

Liberia MBES - March

Latitude: 4.50 N Longitude: 9.00 W

Weather Days

Wave Height > 4.0 ft Mean: 1.1 days Range: 0.0 - 5.9 days p50:17 days p75:13.5 days p90:12 days
Wave Height > 5.0 ft Mean: 0.1 days Range: 0.0 - 3.4 days p50:5 days p75:3 days p90:1.5 days
Wave Height > 6.0 ft Mean: 0.0 days Range: 0.0 - 1.0 days p50:30 days p75:2.5 days p90:1.5 days

Wind Speed > 10.0 knots Mean: 2.3 days Range: 0.9 - 3.7 days p50:2.5 days p75:1.5 days p90:1 days
Wind Speed > 15.0 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 > 20.0 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 2.9 times per month A 2 day or longer window will statistically occur 2.2 times per month A 3 day or longer window will statistically occur 1.6 times per month
Wave Height < 5.0 ft	A 1 day or longer window will statistically occur 2.0 times per month A 2 day or longer window will statistically occur 1.9 times per month A 3 day or longer window will statistically occur 1.8 times per month
Wave Height < 6.0 ft	A 1 day or longer window will statistically occur 1.2 times per month A 2 day or longer window will statistically occur 1.1 times per month 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 6 - 8 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 10 - 15 kts, but rarely greater.
Principle Direction, from: WSW

Currents

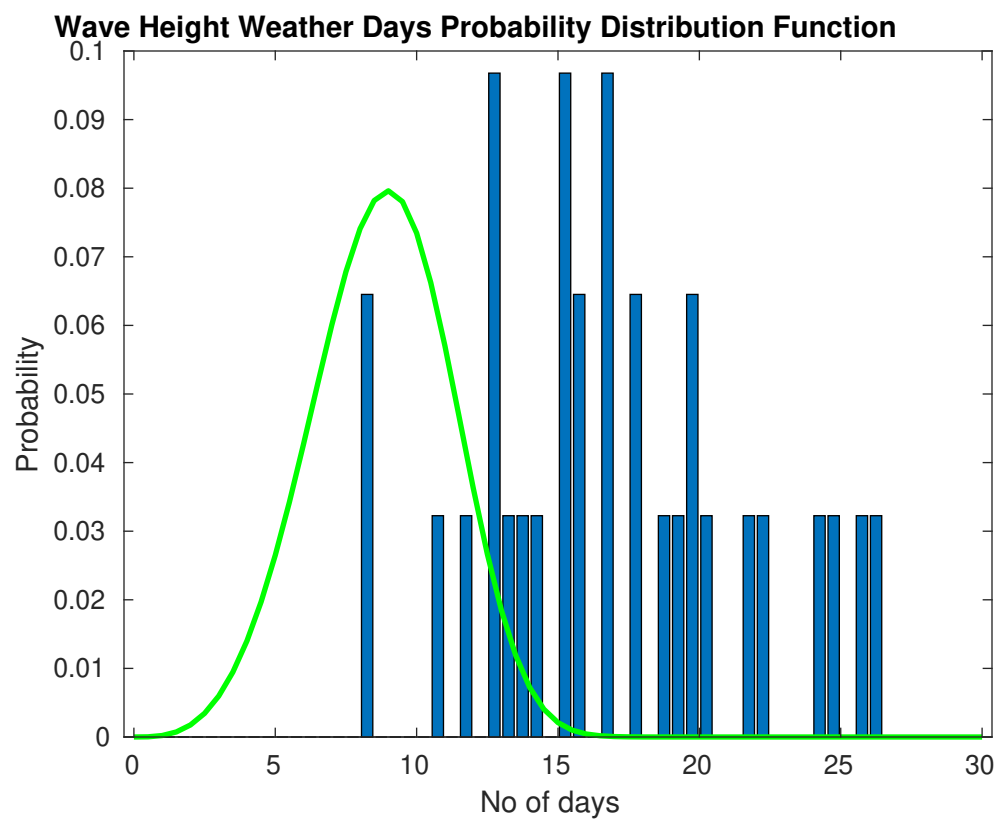
Mean Speed: 0.50-0.75 kts
The currents will occasionally reach 1.75-2.00 kts, but rarely greater.
Principle Direction, to: ESE

