

## Long Island Wind - July

Latitude: 40.90 N Longitude: 71.00 W

### Weather Days

Wave Height > 6.0 ft Mean: 2.6 days Range: 0.8 - 4.5 days p50:2.5 days p75:1.5 days p90:0.5 days

Wave Height > 7.0 ft Mean: 1.2 days Range: 0.1 - 2.4 days p50:1.5 days p75:1 days p90:0.5 days

Wave Height > 8.0 ft Mean: 0.7 days Range: 0.0 - 1.5 days p50:2.5 days p75:1 days p90:0.5 days

Wind Speed > 15.0 knots Mean: 8.0 days Range: 6.1 - 9.9 days p50:8 days p75:7.5 days p90:6 days

Wind Speed > 20.0 knots Mean: 1.9 days Range: 0.8 - 3.0 days p50:2 days p75:1.5 days p90:1 days

Wind Speed > 25.0 knots Mean: 0.3 days Range: 0.0 - 0.6 days p50:0.5 days p75:0.5 days p90:0.5 days

### Working Window

Wave Height < 6.0 ft  
A 1 day or longer window will statistically occur 3.1 times per month  
A 2 day or longer window will statistically occur 2.6 times per month  
A 3 day or longer window will statistically occur 2.3 times per month

Wave Height < 7.0 ft  
A 1 day or longer window will statistically occur 2.0 times per month  
A 2 day or longer window will statistically occur 1.8 times per month  
A 3 day or longer window will statistically occur 1.7 times per month

Wave Height < 8.0 ft  
A 1 day or longer window will statistically occur 1.5 times per month  
A 2 day or longer window will statistically occur 1.4 times per month  
A 3 day or longer window will statistically occur 1.4 times per month

### Waves

Mean Height: 2 - 4 ft

The wave heights will occasionally reach 10 - 12 ft, but rarely higher.

Mean Period: 6 - 8 sec

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

Principle Direction, from: SSW

WindSea/Swell: 22% / 78%

### Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 25 - 30 kts, but rarely greater.

Principle Direction, from: SW

### Currents

Mean Speed: 0.25-0.50 kts

The currents will occasionally reach 1.00-1.25 kts, but rarely greater.

Principle Direction, to: E

### Weather Days

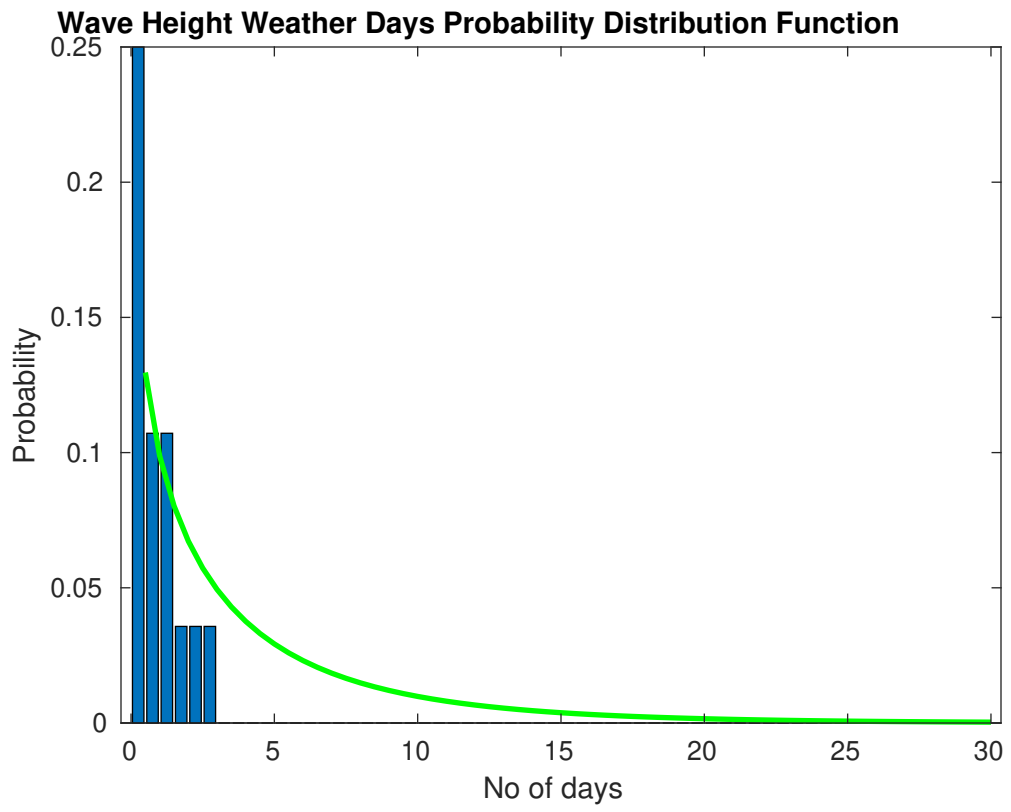
Current Speed > 1.0 knots Mean: 0.3 days Range: 0.0 - 1.1 days p50:1 days p75:1 days p90:1 days

