

## RWE Humboldt Bay OCS-P-0561 - November

Latitude: 41.00 N Longitude: 125.00 W

### Weather Days

Wave Height > 6.0 ft Mean: 22.9 days Range: 21.0 - 24.8 days p50:27 days p75:25.5 days p90:23.5 days

Wave Height > 7.0 ft Mean: 19.9 days Range: 16.9 - 22.8 days p50:24.5 days p75:22.5 days p90:21.5 days

Wave Height > 8.0 ft Mean: 16.1 days Range: 12.5 - 19.8 days p50:21 days p75:19 days p90:17 days

Wind Speed > 10.0 knots Mean: 19.6 days Range: 17.3 - 22.0 days p50:20 days p75:18.5 days p90:16.5 days

Wind Speed > 15.0 knots Mean: 12.7 days Range: 9.9 - 15.5 days p50:13 days p75:11.5 days p90:9 days

Wind Speed > 20.0 knots Mean: 7.1 days Range: 4.6 - 9.6 days p50:7.5 days p75:5.5 days p90:4 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 1.1 times per month  
A 2 day or longer window will statistically occur 0.4 times per month  
A 3 day or longer window will statistically occur 0.1 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 1.7 times per month  
A 2 day or longer window will statistically occur 0.8 times per month  
A 3 day or longer window will statistically occur 0.4 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 2.9 times per month  
A 2 day or longer window will statistically occur 1.2 times per month  
A 3 day or longer window will statistically occur 0.7 times per month

### Waves

Mean Height: 10 - 12 ft

The wave heights will occasionally reach > 18 ft, but rarely higher.

Mean Period: 12 - 14 sec

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

Principle Direction, from: WNW

WindSea/Swell: 3% / 97%

### Winds

Mean Speed: 10 - 15 kts

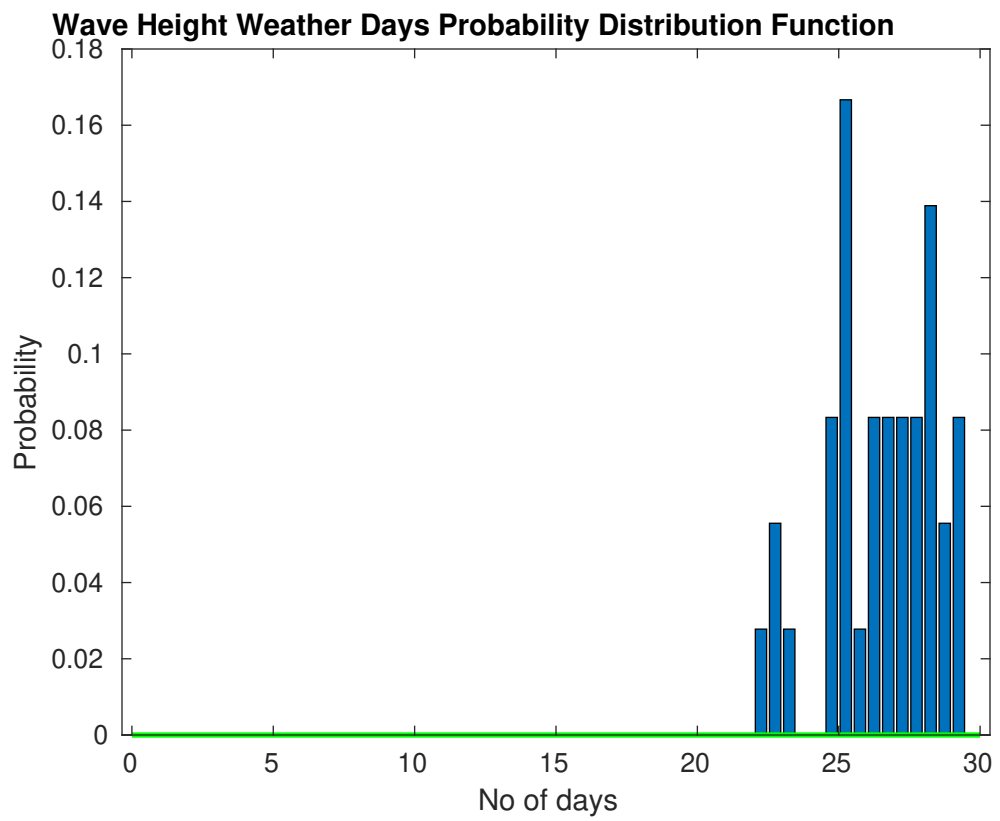
The winds will occasionally reach 35 - 40 kts, but rarely greater.

