

## Even Keel Wind Project - August

Latitude: 35.53 N Longitude: 121.68 W

### Weather Days

Wave Height > 6.0 ft Mean: 9.9 days Range: 4.6 - 15.3 days p50:14.5 days p75:12 days p90:10 days

Wave Height > 7.0 ft Mean: 5.5 days Range: 1.3 - 9.7 days p50:7.5 days p75:5 days p90:3.5 days

Wave Height > 8.0 ft Mean: 2.2 days Range: 0.0 - 4.6 days p50:3 days p75:1.5 days p90:1 days

Wind Speed > 10.0 knots Mean: 21.4 days Range: 18.0 - 24.8 days p50:21.5 days p75:20 days p90:16 days

Wind Speed > 15.0 knots Mean: 11.7 days Range: 8.1 - 15.2 days p50:12 days p75:9.5 days p90:8 days

Wind Speed > 20.0 knots Mean: 2.4 days Range: 0.9 - 3.9 days p50:2 days p75:1.5 days p90:1 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 3.6 times per month  
A 2 day or longer window will statistically occur 2.6 times per month  
A 3 day or longer window will statistically occur 1.8 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 3.7 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 2.3 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 2.8 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 2.1 times per month

### Waves

Mean Height: 6 - 8 ft

The wave heights will occasionally reach 8 - 10 ft, but rarely higher.

Mean Period: 10 - 12 sec

The wave periods will occasionally reach 22 - 24 sec, but rarely longer.

Principle Direction, from: NW

WindSea/Swell: 10% / 90%

### Winds

Mean Speed: 10 - 15 kts

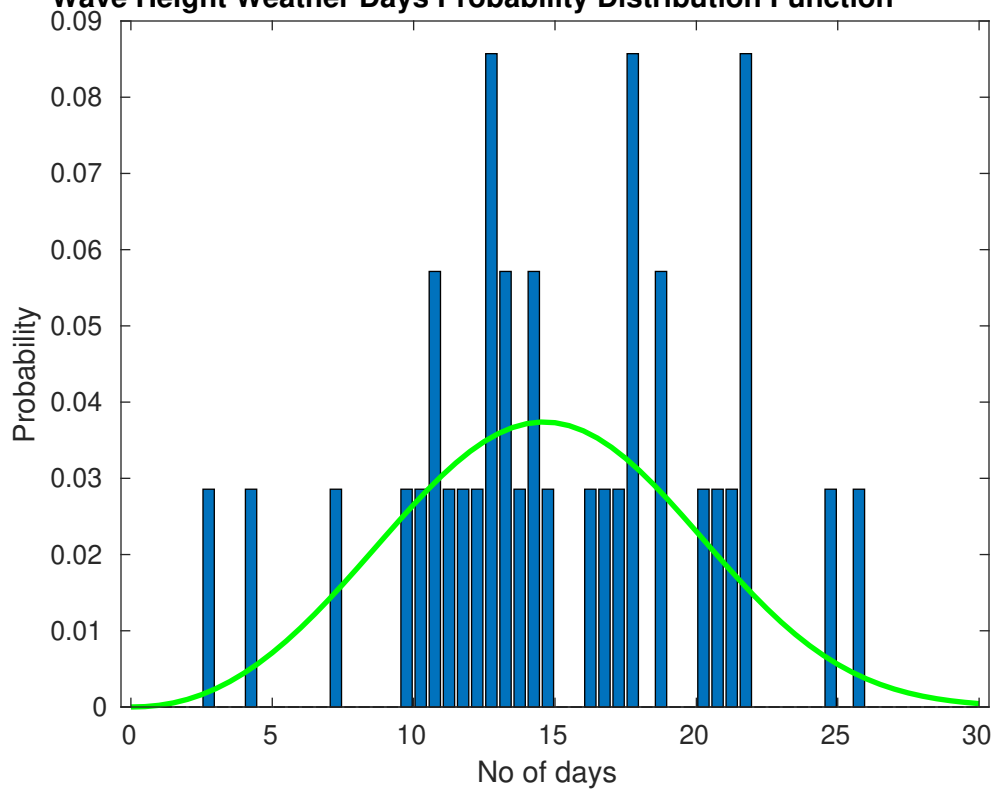
The winds will occasionally reach 20 - 25 kts, but rarely greater.

