

## VNE 522 ECR Midpoint - May

Latitude: 40.62 N Longitude: 71.98 W

### Weather Days

Wave Height > 4.0 ft Mean: 13.0 days Range: 9.6 - 16.5 days p50:14 days p75:11.5 days p90:8.5 days

Wave Height > 5.0 ft Mean: 7.5 days Range: 4.8 - 10.2 days p50:8 days p75:6 days p90:4 days

Wave Height > 6.0 ft Mean: 4.2 days Range: 2.2 - 6.3 days p50:4.5 days p75:3 days p90:2 days

Wind Speed > 20.0 knots Mean: 3.5 days Range: 1.9 - 5.1 days p50:4 days p75:2.5 days p90:1.5 days

Wind Speed > 25.0 knots Mean: 0.9 days Range: 0.0 - 1.8 days p50:1 days p75:0.5 days p90:0.5 days

Wind Speed > 30.0 knots Mean: 0.2 days Range: 0.0 - 0.5 days p50:0.5 days p75:0.5 days p90:0.5 days

### Working Window Probability

Wave Height < 4.0 ft                      3 days or longer: 32%  
    5 days or longer: 6%  
    7 days or longer: 2%

Wave Height < 5.0 ft                      3 days or longer: 57%  
    5 days or longer: 21%  
    7 days or longer: 8%

Wave Height < 6.0 ft                      3 days or longer: 69%  
    5 days or longer: 40%  
    7 days or longer: 24%

### Waves

Mean Height: 2 - 4 ft

The wave heights will occasionally reach 10 - 12 ft, but rarely higher.

Mean Period: 6 - 8 sec

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

Principle Direction, from: SSW

WindSea/Swell: 24% / 76%

### Winds

Mean Speed: 10 - 15 kts

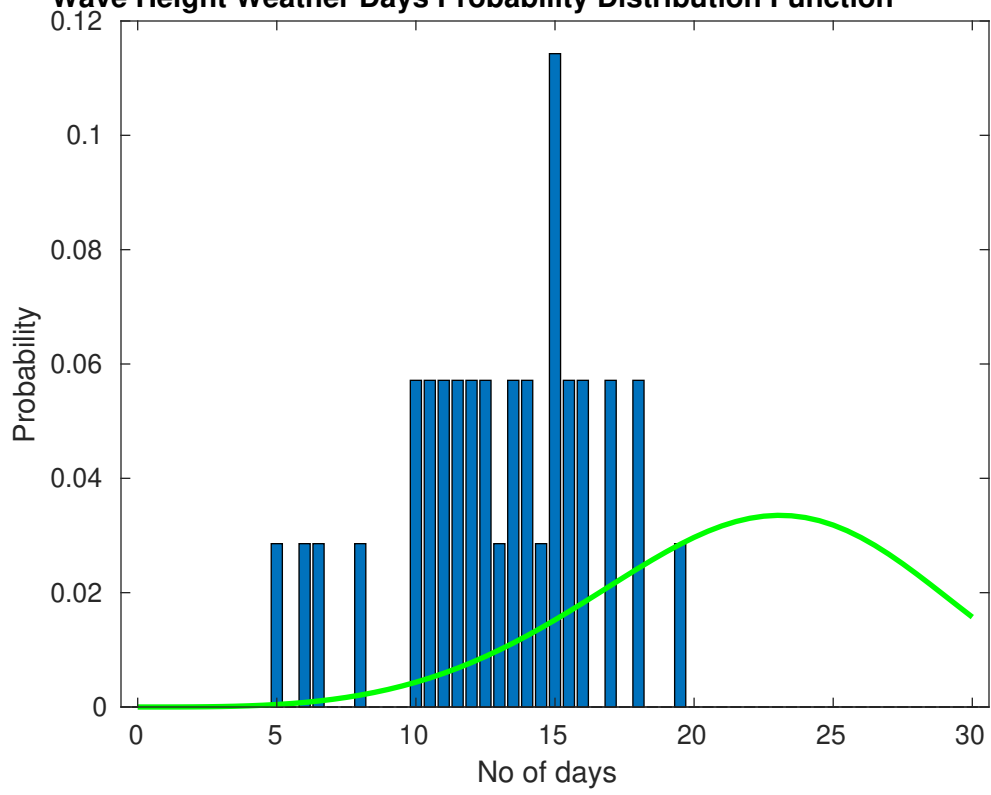
The winds will occasionally reach 30 - 35 kts, but rarely greater.

