

VNE 544 ECR1 Midpoint - July

Latitude: 40.40 N Longitude: 73.39 W

Weather Days

Wave Height > 4.0 ft Mean: 5.3 days Range: 2.6 - 7.9 days p50:5.5 days p75:3.5 days p90:2 days
Wave Height > 5.0 ft Mean: 1.8 days Range: 0.4 - 3.3 days p50:2 days p75:1 days p90:0.5 days
Wave Height > 6.0 ft Mean: 0.7 days Range: 0.0 - 1.6 days p50:0.5 days p75:0.5 days p90:0.5 days

Wind Speed > 20.0 knots Mean: 0.5 days Range: 0.1 - 1.0 days p50:0.5 days p75:0.5 days p90:0.5 days
Wind Speed > 25.0 knots Mean: 0.0 days Range: 0.0 - 0.1 days p50:0.5 days p75:0.5 days p90:0.5 days
Wind Speed > 30.0 knots Mean: 0.0 days Range: 0.0 - 0.0 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: 57%
	5 days or longer: 23%
	7 days or longer: 16%
Wave Height < 5.0 ft	3 days or longer: 76%
	5 days or longer: 47%
	7 days or longer: 40%
Wave Height < 6.0 ft	3 days or longer: 89%
	5 days or longer: 75%
	7 days or longer: 68%

Waves

Mean Height: 2 - 4 ft
The wave heights will occasionally reach 6 - 8 ft, but rarely higher.
Mean Period: 6 - 8 sec
The wave periods will occasionally reach 12 - 14 sec, but rarely longer.
Principle Direction, from: S
WindSea/Swell: 12% / 88%

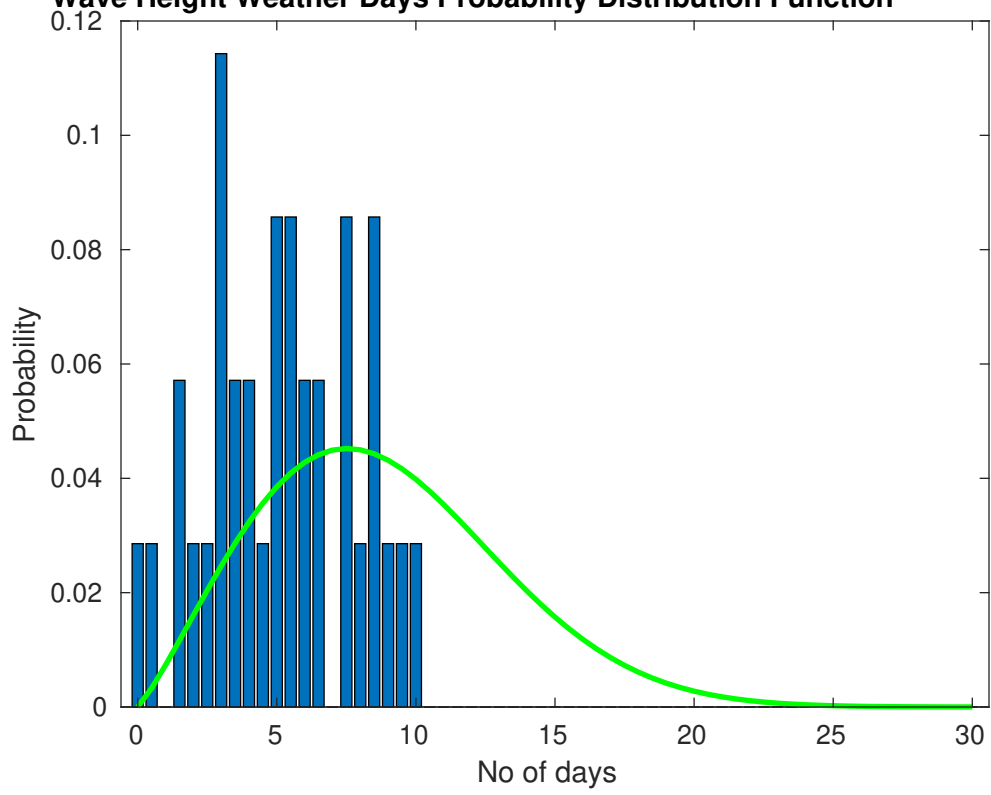
Winds

Mean Speed: 5 - 10 kts
The winds will occasionally reach 20 - 25 kts, but rarely greater.
Principle Direction, from: SSW

