

## Long Island Wind - October

Latitude: 40.90 N Longitude: 71.00 W

### Weather Days

Wave Height > 6.0 ft Mean: 6.3 days Range: 3.7 - 8.9 days p50:7 days p75:5 days p90:3 days

Wave Height > 7.0 ft Mean: 4.0 days Range: 1.7 - 6.3 days p50:4.5 days p75:3.5 days p90:1.5 days

Wave Height > 8.0 ft Mean: 2.6 days Range: 0.7 - 4.6 days p50:3 days p75:2 days p90:0.5 days

Wind Speed > 15.0 knots Mean: 15.1 days Range: 12.7 - 17.4 days p50:15 days p75:13.5 days p90:13 days

Wind Speed > 20.0 knots Mean: 7.3 days Range: 5.4 - 9.3 days p50:8 days p75:7 days p90:5 days

Wind Speed > 25.0 knots Mean: 2.7 days Range: 1.4 - 4.1 days p50:3 days p75:2.5 days p90:1.5 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 4.8 times per month  
A 2 day or longer window will statistically occur 3.5 times per month  
A 3 day or longer window will statistically occur 2.4 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 3.2 times per month  
A 3 day or longer window will statistically occur 2.5 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 2.7 times per month  
A 3 day or longer window will statistically occur 2.4 times per month

### 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: SE

WindSea/Swell: 36% / 64%

### Winds

Mean Speed: 15 - 20 kts

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

Principle Direction, from: WSW

### Currents

Mean Speed: 0.25-0.50 kts

The currents will occasionally reach 1.50-1.75 kts, but rarely greater.

Principle Direction, to: W

### Weather Days

Current Speed > 1.0 knots Mean: 0.9 days Range: 0.0 - 2.1 days p50:2 days p75:1 days p90:1 days

Current Speed > 1.5 knots Mean: 0.3 days Range: 0.0 - 1.0 days p50:1 days p75:1 days p90:1 days

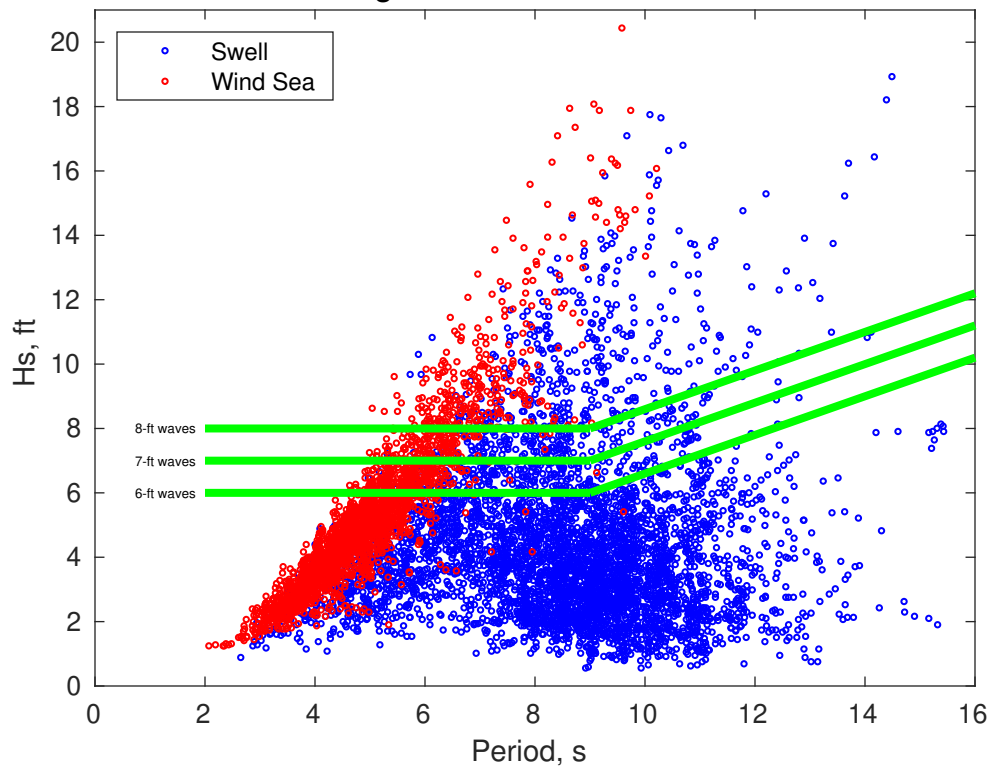
Current Speed > 2.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

