

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

Latitude: 41.00 N Longitude: 125.00 W

### Weather Days

Wave Height > 6.0 ft Mean: 23.2 days Range: 21.5 - 24.8 days p50:28.5 days p75:27.5 days p90:25.5 days

Wave Height > 7.0 ft Mean: 19.9 days Range: 17.2 - 22.7 days p50:26.5 days p75:25 days p90:22 days

Wave Height > 8.0 ft Mean: 16.5 days Range: 12.9 - 20.0 days p50:24 days p75:21.5 days p90:18.5 days

Wind Speed > 10.0 knots Mean: 21.9 days Range: 19.6 - 24.2 days p50:22.5 days p75:20 days p90:19 days

Wind Speed > 15.0 knots Mean: 15.5 days Range: 12.9 - 18.1 days p50:15.5 days p75:13.5 days p90:12.5 days

Wind Speed > 20.0 knots Mean: 9.3 days Range: 6.9 - 11.7 days p50:9.5 days p75:8 days p90:6 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 0.8 times per month  
A 2 day or longer window will statistically occur 0.2 times per month  
A 3 day or longer window will statistically occur 0.0 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 1.3 times per month  
A 2 day or longer window will statistically occur 0.7 times per month  
A 3 day or longer window will statistically occur 0.1 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 2.3 times per month  
A 2 day or longer window will statistically occur 1.0 times per month  
A 3 day or longer window will statistically occur 0.6 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: 4% / 96%

