

## OCS-A 0538 - April

Latitude: 39.71 N Longitude: 73.16 W

### Weather Days

Wave Height > 3.0 ft Mean: 22.1 days Range: 18.9 - 25.3 days p10:27 days p50:23 days p90:18.5 days

Wave Height > 4.0 ft Mean: 16.6 days Range: 12.7 - 20.5 days p10:23 days p50:16 days p90:12.5 days

Wave Height > 5.0 ft Mean: 11.7 days Range: 7.7 - 15.6 days p10:17 days p50:11.5 days p90:7.5 days

Wind Speed > 20.0 knots Mean: 6.7 days Range: 4.3 - 9.1 days p10:10.5 days p50:6.5 days p90:4 days

Wind Speed > 25.0 knots Mean: 2.3 days Range: 0.9 - 3.7 days p10:5 days p50:2.5 days p90:1 days

Wind Speed > 30.0 knots Mean: 0.6 days Range: 0.0 - 1.4 days p10:2 days p50:0.5 days p90:0.5 days

### Working Window Probability

Wave Height < 3.0 ft                      3 days or longer: 12%  
    5 days or longer: 0%  
    7 days or longer: 0%

Wave Height < 4.0 ft                      3 days or longer: 25%  
    5 days or longer: 5%  
    7 days or longer: 1%

Wave Height < 5.0 ft                      3 days or longer: 42%  
    5 days or longer: 9%  
    7 days or longer: 3%

### Waves

Mean Height: 4 - 6 ft

The wave heights will occasionally reach 12 - 14 ft, but rarely higher.

Mean Period: 6 - 8 sec

The wave periods will occasionally reach 12 - 14 sec, but rarely longer.