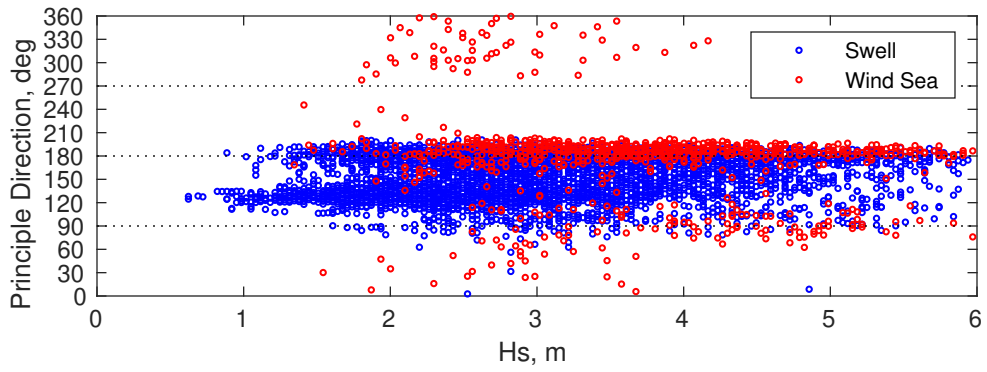
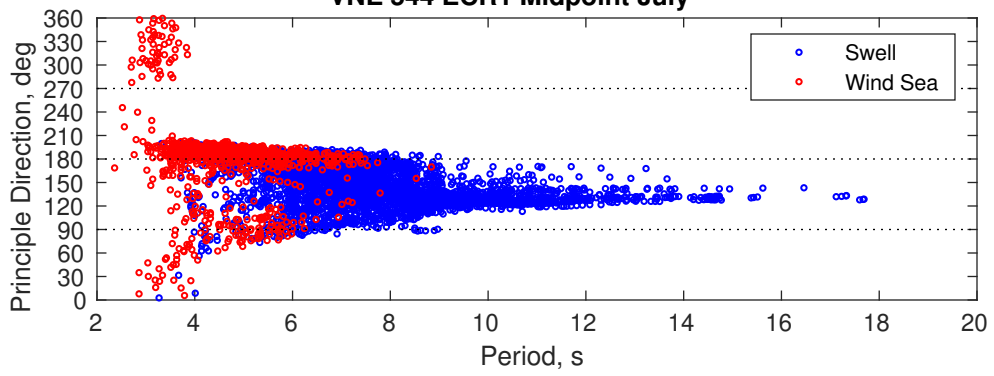
Severe Storms

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

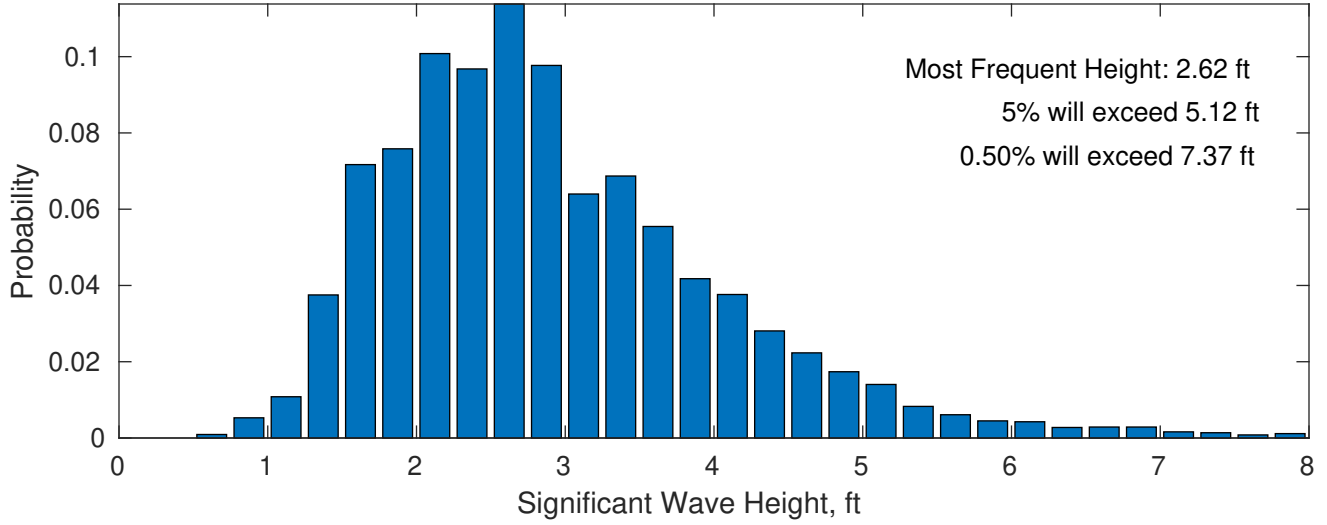
Wave Height Weather Days Probability Distribution Function