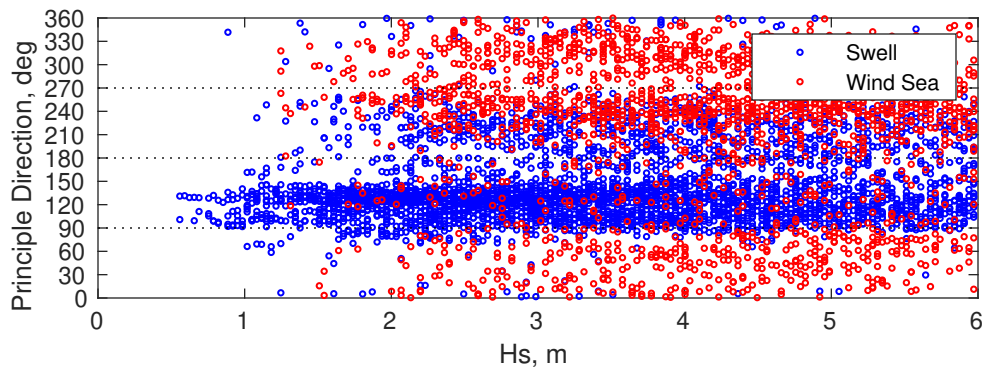
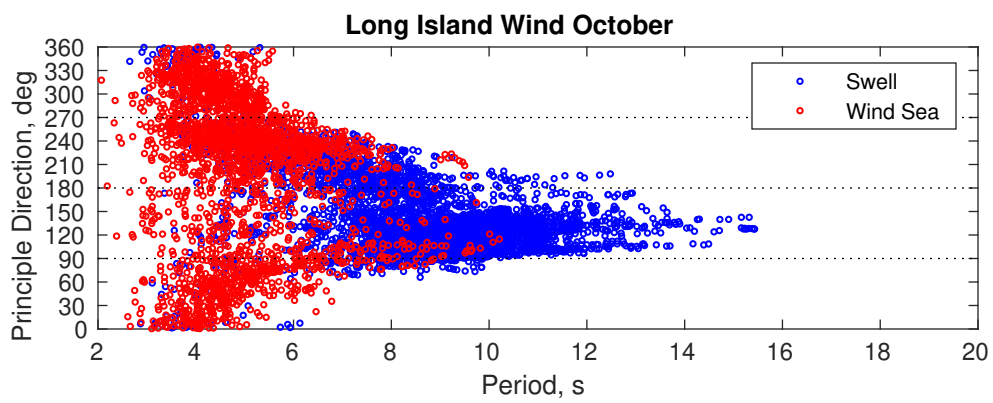
### Severe Storms

There is a 17 % chance of a storm occurring in the month with winds peaking above 34 kts.

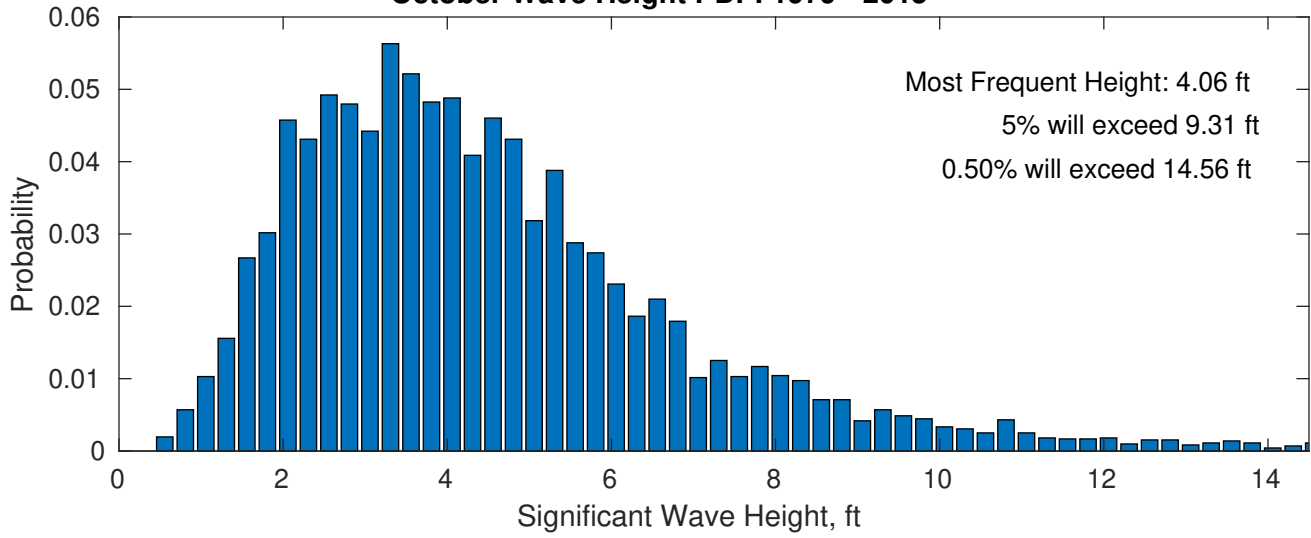
There is a 7 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.

