

## Even Keel Wind Project - November

Latitude: 35.53 N Longitude: 121.68 W

### Weather Days

Wave Height > 6.0 ft Mean: 16.9 days Range: 14.0 - 19.8 days p50:24.5 days p75:22 days p90:20.5 days

Wave Height > 7.0 ft Mean: 12.2 days Range: 8.2 - 16.3 days p50:20.5 days p75:18 days p90:17 days

Wave Height > 8.0 ft Mean: 8.2 days Range: 3.7 - 12.7 days p50:16 days p75:13 days p90:12.5 days

Wind Speed > 10.0 knots Mean: 15.4 days Range: 12.4 - 18.3 days p50:16 days p75:13.5 days p90:11 days

Wind Speed > 15.0 knots Mean: 5.8 days Range: 3.6 - 7.9 days p50:6 days p75:4 days p90:3.5 days

Wind Speed > 20.0 knots Mean: 1.3 days Range: 0.4 - 2.1 days p50:1.5 days p75:1 days p90:0.5 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 2.0 times per month  
A 2 day or longer window will statistically occur 1.1 times per month  
A 3 day or longer window will statistically occur 0.4 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 3.1 times per month  
A 2 day or longer window will statistically occur 1.5 times per month  
A 3 day or longer window will statistically occur 0.9 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 4.4 times per month  
A 2 day or longer window will statistically occur 2.1 times per month  
A 3 day or longer window will statistically occur 1.3 times per month