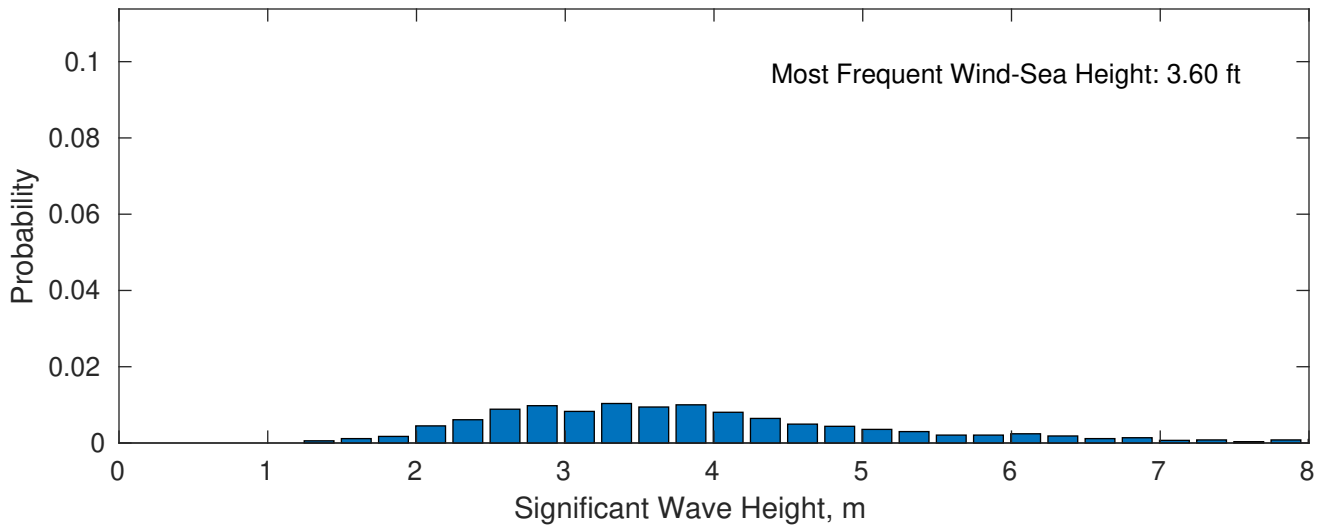
VNE 544 ECR1 Midpoint July



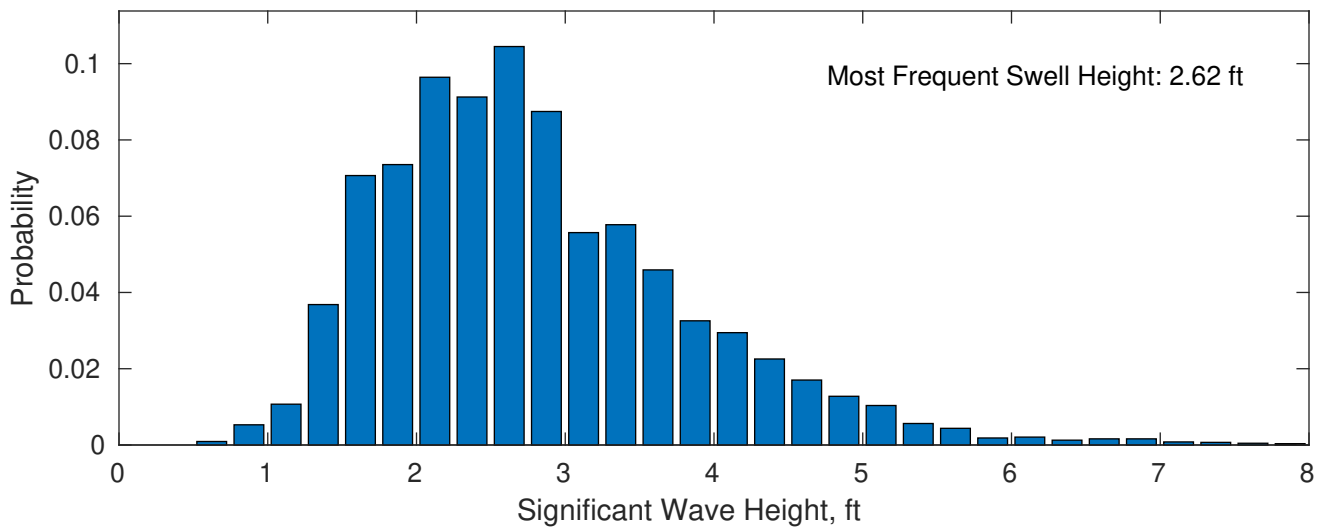
July Wave Height PDF: 1979 - 2015



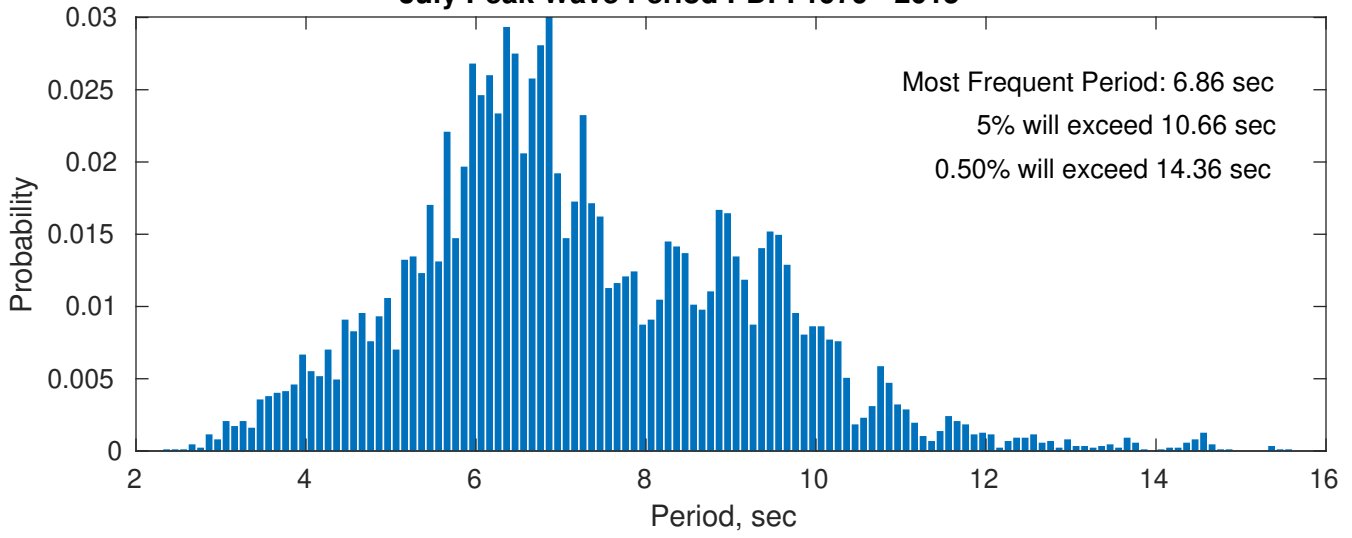
Wind-Sea: 11.66%



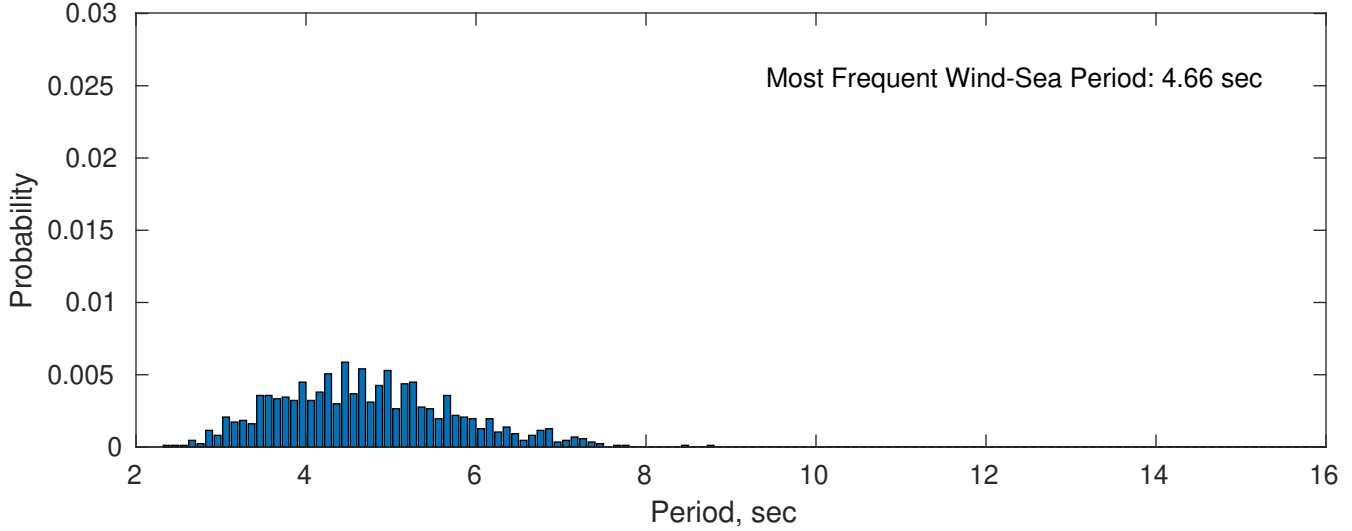
Swell: 88.34%



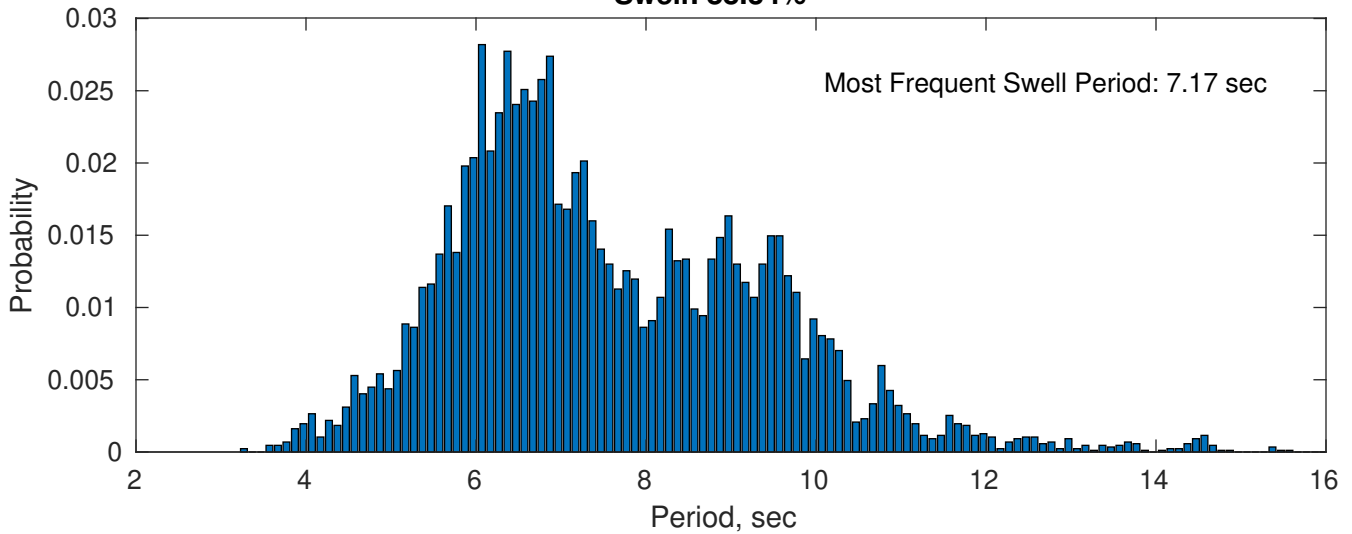
