

# Angola Namibia CRS Luanda (BU-LU) - March

Latitude: 8.85 S Longitude: 12.41 E

## Weather Days

Wave Height > 5.0 ft Mean: 1.8 days Range: 0.5 - 3.1 days p50:2.5 days p75:1.5 days p90:1 days  
Wave Height > 6.5 ft Mean: 0.0 days Range: 0.0 - 0.2 days p50:30 days p75:30 days p90:30 days  
Wave Height > 8.0 ft Mean: 0.0 days Range: 0.0 - 0.0 days p50:30 days p75:30 days p90:30 days  
  
Wind Speed > 15.0 knots Mean: 0.9 days Range: 0.2 - 1.6 days p50:1 days p75:0.5 days p90:0.5 days  
Wind Speed > 20.0 knots Mean: 0.0 days Range: 0.0 - 0.1 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 < 5.0 ft | A 1 day or longer window will statistically occur 3.5 times per month<br>A 2 day or longer window will statistically occur 2.8 times per month<br>A 3 day or longer window will statistically occur 2.3 times per month |
| Wave Height < 6.5 ft | A 1 day or longer window will statistically occur 2.1 times per month<br>A 2 day or longer window will statistically occur 1.9 times per month<br>A 3 day or longer window will statistically occur 1.8 times per month |
| Wave Height < 8.0 ft | A 1 day or longer window will statistically occur 1.1 times per month<br>A 2 day or longer window will statistically occur 1.1 times per month<br>A 3 day or longer window will statistically occur 1.1 times per month |

## Waves

Mean Height: 4 - 6 ft  
The wave heights will occasionally reach 8 - 10 ft, but rarely higher.  
Mean Period: 12 - 14 sec  
The wave periods will occasionally reach 22 - 24 sec, but rarely longer.  
Principle Direction, from: SSW  
WindSea/Swell: 0% / 100%

## Winds

Mean Speed: 5 - 10 kts  
The winds will occasionally reach 15 - 20 kts, but rarely greater.  
Principle Direction, from: SSW

## Currents

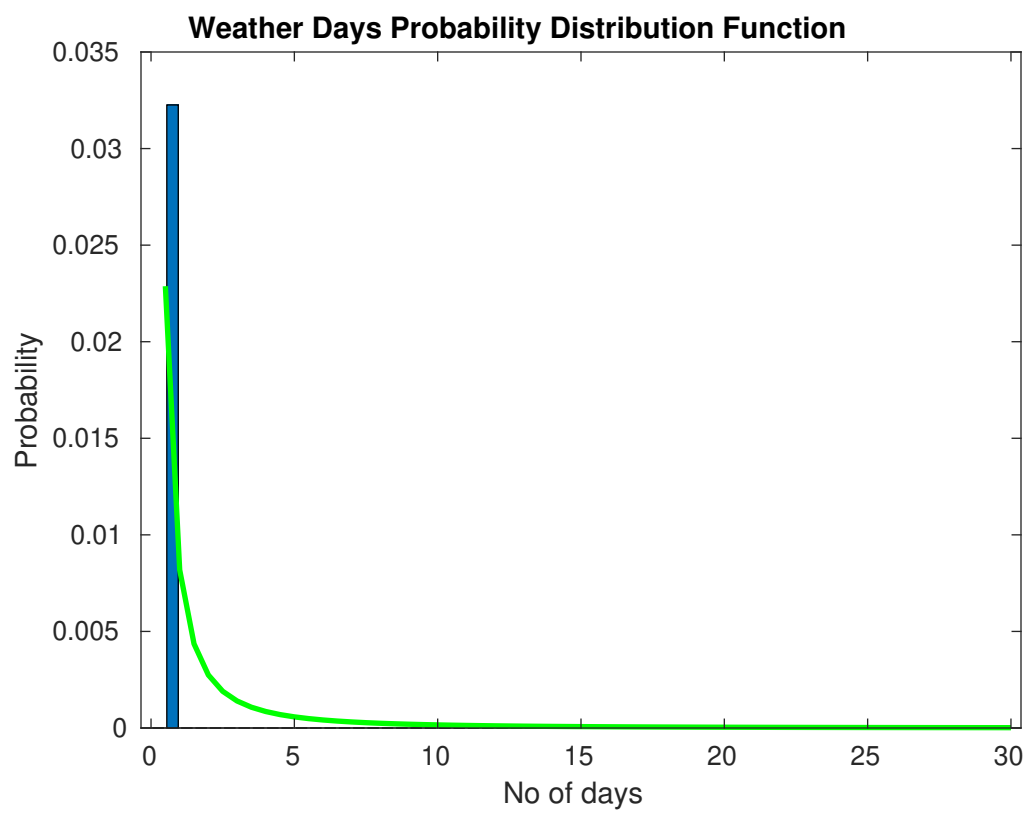
Mean Speed: 0.25-0.50 kts  
The currents will occasionally reach 1.00-1.25 kts, but rarely greater.  
Principle Direction, to: NNW