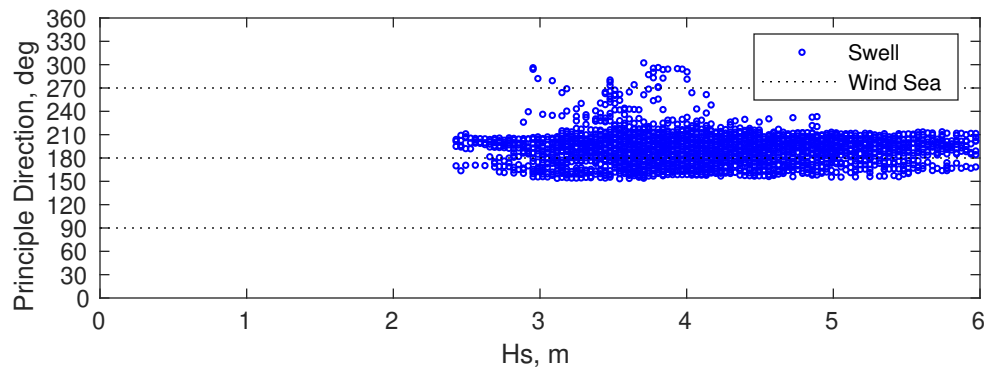
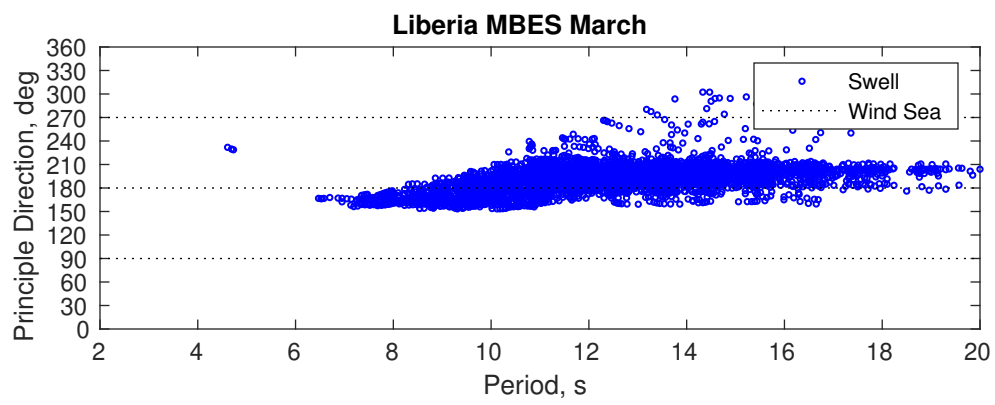
Weather Days

Current Speed > 0.5 knots Mean: 23.8 days Range: 20.3 - 27.3 days p50:26 days p75:21 days p90:19 days
Current Speed > 1.0 knots Mean: 11.6 days Range: 4.7 - 18.5 days p50:11 days p75:7 days p90:5 days
Current Speed > 1.5 knots Mean: 3.1 days Range: 0.0 - 7.9 days p50:2 days p75:1 days p90:1 days