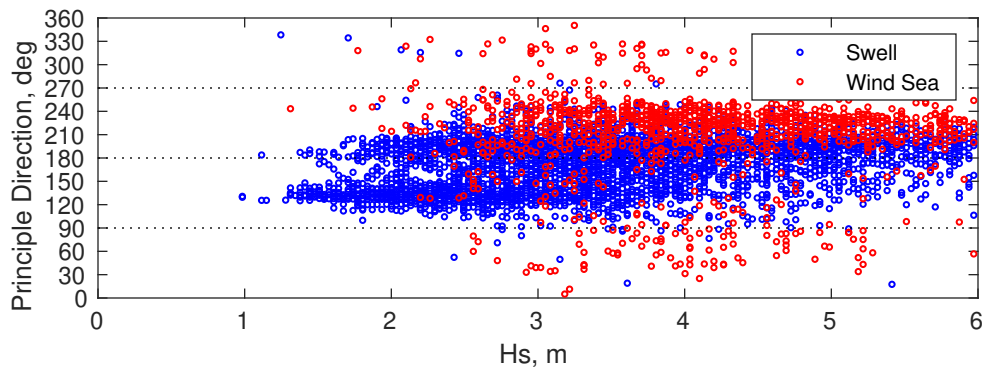
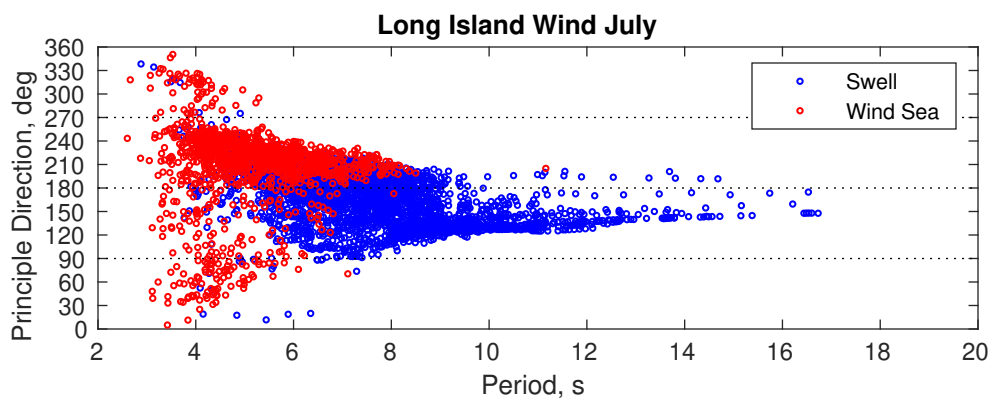
Current Speed > 1.5 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

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

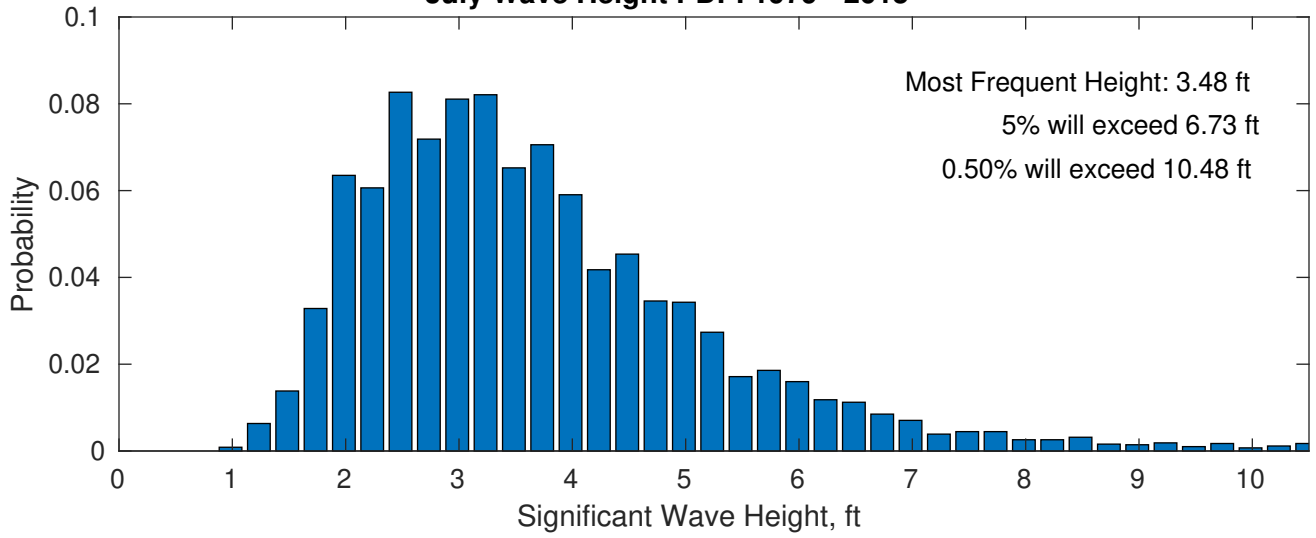
### Severe Storms

Severe storms with gale force winds and extreme waves are not expected during this month.