### Winds

Mean Speed: 15 - 20 kts

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

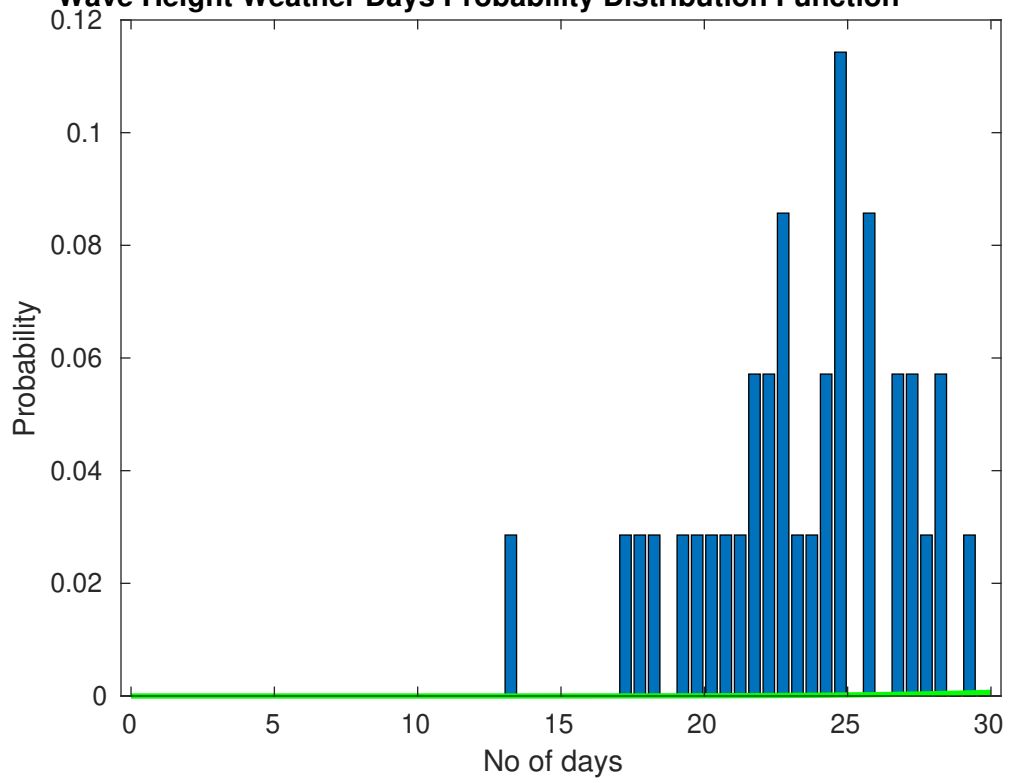
Principle Direction, from: N

### Severe Storms

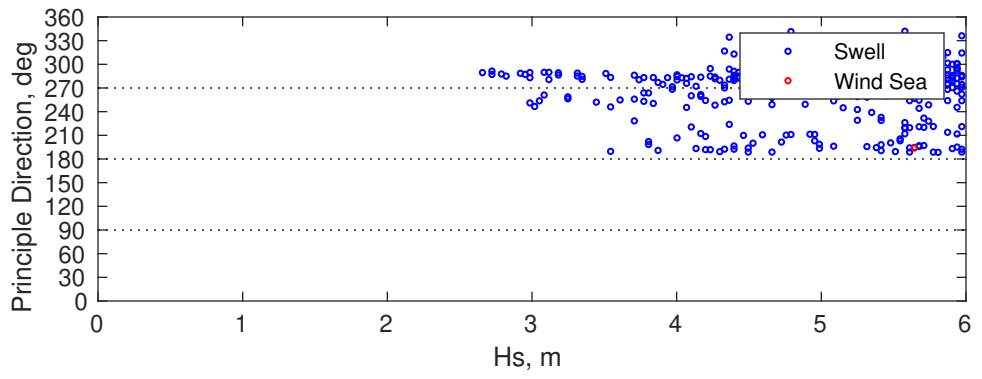
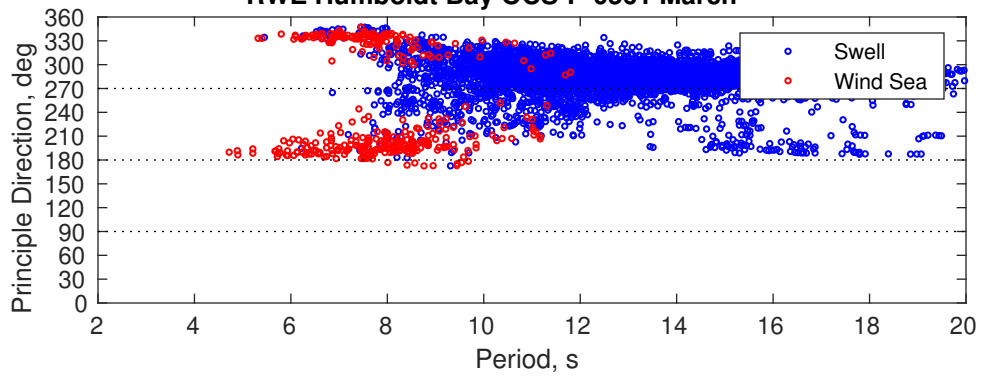
