

## VNE 522 ECR Midpoint - October

Latitude: 40.62 N Longitude: 71.98 W

### Weather Days

Wave Height > 4.0 ft Mean: 13.8 days Range: 10.7 - 16.9 days p50:16 days p75:13.5 days p90:12.5 days

Wave Height > 5.0 ft Mean: 8.8 days Range: 6.0 - 11.5 days p50:10.5 days p75:8.5 days p90:7.5 days

Wave Height > 6.0 ft Mean: 5.7 days Range: 3.1 - 8.3 days p50:6.5 days p75:5 days p90:2 days

Wind Speed > 20.0 knots Mean: 6.9 days Range: 5.1 - 8.7 days p50:7.5 days p75:6.5 days p90:4.5 days

Wind Speed > 25.0 knots Mean: 2.4 days Range: 1.3 - 3.5 days p50:2.5 days p75:2 days p90:1 days

Wind Speed > 30.0 knots Mean: 0.8 days Range: 0.2 - 1.3 days p50:1 days p75:0.5 days p90:0.5 days

### Working Window Probability

Wave Height < 4.0 ft  
3 days or longer: 30%  
5 days or longer: 5%  
7 days or longer: 1%

Wave Height < 5.0 ft  
3 days or longer: 45%  
5 days or longer: 13%  
7 days or longer: 7%

Wave Height < 6.0 ft  
3 days or longer: 64%  
5 days or longer: 29%  
7 days or longer: 16%

### Waves

Mean Height: 2 - 4 ft

The wave heights will occasionally reach 14 - 16 ft, but rarely higher.

Mean Period: 6 - 8 sec

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

Principle Direction, from: ESE

WindSea/Swell: 32% / 68%

### Winds

Mean Speed: 10 - 15 kts

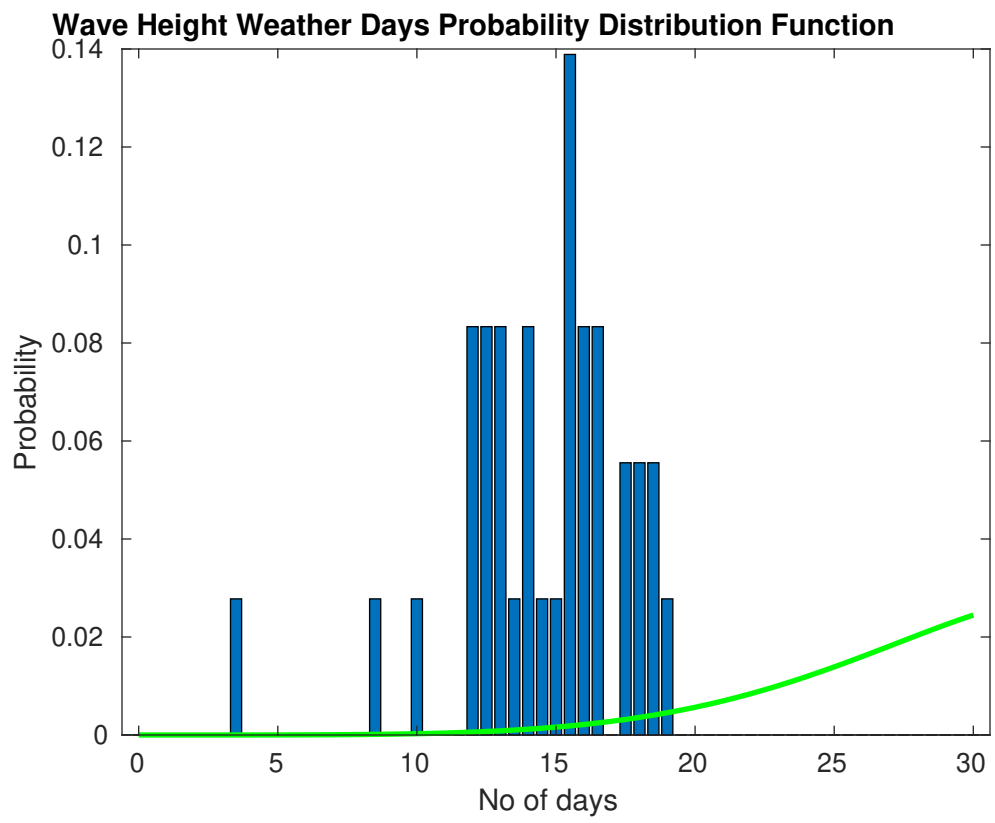
The winds will occasionally reach 35 - 40 kts, but rarely greater.