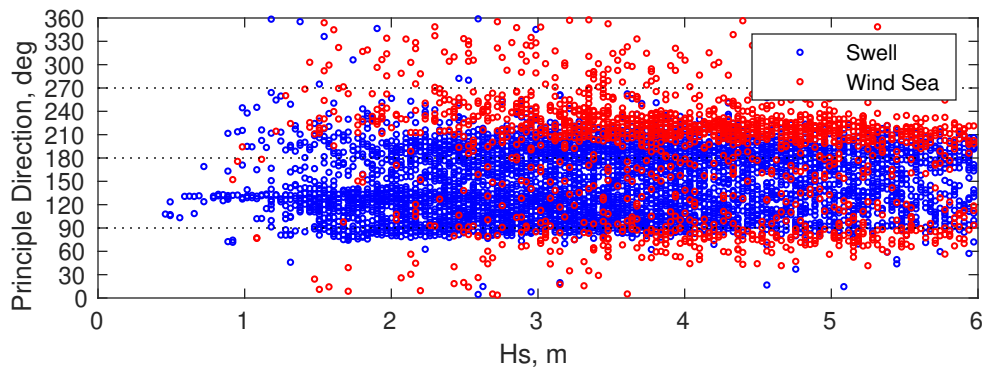
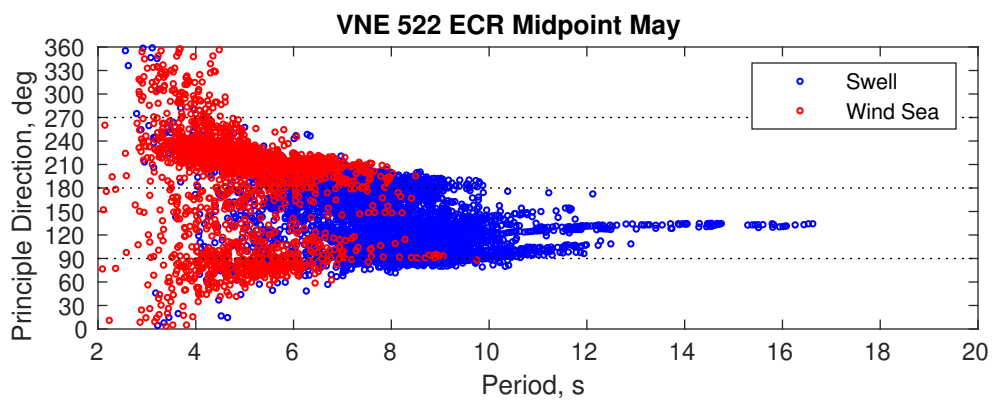
Principle Direction, from: SW

### Severe Storms

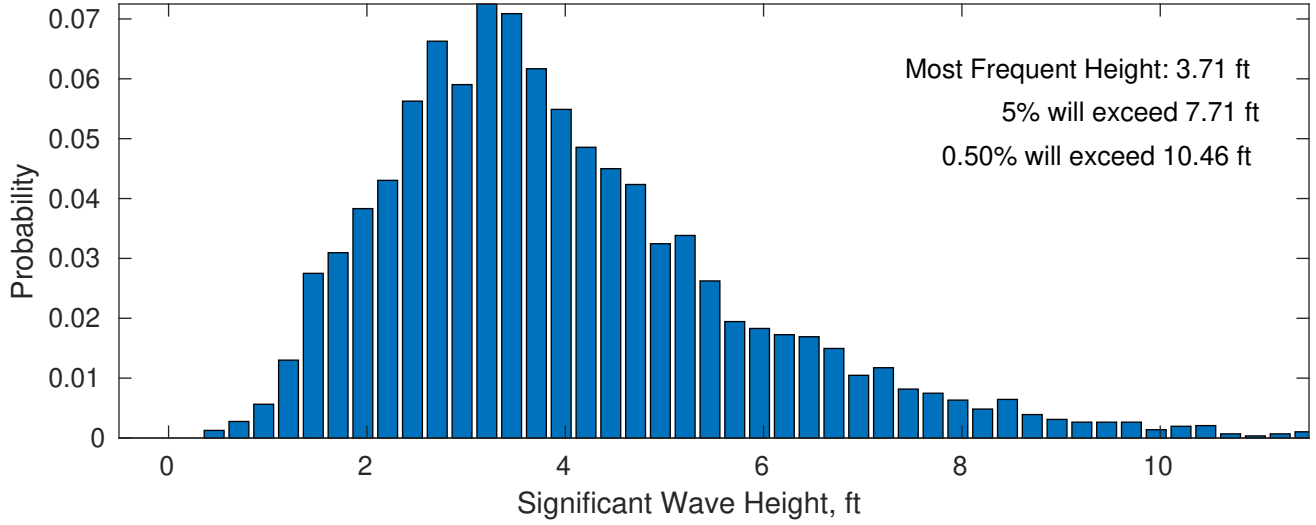
Severe storms with gale force winds and extreme waves are not expected during this month.