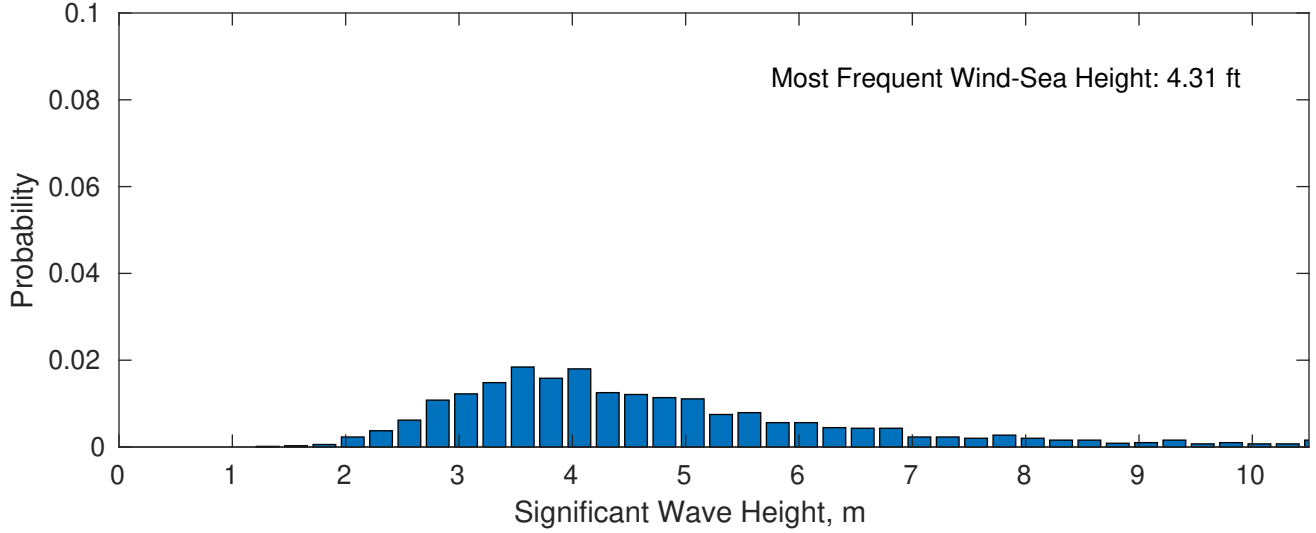




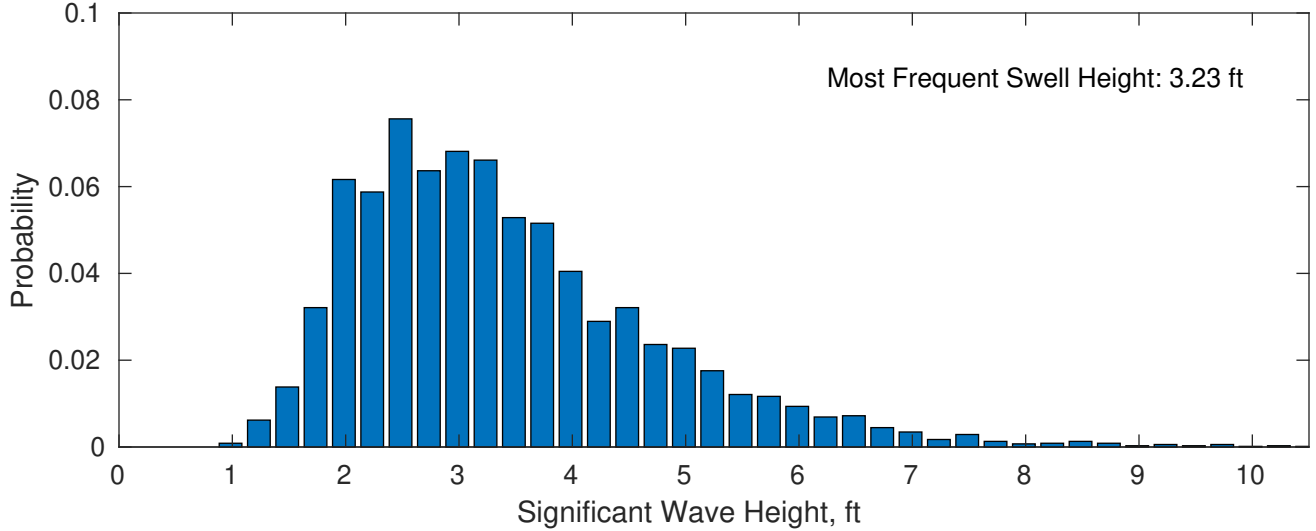
**July Wave Height PDF: 1979 - 2015**



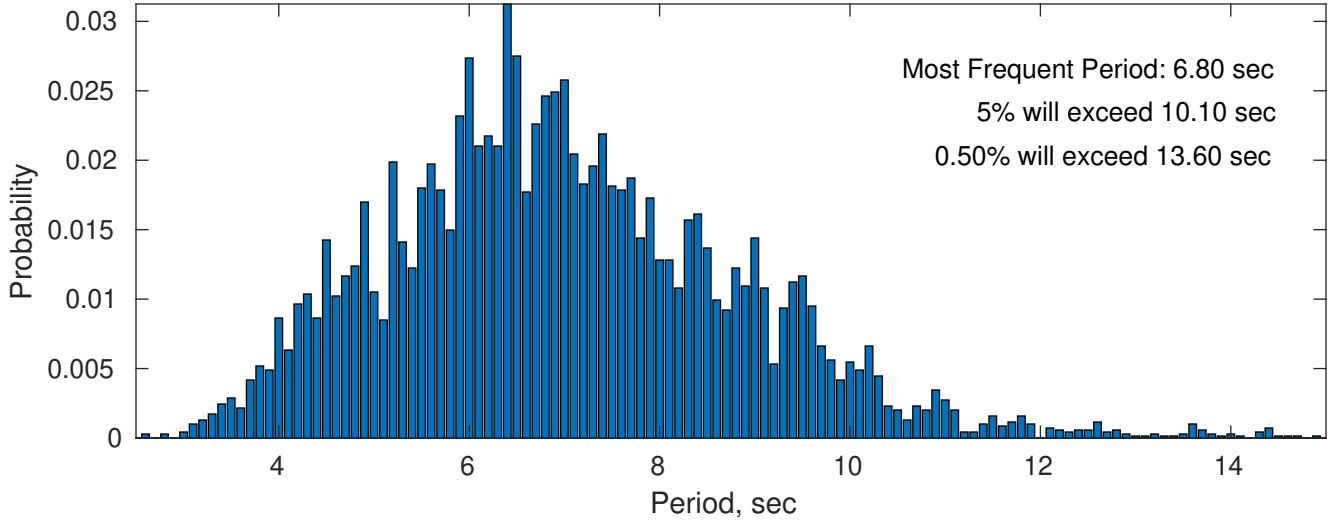
