

Madagascar MBES - April

Latitude: 14.97 S Longitude: 45.59 E

Weather Days

Wave Height > 5.0 ft Mean: 0.5 days Range: 0.0 - 1.5 days p50:30 days p75:0.5 days p90:0.5 days

Wave Height > 6.5 ft Mean: 0.1 days Range: 0.0 - 0.6 days p50:30 days p75:30 days p90:30 days

Wave Height > 8.0 ft Mean: 0.1 days Range: 0.0 - 0.5 days p50:30 days p75:30 days p90:30 days

Wind Speed > 15.0 knots Mean: 4.4 days Range: 1.8 - 7.0 days p50:4 days p75:3.5 days p90:2 days

Wind Speed > 20.0 knots Mean: 0.9 days Range: 0.0 - 2.4 days p50:0.5 days p75:0.5 days p90:0.5 days

Wind Speed > 25.0 knots Mean: 0.1 days Range: 0.0 - 0.6 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 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 1.3 times per month

Wave Height < 6.5 ft
A 1 day or longer window will statistically occur 1.0 times per month
A 2 day or longer window will statistically occur 1.0 times per month
A 3 day or longer window will statistically occur 1.0 times per month

Wave Height < 8.0 ft
A 1 day or longer window will statistically occur 0.9 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 0.9 times per month

Waves

Mean Height: 1 - 2 ft

The wave heights will occasionally reach 4 - 6 ft, but rarely higher.

Mean Period: 4 - 6 sec

The wave periods will occasionally reach 18 - 20 sec, but rarely longer.

Principle Direction, from: E

WindSea/Swell: 35% / 65%

Winds

Mean Speed: 5 - 10 kts

The winds will occasionally reach 20 - 25 kts, but rarely greater.

Principle Direction, from: ESE

Currents

Mean Speed: 0.50-0.75 kts

The currents will occasionally reach 1.50-1.75 kts, but rarely greater.

Principle Direction, to: E

Weather Days

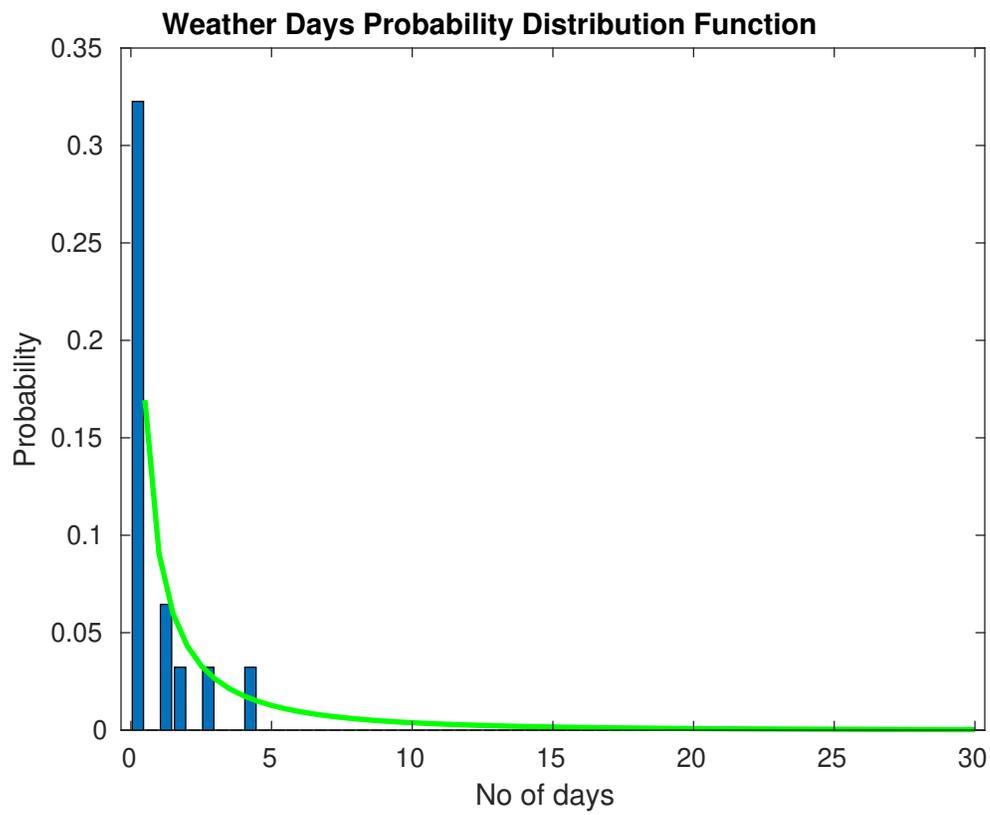
Current Speed > 0.5 knots Mean: 15.5 days Range: 7.5 - 23.5 days p50:17 days p75:8 days p90:6 days