**Wave Height Weather Days Probability Distribution Function**

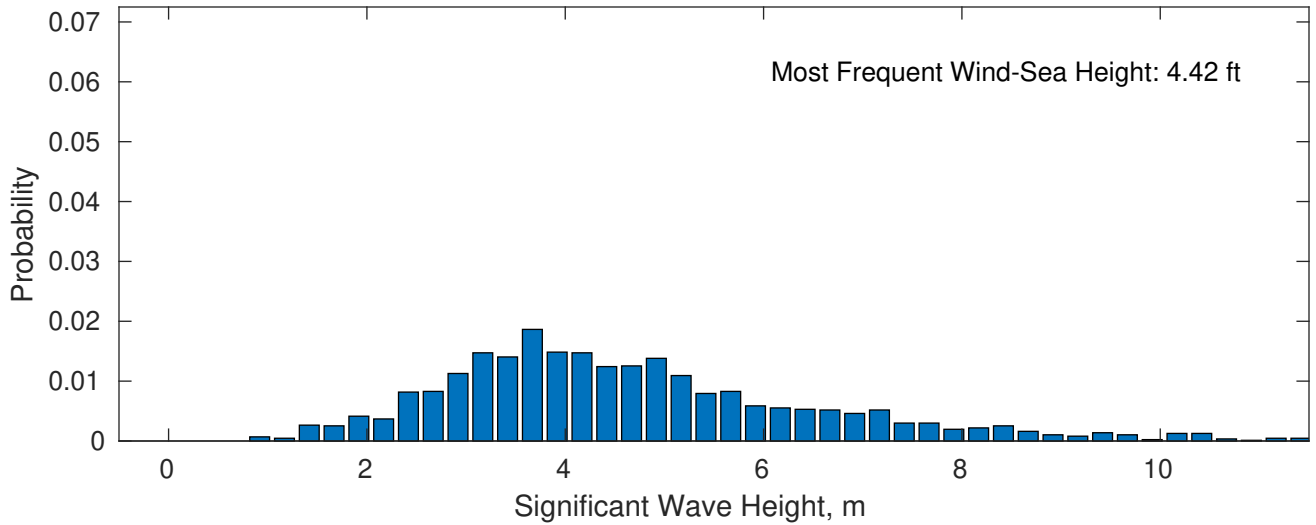




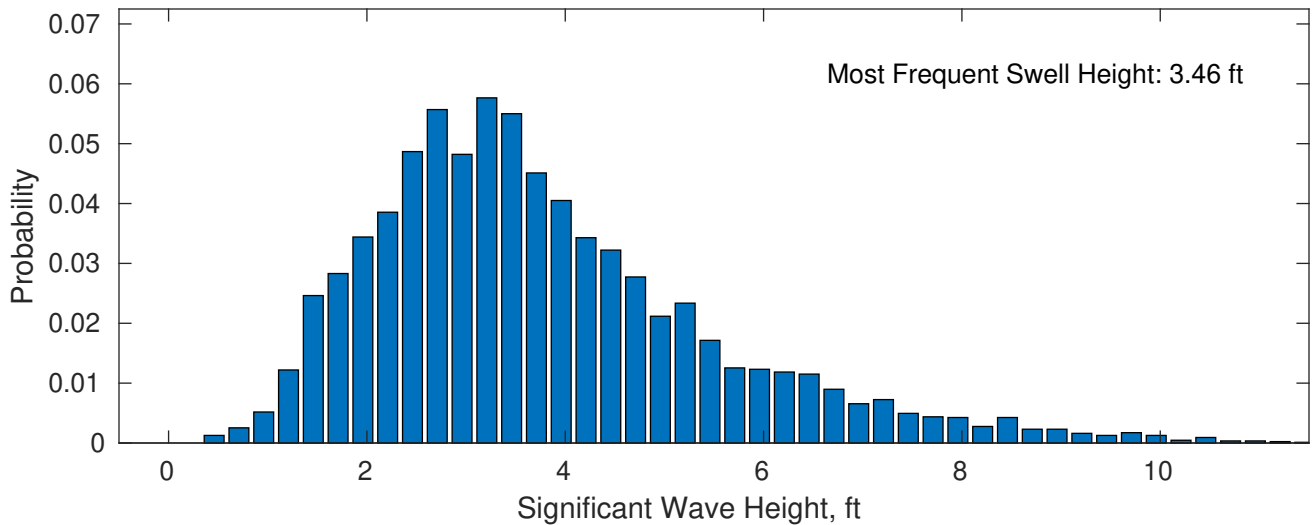