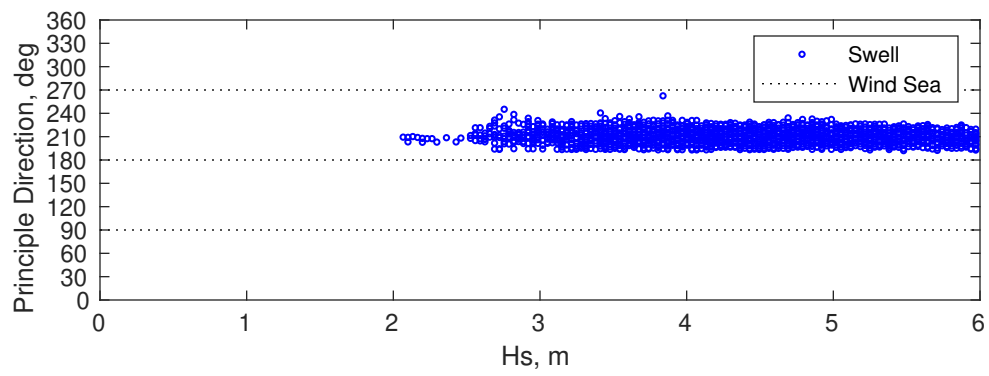
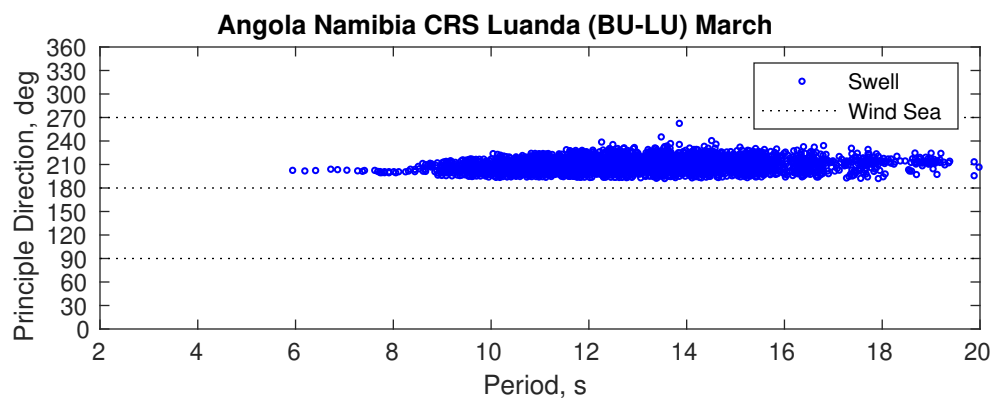
## Weather Days

Current Speed > 0.5 knots Mean: 10.9 days Range: 4.3 - 17.6 days p50:11 days p75:6 days p90:2 days  
Current Speed > 1.0 knots Mean: 1.0 days Range: 0.0 - 2.9 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

