

## West Coast Ocean Wind OCS-P0564 - April

Latitude: 33.50 N Longitude: 122.00 W

### Weather Days

Wave Height > 6.0 ft Mean: 20.2 days Range: 17.5 - 23.0 days p50:27.5 days p75:25.5 days p90:24 days

Wave Height > 7.0 ft Mean: 17.0 days Range: 13.3 - 20.7 days p50:23 days p75:21 days p90:18.5 days

Wave Height > 8.0 ft Mean: 13.7 days Range: 9.5 - 17.9 days p50:19.5 days p75:17.5 days p90:13 days

Wind Speed > 10.0 knots Mean: 25.1 days Range: 22.6 - 27.5 days p50:25.5 days p75:24 days p90:21.5 days

Wind Speed > 15.0 knots Mean: 18.0 days Range: 14.0 - 21.9 days p50:18.5 days p75:15 days p90:13 days

Wind Speed > 20.0 knots Mean: 10.4 days Range: 6.7 - 14.1 days p50:10.5 days p75:8 days p90:5.5 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 1.5 times per month  
A 2 day or longer window will statistically occur 0.5 times per month  
A 3 day or longer window will statistically occur 0.2 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 2.2 times per month  
A 2 day or longer window will statistically occur 1.3 times per month  
A 3 day or longer window will statistically occur 0.7 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 3.2 times per month  
A 2 day or longer window will statistically occur 1.6 times per month  
A 3 day or longer window will statistically occur 1.1 times per month

### Waves

Mean Height: 8 - 10 ft

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

Mean Period: 10 - 12 sec

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

Principle Direction, from: WNW

WindSea/Swell: 13% / 87%

### Winds

Mean Speed: 15 - 20 kts

The winds will occasionally reach 30 - 35 kts, but rarely greater.

