

VNE 544 ECR2 Midpoint - September

Latitude: 40.24 N Longitude: 73.53 W

Weather Days

Wave Height > 4.0 ft Mean: 8.3 days Range: 4.7 - 11.9 days p50:10 days p75:7 days p90:5.5 days

Wave Height > 5.0 ft Mean: 4.7 days Range: 1.8 - 7.5 days p50:5 days p75:4 days p90:1.5 days

Wave Height > 6.0 ft Mean: 2.5 days Range: 0.3 - 4.7 days p50:3 days p75:1.5 days p90:0.5 days

Wind Speed > 20.0 knots Mean: 1.8 days Range: 0.9 - 2.7 days p50:2 days p75:1.5 days p90:1 days

Wind Speed > 25.0 knots Mean: 0.4 days Range: 0.0 - 0.9 days p50:0.5 days p75:0.5 days p90:0.5 days

Wind Speed > 30.0 knots Mean: 0.1 days Range: 0.0 - 0.3 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: 55%

5 days or longer: 19%

7 days or longer: 9%

Wave Height < 5.0 ft 3 days or longer: 67%

5 days or longer: 34%

7 days or longer: 20%

Wave Height < 6.0 ft 3 days or longer: 77%

5 days or longer: 47%

7 days or longer: 39%

Waves

Mean Height: 2 - 4 ft

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

Mean Period: 8 - 10 sec

The wave periods will occasionally reach 14 - 16 sec, but rarely longer.

Principle Direction, from: SE

WindSea/Swell: 14% / 86%

Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 25 - 30 kts, but rarely greater.