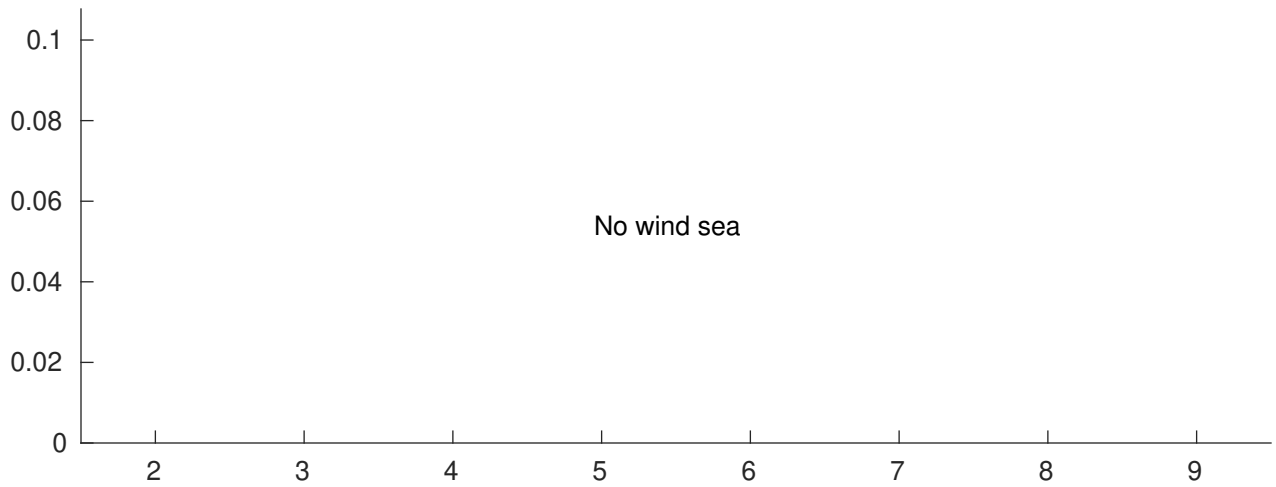
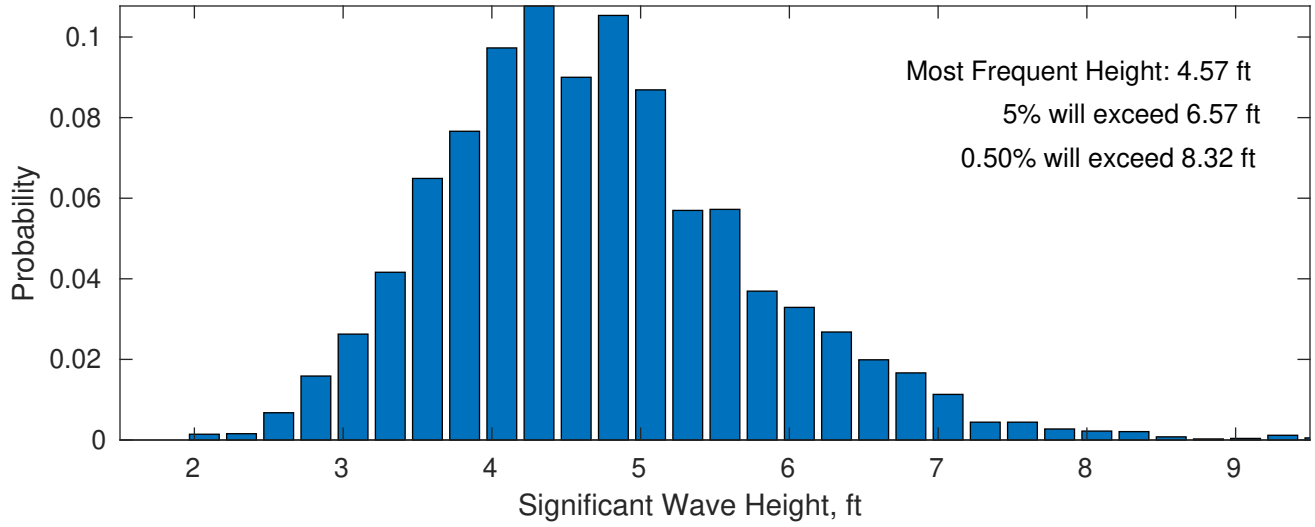
## Severe Storms