**Wind-Sea: 21.53%**



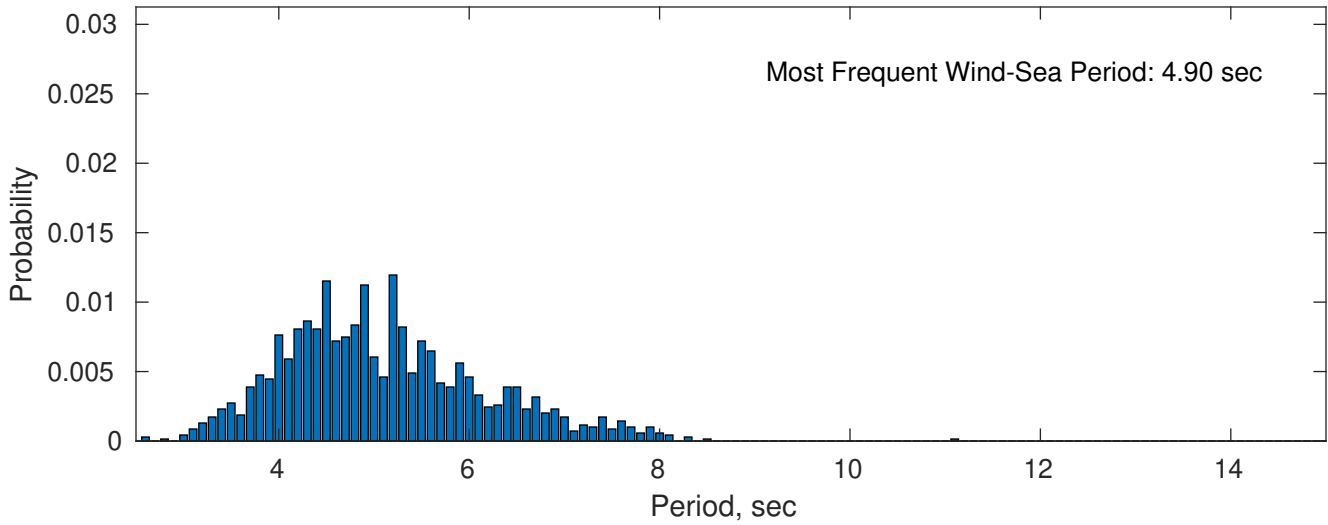
**Swell: 78.47%**



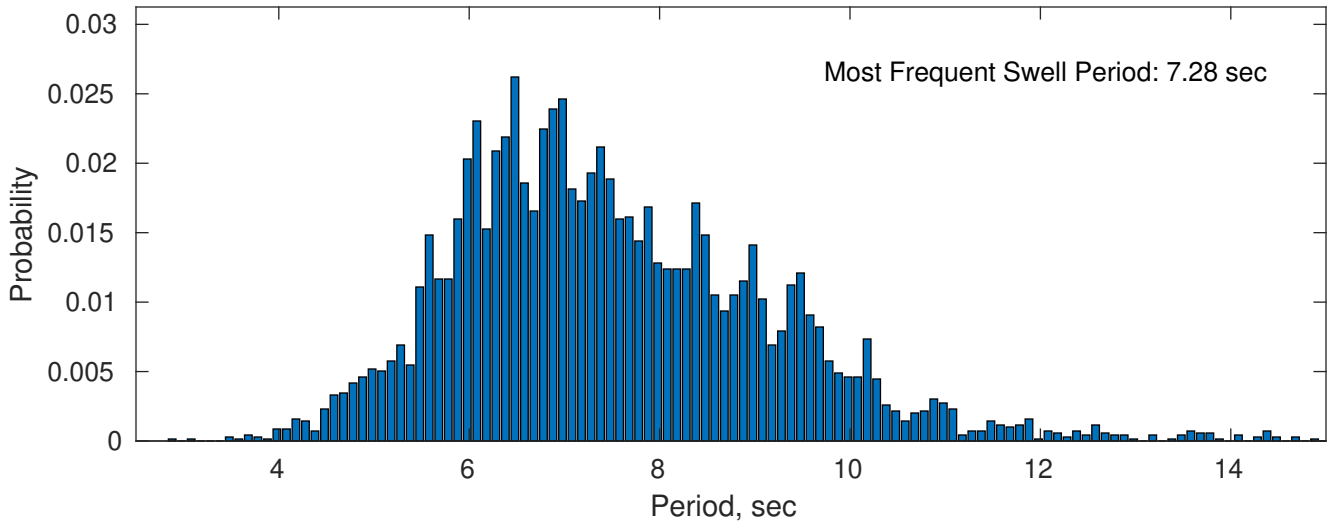
### July Peak Wave Period PDF: 1979 - 2015