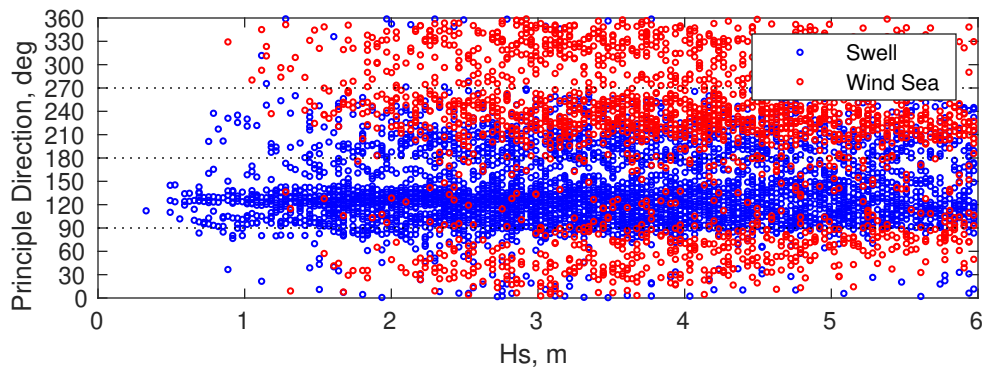
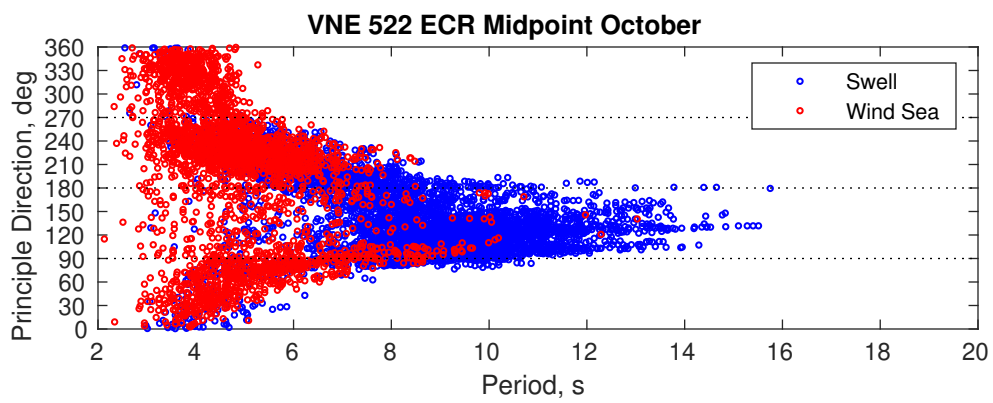
Principle Direction, from: SW

### Severe Storms

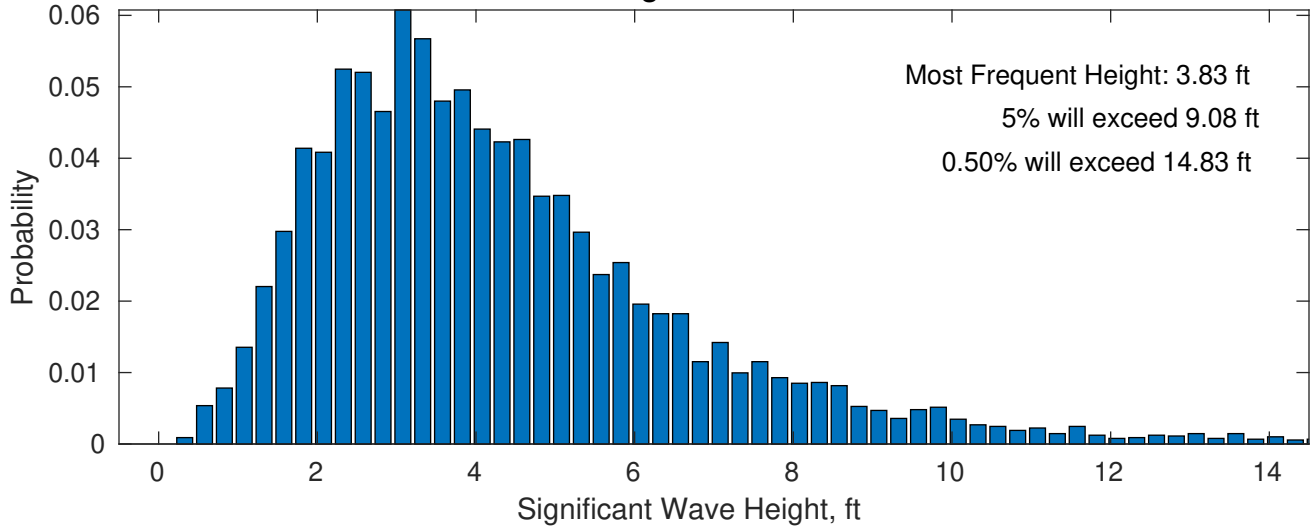
There is a 47 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 44 % chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