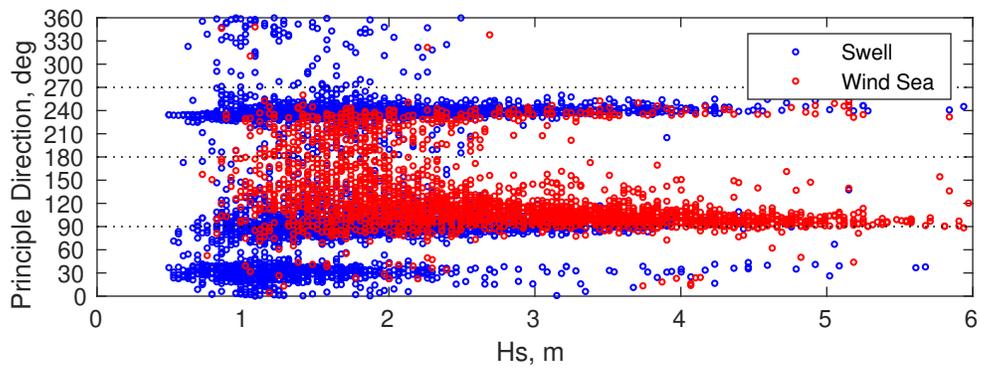
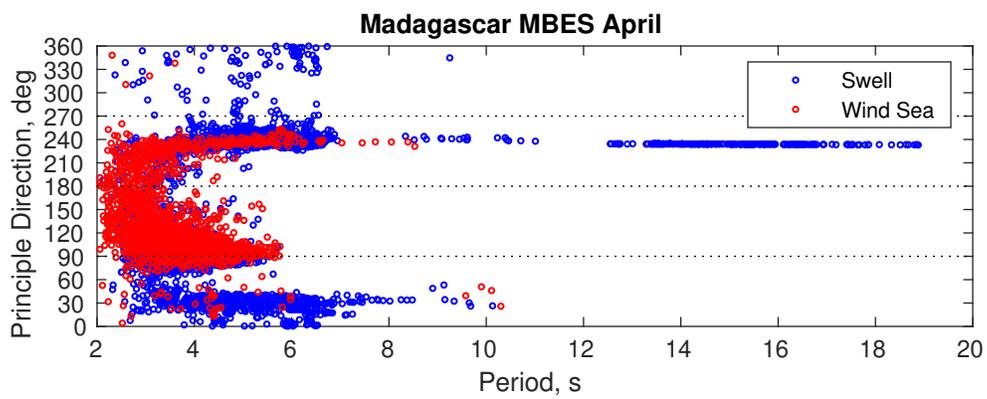
Current Speed > 1.0 knots Mean: 3.2 days Range: 0.0 - 7.5 days p50:2 days p75:2 days p90:1 days

Current Speed > 1.5 knots Mean: 0.4 days Range: 0.0 - 1.2 days p50:1 days p75:1 days p90:1 days