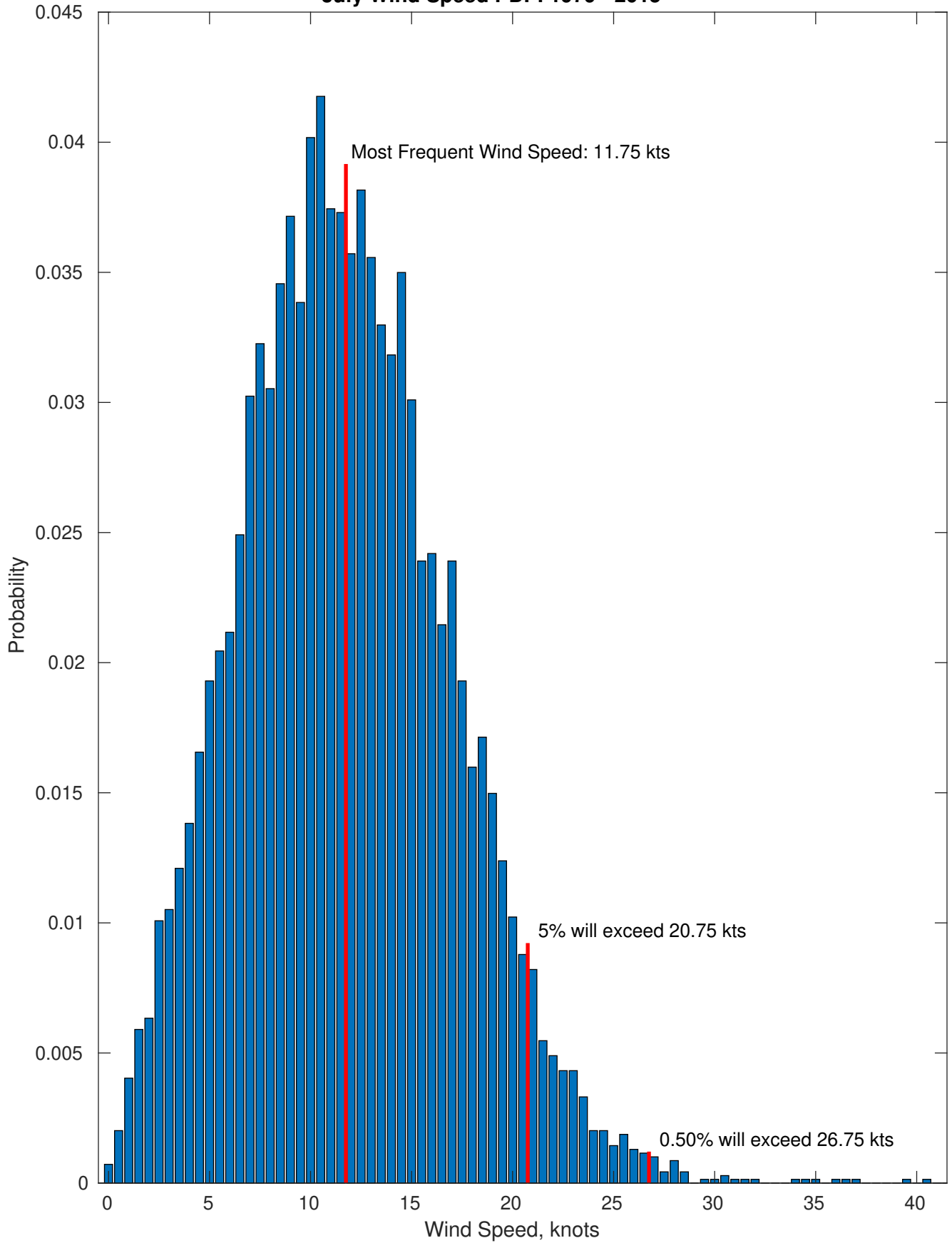
### Wind-Sea: 21.53%



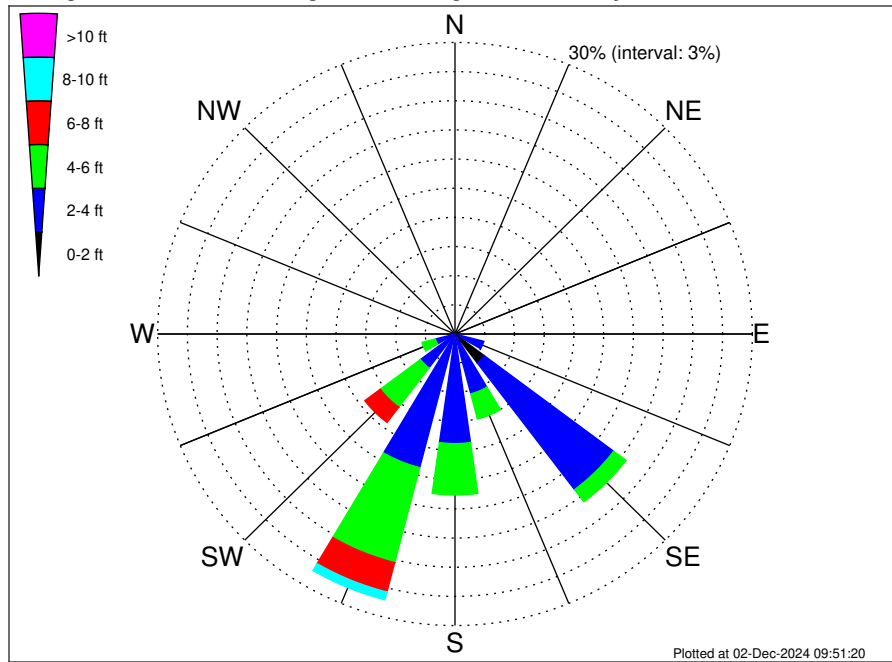
### Swell: 78.47%



July Wind