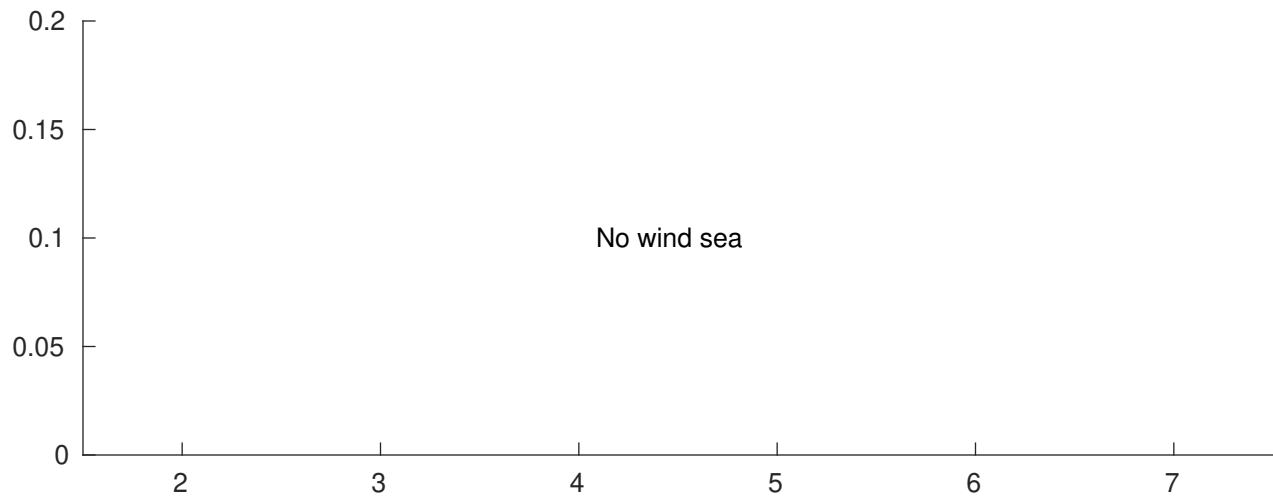
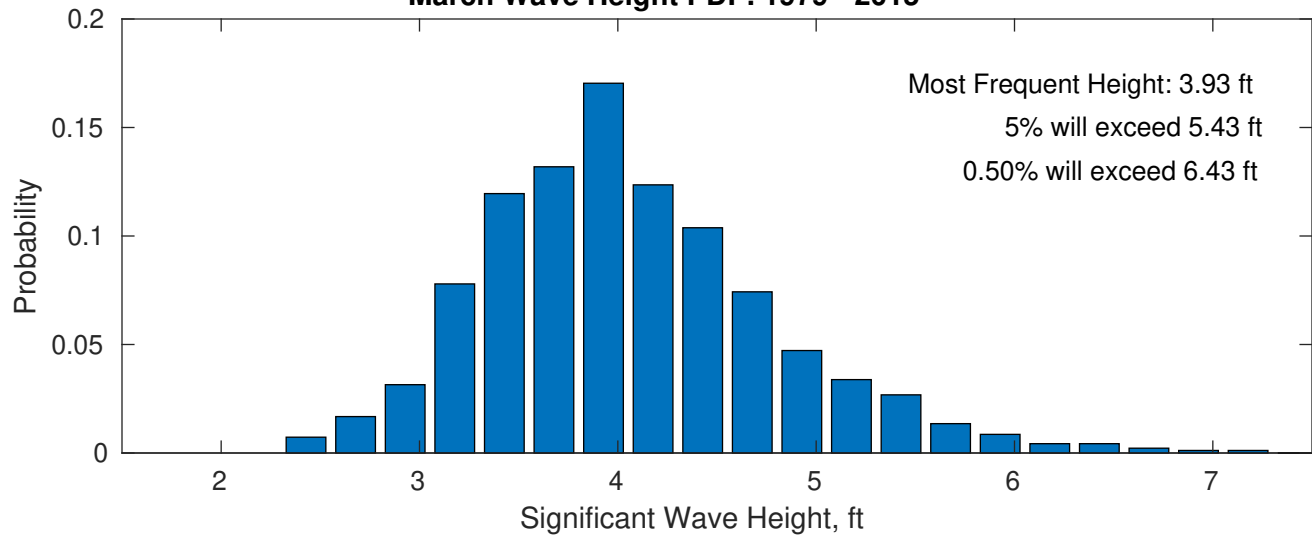
Severe Storms

