

Liberia MBES - April

Latitude: 4.50 N Longitude: 9.00 W

Weather Days

Wave Height > 4.0 ft Mean: 3.9 days Range: 0.7 - 7.2 days p50:25 days p75:22.5 days p90:21 days
Wave Height > 5.0 ft Mean: 0.3 days Range: 0.0 - 5.0 days p50:11 days p75:7.5 days p90:6.5 days
Wave Height > 6.0 ft Mean: 0.0 days Range: 0.0 - 2.0 days p50:4 days p75:2.5 days p90:1.5 days

Wind Speed > 10.0 knots Mean: 1.8 days Range: 0.7 - 3.0 days p50:1.5 days p75:1 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 1.5 times per month A 2 day or longer window will statistically occur 0.9 times per month A 3 day or longer window will statistically occur 0.4 times per month
Wave Height < 5.0 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 1.8 times per month
Wave Height < 6.0 ft	A 1 day or longer window will statistically occur 1.9 times per month A 2 day or longer window will statistically occur 1.7 times per month A 3 day or longer window will statistically occur 1.5 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

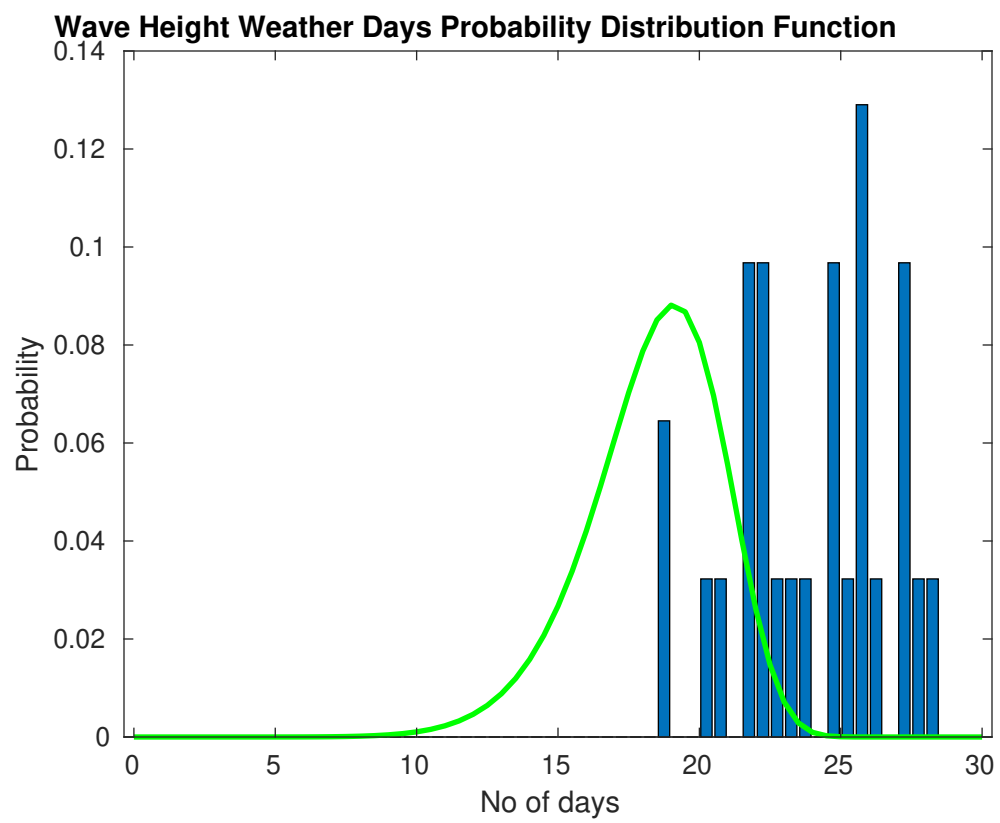
Currents

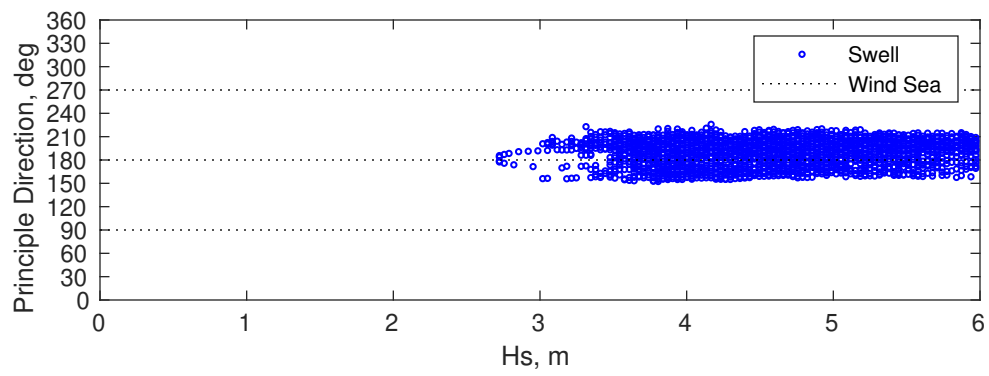
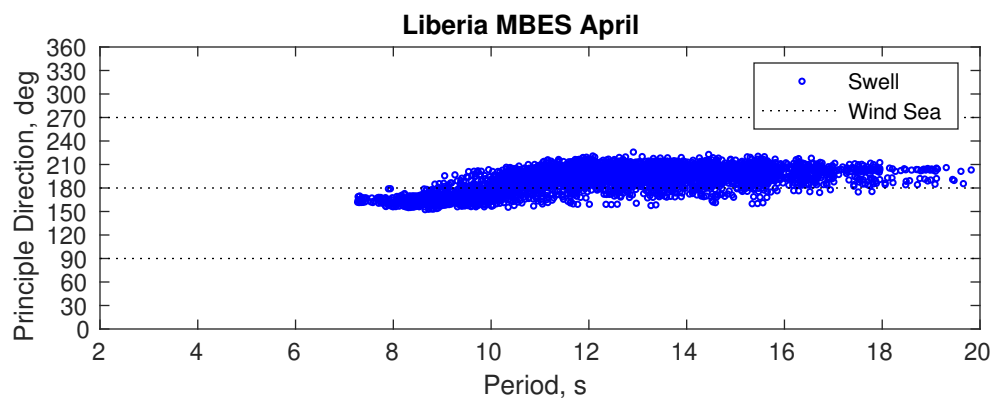
Mean Speed: 0.50-0.75 kts
The currents will occasionally reach 1.75-2.00 kts, but rarely greater.
Principle Direction, to: ESE

Weather Days
Current Speed > 0.5 knots Mean: 23.5 days Range: 16.2 - 30.0 days p50:27 days p75:22 days p90:12 days
Current Speed > 1.0 knots Mean: 13.0 days Range: 5.4 - 20.6 days p50:13 days p75:7 days p90:3 days
Current Speed > 1.5 knots Mean: 3.0 days Range: 0.0 - 6.7 days p50:3 days p75:1 days p90:1 days

