

# VNE 522 ECR Midpoint - March

Latitude: 40.62 N Longitude: 71.98 W

## Weather Days

Wave Height > 4.0 ft Mean: 15.3 days Range: 12.2 - 18.4 days p50:16.5 days p75:14.5 days p90:11 days

Wave Height > 5.0 ft Mean: 10.9 days Range: 7.9 - 13.9 days p50:12 days p75:9.5 days p90:7 days

Wave Height > 6.0 ft Mean: 7.5 days Range: 4.6 - 10.5 days p50:8.5 days p75:6.5 days p90:4 days

Wind Speed > 20.0 knots Mean: 8.8 days Range: 6.1 - 11.5 days p50:9 days p75:7 days p90:5.5 days

Wind Speed > 25.0 knots Mean: 3.5 days Range: 1.5 - 5.4 days p50:3.5 days p75:2 days p90:1.5 days

Wind Speed > 30.0 knots Mean: 1.1 days Range: 0.2 - 2.1 days p50:1.5 days p75:0.5 days p90:0.5 days

## Working Window Probability

Wave Height < 4.0 ft                      3 days or longer: 29%  
    5 days or longer: 3%  
    7 days or longer: 1%

Wave Height < 5.0 ft                      3 days or longer: 41%  
    5 days or longer: 9%  
    7 days or longer: 5%

Wave Height < 6.0 ft                      3 days or longer: 53%  
    5 days or longer: 18%  
    7 days or longer: 9%

## Waves

Mean Height: 4 - 6 ft

The wave heights will occasionally reach 12 - 14 ft, but rarely higher.

Mean Period: 6 - 8 sec

The wave periods will occasionally reach 12 - 14 sec, but rarely longer.

Principle Direction, from: E

WindSea/Swell: 37% / 63%

## Winds

Mean Speed: 15 - 20 kts

The winds will occasionally reach 35 - 40 kts, but rarely greater.