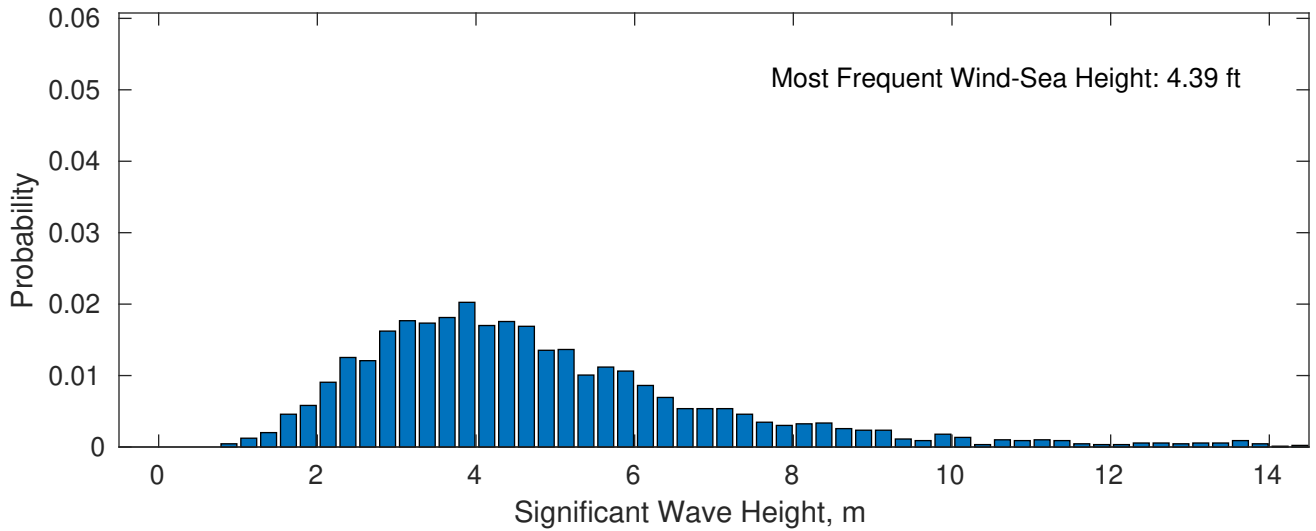




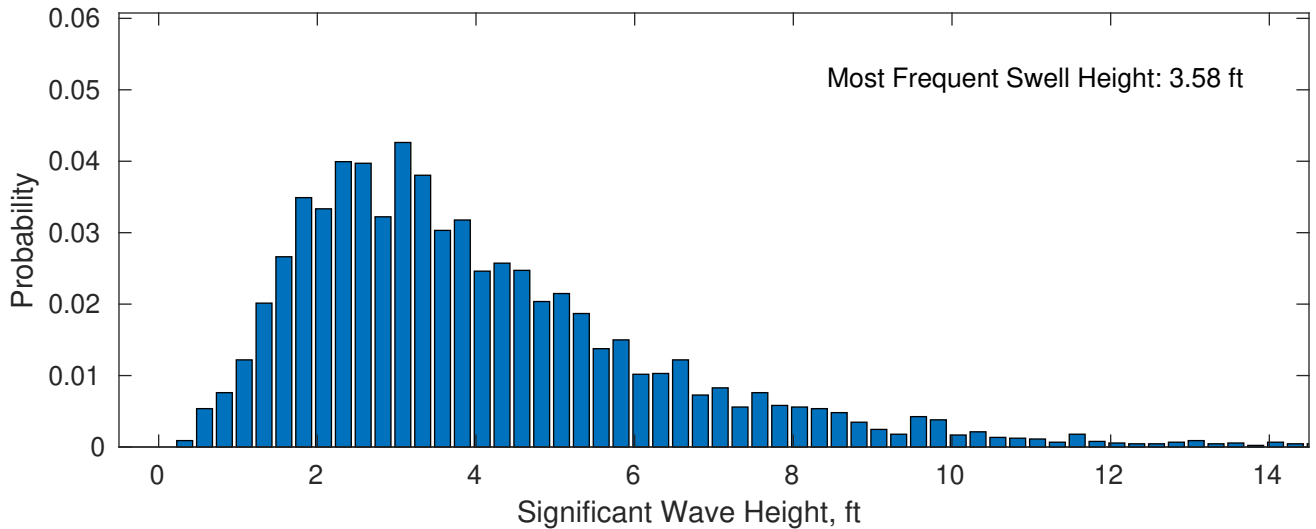
**October Wave Height PDF: 1979 - 2015**