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

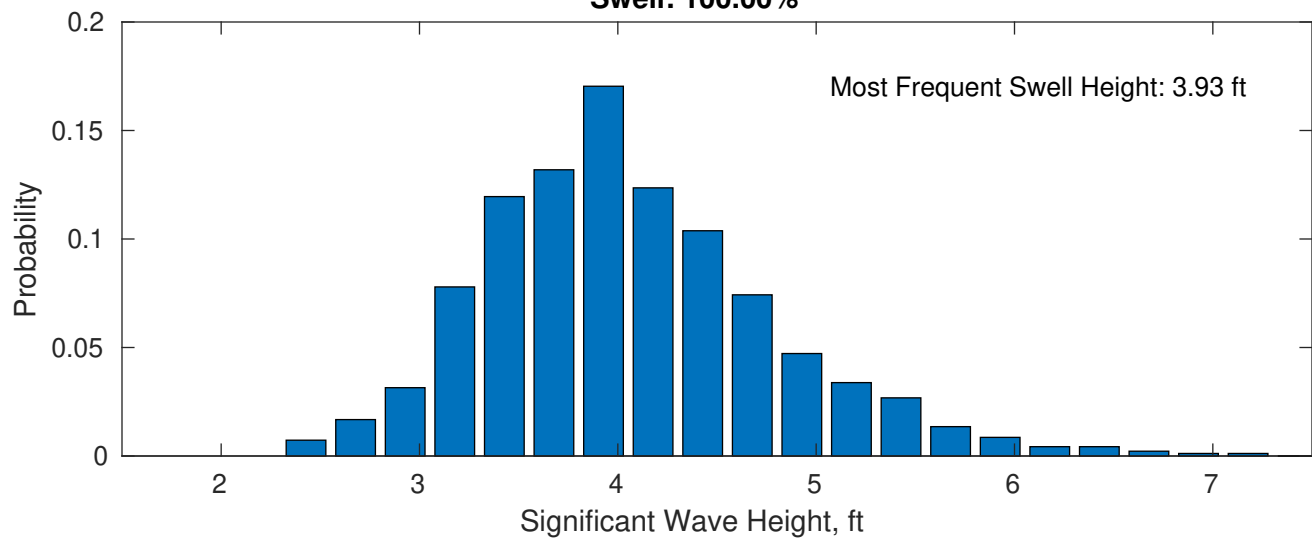