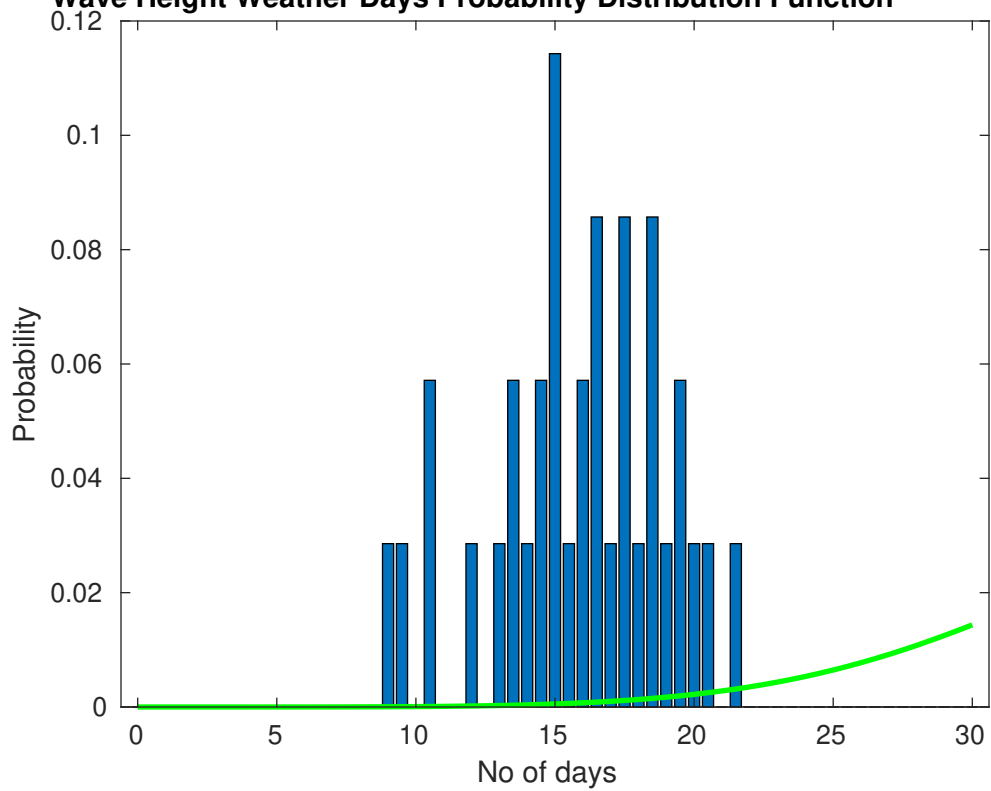
Principle Direction, from: NW

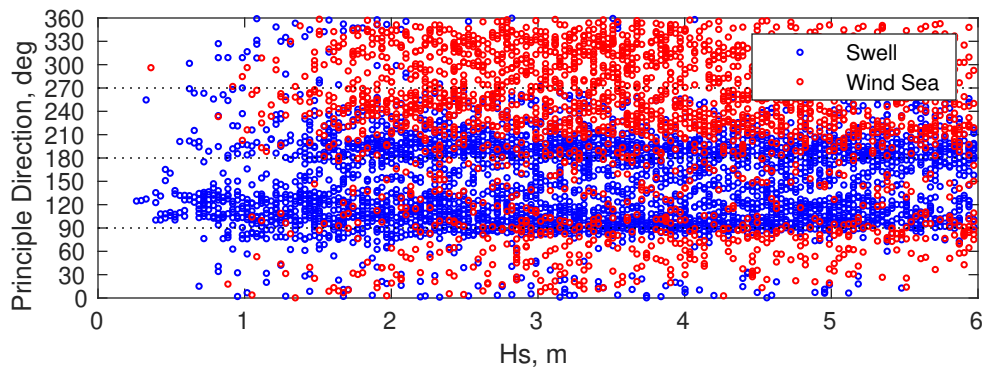
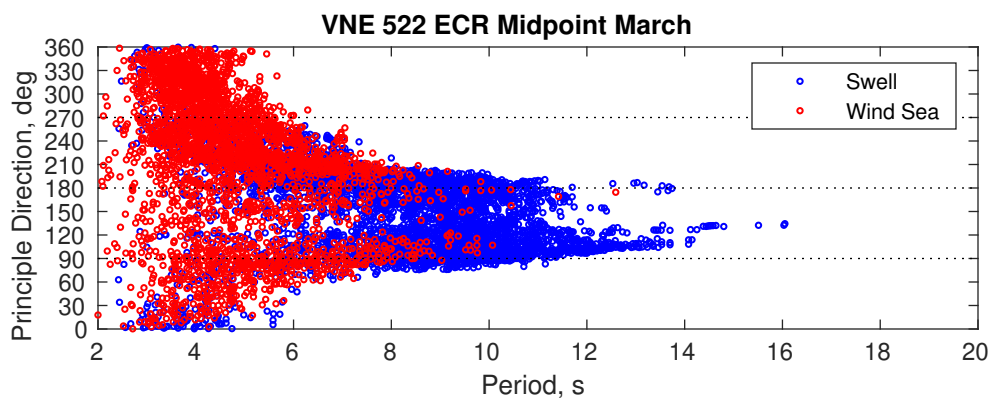
## Severe Storms

There is a 57 % chance of a storm occurring in the month with winds peaking above 34 kts.

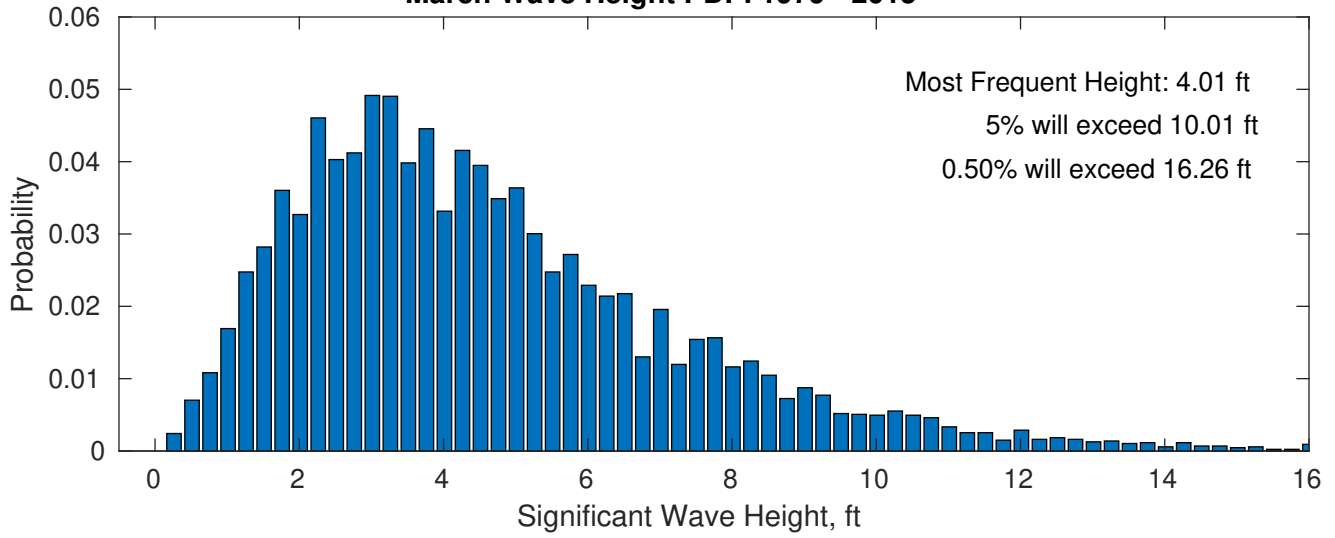
There is a 63 % chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