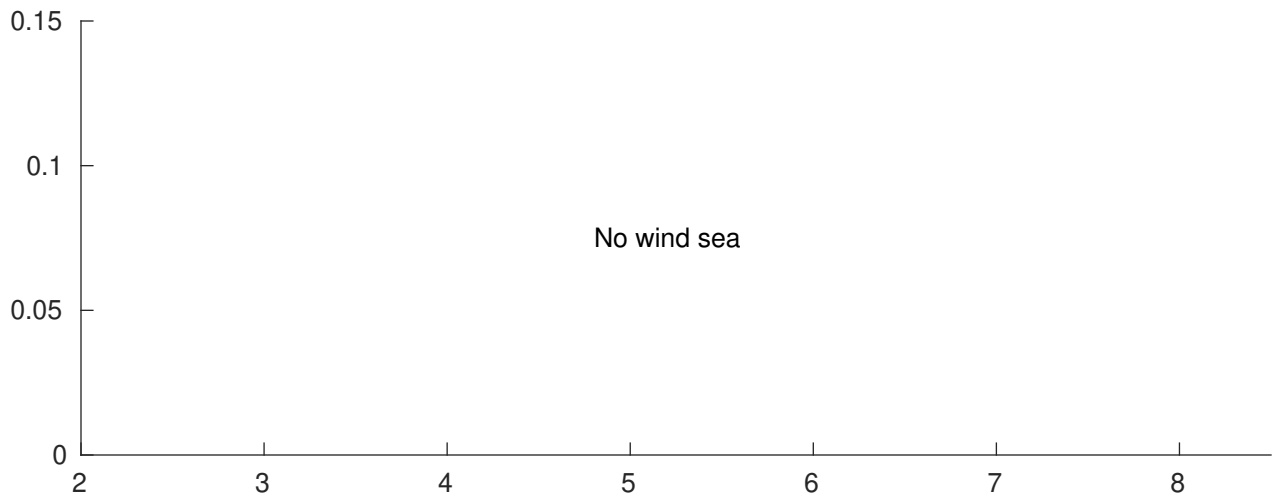
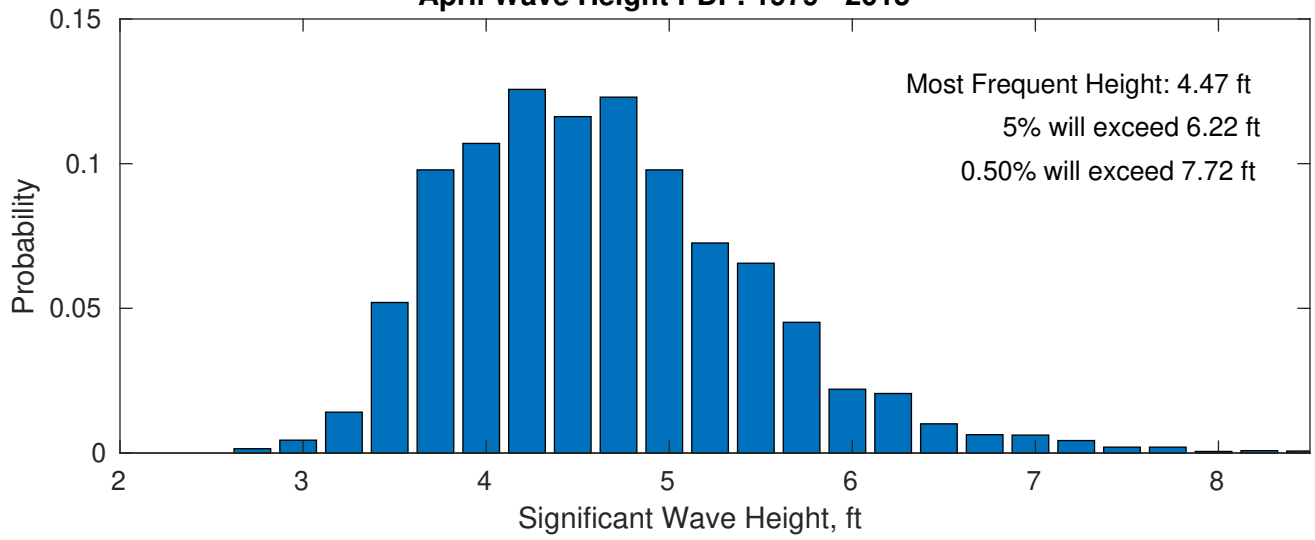
Severe Storms