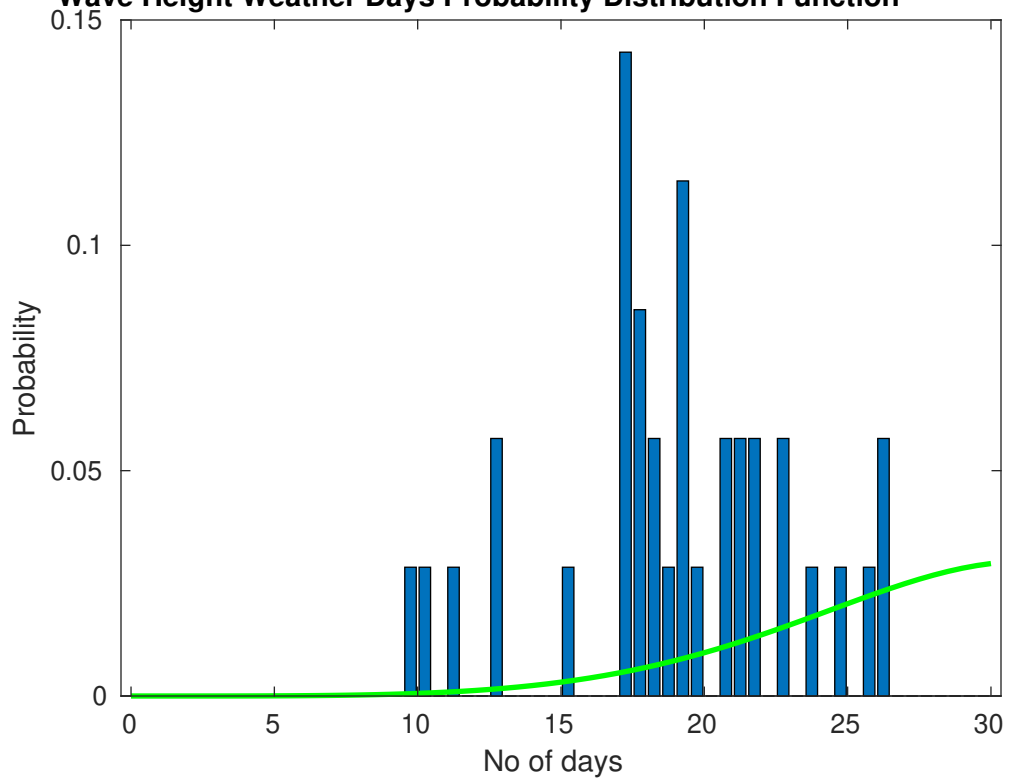
Principle Direction, from: NNW

### Severe Storms

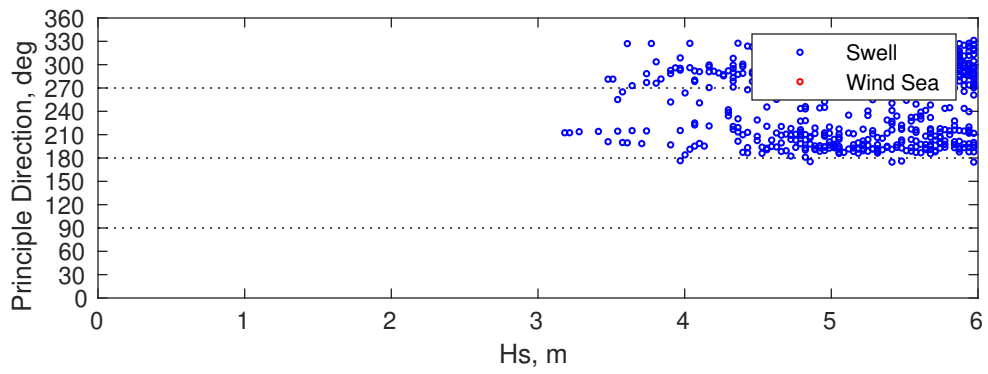
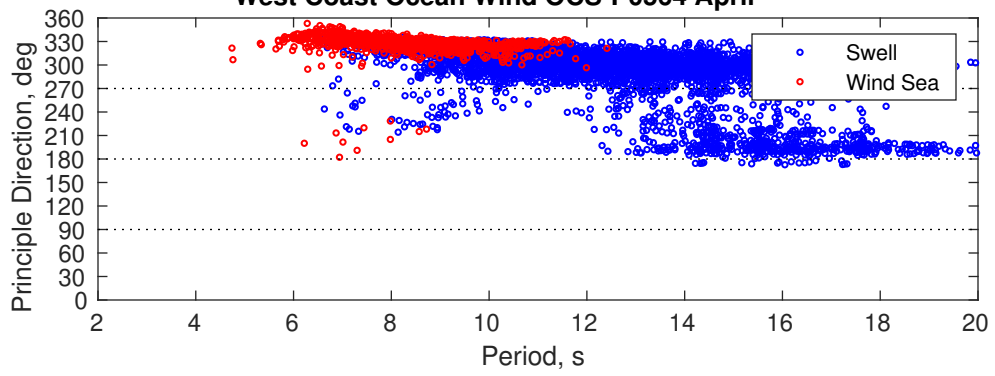
There is a 3 % chance of a storm occurring