There is a 46 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 23 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

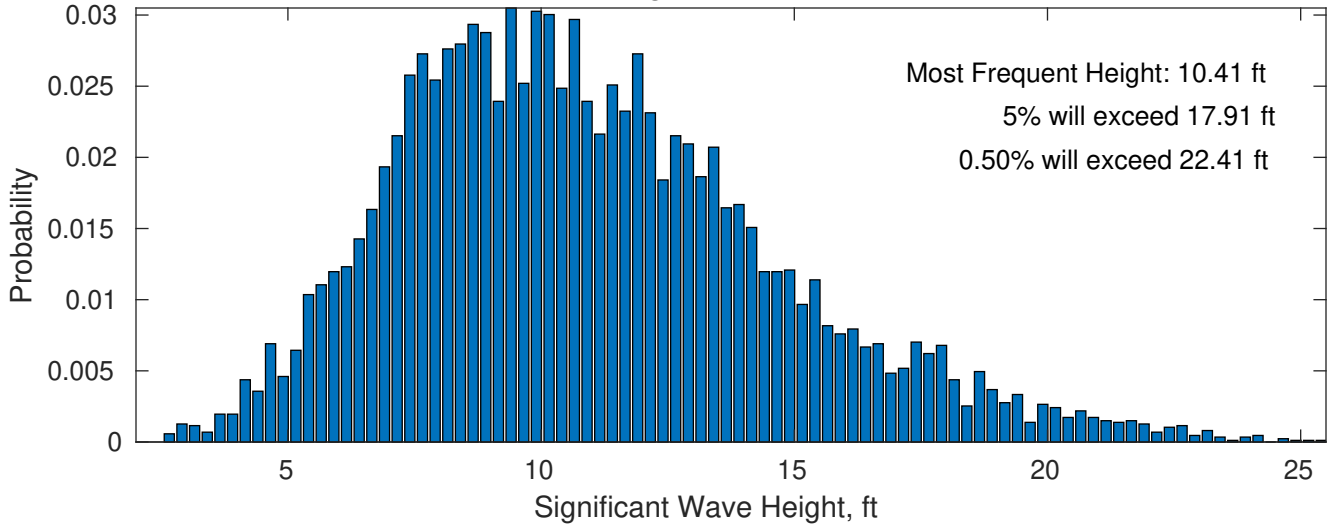
**Wave Height Weather Days Probability Distribution Function**