Principle Direction, from: NW

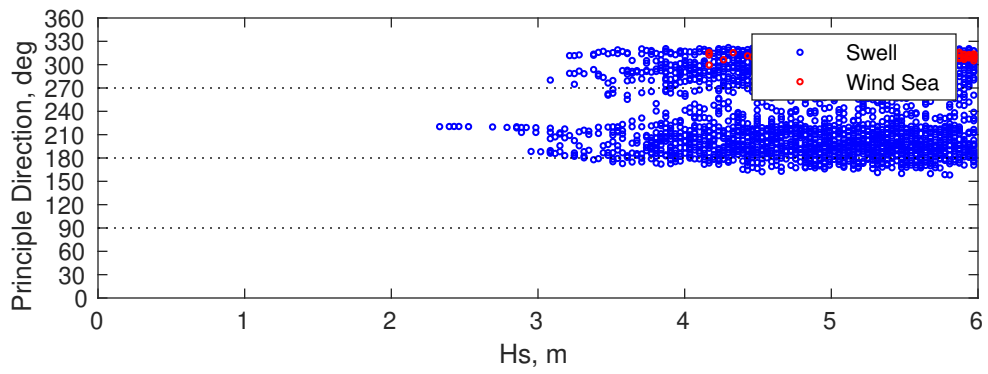
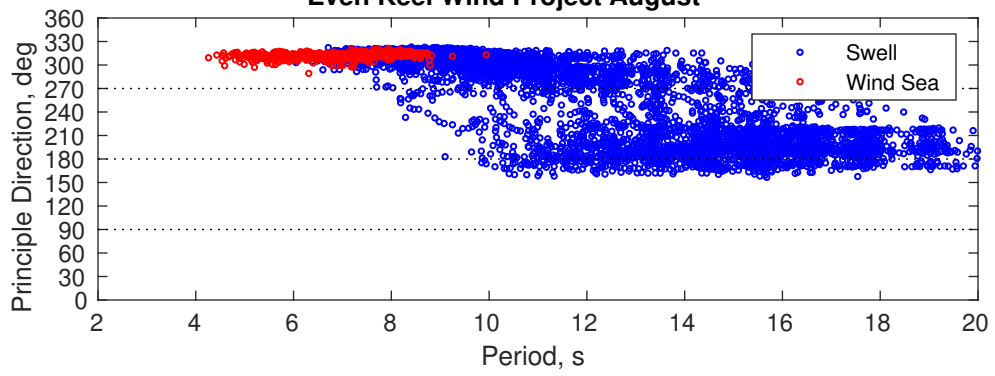
### Severe Storms

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

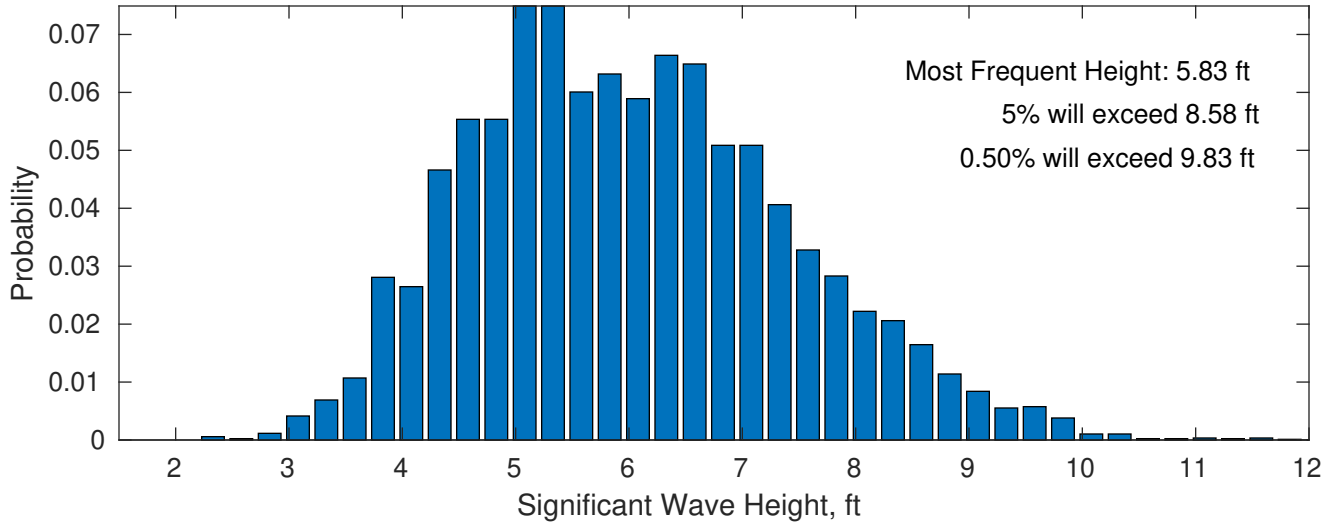
**Wave Height Weather Days Probability Distribution Function**