Principle Direction, from: E

WindSea/Swell: 34% / 66%

### Winds

Mean Speed: 10 - 15 kts

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

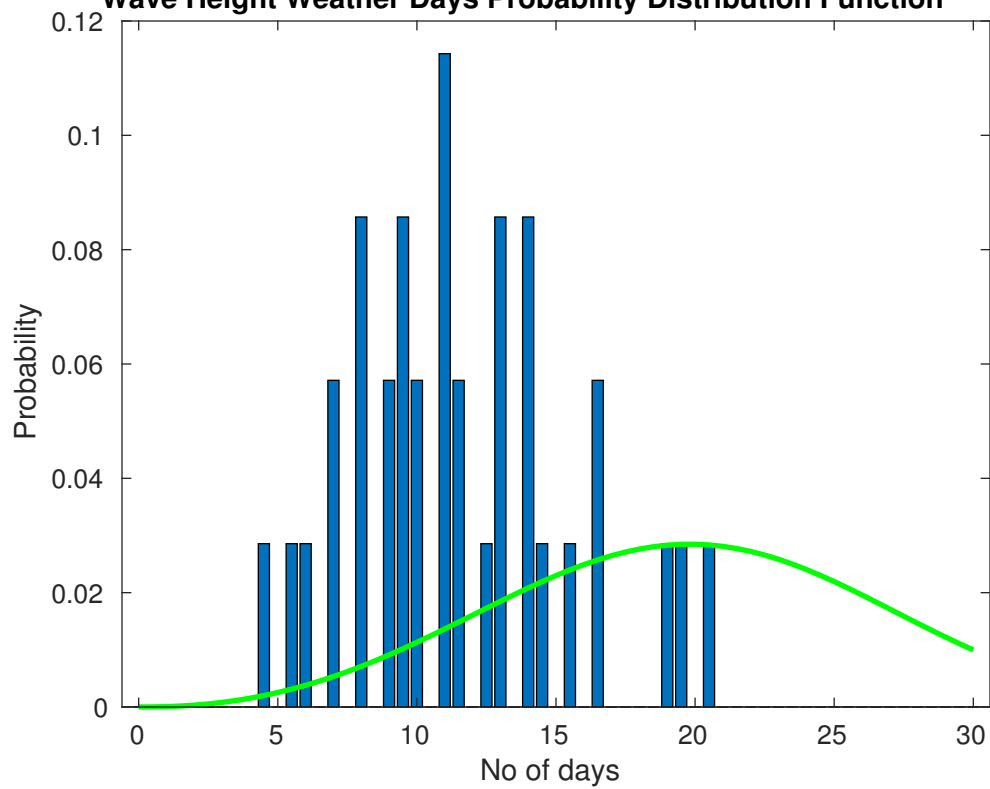
Principle Direction, from: SW

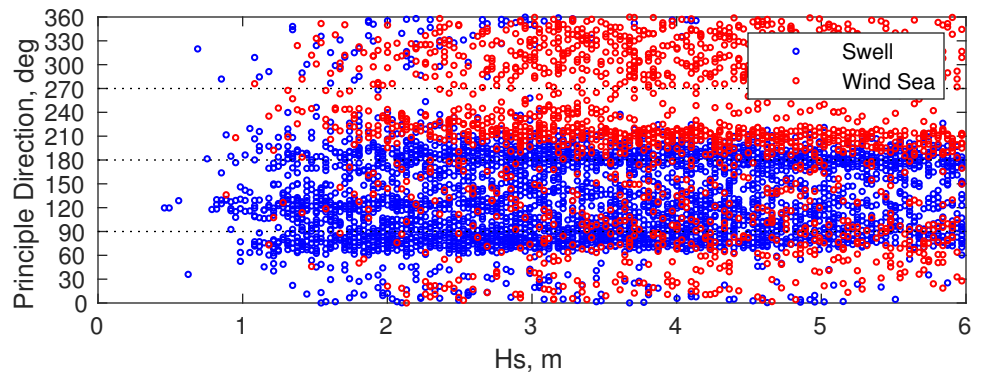
