

RWE Humboldt Bay OCS-P-0561 - July

Latitude: 41.00 N Longitude: 125.00 W

Weather Days

Wave Height > 6.0 ft Mean: 17.1 days Range: 13.7 - 20.4 days p50:21 days p75:18 days p90:16 days

Wave Height > 7.0 ft Mean: 13.8 days Range: 10.1 - 17.5 days p50:16 days p75:13 days p90:11 days

Wave Height > 8.0 ft Mean: 10.8 days Range: 7.2 - 14.3 days p50:11.5 days p75:8.5 days p90:7.5 days

Wind Speed > 10.0 knots Mean: 24.1 days Range: 21.0 - 27.1 days p50:25 days p75:22.5 days p90:19.5 days

Wind Speed > 15.0 knots Mean: 19.8 days Range: 15.7 - 23.9 days p50:20.5 days p75:16.5 days p90:13.5 days

Wind Speed > 20.0 knots Mean: 13.6 days Range: 9.6 - 17.6 days p50:14 days p75:11 days p90:8 days

Working Window

Wave Height < 6.0 ft
A 1 day or longer window will statistically occur 3.0 times per month
A 2 day or longer window will statistically occur 1.7 times per month
A 3 day or longer window will statistically occur 1.0 times per month

Wave Height < 7.0 ft
A 1 day or longer window will statistically occur 3.8 times per month
A 2 day or longer window will statistically occur 2.5 times per month
A 3 day or longer window will statistically occur 1.8 times per month

Wave Height < 8.0 ft
A 1 day or longer window will statistically occur 4.0 times per month
A 2 day or longer window will statistically occur 3.0 times per month
A 3 day or longer window will statistically occur 2.1 times per month

Waves

Mean Height: 6 - 8 ft

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

Mean Period: 8 - 10 sec

The wave periods will occasionally reach 22 - 24 sec, but rarely longer.