### Waves

Mean Height: 8 - 10 ft

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

Mean Period: 12 - 14 sec

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

Principle Direction, from: WNW

WindSea/Swell: 0% / 100%

### Winds

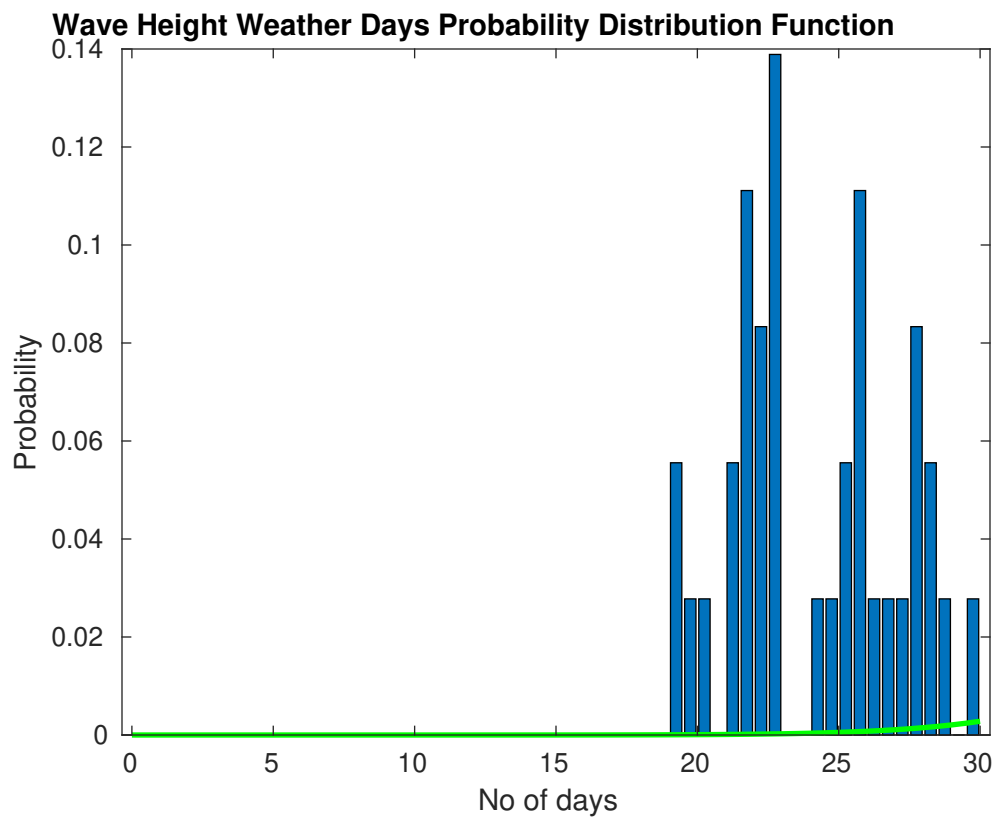
Mean Speed: 10 - 15 kts

