

## Total Guyana Near-Shore Survey - December

Latitude: 7.59 N Longitude: 58.11 W

### Weather Days

Wave Height > 4.0 ft Mean: 19.4 days Range: 8.9 - 30.0 days p50:28.5 days p75:7 days p90:5 days  
Wave Height > 5.0 ft Mean: 12.0 days Range: 2.2 - 21.7 days p50:21.5 days p75:18 days p90:6.5 days  
Wave Height > 6.0 ft Mean: 4.9 days Range: 0.0 - 10.9 days p50:12 days p75:7.5 days p90:5 days  
Wind Speed > 15.0 knots Mean: 6.1 days Range: 3.0 - 9.3 days p50:6.5 days p75:4 days p90:2.5 days  
Wind Speed > 20.0 knots Mean: 0.1 days Range: 0.0 - 0.2 days p50:0.5 days p75:0.5 days p90:0.5 days  
Wind Speed > 25.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:0.5 days p75:0.5 days p90:0.5 days

### Working Window

|                      |   |
|----------------------|---|
| Wave Height < 4.0 ft | A 1 day or longer window will statistically occur 1.2 times per month<br>A 2 day or longer window will statistically occur 0.8 times per month<br>A 3 day or longer window will statistically occur 0.6 times per month |
| Wave Height < 5.0 ft | A 1 day or longer window will statistically occur 2.6 times per month<br>A 2 day or longer window will statistically occur 1.5 times per month<br>A 3 day or longer window will statistically occur 1.1 times per month |
| Wave Height < 6.0 ft | A 1 day or longer window will statistically occur 2.8 times per month<br>A 2 day or longer window will statistically occur 2.3 times per month<br>A 3 day or longer window will statistically occur 1.9 times per month |

### Waves

Mean Height: 4 - 6 ft  
The wave heights will occasionally reach 8 - 10 ft, but rarely higher.  
Mean Period: 8 - 10 sec  
The wave periods will occasionally reach 18 - 20 sec, but rarely longer.  
Principle Direction, from: NE  
WindSea/Swell: 64% / 36%

### Winds

Mean Speed: 10 - 15 kts  
The winds will occasionally reach 15 - 20 kts, but rarely greater.  
Principle Direction, from: ENE

### Currents

Mean Speed: 0.25-0.50 kts  
The currents will occasionally reach 0.75-1.00 kts, but rarely greater.  
Principle Direction, to: NW