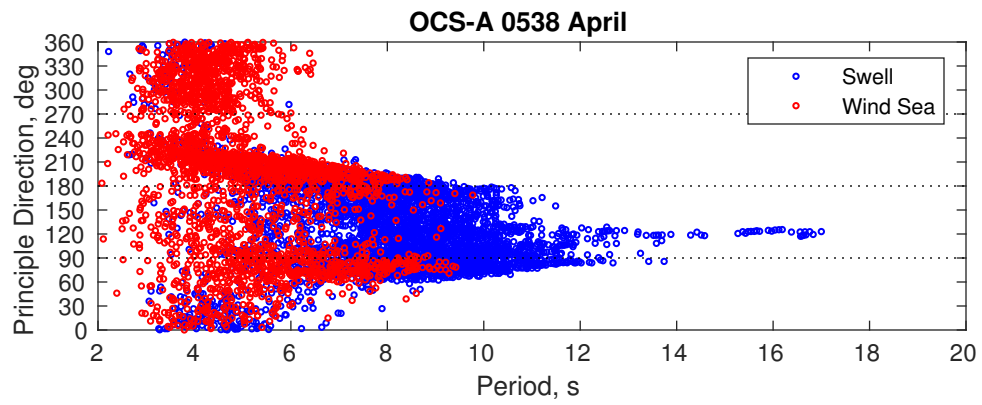
### Severe Storms

There is a 20 % chance of a storm occurring in the month with winds peaking above 34 kts.

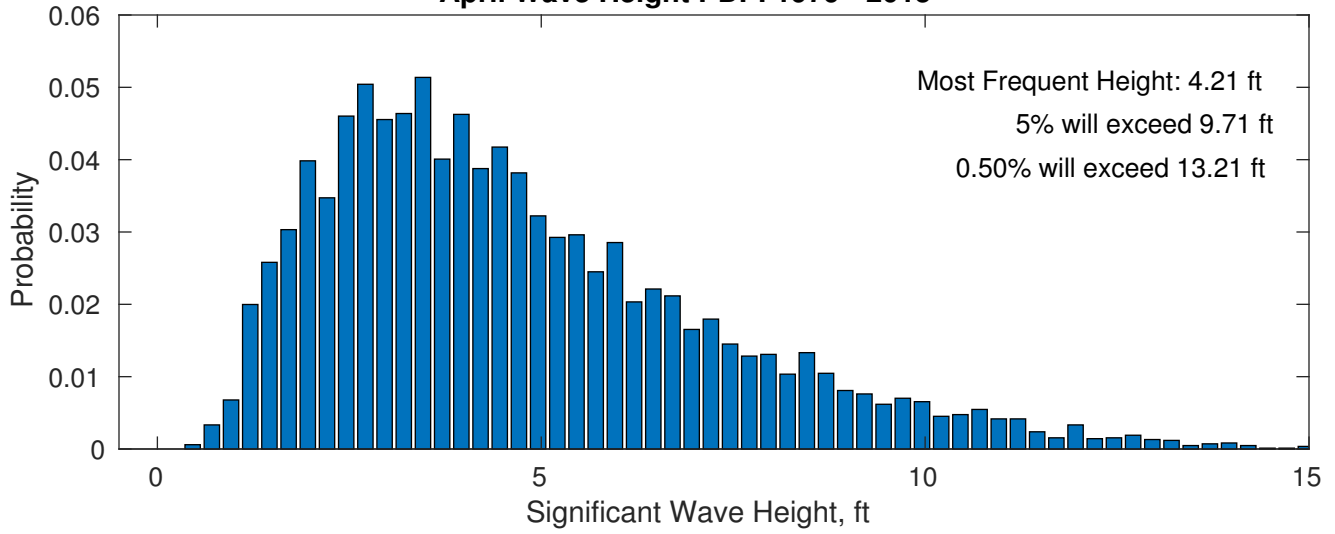
There is a 37 % chance of a storm occurring in the month with waves peaking at 4m (13 ft) or greater.