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

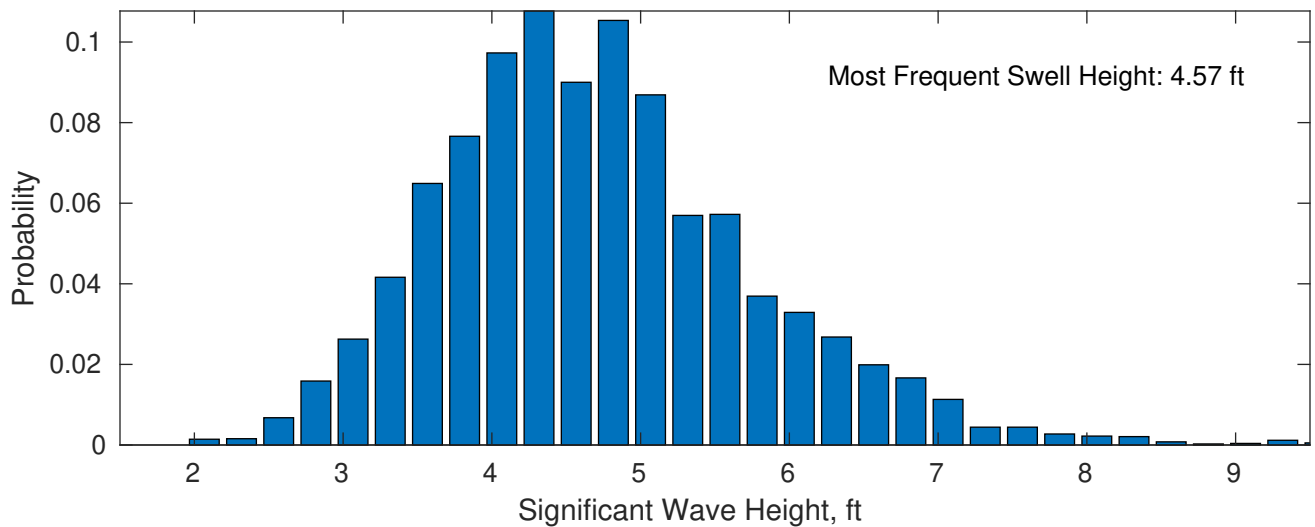




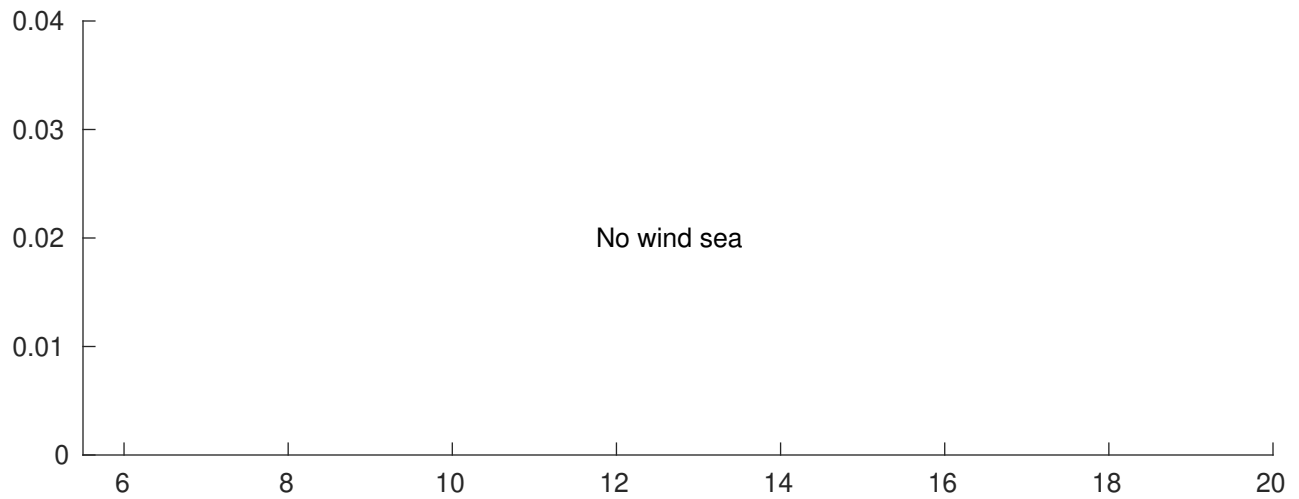
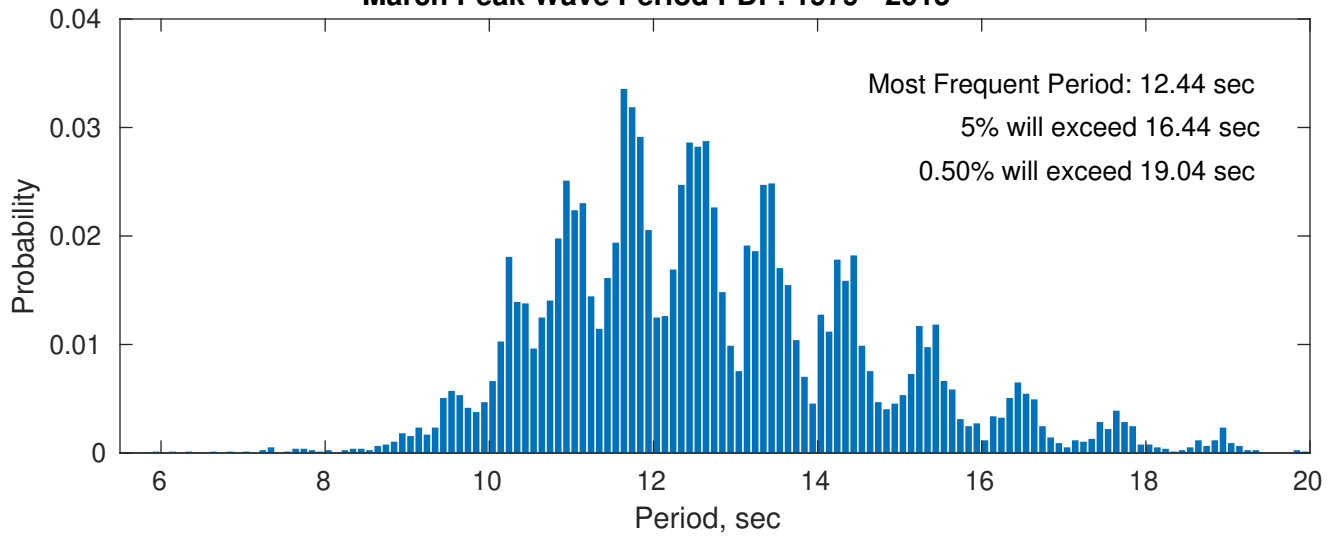
**March Wave Height PDF: 1979 - 2015**