July Peak Wave Period PDF: 1979 - 2015



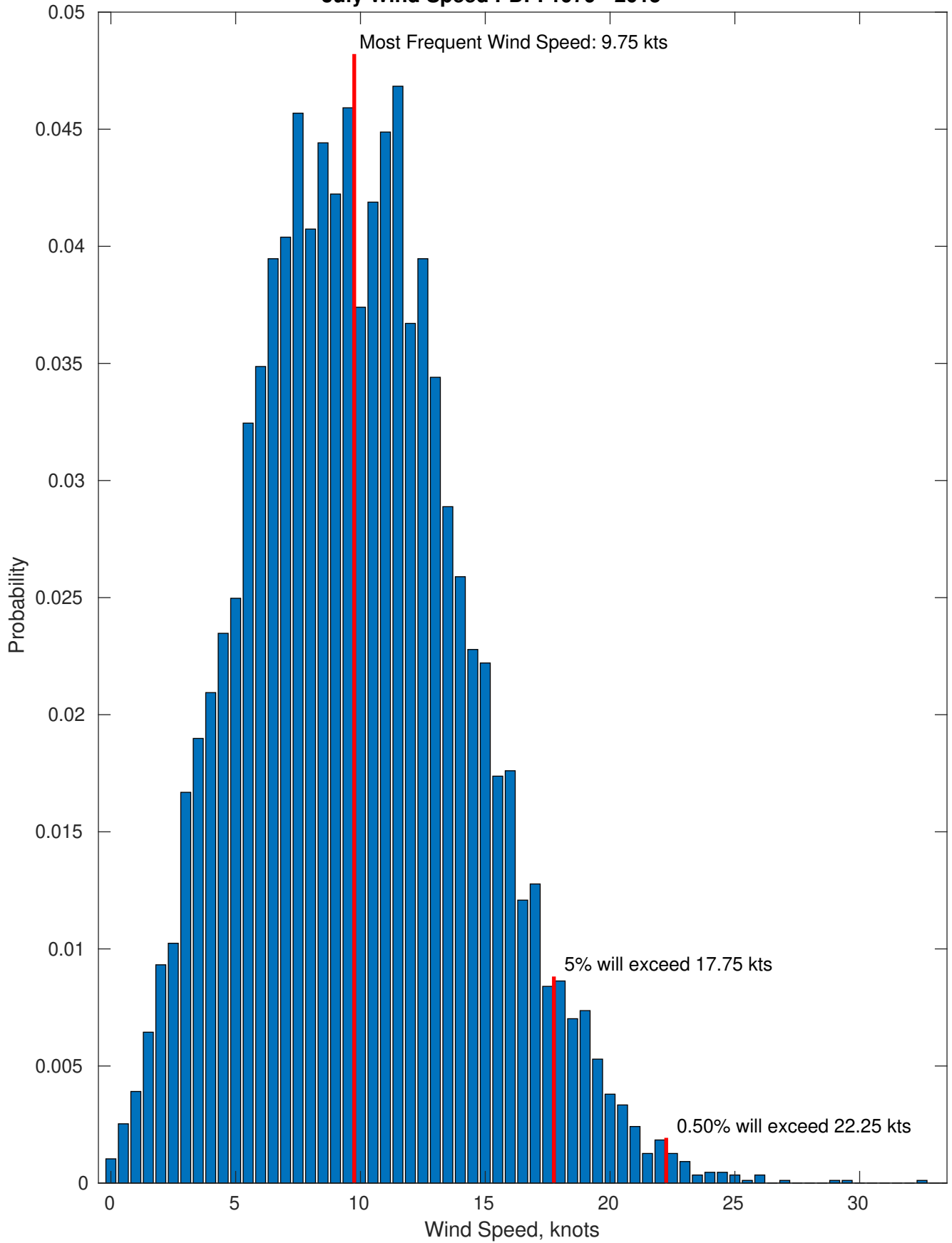
Wind-Sea: 11.66%



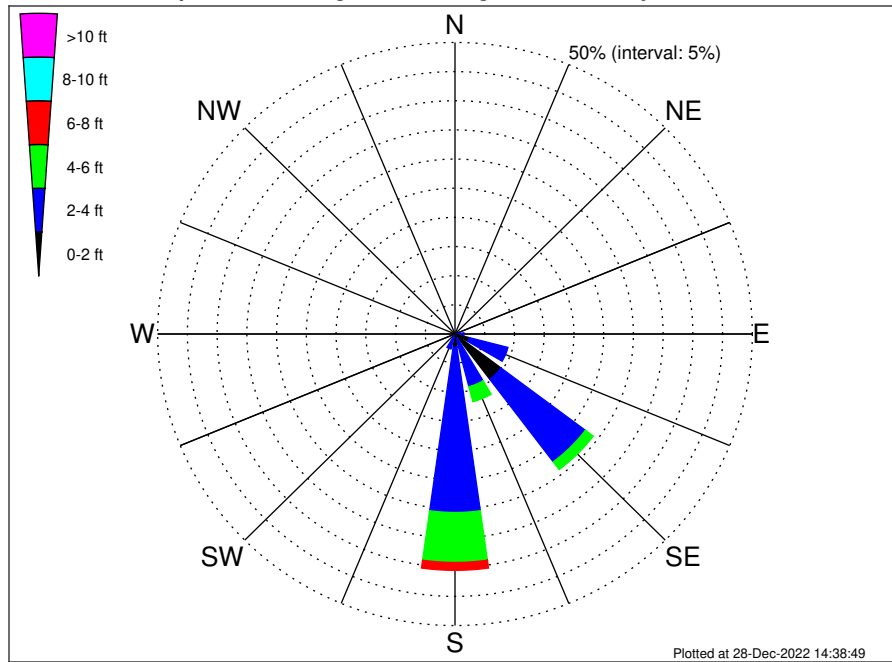
Swell: 88.34%



July Wind Speed PDF: 1979 - 2015



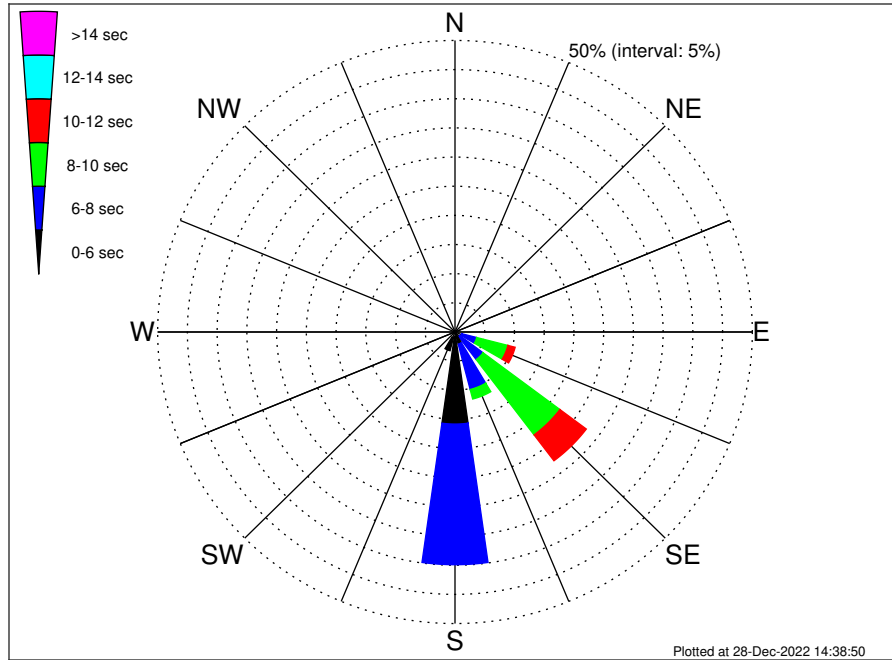
VNE 544 ECR1 Midpoint Climatological WaveHeight Rose for July: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	0.06	0.24	•	0.01	•	•	•	•	•	•	•	0.31
1 - 2 ft	0.01	0.01	0.01	0.01	0.09	2.44	9.45	0.84	2.24	0.37	0.01	0.02	0.01	0.02	•	•	15.55
2 - 4 ft	0.10	0.09	0.12	0.26	1.43	6.70	17.77	8.48	28.35	2.29	0.02	•	•	0.14	0.18	0.17	66.11
4 - 6 ft	0.01	•	•	0.14	0.77	1.12	1.65	2.66	8.56	0.69	•	•	•	•	0.01	0.01	15.62
6 - 8 ft	•	•	•	0.01	0.13	0.15	0.16	0.22	1.36	0.06	•	•	•	•	•	•	2.08
8 - 10 ft	•	•	•	•	•	0.01	0.03	0.01	0.23	•	•	•	•	•	•	•	0.29
10 - 12 ft	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	•	0.01
12 - 14 ft	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	0.01
14 - 16 ft	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	0.01
16 - 18 ft	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	0.01
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.13	0.10	0.13	0.43	2.42	10.47	29.30	12.22	40.79	3.41	0.03	0.02	0.01	0.16	0.20	0.18	100.00