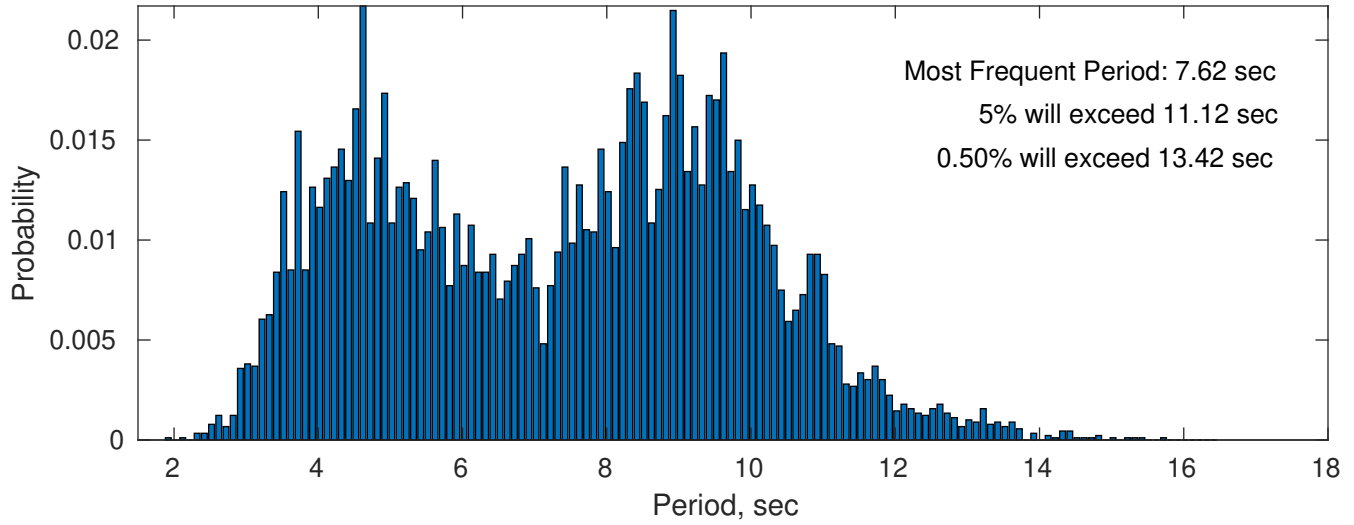
**Wind-Sea: 32.10%**



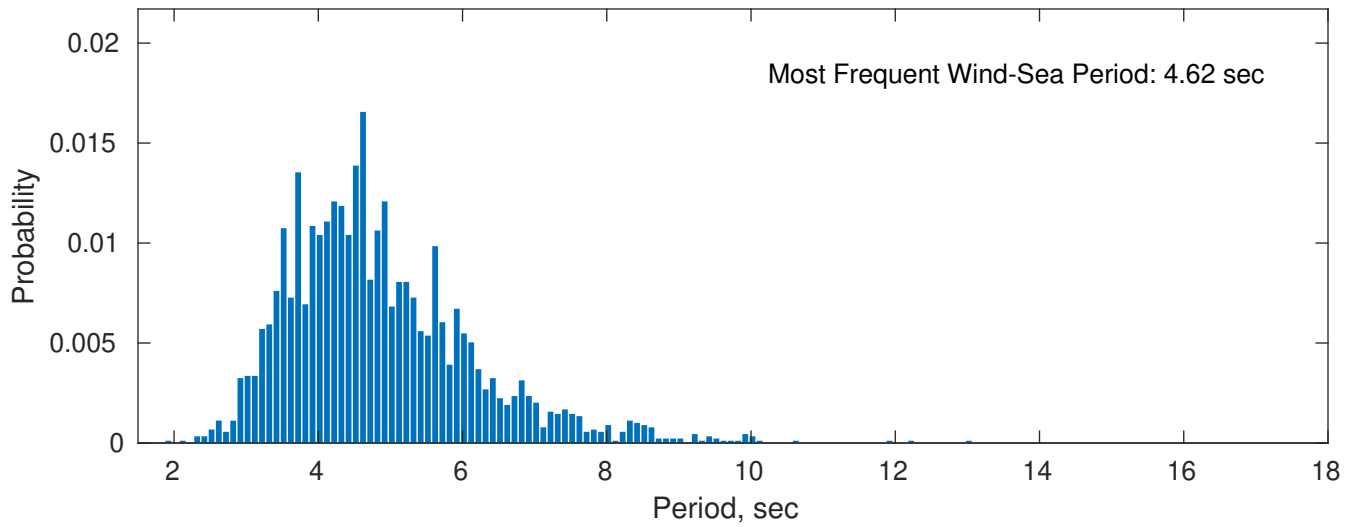