Principle Direction, from: NNW

WindSea/Swell: 44% / 56%

Winds

Mean Speed: 15 - 20 kts

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

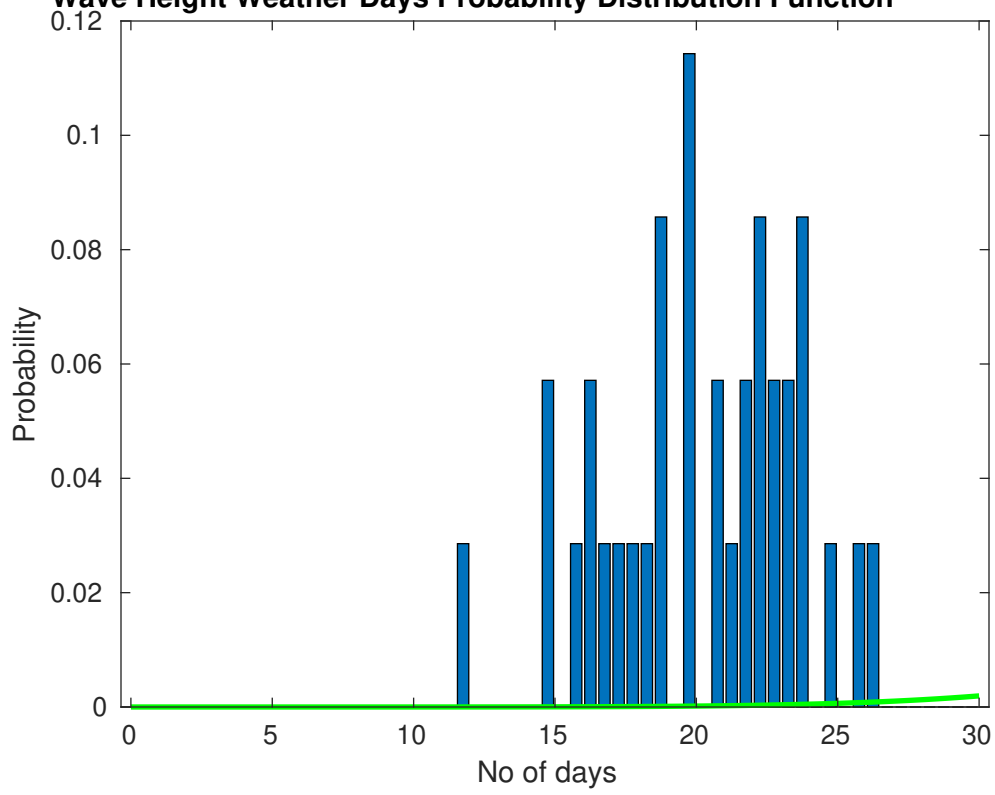
Principle Direction, from: NNW

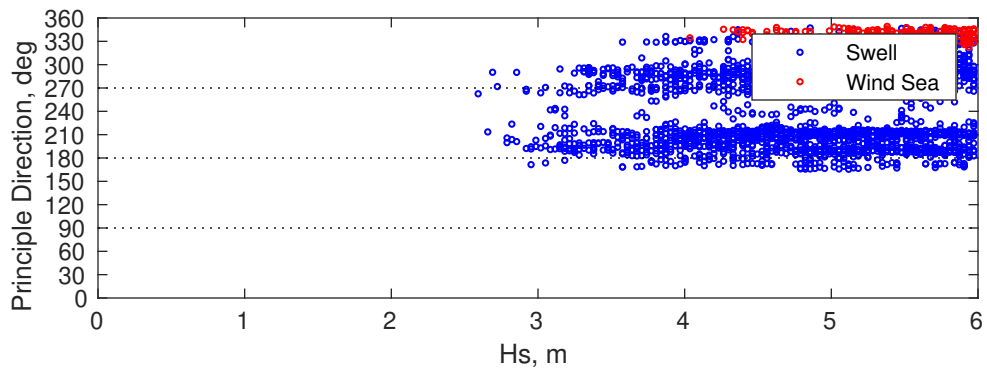
