

VNE 522 ECR Midpoint - April

Latitude: 40.62 N Longitude: 71.98 W

Weather Days

Wave Height > 4.0 ft Mean: 14.9 days Range: 11.0 - 18.8 days p50:15.5 days p75:13.5 days p90:10.5 days

Wave Height > 5.0 ft Mean: 10.5 days Range: 6.6 - 14.4 days p50:10.5 days p75:8.5 days p90:6 days

Wave Height > 6.0 ft Mean: 7.2 days Range: 3.6 - 10.8 days p50:7 days p75:5.5 days p90:3.5 days

Wind Speed > 20.0 knots Mean: 6.1 days Range: 3.7 - 8.5 days p50:6 days p75:5 days p90:3.5 days

Wind Speed > 25.0 knots Mean: 1.9 days Range: 0.5 - 3.4 days p50:2 days p75:1.5 days p90:1 days

Wind Speed > 30.0 knots Mean: 0.6 days Range: 0.0 - 1.2 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: 34%
5 days or longer: 5%
7 days or longer: 1%

Wave Height < 5.0 ft
3 days or longer: 44%
5 days or longer: 13%
7 days or longer: 5%

Wave Height < 6.0 ft
3 days or longer: 60%
5 days or longer: 25%
7 days or longer: 14%

