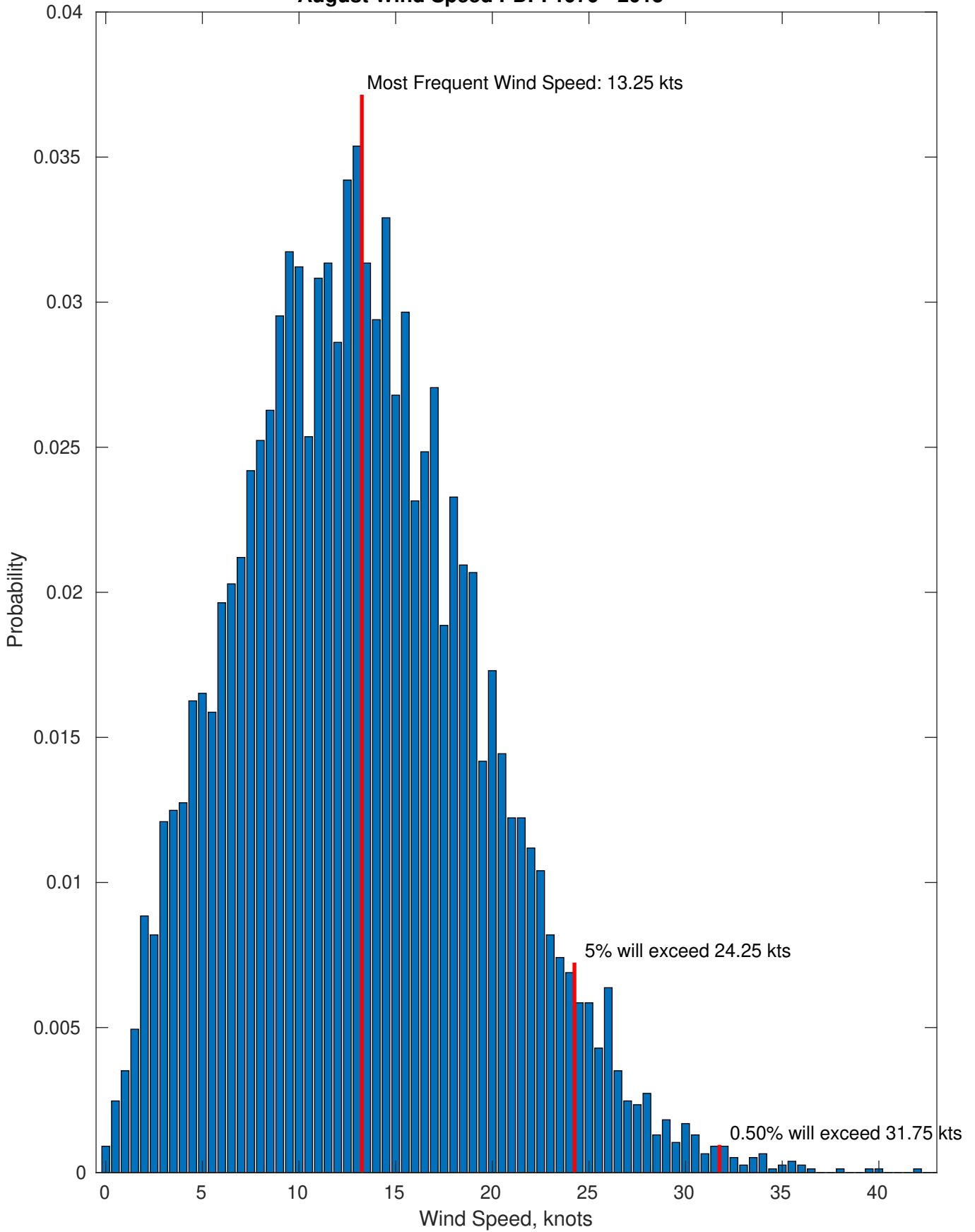
Wind-Sea: 45.24%



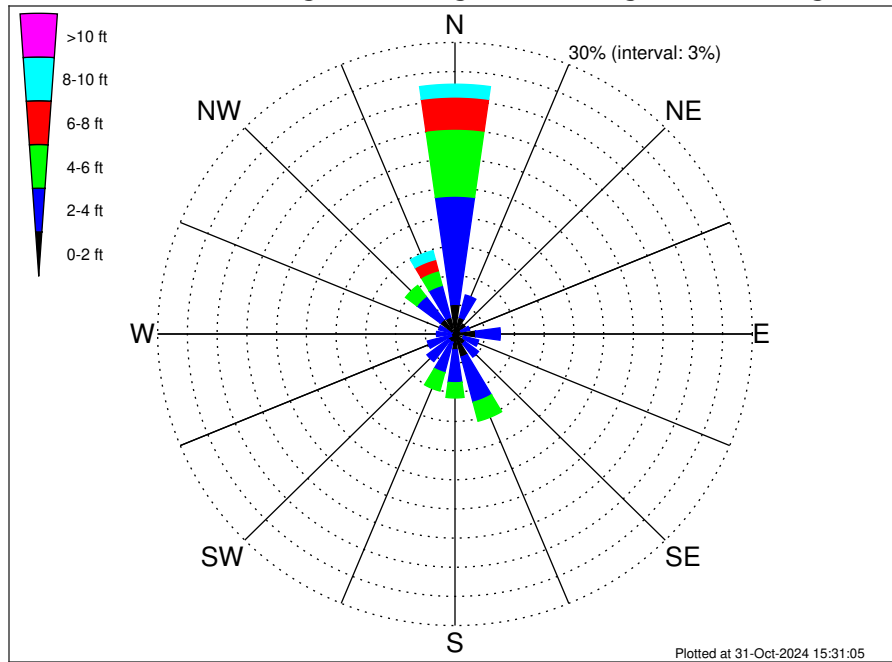
Swell: 54.76%



August Wind Speed PDF: 1979 - 2015



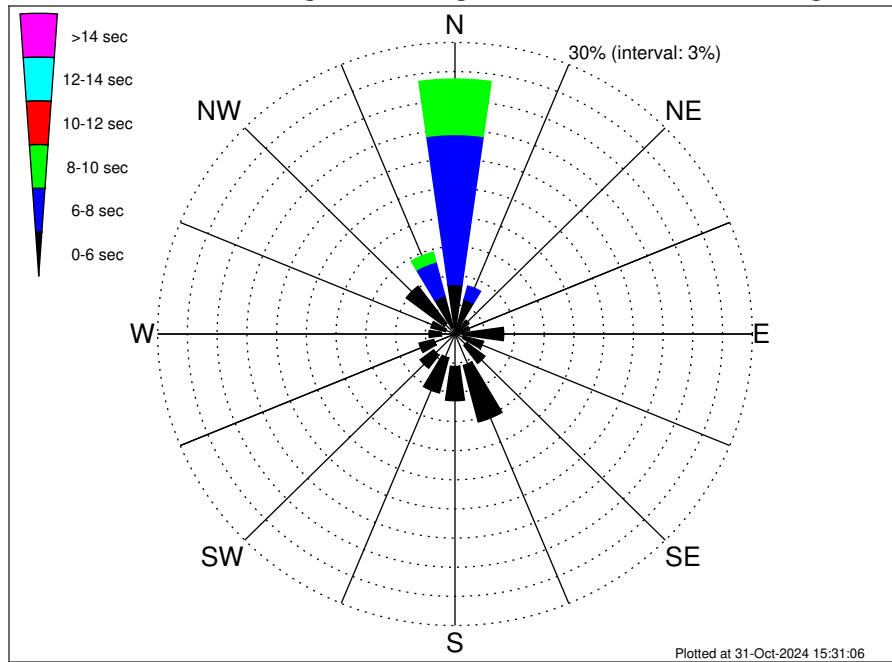
UK Cable Route GT - Middlesborough Climatological WaveHeight Rose for August: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.23	0.27	0.30	0.07	0.23	0.27	0.26	0.46	0.30	0.05	0.04	0.01	0.04	0.05	0.39	0.68	3.66
1 - 2 ft	2.82	1.50	0.98	0.61	1.86	0.62	1.00	1.99	1.33	0.83	0.79	0.39	0.40	0.29	1.46	1.09	17.96
2 - 4 ft	11.13	2.38	0.68	0.86	2.48	1.57	1.72	4.81	3.39	3.23	2.72	2.48	1.43	1.38	2.99	3.39	46.66
4 - 6 ft	6.89	0.68	0.03	0.09	0.52	0.42	0.74	2.02	1.56	1.95	0.72	0.72	0.57	0.65	1.42	1.56	20.53
6 - 8 ft	3.30	0.10	0.05	0.05	0.29	0.13	0.14	0.38	0.38	0.20	0.13	0.13	0.16	0.16	0.33	1.20	7.11
8 - 10 ft	1.31	0.10	.	.	.	0.04	.	0.13	0.09	0.03	0.03	0.01	0.03	0.03	0.09	0.94	2.82
10 - 12 ft	0.52	0.07	.	.	.	0.01	.	0.03	.	.	.	.	.	.	0.03	0.30	0.95
12 - 14 ft	0.14	.	.	.	.	0.03	.	.	.	.	.	.	.	.	0.01	0.04	0.22
14 - 16 ft	0.05	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.04	0.09
16 - 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
> 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	26.42	5.10	2.03	1.68	5.39	3.10	3.86	9.81	7.05	6.28	4.42	3.75	2.63	2.55	6.71	9.24	100.00