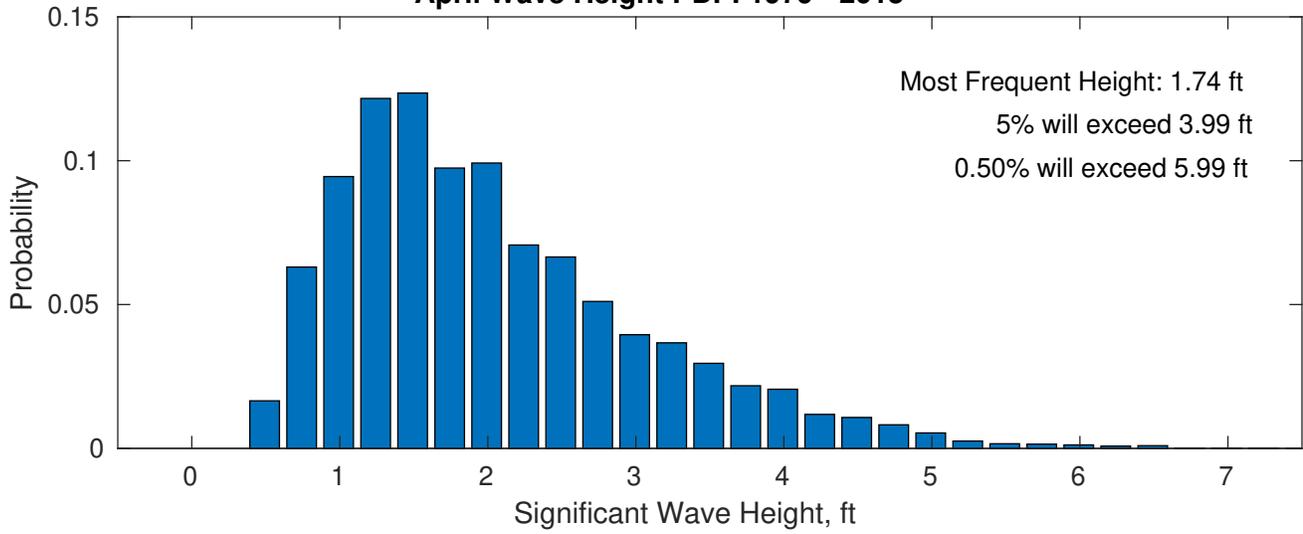
Severe Storms

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

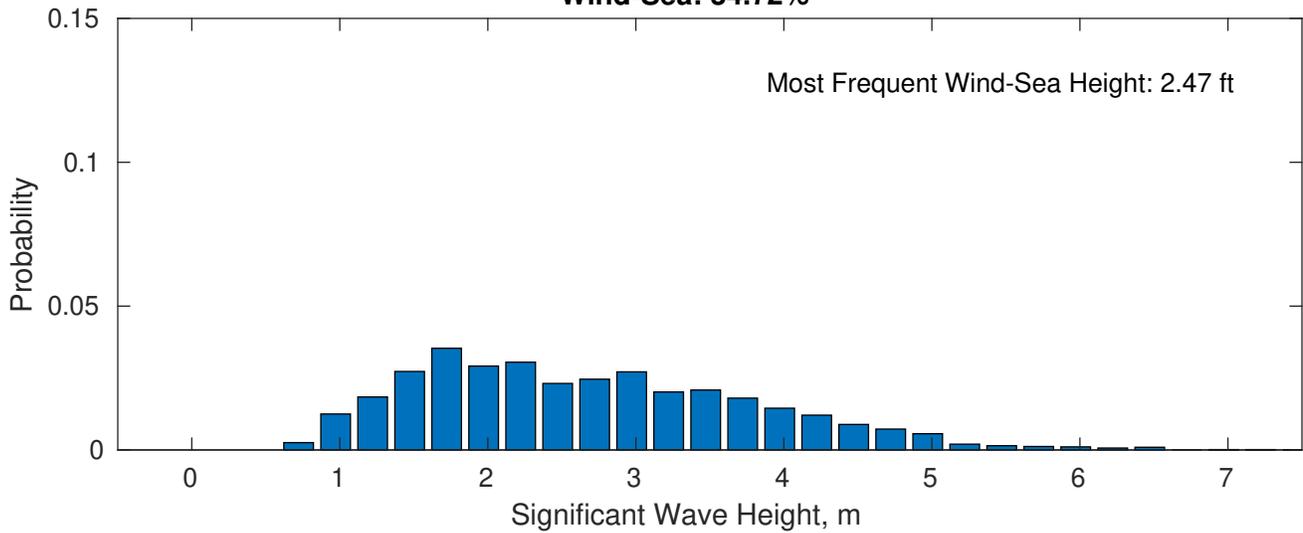




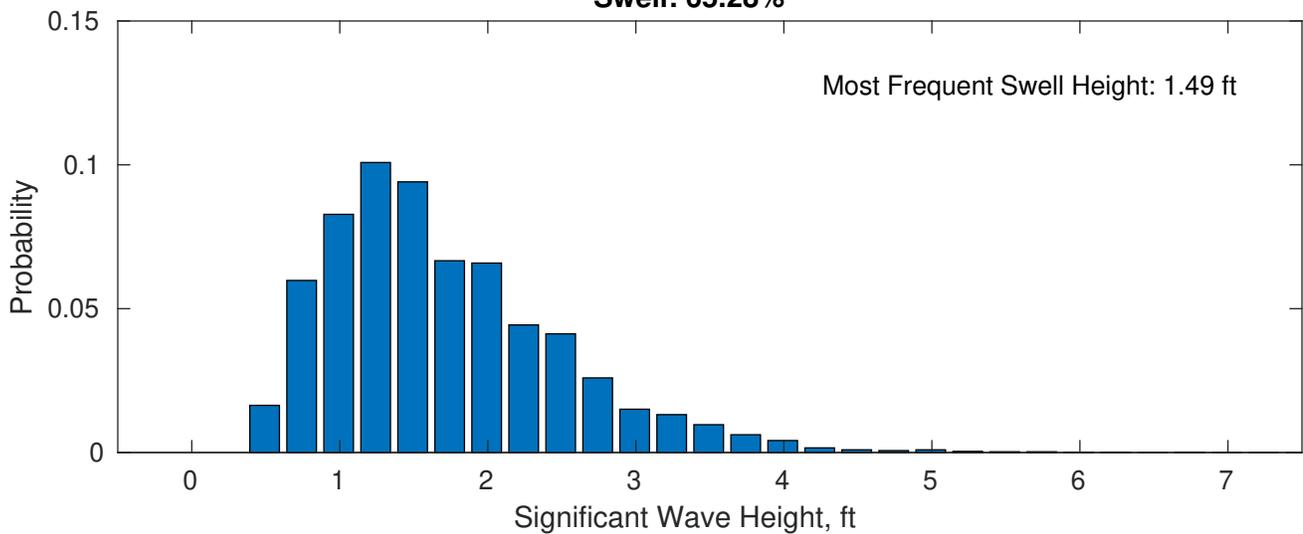
April Wave Height PDF: 1979 - 2015



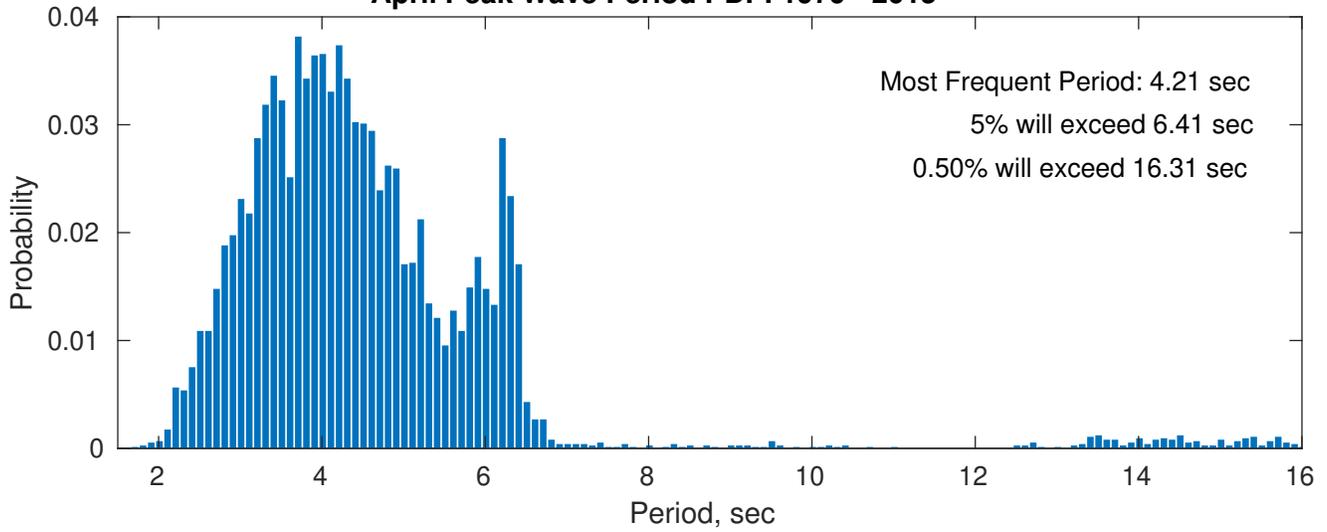