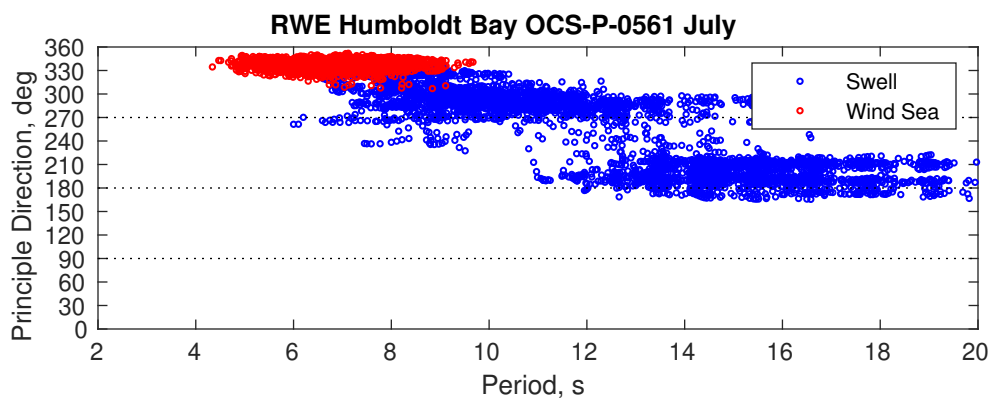
Severe Storms

There is a 40 % chance of a storm occurring in the month with winds peaking above 34 kts.

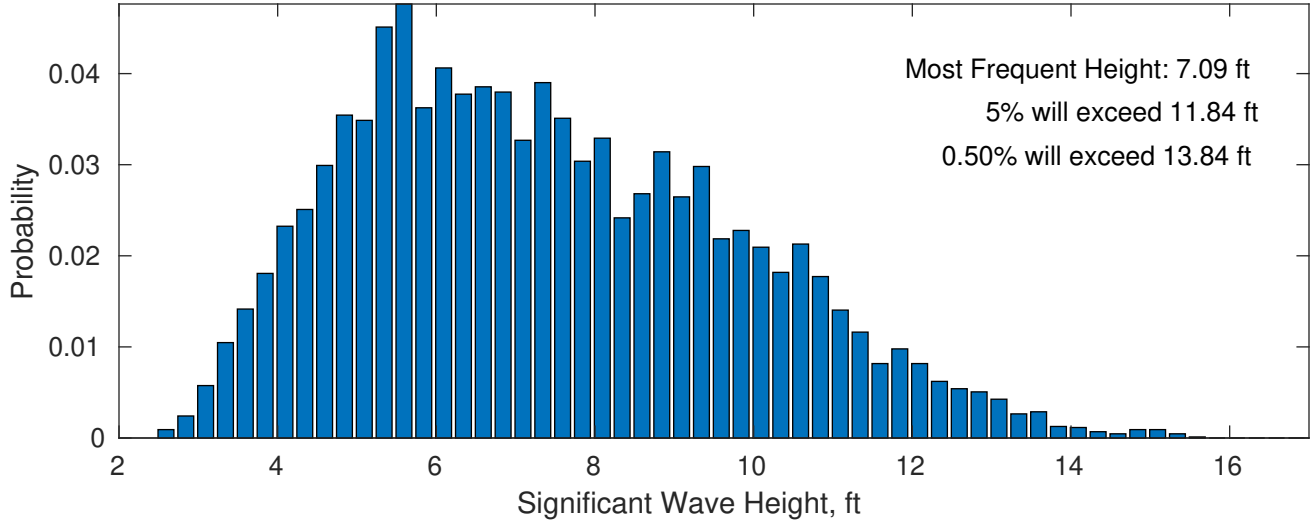
There is little chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