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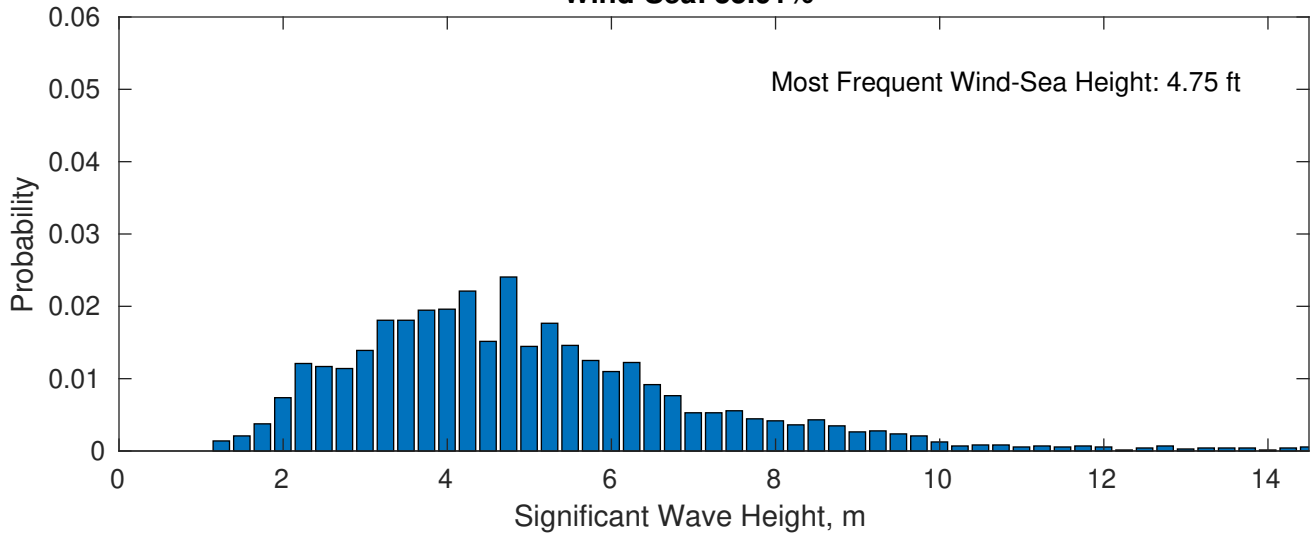




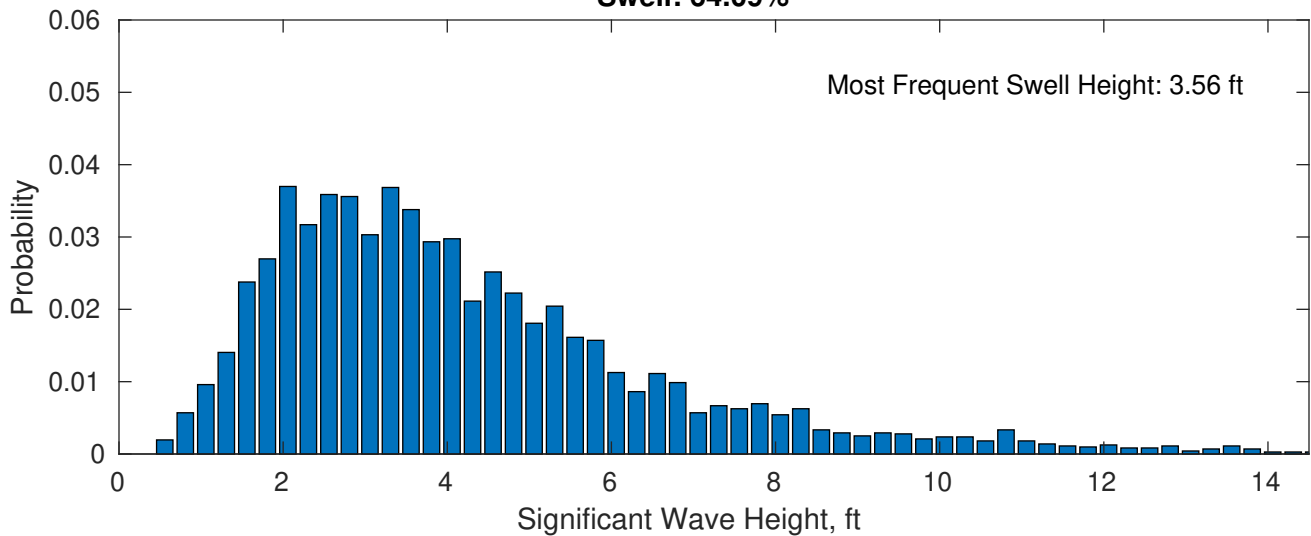
**October Wave Height PDF: 1979 - 2015**