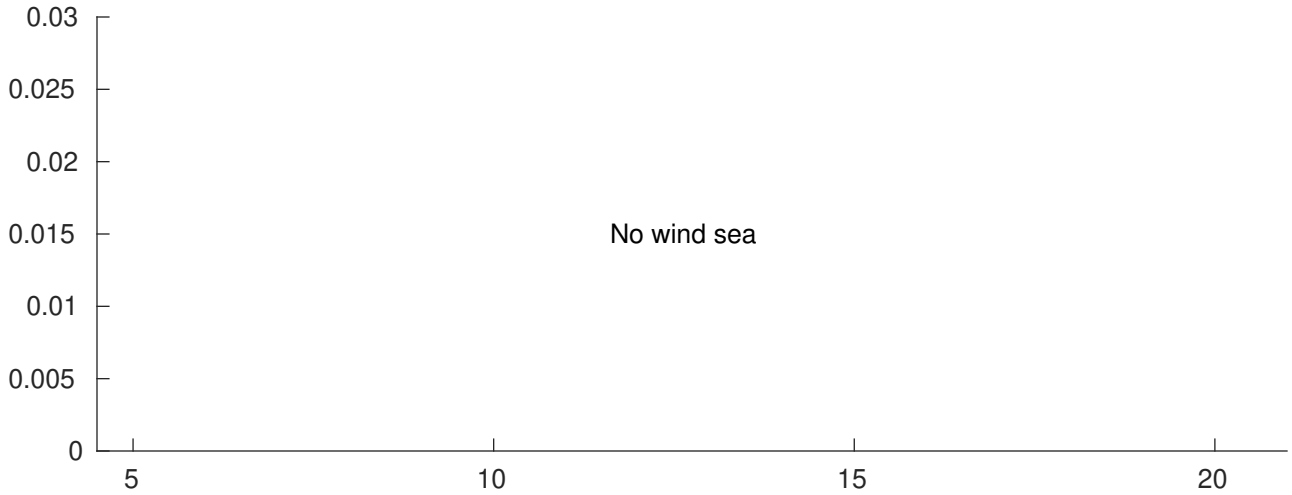
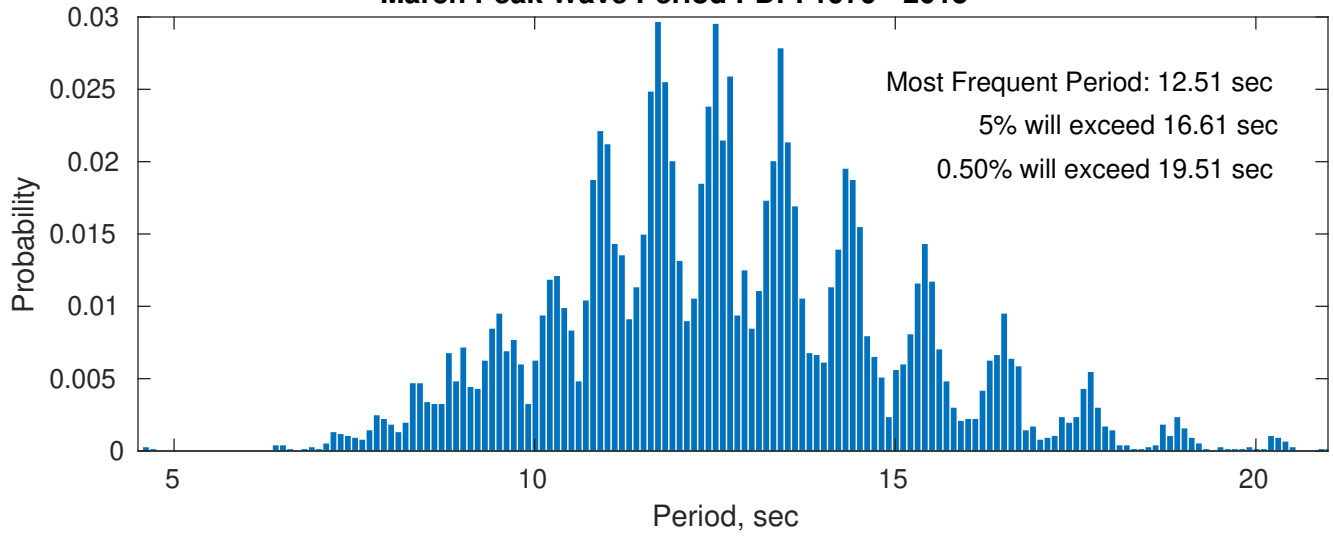
March Wave Height PDF: 1979 - 2015