**Swell: 67.90%**



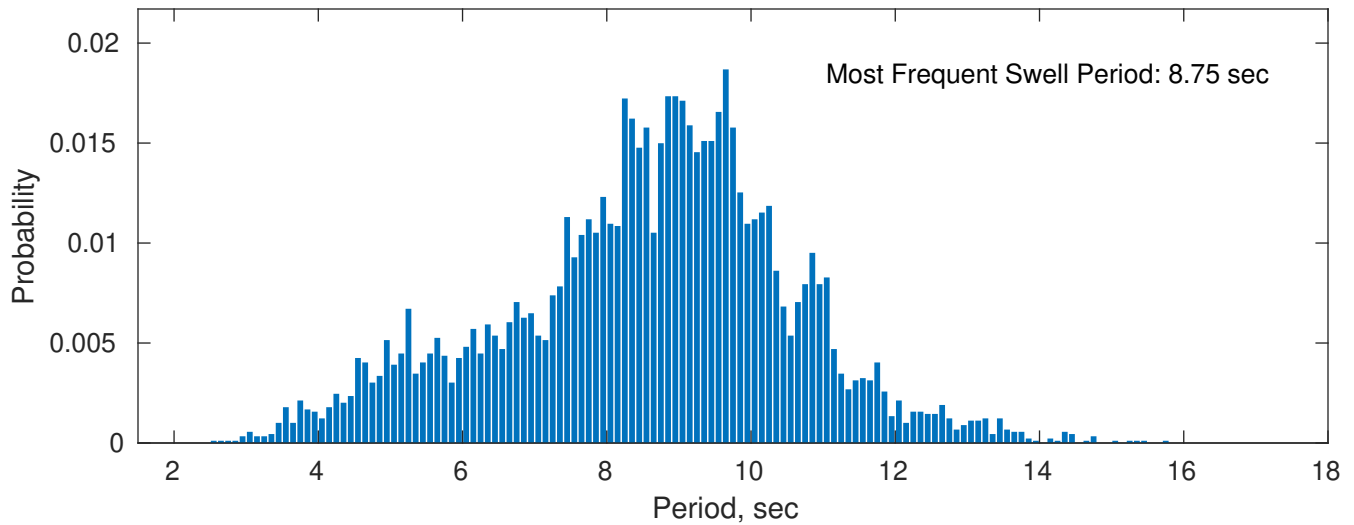
### October Peak Wave Period PDF: 1979 - 2015