in the month with winds peaking above 34 kts.

There is a 11 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

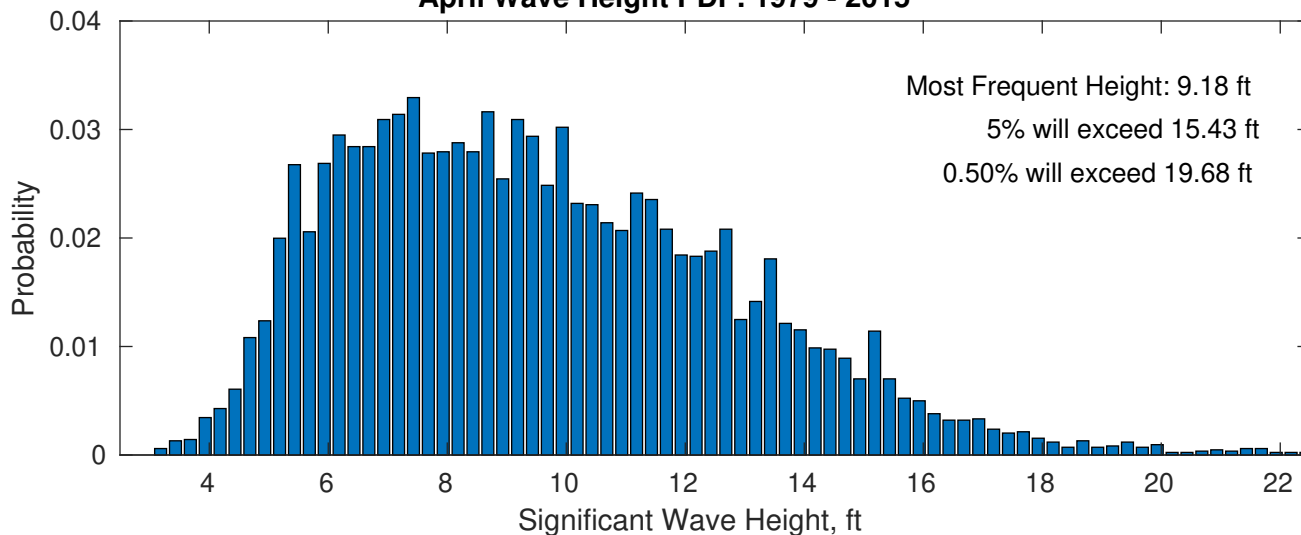
Wave Height Weather Days Probability Distribution Function