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

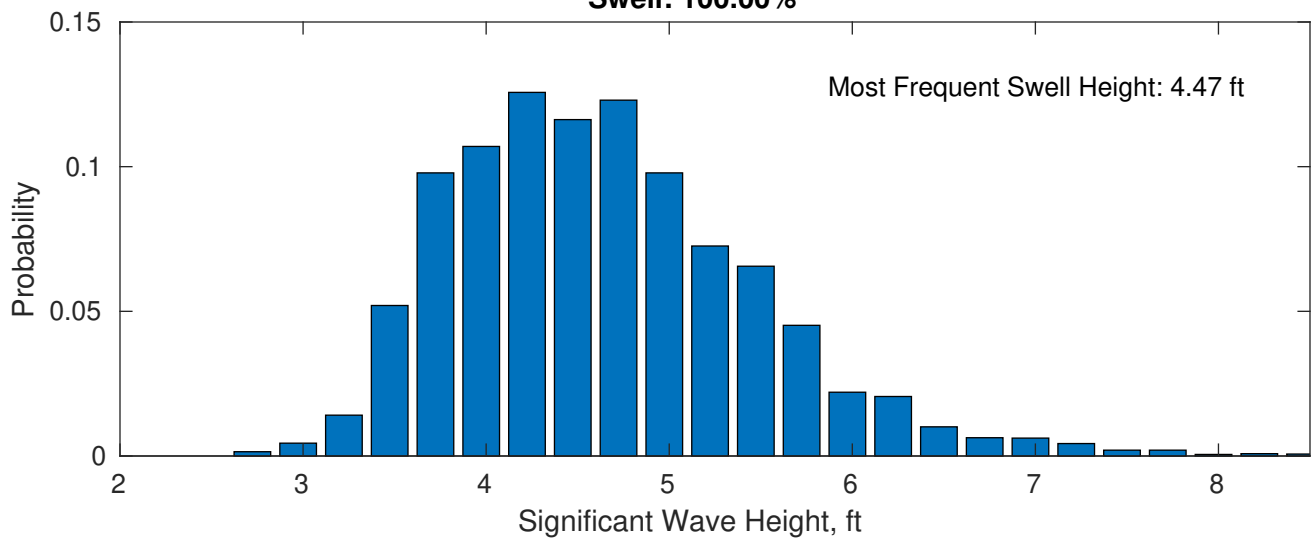