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: 30% / 70%

Winds

Mean Speed: 10 - 15 kts

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

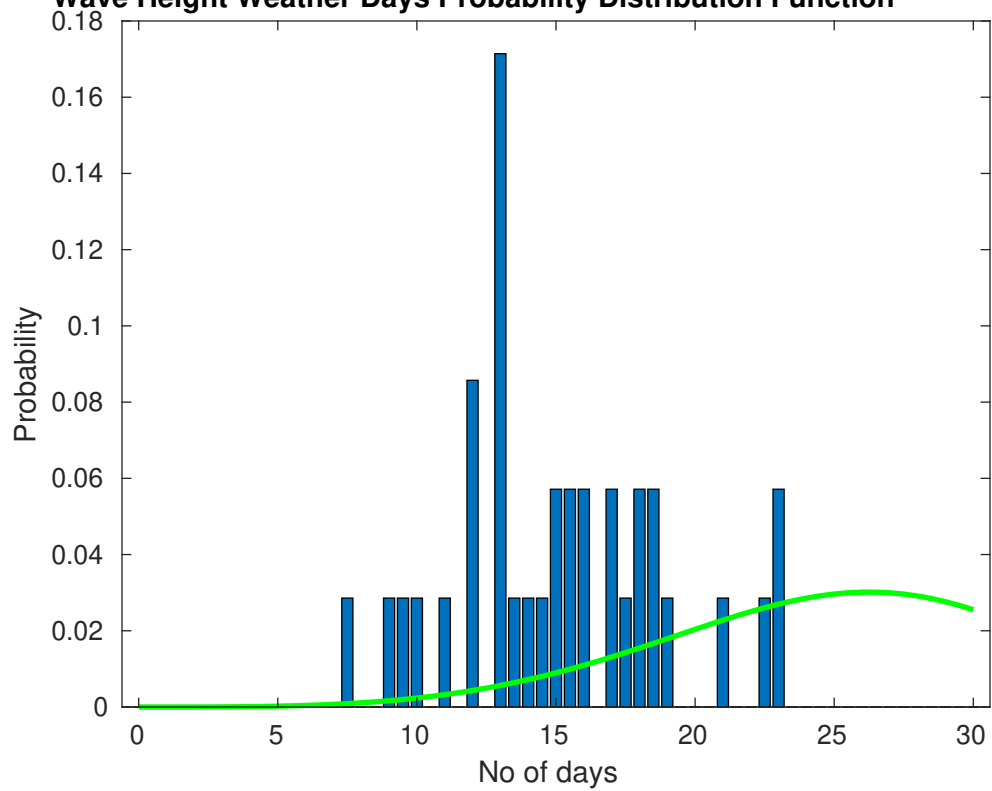
Principle Direction, from: SW

Severe Storms

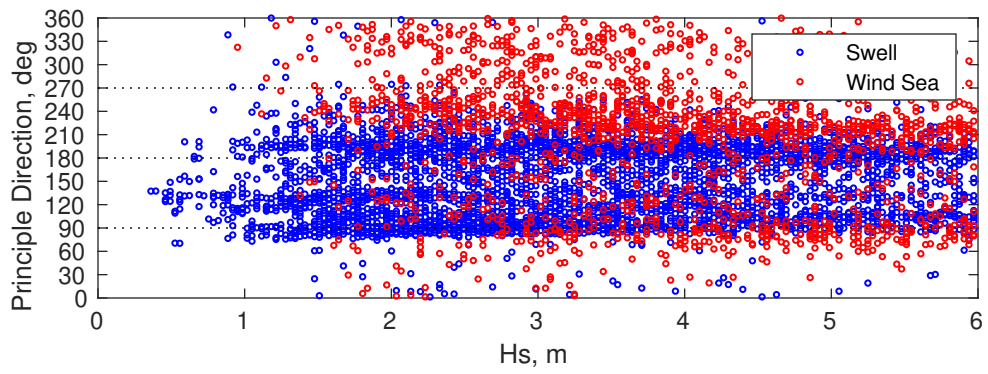
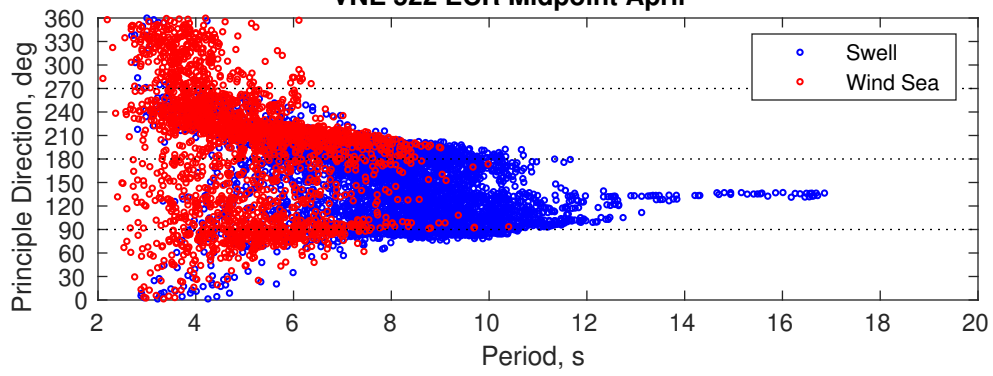
There is a 20 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 34 % chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

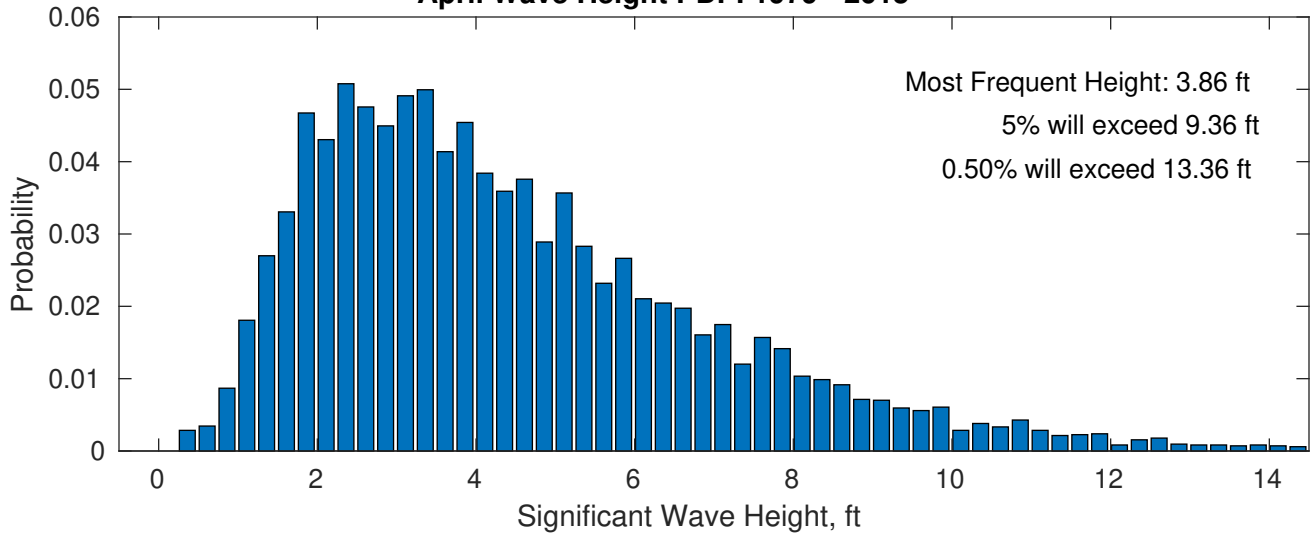
Wave Height Weather Days Probability Distribution Function