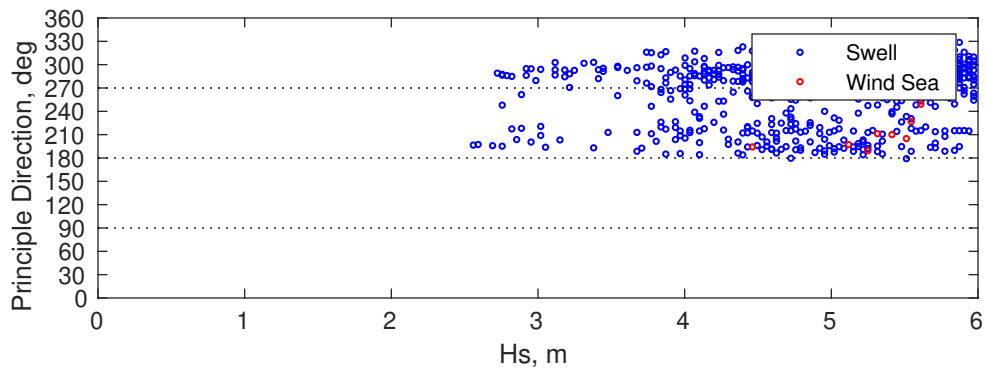
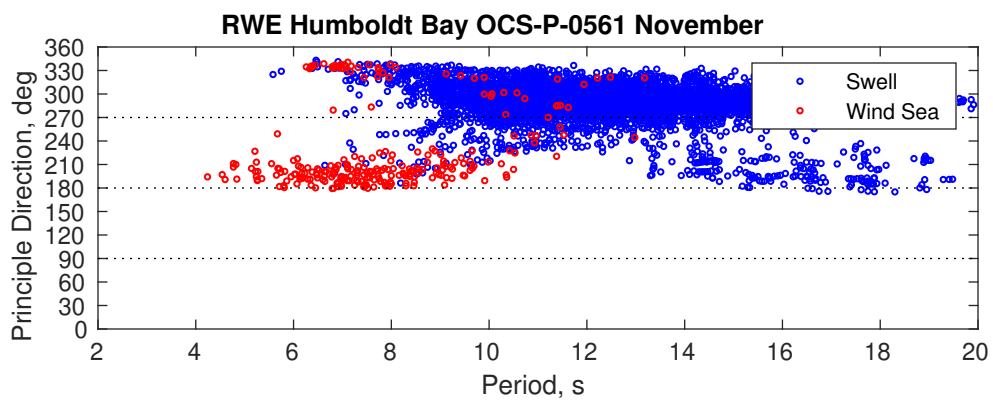
Principle Direction, from: N

### Severe Storms

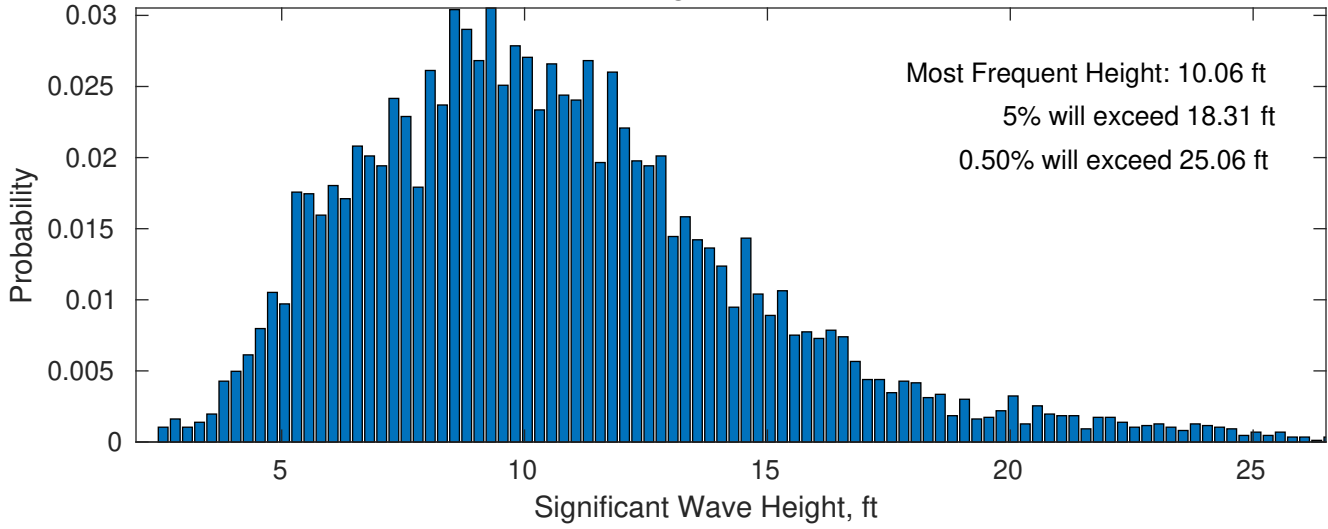
There is a 39 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 50 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