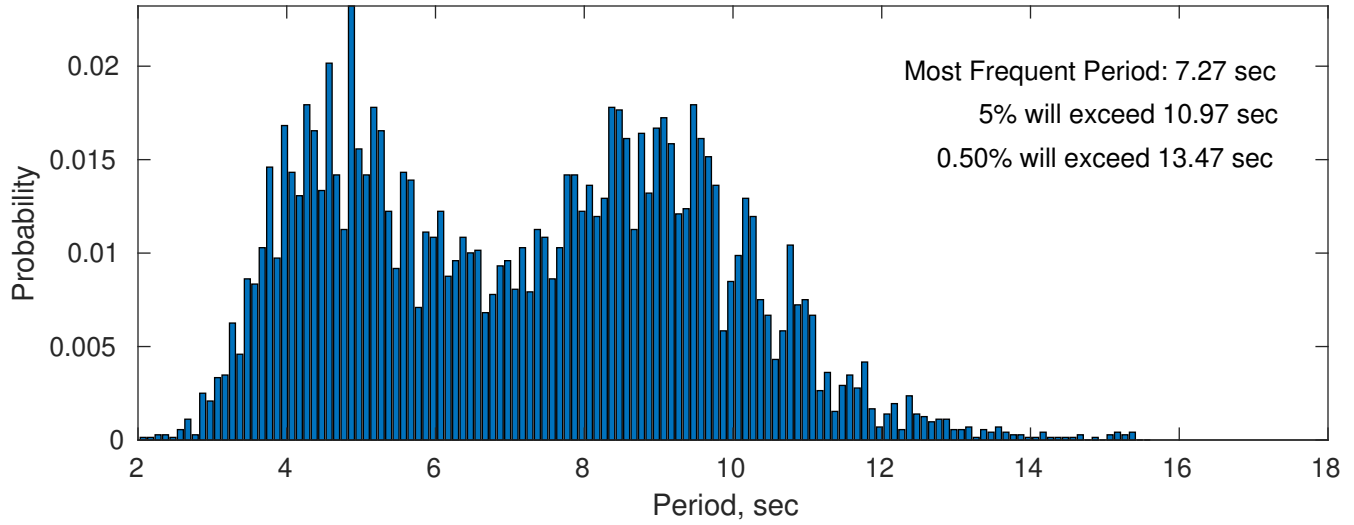
**Wind-Sea: 35.91%**



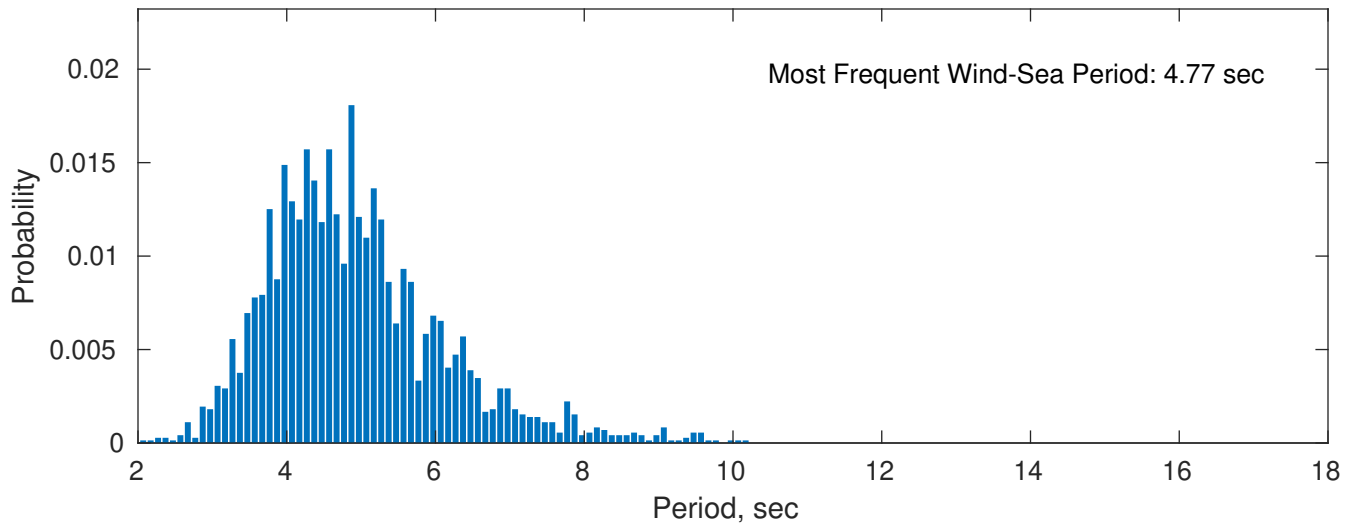