Wind-Sea: 34.72%



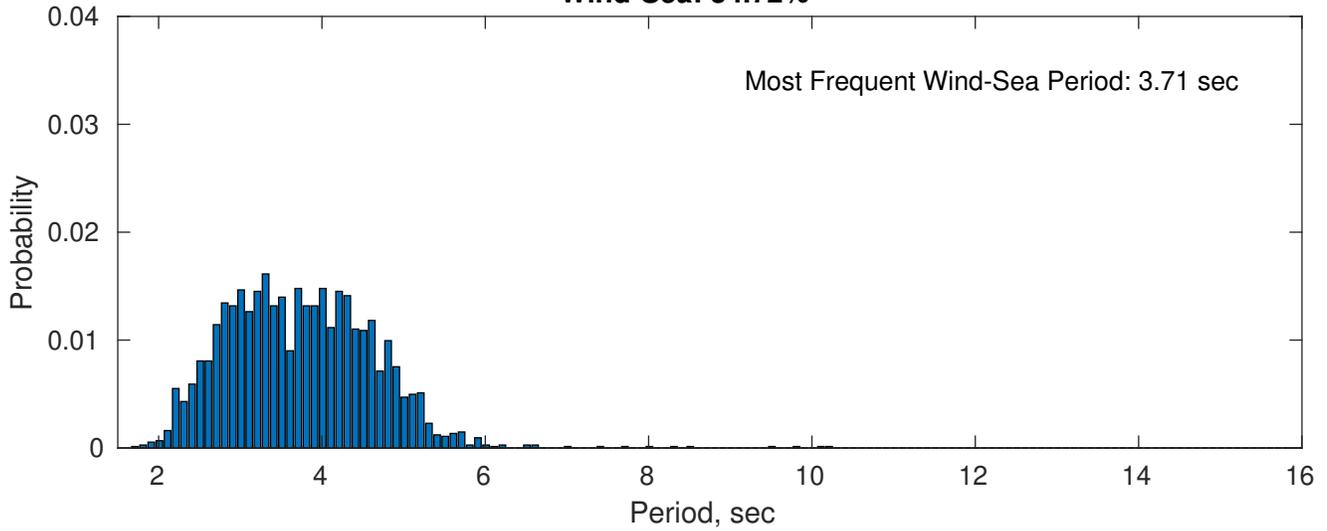
Swell: 65.28%



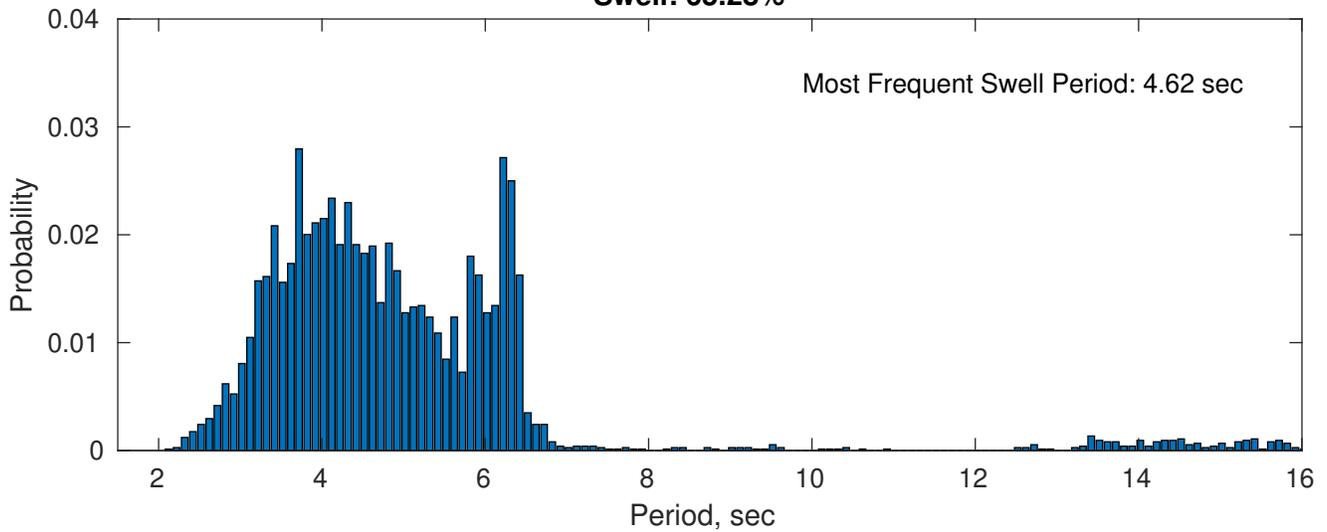
April Peak Wave Period PDF: 1979 - 2015



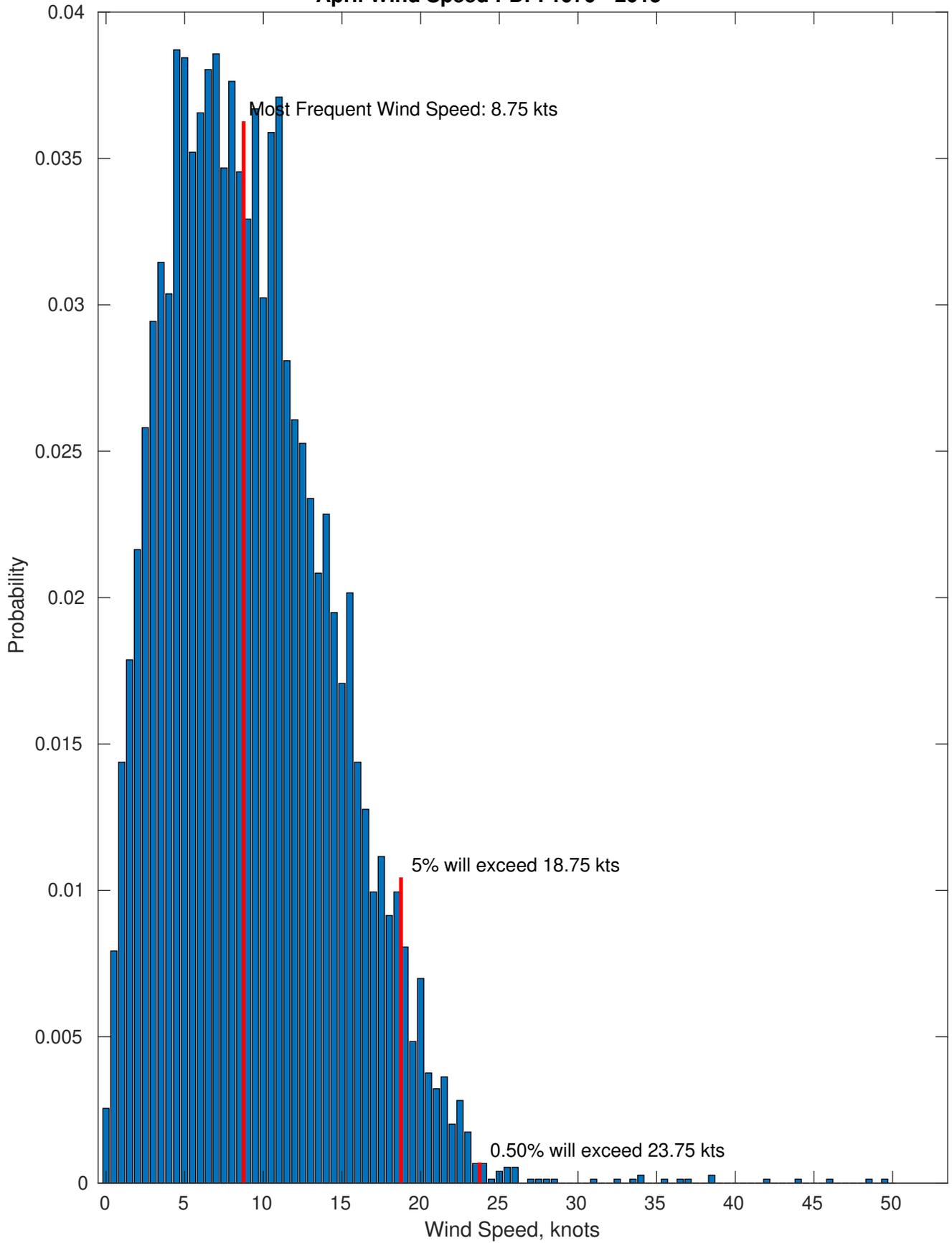
Wind-Sea: 34.72%



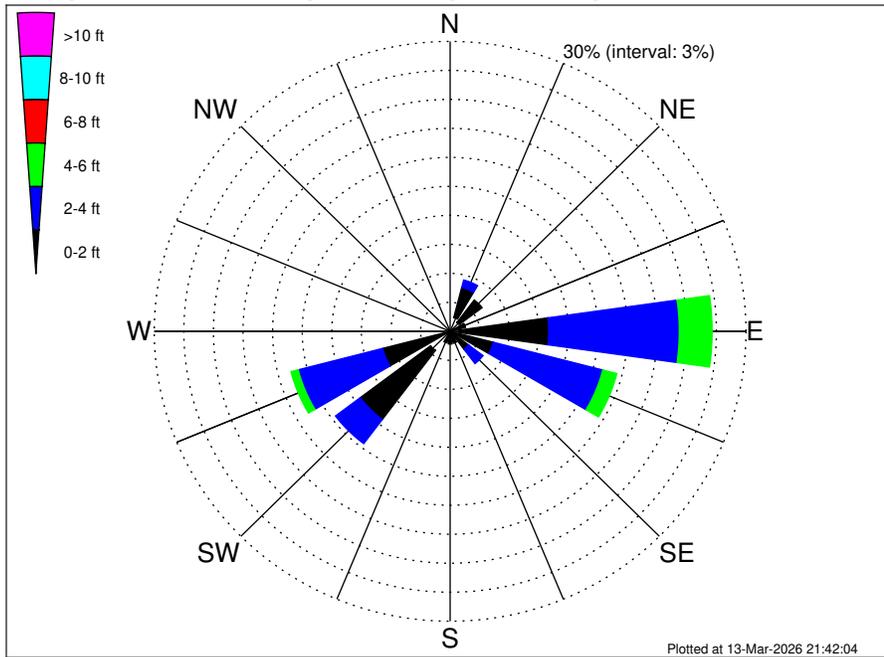