Wave Height Weather Days Probability Distribution Function

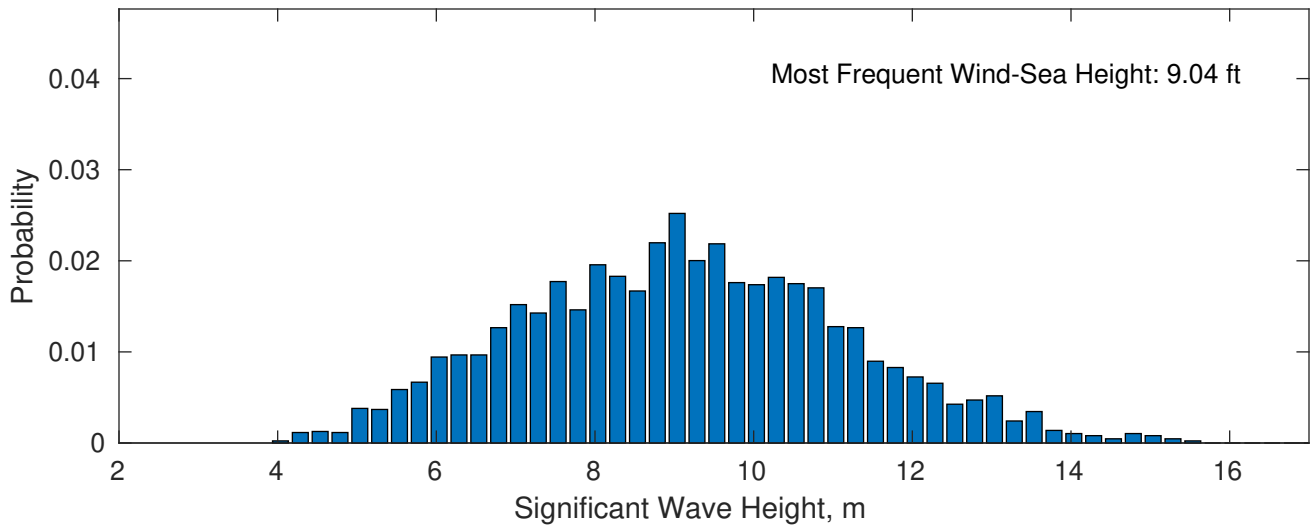




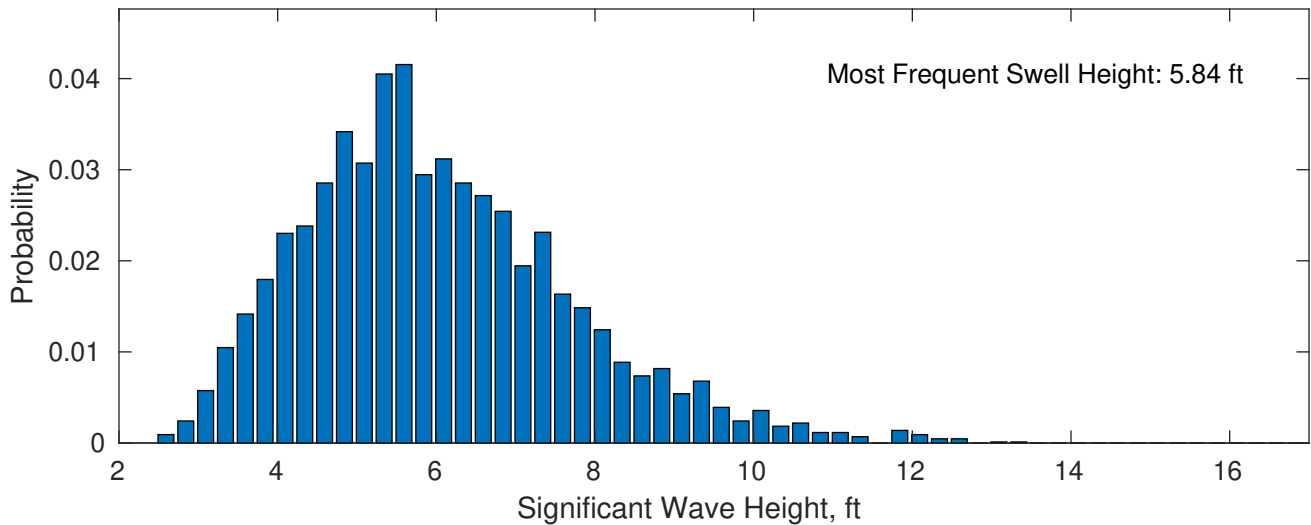
July Wave Height PDF: 1979 - 2015



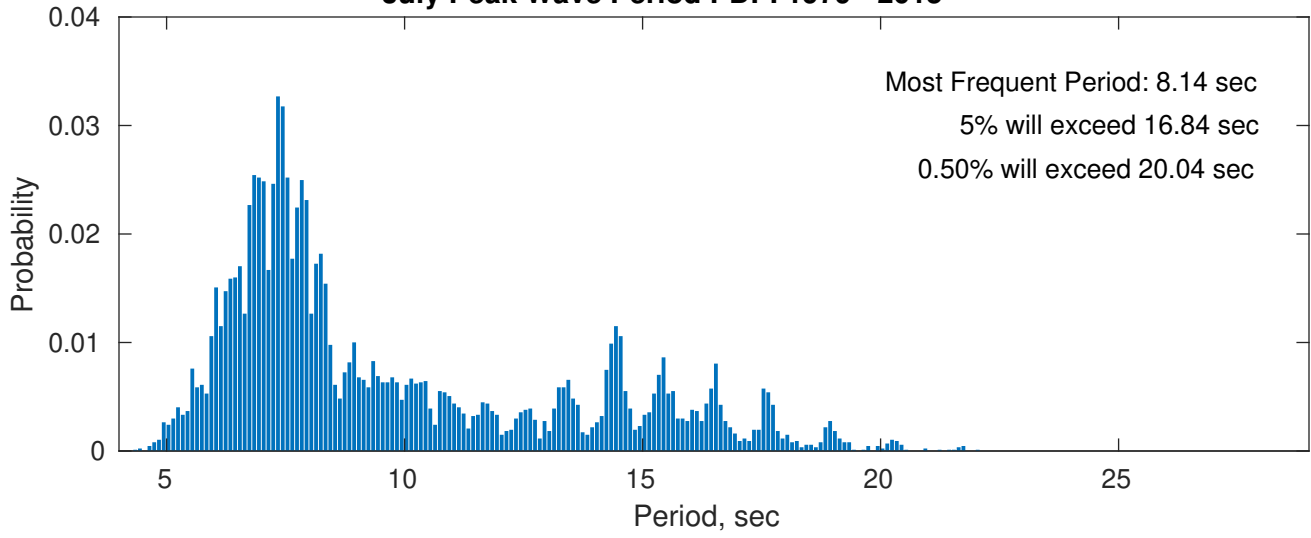
Wind-Sea: 44.11%



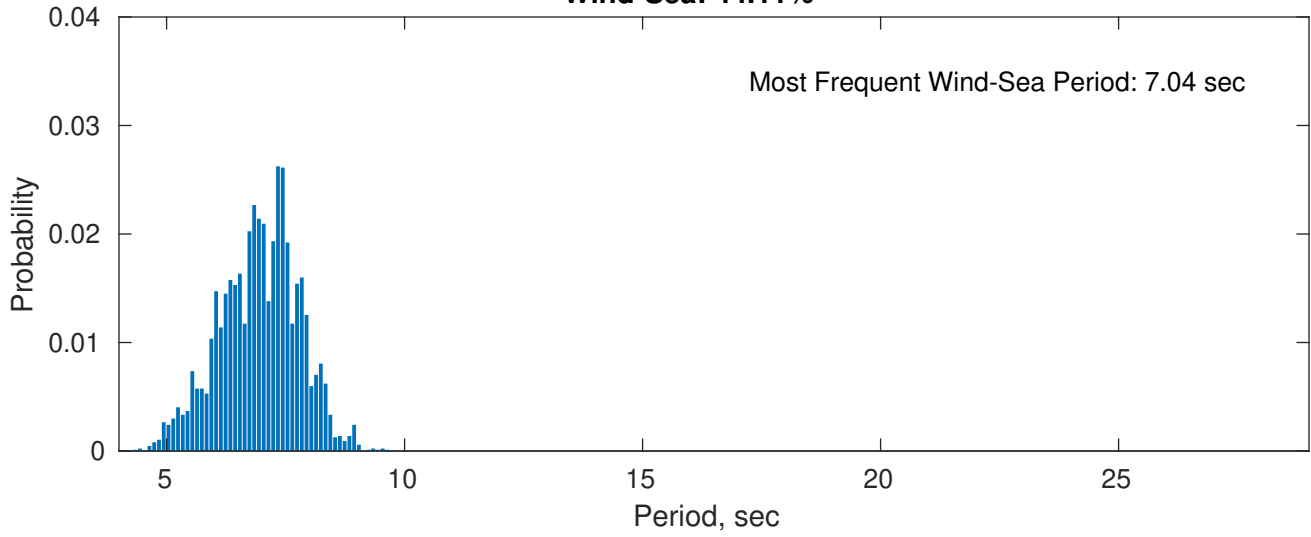
Swell: 55.89%



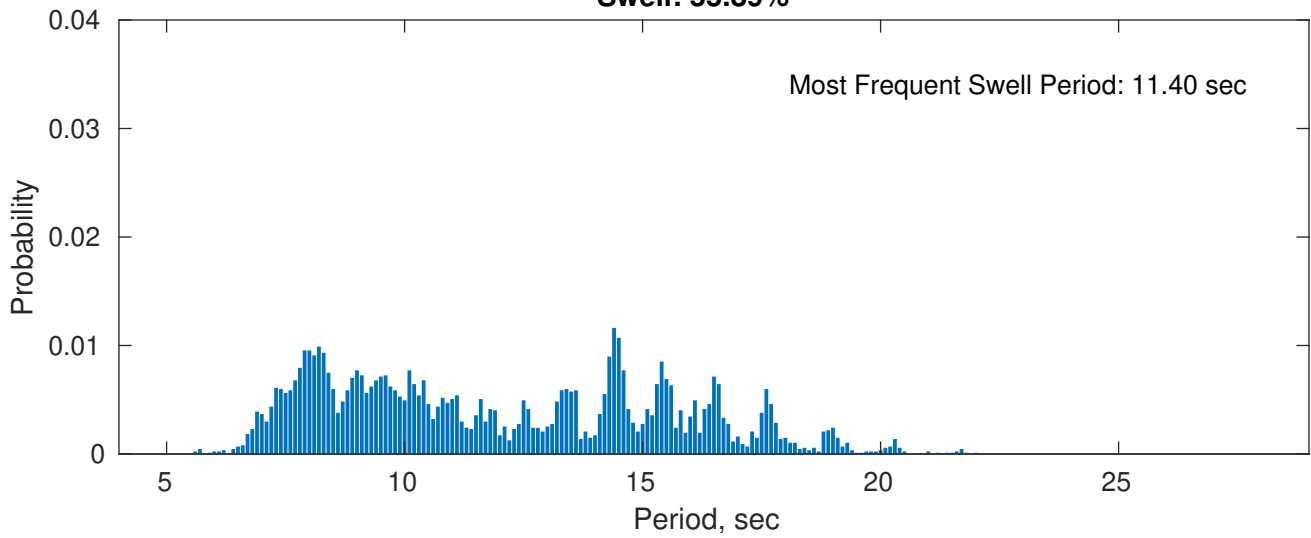