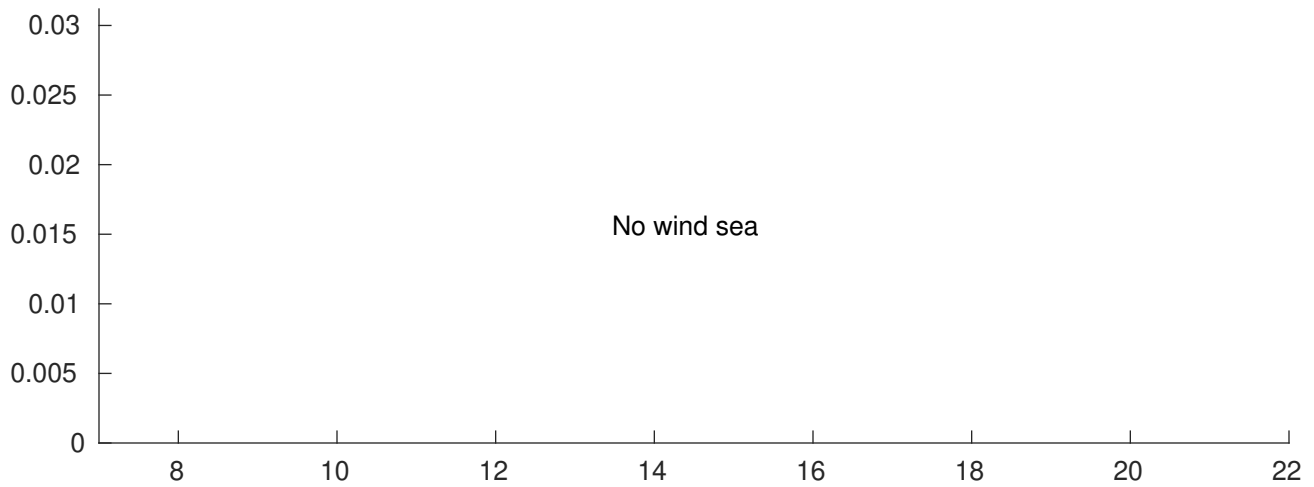
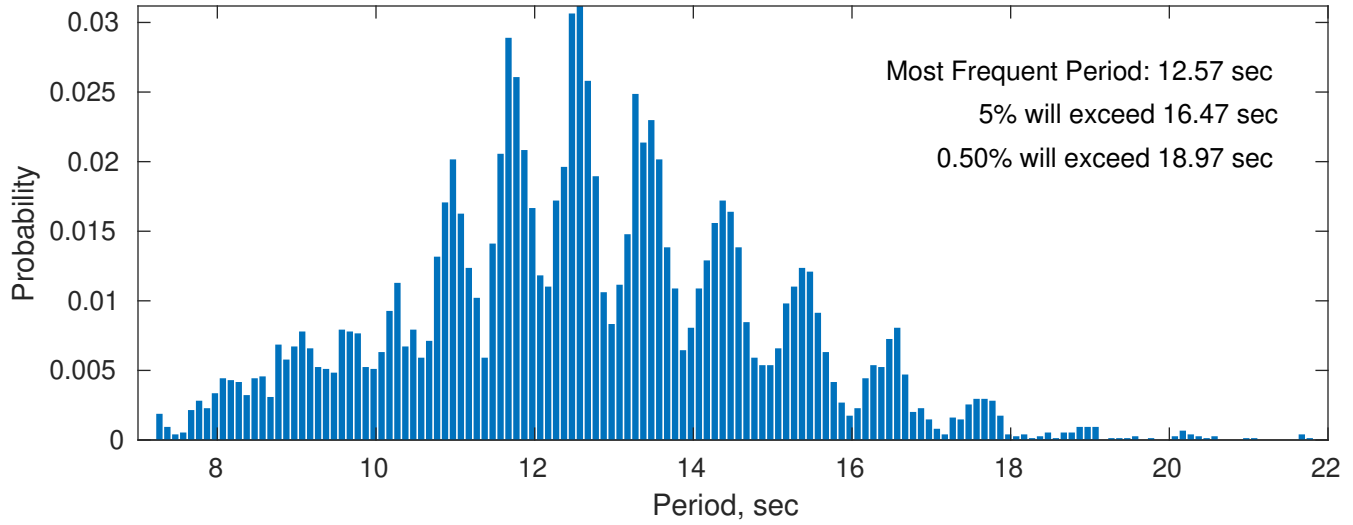
April Wave Height PDF: 1979 - 2015