Swell: 65.28%



April Wind Speed PDF: 1979 - 2015



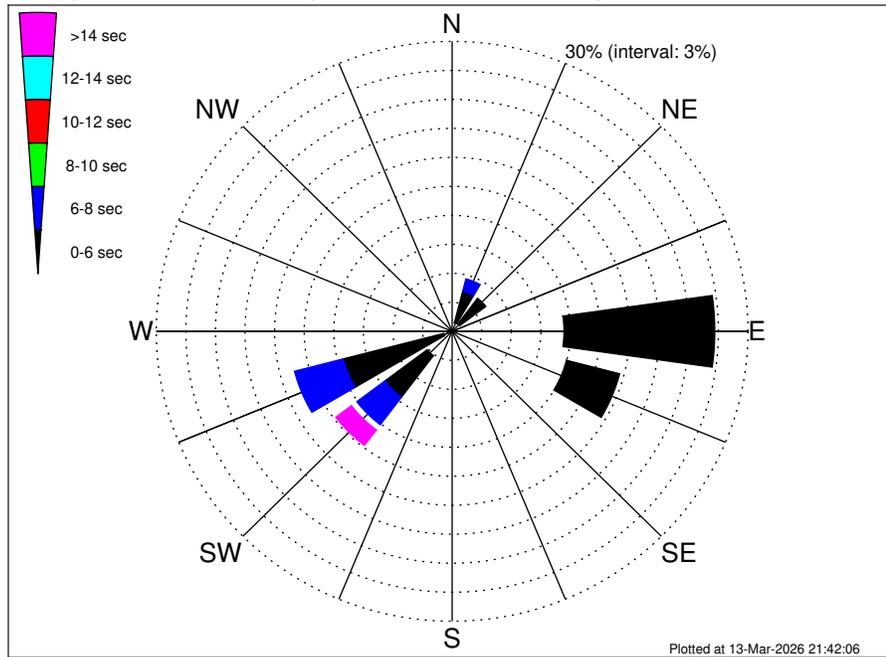
Madagascar MBES Climatological WaveHeight Rose for April: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.24	1.47	1.14	0.34	0.87	0.28	0.12	0.12	0.15	0.03	2.47	0.42	0.12	0.05	0.03	0.11	7.96