**May Wave Height PDF: 1979 - 2015**



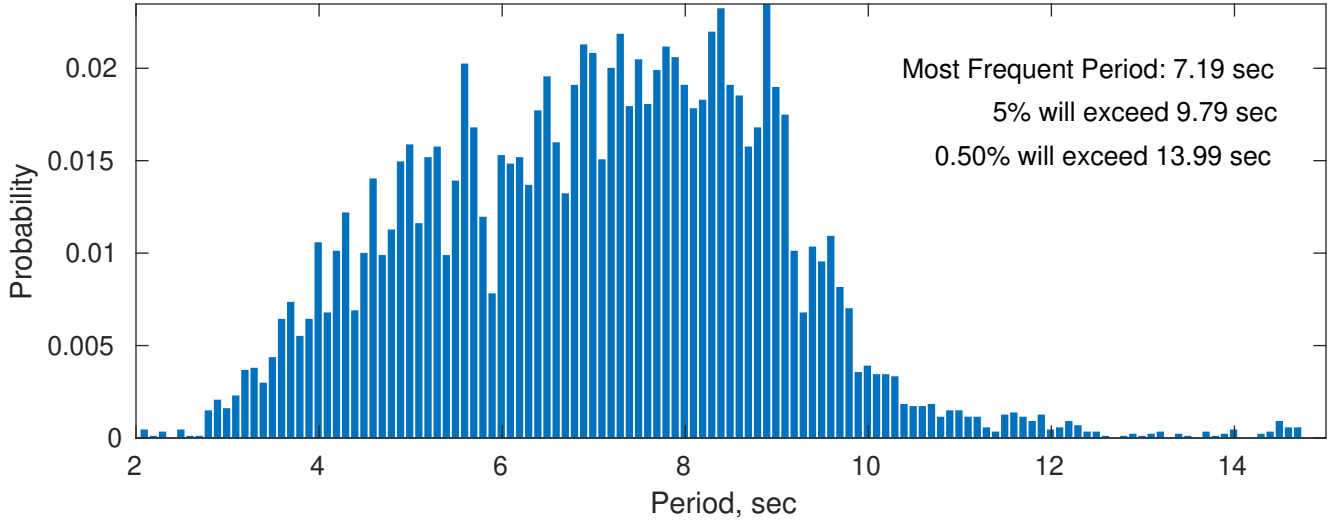
**Wind-Sea: 24.09%**