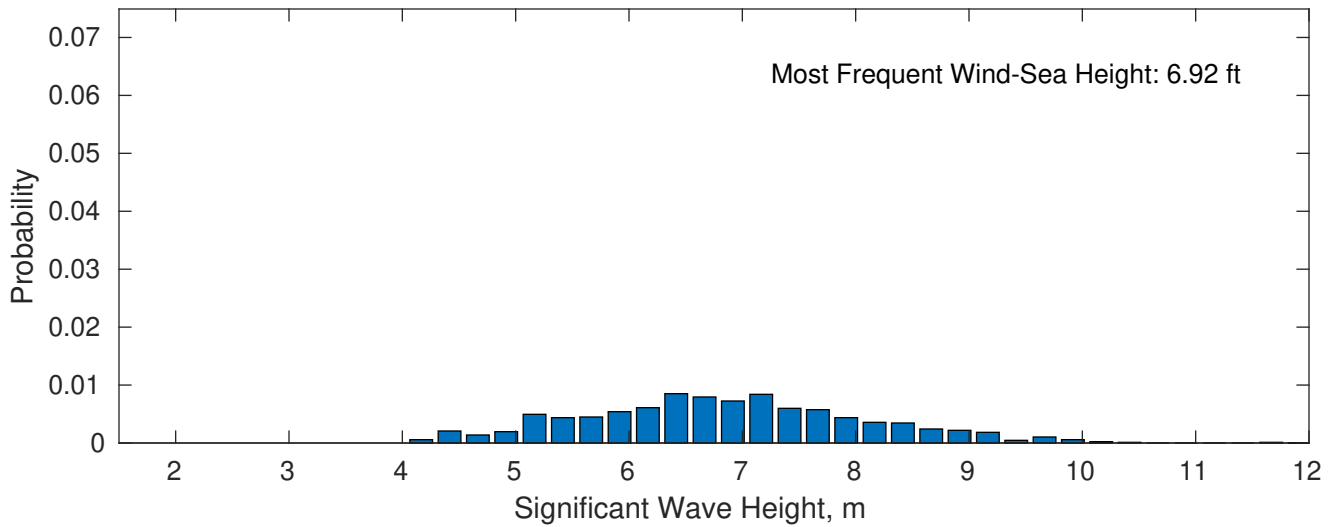
### Even Keel Wind Project August



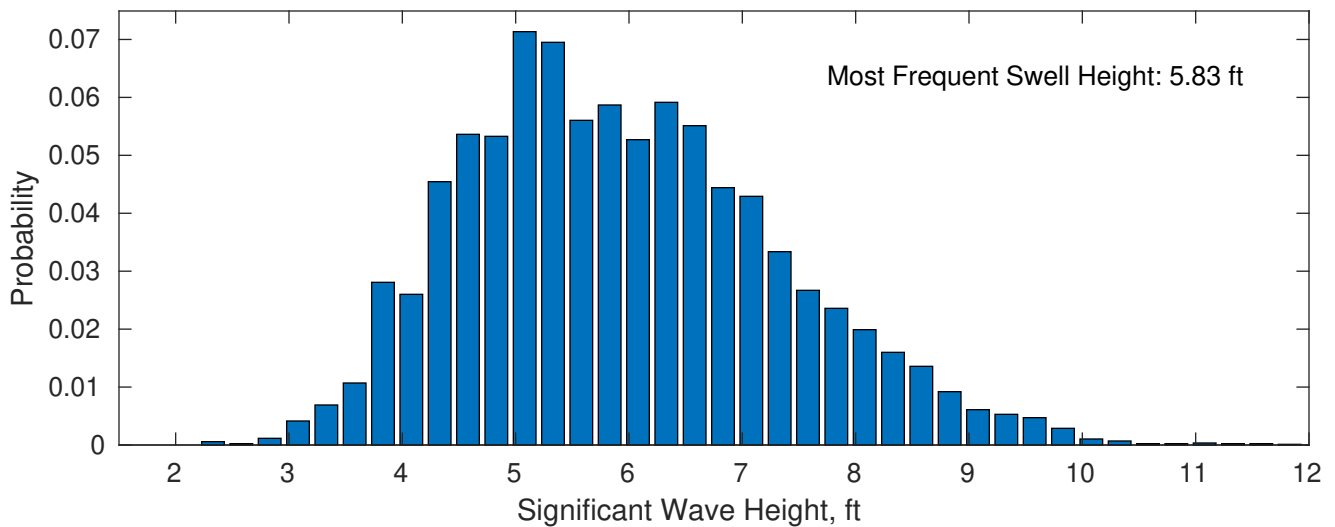