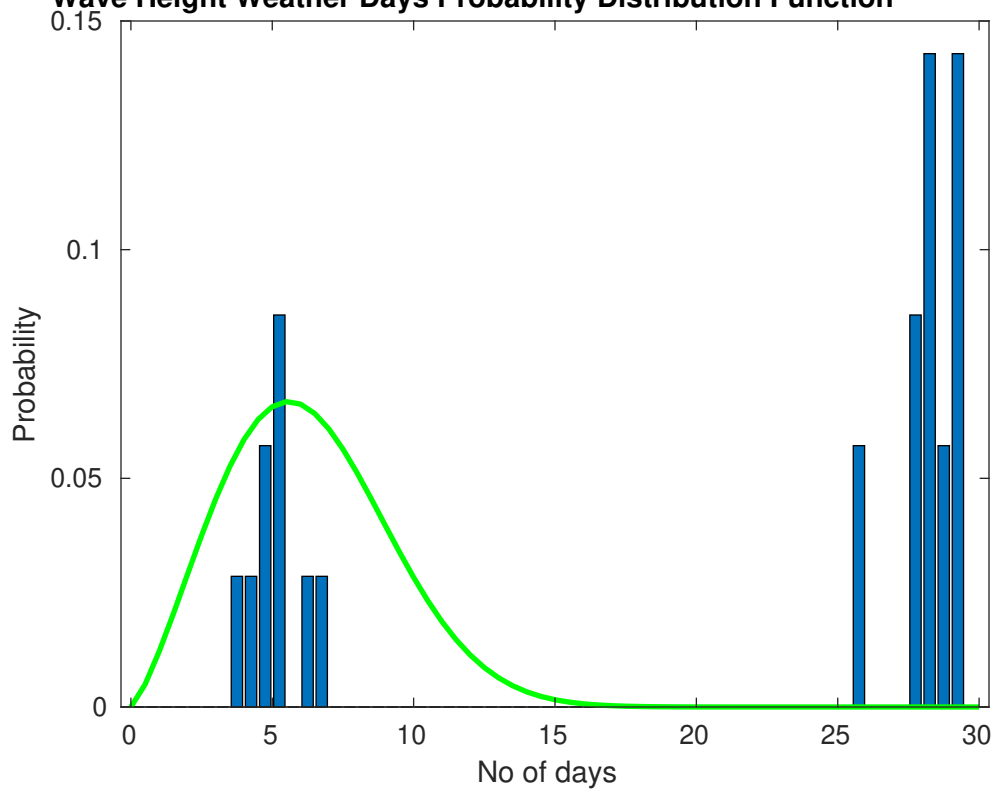
### Weather Days

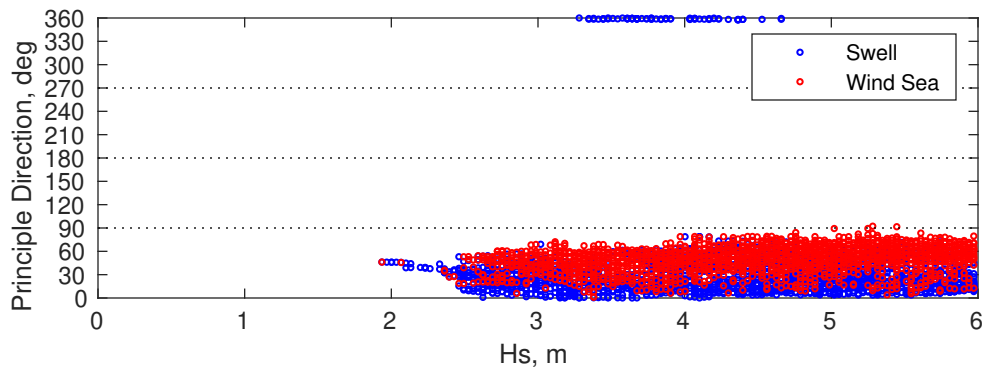
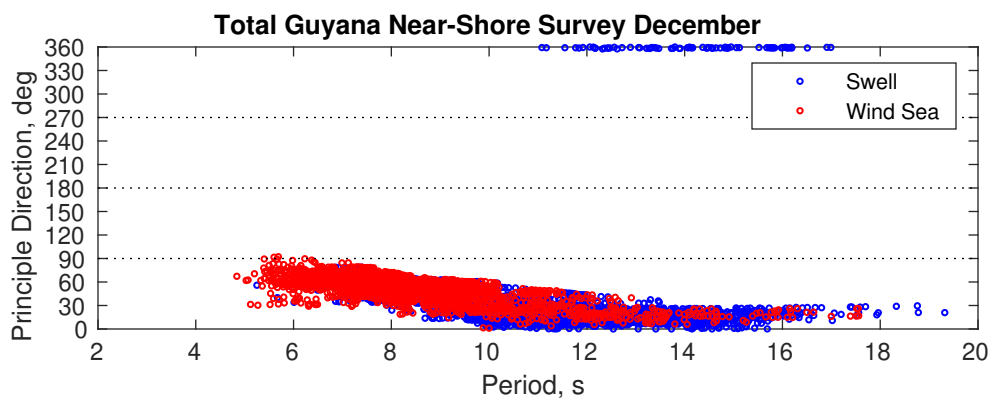
Current Speed > 0.5 knots Mean: 7.4 days Range: 2.5 - 12.3 days p50:9 days p75:5 days p90:1 days  
Current Speed > 1.0 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days  
Current Speed > 1.5 knots Mean: 0.0 days Range: 0.0 - 0.0 days p50:1 days p75:1 days p90:1 days