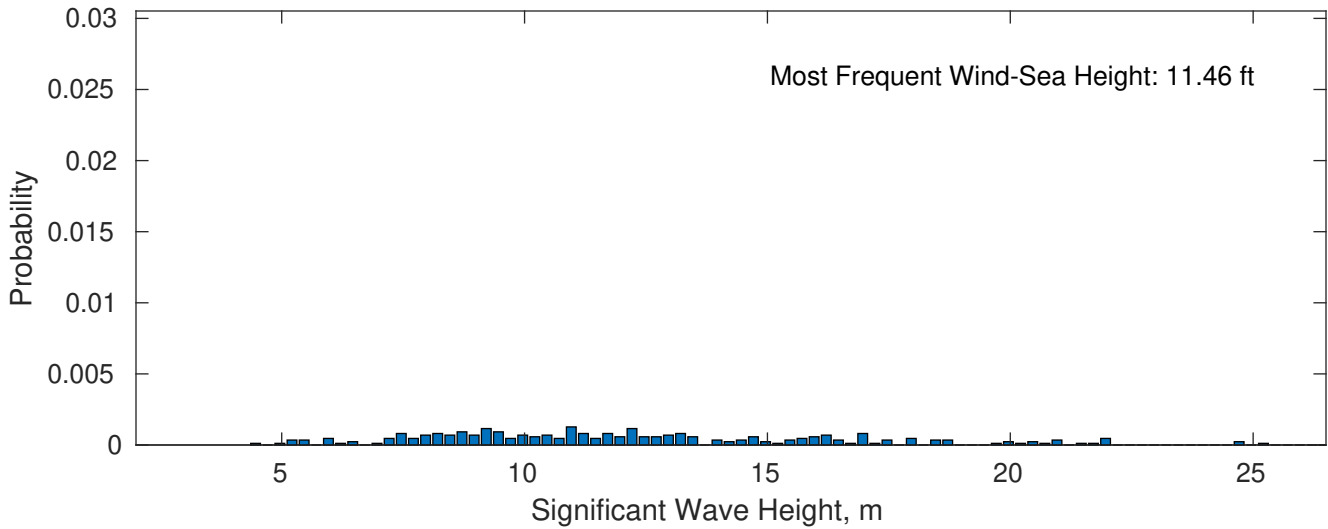




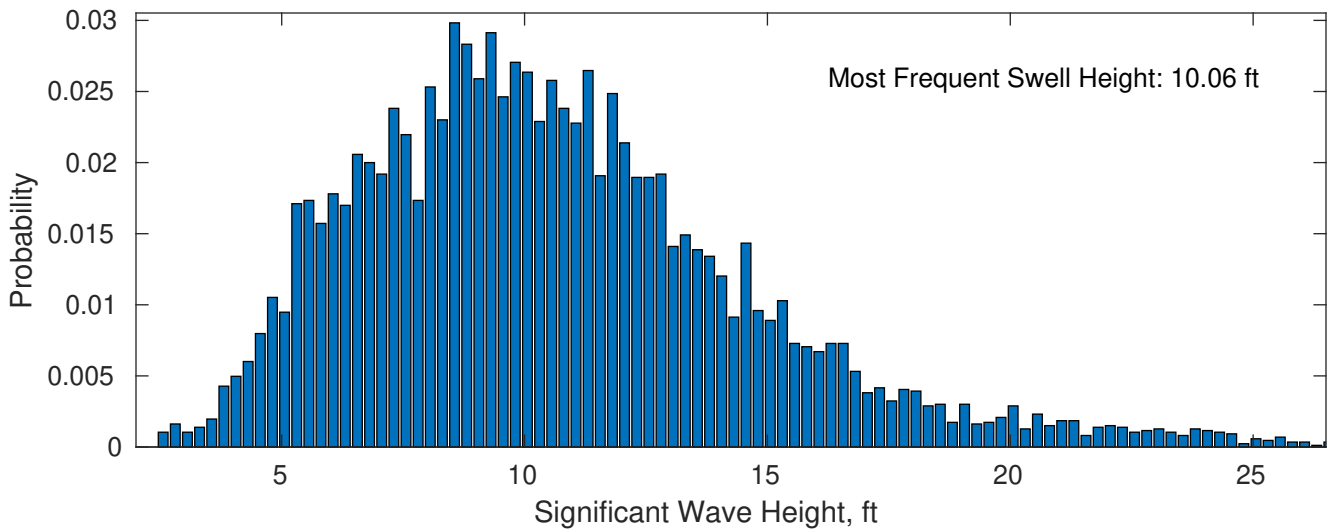
**November Wave Height PDF: 1979 - 2015**