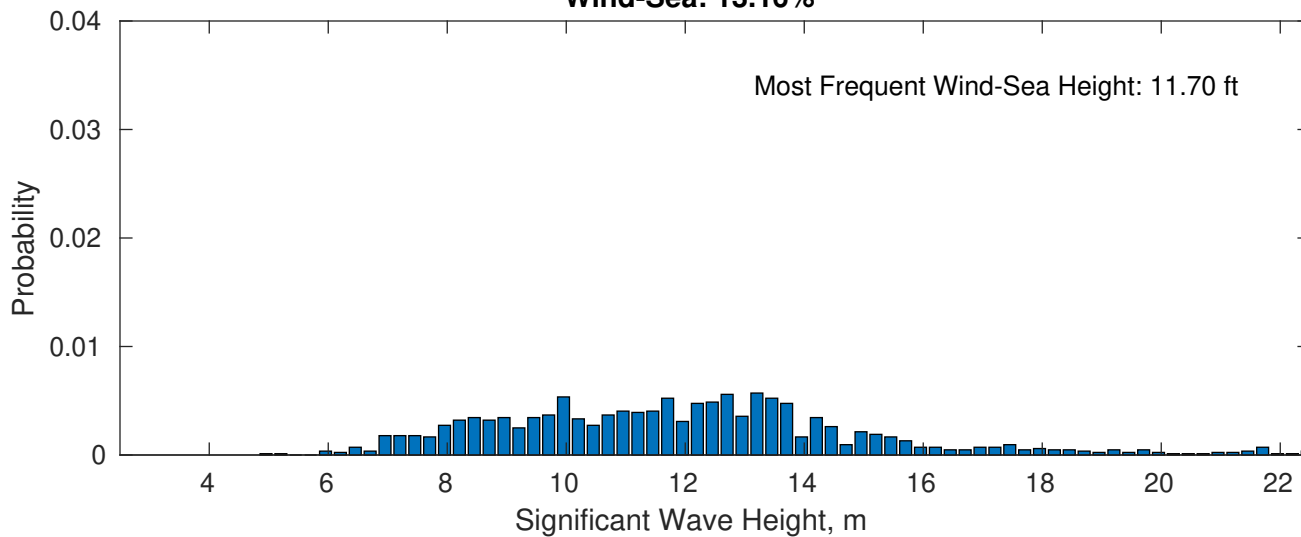
West Coast Ocean Wind OCS-P0564 April



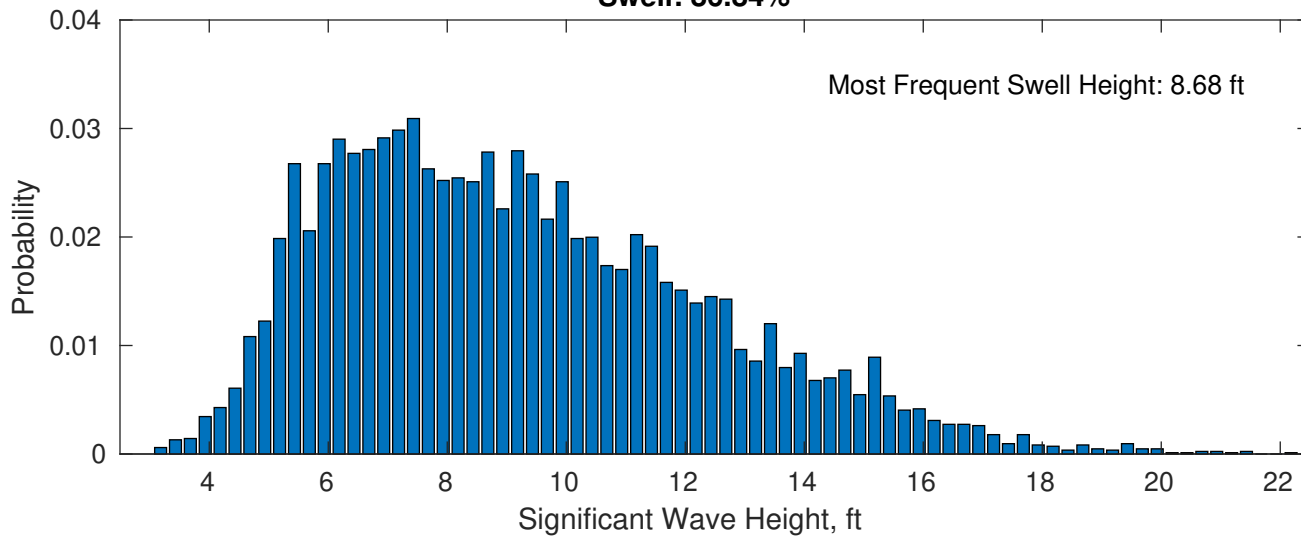
### April Wave Height PDF: 1979 - 2015



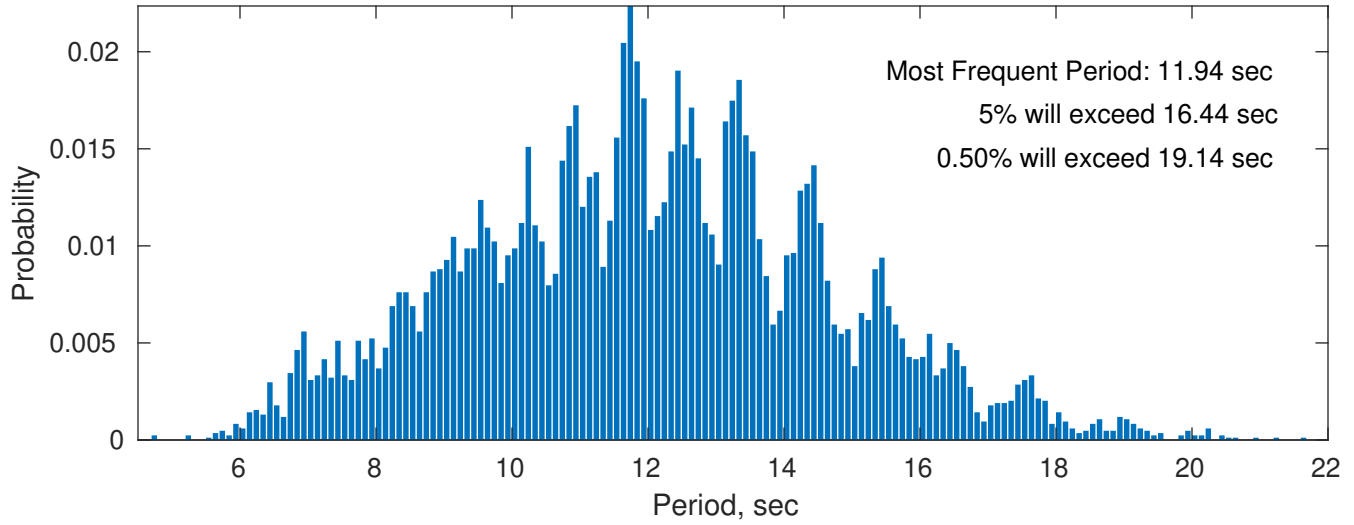