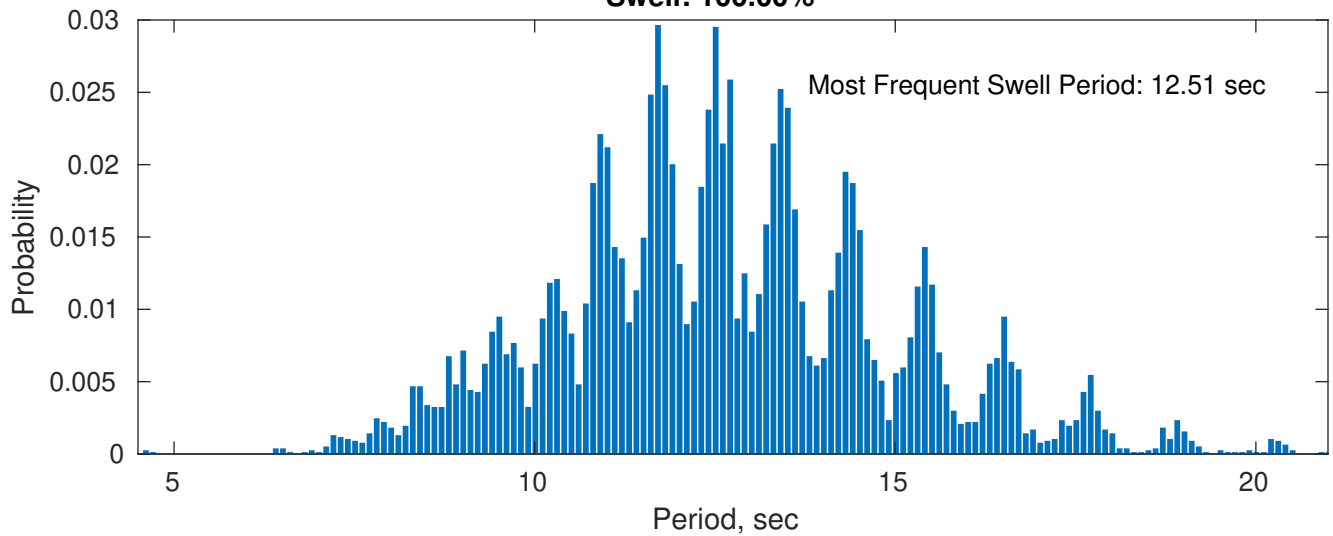
Swell: 100.00%



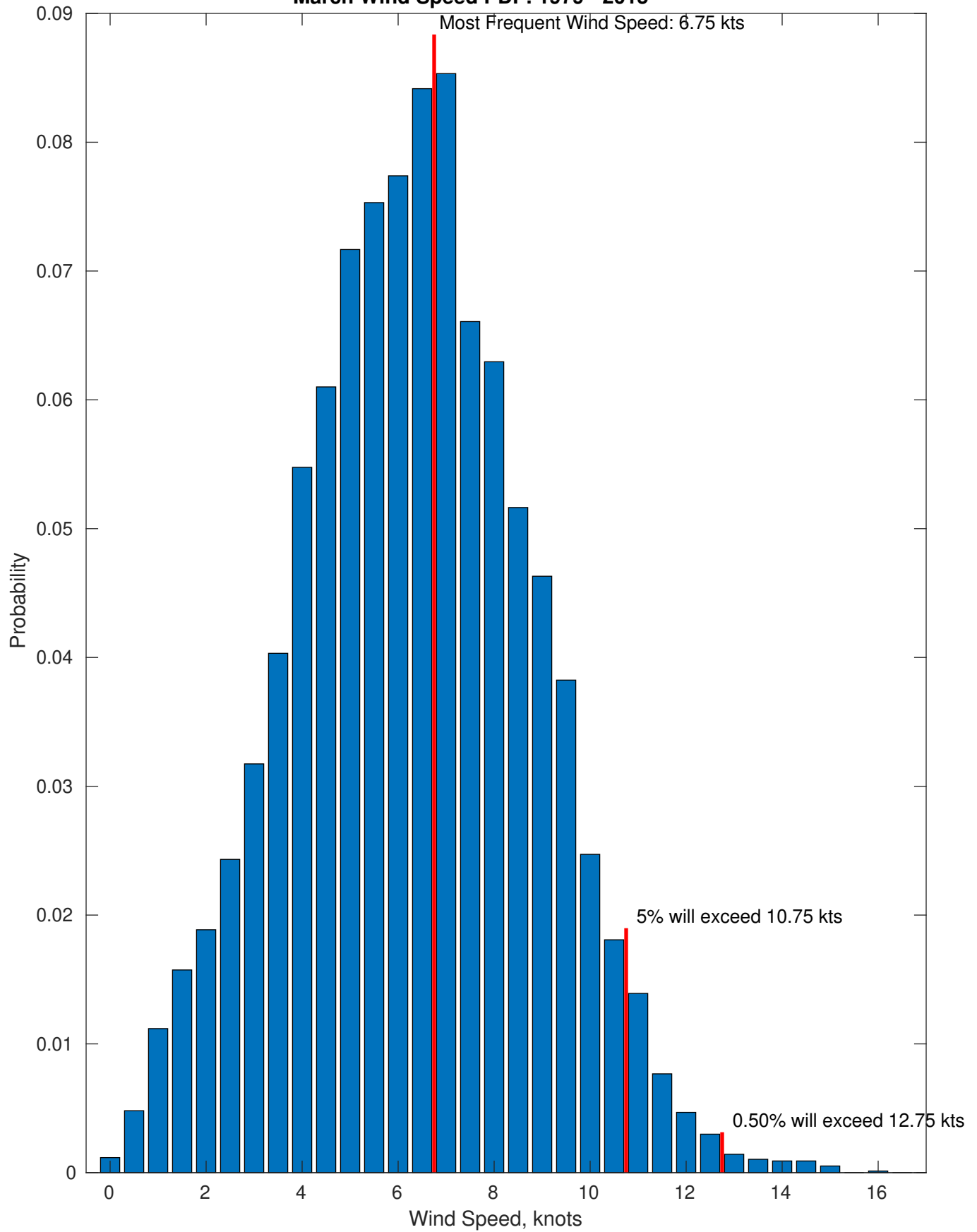
March Peak Wave Period PDF: 1979 - 2015



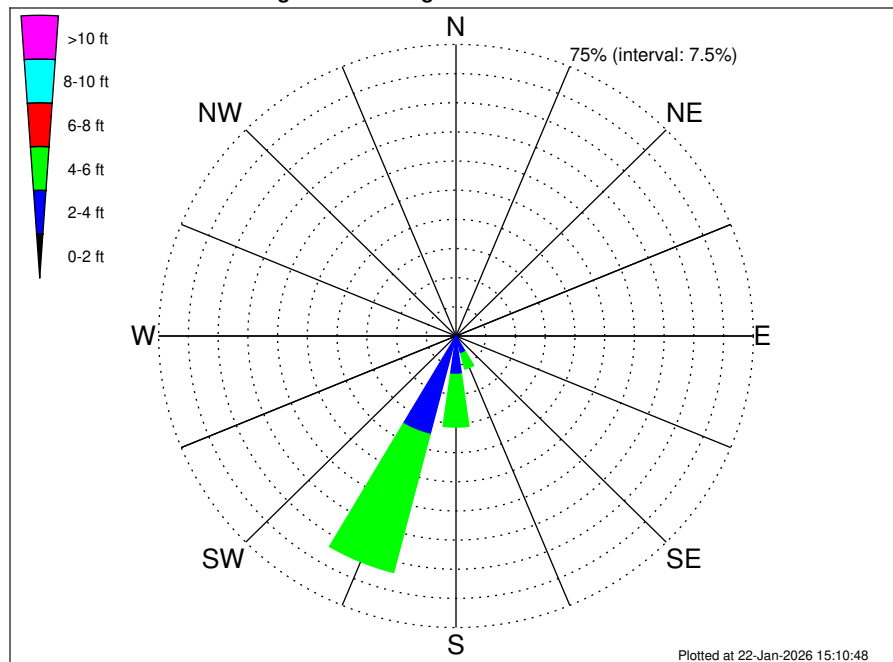