**Swell: 64.09%**



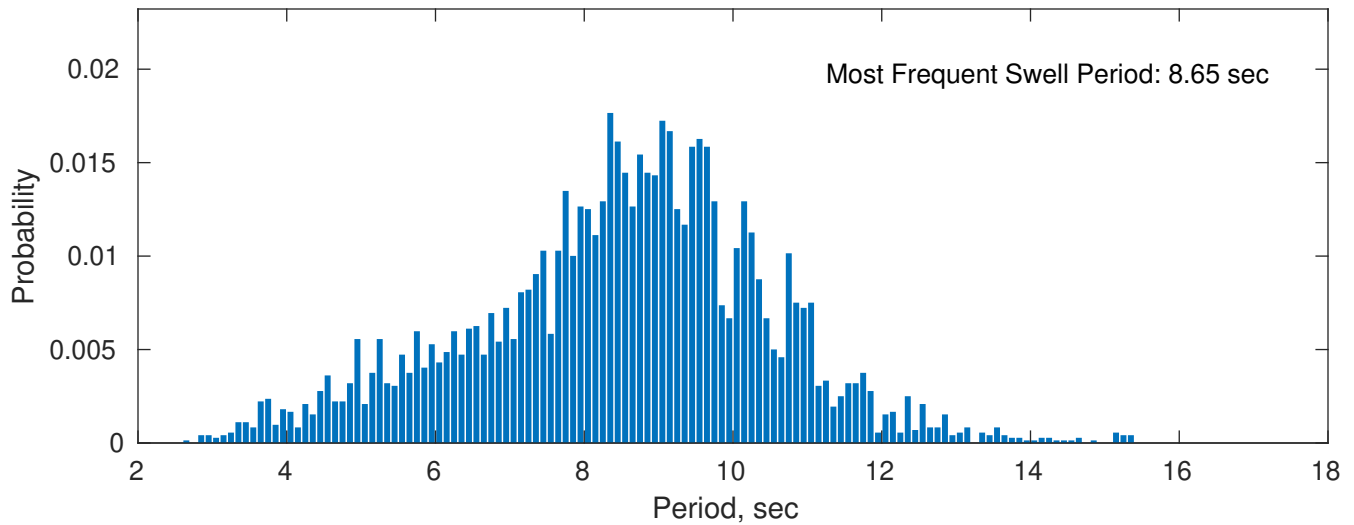
### October Peak Wave Period PDF: 1979 - 2015