**August Wave Height PDF: 1979 - 2015**



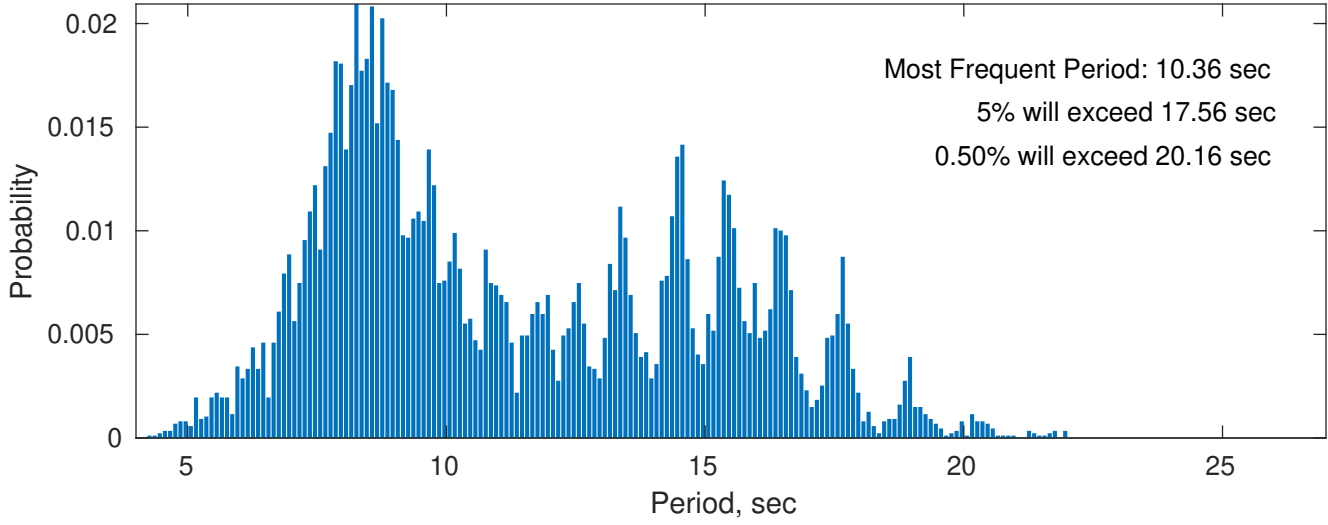
**Wind-Sea: 9.55%**



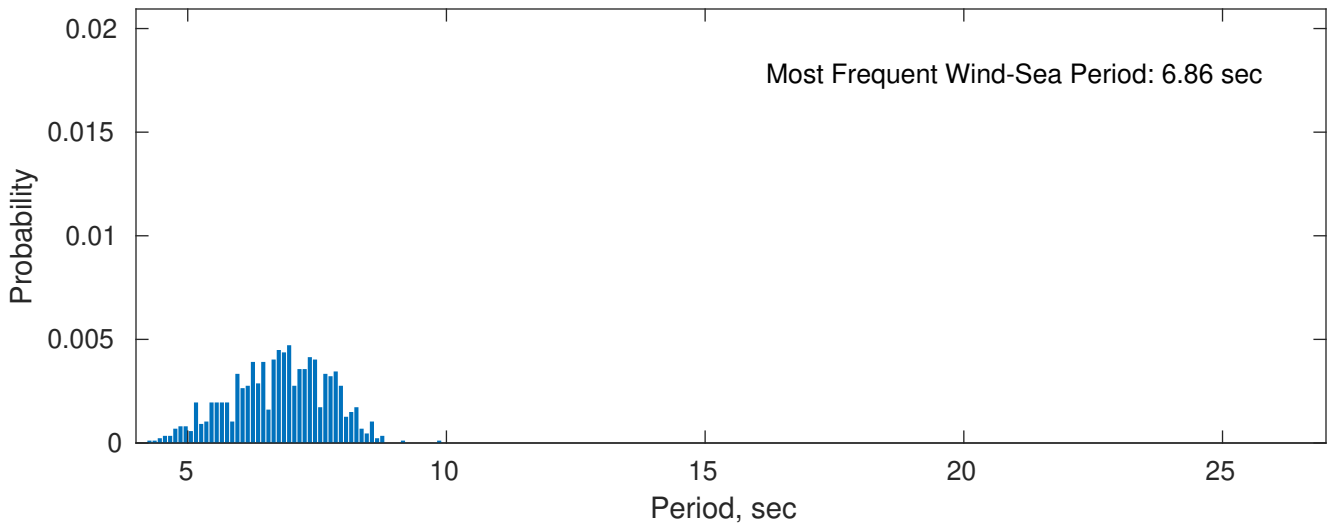