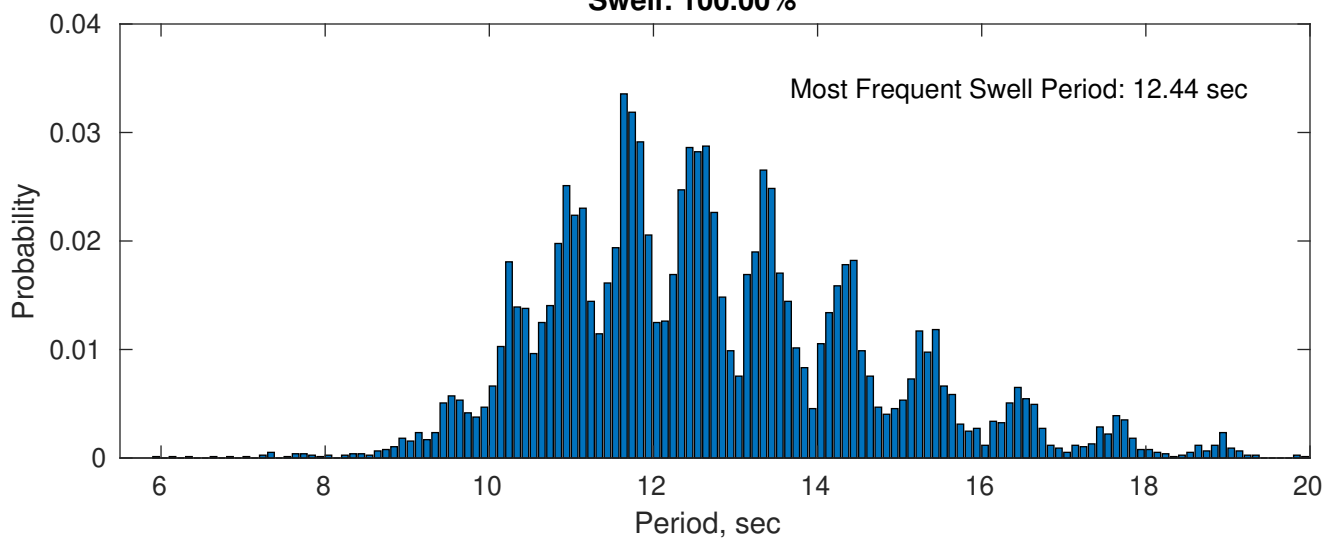
**Swell: 100.00%**



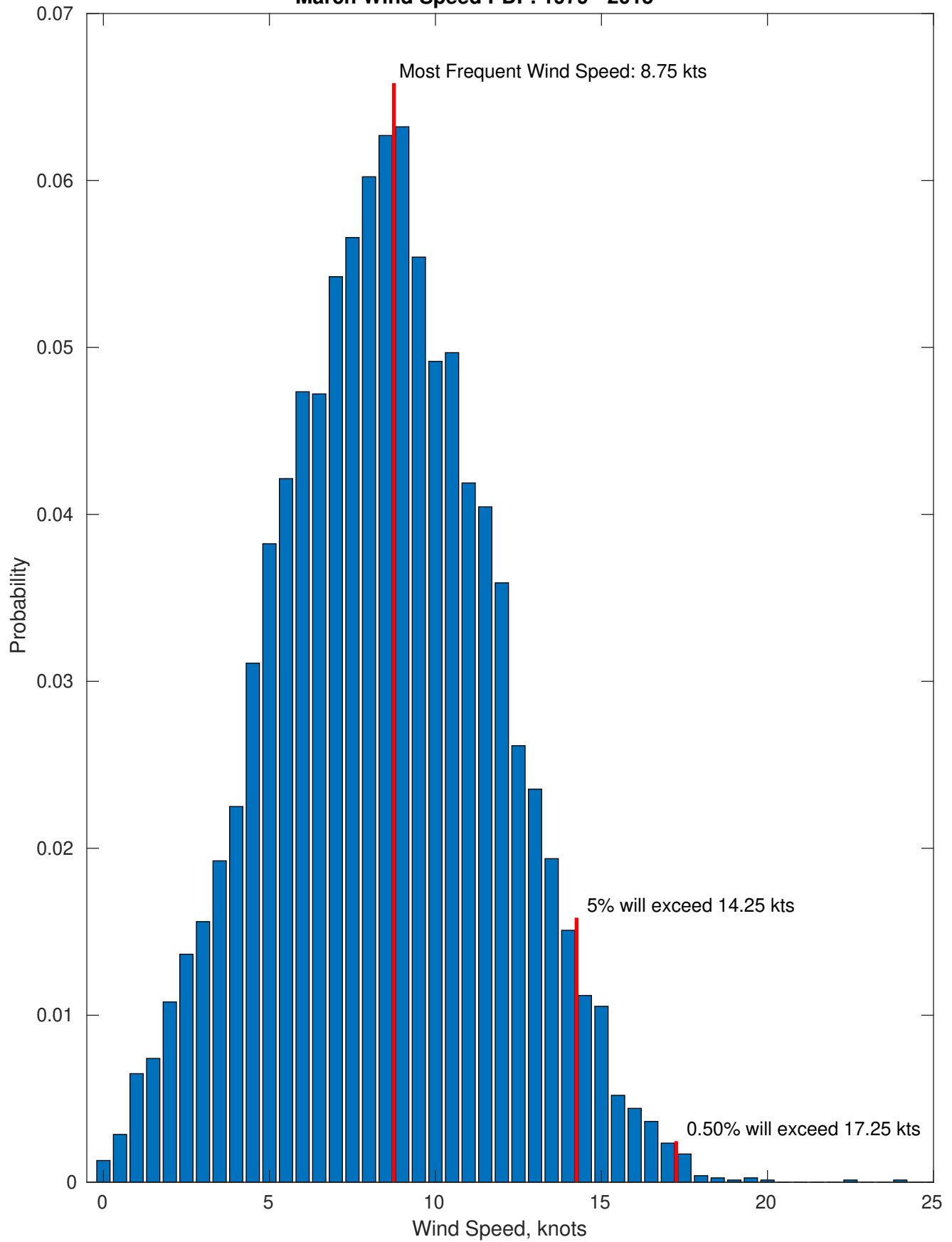
**March Peak Wave Period PDF: 1979 - 2015**