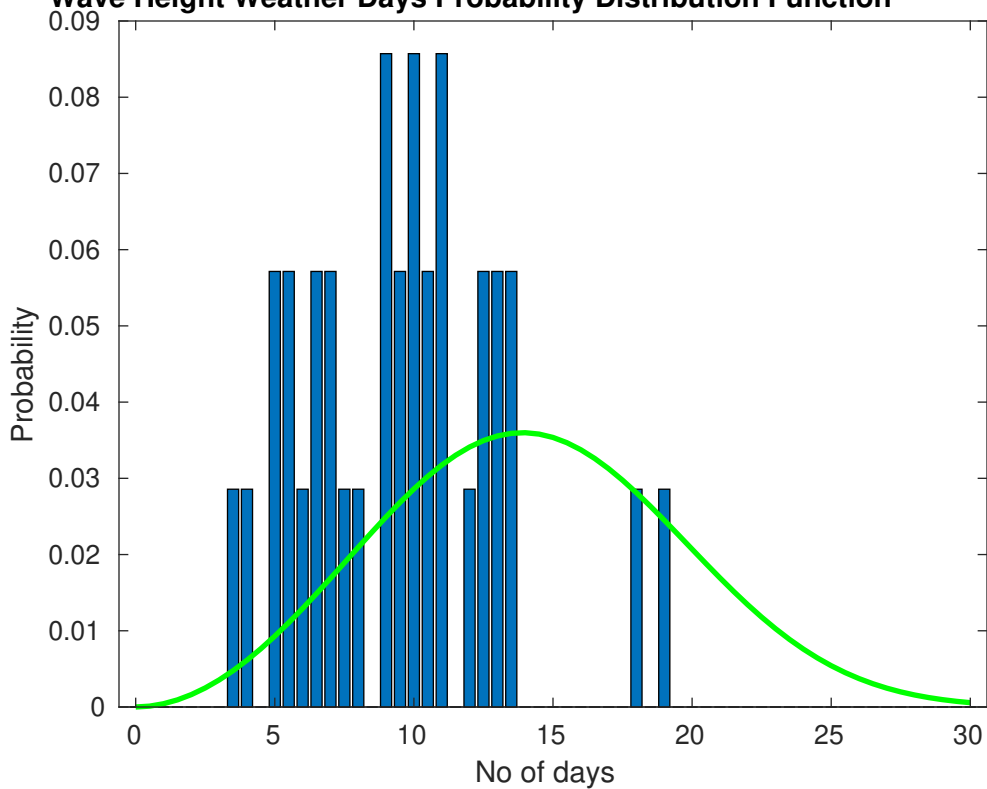
Principle Direction, from: SSW

Severe Storms

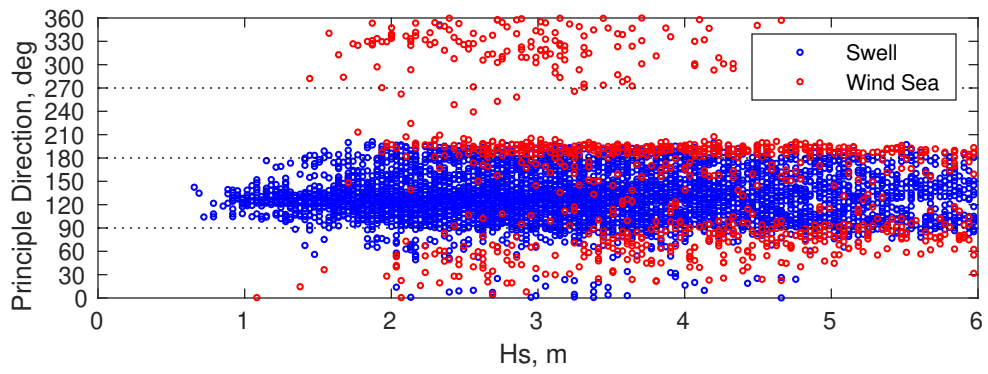
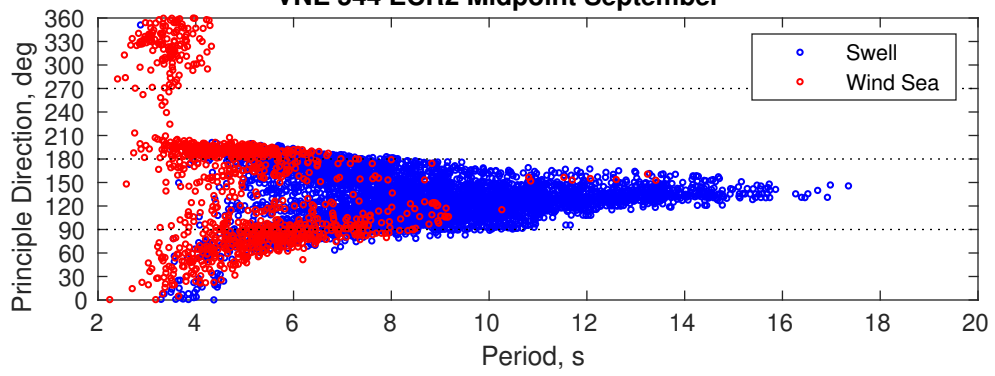
There is a 6 