### Wind-Sea: 13.16%



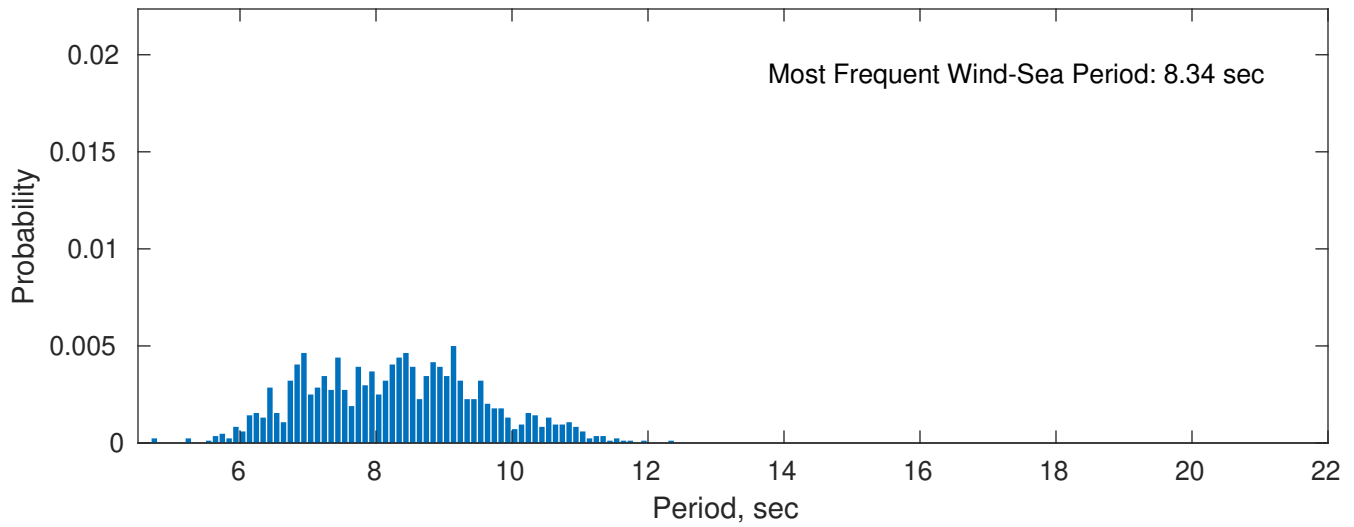
### Swell: 86.84%



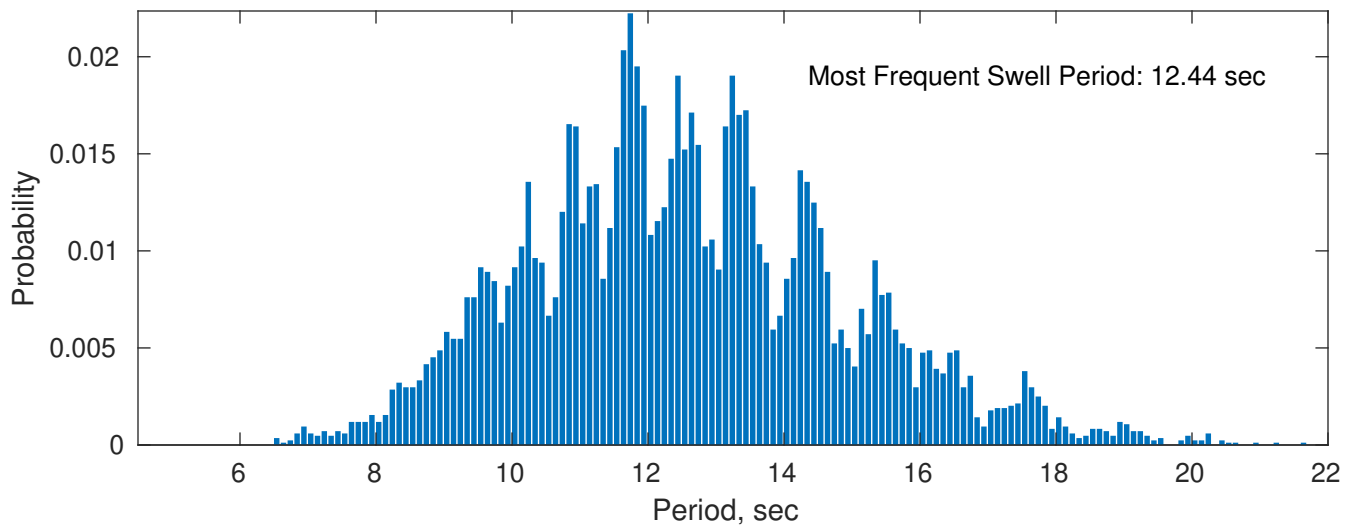
### April Peak Wave Period PDF: 1979 - 2015