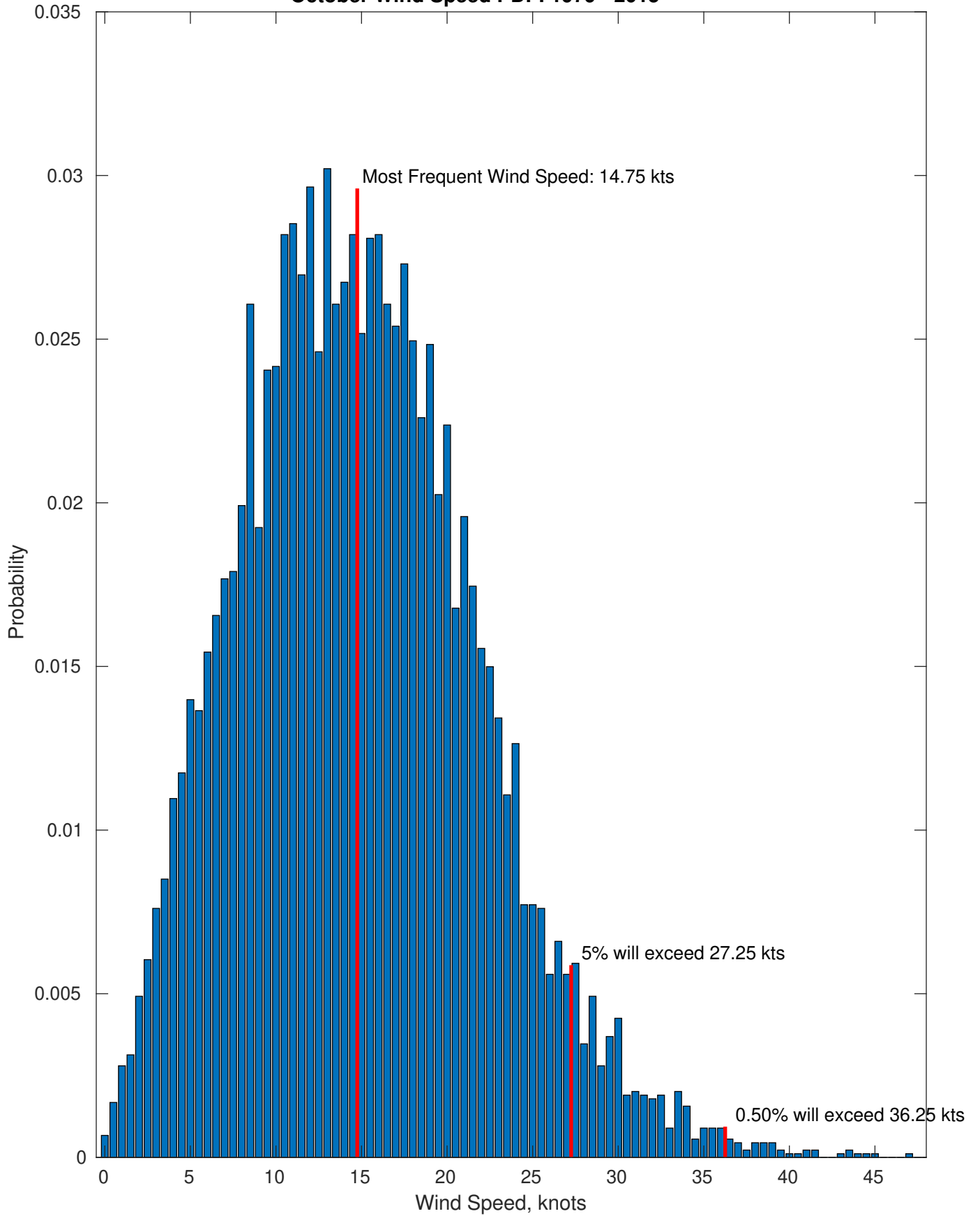
### Wind-Sea: 32.10%



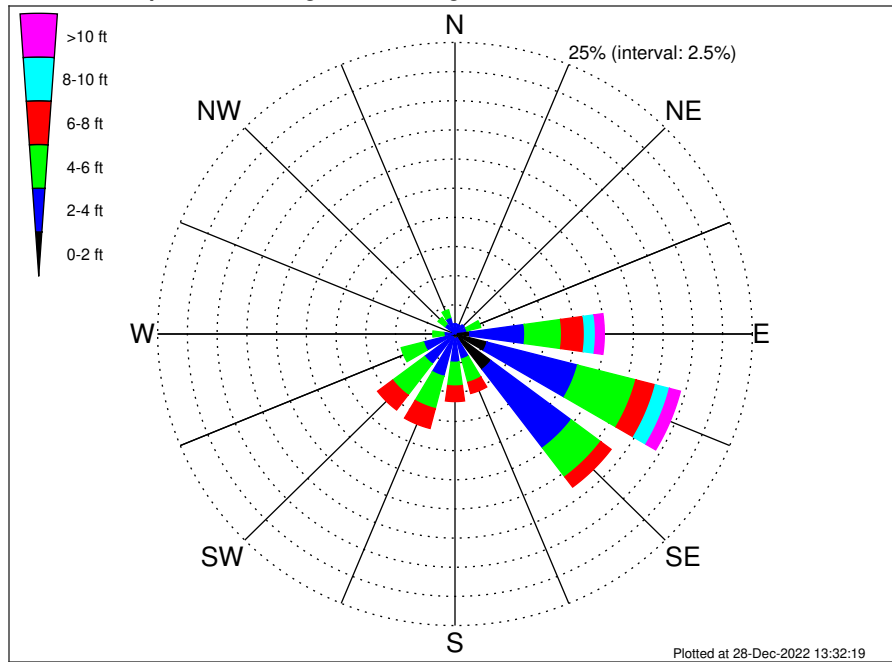
### Swell: 67.90%



October Wind Speed PDF: 1979 - 2015



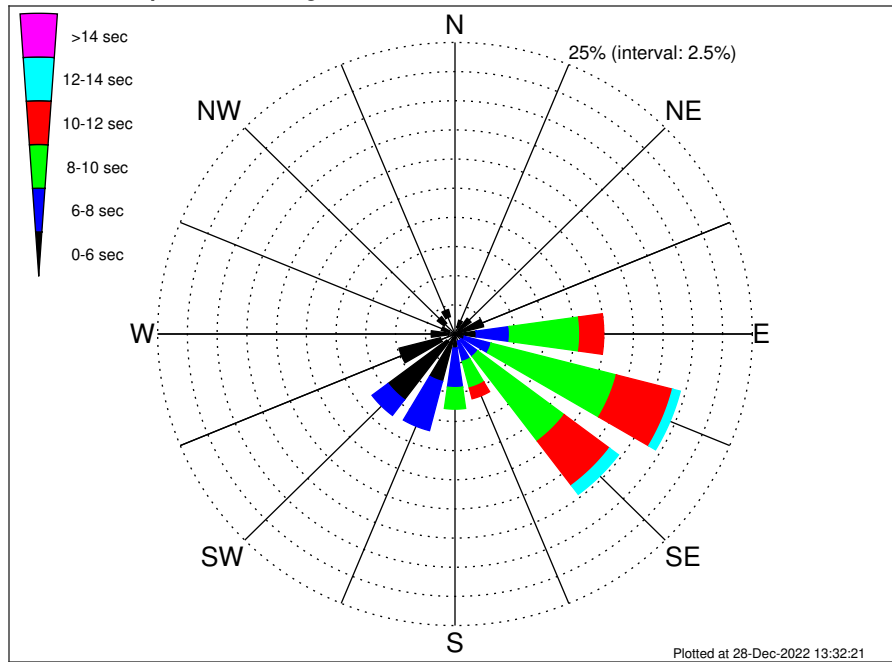
VNE 522 ECR Midpoint Climatological WaveHeight Rose for October: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	0.01	0.01	0.22	0.28	0.46	0.03	•	0.02	0.04	0.01	•	•	•	0.01	1.11
1 - 2 ft	0.11	0.03	0.12	0.08	1.02	2.51	3.35	0.36	0.43	0.36	0.26	0.38	0.15	0.12	0.11	0.15	9.52
2 - 4 ft	0.77	0.81	0.85	0.95	4.63	7.87	8.44	1.82	2.00	3.37	2.90	2.34	0.79	0.50	0.97	1.32	40.33
4 - 6 ft	0.20	0.31	0.60	1.20	3.09	5.06	3.10	2.07	2.04	2.86	3.37	1.95	0.93	0.54	0.70	0.67	28.69
6 - 8 ft	0.02	0.04	0.10	0.43	1.92	1.70	1.10	0.98	1.33	1.76	1.59	0.54	0.13	0.02	0.08	0.01	11.76
8 - 10 ft	0.01	0.02	0.02	0.27	0.93	1.22	0.47	0.53	0.60	0.37	0.45	0.11	0.01	•	•	0.01	5.02
10 - 12 ft	•	•	•	0.04	0.46	0.50	0.20	0.23	0.18	0.17	0.17	•	•	•	•	•	1.96
12 - 14 ft	•	•	•	•	0.18	0.19	0.18	0.08	0.16	0.02	0.04	•	•	•	•	•	0.85
14 - 16 ft	•	•	•	•	0.10	0.19	0.06	0.04	0.12	•	0.01	•	•	•	•	•	0.53
16 - 18 ft	•	•	•	•	•	0.04	0.02	•	0.04	•	•	•	•	•	•	•	0.11
> 18 ft	•	•	•	•	•	0.02	0.03	0.03	0.03	•	•	•	•	•	•	•	0.12
Total	1.12	1.22	1.71	2.98	12.55	19.58	17.40	6.19	6.94	8.93	8.83	5.33	2.01	1.19	1.87	2.17	100.00