Speed PDF: 1979 - 2015



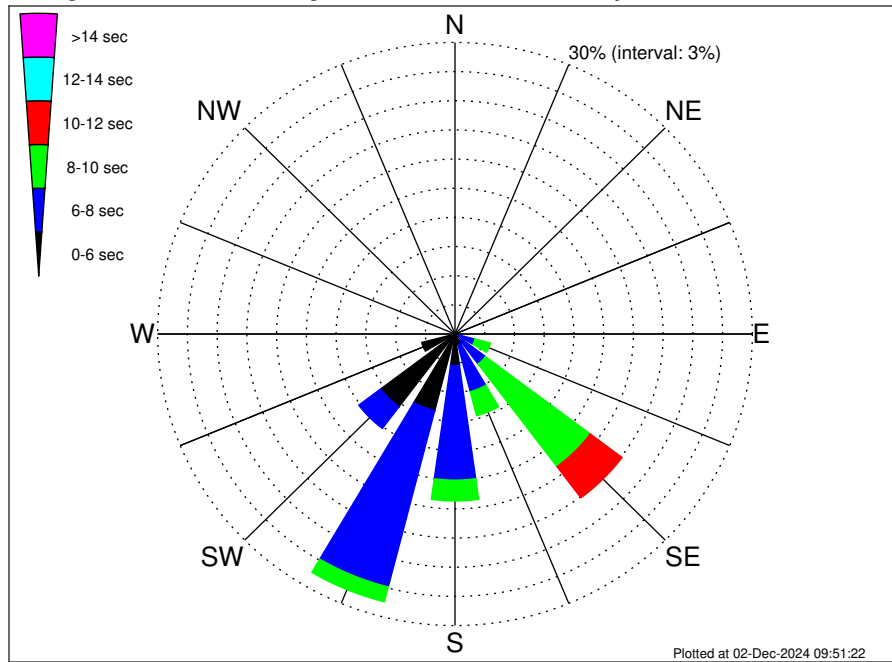
Long Island Wind Climatological WaveHeight Rose for July: 1979 - 2015