**Wave Height Weather Days Probability Distribution Function**

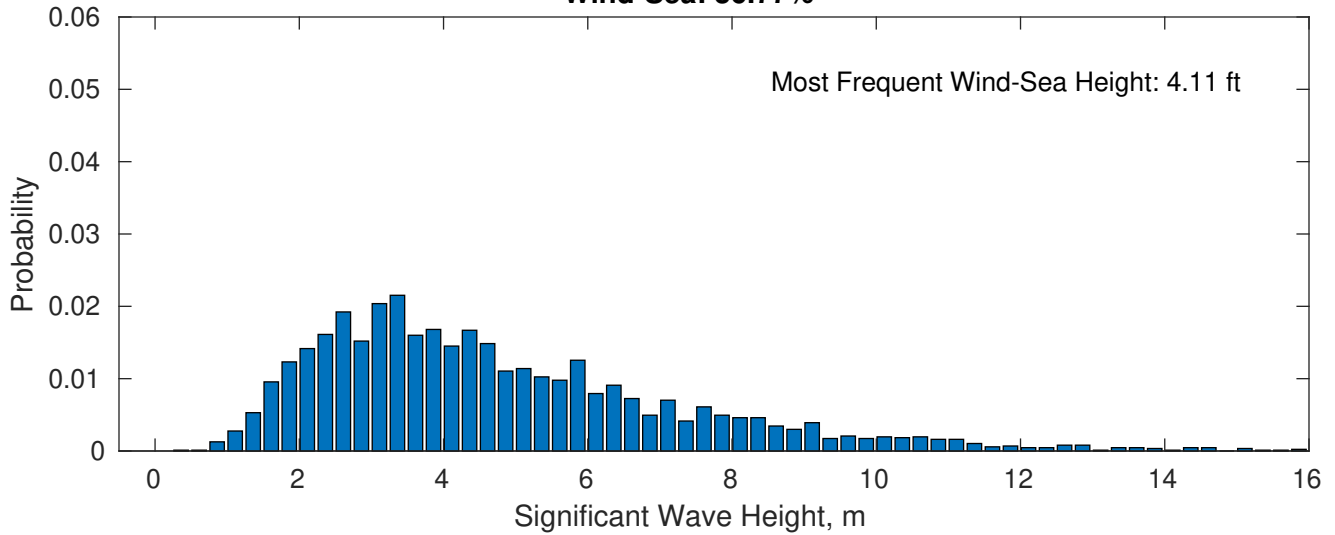




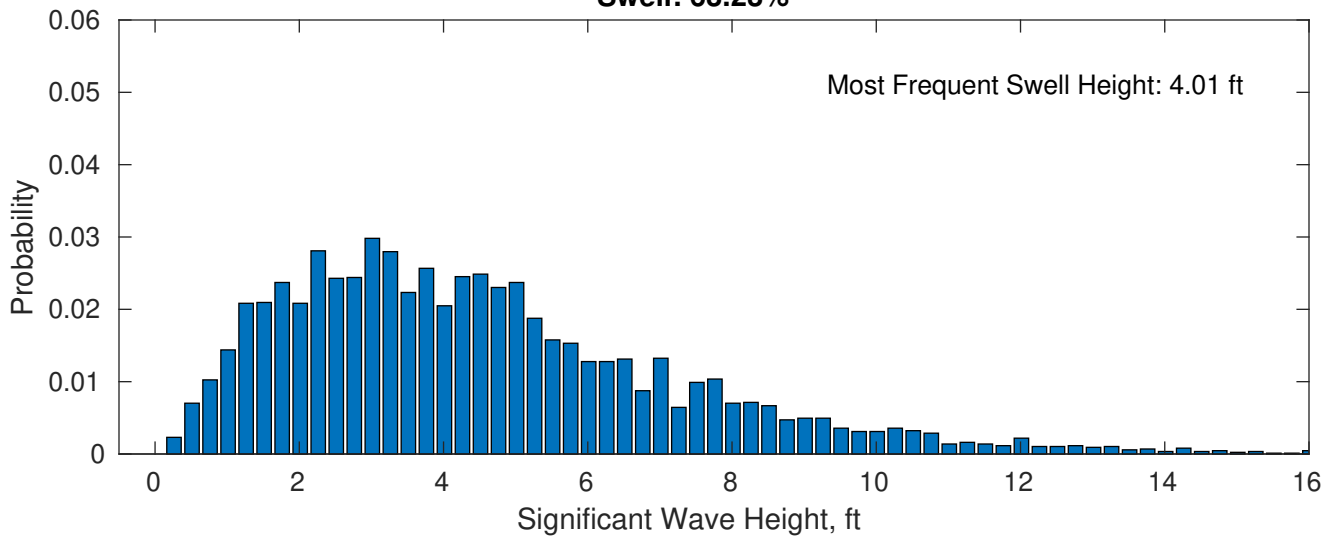
### March Wave Height PDF: 1979 - 2015



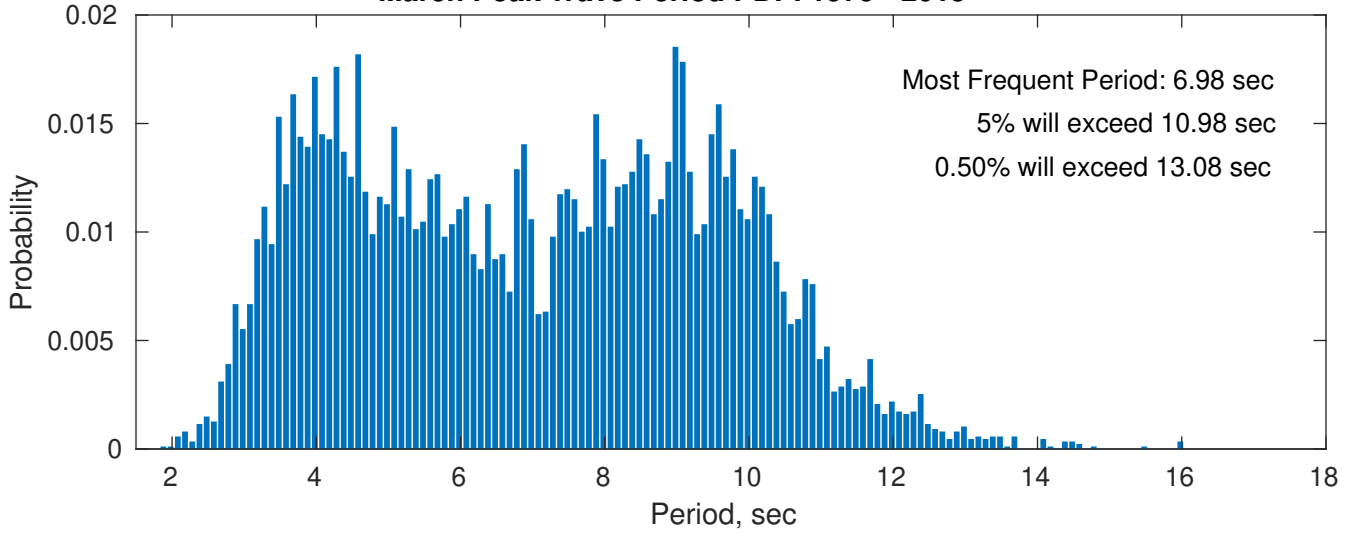