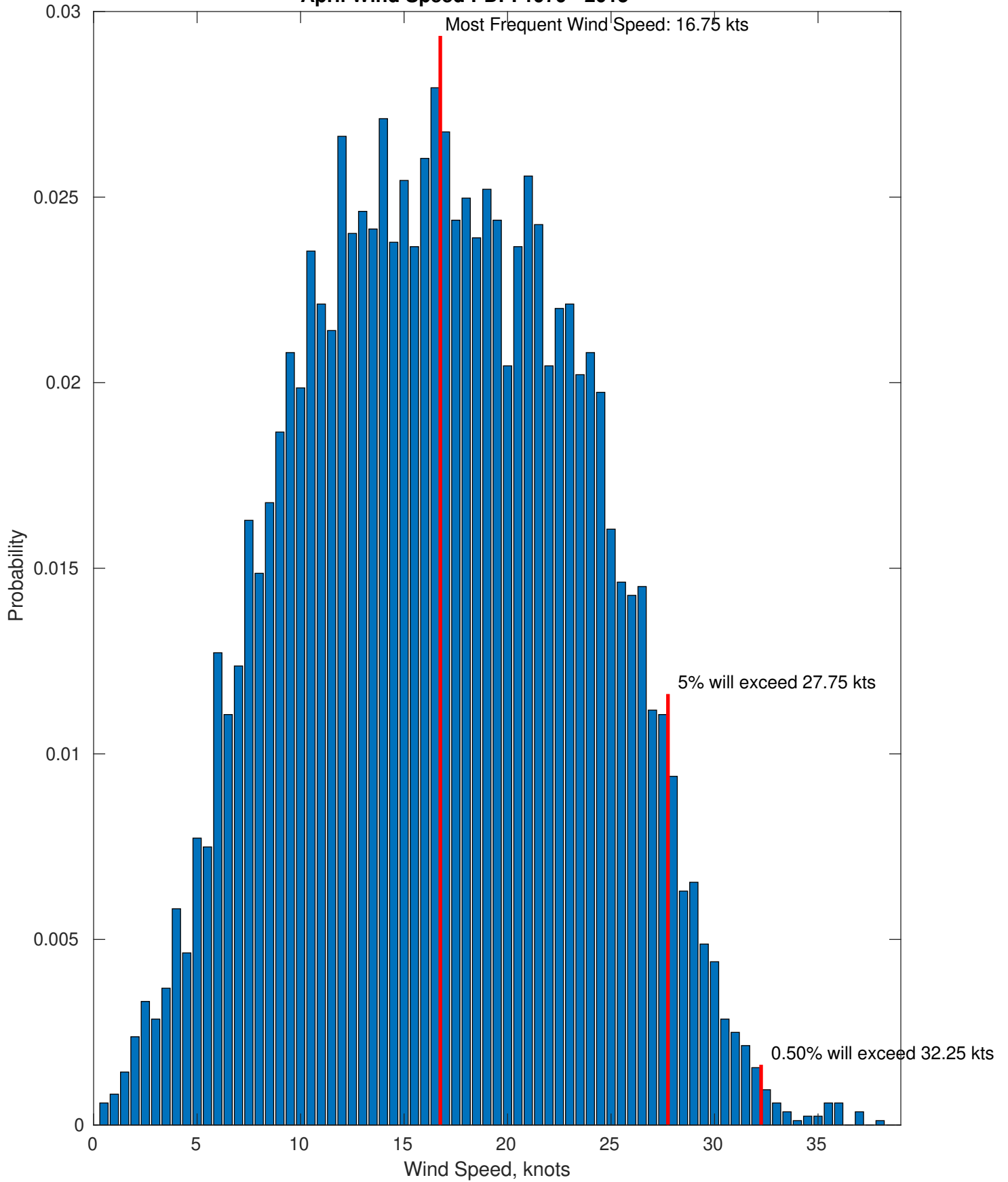
### Wind-Sea: 13.16%



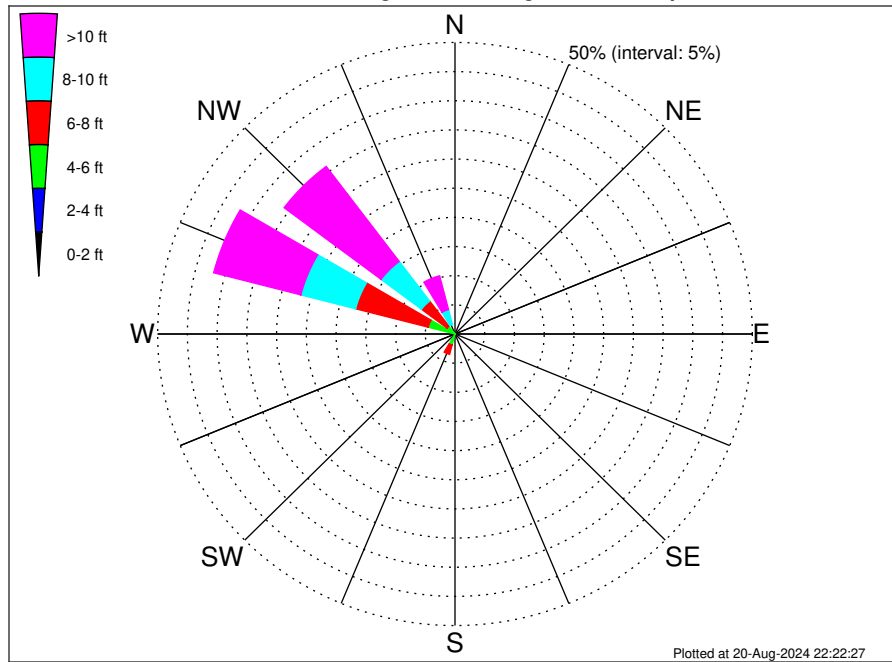
### Swell: 86.84%



### April Wind Speed PDF: 1979 - 2015



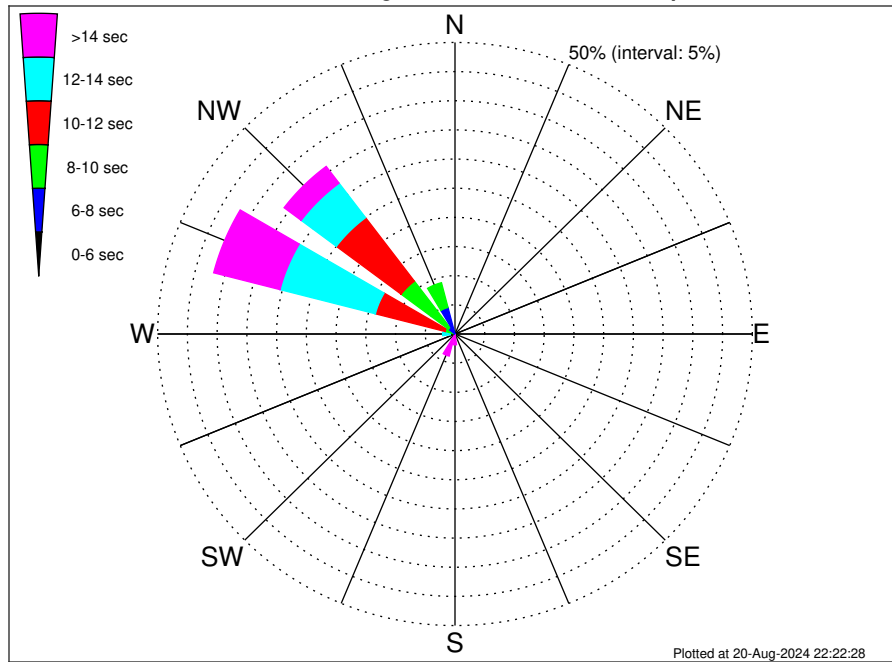
West Coast Ocean Wind OCS-P0564 Climatological WaveHeight Rose for April: 1979 - 2015



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	•	•	•	•	•	•	•	•	0.01	0.10	0.07	0.02	0.05	0.12	0.01	0.02	0.40
4 - 6 ft	•	•	•	•	•	•	•	•	0.68	1.86	0.69	0.29	0.95	4.53	1.65	0.39	11.04
6 - 8 ft	0.01	•	•	•	•	•	•	•	0.75	1.65	0.50	0.37	1.20	12.62	5.40	1.25	23.75
8 - 10 ft	0.02	•	•	•	•	•	•	•	0.29	0.20	0.24	0.23	0.88	9.51	8.51	2.65	22.54
10 - 12 ft	0.01	•	•	•	•	•	•	•	0.12	0.08	0.10	0.12	0.20	6.90	8.66	2.28	18.47
12 - 14 ft	•	•	•	•	•	•	•	•	0.01	0.02	•	0.01	0.06	4.74	6.06	2.30	13.21
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	2.59	3.48	0.83	6.91
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	0.67	1.55	0.19	2.40
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	0.24	0.65	0.39	1.28
Total	0.05	•	•	•	•	•	•	•	1.86	3.91	1.59	1.03	3.34	41.92	35.99	10.31	100.00

West Coast Ocean Wind OCS-P0564 Climatological WavePeriod Rose for April: 1979 - 2015