### Severe Storms

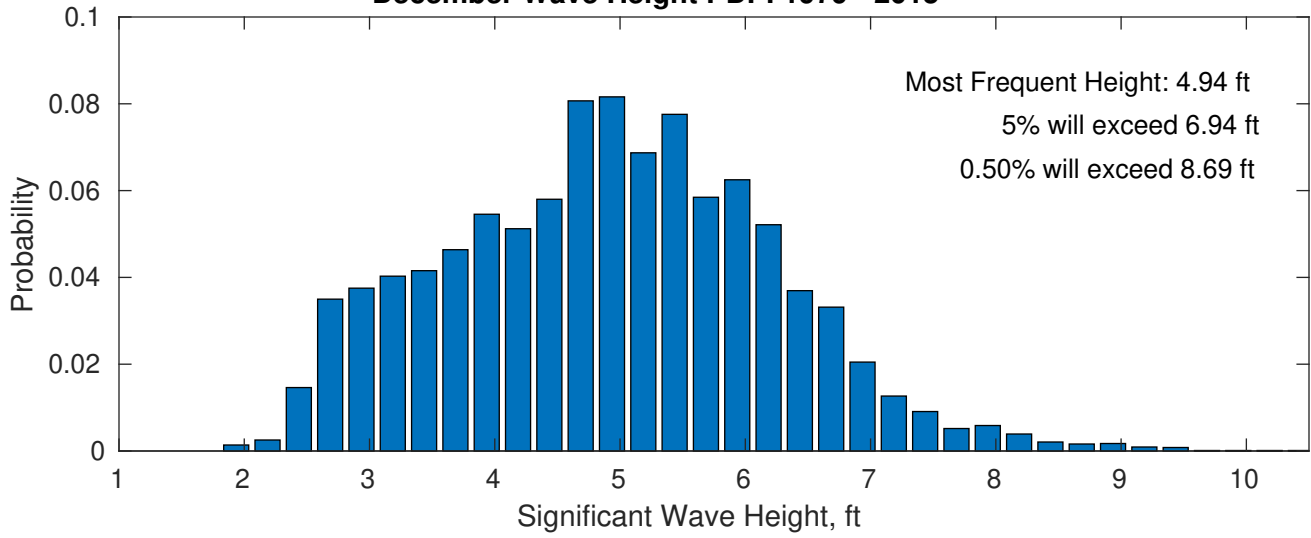
Severe storms with gale force winds and extreme waves are not expected during this month.