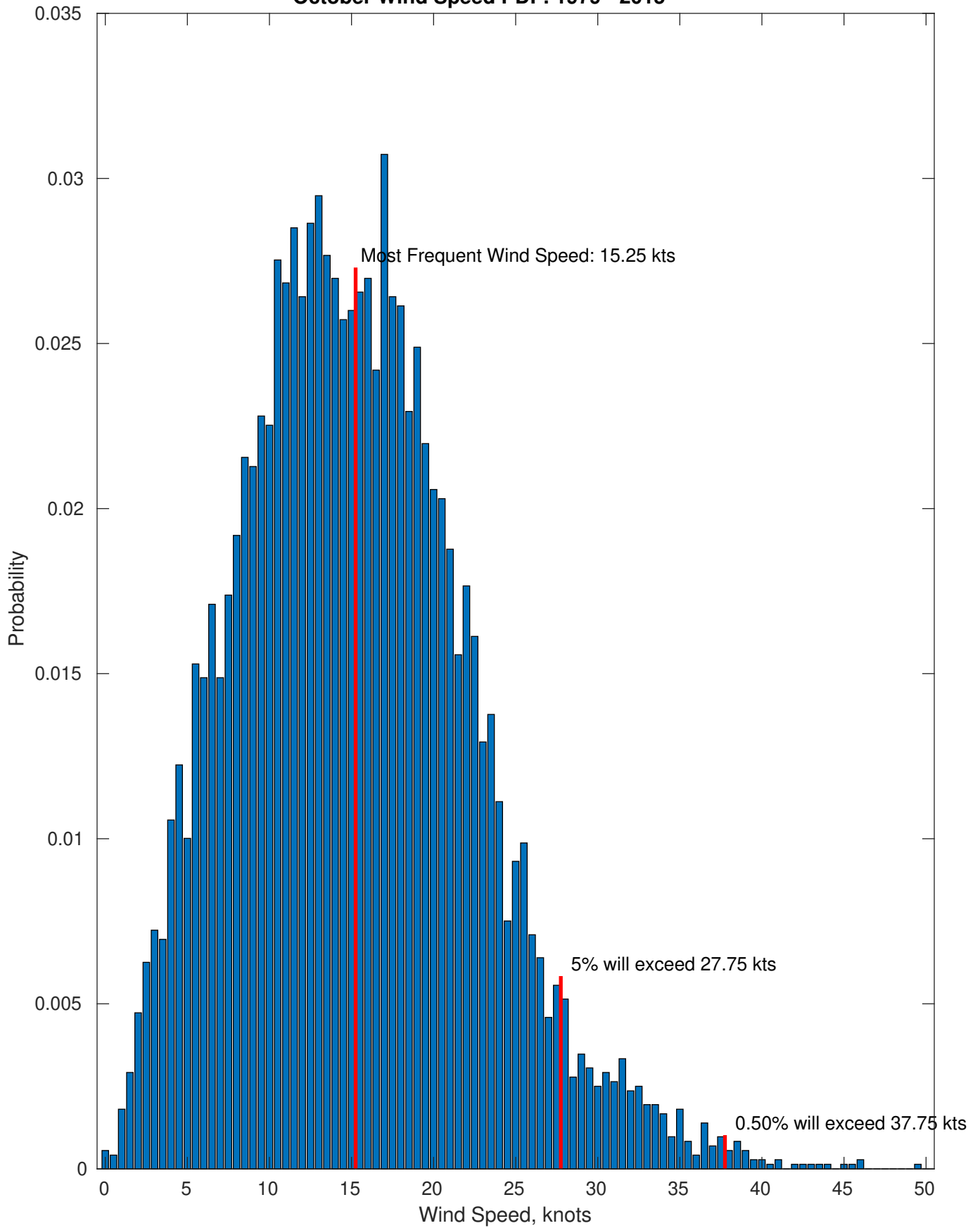
### Wind-Sea: 35.91%



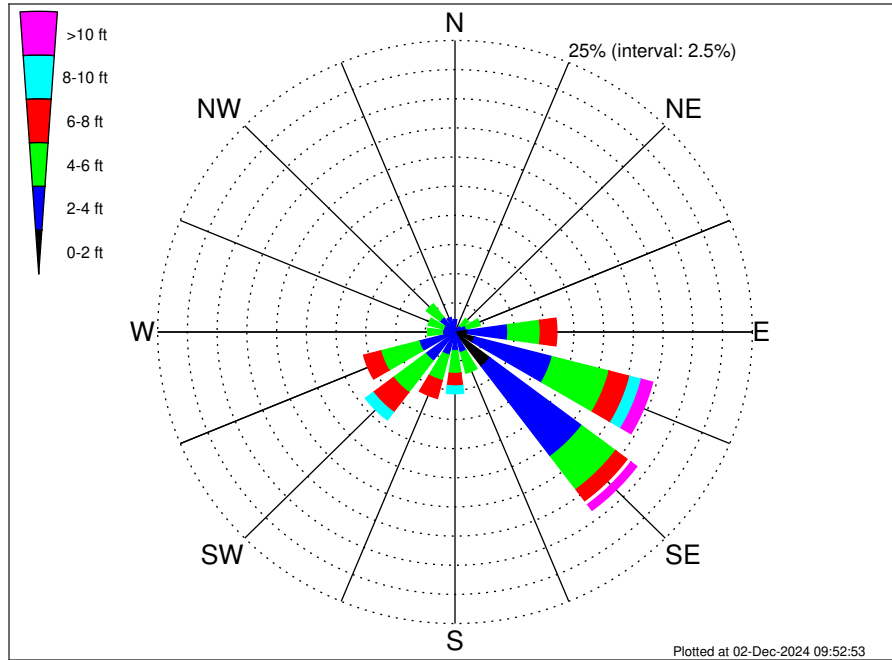
### Swell: 64.09%



October Wind Speed PDF: 1979 - 2015



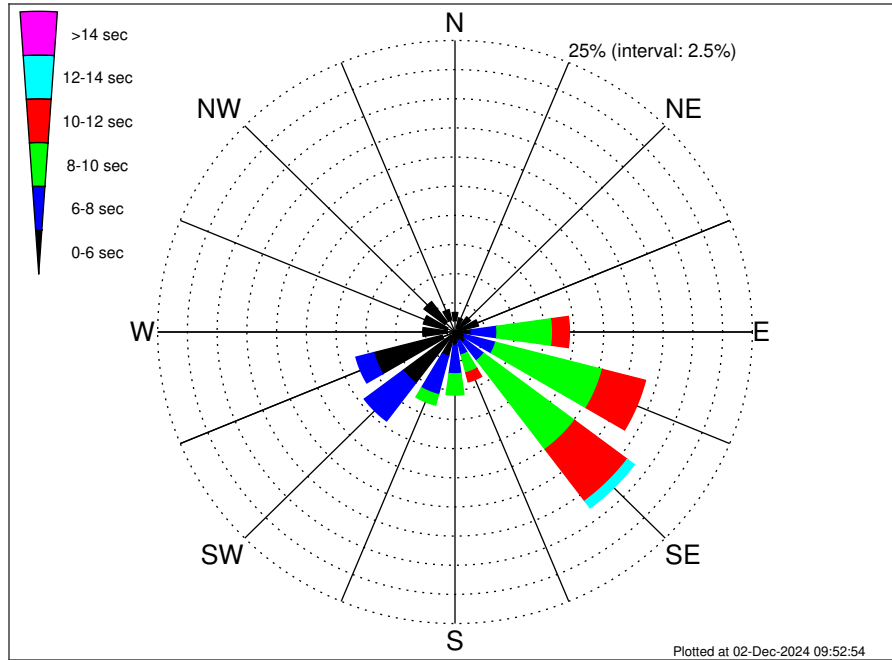
Long Island Wind Climatological WaveHeight Rose for October: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	0.21	0.11	0.21	•	•	•	•	•	•	•	•	0.01	0.54
1 - 2 ft	0.11	0.01	0.04	0.15	0.88	1.60	3.48	0.15	0.15	0.11	0.19	0.35	0.06	0.15	0.10	0.04	7.58
2 - 4 ft	0.96	0.54	0.64	0.85	3.36	6.74	9.66	1.67	1.46	1.93	2.89	2.78	1.02	0.86	1.50	1.24	38.11
4 - 6 ft	0.44	0.60	0.76	1.20	2.73	4.94	3.56	1.82	1.95	2.25	3.39	3.32	1.24	1.32	1.42	0.49	31.42