Swell: 100.00%



March Wind Speed PDF: 1979 - 2015



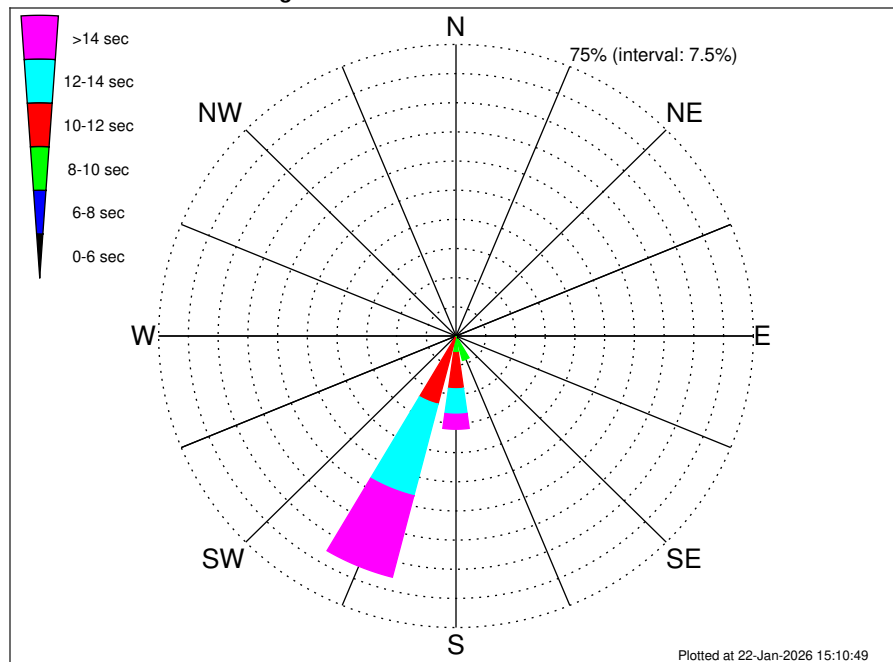
Liberia MBES Climatological WaveHeight Rose for March: 1979 - 2015