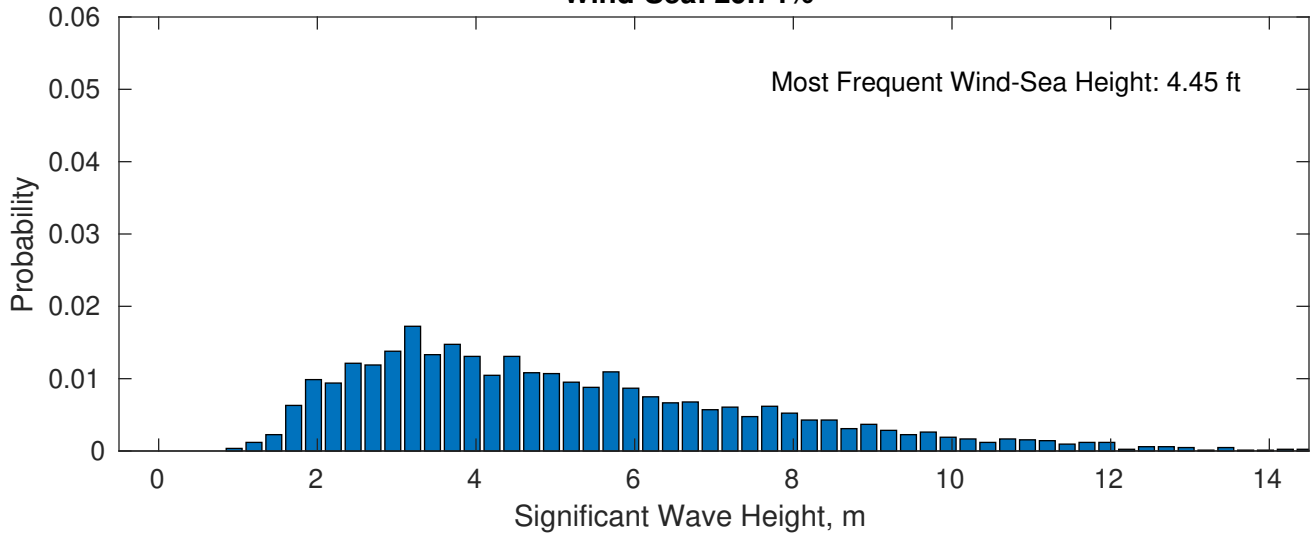
VNE 522 ECR Midpoint April



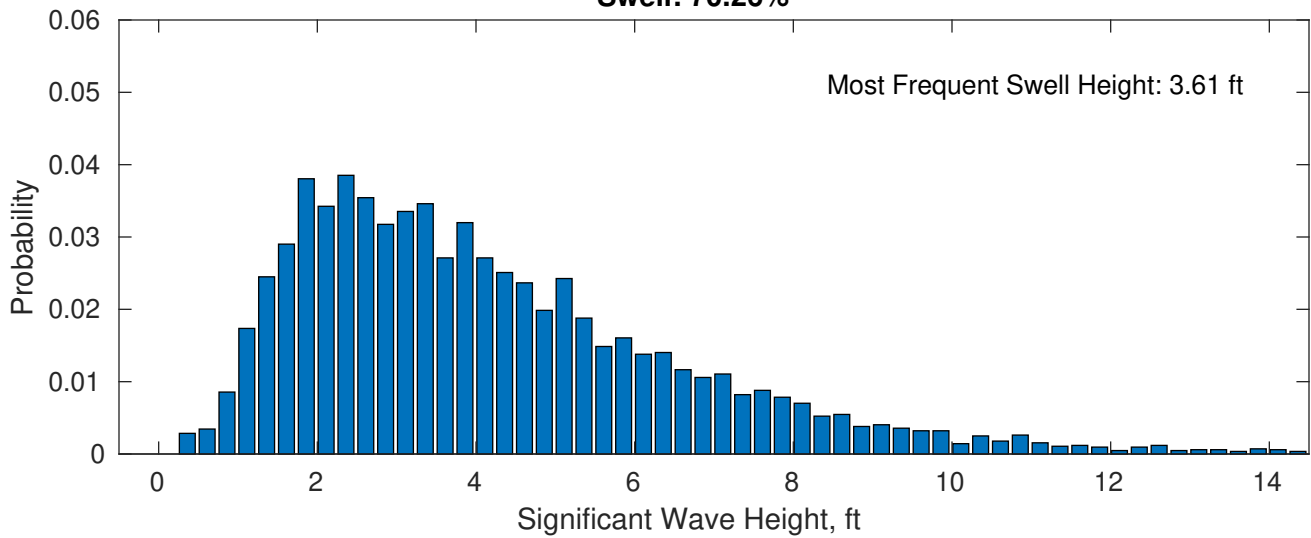
April Wave Height PDF: 1979 - 2015



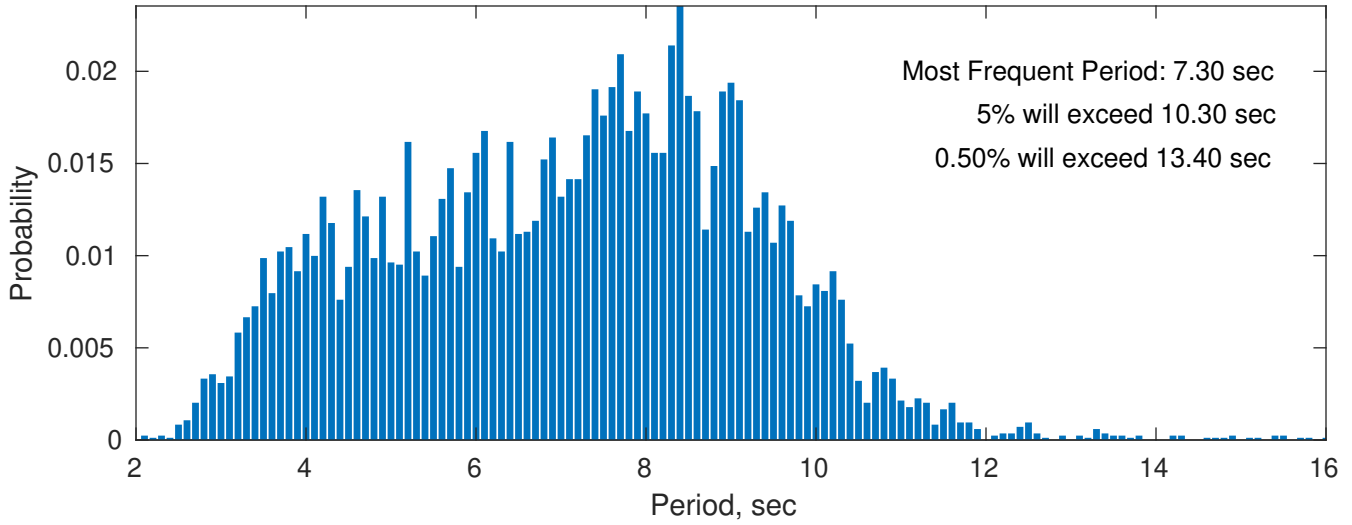
Wind-Sea: 29.74%



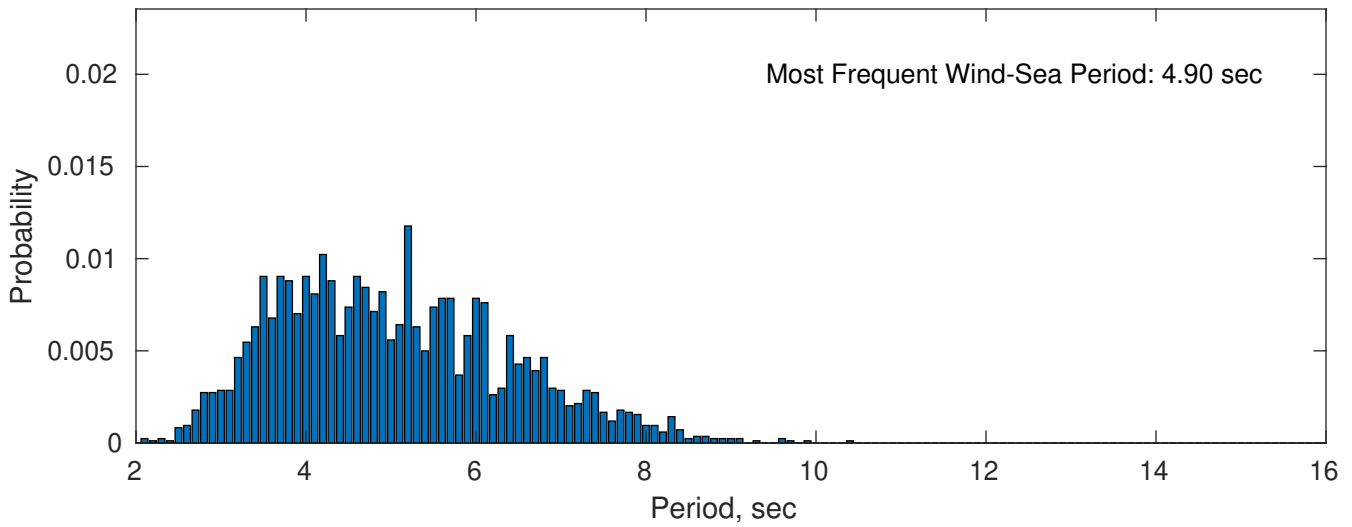
Swell: 70.26%



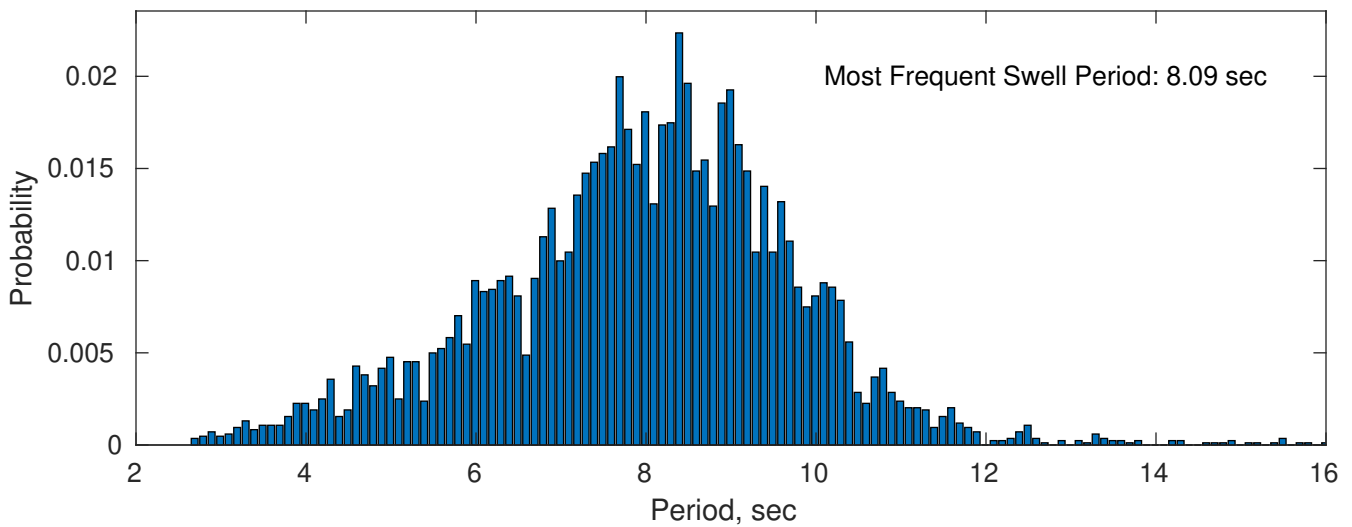