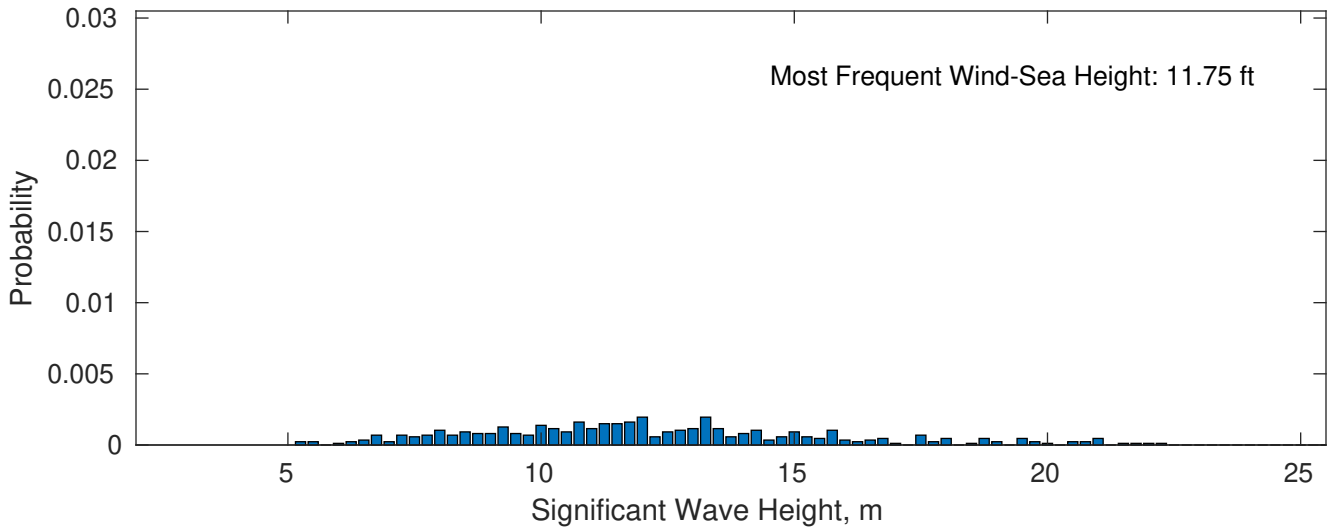
RWE Humboldt Bay OCS-P-0561 March



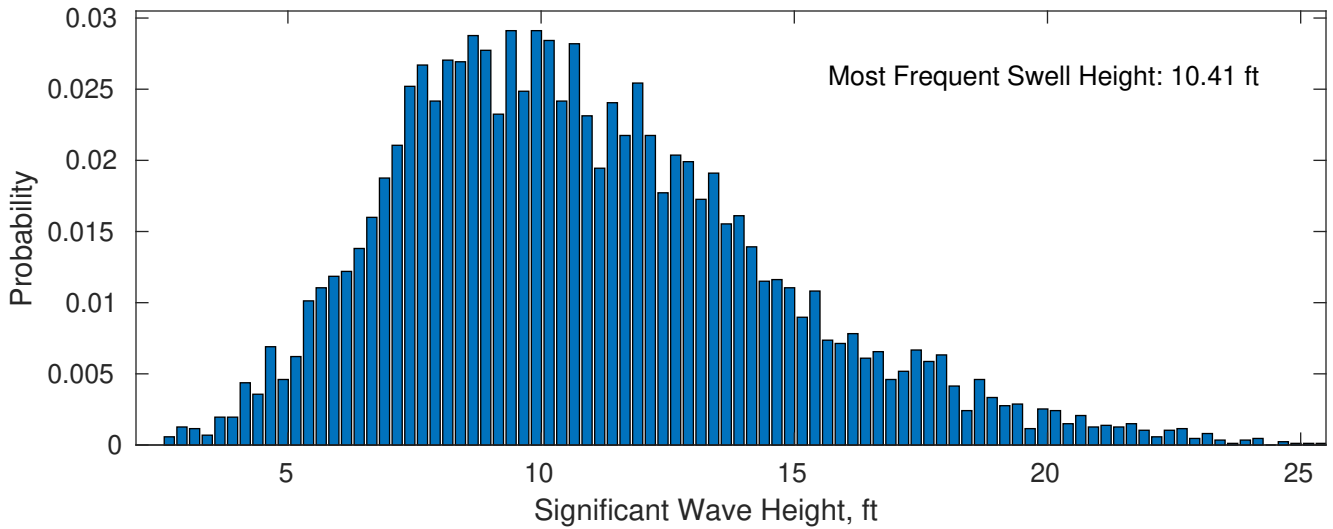
**March Wave Height PDF: 1979 - 2015**



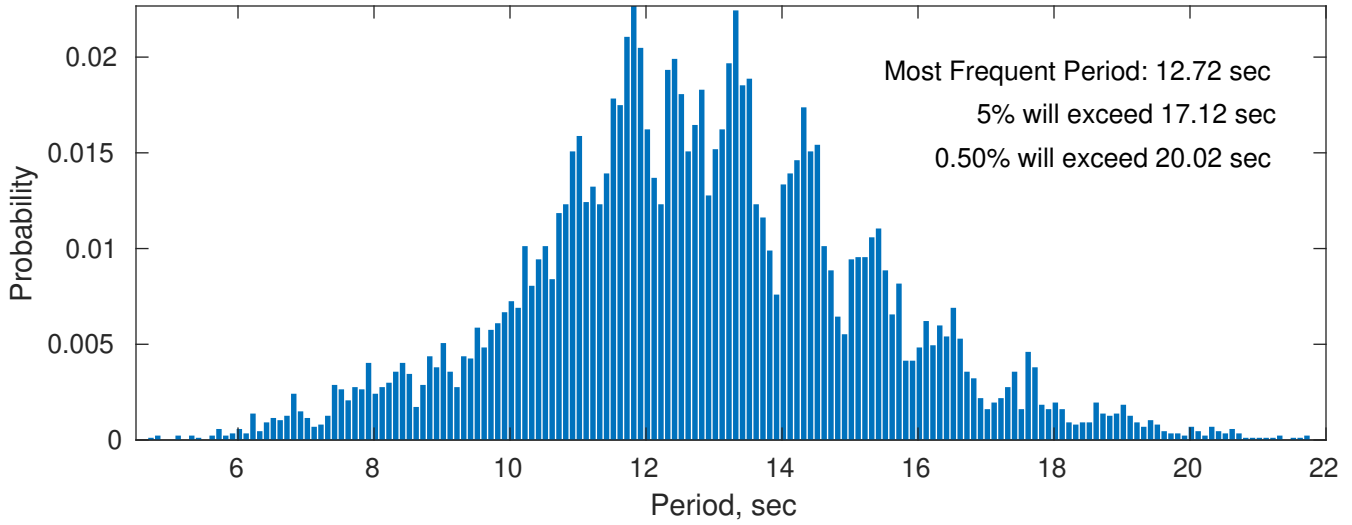