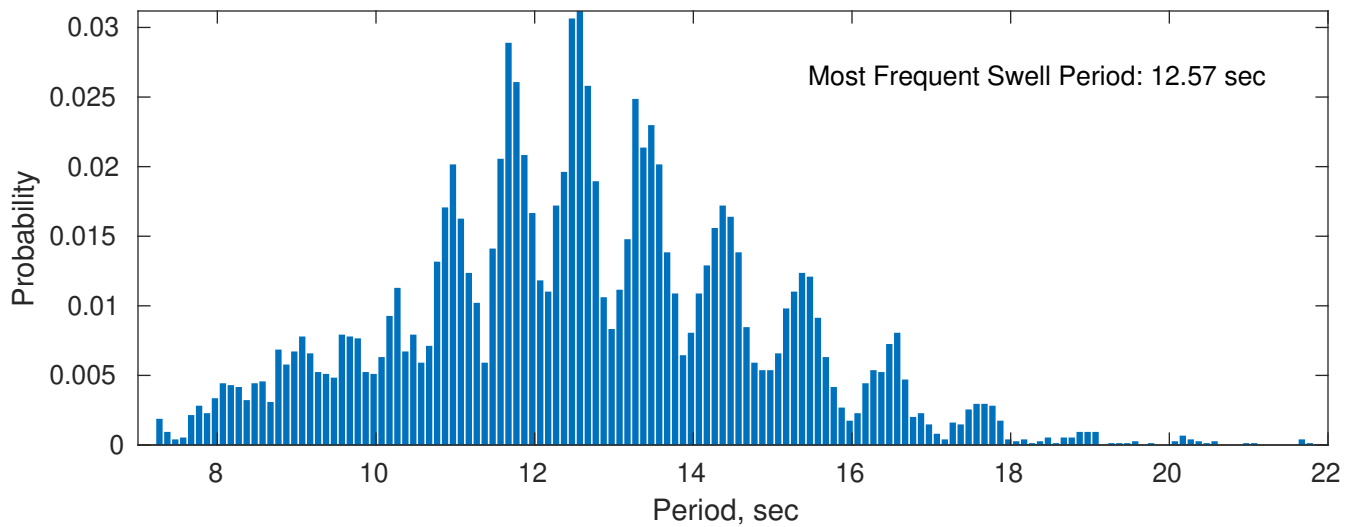
Swell: 100.00%



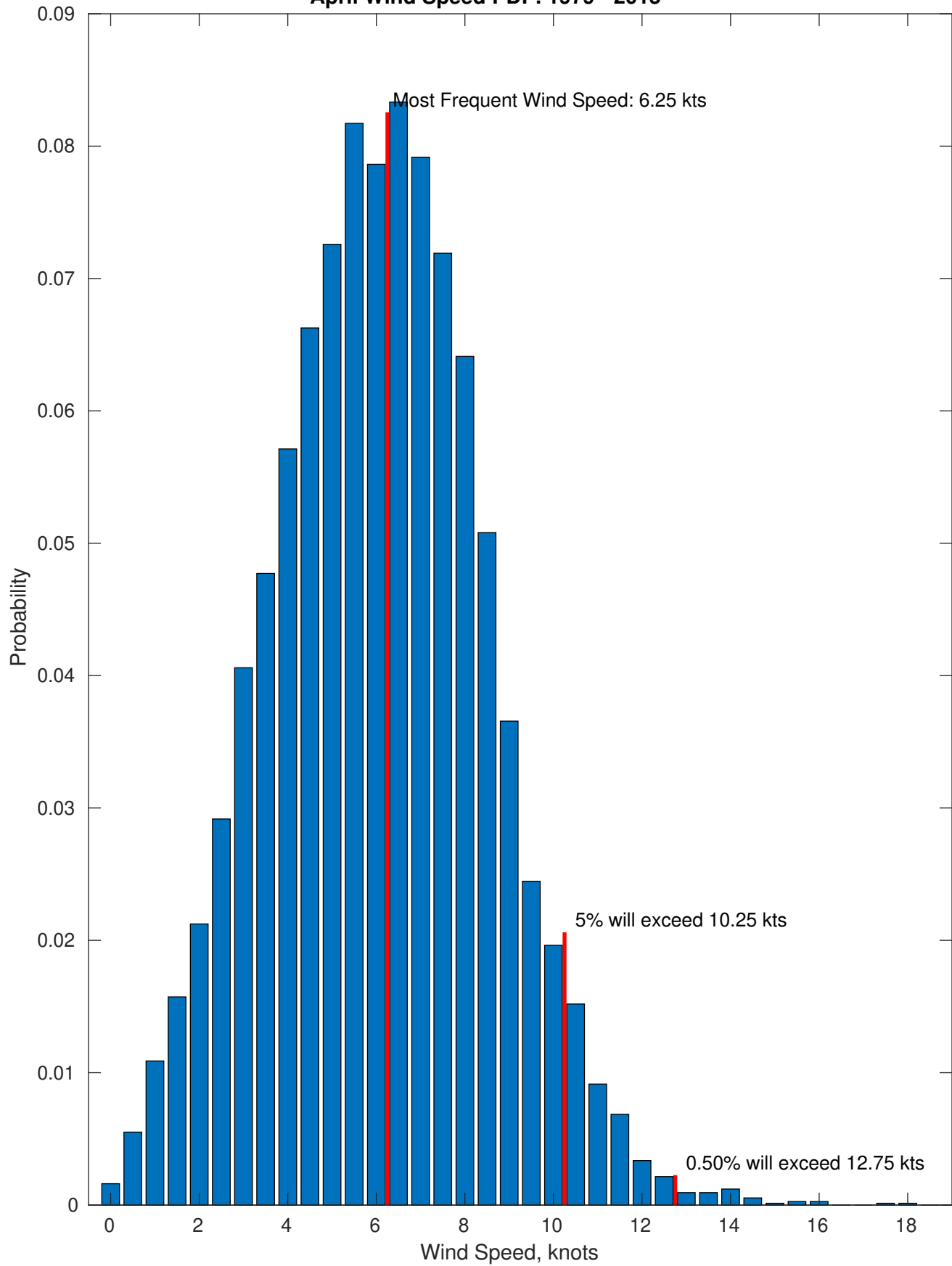
April Peak Wave Period PDF: 1979 - 2015



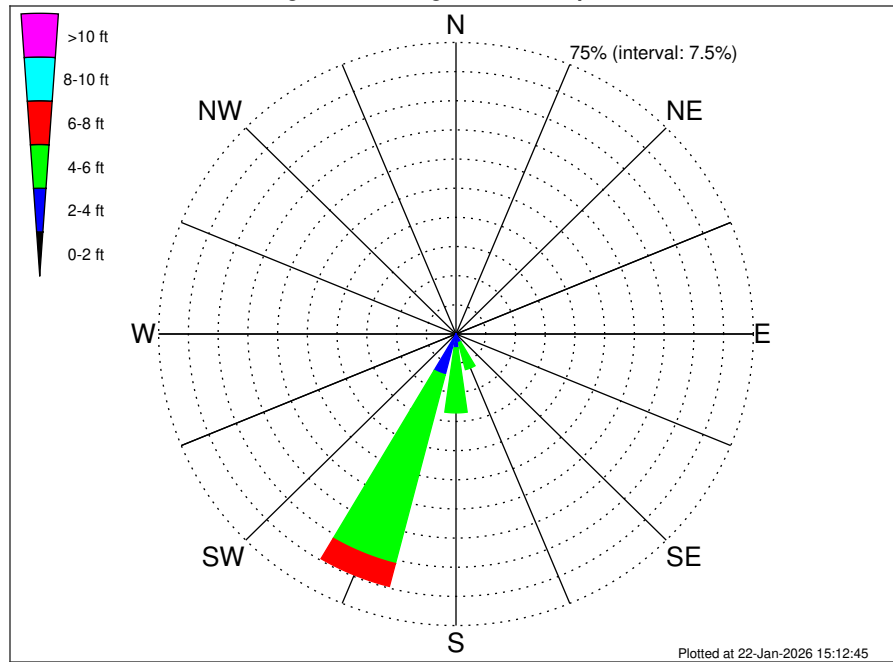
Swell: 100.00%



April Wind Speed PDF: 1979 - 2015



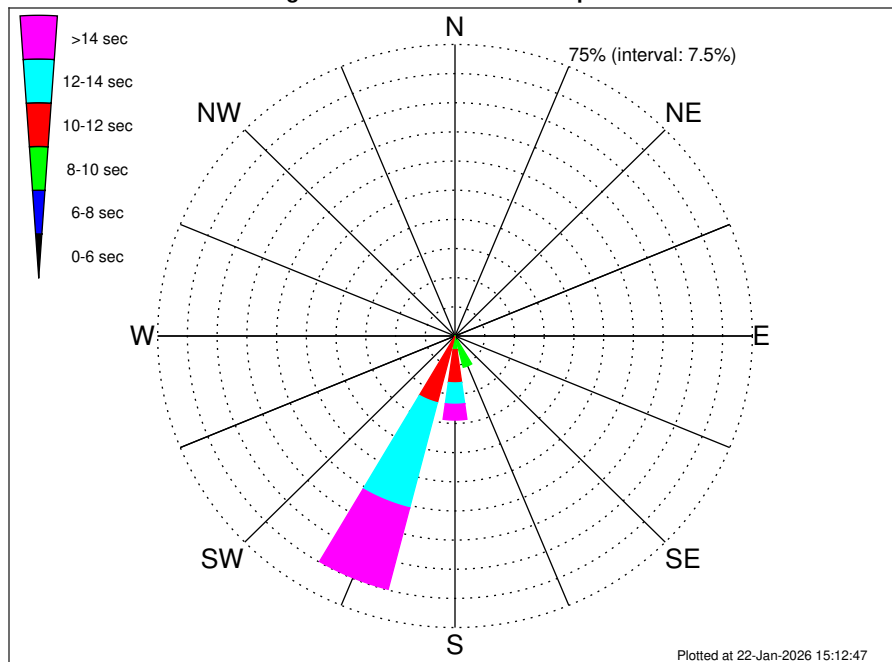
Liberia MBES Climatological WaveHeight Rose for April: 1979 - 2015



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	.	.	.	.	.	.	.	2.28	3.58	10.82	0.31	.	.	.	.	.	16.99
4 - 6 ft	.	.	.	.	.	.	.	7.19	16.72	50.17	1.22	.	.	.	.	.	75.31
6 - 8 ft	.	.	.	.	.	.	.	0.04	1.21	6.09	0.01	.	.	.	.	.	7.35
8 - 10 ft	.	.	.	.	.	.	.	.	0.12	0.23	.	.	.	.	.	.	0.35
10 - 12 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12 - 14 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
14 - 16 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
16 - 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
> 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	.	.	.	.	.	.	.	9.52	21.63	67.31	1.55	.	.	.	.	.	100.00