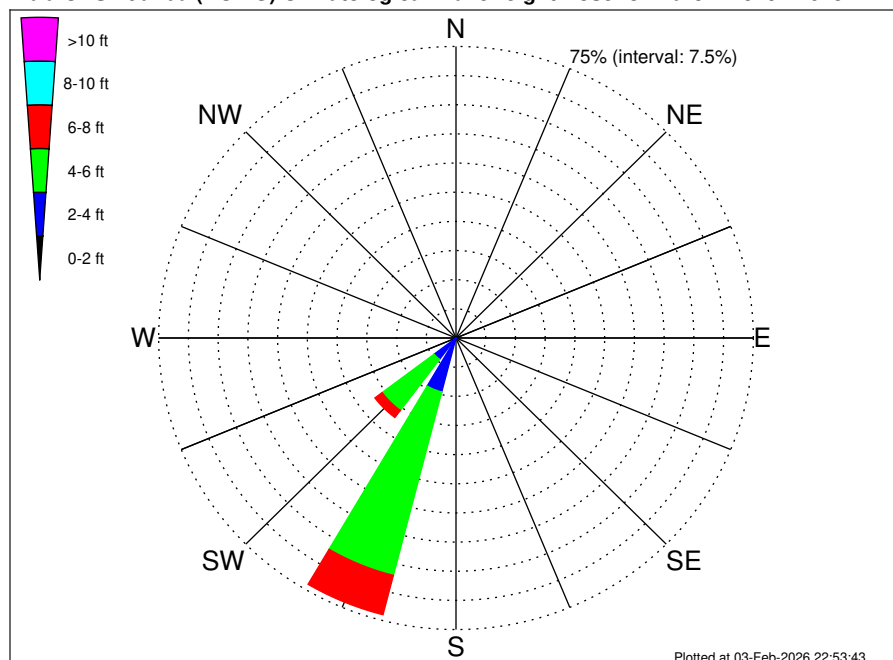
**Swell: 100.00%**



March Wind Speed PDF: 1979 - 2015



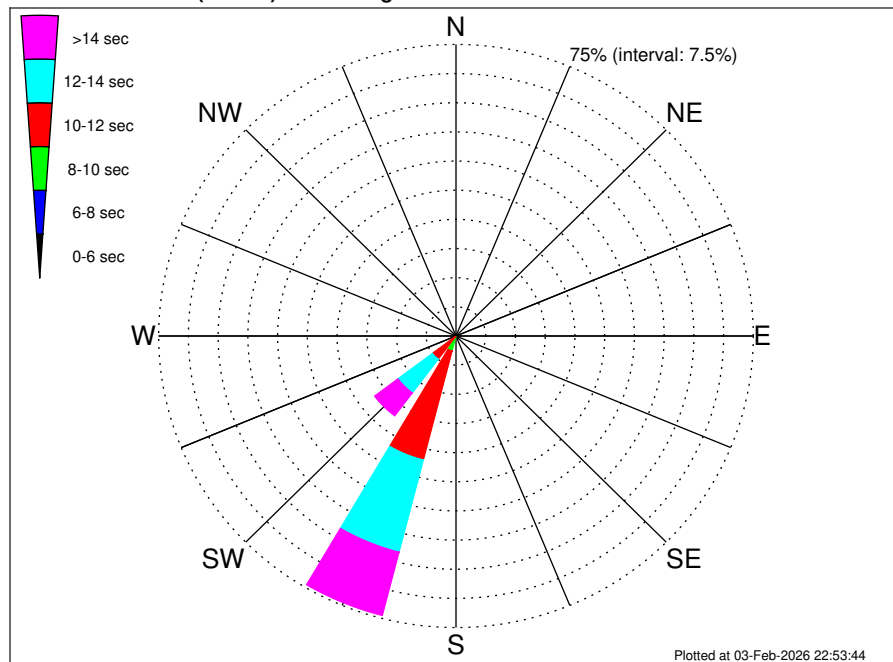
# Angola Namibia CRS Luanda (BU-LU) Climatological WaveHeight Rose for March: 1979 - 2015



## 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   | . | .   | .  | .   | . | .   | .  | .   | . | 14.33 | 6.89  | 0.05 | 0.01 | .   | .  | .   | 21.29  |
| 4 - 6 ft   | . | .   | .  | .   | . | .   | .  | .   | . | 48.74 | 16.44 | .    | .    | .   | .  | .   | 65.18  |
| 6 - 8 ft   | . | .   | .  | .   | . | .   | .  | .   | . | 10.46 | 2.28  | .    | .    | .   | .  | .   | 12.73  |
| 8 - 10 ft  | . | .   | .  | .   | . | .   | .  | .   | . | 0.72  | 0.08  | .    | .    | .   | .  | .   | 0.79   |