Joint Frequency Distribution Table

|            | N    | NNE  | NE   | ENE  | E    | ESE  | SE    | SSE  | S     | SSW   | SW    | WSW  | W    | WNW  | NW   | NNW  | Total  |
|------------|------|------|------|------|------|------|-------|------|-------|-------|-------|------|------|------|------|------|--------|
| calm       | •    | •    | •    | •    | •    | •    | 0.04  | •    | •     | •     | •     | •    | •    | •    | •    | •    | 0.04   |
| 1 - 2 ft   | •    | •    | •    | •    | 0.01 | 0.24 | 3.66  | 0.35 | 0.59  | 0.36  | 0.01  | 0.07 | •    | •    | 0.01 | 0.03 | 5.34   |
| 2 - 4 ft   | 0.03 | 0.04 | 0.24 | 0.23 | 0.45 | 2.75 | 16.35 | 6.01 | 10.69 | 13.84 | 4.35  | 1.97 | 0.29 | 0.12 | 0.33 | 0.09 | 57.76  |
| 4 - 6 ft   | •    | 0.04 | 0.20 | 0.26 | 0.43 | 0.60 | 1.56  | 2.68 | 5.29  | 10.10 | 5.07  | 1.38 | •    | 0.12 | 0.09 | •    | 27.81  |
| 6 - 8 ft   | •    | 0.01 | •    | 0.03 | 0.06 | 0.09 | 0.20  | 0.48 | 0.68  | 3.12  | 1.96  | 0.09 | •    | 0.01 | 0.01 | •    | 6.74   |
| 8 - 10 ft  | •    | 0.01 | •    | •    | •    | 0.01 | 0.04  | •    | 0.12  | 0.82  | 0.59  | •    | •    | •    | •    | •    | 1.60   |
| 10 - 12 ft | •    | 0.01 | •    | •    | 0.01 | •    | •     | •    | •     | 0.37  | 0.19  | •    | •    | •    | •    | •    | 0.59   |
| 12 - 14 ft | •    | •    | •    | 0.03 | •    | •    | •     | •    | •     | 0.03  | •     | •    | •    | •    | •    | •    | 0.06   |
| 14 - 16 ft | •    | •    | •    | •    | •    | •    | •     | •    | 0.01  | •     | •     | •    | •    | •    | •    | •    | 0.01   |
| 16 - 18 ft | •    | •    | •    | •    | •    | •    | •     | •    | •     | 0.01  | •     | •    | •    | •    | •    | •    | 0.01   |
| > 18 ft    | •    | •    | •    | •    | •    | •    | •     | •    | •     | 0.03  | •     | •    | •    | •    | •    | •    | 0.03   |
| Total      | 0.03 | 0.13 | 0.45 | 0.55 | 0.96 | 3.70 | 21.85 | 9.50 | 17.37 | 28.69 | 12.17 | 3.51 | 0.29 | 0.24 | 0.45 | 0.12 | 100.00 |