**Wind-Sea: 4.28%**



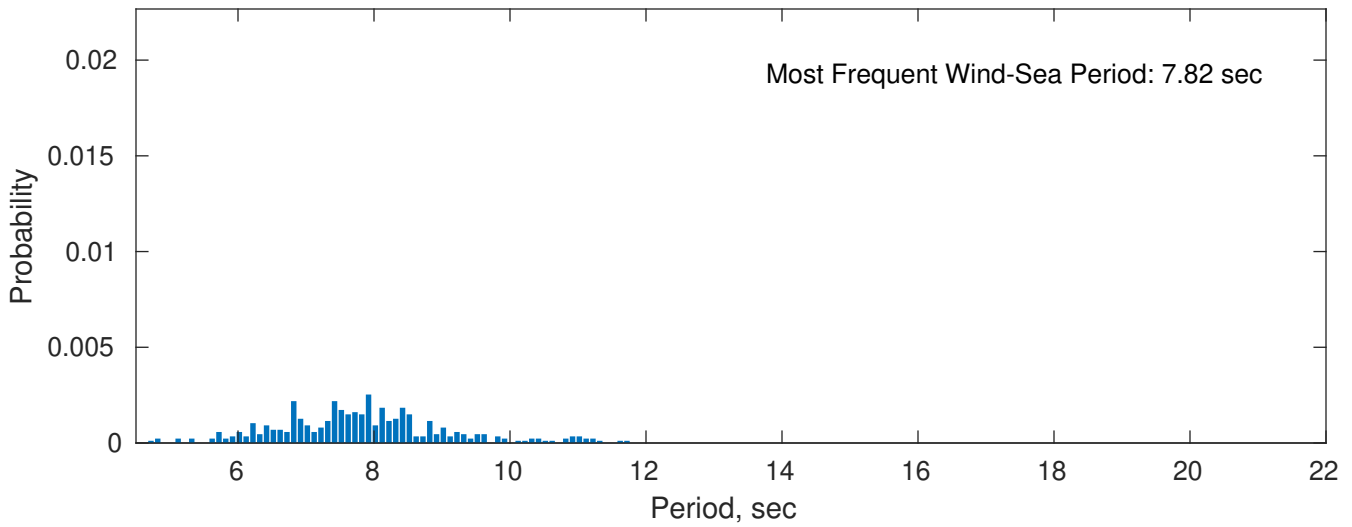
**Swell: 95.72%**



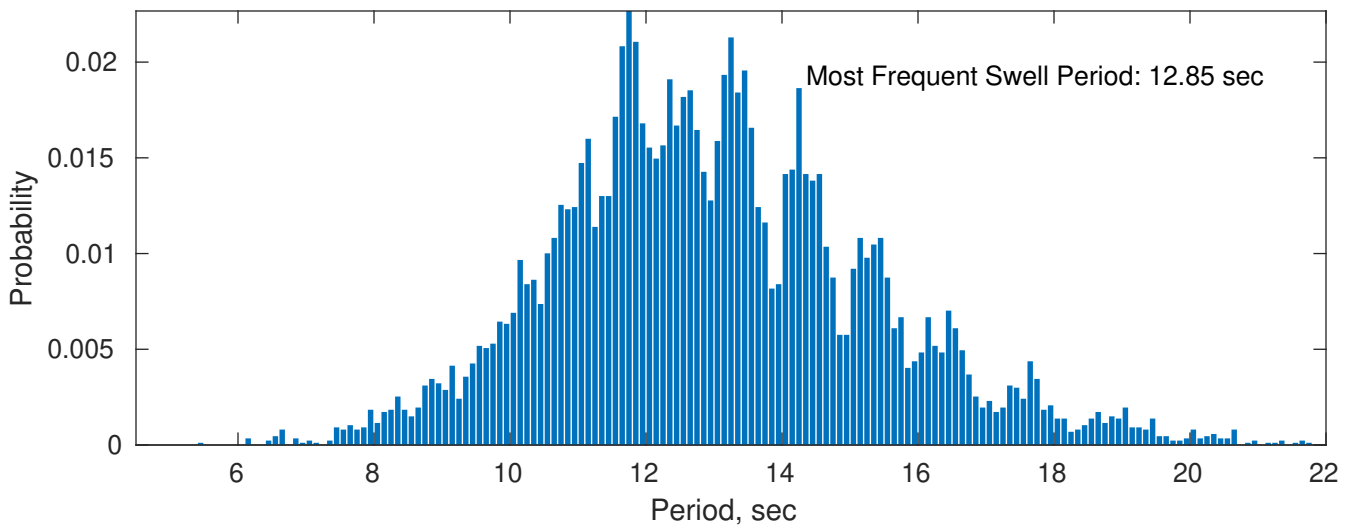
### March Peak Wave Period PDF: 1979 - 2015