| 10 - 12 ft | . | .   | .  | .   | . | .   | .  | .   | . | .     | .     | .    | .    | .   | .  | .   | .      |
| 12 - 14 ft | . | .   | .  | .   | . | .   | .  | .   | . | .     | .     | .    | .    | .   | .  | .   | .      |
| 14 - 16 ft | . | .   | .  | .   | . | .   | .  | .   | . | .     | .     | .    | .    | .   | .  | .   | .      |
| 16 - 18 ft | . | .   | .  | .   | . | .   | .  | .   | . | .     | .     | .    | .    | .   | .  | .   | .      |
| > 18 ft    | . | .   | .  | .   | . | .   | .  | .   | . | .     | .     | .    | .    | .   | .  | .   | .      |
| Total      | . | .   | .  | .   | . | .   | .  | .   | . | 74.25 | 25.69 | 0.05 | 0.01 | .   | .  | .   | 100.00 |

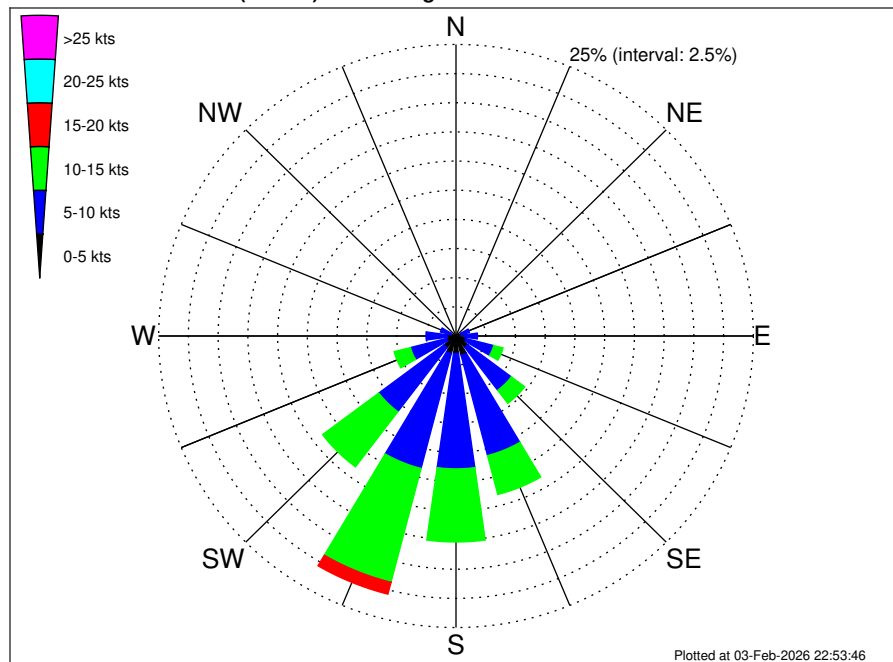
# Angola Namibia CRS Luanda (BU-LU) Climatological WavePeriod Rose for March: 1979 - 2015