6 - 8 ft	0.07	0.08	0.14	0.29	1.39	1.81	1.21	0.47	1.07	1.59	2.13	1.49	0.42	0.42	0.25	0.18	13.00
8 - 10 ft	0.08	0.01	0.19	0.13	0.57	1.00	0.40	0.28	0.67	0.53	0.83	0.57	0.13	•	•	0.03	5.42
10 - 12 ft	0.03	0.01	0.03	0.03	0.25	0.42	0.31	0.10	0.43	0.21	0.25	0.10	•	•	•	•	2.16
12 - 14 ft	•	•	0.01	•	0.10	0.35	0.22	0.13	0.10	0.01	0.14	•	•	•	•	•	1.06
14 - 16 ft	•	•	•	•	0.11	0.11	0.07	0.03	•	0.03	0.06	•	•	•	•	•	0.40
16 - 18 ft	•	•	•	•	0.01	0.07	0.03	0.04	0.03	0.04	0.03	•	•	•	•	•	0.25
> 18 ft	•	•	•	•	0.01	0.03	•	•	•	0.01	•	•	•	•	•	•	0.06
Total	1.70	1.27	1.82	2.64	9.62	17.17	19.15	4.69	5.85	6.72	9.91	8.61	2.85	2.75	3.27	1.99	100.00