Joint Frequency Distribution Table

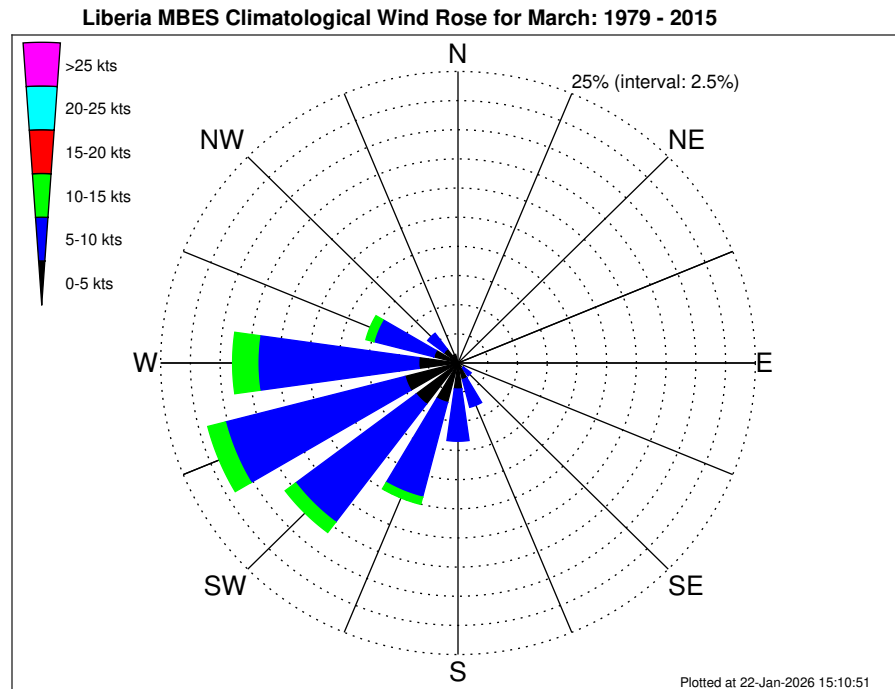
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1 - 2 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2 - 4 ft	.	.	.	.	.	.	.	4.68	9.90	26.16	1.24	0.33	0.27	0.20	.	.	42.77
4 - 6 ft	.	.	.	.	.	.	.	4.10	13.53	36.68	0.90	0.04	0.03	0.03	.	.	55.29
6 - 8 ft	.	.	.	.	.	.	.	0.10	0.56	1.26	0.01	.	.	.	.	.	1.94
8 - 10 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10 - 12 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12 - 14 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
14 - 16 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
16 - 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
> 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	.	.	.	.	.	.	.	8.88	23.99	64.10	2.15	0.36	0.30	0.22	.	.	100.00

Liberia MBES 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	.	.	.	.	.	.	.	.	.	.	0.04	.	.	.	.	.	0.04
6 - 8 sec	.	.	.	.	.	.	.	1.04	0.27	.	.	.	.	.	.	.	1.31
8 - 10 sec	.	.	.	.	.	.	.	5.45	4.05	0.47	.	.	.	.	.	.	9.96
10 - 12 sec	.	.	.	.	.	.	.	1.72	9.27	17.66	0.90	0.10	.	.	.	.	29.66
12 - 14 sec	.	.	.	.	.	.	.	0.31	6.54	24.32	0.74	0.13	0.13	0.01	.	.	32.19
14 - 16 sec	.	.	.	.	.	.	.	0.27	2.93	14.23	0.42	0.08	0.10	0.13	.	.	18.16
18 - 20 sec	.	.	.	.	.	.	.	0.09	0.75	5.96	0.05	0.05	0.07	0.04	.	.	7.01
22 - 24 sec	.	.	.	.	.	.	.	.	0.17	1.46	.	.	.	0.04	.	.	1.66
Total	.	.	.	.	.	.	.	8.88	23.99	64.10	2.15	0.36	0.30	0.22	.	.	100.00



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.05	0.05	0.03	•	0.01	0.05	0.03	0.08	0.04	0.03	0.03	0.01	0.07	0.03	0.05	0.05	0.60
0 - 5 kts	0.38	0.30	0.22	0.27	0.18	0.36	0.56	1.39	2.20	3.47	4.38	4.59	3.24	2.08	1.44	0.72	25.79
5 - 10 kts	0.20	0.05	0.07	0.05	0.05	0.10	0.81	2.46	4.47	8.39	12.68	15.60	13.53	5.20	1.70	0.55	65.91
10 - 15 kts	0.04	0.01	•	•	•	0.03	0.29	0.57	0.46	0.64	1.11	1.53	2.12	0.69	0.13	0.03	7.64
15 - 20 kts	•	•	•	•	•	•	0.01	•	•	•	•	0.04	0.01	•	•	•	0.07
20 - 25 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25 - 30 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
30 - 35 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.66	0.42	0.31	0.33	0.25	0.55	1.69	4.50	7.17	12.53	18.20	21.77	18.96	8.00	3.33	1.34	100.00