July Peak Wave Period PDF: 1979 - 2015



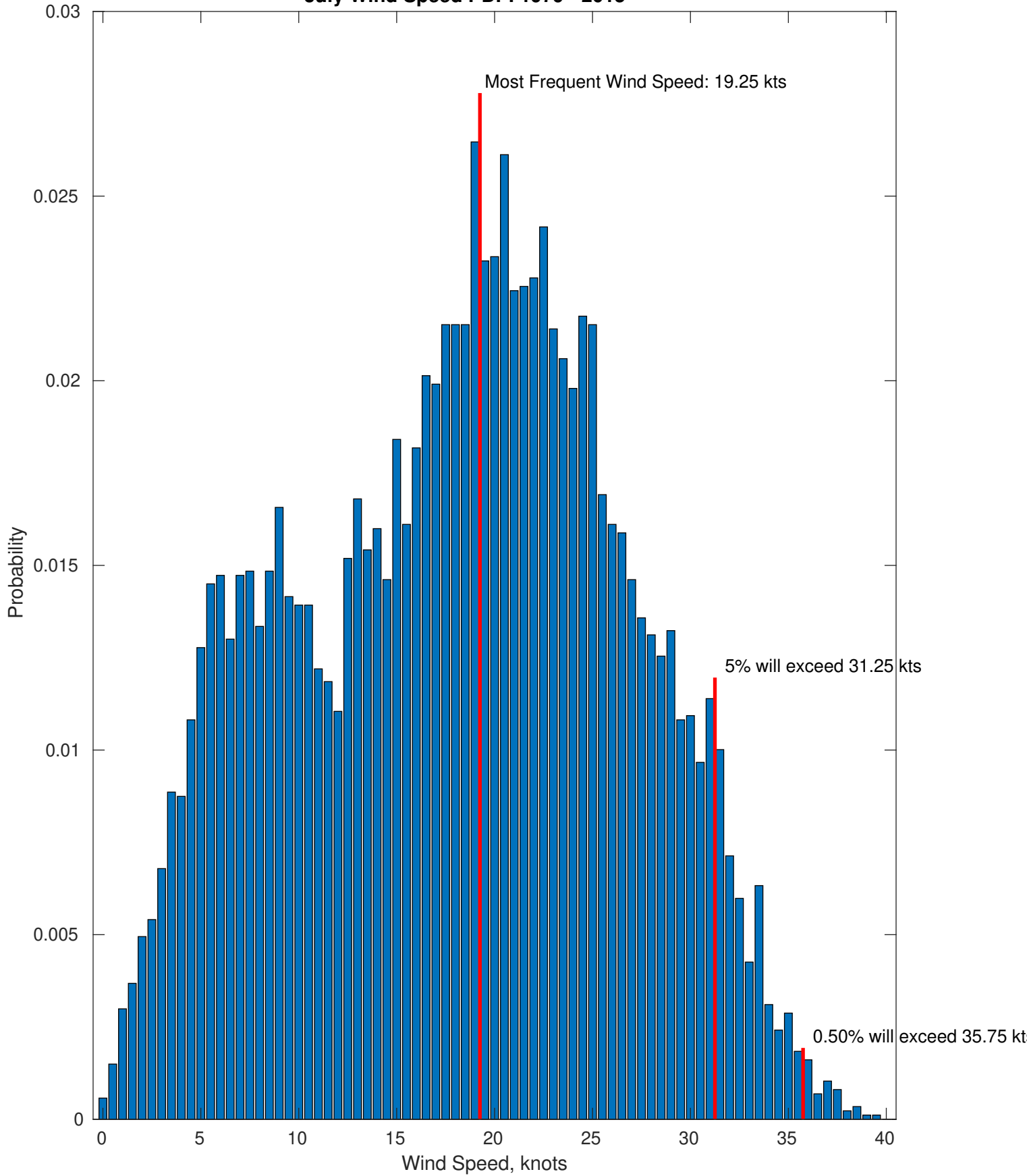
Wind-Sea: 44.11%



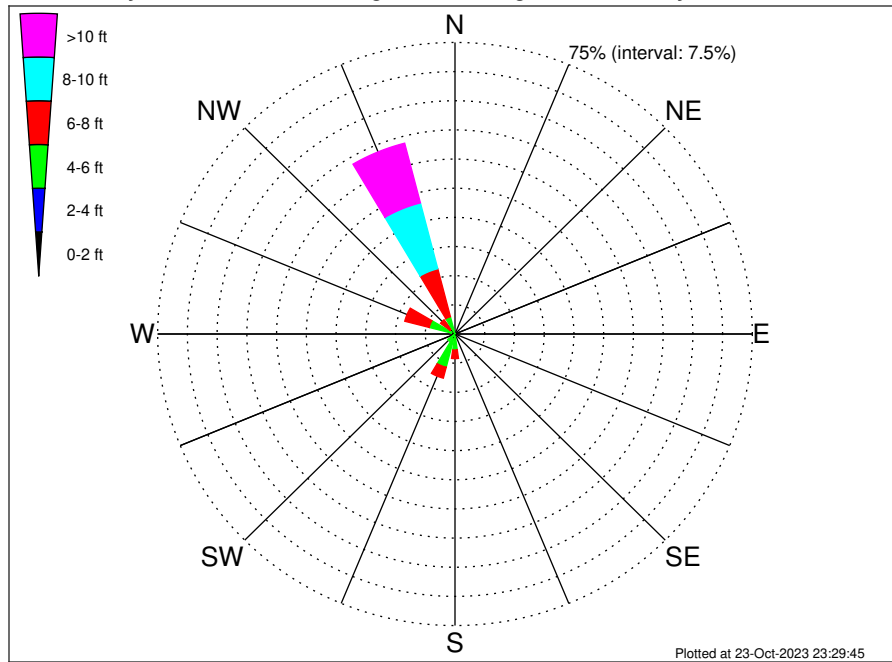
Swell: 55.89%



July Wind Speed PDF: 1979 - 2015



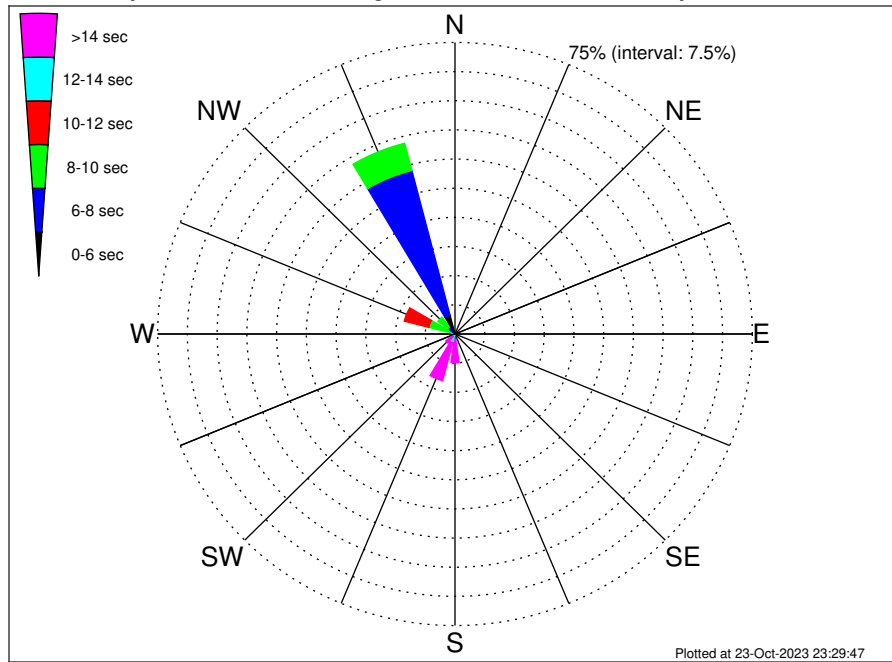
RWE Humboldt Bay OCS-P-0561 Climatological WaveHeight Rose for July: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1 - 2 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2 - 4 ft	.	.	.	.	.	.	.	0.03	0.64	1.40	0.39	0.10	0.74	0.94	0.02	0.10	4.38
4 - 6 ft	0.01	.	.	.	.	.	.	0.20	3.49	7.45	1.92	0.40	1.75	5.80	1.57	4.50	27.08
6 - 8 ft	.	.	.	.	.	.	.	.	2.21	2.89	0.48	0.22	1.38	6.35	2.99	12.75	29.28
8 - 10 ft	0.07	.	.	.	.	.	.	0.01	0.81	0.61	0.14	0.02	0.10	1.82	1.24	17.48	22.30
10 - 12 ft	0.10	.	.	.	.	.	.	.	0.17	0.05	.	0.03	0.02	0.23	0.23	11.76	12.60
12 - 14 ft	0.02	.	.	.	.	.	.	.	0.02	.	.	.	.	0.21	.	3.59	3.84
14 - 16 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.52	0.52
16 - 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
> 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	0.21	.	.	.	.	.	.	0.24	7.34	12.39	2.93	0.78	3.99	15.35	6.05	50.70	100.00