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 20 % chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

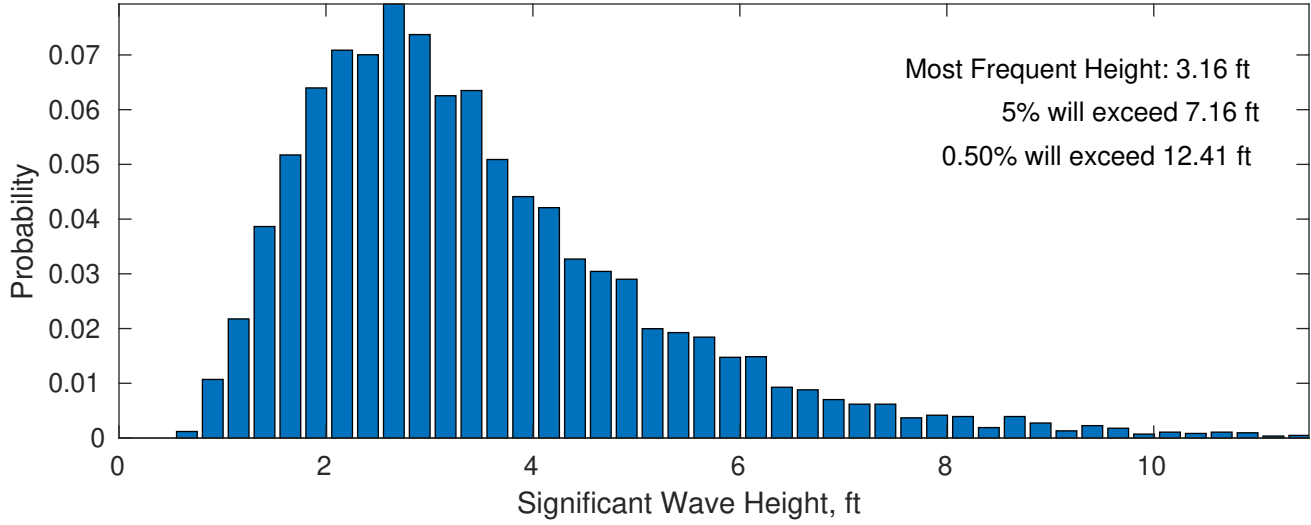
Wave Height Weather Days Probability Distribution Function