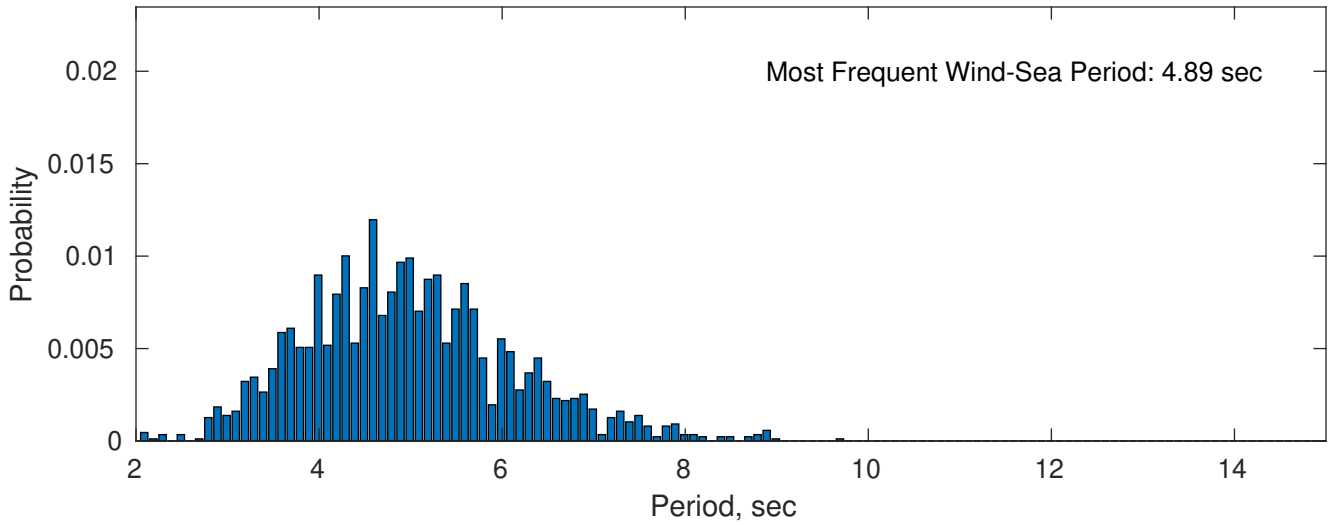
**Swell: 75.91%**



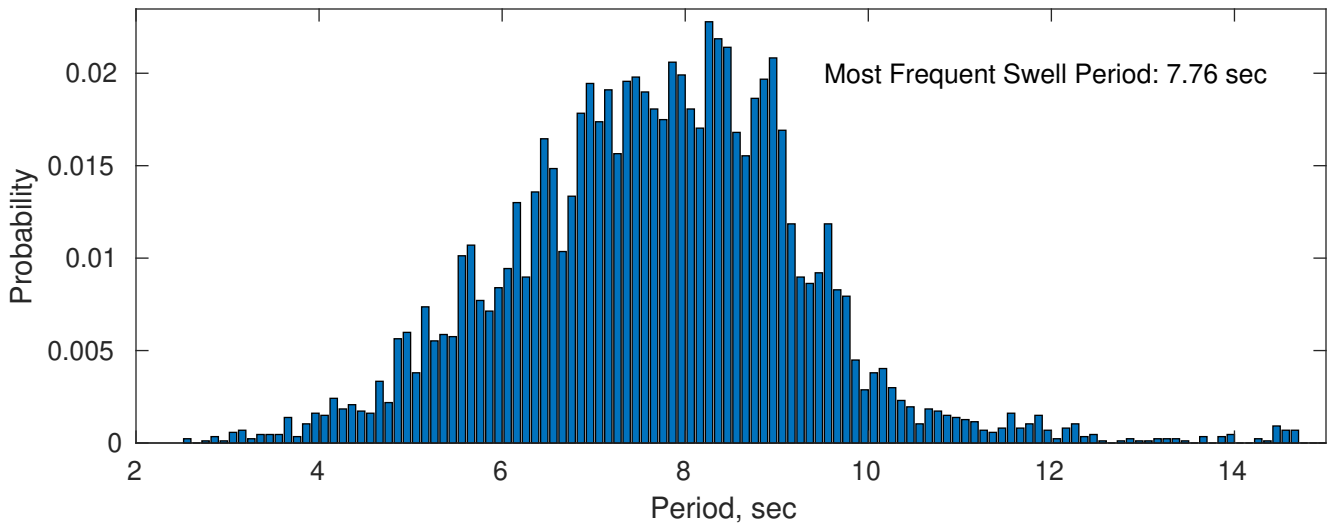
**May Peak Wave Period PDF: 1979 - 2015**