**Wave Height Weather Days Probability Distribution Function**

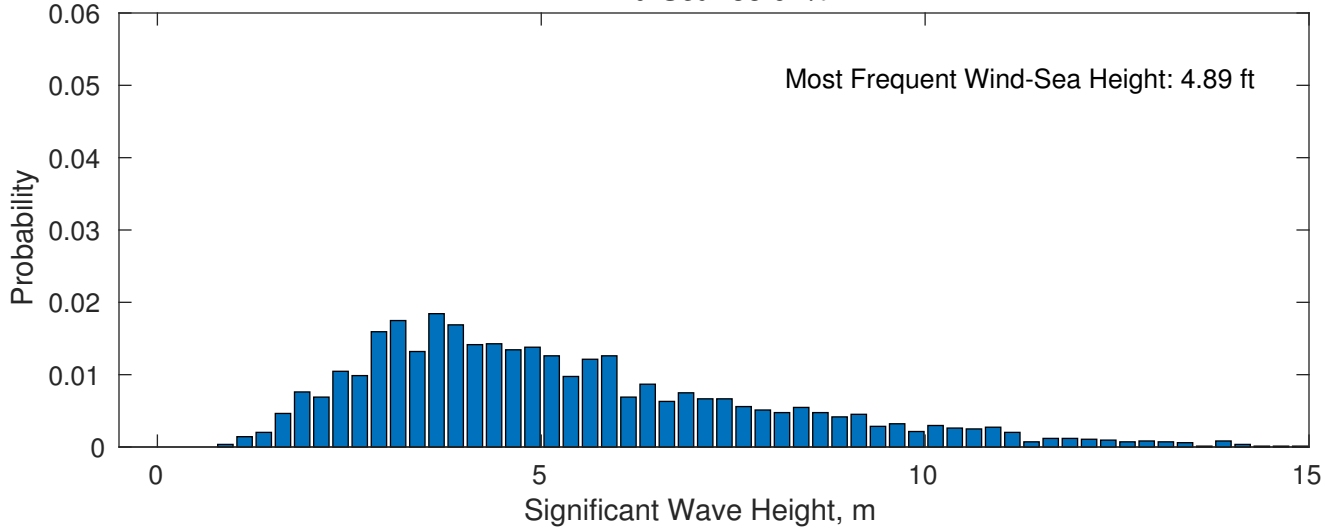




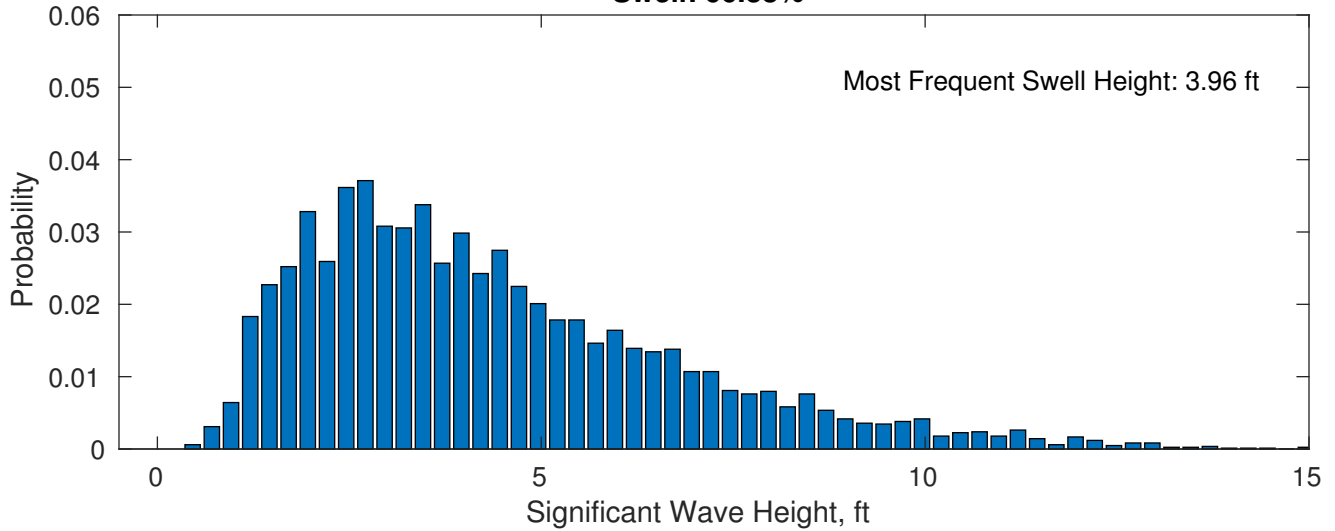
**April Wave Height PDF: 1979 - 2015**



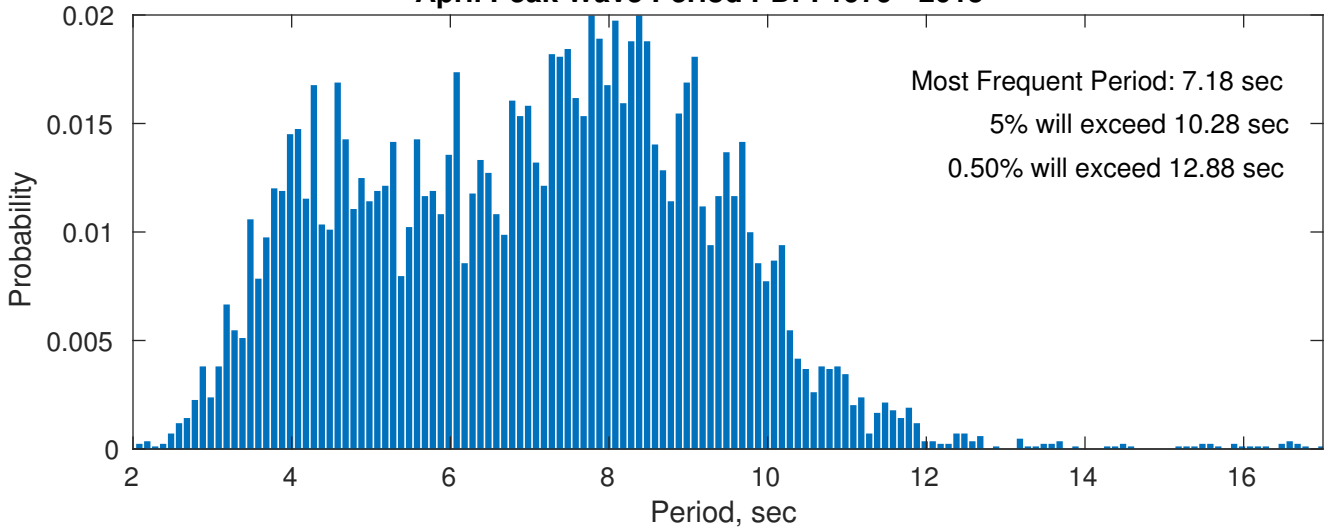