April Peak Wave Period PDF: 1979 - 2015



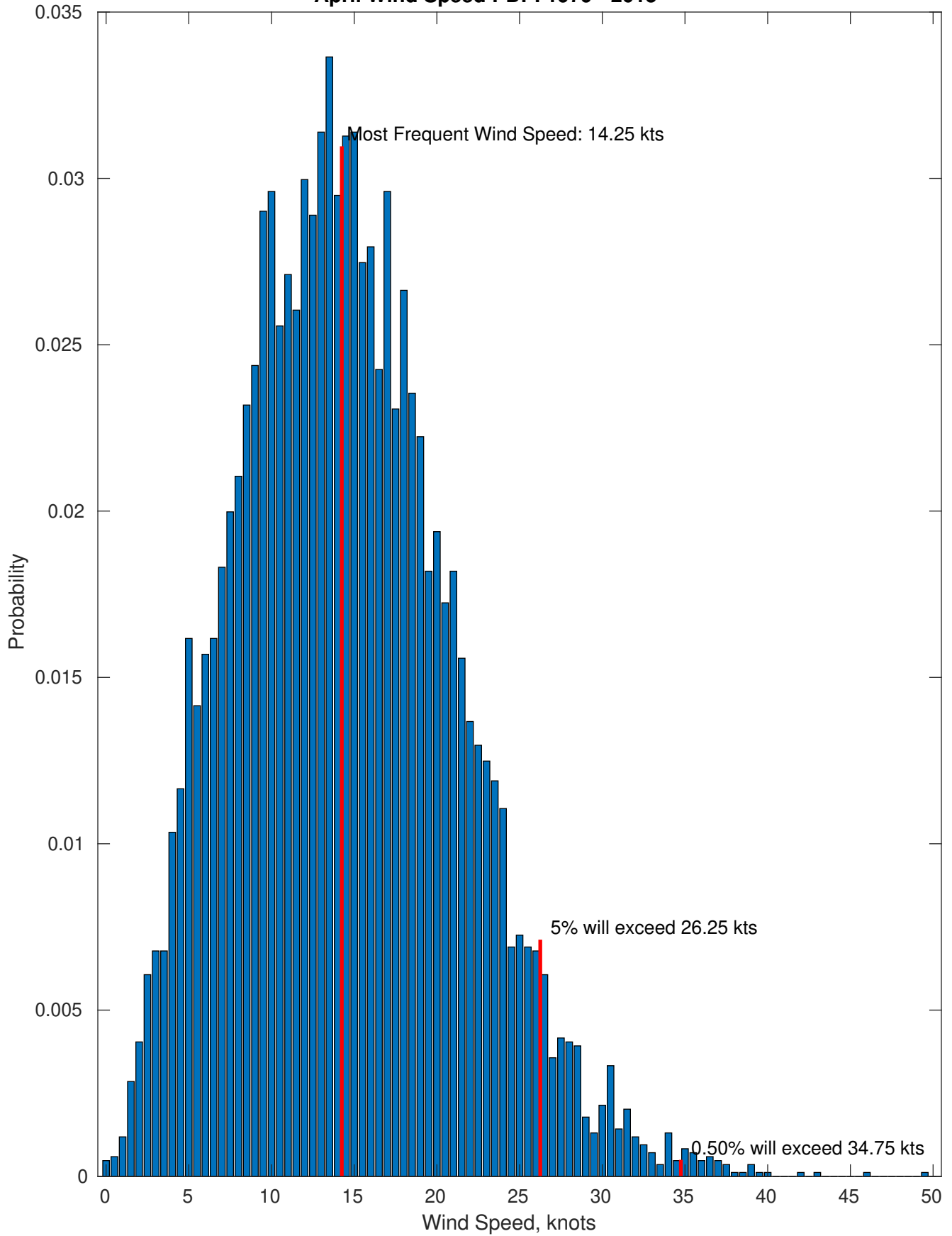
Wind-Sea: 29.74%



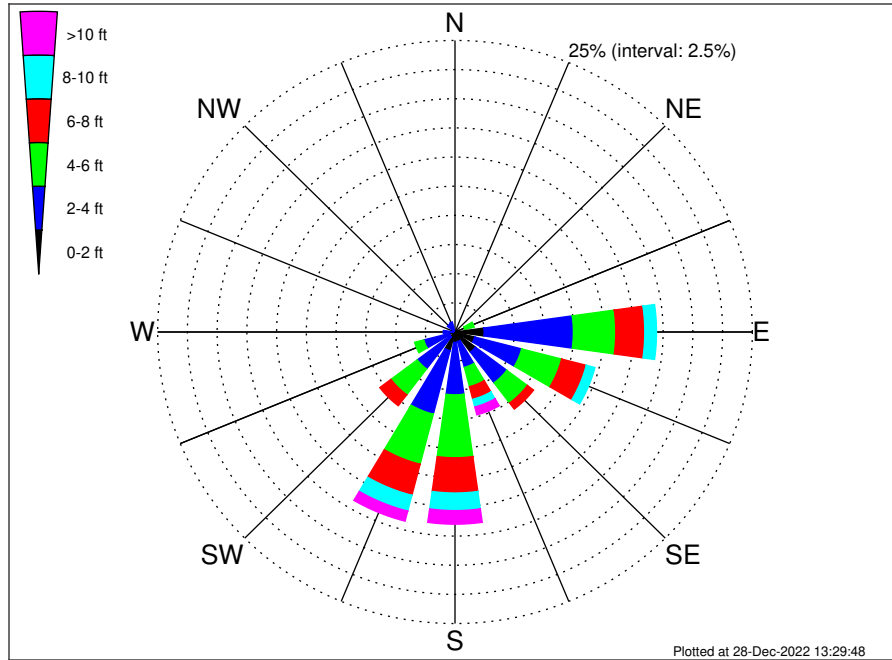
Swell: 70.26%



April Wind Speed PDF: 1979 - 2015



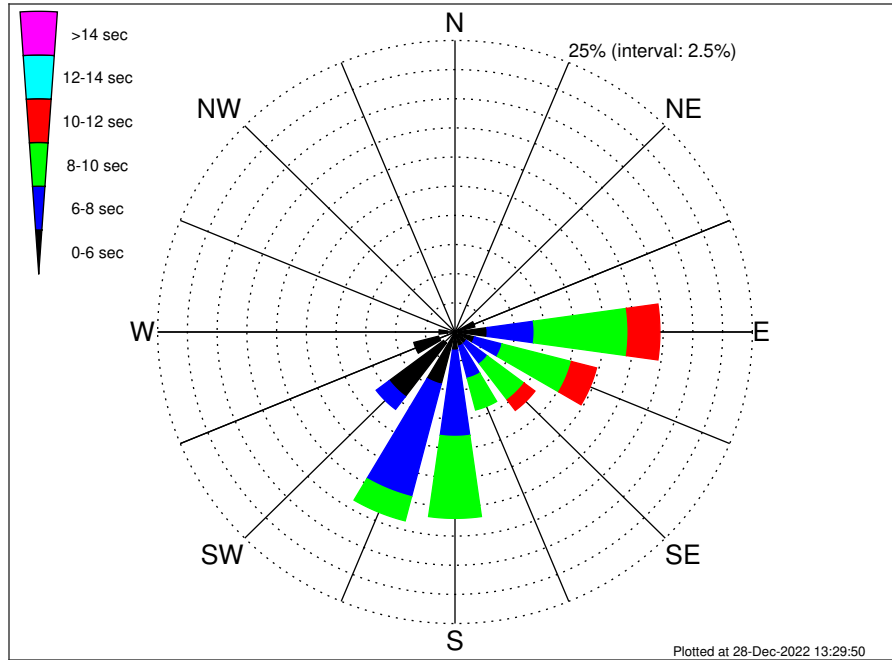
VNE 522 ECR Midpoint Climatological WaveHeight Rose for April: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	