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

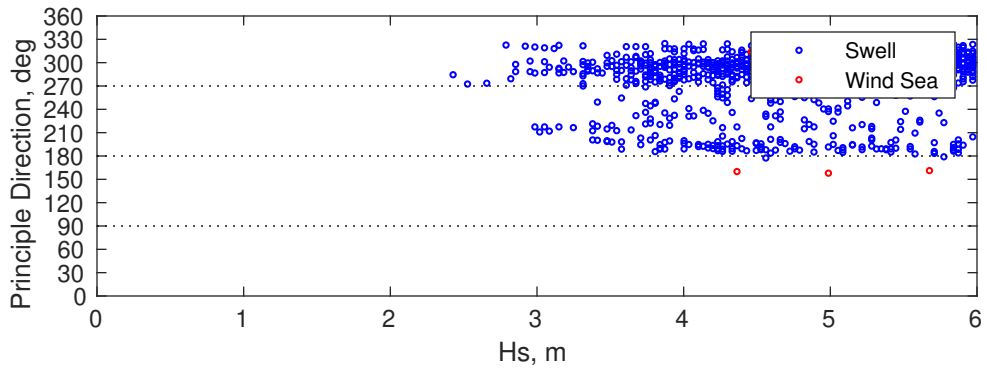
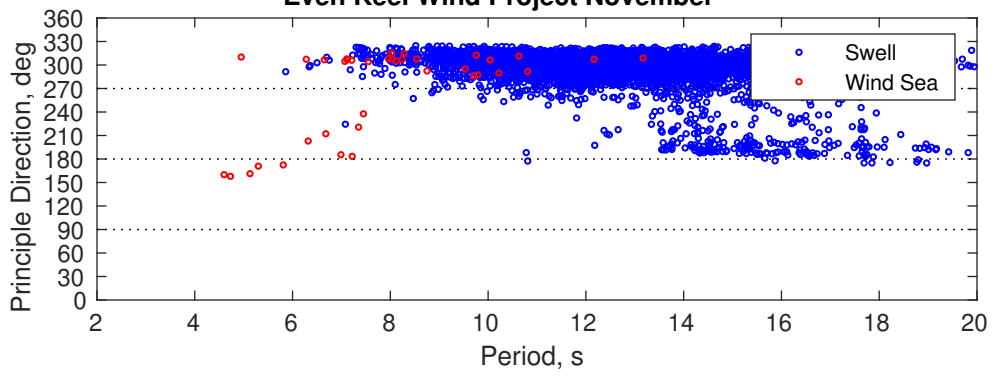
Principle Direction, from: NNW

### Severe Storms

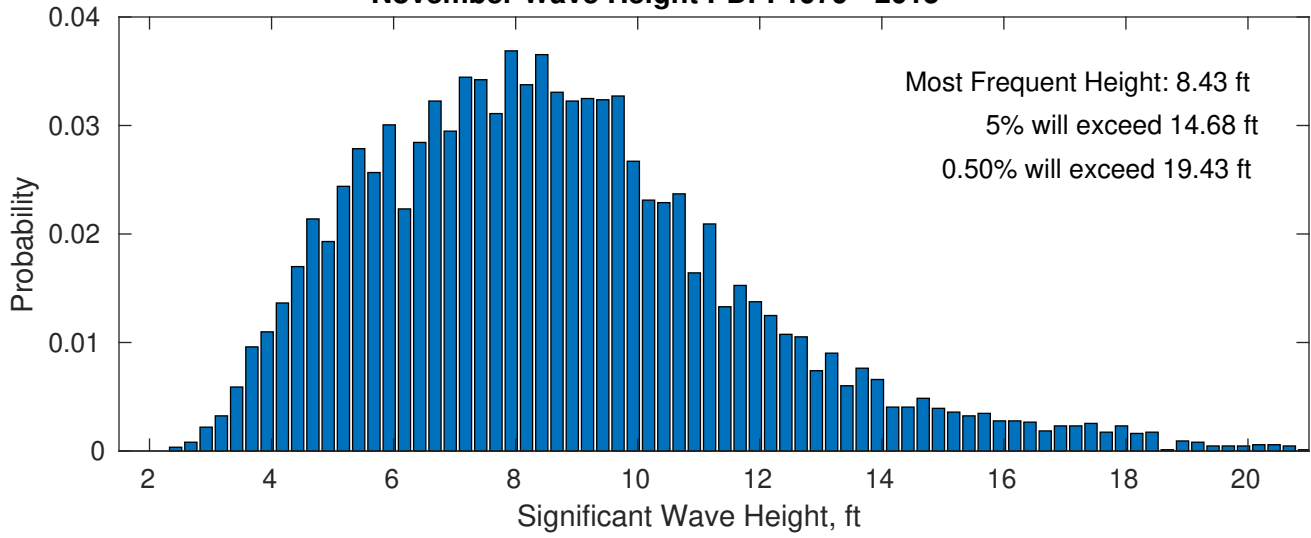
Severe storms with gale force winds and extreme waves are not expected during this month.