**Wind-Sea: 33.62%**



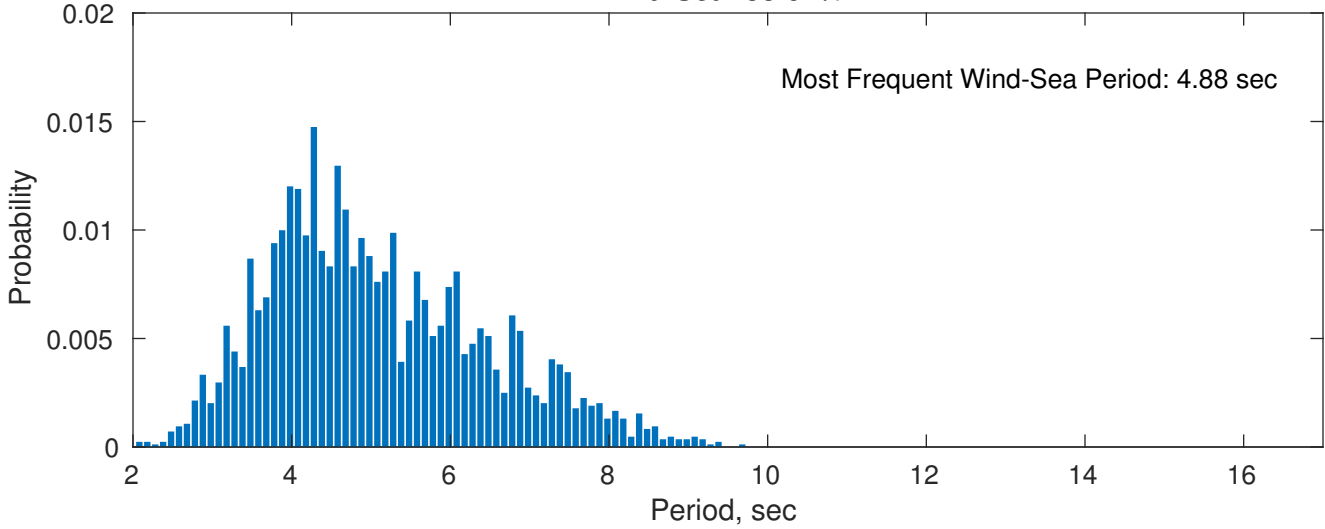
**Swell: 66.38%**



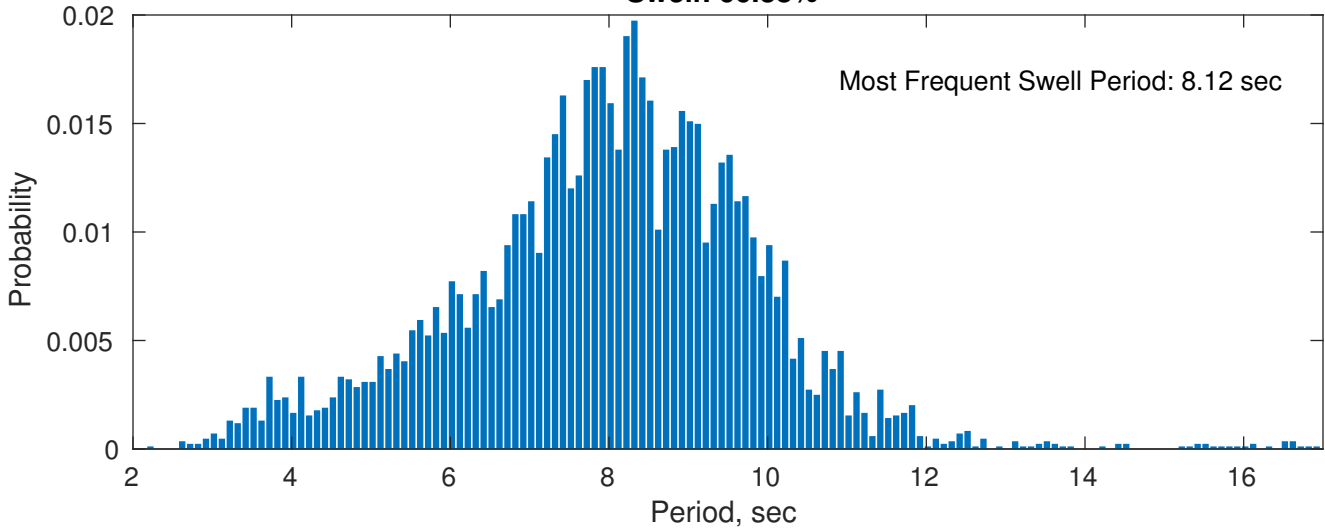
**April Peak Wave Period PDF: 1979 - 2015**