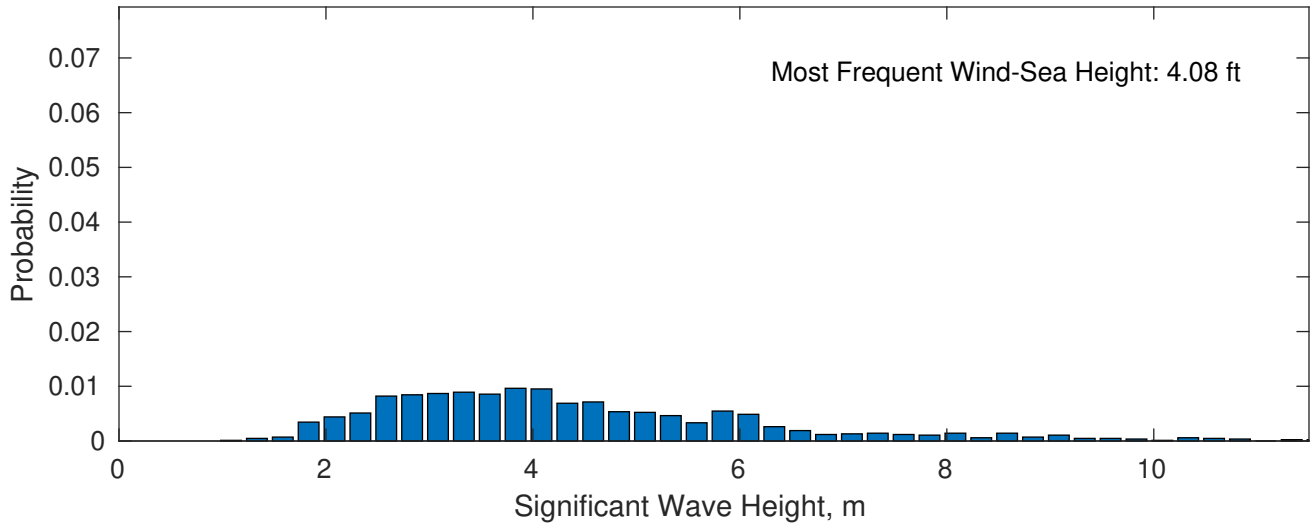
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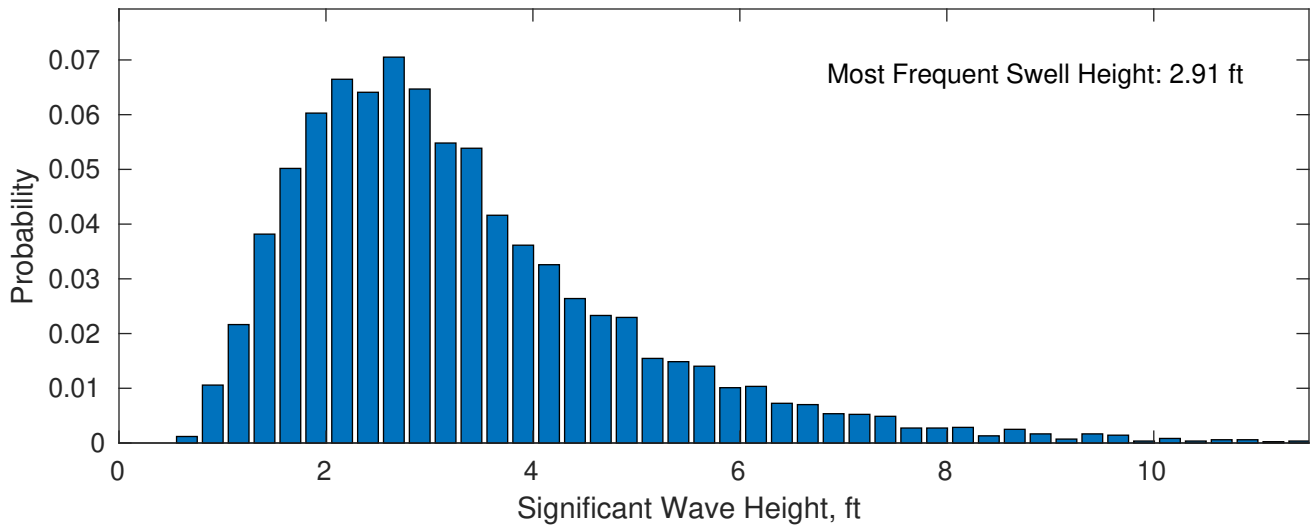
September Wave Height PDF: 1979 - 2015