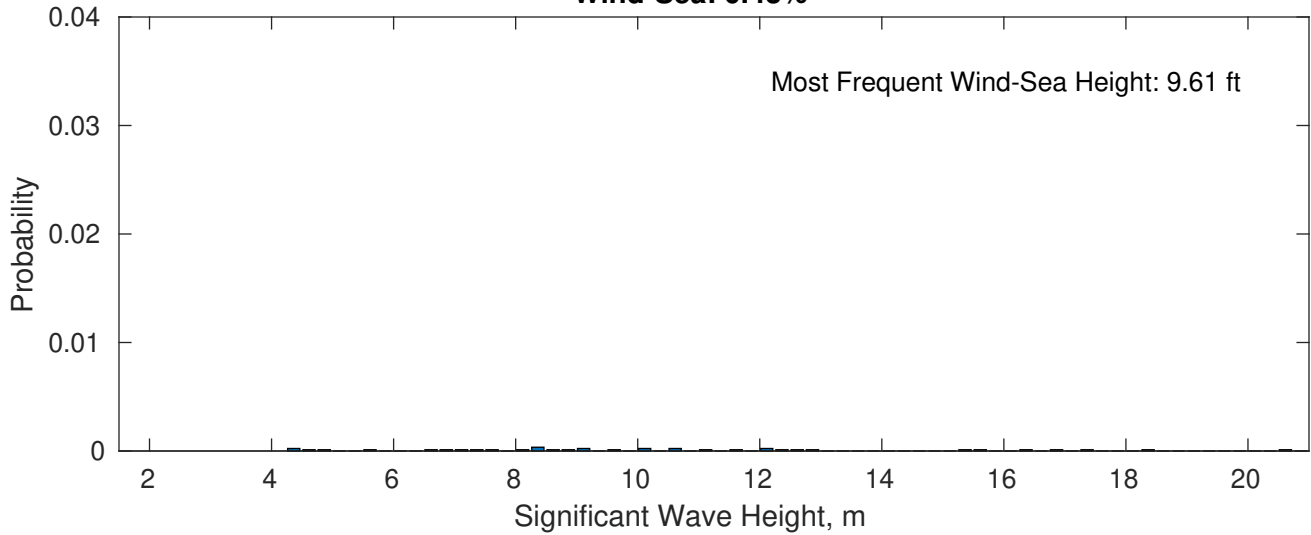
### Even Keel Wind Project November



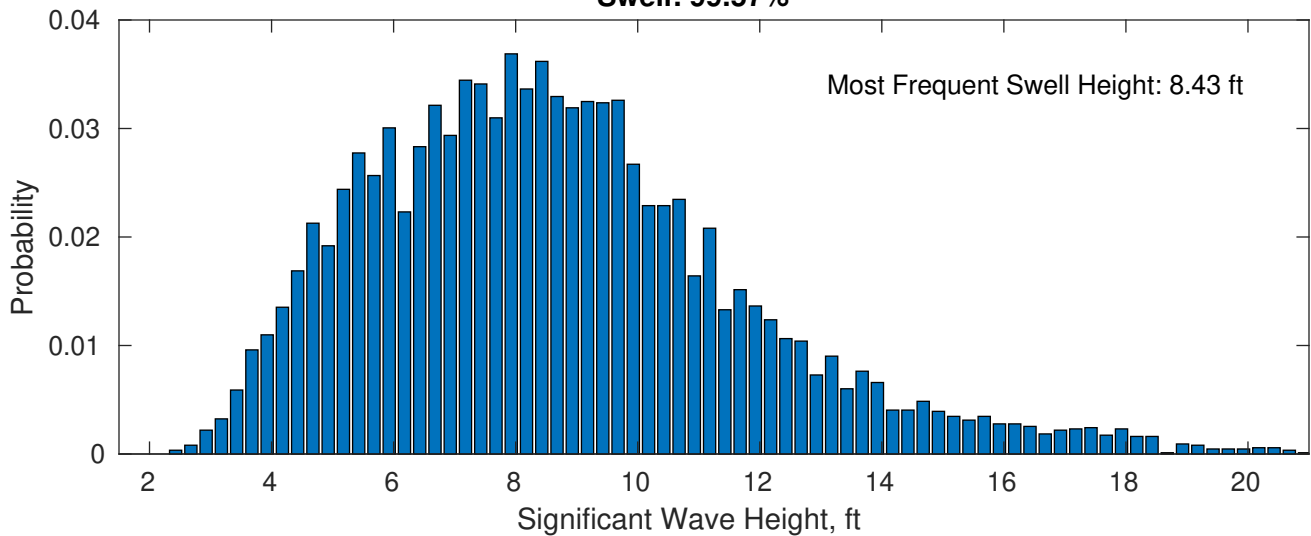
**November Wave Height PDF: 1979 - 2015**