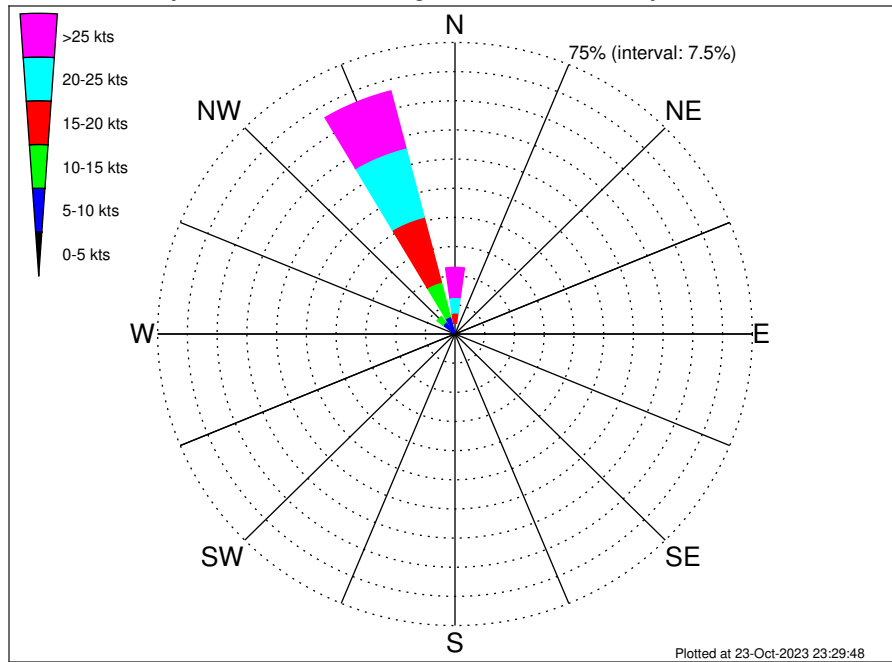
RWE Humboldt Bay OCS-P-0561 Climatological WavePeriod Rose for July: 1979 - 2015



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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 - 6 sec	0.01	•	•	•	•	•	•	•	•	•	•	•	0.01	•	0.16	5.05	5.24
6 - 8 sec	0.20	•	•	•	•	•	•	•	•	•	•	0.06	0.37	0.70	2.08	38.40	41.81
8 - 10 sec	•	•	•	•	•	•	•	•	•	0.06	0.24	1.08	6.16	3.16	7.24	17.94	
10 - 12 sec	•	•	•	•	•	•	•	0.18	0.32	0.06	0.12	1.48	6.38	0.62	0.01	9.17	
12 - 14 sec	•	•	•	•	•	•	•	0.01	1.23	1.98	0.76	0.24	0.83	1.43	0.02	•	6.50
14 - 16 sec	•	•	•	•	•	•	•	0.16	2.42	5.93	1.31	0.10	0.22	0.49	•	•	10.63
18 - 20 sec	•	•	•	•	•	•	•	0.03	2.51	3.12	0.64	0.02	•	0.16	•	•	6.49
22 - 24 sec	•	•	•	•	•	•	•	0.03	1.00	1.05	0.10	•	•	0.03	•	•	2.22
Total	0.21	•	•	•	•	•	•	0.24	7.34	12.39	2.93	0.78	3.99	15.35	6.05	50.70	100.00

RWE Humboldt Bay OCS-P-0561 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	0.01	•	•	0.03	0.01	0.01	•	0.01	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.21
0 - 5 kts	0.32	0.17	0.13	0.09	0.09	0.08	0.10	0.21	0.33	0.36	0.39	0.39	0.56	0.83	0.58	0.59	5.22
5 - 10 kts	0.93	0.18	0.02	•	0.01	•	0.05	0.26	0.83	0.98	0.85	0.77	0.67	1.55	3.21	4.03	14.35
10 - 15 kts	1.48	0.01	•	•	•	•	•	0.14	0.76	0.49	0.13	0.02	0.01	0.02	1.88	9.15	14.10
15 - 20 kts	2.68	•	•	•	•	•	•	0.07	0.17	0.15	0.02	•	•	•	0.32	17.28	20.70
20 - 25 kts	4.00	0.01	•	•	•	•	•	0.02	0.06	•	•	•	•	•	0.01	18.39	22.50
25 - 30 kts	4.04	•	•	•	•	•	•	•	0.05	•	•	•	•	•	•	10.75	14.83
30 - 35 kts	3.16	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	3.95	7.12
35 - 40 kts	0.51	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.46	0.97
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	17.15	0.38	0.15	0.13	0.12	0.09	0.15	0.71	2.24	2.00	1.40	1.20	1.25	2.42	6.01	64.60	100.00