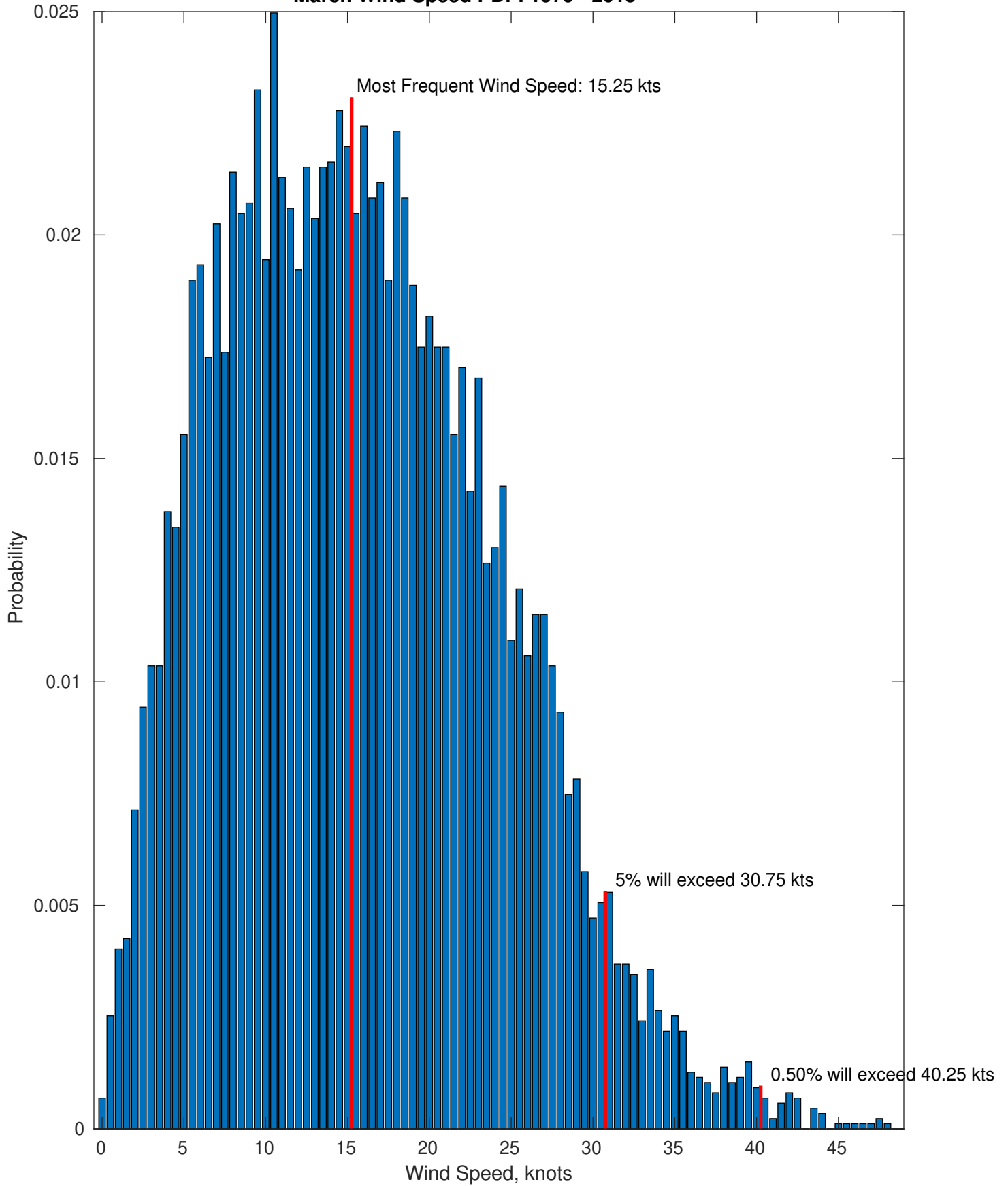
### Wind-Sea: 4.28%



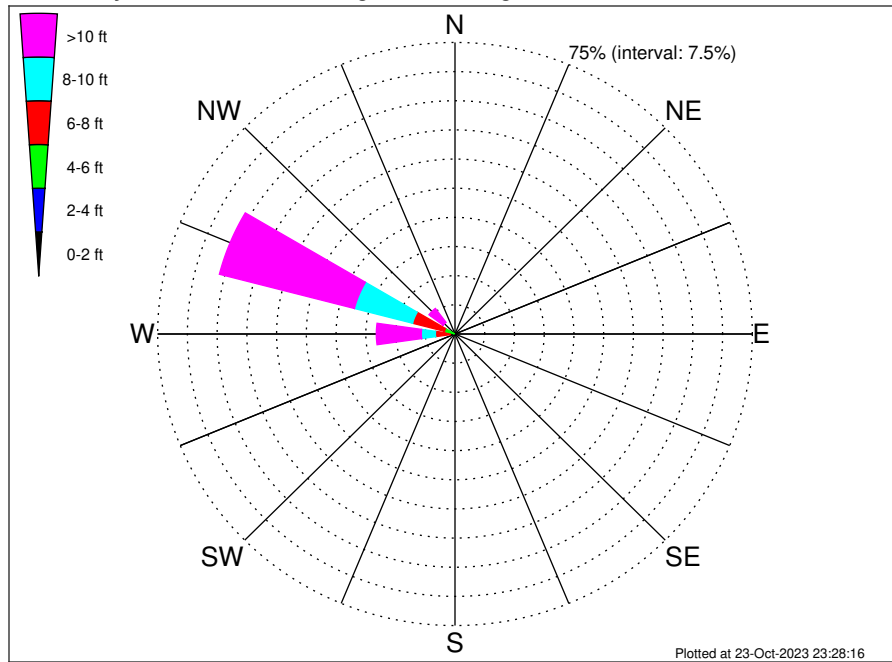
### Swell: 95.72%



March Wind Speed PDF: 1979 - 2015



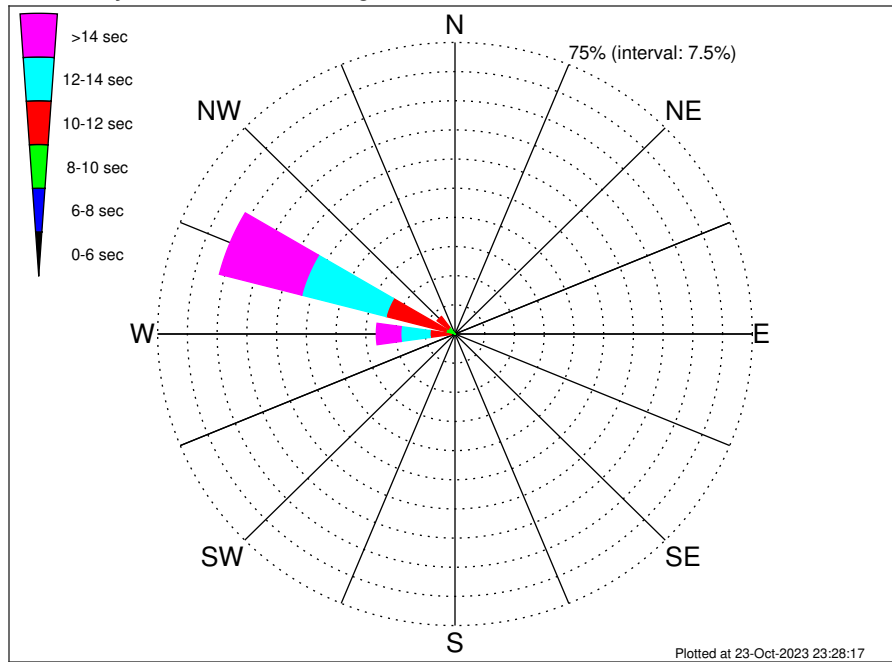
RWE Humboldt Bay OCS-P-0561 Climatological WaveHeight Rose for March: 1979 - 2015



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	.	.	.	.	.	.	.	.	0.02	0.02	0.01	0.13	0.13	0.30	.	.	0.61
4 - 6 ft	.	.	.	.	.	.	.	.	0.10	0.47	0.20	0.25	1.19	2.45	0.39	0.10	5.16
6 - 8 ft	.	.	.	.	.	.	.	.	0.23	0.36	0.29	0.68	3.64	8.31	1.57	0.31	15.37
8 - 10 ft	.	.	.	.	.	.	.	.	0.16	0.22	0.24	0.46	3.54	15.16	1.78	0.58	22.14
10 - 12 ft	.	.	.	.	.	.	.	.	0.21	0.46	0.26	0.39	3.20	14.25	1.59	0.53	20.89
12 - 14 ft	.	.	.	.	.	.	.	.	0.20	0.47	0.22	0.23	2.87	10.72	1.24	0.36	16.31
14 - 16 ft	.	.	.	.	.	.	.	.	0.14	0.39	0.18	0.26	2.05	5.48	0.83	0.03	9.37
16 - 18 ft	.	.	.	.	.	.	.	.	0.03	0.08	0.14	0.20	1.69	2.59	0.39	0.05	5.17
> 18 ft	.	.	.	.	.	.	.	.	0.01	0.28	0.18	0.37	1.55	2.14	0.44	0.02	4.99
Total	.	.	.	.	.	.	.	.	1.10	2.75	1.73	2.97	19.85	61.39	8.23	1.98	100.00