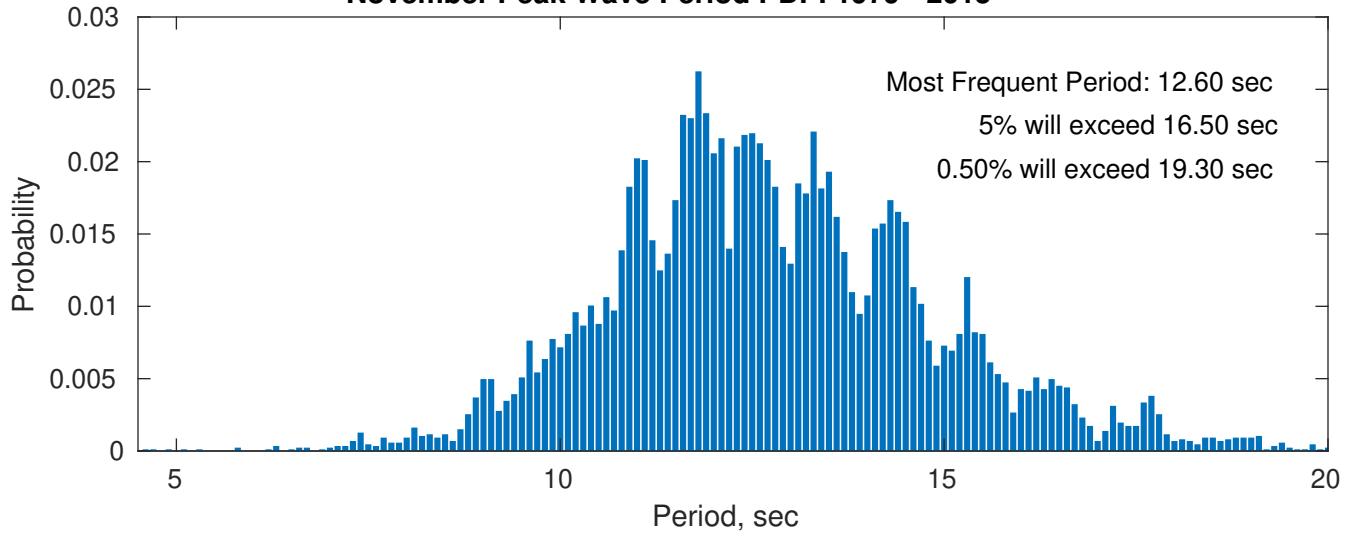
**Wind-Sea: 0.43%**



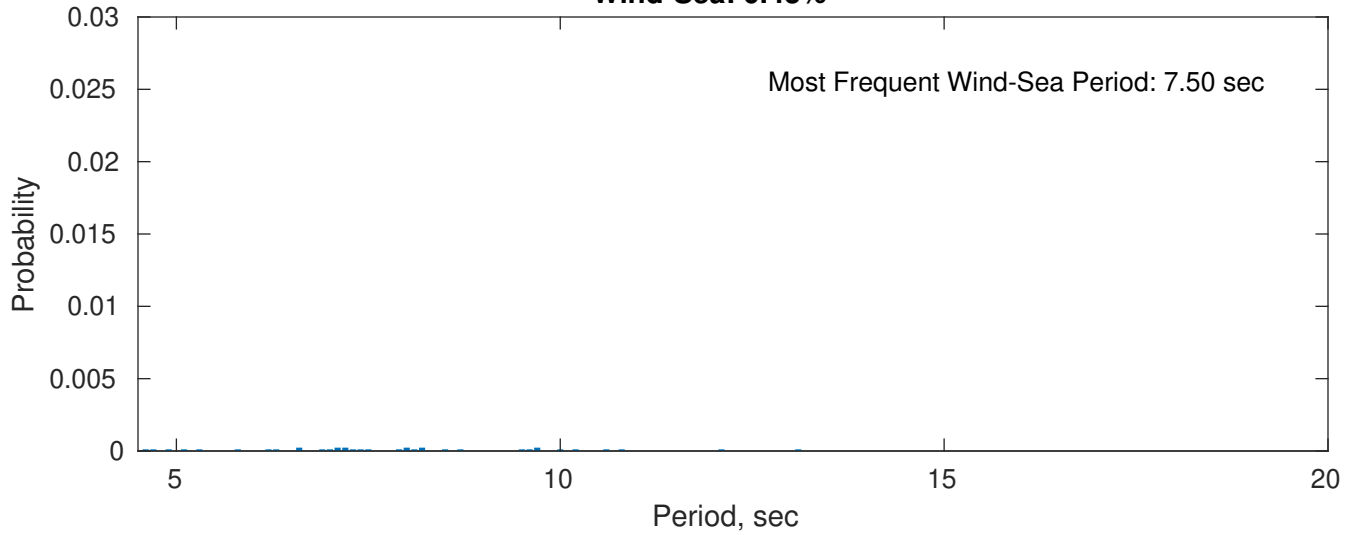
**Swell: 99.57%**



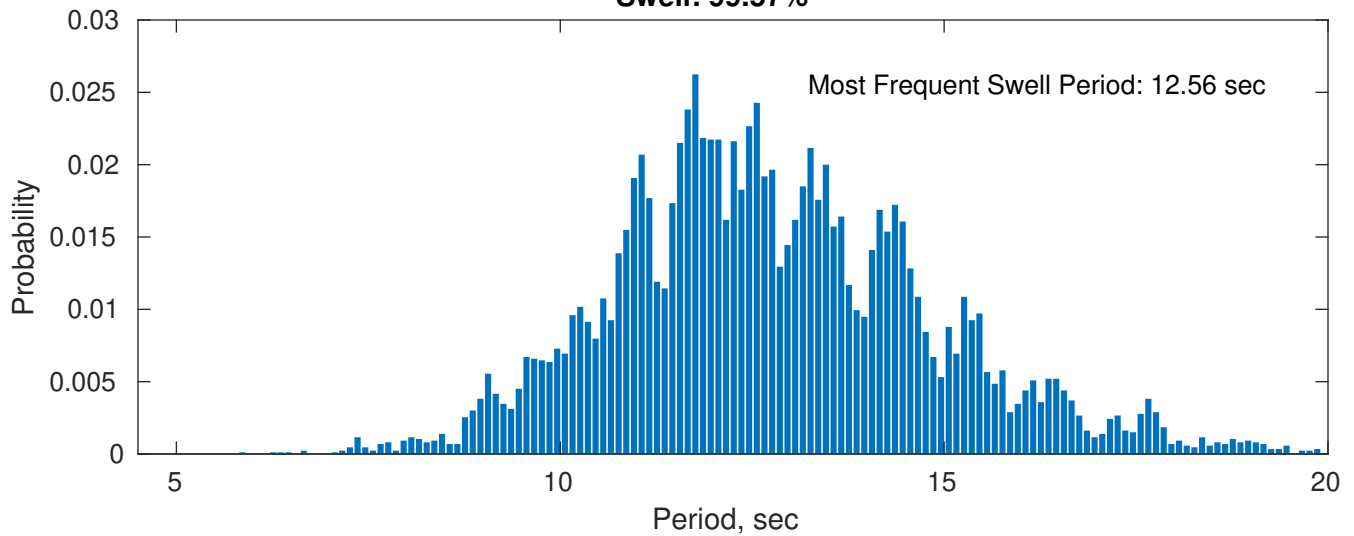
### November Peak Wave Period PDF: 1979 - 2015