**Wave Height Weather Days Probability Distribution Function**

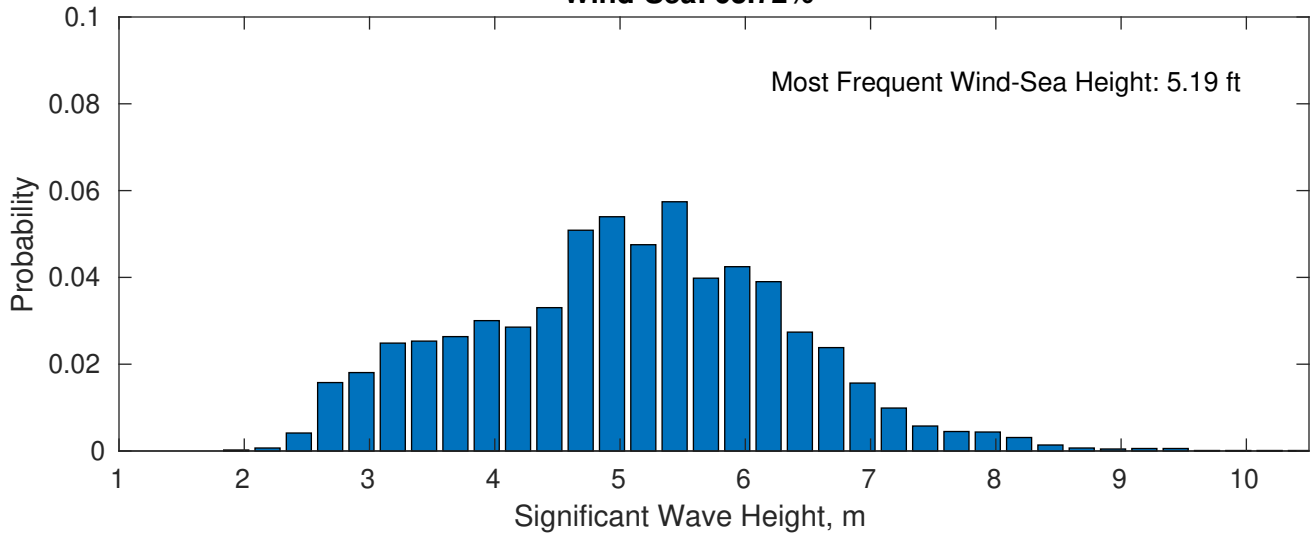




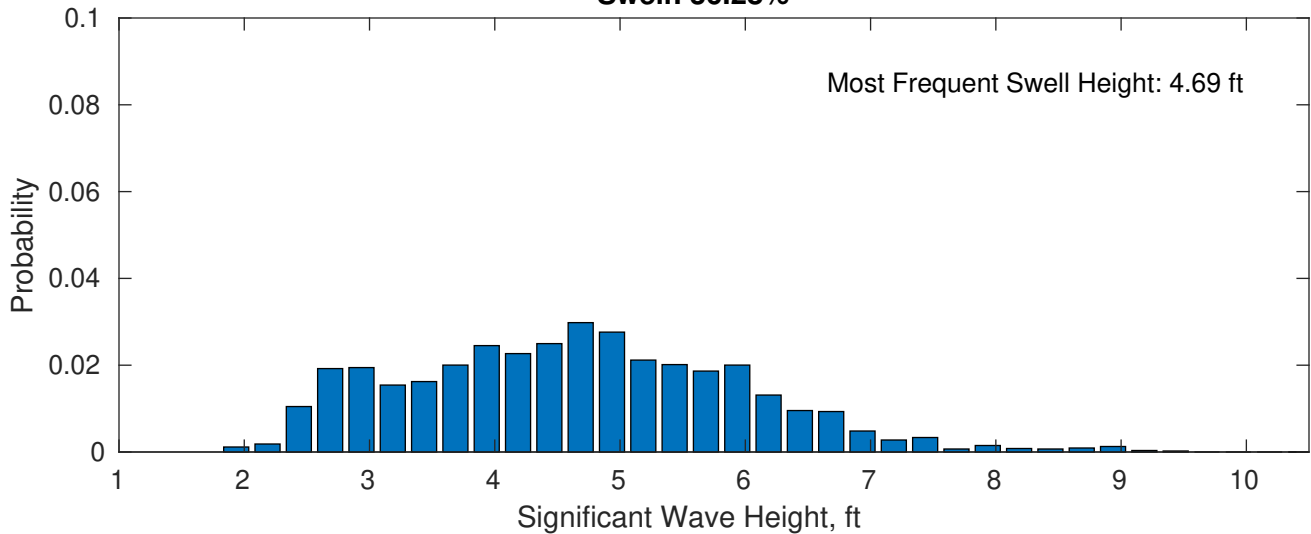
**December Wave Height PDF: 1979 - 2015**