### Long Island Wind Climatological WavePeriod Rose for October: 1979 - 2015

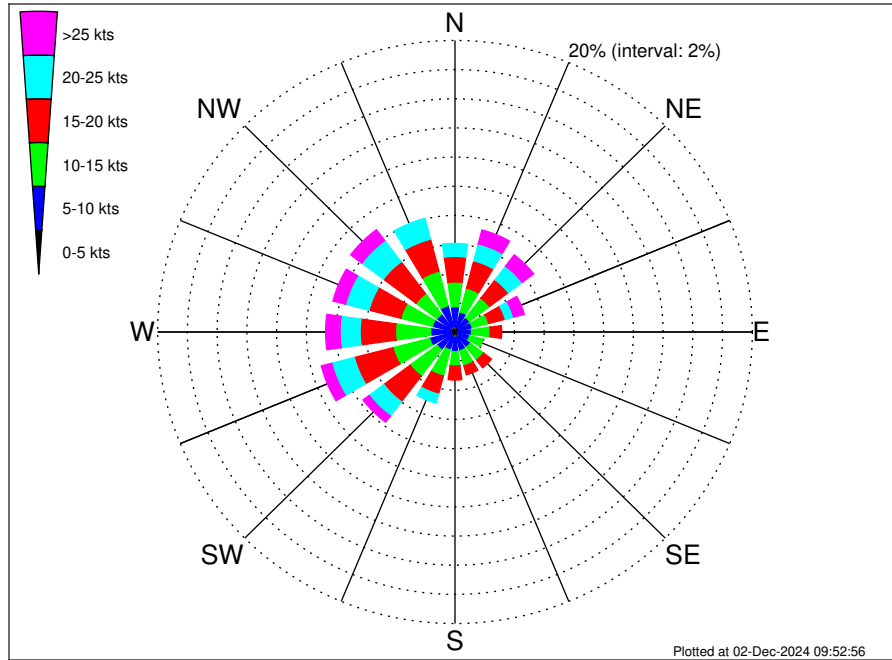


### Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1 - 2 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 - 4 sec	0.97	0.44	0.40	0.25	0.22	0.14	0.25	0.14	0.19	0.18	0.44	1.11	0.68	0.70	1.08	1.07	8.29
4 - 6 sec	0.71	0.81	1.22	1.79	1.14	0.72	0.83	0.64	0.95	1.96	5.03	5.95	2.03	2.06	2.18	0.92	28.95
6 - 8 sec	0.01	0.01	0.19	0.46	2.17	2.67	1.96	1.25	2.45	3.41	4.07	1.54	0.14	•	•	•	20.34
8 - 10 sec	•	•	•	0.14	4.69	9.27	9.55	1.59	1.82	0.93	0.36	•	•	•	•	•	28.35
10 - 12 sec	•	•	•	•	1.40	3.74	5.55	0.81	0.35	0.21	•	•	•	•	•	•	12.06
12 - 14 sec	•	•	•	•	•	0.58	0.74	0.26	0.10	0.03	•	•	•	•	•	•	1.71
14 - 16 sec	•	•	•	•	•	0.04	0.26	•	•	•	•	•	•	•	•	•	0.31
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	1.70	1.27	1.82	2.64	9.62	17.17	19.15	4.69	5.85	6.72	9.91	8.61	2.85	2.75	3.27	1.99	100.00



Long Island Wind Climatological Wind Rose for October: 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	•	•	•	0.03	•	0.10
0 - 5 kts	0.39	0.31	0.32	0.31	0.22	0.15	0.40	0.39	0.40	0.36	0.33	0.25	0.33	0.29	0.40	0.40	5.27
5 - 10 kts	1.35	1.10	0.90	0.88	0.89	0.85	0.89	0.93	0.93	0.90	1.17	1.52	1.31	1.28	1.08	1.46	17.44
10 - 15 kts	1.70	1.70	1.68	1.14	1.25	0.93	1.11	1.07	0.99	1.86	2.27	2.54	2.36	2.20	1.78	2.45	27.03
15 - 20 kts	1.75	1.93	1.59	1.15	0.78	0.44	0.67	0.64	0.96	1.28	2.21	2.68	2.38	2.21	2.74	2.27	25.68
20 - 25 kts	0.89	1.21	1.17	0.58	0.43	0.35	0.29	0.32	0.49	0.63	1.24	1.57	1.35	1.63	1.82	1.47	15.43
25 - 30 kts	0.17	0.46	0.42	0.39	0.19	0.07	0.11	0.10	0.29	0.18	0.40	0.49	0.64	0.61	0.85	0.36	5.73
30 - 35 kts	0.10	0.39	0.43	0.22	0.15	0.04	0.06	0.04	0.03	0.06	0.08	0.13	0.18	0.25	0.07	0.06	2.28
35 - 40 kts	0.07	0.06	0.11	0.08	0.07	0.01	0.04	0.04	0.03	•	0.03	0.11	0.15	0.01	•	0.01	0.83
40 - 45 kts	0.01	0.03	•	0.03	0.01	0.01	0.01	0.01	•	•	•	•	•	•	0.01	•	0.14
45 - 50 kts	•	0.04	•	0.01	0.01	•	•	•	•	•	•	•	•	•	•	•	0.07
Total	6.42	7.23	6.62	4.81	4.02	2.88	3.59	3.55	4.13	5.27	7.74	9.29	8.70	8.48	8.79	8.48	100.00