**Swell: 90.45%**



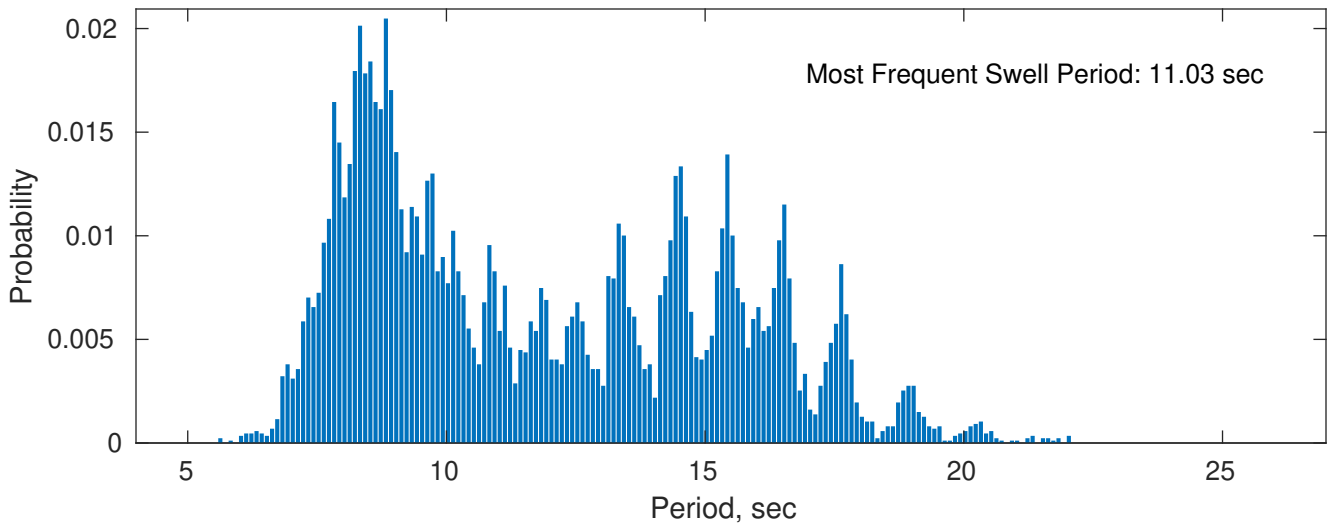
**August Peak Wave Period PDF: 1979 - 2015**