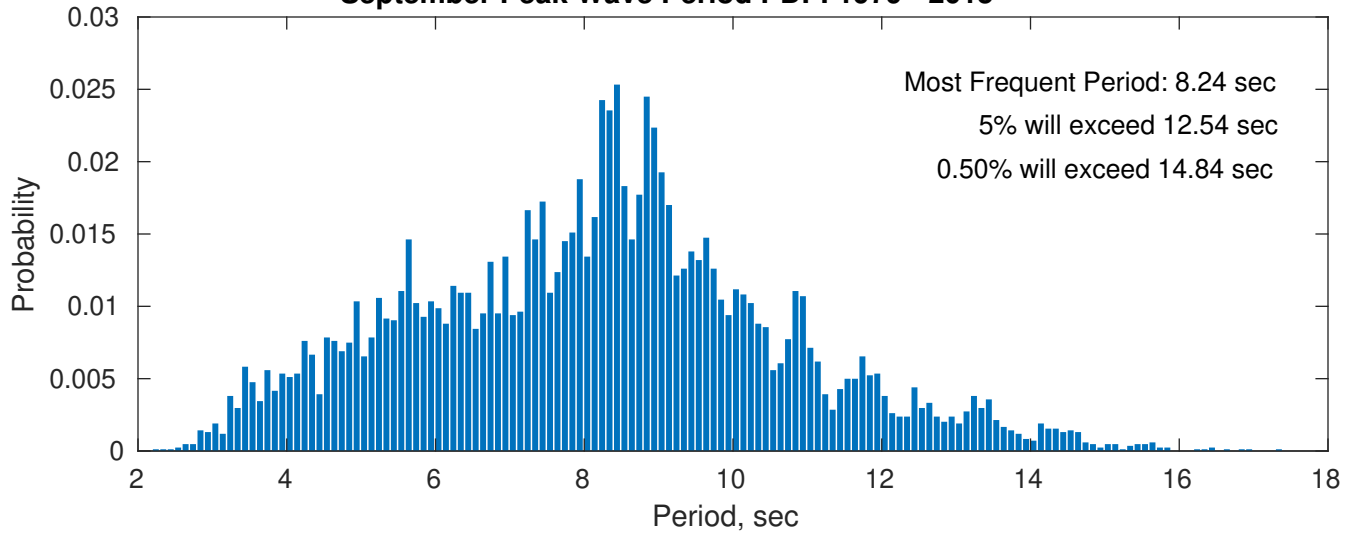
Wind-Sea: 14.29%



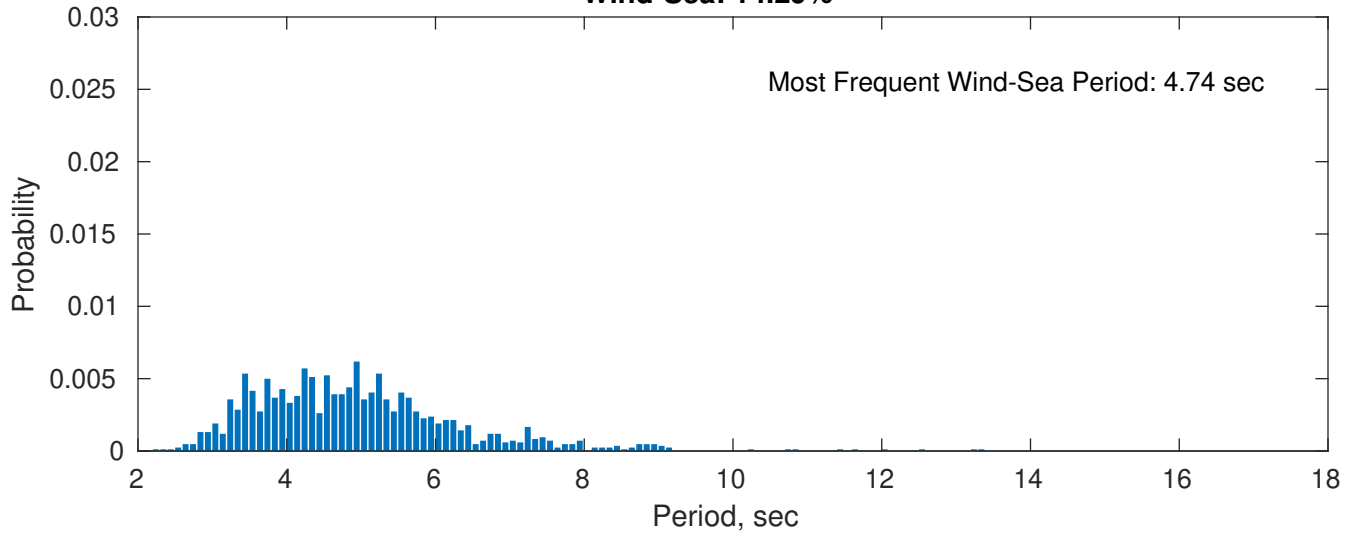
Swell: 85.71%



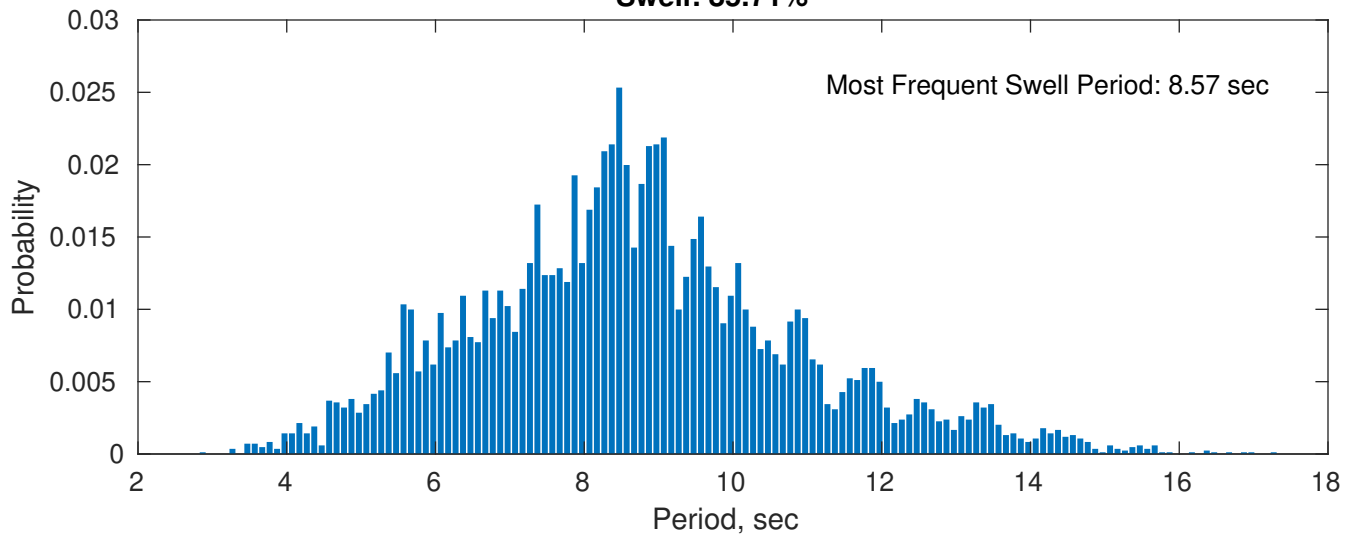
September Peak Wave Period PDF: 1979 - 2015