### Wind-Sea: 36.77%



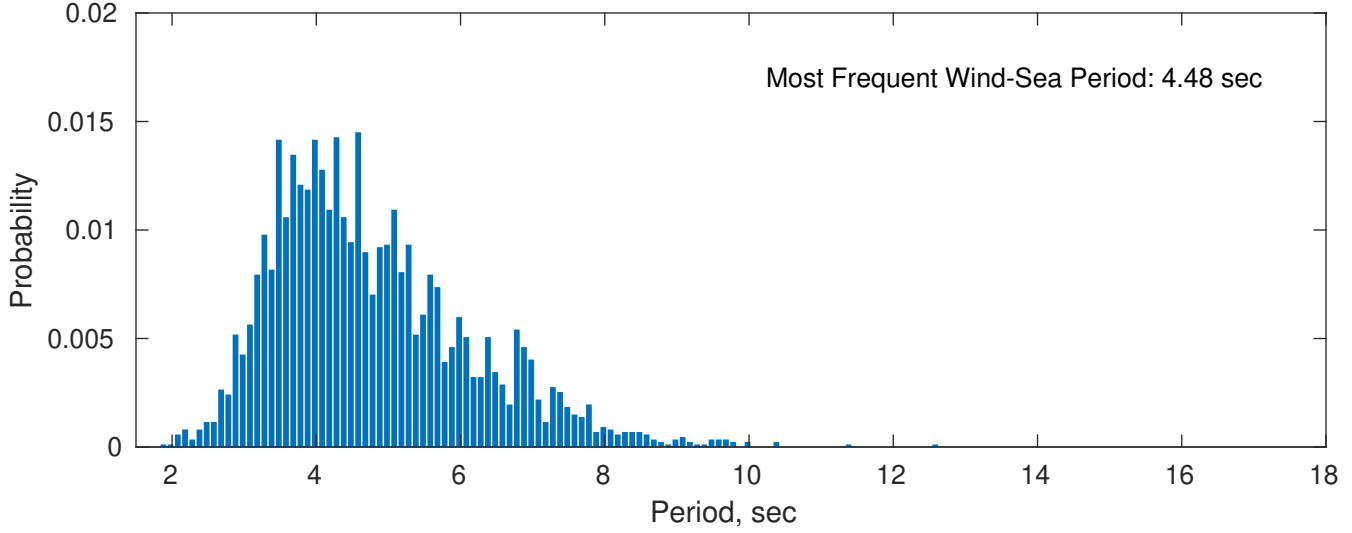
### Swell: 63.23%



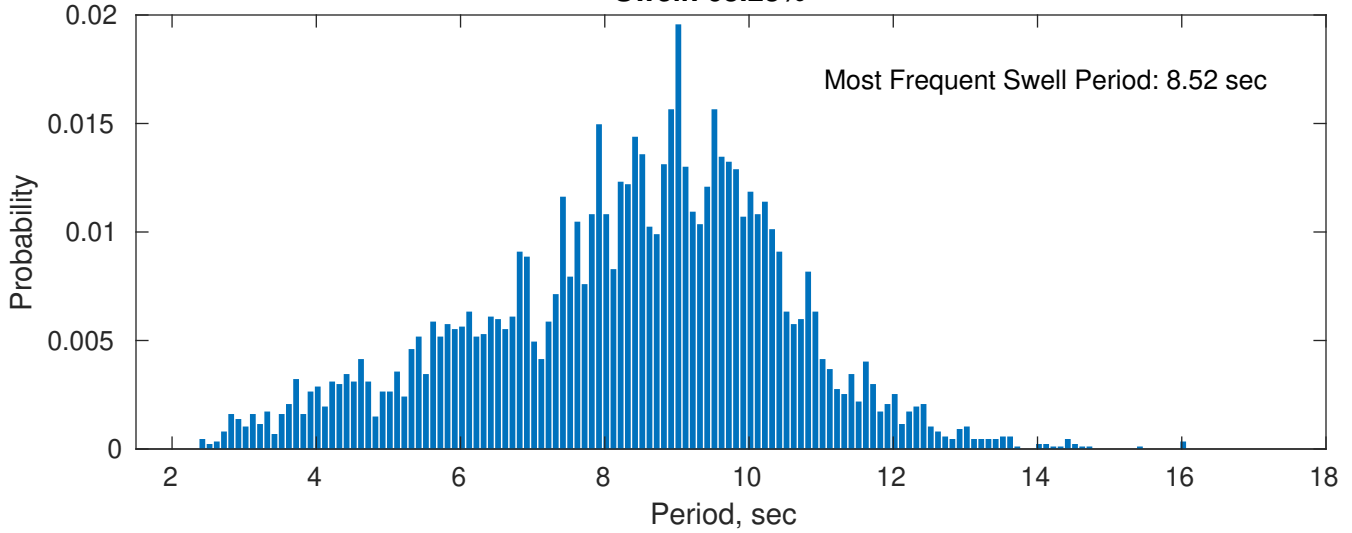
**March Peak Wave Period PDF: 1979 - 2015**