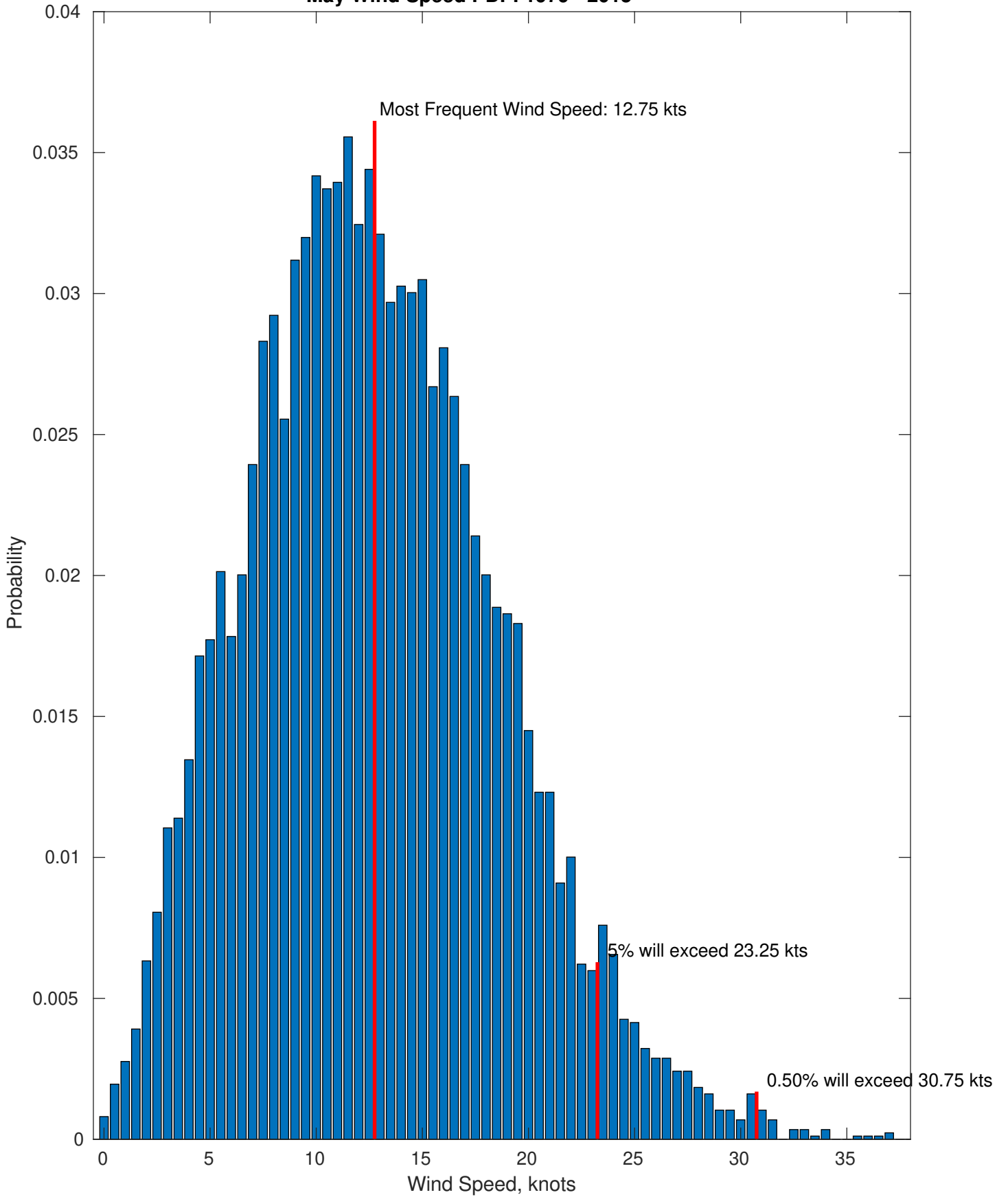
**Wind-Sea: 24.09%**



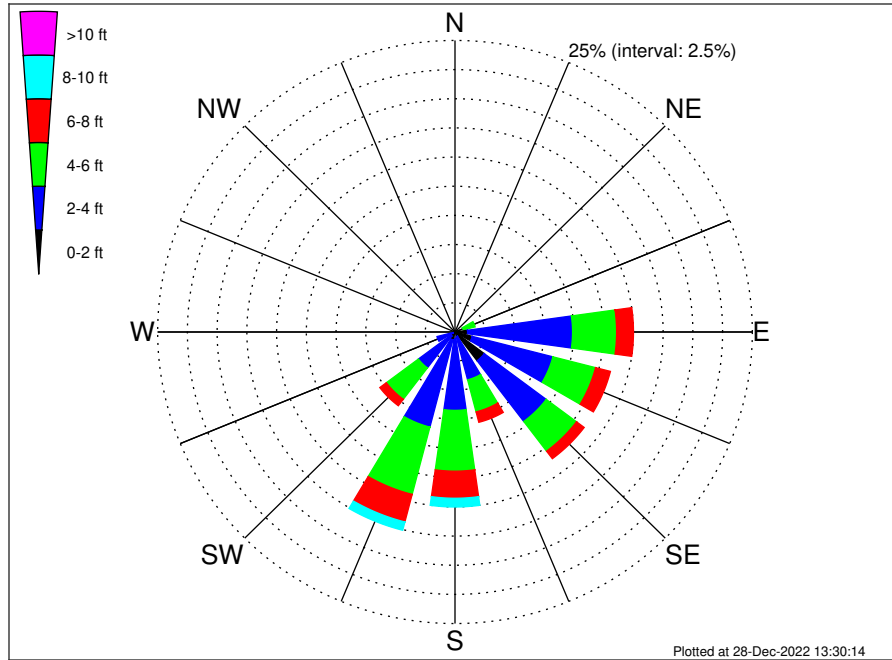
**Swell: 75.91%**



May Wind Speed PDF: 1979 - 2015



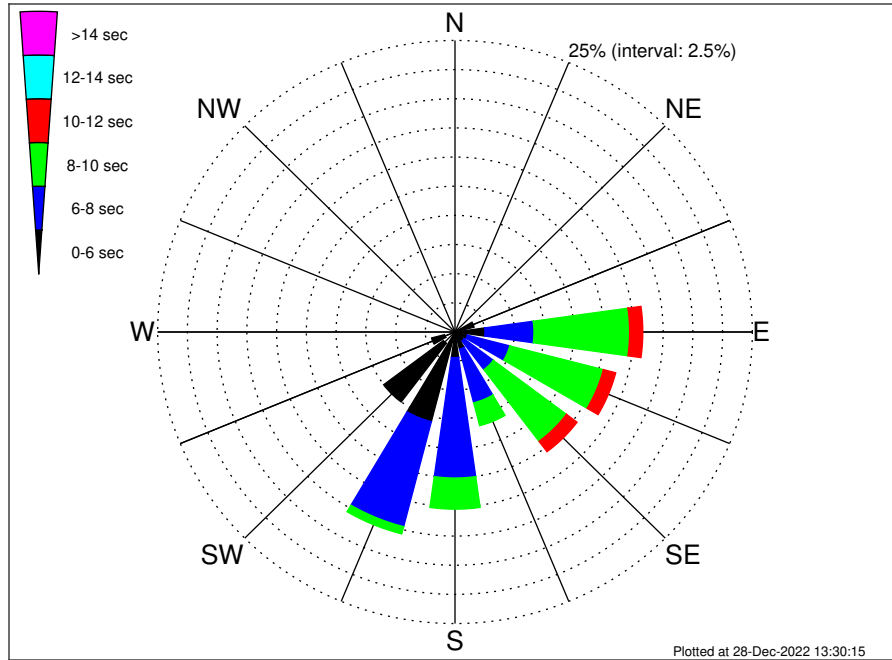
VNE 522 ECR Midpoint Climatological WaveHeight Rose for May: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	0.03	•	0.08	0.24	0.02	0.03	0.03	0.01	0.01	•	•	•	•	0.47
1 - 2 ft	0.06	0.02	0.02	0.13	1.06	1.42	2.84	0.39	0.52	0.66	0.43	0.17	0.12	0.06	0.07	0.05	8.00
2 - 4 ft	0.13	0.13	0.17	0.56	8.83	7.01	6.52	3.82	6.17	7.73	3.42	1.38	0.48	0.31	0.28	0.15	47.09
4 - 6 ft	0.01	0.02	0.16	1.02	3.71	3.71	3.19	2.84	5.21	5.96	3.37	0.46	0.06	0.09	0.03	0.06	29.91
6 - 8 ft	•	•	0.01	0.32	1.42	1.29	0.81	0.92	2.32	2.44	0.69	0.07	•	•	•	•	10.29
8 - 10 ft	•	•	•	0.06	0.55	0.38	0.18	0.41	0.75	0.74	0.17	•	•	•	•	•	3.25
10 - 12 ft	•	•	•	•	0.23	0.10	0.05	0.03	0.17	0.30	•	•	•	•	•	•	0.89
12 - 14 ft	•	•	•	•	•	0.02	•	0.02	0.05	0.02	•	•	•	•	•	•	0.12
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.20	0.17	0.37	2.13	15.79	14.00	13.83	8.47	15.22	17.88	8.09	2.09	0.66	0.46	0.38	0.25	100.00