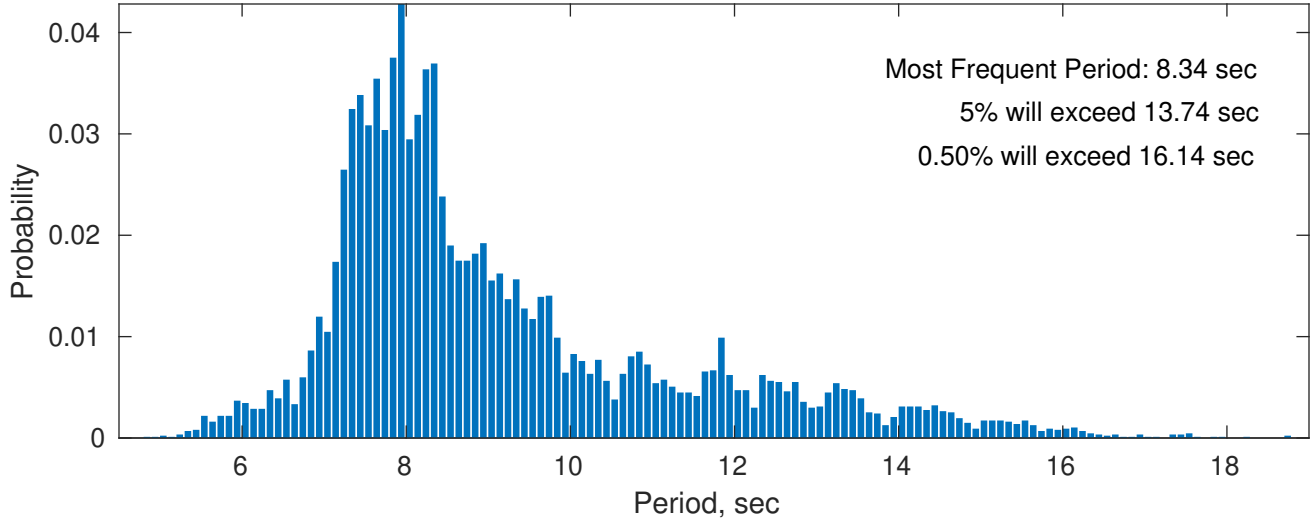
**Wind-Sea: 63.72%**



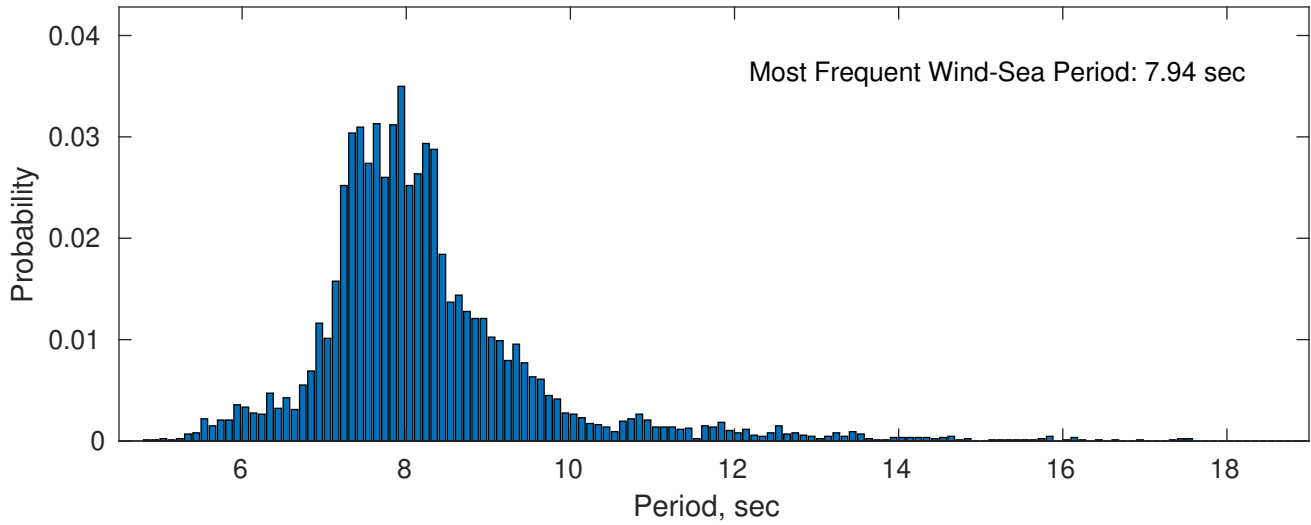
**Swell: 36.28%**



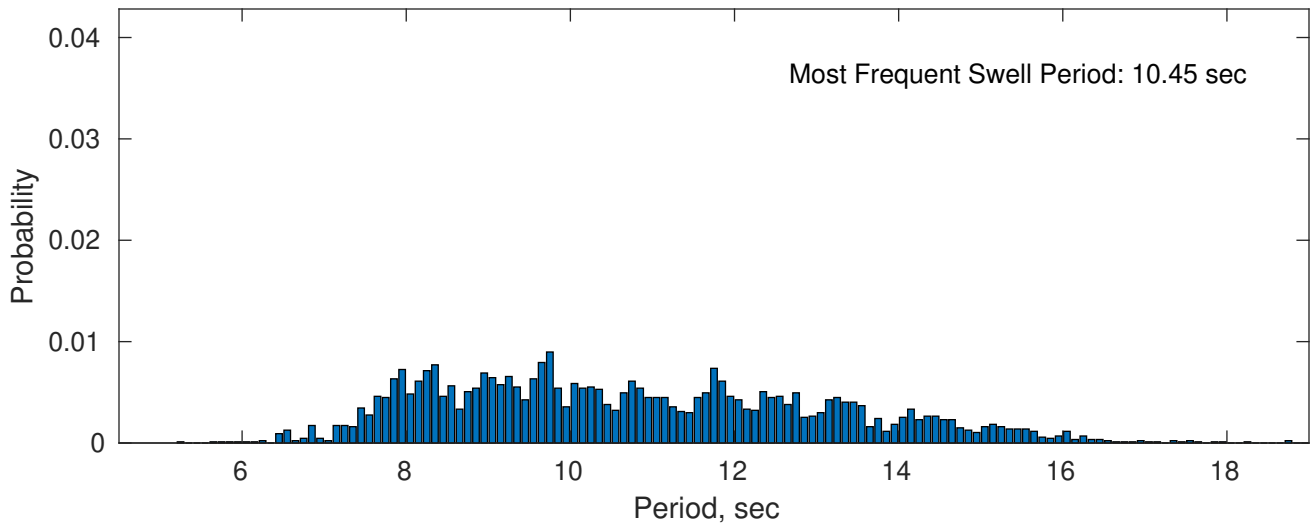
**December Peak Wave Period PDF: 1979 - 2015**