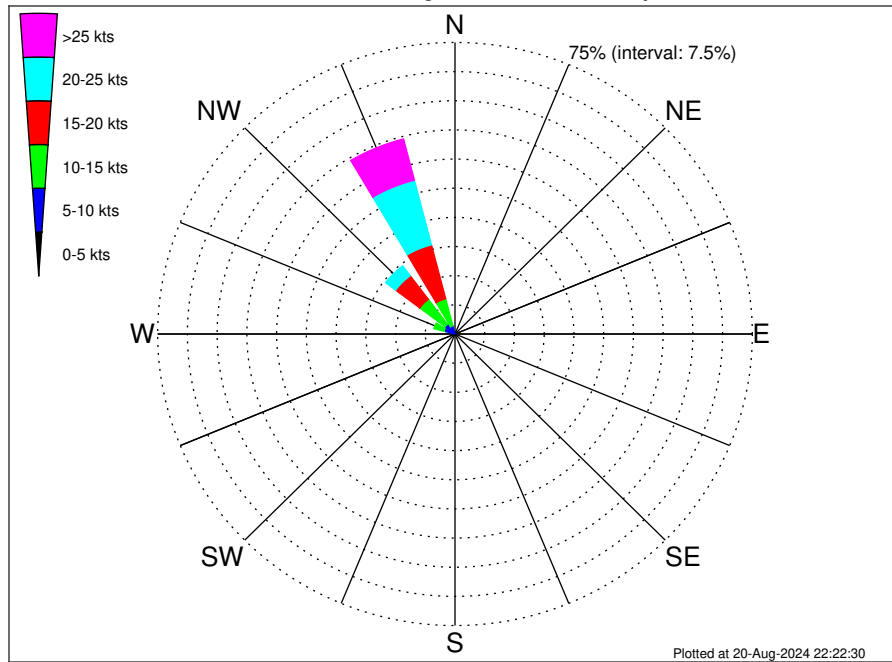


Joint Frequency Distribution Table

	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	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.07	0.14	0.21
6 - 8 sec	0.05	.	.	.	.	.	.	.	0.02	0.05	0.07	0.06	0.04	0.11	1.31	4.55	6.26
8 - 10 sec	.	.	.	.	.	.	.	.	.	.	0.20	0.18	0.18	1.64	9.97	4.39	16.55
10 - 12 sec	.	.	.	.	.	.	.	.	.	.	.	0.08	0.59	12.08	13.64	1.09	27.49
12 - 14 sec	.	.	.	.	.	.	.	.	0.13	0.36	0.34	0.29	1.28	16.57	7.41	0.06	26.44
14 - 16 sec	.	.	.	.	.	.	.	.	0.63	1.74	0.73	0.31	1.00	8.47	2.81	0.07	15.75
18 - 20 sec	.	.	.	.	.	.	.	.	0.77	1.39	0.25	0.11	0.24	2.46	0.65	.	5.87
22 - 24 sec	.	.	.	.	.	.	.	.	0.30	0.38	.	0.01	0.01	0.59	0.13	.	1.43
Total	0.05	.	.	.	.	.	.	.	1.86	3.91	1.59	1.03	3.34	41.92	35.99	10.31	100.00



West Coast Ocean Wind OCS-P0564 Climatological Wind Rose for April: 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	•	•	•	0.01	0.01	•	•	0.01	•	•	0.01	•	•	0.06
0 - 5 kts	0.17	0.20	0.06	0.07	0.01	0.05	0.15	0.12	0.11	0.17	0.21	0.21	0.24	0.31	0.25	0.17	2.50
5 - 10 kts	0.87	0.23	0.20	0.08	0.08	0.07	0.24	0.25	0.50	0.65	0.77	1.06	1.39	2.56	2.89	2.03	13.88
10 - 15 kts	1.42	0.12	0.02	0.01	0.06	0.12	0.12	0.27	0.33	0.51	0.71	0.81	1.40	2.64	8.02	7.16	23.72
15 - 20 kts	0.75	0.04	0.01	•	0.01	0.01	0.02	0.25	0.24	0.25	0.17	0.24	0.43	0.90	7.62	14.33	25.27
20 - 25 kts	0.77	•	•	•	•	0.01	0.04	0.17	0.08	0.05	0.02	0.05	0.07	0.33	3.15	17.18	21.93
25 - 30 kts	0.54	•	•	•	•	0.01	0.01	0.04	0.01	0.01	0.01	•	•	0.01	0.83	9.41	10.88
30 - 35 kts	0.08	•	•	•	•	•	•	•	•	•	•	•	•	0.01	0.11	1.37	1.57
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.01	0.18	0.19
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	4.59	0.58	0.31	0.17	0.17	0.27	0.59	1.11	1.27	1.64	1.91	2.37	3.53	6.78	22.88	51.83	100.00