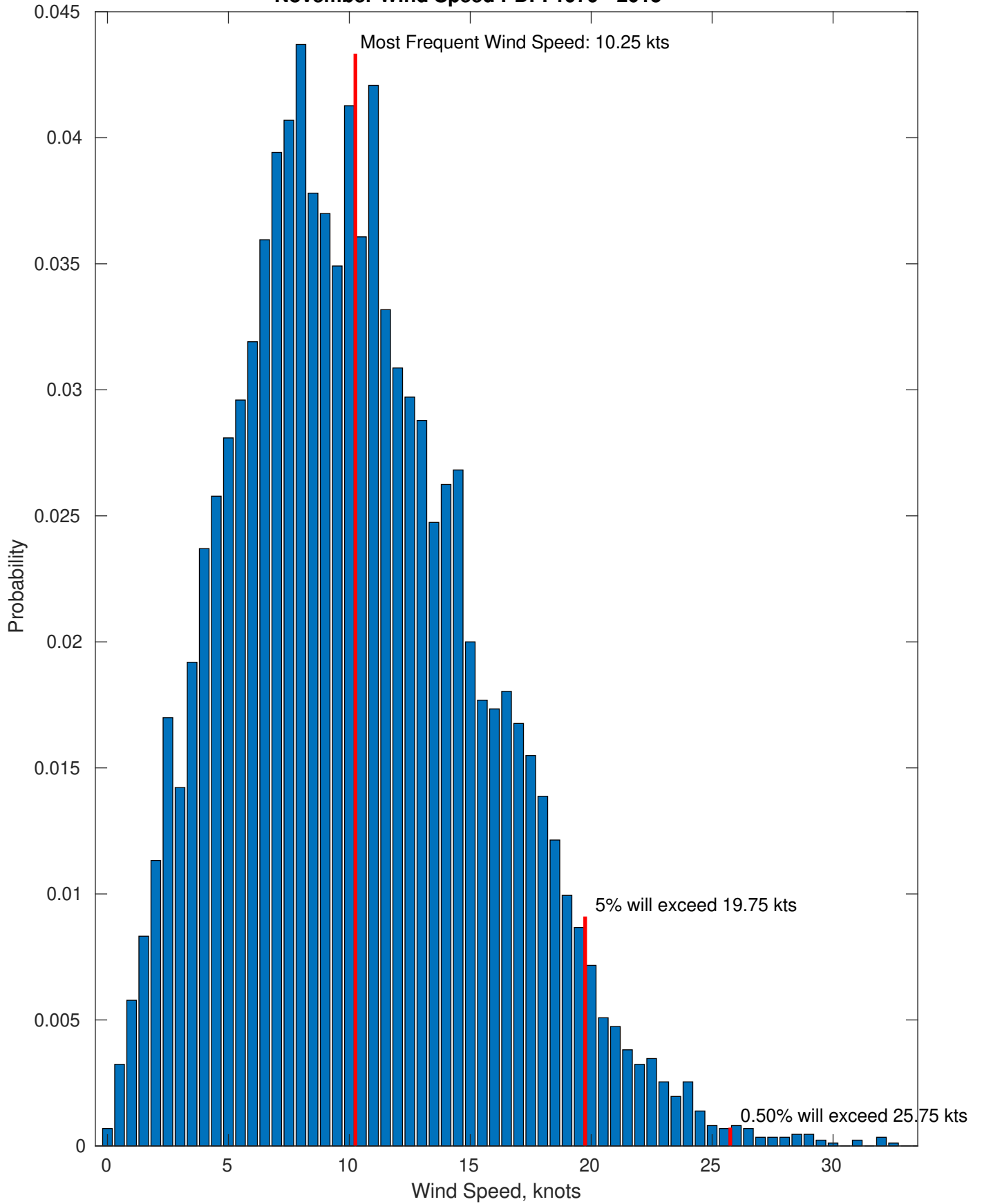
### Wind-Sea: 0.43%



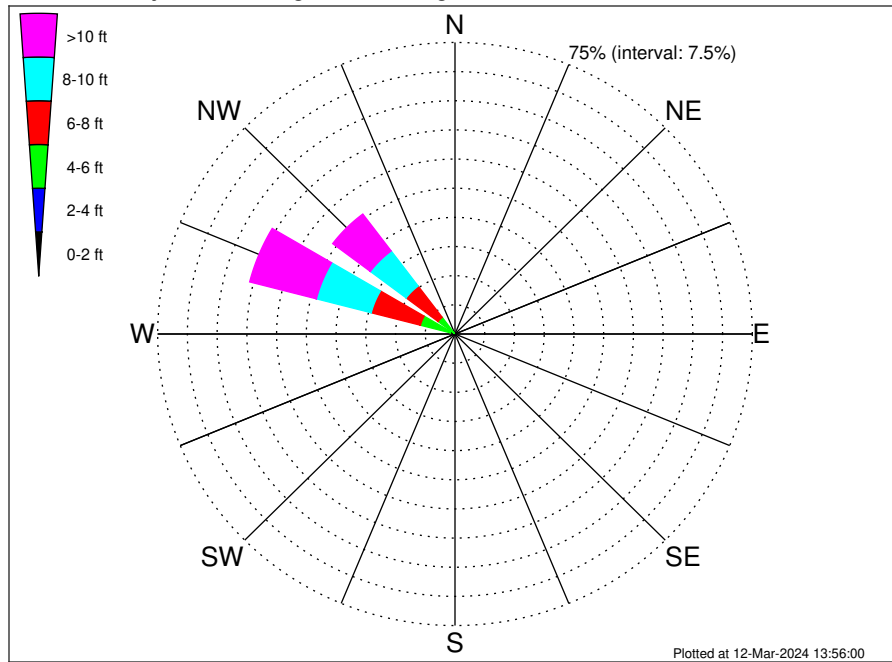
### Swell: 99.57%



### November Wind Speed PDF: 1979 - 2015



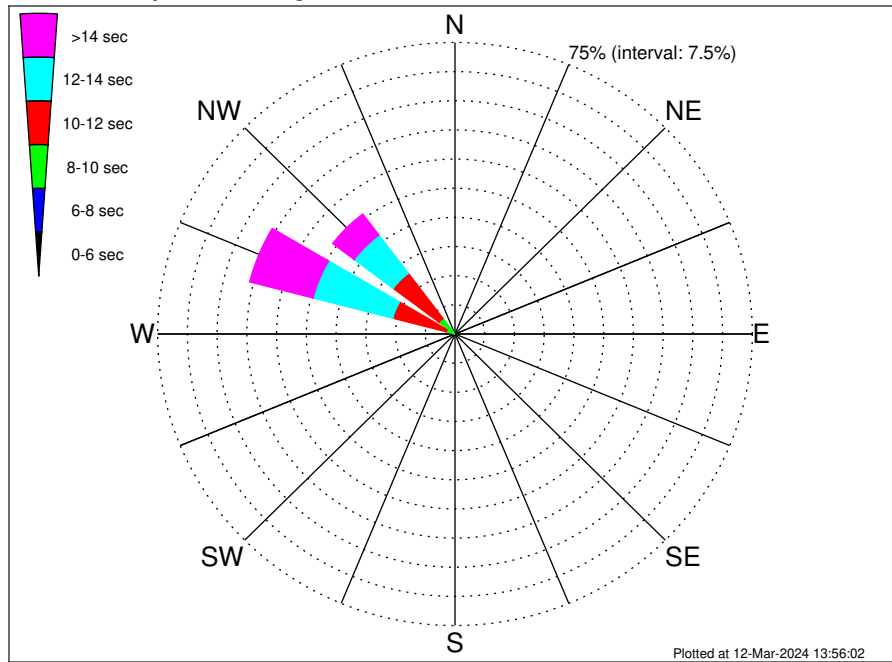
Even Keel Wind Project Climatological WaveHeight Rose for November: 1979 - 2015



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	•	•	•	•	•	•	•	•	0.06	0.22	0.21	0.09	0.35	1.23	0.32	•	2.47
4 - 6 ft	•	•	•	•	•	•	•	0.03	0.57	0.61	0.34	0.36	1.62	7.79	5.04	•	16.36
6 - 8 ft	•	•	•	•	•	•	•	•	0.31	0.29	0.03	0.13	0.99	12.81	10.08	•	24.65
8 - 10 ft	•	•	•	•	•	•	•	•	0.03	0.12	0.01	0.12	0.77	14.29	11.31	•	26.65
10 - 12 ft	•	•	•	•	•	•	•	•	0.02	•	•	0.02	0.30	9.02	6.54	•	15.91
12 - 14 ft	•	•	•	•	•	•	•	•	•	•	0.01	0.02	0.15	4.24	3.16	•	7.58
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	0.06	2.03	1.18	•	3.27
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	0.01	1.14	0.73	•	1.88
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	0.95	0.28	•	1.23
Total	•	•	•	•	•	•	•	0.03	0.99	1.24	0.60	0.74	4.25	53.50	38.64	•	100.00