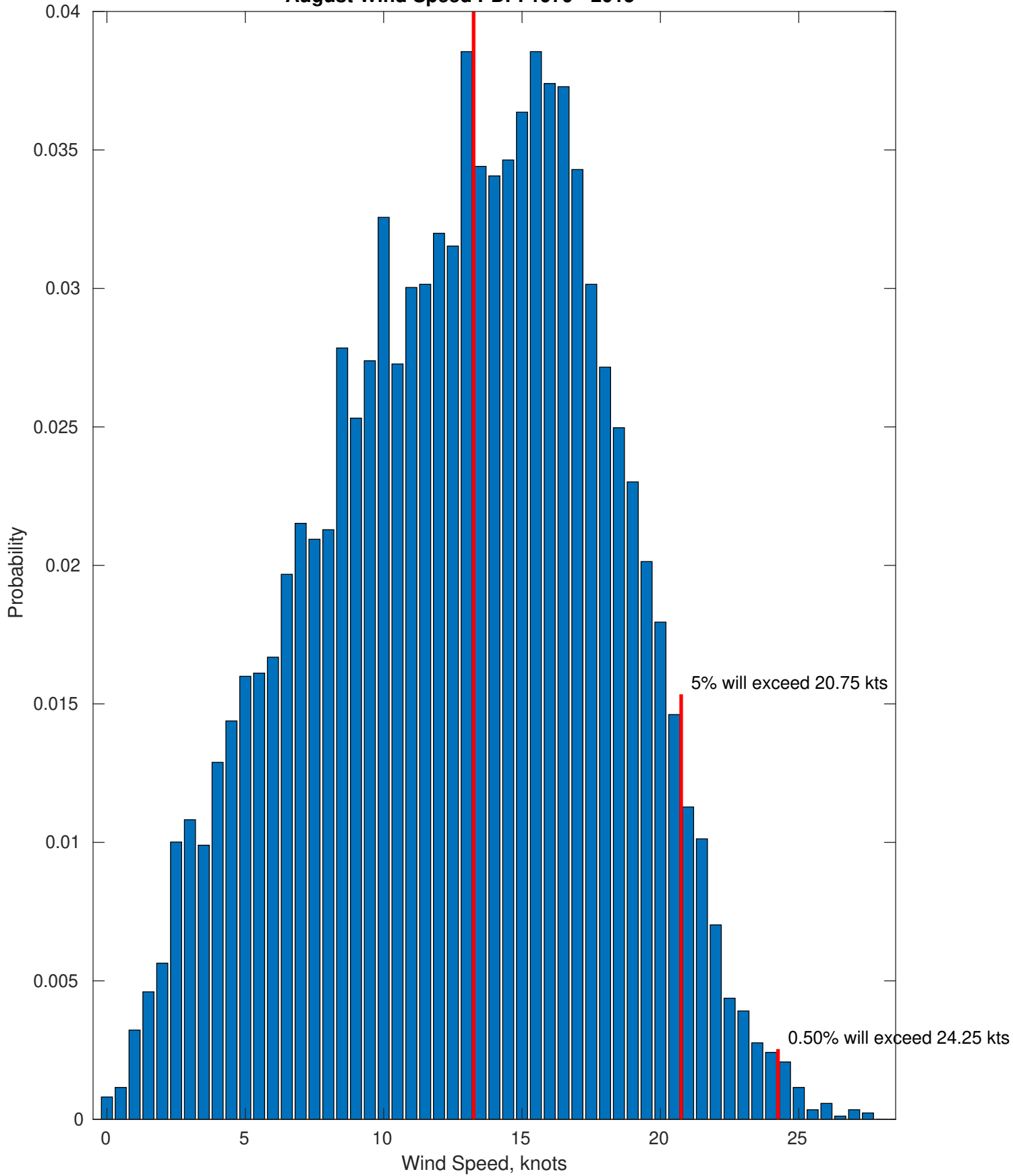
**Wind-Sea: 9.55%**



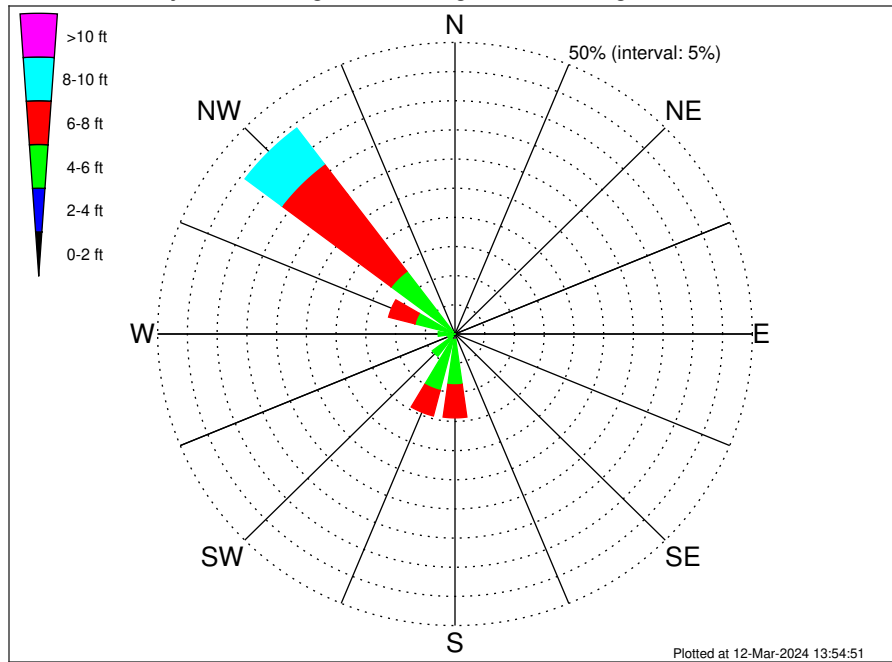
**Swell: 90.45%**



August Wind Speed PDF: 1979 - 2015  
Most Frequent Wind Speed: 13.25 kts



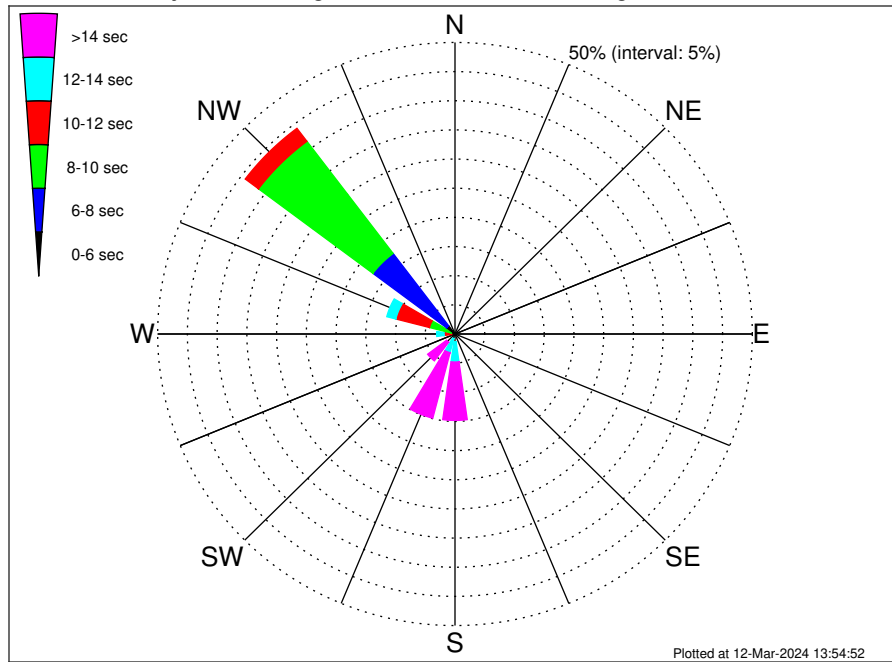
Even Keel Wind Project Climatological WaveHeight Rose for August: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 ft	•	•	•	•	•	•	•	•	0.97	1.00	0.54	0.05	0.37	0.76	0.46	•	4.14
4 - 6 ft	•	•	•	•	•	•	•	0.41	7.77	9.01	4.23	1.25	2.46	6.20	13.00	•	44.35
6 - 8 ft	•	•	•	•	•	•	•	0.41	5.65	4.51	0.94	0.48	1.13	4.58	23.04	•	40.75
8 - 10 ft	•	•	•	•	•	•	•	0.25	0.44	0.39	0.05	0.08	0.13	1.23	7.71	•	10.28
10 - 12 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.48	•	0.48
12 - 14 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	•	•	•	•	•	•	•	1.08	14.82	14.91	5.77	1.86	4.09	12.77	44.70	•	100.00