0.04	0.06	0.26	0.42	0.11	0.07	0.07	•	0.01	0.01	•	0.01	0.01	1.07
1 - 2 ft	0.11	0.06	0.02	0.25	2.39	1.45	1.74	0.74	0.82	1.58	0.52	0.48	0.14	0.08	0.10	0.15	10.63
2 - 4 ft	0.37	0.21	0.23	0.57	7.50	4.08	3.31	2.28	4.49	5.62	3.45	2.22	0.83	0.61	0.70	0.73	37.21
4 - 6 ft	0.10	0.12	0.12	0.81	3.57	3.47	2.16	1.71	5.40	4.44	2.77	0.80	0.26	0.20	0.26	0.29	26.47
6 - 8 ft	0.01	0.02	0.08	0.52	2.44	2.14	0.65	1.12	3.02	2.75	1.18	0.14	0.11	0.05	•	0.04	14.27
8 - 10 ft	0.01	0.01	0.02	0.10	0.99	0.75	0.58	0.68	1.51	1.40	0.36	0.02	0.05	0.07	0.04	•	6.59
10 - 12 ft	•	•	•	0.04	0.32	0.25	0.19	0.33	0.67	0.65	0.02	•	•	•	•	•	2.47
12 - 14 ft	•	•	•	0.02	•	0.06	0.07	0.24	0.37	0.15	•	•	•	•	•	•	0.92
14 - 16 ft	•	•	•	•	•	•	0.04	0.10	0.06	0.08	•	•	•	•	•	•	0.27
16 - 18 ft	•	•	•	•	•	•	•	0.02	0.04	•	•	•	•	•	•	•	0.06
> 18 ft	•	•	•	•	•	•	•	0.01	0.04	•	•	•	•	•	•	•	0.05
Total	0.59	0.43	0.48	2.34	17.27	12.46	9.16	7.34	16.48	16.75	8.30	3.67	1.40	1.01	1.11	1.21	100.00