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

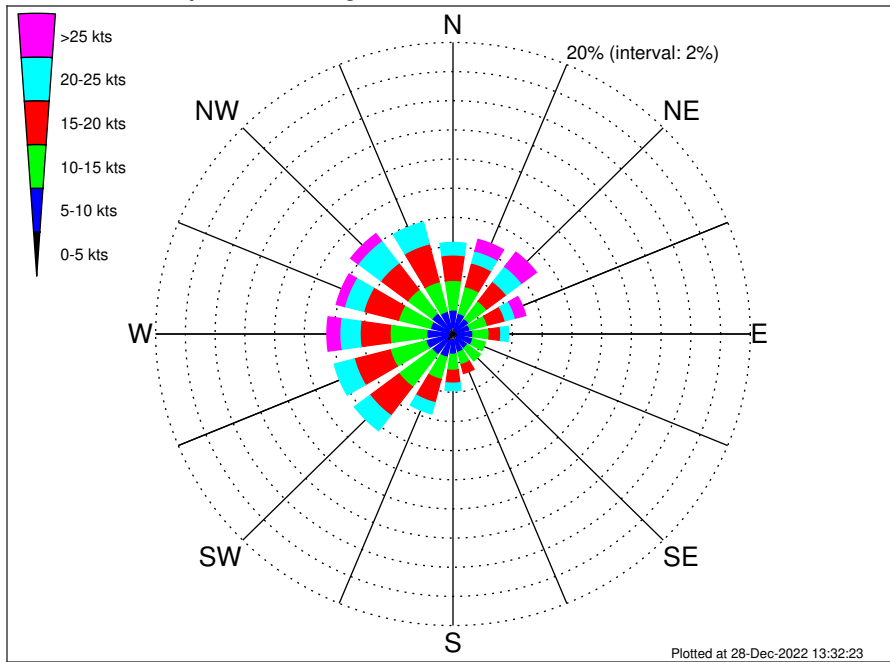


Joint Frequency Distribution Table

	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
2 - 4 sec	0.84	0.59	0.44	0.37	0.15	0.15	0.16	0.12	0.19	0.36	0.86	1.26	0.55	0.50	1.15	1.53	9.22
4 - 6 sec	0.28	0.63	1.25	2.11	1.64	0.67	0.51	0.53	1.02	3.85	6.20	3.60	1.45	0.67	0.72	0.64	25.78
6 - 8 sec	•	•	0.02	0.47	2.80	2.33	1.72	1.78	3.39	4.35	1.68	0.46	0.01	•	•	•	19.01
8 - 10 sec	•	•	•	0.02	5.91	10.87	9.11	2.35	1.85	0.35	0.09	•	•	•	•	•	30.54
10 - 12 sec	•	•	•	•	2.01	4.88	4.77	0.96	0.38	0.02	•	•	•	•	•	•	13.02
12 - 14 sec	•	•	•	•	0.04	0.67	0.95	0.44	0.08	•	•	•	•	•	•	•	2.18
14 - 16 sec	•	•	•	•	•	0.01	0.18	0.01	0.03	•	•	•	•	•	•	•	0.23
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	1.12	1.22	1.71	2.98	12.55	19.58	17.40	6.19	6.94	8.93	8.83	5.33	2.01	1.19	1.87	2.17	100.00



VNE 522 ECR Midpoint Climatological Wind Rose for October: 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	0.01	•	0.01	0.01	0.03	0.01	0.04	0.02	0.02	0.02	•	•	0.01	•	0.01	0.23
0 - 5 kts	0.45	0.27	0.28	0.25	0.31	0.28	0.32	0.45	0.38	0.39	0.54	0.31	0.39	0.25	0.34	0.37	5.57
5 - 10 kts	1.19	1.19	1.03	0.93	1.02	1.06	0.88	0.81	1.00	1.24	1.20	1.57	1.38	1.32	1.43	1.22	18.45
10 - 15 kts	2.03	1.89	1.51	1.21	1.10	0.87	1.09	0.87	1.10	1.57	2.79	2.48	2.47	2.22	2.05	2.10	27.33
15 - 20 kts	1.75	1.68	1.67	1.23	0.78	0.28	0.41	0.63	0.88	1.64	2.45	2.49	2.01	2.42	2.27	2.69	25.29
20 - 25 kts	0.85	0.85	1.31	0.72	0.51	0.22	0.23	0.31	0.50	0.79	1.31	1.40	1.36	1.33	1.91	1.53	15.16
25 - 30 kts	0.30	0.57	0.65	0.39	0.15	0.10	0.04	0.11	0.18	0.30	0.37	0.29	0.57	0.44	0.55	0.38	5.39
30 - 35 kts	0.09	0.20	0.40	0.28	0.04	0.02	0.03	0.07	0.07	0.02	0.10	0.11	0.23	0.12	0.06	0.02	1.88
35 - 40 kts	0.02	0.02	0.16	0.03	0.06	0.01	0.03	0.01	0.01	0.01	•	0.08	0.06	0.01	0.01	0.02	0.55
40 - 45 kts	0.02	0.02	0.01	0.01	0.02	•	0.02	•	0.01	•	•	•	•	•	•	•	0.12
45 - 50 kts	•	•	0.01	•	0.01	•	•	•	•	•	•	•	•	•	•	•	0.02
Total	6.71	6.70	7.03	5.06	4.02	2.89	3.09	3.30	4.15	6.00	8.77	8.74	8.48	8.11	8.61	8.35	100.00