Even Keel Wind Project Climatological WavePeriod Rose for August: 1979 - 2015

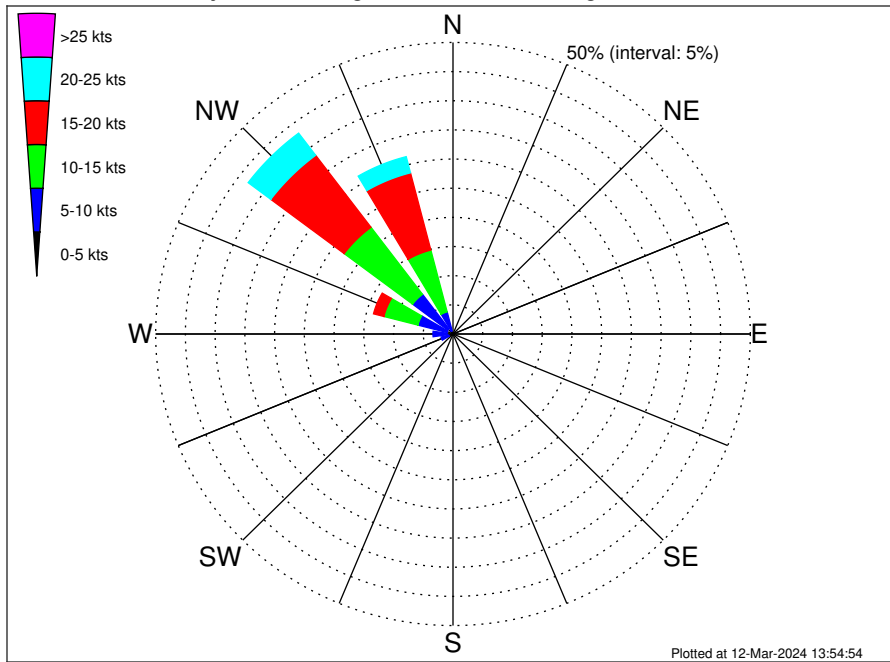


Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 - 6 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	0.09	1.75	•	1.84
6 - 8 sec	•	•	•	•	•	•	•	•	•	•	•	•	0.05	0.54	15.55	•	16.13
8 - 10 sec	•	•	•	•	•	•	•	•	0.08	0.02	0.18	0.10	0.54	3.81	24.09	•	28.83
10 - 12 sec	•	•	•	•	•	•	•	0.18	1.24	0.78	0.44	0.28	1.25	5.85	2.78	•	12.81
12 - 14 sec	•	•	•	•	•	•	•	0.30	3.49	2.51	1.15	0.51	1.25	1.57	0.48	•	11.25
14 - 16 sec	•	•	•	•	•	•	•	0.44	5.07	6.17	1.94	0.60	0.70	0.56	0.05	•	15.54
18 - 20 sec	•	•	•	•	•	•	•	0.13	3.75	4.28	1.59	0.36	0.29	0.33	•	•	10.72
22 - 24 sec	•	•	•	•	•	•	•	0.03	1.19	1.15	0.46	0.02	•	0.02	•	•	2.88
Total	•	•	•	•	•	•	•	1.08	14.82	14.91	5.77	1.86	4.09	12.77	44.70	•	100.00



Even Keel Wind Project 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	0.06	0.01	•	•	0.01	0.01	•	0.02	•	0.02	0.01	0.01	0.01	•	0.01	0.01	0.20
0 - 5 kts	0.16	0.09	0.03	0.05	0.03	0.05	0.20	0.37	0.47	0.62	0.62	0.75	1.01	1.02	1.13	0.54	7.15
5 - 10 kts	0.15	0.01	0.01	•	•	0.06	0.25	0.28	0.23	0.33	0.48	1.31	2.35	5.07	7.38	3.36	21.28
10 - 15 kts	0.15	0.01	•	•	•	•	•	0.01	0.03	0.06	0.06	0.12	0.81	5.91	14.41	10.96	32.52
15 - 20 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	1.80	15.45	13.68	30.93
20 - 25 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	0.03	4.75	2.87	7.65
25 - 30 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.16	0.12	0.28
30 - 35 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.52	0.13	0.05	0.05	0.05	0.12	0.45	0.68	0.74	1.04	1.17	2.19	4.18	13.84	43.29	31.53	100.00