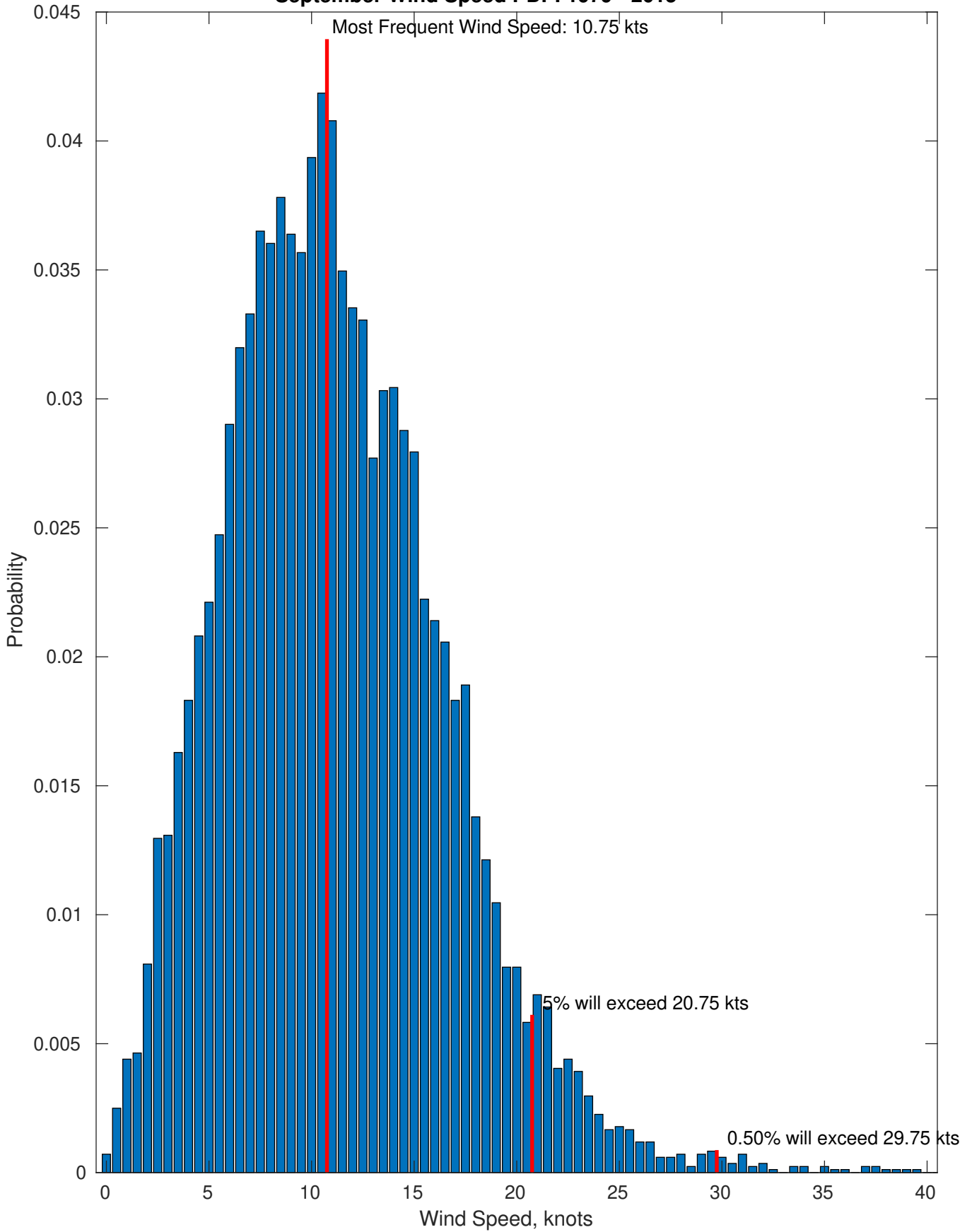
Wind-Sea: 14.29%



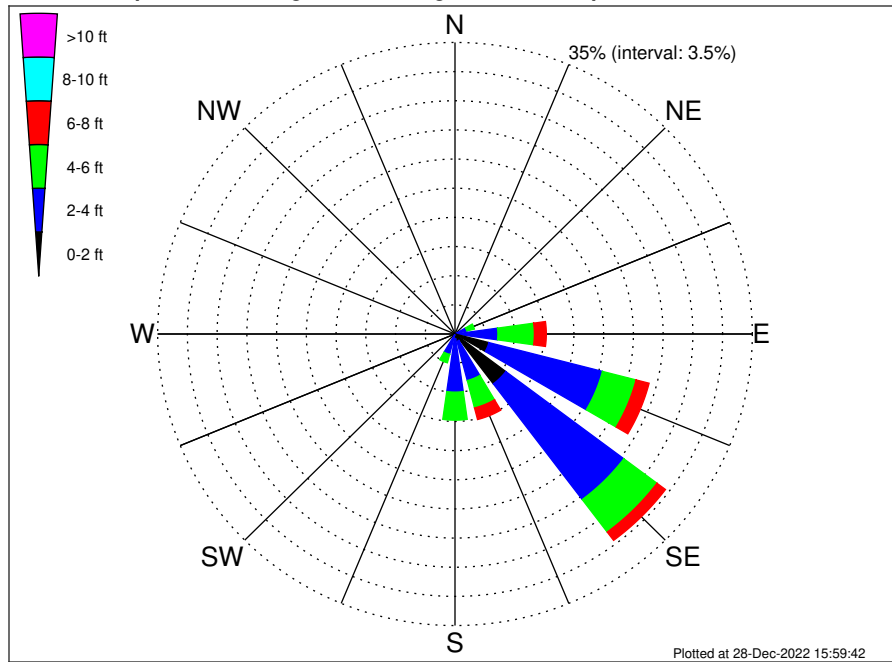
Swell: 85.71%



September Wind Speed PDF: 1979 - 2015



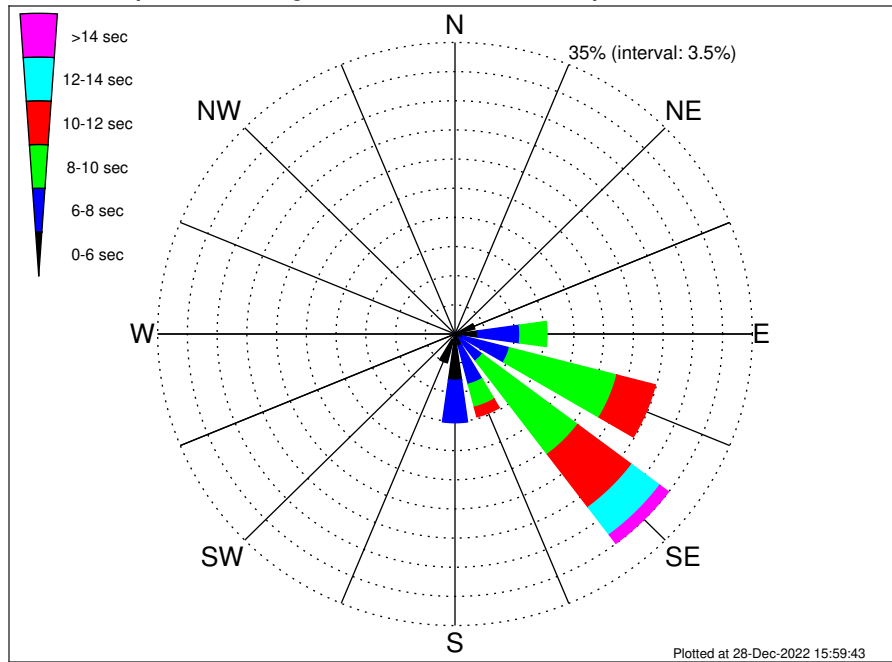
VNE 544 ECR2 Midpoint Climatological WaveHeight Rose for September: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	0.19	0.26	•	•	•	•	•	•	•	•	0.45
1 - 2 ft	0.02	0.02	0.02	0.13	0.37	3.94	7.23	0.89	0.61	0.13	•	•	0.01	0.04	0.11	13.56
2 - 4 ft	0.43	0.36	0.52	1.32	4.68	13.80	17.40	4.88	6.37	2.40	0.01	0.05	0.11	0.11	0.40	53.31
4 - 6 ft	0.06	0.13	0.29	0.90	4.29	4.09	4.89	3.40	3.37	1.03	•	•	•	0.08	0.04	22.62
6 - 8 ft	•	•	•	0.46	1.40	1.58	1.25	1.44	0.62	0.04	•	•	•	•	•	6.79
8 - 10 ft	•	•	0.01	0.02	0.51	0.78	0.32	0.30	0.15	•	•	•	•	•	•	2.10
10 - 12 ft	•	•	•	•	0.18	0.21	0.05	0.10	0.05	•	•	•	•	•	•	0.58
12 - 14 ft	•	•	•	•	0.05	0.17	0.04	0.04	0.04	•	•	•	•	•	•	0.32
14 - 16 ft	•	•	•	•	0.02	0.08	0.04	0.06	•	•	•	•	•	•	•	0.20
16 - 18 ft	•	•	•	•	•	0.01	•	0.01	•	•	•	•	•	•	•	0.02
> 18 ft	•	•	•	•	•	•	•	0.05	•	•	•	•	•	•	•	0.05
Total	0.51	0.51	0.84	2.84	11.51	24.86	31.46	11.15	11.20	3.60	0.01	0.05	0.12	0.23	0.48	100.00