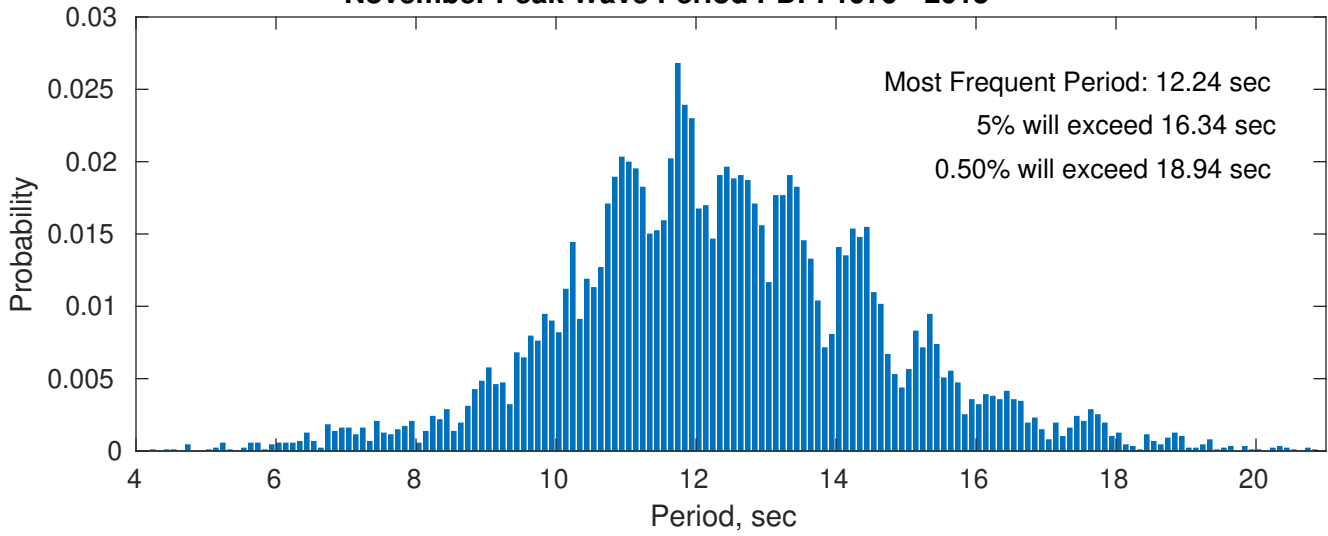
**Wind-Sea: 2.99%**



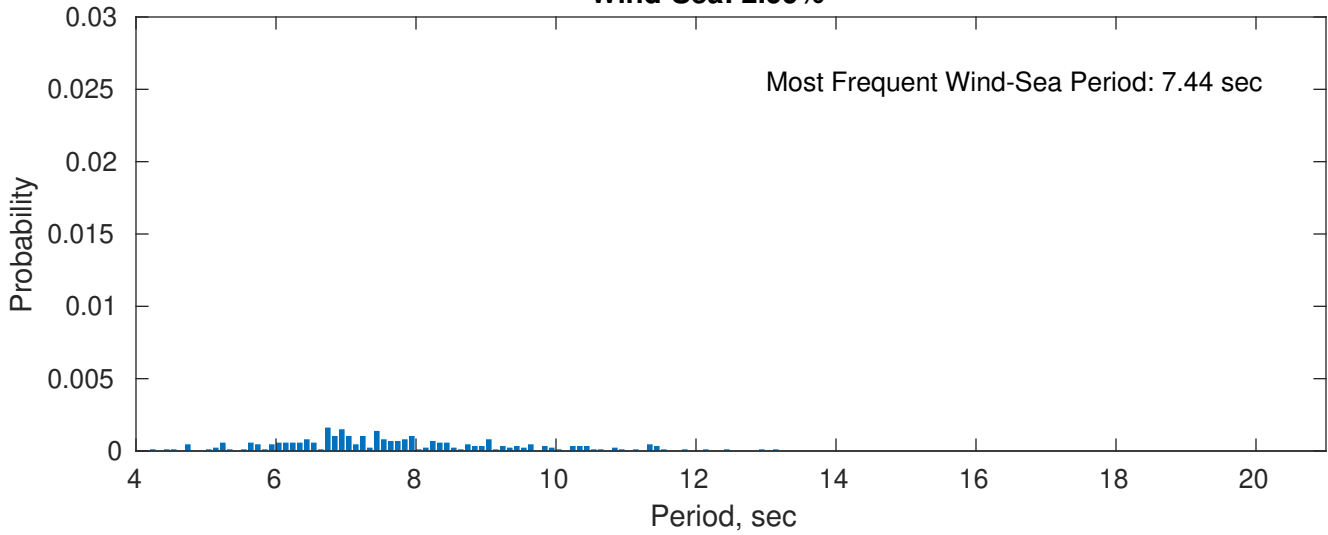