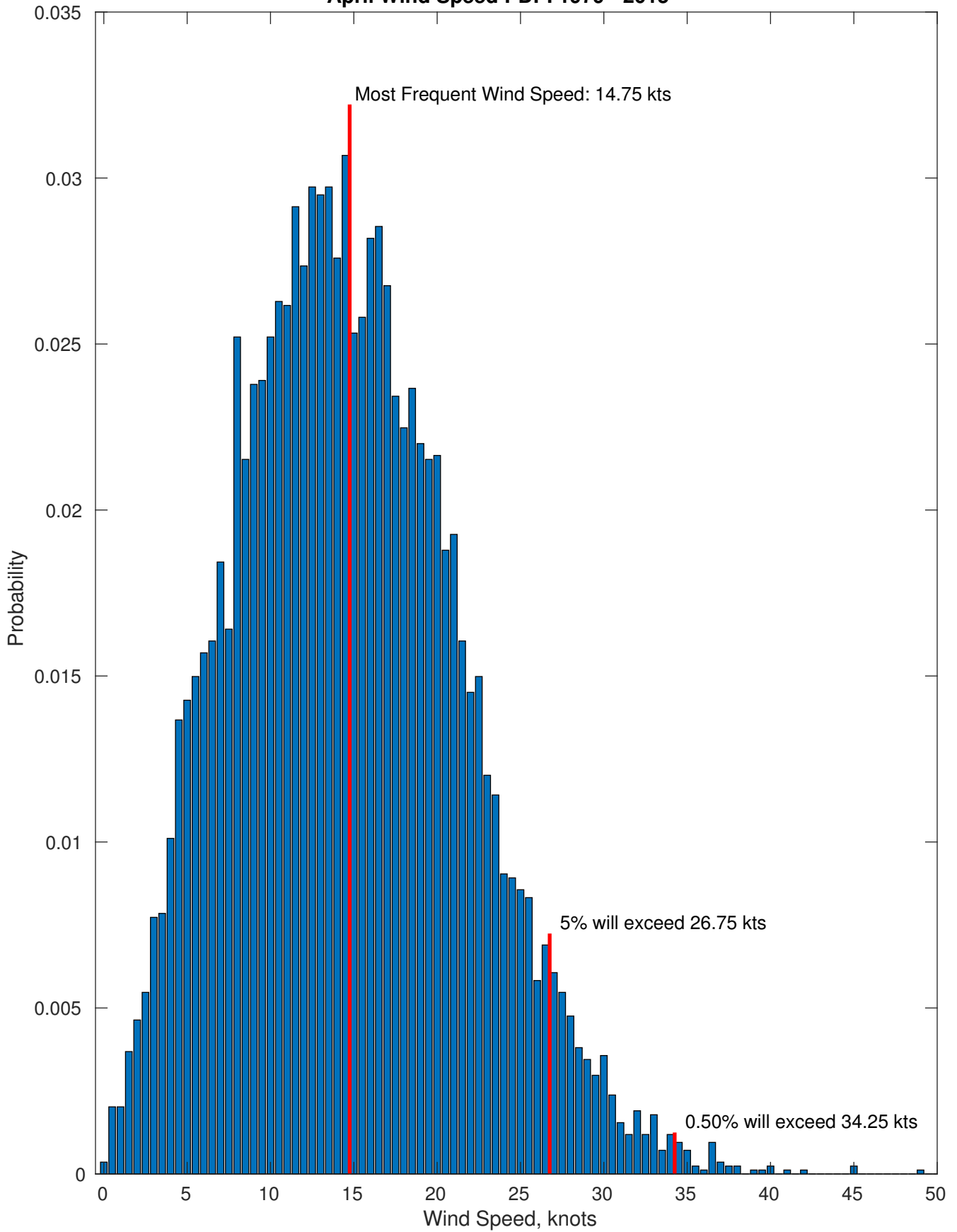
**Wind-Sea: 33.62%**



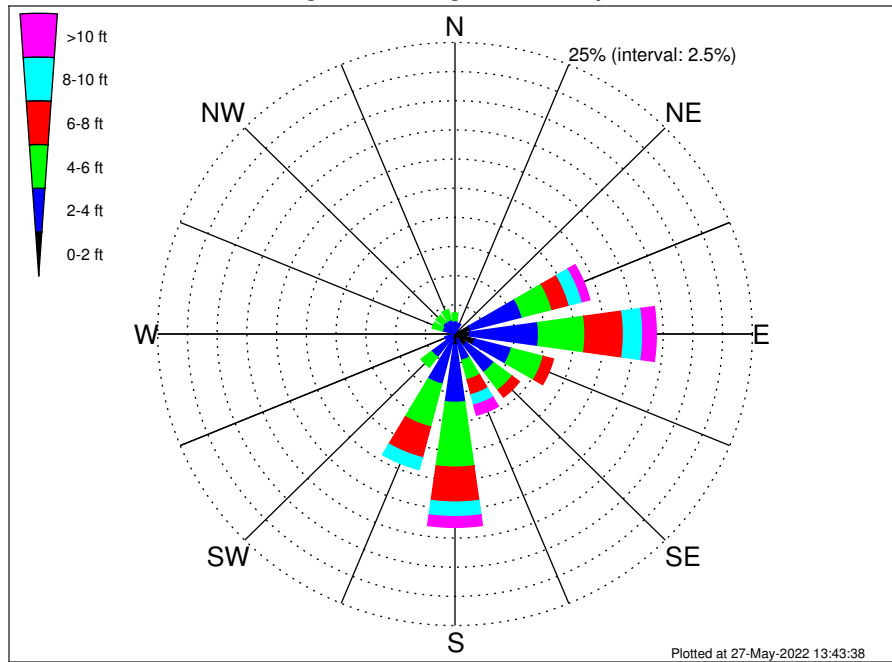
**Swell: 66.38%**



### April Wind Speed PDF: 1979 - 2015



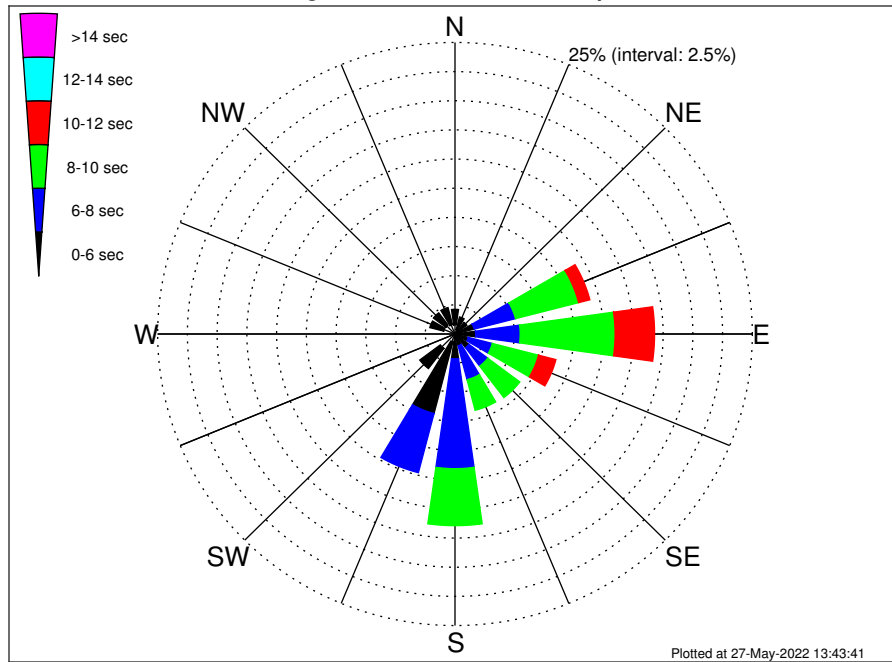
OCS-A 0538 Climatological WaveHeight Rose for April: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	0.02	0.02	0.01	0.11	0.21	0.01	0.04	0.02	•	•	•	0.01	0.01	•	0.48
1 - 2 ft	0.14	0.13	0.18	1.30	1.24	1.62	1.00	0.48	0.92	0.44	0.36	0.19	0.15	0.18	0.18	0.12	8.61
2 - 4 ft	1.01	0.82	0.46	4.51	5.78	3.18	2.87	1.83	4.91	3.97	2.12	0.69	0.37	0.93	1.08	1.14	35.66
4 - 6 ft	0.65	0.36	0.45	2.59	3.90	2.77	1.93	1.72	5.55	3.79	1.09	0.26	0.32	0.87	0.74	0.90	27.91
6 - 8 ft	0.30	0.23	0.25	1.50	3.23	0.88	0.77	1.33	3.00	2.72	0.27	0.01	0.07	0.17	0.24	0.12	15.09
8 - 10 ft	0.05	0.02	0.12	1.13	1.63	0.46	0.56	0.92	1.25	1.06	0.04	0.06	0.06	0.04	0.06	0.06	7.50
10 - 12 ft	•	0.01	0.05	0.46	0.86	0.21	0.18	0.51	0.68	0.30	•	•	0.01	•	0.04	0.04	3.34
12 - 14 ft	0.01	0.02	0.02	0.15	0.26	0.10	0.06	0.27	0.21	0.02	•	•	•	•	•	•	1.14
14 - 16 ft	•	0.01	0.01	0.05	0.01	•	0.01	0.08	0.02	0.01	•	•	•	•	•	•	0.21
16 - 18 ft	•	•	0.01	•	•	•	•	0.04	•	•	•	•	•	•	•	•	0.05
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	2.16	1.61	1.58	11.71	16.92	9.32	7.59	7.19	16.58	12.34	3.88	1.21	0.99	2.19	2.34	2.38	100.00