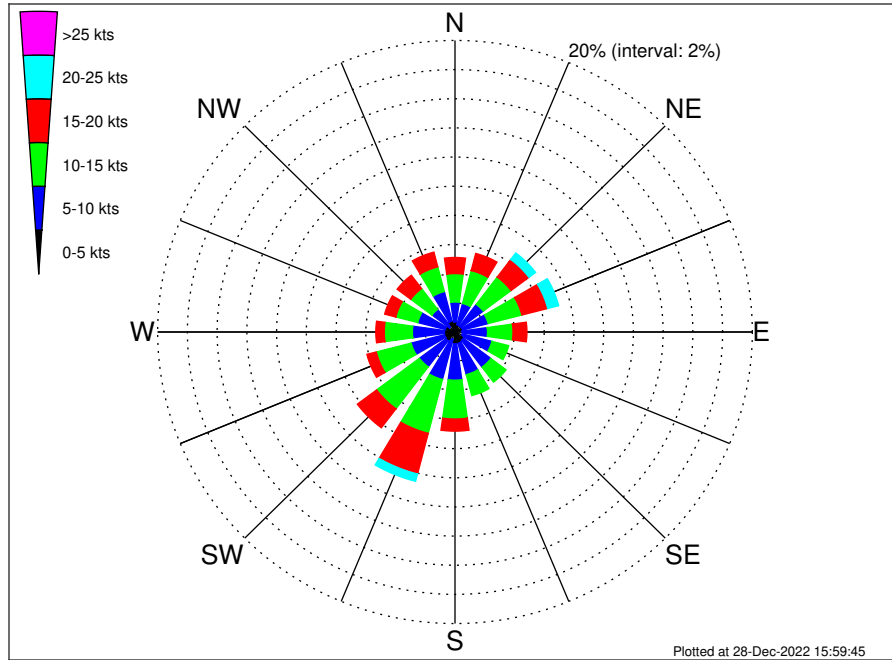
VNE 544 ECR2 Midpoint Climatological WavePeriod Rose for September: 1979 - 2015



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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 sec	0.45	0.27	0.33	0.19	0.10	0.06	0.06	0.08	0.44	0.75	0.01	0.05	0.12	0.18	0.44	0.58	4.11
4 - 6 sec	0.06	0.24	0.50	2.22	2.56	0.93	0.61	1.44	5.11	2.83	•	•	•	0.05	0.04	0.04	16.61
6 - 8 sec	•	•	0.01	0.42	4.99	5.64	3.35	4.71	5.10	0.02	•	•	•	•	•	•	24.24
8 - 10 sec	•	•	•	0.01	3.19	13.07	14.05	2.84	0.54	•	•	•	•	•	•	•	33.70
10 - 12 sec	•	•	•	•	0.68	4.67	7.98	1.20	0.01	•	•	•	•	•	•	•	14.54
12 - 14 sec	•	•	•	•	•	0.45	4.13	0.63	•	•	•	•	•	•	•	•	5.21
14 - 16 sec	•	•	•	•	•	0.05	1.20	0.24	•	•	•	•	•	•	•	•	1.49
18 - 20 sec	•	•	•	•	•	•	0.08	0.01	•	•	•	•	•	•	•	•	0.10
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.51	0.51	0.84	2.84	11.51	24.86	31.46	11.15	11.20	3.60	0.01	0.05	0.12	0.23	0.48	0.62	100.00

VNE 544 ECR2 Midpoint Climatological Wind Rose for September: 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	0.04	0.01	•	0.04	0.04	0.02	0.05	0.01	0.01	0.01	0.04	0.01	•	0.01	0.32
0 - 5 kts	0.67	0.51	0.46	0.52	0.49	0.48	0.68	0.77	0.76	0.50	0.75	0.71	0.68	0.65	0.46	0.76	9.86
5 - 10 kts	1.37	1.50	1.88	1.77	1.70	2.06	2.31	2.22	2.50	2.85	2.24	2.32	2.15	1.93	1.47	2.09	32.35
10 - 15 kts	1.95	2.33	2.34	2.34	1.71	1.17	1.28	1.49	2.66	3.82	3.60	2.43	1.89	1.52	1.80	1.75	34.08
15 - 20 kts	1.11	1.21	1.51	1.80	0.94	0.49	0.31	0.49	0.83	2.88	1.63	0.65	0.57	0.77	1.14	1.05	17.37
20 - 25 kts	0.23	0.42	0.56	0.76	0.27	0.06	0.05	0.18	0.36	0.52	0.24	0.12	0.14	0.26	0.25	0.23	4.64
25 - 30 kts	0.01	0.12	0.13	0.23	0.04	0.08	0.04	0.04	0.08	0.05	0.04	0.02	•	0.02	0.05	0.01	0.95
30 - 35 kts	•	0.04	•	0.06	0.04	0.02	0.02	0.01	0.05	0.01	•	•	0.01	0.02	•	•	0.29
35 - 40 kts	•	0.01	•	0.02	0.07	0.01	•	•	0.01	•	•	0.01	•	•	•	•	0.14
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	5.35	6.15	6.92	7.51	5.26	4.40	4.72	5.22	7.30	10.64	8.50	6.28	5.48	5.20	5.17	5.90	100.00