**Swell: 97.01%**



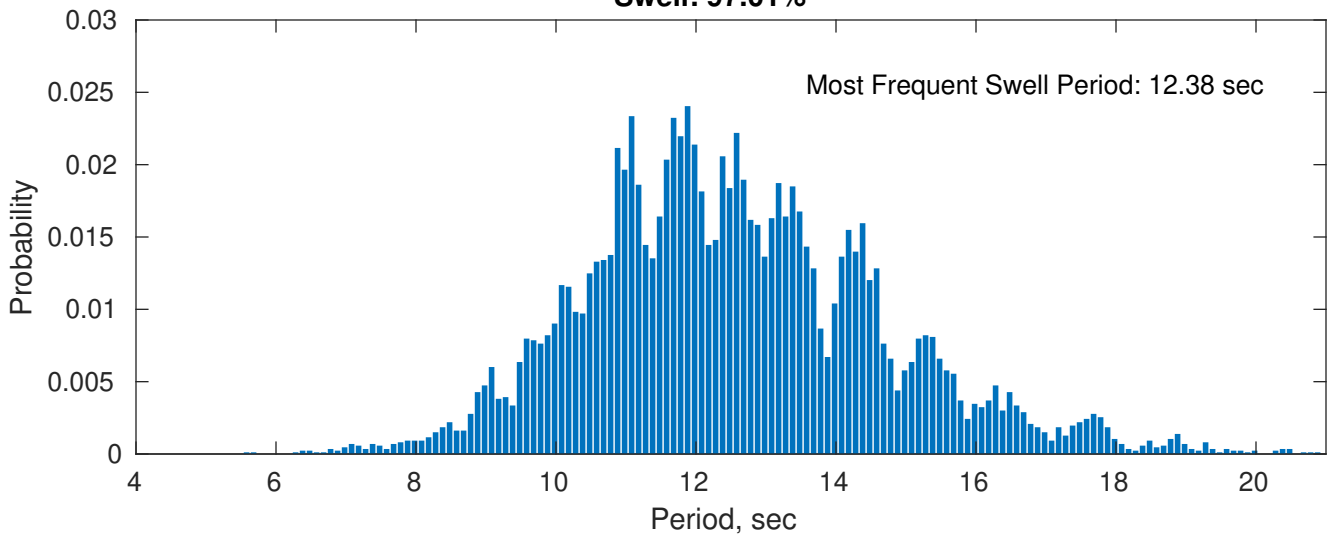
### November Peak Wave Period PDF: 1979 - 2015