Long Island Wind Climatological WavePeriod Rose for July: 1979 - 2015

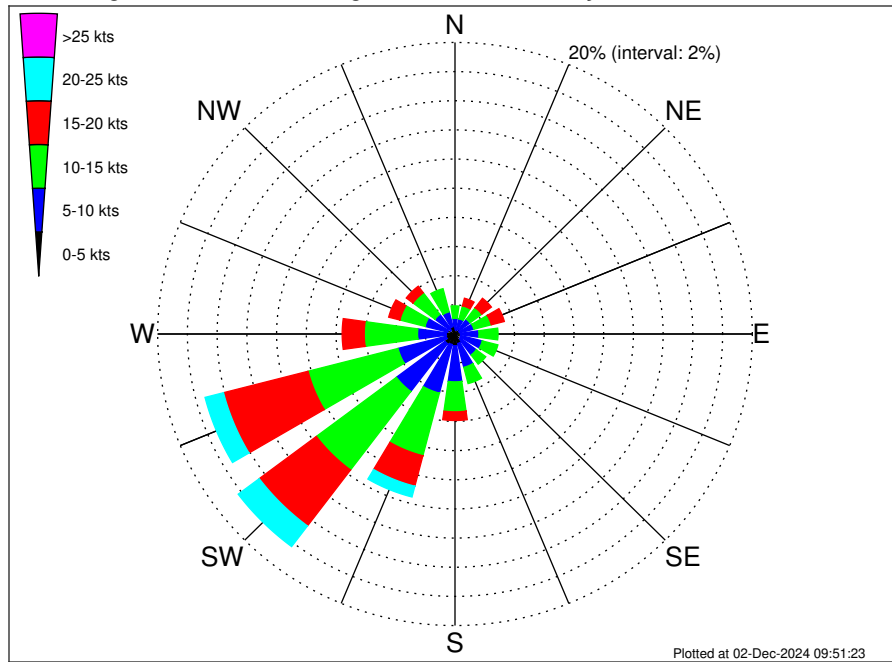


Joint Frequency Distribution Table

|             | N    | NNE  | NE   | ENE  | E    | ESE  | SE    | SSE  | S     | SSW   | SW    | WSW  | W    | WNW  | NW   | NNW  | Total  |
|-------------|------|------|------|------|------|------|-------|------|-------|-------|-------|------|------|------|------|------|--------|
| calm        | •    | •    | •    | •    | •    | •    | •     | •    | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 1 - 2 sec   | •    | •    | •    | •    | •    | •    | •     | •    | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 2 - 4 sec   | 0.03 | 0.03 | 0.17 | 0.10 | 0.04 | 0.03 | 0.16  | 0.13 | 0.23  | 0.23  | 0.39  | 0.56 | 0.19 | 0.04 | 0.24 | 0.10 | 2.68   |
| 4 - 6 sec   | •    | 0.09 | 0.27 | 0.40 | 0.56 | 0.42 | 0.65  | 1.05 | 3.02  | 7.92  | 9.00  | 2.91 | 0.10 | 0.20 | 0.20 | 0.01 | 26.81  |
| 6 - 8 sec   | •    | 0.01 | •    | 0.04 | 0.35 | 1.64 | 3.05  | 4.94 | 11.78 | 18.74 | 2.78  | 0.04 | •    | •    | •    | •    | 43.38  |
| 8 - 10 sec  | •    | •    | •    | •    | 0.01 | 1.61 | 13.23 | 2.56 | 2.15  | 1.58  | •     | •    | •    | •    | •    | •    | 21.15  |
| 10 - 12 sec | •    | •    | •    | •    | •    | •    | 4.02  | 0.52 | 0.09  | 0.13  | •     | •    | •    | •    | •    | •    | 4.75   |
| 12 - 14 sec | •    | •    | •    | •    | •    | •    | 0.56  | 0.19 | 0.04  | 0.06  | •     | •    | •    | •    | •    | •    | 0.85   |
| 14 - 16 sec | •    | •    | •    | •    | •    | •    | 0.17  | 0.03 | 0.04  | 0.03  | •     | •    | •    | •    | •    | •    | 0.27   |
| 18 - 20 sec | •    | •    | •    | •    | •    | •    | •     | 0.09 | 0.01  | •     | •     | •    | •    | •    | •    | •    | 0.10   |
| 22 - 24 sec | •    | •    | •    | •    | •    | •    | •     | •    | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| Total       | 0.03 | 0.13 | 0.45 | 0.55 | 0.96 | 3.70 | 21.85 | 9.50 | 17.37 | 28.69 | 12.17 | 3.51 | 0.29 | 0.24 | 0.45 | 0.12 | 100.00 |



Long Island Wind Climatological Wind Rose for July: 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 | 0.03 | •    | •    | 0.03 | •    | •    | 0.01 | 0.04 | 0.01  | 0.04  | 0.01  | 0.03 | 0.03 | 0.01 | •    | 0.27   |
| 0 - 5 kts   | 0.24 | 0.29 | 0.39 | 0.32 | 0.36 | 0.40 | 0.46 | 0.66 | 0.76 | 0.73  | 0.79  | 0.60  | 0.56 | 0.49 | 0.35 | 0.52 | 7.93   |
| 5 - 10 kts  | 0.82 | 0.76 | 0.88 | 0.99 | 1.22 | 1.50 | 1.34 | 1.68 | 2.48 | 3.44  | 4.10  | 3.34  | 1.93 | 1.57 | 1.32 | 1.05 | 28.44  |
| 10 - 15 kts | 0.85 | 0.92 | 0.99 | 1.21 | 1.28 | 1.08 | 0.79 | 1.15 | 2.06 | 4.44  | 6.74  | 6.25  | 3.59 | 1.74 | 1.86 | 1.64 | 36.59  |
| 15 - 20 kts | 0.27 | 0.53 | 0.81 | 0.91 | 0.36 | 0.32 | 0.19 | 0.20 | 0.59 | 2.16  | 4.81  | 5.88  | 1.48 | 0.78 | 0.56 | 0.49 | 20.33  |
| 20 - 25 kts | 0.04 | 0.13 | 0.20 | 0.06 | 0.09 | 0.12 | 0.10 | 0.13 | 0.13 | 0.76  | 1.77  | 1.28  | 0.23 | 0.10 | 0.14 | 0.07 | 5.36   |
| 25 - 30 kts | 0.01 | 0.04 | 0.01 | •    | •    | 0.06 | 0.01 | 0.04 | •    | 0.13  | 0.33  | 0.16  | •    | •    | 0.06 | •    | 0.86   |
| 30 - 35 kts | 0.01 | •    | 0.03 | 0.01 | •    | 0.01 | •    | •    | •    | 0.01  | •     | 0.03  | •    | •    | •    | •    | 0.12   |
| 35 - 40 kts | 0.01 | 0.01 | •    | •    | •    | •    | •    | •    | 0.01 | 0.01  | •     | 0.01  | •    | •    | •    | •    | 0.07   |
| 40 - 45 kts | •    | 0.01 | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •    | •    | •    | •    | 0.01   |
| 45 - 50 kts | •    | •    | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •    | •    | •    | •    | •      |
| Total       | 2.29 | 2.74 | 3.31 | 3.50 | 3.34 | 3.49 | 2.89 | 3.89 | 6.08 | 11.71 | 18.59 | 17.57 | 7.82 | 4.71 | 4.31 | 3.77 | 100.00 |