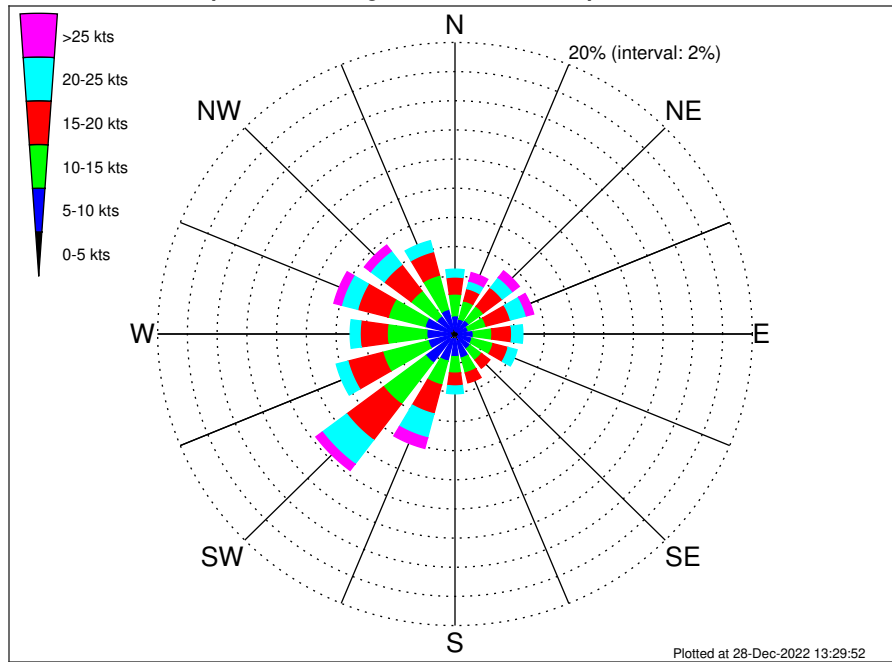
VNE 522 ECR Midpoint Climatological WavePeriod Rose for April: 1979 - 2015



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	0.48	0.24	0.21	0.33	0.32	0.33	0.34	0.27	0.27	0.20	1.20	1.43	0.63	0.58	0.77	0.93	8.55
4 - 6 sec	0.11	0.19	0.23	1.39	2.39	1.37	0.86	0.98	1.30	4.42	5.73	2.15	0.71	0.37	0.33	0.29	22.81
6 - 8 sec	0.01	.	0.04	0.52	3.95	2.40	2.21	2.85	7.38	9.96	1.37	0.10	0.06	0.06	.	.	30.92
8 - 10 sec	.	.	.	0.10	7.90	6.02	3.88	2.81	7.03	2.14	.	.	.	.	.	.	29.86
10 - 12 sec	.	.	.	.	2.68	2.18	1.13	0.43	0.50	0.02	.	.	.	.	.	.	6.93
12 - 14 sec	.	.	.	.	0.04	0.17	0.34	.	.	.	.	.	.	.	.	.	0.55
14 - 16 sec	.	.	.	.	.	.	0.20	.	.	.	.	.	.	.	.	.	0.20
18 - 20 sec	.	.	.	.	.	.	0.19	.	.	.	.	.	.	.	.	.	0.19
22 - 24 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	0.59	0.43	0.48	2.34	17.27	12.46	9.16	7.34	16.48	16.75	8.30	3.67	1.40	1.01	1.11	1.21	100.00

VNE 522 ECR Midpoint Climatological Wind Rose for April: 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	•	•	0.01	•	•	0.02	•	0.01	0.02	•	0.01	0.11
0 - 5 kts	0.26	0.18	0.29	0.23	0.24	0.31	0.25	0.49	0.36	0.36	0.44	0.27	0.32	0.34	0.27	0.37	4.97
5 - 10 kts	0.99	0.89	0.88	0.69	0.99	0.88	1.02	1.20	1.20	1.57	2.00	1.59	1.57	1.71	1.26	1.37	19.81
10 - 15 kts	1.49	1.28	1.21	1.25	1.25	1.46	0.96	1.06	1.13	1.69	3.56	3.15	2.66	2.56	2.16	2.43	29.30
15 - 20 kts	1.17	0.87	1.61	1.69	1.33	1.05	0.70	0.70	0.88	2.05	3.10	2.43	1.82	2.13	2.26	1.66	25.43
20 - 25 kts	0.54	0.54	0.87	1.11	0.75	0.62	0.37	0.32	0.54	1.70	2.06	0.81	0.67	1.13	1.17	0.77	13.94
25 - 30 kts	0.11	0.42	0.37	0.40	0.20	0.15	0.21	0.21	0.18	0.61	0.46	0.13	0.13	0.38	0.34	0.26	4.58
30 - 35 kts	0.11	0.12	0.17	0.08	0.06	0.14	0.11	0.05	0.02	0.11	0.08	•	0.10	0.13	0.04	0.08	1.39
35 - 40 kts	0.05	0.02	0.04	0.02	•	0.01	0.02	0.04	0.01	0.04	•	•	0.01	0.01	0.13	0.01	0.42
40 - 45 kts	•	0.02	•	•	•	•	0.01	•	•	•	•	•	•	•	•	•	0.04
45 - 50 kts	•	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	0.01	0.02
Total	4.71	4.35	5.42	5.47	4.83	4.63	3.66	4.08	4.32	8.11	11.72	8.38	7.29	8.42	7.63	6.98	100.00