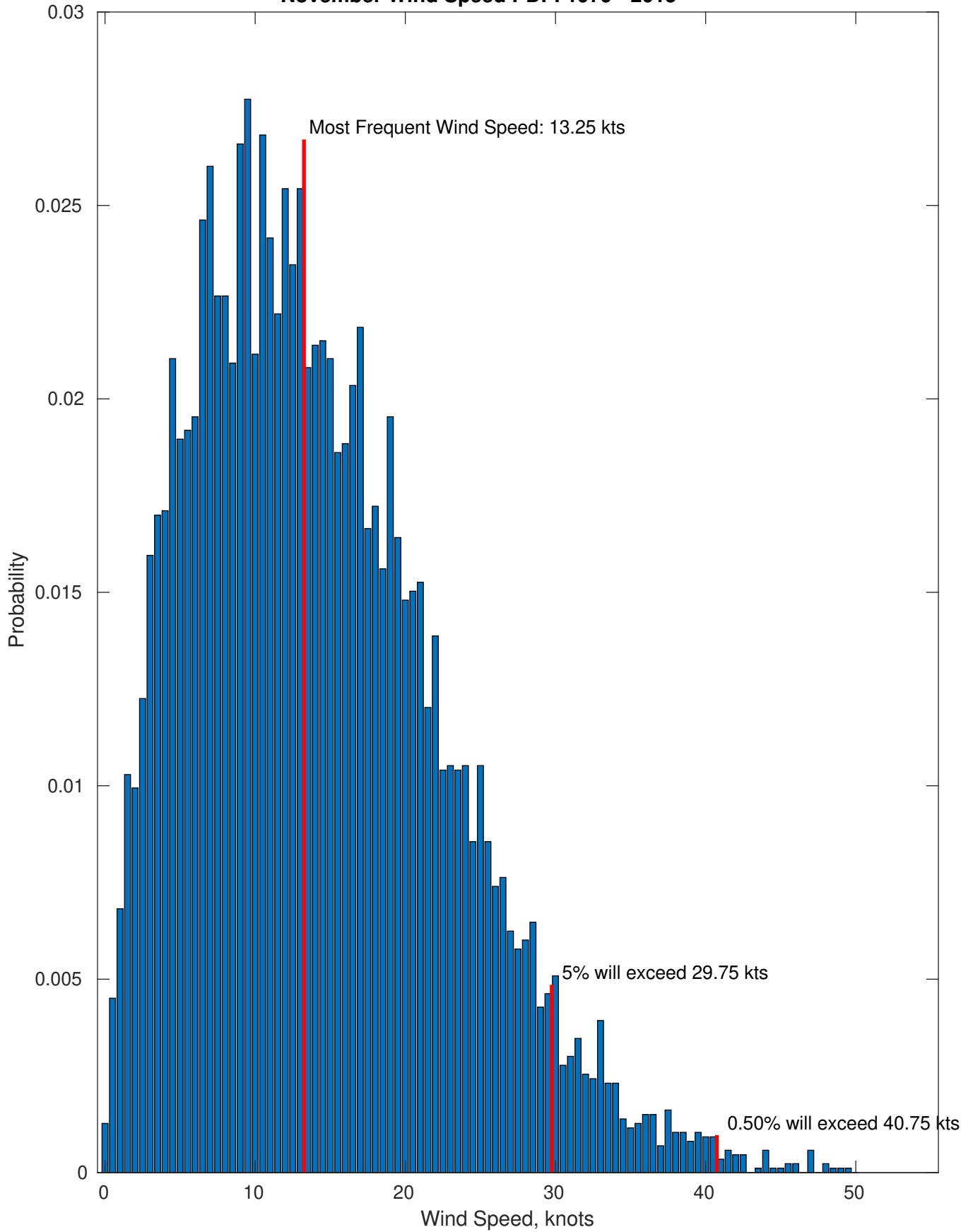
### Wind-Sea: 2.99%



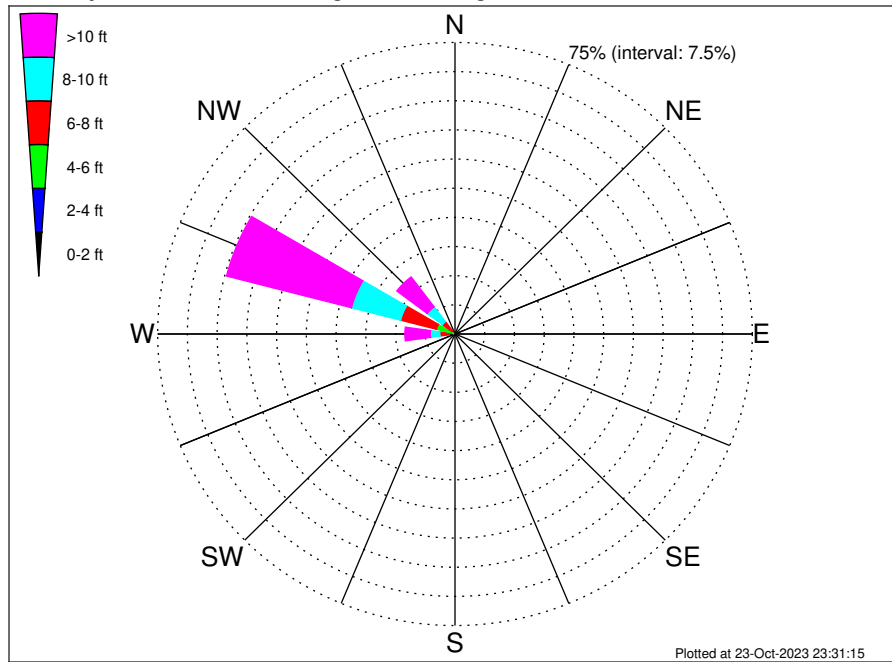
### Swell: 97.01%



November Wind Speed PDF: 1979 - 2015



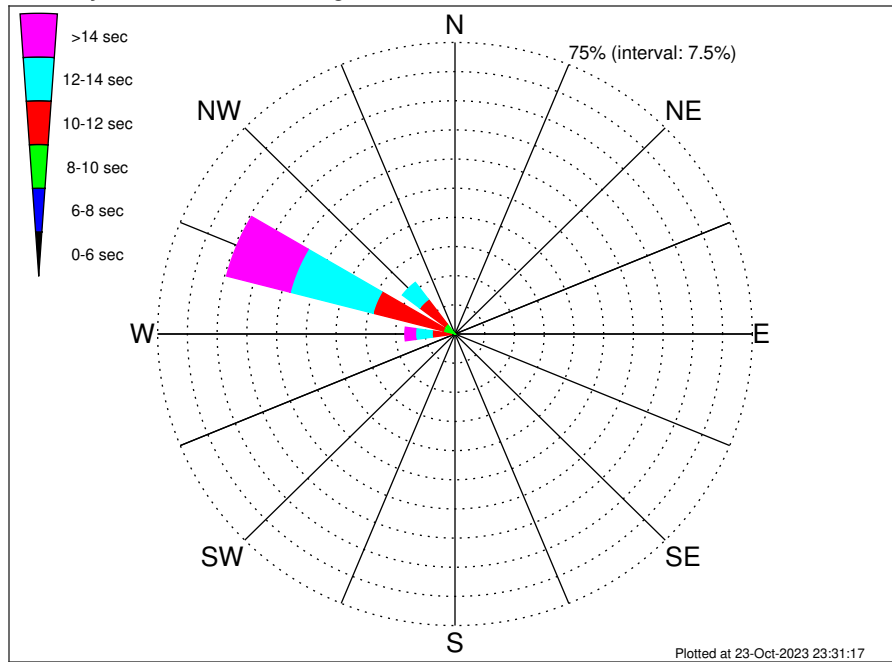
RWE Humboldt Bay OCS-P-0561 Climatological WaveHeight Rose for November: 1979 - 2015



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	0.20	0.10	0.03	0.15	0.40	0.05	•	0.97
4 - 6 ft	•	•	•	•	•	•	•	•	0.29	0.68	0.55	0.42	1.32	4.43	0.94	0.06	8.68
6 - 8 ft	•	•	•	•	•	•	•	•	0.17	0.34	0.13	0.29	2.37	9.35	2.99	0.51	16.15
8 - 10 ft	•	•	•	•	•	•	•	•	0.21	0.38	0.13	0.52	2.39	12.79	4.77	0.47	21.66
10 - 12 ft	•	•	•	•	•	•	•	•	0.21	0.27	0.12	0.24	2.23	12.58	3.72	0.53	19.90
12 - 14 ft	•	•	•	•	•	•	•	•	0.15	0.27	0.27	0.22	1.45	8.80	2.83	0.28	14.25
14 - 16 ft	•	•	•	•	•	•	•	•	0.06	0.17	0.09	0.05	0.87	5.26	1.57	0.08	8.15
16 - 18 ft	•	•	•	•	•	•	•	•	0.01	0.21	0.14	0.08	0.52	2.84	0.79	0.05	4.64
> 18 ft	•	•	•	•	•	•	•	•	0.02	0.14	0.07	0.21	1.35	3.09	0.72	•	5.60
Total	•	•	•	•	•	•	•	•	1.16	2.65	1.60	2.06	12.65	59.54	18.38	1.98	100.00