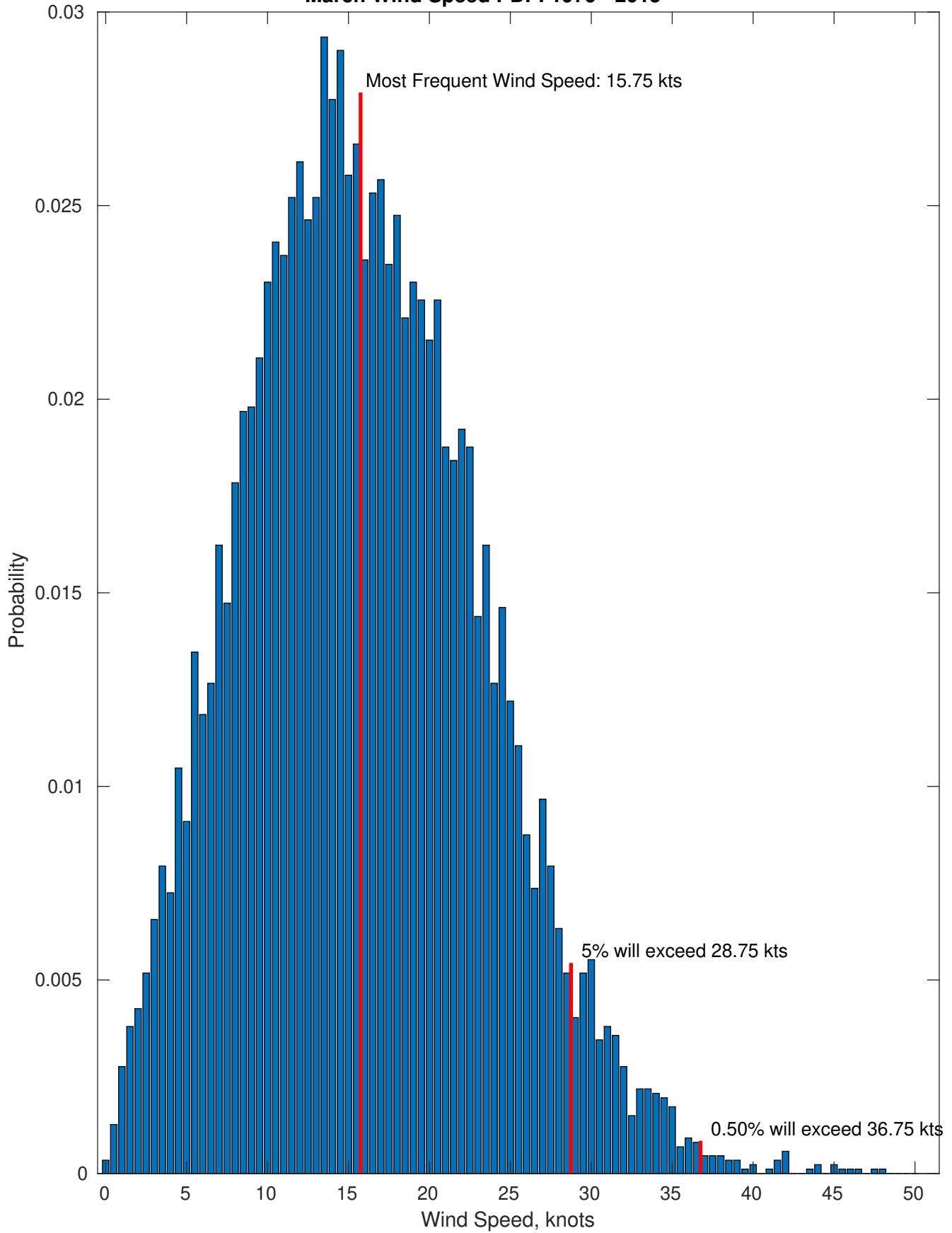
**Wind-Sea: 36.77%**



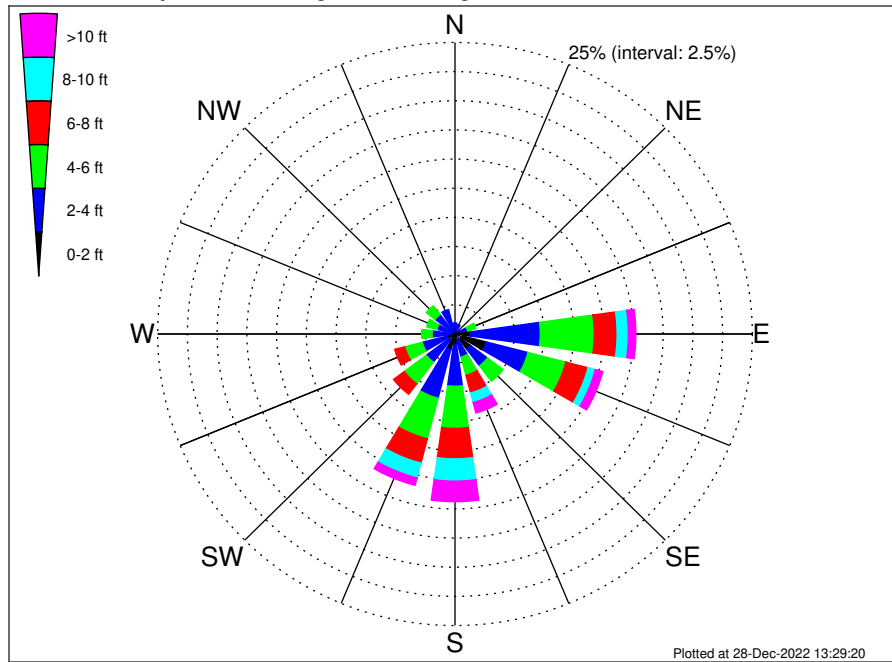
**Swell: 63.23%**



March Wind Speed PDF: 1979 - 2015



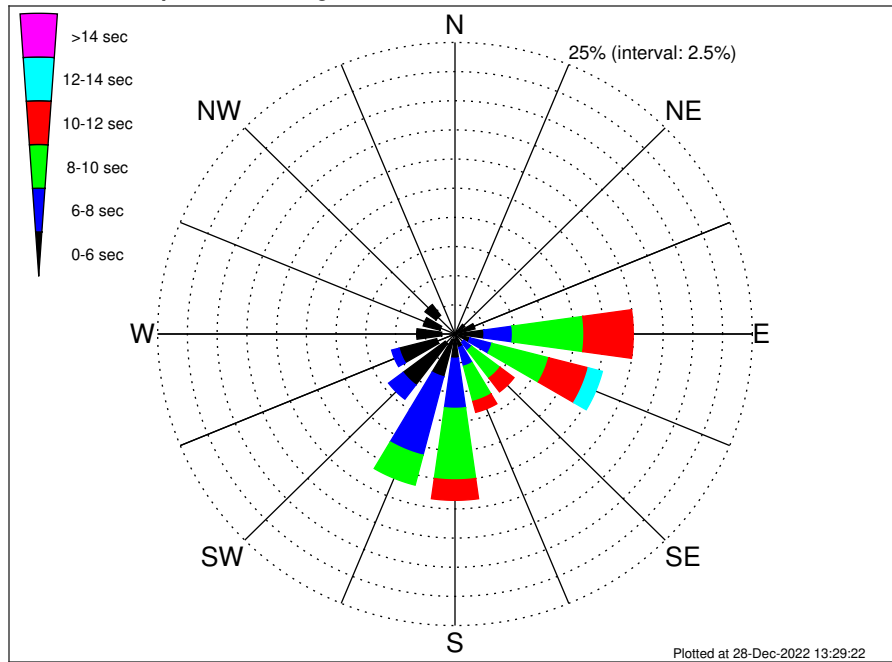
VNE 522 ECR Midpoint Climatological WaveHeight Rose for March: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.01	0.03	0.02	0.07	0.14	0.64	0.58	0.08	0.06	0.13	0.06	0.05	0.08	0.03	0.03	0.01	2.03
1 - 2 ft	0.29	0.17	0.13	0.38	1.16	2.07	1.06	0.41	0.83	1.24	0.58	0.66	0.30	0.17	0.31	0.41	10.18
2 - 4 ft	0.66	0.63	0.46	0.66	5.87	3.63	1.78	1.54	3.59	4.32	2.39	2.14	1.54	1.37	1.75	1.74	34.07
4 - 6 ft	0.35	0.26	0.35	0.71	4.54	3.29	1.65	1.62	3.61	3.59	2.31	1.52	0.89	0.89	0.93	0.53	27.04
6 - 8 ft	0.07	0.08	0.09	0.38	1.92	1.92	0.62	1.55	2.61	2.15	1.13	0.87	0.39	0.30	0.12	0.12	14.33
8 - 10 ft	0.02	0.01	•	0.26	0.94	0.63	0.28	0.85	1.91	1.31	0.47	0.23	0.03	•	0.02	•	6.99
10 - 12 ft	•	•	•	0.06	0.44	0.32	0.25	0.45	0.98	0.39	0.06	0.03	0.01	•	•	•	2.99
12 - 14 ft	•	•	•	•	0.07	0.22	0.17	0.22	0.41	0.20	•	•	•	•	•	•	1.29
14 - 16 ft	•	•	•	•	0.06	0.03	0.07	0.06	0.20	0.05	•	•	•	•	•	•	0.46
16 - 18 ft	•	•	•	•	0.06	0.01	0.08	0.06	0.06	0.02	•	•	•	•	•	•	0.29
> 18 ft	•	•	•	•	0.01	0.06	0.01	0.14	0.12	•	•	•	•	•	•	•	0.33
Total	1.39	1.20	1.05	2.52	15.21	12.84	6.55	6.99	14.38	13.40	7.00	5.50	3.25	2.76	3.17	2.81	100.00