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

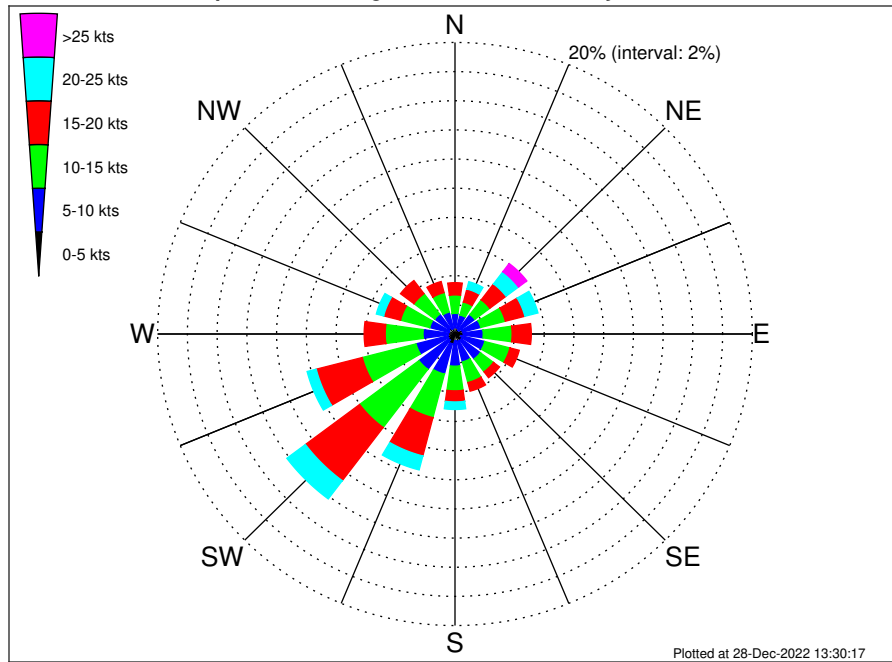


Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1 - 2 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2 - 4 sec	0.18	0.15	0.10	0.24	0.23	0.13	0.10	0.25	0.13	0.29	1.22	0.91	0.30	0.32	0.35	0.20	5.10
4 - 6 sec	0.01	0.02	0.25	1.42	2.29	0.96	0.86	1.27	2.07	7.65	6.29	1.13	0.36	0.14	0.03	0.06	24.81
6 - 8 sec	.	.	0.01	0.44	4.12	3.67	3.07	4.75	10.32	9.30	0.58	0.06	.	.	.	.	36.32
8 - 10 sec	.	.	.	0.03	8.04	8.14	7.70	2.03	2.67	0.64	.	.	.	.	.	.	29.25
10 - 12 sec	.	.	.	.	1.10	1.07	1.12	0.17	0.02	.	.	.	.	.	.	.	3.49
12 - 14 sec	.	.	.	.	.	0.05	0.47	.	0.01	.	.	.	.	.	.	.	0.53
14 - 16 sec	.	.	.	.	.	.	0.41	.	.	.	.	.	.	.	.	.	0.41
18 - 20 sec	.	.	.	.	.	.	0.09	.	.	.	.	.	.	.	.	.	0.09
22 - 24 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	0.20	0.17	0.37	2.13	15.79	14.00	13.83	8.47	15.22	17.88	8.09	2.09	0.66	0.46	0.38	0.25	100.00



VNE 522 ECR Midpoint Climatological Wind Rose for May: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.01	0.03	•	0.03	0.02	0.02	•	0.01	0.28
0 - 5 kts	0.45	0.39	0.30	0.49	0.54	0.40	0.53	0.49	0.46	0.66	0.53	0.47	0.44	0.39	0.49	0.37	7.41
5 - 10 kts	0.97	0.93	1.35	1.28	1.35	1.65	1.60	1.46	1.74	2.15	2.51	2.20	1.69	1.35	1.21	1.17	24.59
10 - 15 kts	1.27	0.92	1.27	1.70	1.94	1.75	1.10	1.46	1.69	3.08	4.99	3.74	2.54	2.03	1.76	1.38	32.64
15 - 20 kts	0.84	0.92	1.37	1.36	1.29	0.64	0.51	0.61	0.76	2.72	4.57	3.20	1.42	1.17	1.13	0.78	23.28
20 - 25 kts	0.26	0.52	1.05	0.91	0.33	0.21	0.12	0.30	0.52	0.99	1.57	0.63	0.37	0.51	0.41	0.20	8.88
25 - 30 kts	0.03	0.28	0.55	0.12	0.07	0.02	0.01	0.05	0.09	0.31	0.40	0.03	0.14	0.09	0.07	0.08	2.35
30 - 35 kts	0.03	0.08	0.13	0.08	0.03	•	•	0.01	0.03	0.02	0.06	•	0.01	0.02	•	•	0.52
35 - 40 kts	•	0.02	0.02	0.01	•	•	•	•	•	•	•	•	•	•	•	•	0.06
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	3.86	4.09	6.05	5.97	5.57	4.70	3.88	4.41	5.30	9.97	14.63	10.31	6.63	5.58	5.07	3.99	100.00