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

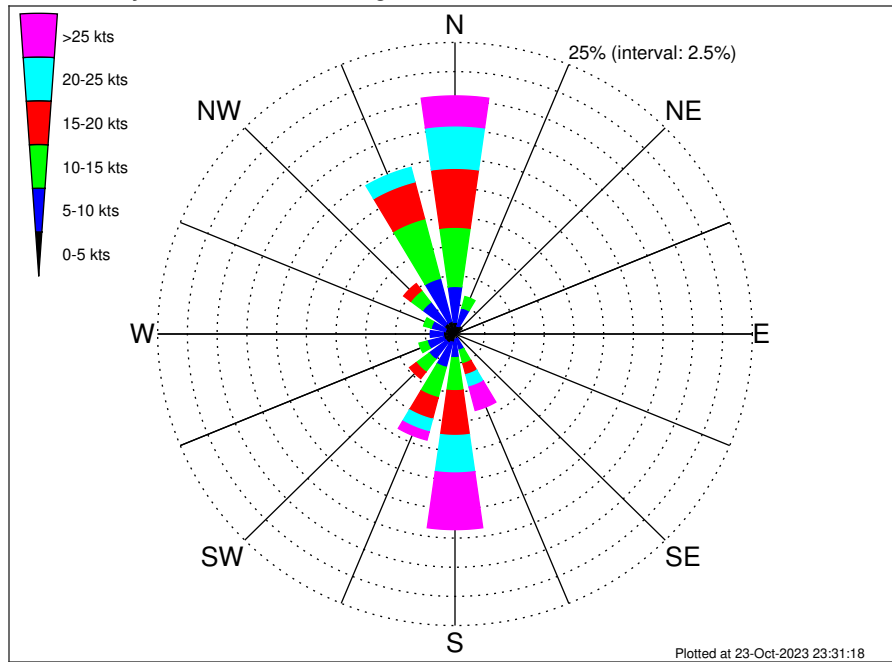


Joint Frequency Distribution Table

	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	•	•	•	•	•	•	•	•	0.08	0.22	0.02	0.01	•	•	0.01	0.01	0.36
6 - 8 sec	•	•	•	•	•	•	•	•	0.44	0.75	0.12	0.03	0.03	0.05	0.29	0.71	2.42
8 - 10 sec	•	•	•	•	•	•	•	•	0.08	0.58	0.28	0.35	0.89	2.99	2.89	0.68	8.74
10 - 12 sec	•	•	•	•	•	•	•	•	•	0.05	0.38	0.84	4.84	18.35	7.98	0.43	32.87
12 - 14 sec	•	•	•	•	•	•	•	•	•	0.09	0.15	0.52	4.20	21.57	5.46	0.07	32.06
14 - 16 sec	•	•	•	•	•	•	•	•	0.10	0.51	0.42	0.24	2.08	12.20	1.50	0.08	17.13
18 - 20 sec	•	•	•	•	•	•	•	•	0.34	0.43	0.15	0.06	0.51	3.42	0.24	•	5.14
22 - 24 sec	•	•	•	•	•	•	•	•	0.12	0.02	0.08	•	0.09	0.96	0.01	•	1.28
Total	•	•	•	•	•	•	•	•	1.16	2.65	1.60	2.06	12.65	59.54	18.38	1.98	100.00



RWE Humboldt Bay OCS-P-0561 Climatological Wind Rose for November: 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	0.03	0.05	0.05	0.01	0.01	0.03	0.02	0.03	0.01	0.06	0.07	0.06	0.03	0.01	0.03	0.58
0 - 5 kts	0.95	0.68	0.69	0.40	0.47	0.30	0.30	0.40	0.44	0.73	0.87	0.90	0.92	0.81	1.09	1.08	11.04
5 - 10 kts	3.08	1.60	0.34	0.29	0.22	0.32	0.55	1.01	1.56	2.22	1.79	1.45	1.10	1.24	2.31	3.83	22.89
10 - 15 kts	5.08	1.01	0.18	0.03	0.07	0.12	0.22	1.20	2.83	2.68	1.36	0.72	0.55	0.65	1.26	5.27	23.24
15 - 20 kts	5.05	0.59	0.03	0.01	•	0.05	0.21	0.97	3.84	1.91	0.71	0.52	0.24	0.47	0.74	3.27	18.61
20 - 25 kts	3.64	0.20	0.01	•	•	0.03	0.18	1.09	3.21	1.12	0.44	0.31	0.16	0.14	0.31	1.28	12.14
25 - 30 kts	2.10	0.05	•	•	•	•	0.05	0.87	2.42	0.42	0.21	0.12	0.05	0.15	0.07	0.27	6.75
30 - 35 kts	0.35	0.05	•	•	•	•	0.03	0.61	1.47	0.23	0.07	•	•	•	0.06	0.06	2.92
35 - 40 kts	0.10	•	•	•	•	•	0.01	0.35	0.61	0.06	0.02	•	•	•	•	0.01	1.17
40 - 45 kts	0.01	•	•	•	•	•	•	0.17	0.25	0.01	•	•	•	•	•	•	0.45
45 - 50 kts	•	•	•	•	•	•	•	0.08	0.10	0.01	0.01	•	•	•	•	•	0.21
Total	20.42	4.20	1.31	0.79	0.77	0.83	1.60	6.77	16.77	9.40	5.54	4.08	3.09	3.49	5.85	15.10	100.00