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

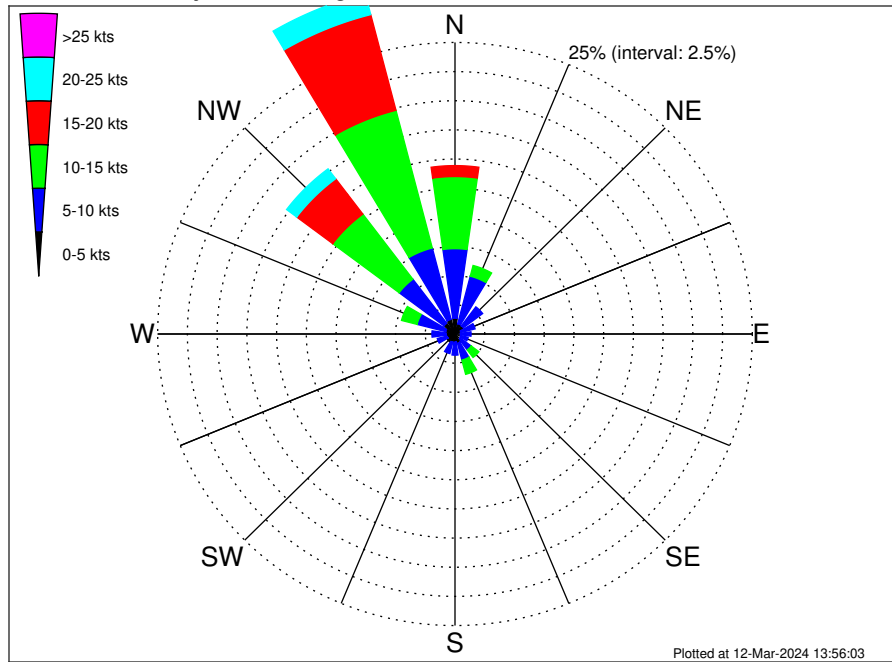


Joint Frequency Distribution Table

	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	•	•	•	•	•	•	•	0.03	0.02	•	•	•	•	0.01	0.01	•	0.08
6 - 8 sec	•	•	•	•	•	•	•	0.02	0.02	0.02	0.02	0.01	•	0.13	0.50	•	0.71
8 - 10 sec	•	•	•	•	•	•	•	•	•	•	0.02	0.17	2.13	4.51	•	•	6.83
10 - 12 sec	•	•	•	•	•	•	•	0.02	•	0.01	0.12	1.43	13.97	14.52	•	•	30.07
12 - 14 sec	•	•	•	•	•	•	•	•	0.17	0.13	0.22	1.65	20.75	12.32	•	•	35.25
14 - 16 sec	•	•	•	•	•	•	•	0.44	0.59	0.23	0.27	0.82	12.08	5.12	•	•	19.55
18 - 20 sec	•	•	•	•	•	•	•	0.36	0.32	0.20	0.09	0.15	3.50	1.39	•	•	6.01
22 - 24 sec	•	•	•	•	•	•	•	0.13	0.13	0.01	0.01	0.02	0.94	0.27	•	•	1.50
Total	•	•	•	•	•	•	•	0.03	0.99	1.24	0.60	0.74	4.25	53.50	38.64	•	100.00



Even Keel Wind Project Climatological Wind Rose for November: 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	0.01	0.01	•	•	0.05	0.06	0.03	0.01	0.02	0.03	0.02	0.03	0.02	0.03	0.01	0.39
0 - 5 kts	1.32	0.90	0.87	0.54	0.46	0.46	0.50	0.77	0.68	0.71	0.76	0.66	0.71	0.79	1.12	1.28	12.53
5 - 10 kts	5.97	4.21	2.03	1.20	0.89	0.64	1.16	1.50	1.12	1.01	0.59	0.86	1.20	2.49	4.73	6.32	35.91
10 - 15 kts	6.18	0.95	0.32	0.16	0.09	0.25	0.81	1.26	0.38	0.42	0.13	0.10	0.37	1.35	6.99	12.20	31.98
15 - 20 kts	0.94	0.03	0.02	0.01	0.01	0.07	0.32	0.55	0.16	0.12	0.10	0.09	0.12	0.17	3.79	8.47	14.99
20 - 25 kts	0.05	•	•	•	•	•	0.13	0.16	0.09	0.05	0.08	0.02	0.01	0.09	1.06	1.85	3.60
25 - 30 kts	•	•	•	•	•	•	0.03	0.13	0.06	•	•	0.02	0.01	0.05	0.08	0.14	0.52
30 - 35 kts	•	•	•	•	•	•	•	0.01	•	•	0.01	•	•	0.02	0.02	0.01	0.08
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	14.49	6.10	3.26	1.92	1.46	1.47	3.01	4.43	2.51	2.31	1.71	1.78	2.45	4.98	17.84	30.29	100.00