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

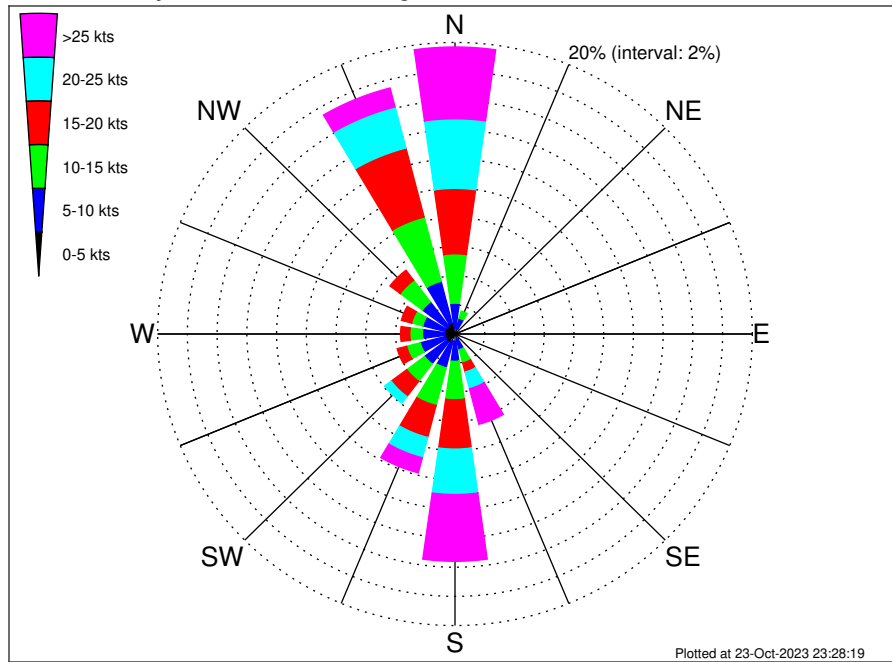


Joint Frequency Distribution Table

	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	•	•	•	•	•	•	•	•	0.10	0.08	•	•	•	•	•	0.05	0.23
6 - 8 sec	•	•	•	•	•	•	•	•	0.39	0.70	0.17	0.06	0.06	0.01	0.22	1.51	3.12
8 - 10 sec	•	•	•	•	•	•	•	•	0.26	0.92	0.45	0.79	1.01	2.41	1.93	0.35	8.12
10 - 12 sec	•	•	•	•	•	•	•	•	•	0.17	0.69	1.09	5.25	15.58	3.50	0.06	26.34
12 - 14 sec	•	•	•	•	•	•	•	•	•	0.06	0.09	0.58	7.36	21.96	1.75	0.02	31.82
14 - 16 sec	•	•	•	•	•	•	•	•	0.07	0.48	0.28	0.26	4.28	14.29	0.64	•	20.31
18 - 20 sec	•	•	•	•	•	•	•	•	0.23	0.23	0.05	0.13	1.44	5.19	0.16	•	7.42
22 - 24 sec	•	•	•	•	•	•	•	•	0.05	0.10	•	0.06	0.45	1.96	0.02	•	2.64
Total	•	•	•	•	•	•	•	•	1.10	2.75	1.73	2.97	19.85	61.39	8.23	1.98	100.00



RWE Humboldt Bay OCS-P-0561 Climatological Wind Rose for March: 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	0.02	0.03	0.02	0.01	0.02	•	0.02	0.01	0.06	0.01	•	•	0.03	0.03	0.02	0.32
0 - 5 kts	0.39	0.35	0.26	0.23	0.18	0.17	0.28	0.35	0.49	0.45	0.68	0.69	0.69	0.68	0.64	0.75	7.28
5 - 10 kts	1.71	0.75	0.31	0.16	0.24	0.28	0.35	0.75	1.37	1.89	1.88	1.73	1.50	1.53	2.07	2.96	19.46
10 - 15 kts	3.38	0.51	0.14	0.07	0.05	0.17	0.29	0.94	2.64	2.67	1.50	0.94	0.85	0.77	1.86	4.56	21.33
15 - 20 kts	4.49	0.38	0.01	0.01	0.03	0.03	0.24	0.63	3.38	2.27	1.31	0.66	0.62	0.71	0.86	4.89	20.54
20 - 25 kts	4.78	0.17	•	•	•	0.05	0.24	1.19	3.12	1.44	0.55	0.46	0.26	0.13	0.39	2.91	15.68
25 - 30 kts	3.46	0.08	•	•	•	0.02	0.09	0.89	2.70	0.74	0.23	0.09	0.07	0.03	0.09	1.23	9.74
30 - 35 kts	1.12	0.01	•	•	•	•	0.05	0.82	1.19	0.25	0.05	0.01	•	0.02	0.05	0.12	3.67
35 - 40 kts	0.35	•	•	•	•	•	0.01	0.46	0.51	0.06	0.01	•	•	0.01	•	•	1.40
40 - 45 kts	•	•	•	•	•	•	•	0.28	0.17	0.02	•	•	•	•	•	•	0.47
45 - 50 kts	•	•	•	•	•	•	•	0.08	0.01	•	•	•	•	•	•	•	0.09
Total	19.69	2.27	0.76	0.49	0.52	0.75	1.54	6.40	15.59	9.84	6.21	4.58	3.99	3.92	6.01	17.43	100.00