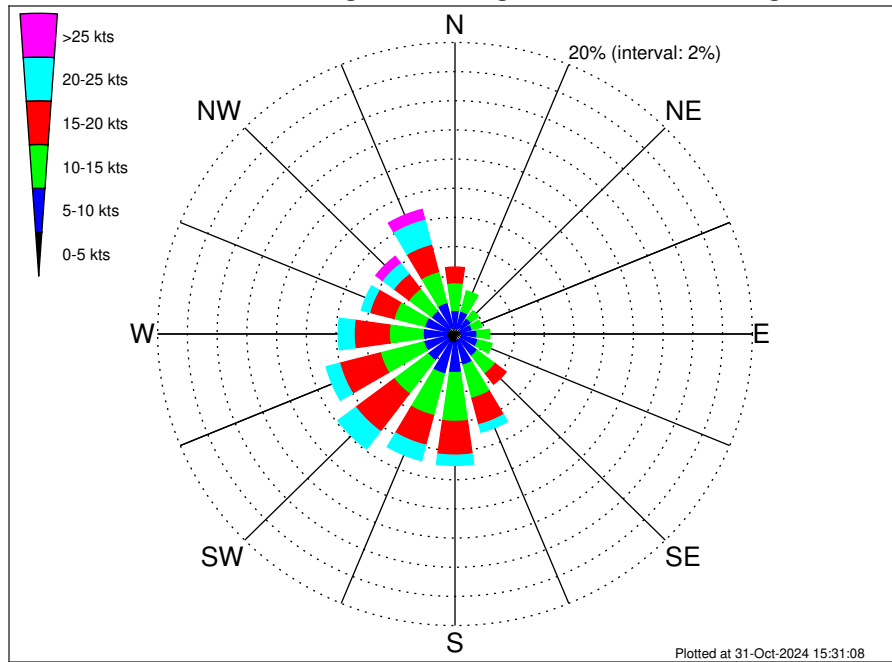
UK Cable Route GT - Middlesborough Climatological WavePeriod Rose for August: 1979 - 2015



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	0.03	•	•	•	•	•	•	•	0.05
2 - 4 sec	0.36	0.46	0.33	0.55	0.75	0.88	1.47	3.32	3.32	2.54	2.71	2.21	1.38	1.00	1.35	0.70	23.32
4 - 6 sec	4.73	3.21	1.46	0.96	4.16	2.06	2.32	6.02	3.52	3.73	1.70	1.53	1.25	1.52	4.81	3.34	46.34
6 - 8 sec	15.43	1.43	0.25	0.17	0.47	0.14	0.08	0.46	0.18	0.01	0.01	•	•	0.03	0.55	3.60	22.80
8 - 10 sec	5.71	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1.05	6.76
10 - 12 sec	0.18	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.26	0.44
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.20	0.20
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.08	0.08
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	26.42	5.10	2.03	1.68	5.39	3.10	3.86	9.81	7.05	6.28	4.42	3.75	2.63	2.55	6.71	9.24	100.00

UK Cable Route GT - Middlesborough Climatological Wind Rose for August: 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	0.07	0.03	0.03	0.01	0.01	0.01	0.01	0.04	0.03	0.03	•	0.01	0.04	0.01	0.34
0 - 5 kts	0.39	0.42	0.48	0.39	0.48	0.46	0.48	0.46	0.61	0.59	0.62	0.53	0.53	0.51	0.48	0.48	7.91
5 - 10 kts	1.24	1.18	0.79	0.78	0.98	1.13	1.38	1.73	2.03	2.20	1.61	1.61	1.61	1.59	1.46	1.73	23.05
10 - 15 kts	1.90	1.44	0.65	0.66	0.86	0.98	1.52	2.35	3.34	2.95	2.86	3.02	2.28	2.13	1.91	2.20	31.06
15 - 20 kts	1.07	0.42	0.22	0.05	0.29	0.36	0.91	1.87	2.32	2.11	3.24	2.82	2.37	1.69	1.27	1.94	22.94
20 - 25 kts	0.44	0.16	0.09	0.05	0.05	0.23	0.43	0.53	0.70	1.09	1.51	0.94	1.07	0.57	0.96	1.78	10.61
25 - 30 kts	0.23	0.03	•	•	•	0.01	0.08	0.12	0.22	0.35	0.34	0.30	0.35	0.22	0.43	0.49	3.17
30 - 35 kts	0.08	•	•	•	0.01	•	•	0.03	0.05	0.14	0.08	0.09	0.03	0.03	0.07	0.16	0.75
35 - 40 kts	•	•	•	•	0.01	•	•	0.01	•	•	0.01	•	•	0.01	0.04	0.04	0.13
40 - 45 kts	•	•	•	•	0.01	•	•	•	•	•	•	•	•	•	0.01	•	0.03
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	5.35	3.66	2.30	1.96	2.72	3.19	4.81	7.11	9.29	9.47	10.30	9.34	8.23	6.76	6.67	8.83	100.00