## 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   | • | •   | •  | •   | • | •   | •  | •   | • | 0.01  | •     | •    | •    | •   | •  | •   | 0.01   |
| 6 - 8 sec   | • | •   | •  | •   | • | •   | •  | •   | • | 0.26  | •     | •    | •    | •   | •  | •   | 0.26   |
| 8 - 10 sec  | • | •   | •  | •   | • | •   | •  | •   | • | 3.71  | 0.29  | •    | •    | •   | •  | •   | 3.99   |
| 10 - 12 sec | • | •   | •  | •   | • | •   | •  | •   | • | 28.97 | 7.18  | •    | •    | •   | •  | •   | 36.15  |
| 12 - 14 sec | • | •   | •  | •   | • | •   | •  | •   | • | 24.49 | 10.87 | 0.04 | 0.01 | •   | •  | •   | 35.42  |
| 14 - 16 sec | • | •   | •  | •   | • | •   | •  | •   | • | 12.32 | 5.11  | 0.01 | •    | •   | •  | •   | 17.44  |
| 18 - 20 sec | • | •   | •  | •   | • | •   | •  | •   | • | 3.67  | 1.73  | •    | •    | •   | •  | •   | 5.40   |
| 22 - 24 sec | • | •   | •  | •   | • | •   | •  | •   | • | 0.82  | 0.51  | •    | •    | •   | •  | •   | 1.33   |
| Total       | • | •   | •  | •   | • | •   | •  | •   | • | 74.25 | 25.69 | 0.05 | 0.01 | •   | •  | •   | 100.00 |

Angola Namibia CRS Luanda (BU-LU) Climatological Wind Rose for March: 1979 - 2015



Joint Frequency Distribution Table

|             | N    | NNE  | NE   | ENE  | E    | ESE  | SE   | SSE   | S     | SSW   | SW    | WSW  | W    | WNW  | NW   | NNW  | Total  |
|-------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|--------|
| calm        | •    | 0.07 | •    | 0.03 | 0.03 | 0.01 | •    | 0.05  | 0.03  | 0.04  | 0.04  | 0.05 | 0.04 | 0.03 | 0.01 | •    | 0.42   |
| 0 - 5 kts   | 0.34 | 0.26 | 0.38 | 0.46 | 0.62 | 0.86 | 1.24 | 1.65  | 1.47  | 1.52  | 1.22  | 0.75 | 0.72 | 0.40 | 0.49 | 0.30 | 12.68  |
| 5 - 10 kts  | 0.43 | 0.40 | 0.60 | 0.69 | 1.16 | 2.41 | 4.59 | 8.88  | 9.90  | 10.17 | 6.87  | 3.15 | 1.77 | 0.92 | 0.44 | 0.35 | 52.73  |
| 10 - 15 kts | 0.21 | 0.14 | 0.07 | 0.23 | 0.40 | 0.81 | 1.40 | 3.45  | 6.27  | 10.08 | 5.92  | 1.42 | 0.38 | 0.13 | 0.14 | 0.20 | 31.24  |
| 15 - 20 kts | 0.01 | 0.01 | 0.01 | •    | 0.03 | 0.05 | 0.27 | 0.27  | 0.46  | 1.05  | 0.61  | 0.03 | 0.01 | 0.01 | 0.03 | 0.03 | 2.89   |
| 20 - 25 kts | 0.01 | •    | •    | •    | •    | •    | •    | 0.01  | •     | •     | 0.01  | •    | •    | •    | •    | •    | 0.04   |
| 25 - 30 kts | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 30 - 35 kts | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 35 - 40 kts | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 40 - 45 kts | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| 45 - 50 kts | •    | •    | •    | •    | •    | •    | •    | •     | •     | •     | •     | •    | •    | •    | •    | •    | •      |
| Total       | 1.00 | 0.88 | 1.05 | 1.40 | 2.24 | 4.14 | 7.51 | 14.32 | 18.12 | 22.87 | 14.67 | 5.40 | 2.91 | 1.50 | 1.12 | 0.87 | 100.00 |