OCS-A 0538 Climatological WavePeriod Rose for April: 1979 - 2015

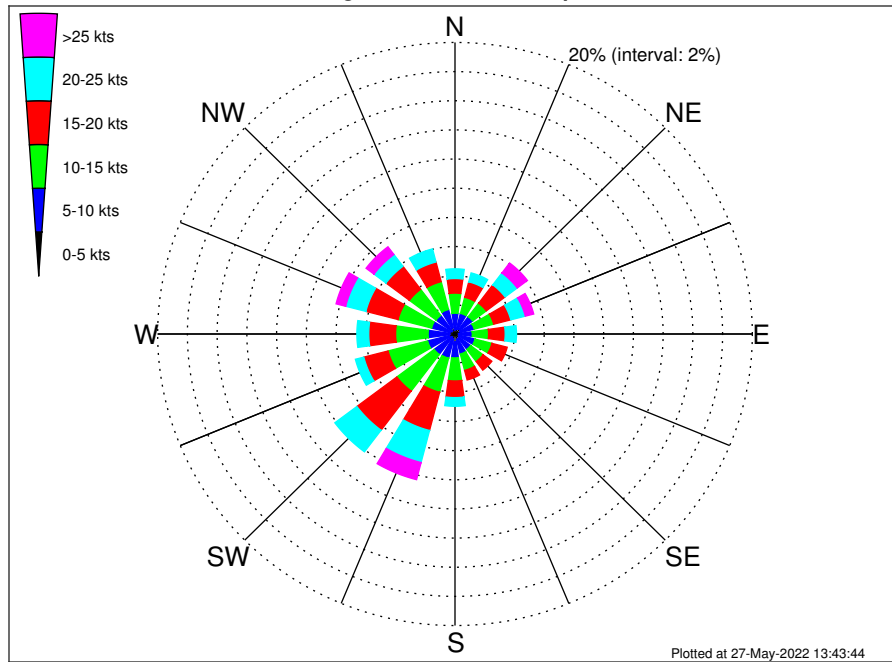


Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 sec	0.78	0.40	0.30	0.19	0.17	0.29	0.36	0.25	0.24	0.70	1.55	0.58	0.37	0.99	0.96	0.83	8.95
4 - 6 sec	1.33	1.11	0.95	1.47	1.57	0.87	1.11	0.78	1.89	6.34	2.16	0.58	0.62	1.20	1.31	1.51	24.81
6 - 8 sec	0.05	0.10	0.29	3.59	3.75	2.09	1.99	3.01	9.42	5.24	0.17	0.05	•	•	0.07	0.04	29.84
8 - 10 sec	•	•	0.05	5.48	7.98	4.01	3.38	2.71	4.89	0.06	•	•	•	•	•	•	28.55
10 - 12 sec	•	•	•	0.98	3.32	1.51	0.61	0.44	0.14	•	•	•	•	•	•	•	6.99
12 - 14 sec	•	•	•	•	0.14	0.29	0.10	•	•	•	•	•	•	•	•	•	0.52
14 - 16 sec	•	•	•	•	•	0.15	0.02	•	•	•	•	•	•	•	•	•	0.18
18 - 20 sec	•	•	•	•	•	0.12	0.04	•	•	•	•	•	•	•	•	•	0.15
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	2.16	1.61	1.58	11.71	16.92	9.32	7.59	7.19	16.58	12.34	3.88	1.21	0.99	2.19	2.34	2.38	100.00



OCS-A 0538 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	0.02	0.02	•	•	•	0.01	0.01	0.04	•	0.01	0.02	0.02	0.04	0.01	0.01	0.24
0 - 5 kts	0.27	0.33	0.40	0.37	0.24	0.27	0.33	0.37	0.50	0.37	0.27	0.42	0.33	0.33	0.26	0.44	5.52
5 - 10 kts	1.14	1.11	1.06	0.96	0.93	1.12	0.98	1.03	1.11	1.34	1.47	1.46	1.45	1.26	1.32	1.28	19.03
10 - 15 kts	1.38	1.14	1.15	1.36	1.09	1.18	1.05	1.17	1.58	2.41	3.14	2.75	2.19	2.33	2.25	1.97	28.14
15 - 20 kts	1.00	1.09	1.58	1.19	1.12	1.06	0.74	0.68	1.14	2.71	3.37	1.69	1.81	2.24	1.97	1.39	24.77
20 - 25 kts	0.67	0.63	1.02	1.01	0.76	0.46	0.32	0.34	0.59	2.27	1.86	0.58	0.80	1.40	1.01	0.93	14.66
25 - 30 kts	0.21	0.43	0.52	0.48	0.23	0.23	0.21	0.20	0.29	0.99	0.37	0.15	0.20	0.49	0.39	0.23	5.61
30 - 35 kts	0.10	0.05	0.31	0.11	0.08	0.04	0.13	0.02	0.04	0.19	0.05	0.01	0.08	0.17	0.19	0.08	1.64
35 - 40 kts	0.04	•	0.02	•	0.01	•	0.05	•	0.01	0.04	0.01	•	0.01	0.01	0.07	0.04	0.31
40 - 45 kts	•	0.01	•	•	•	•	•	•	•	•	•	•	0.01	•	0.01	0.01	0.05
45 - 50 kts	0.04	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.04
Total	4.85	4.82	6.10	5.47	4.46	4.35	3.82	3.83	5.29	10.32	10.55	7.09	6.91	8.26	7.49	6.39	100.00