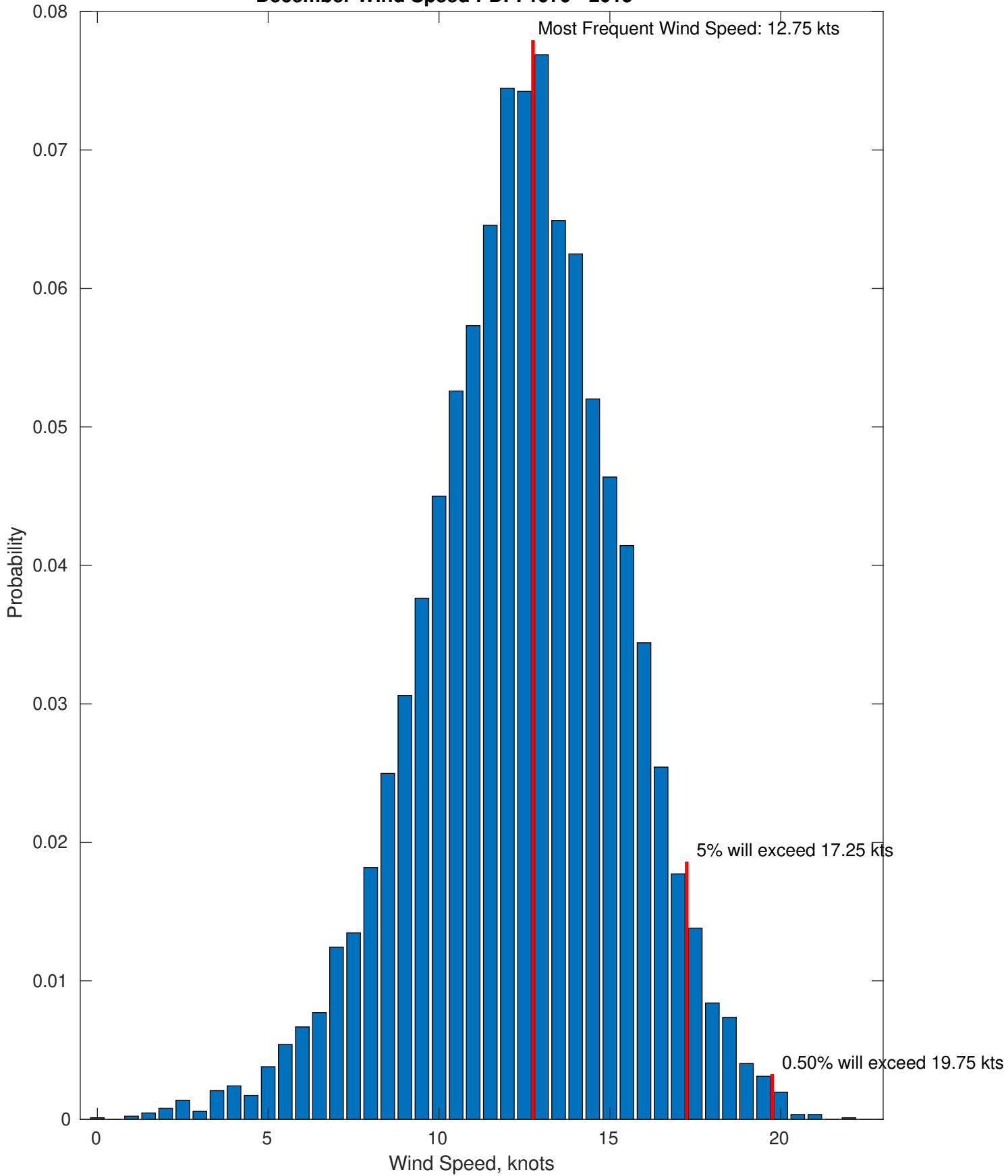
**Wind-Sea: 63.72%**



**Swell: 36.28%**



December Wind Speed PDF: 1979 - 2015

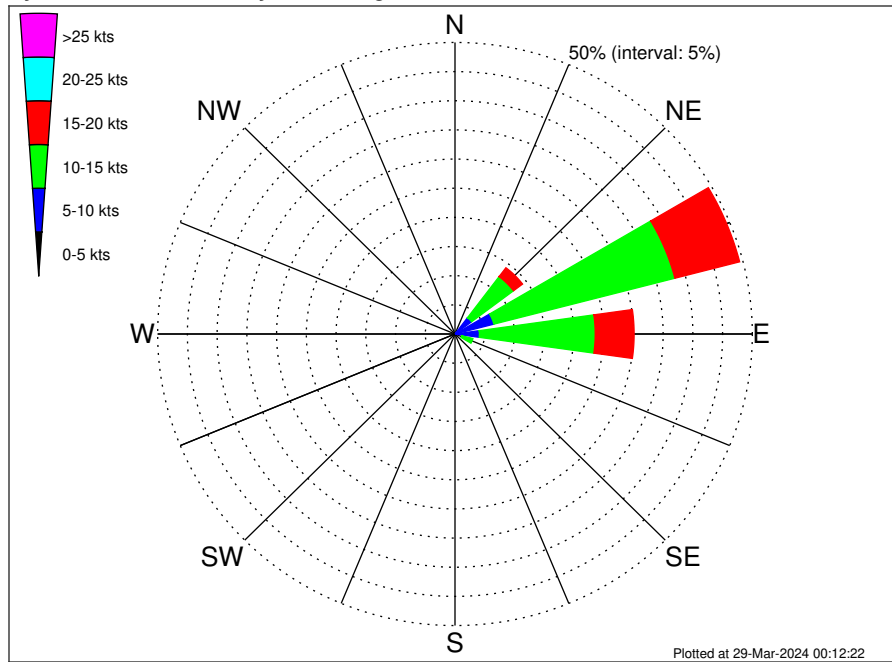








**Total Guyana Near-Shore Survey Climatological Wind Rose for December: 1979 - 2015**



**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 - 5 kts   | 0.07 | 0.12 | 0.15  | 0.21  | 0.17  | 0.09 | 0.08 | 0.02 | 0.01 | 0.02 | •    | •    | • | •   | 0.01 | 0.01 | 0.97   |
| 5 - 10 kts  | 0.15 | 0.79 | 3.34  | 6.55  | 3.94  | 1.09 | 0.14 | 0.07 | 0.01 | •    | •    | 0.01 | • | •   | •    | •    | 16.09  |
| 10 - 15 kts | 0.08 | 0.53 | 8.84  | 31.44 | 19.47 | 1.92 | 0.10 | 0.02 | 0.01 | •    | •    | •    | • | •   | •    | 0.02 | 62.45  |
| 15 - 20 kts | •    | 0.10 | 1.90  | 11.24 | 6.54  | 0.43 | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | 20.21  |
| 20 - 25 kts | •    | •    | 0.03  | 0.16  | 0.08  | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | 0.28   |
| 25 - 30 kts | •    | •    | •     | •     | •     | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | •      |
| 30 - 35 kts | •    | •    | •     | •     | •     | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | •      |
| 35 - 40 kts | •    | •    | •     | •     | •     | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | •      |
| 40 - 45 kts | •    | •    | •     | •     | •     | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | •      |
| 45 - 50 kts | •    | •    | •     | •     | •     | •    | •    | •    | •    | •    | •    | •    | • | •   | •    | •    | •      |
| Total       | 0.30 | 1.54 | 14.26 | 49.60 | 30.20 | 3.53 | 0.32 | 0.12 | 0.03 | 0.02 | 0.01 | 0.01 | • | •   | 0.01 | 0.03 | 100.00 |