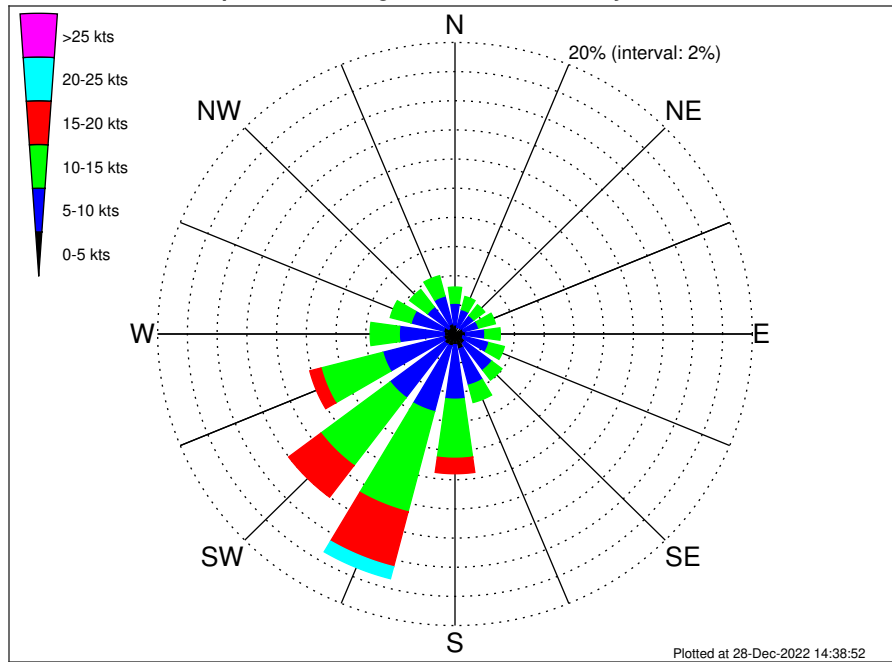
VNE 544 ECR1 Midpoint Climatological WavePeriod Rose for July: 1979 - 2015



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	0.12	0.10	0.10	0.13	0.05	0.17	0.14	0.24	0.78	0.97	0.03	0.02	0.01	0.16	0.20	0.18	3.41
4 - 6 sec	0.01	.	0.02	0.30	1.08	0.97	0.86	1.90	15.01	2.35	.	.	.	.	.	.	22.50
6 - 8 sec	.	.	.	.	1.16	2.64	4.91	8.04	24.12	0.09	.	.	.	.	.	.	40.97
8 - 10 sec	.	.	.	.	0.13	5.42	16.18	1.69	0.81	.	.	.	.	.	.	.	24.22
10 - 12 sec	.	.	.	.	.	1.25	5.56	0.29	0.08	.	.	.	.	.	.	.	7.18
12 - 14 sec	.	.	.	.	.	0.02	1.07	0.06	.	.	.	.	.	.	.	.	1.15
14 - 16 sec	.	.	.	.	.	.	0.45	.	.	.	.	.	.	.	.	.	0.45
18 - 20 sec	.	.	.	.	.	.	0.13	.	.	.	.	.	.	.	.	.	0.13
22 - 24 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	0.13	0.10	0.13	0.43	2.42	10.47	29.30	12.22	40.79	3.41	0.03	0.02	0.01	0.16	0.20	0.18	100.00

VNE 544 ECR1 Midpoint Climatological Wind Rose for July: 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	0.01	0.01	0.03	•	0.06	0.01	0.02	0.02	0.03	0.01	0.02	0.06	0.36
0 - 5 kts	0.61	0.47	0.49	0.58	0.70	0.55	0.77	1.06	0.68	0.84	0.85	0.75	0.68	0.78	0.52	0.67	11.00
5 - 10 kts	1.48	1.25	1.08	1.06	1.30	1.80	2.30	2.57	3.74	4.65	4.59	4.25	3.04	2.26	1.78	1.97	39.11
10 - 15 kts	1.10	0.92	0.92	1.16	1.04	1.07	0.85	1.23	4.05	7.10	5.83	4.29	1.96	1.45	1.50	1.44	35.91
15 - 20 kts	0.35	0.29	0.33	0.37	0.32	0.21	0.05	0.22	1.06	3.89	2.72	0.78	0.25	0.28	0.38	0.39	11.88
20 - 25 kts	0.02	0.02	0.07	0.06	0.07	0.01	0.02	0.05	0.12	0.85	0.15	0.03	0.01	0.02	0.07	0.03	1.61
25 - 30 kts	0.01	0.02	0.01	0.01	•	•	•	0.01	0.01	0.02	•	0.01	•	•	•	•	0.12
30 - 35 kts	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	•	•	0.01
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	3.60	2.99	2.92	3.25	3.44	3.65	4.04	5.13	9.71	17.36	14.17	10.14	5.97	4.80	4.27	4.56	100.00