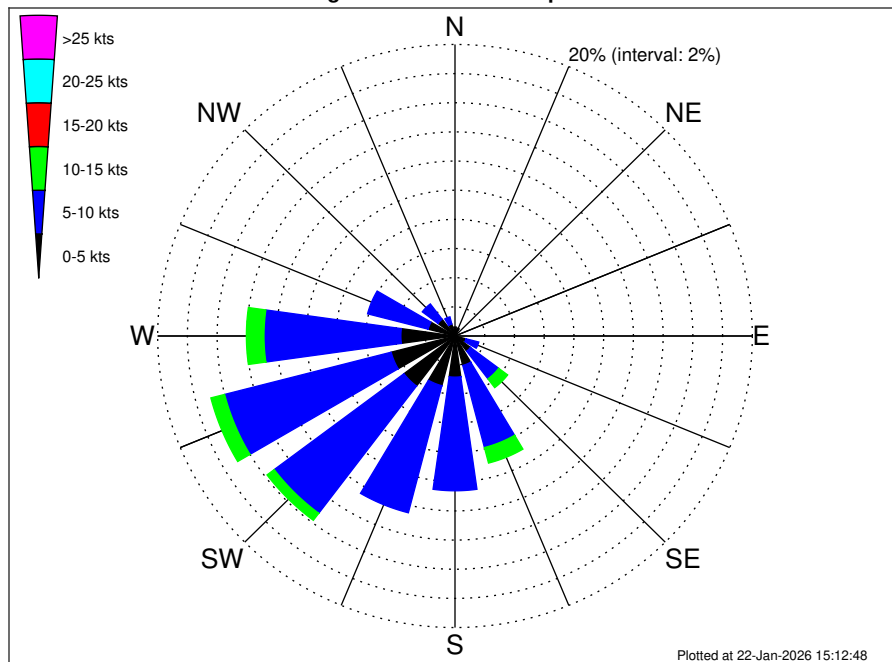
Liberia MBES Climatological WavePeriod Rose for April: 1979 - 2015



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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6 - 8 sec	•	•	•	•	•	•	•	1.21	0.05	•	•	•	•	•	•	•	1.26
8 - 10 sec	•	•	•	•	•	•	•	7.11	3.48	0.28	•	•	•	•	•	•	10.87
10 - 12 sec	•	•	•	•	•	•	•	0.87	8.53	17.45	0.38	•	•	•	•	•	27.23
12 - 14 sec	•	•	•	•	•	•	•	0.19	5.51	27.96	0.66	•	•	•	•	•	34.31
14 - 16 sec	•	•	•	•	•	•	•	0.13	3.08	15.52	0.46	•	•	•	•	•	19.19
18 - 20 sec	•	•	•	•	•	•	•	•	0.73	5.39	0.05	•	•	•	•	•	6.17
22 - 24 sec	•	•	•	•	•	•	•	•	0.24	0.71	•	•	•	•	•	•	0.95
Total	•	•	•	•	•	•	•	9.52	21.63	67.31	1.55	•	•	•	•	•	100.00

Liberia MBES Climatological Wind Rose for April: 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	0.01	0.03	0.09	0.04	0.04	0.04	0.05	0.03	0.01	0.03	0.09	0.04	0.05	0.05	0.03	0.71
0 - 5 kts	0.55	0.55	0.31	0.43	0.47	0.73	1.26	2.03	2.80	3.51	4.27	4.34	3.60	1.81	1.38	0.82	28.87
5 - 10 kts	0.16	0.12	0.05	0.07	0.30	0.89	2.38	5.82	7.80	9.01	10.93	11.57	9.21	4.21	1.32	0.51	64.33
10 - 15 kts	.	.	.	.	.	0.12	0.75	1.10	0.46	0.39	0.60	0.95	1.18	0.34	0.07	0.03	5.99
15 - 20 kts	.	.	.	.	.	.	.	0.05	.	.	0.01	0.01	0.01	.	.	.	0.09
20 - 25 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25 - 30 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
30 - 35 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
35 - 40 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
40 - 45 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
45 - 50 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	0.78	0.69	0.39	0.59	0.81	1.77	4.44	9.06	11.08	12.92	15.85	16.98	14.05	6.41	2.82	1.38	100.00