VNE 522 ECR Midpoint Climatological WavePeriod Rose for March: 1979 - 2015

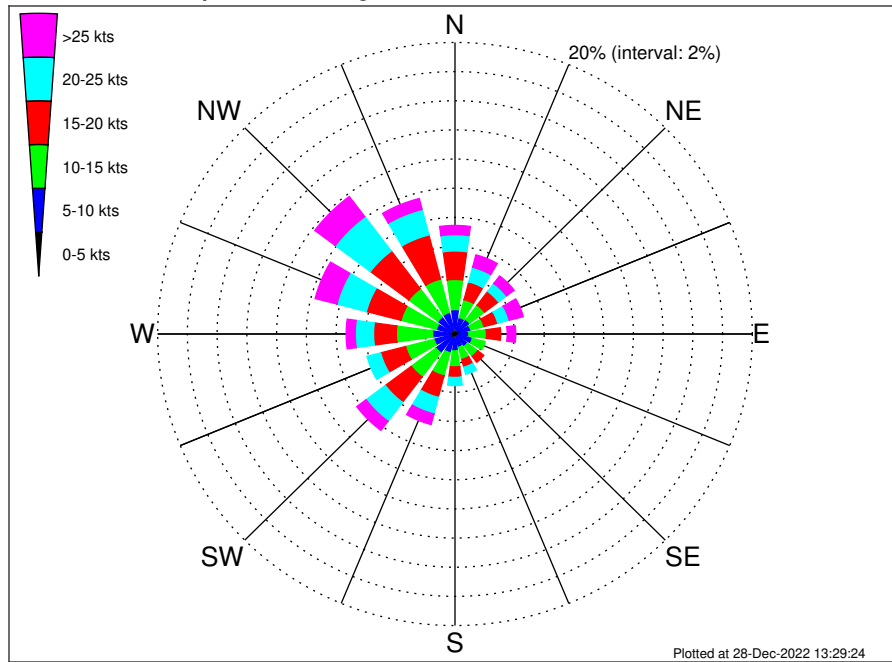


Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ENE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	0.01	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	0.02
2 - 4 sec	0.94	0.66	0.25	0.40	0.47	0.37	0.35	0.26	0.45	0.53	1.01	1.59	1.13	1.30	2.00	2.19	13.91
4 - 6 sec	0.45	0.53	0.78	1.34	1.97	0.93	0.55	0.93	1.63	3.26	4.45	3.27	2.10	1.46	1.16	0.62	25.44
6 - 8 sec	•	•	0.01	0.52	2.39	1.91	0.85	1.66	4.29	6.95	1.52	0.64	0.02	•	•	•	20.78
8 - 10 sec	•	•	•	0.26	6.01	4.93	2.99	3.12	6.14	2.65	•	•	•	•	•	•	26.10
10 - 12 sec	•	•	•	•	4.14	3.44	1.47	0.97	1.75	0.01	•	•	•	•	•	•	11.79
12 - 14 sec	•	•	•	•	0.22	1.22	0.16	0.05	0.12	•	•	•	•	•	•	•	1.76
14 - 16 sec	•	•	•	•	•	0.03	0.14	•	•	•	•	•	•	•	•	•	0.17
18 - 20 sec	•	•	•	•	•	•	0.03	•	•	•	•	•	•	•	•	•	0.03
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	1.39	1.20	1.05	2.52	15.21	12.84	6.55	6.99	14.38	13.40	7.00	5.50	3.25	2.76	3.17	2.81	100.00



VNE 522 ECR Midpoint Climatological Wind Rose for March: 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	0.01	0.01	•	•	0.01	•	0.01	0.01	•	0.01	0.02	•	0.01	0.16
0 - 5 kts	0.37	0.26	0.26	0.35	0.26	0.24	0.20	0.33	0.35	0.26	0.33	0.29	0.36	0.29	0.35	0.32	4.82
5 - 10 kts	1.28	0.89	0.96	0.74	0.66	0.97	0.85	0.60	0.82	1.05	1.27	1.17	1.14	0.98	1.11	1.19	15.64
10 - 15 kts	2.06	1.28	1.25	0.92	1.19	0.89	0.86	0.86	1.09	1.65	2.07	1.97	2.44	2.46	2.44	2.37	25.81
15 - 20 kts	1.96	1.25	1.17	0.96	0.96	0.46	0.52	0.54	0.73	1.52	2.19	1.74	1.53	2.41	3.23	3.13	24.29
20 - 25 kts	1.12	1.04	0.68	0.79	0.44	0.35	0.46	0.51	0.55	1.17	1.62	0.94	1.23	2.05	2.96	1.81	17.72
25 - 30 kts	0.43	0.59	0.38	0.58	0.26	0.16	0.22	0.17	0.29	0.60	0.60	0.31	0.32	0.97	1.29	0.61	7.77
30 - 35 kts	0.15	0.20	0.22	0.28	0.17	0.03	0.10	0.10	0.13	0.08	0.09	0.09	0.22	0.49	0.41	0.13	2.90
35 - 40 kts	0.05	0.08	0.02	0.05	0.09	0.01	0.02	0.02	•	0.06	0.09	0.02	0.03	0.03	0.02	0.02	0.63
40 - 45 kts	0.01	•	0.01	0.05	0.02	•	•	•	•	•	•	0.01	0.03	0.01	•	0.01	0.16
45 - 50 kts	•	0.01	0.01	0.03	0.02	•	•	•	•	0.01	•	•	•	•	•	•	0.09
Total	7.45	5.61	4.98	4.74	4.09	3.11	3.23	3.15	3.95	6.41	8.28	6.55	7.32	9.72	11.81	9.60	100.00