1 - 2 ft	0.65	3.23	2.92	1.28	9.13	4.25	2.22	1.16	1.17	1.21	8.95	6.65	0.34	0.08	0.13	0.36	43.71
2 - 4 ft	0.07	0.79	0.42	0.28	13.24	11.47	1.84	0.59	0.23	0.44	3.13	8.84	0.01	0.04	0.07	0.04	41.51
4 - 6 ft	•	0.12	0.19	0.05	3.32	1.47	0.11	0.08	•	•	0.15	0.75	•	•	•	•	6.24
6 - 8 ft	•	0.01	0.04	0.01	0.07	0.08	•	0.03	•	•	0.03	0.07	•	•	•	•	0.34
8 - 10 ft	•	•	0.03	•	•	•	•	•	•	•	0.01	•	•	•	•	•	0.04
10 - 12 ft	•	•	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	0.01
12 - 14 ft	•	•	0.01	•	•	•	•	•	•	•	•	0.03	•	•	•	•	0.04
14 - 16 ft	•	0.01	0.03	•	•	•	•	•	•	•	•	0.01	•	•	•	0.01	0.07
16 - 18 ft	•	0.01	0.01	•	•	•	•	•	•	•	0.01	•	•	•	•	•	0.04
> 18 ft	•	0.04	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	0.05
Total	0.95	5.69	4.80	1.96	26.63	17.54	4.29	1.98	1.55	1.68	14.77	16.77	0.47	0.17	0.23	0.52	100.00

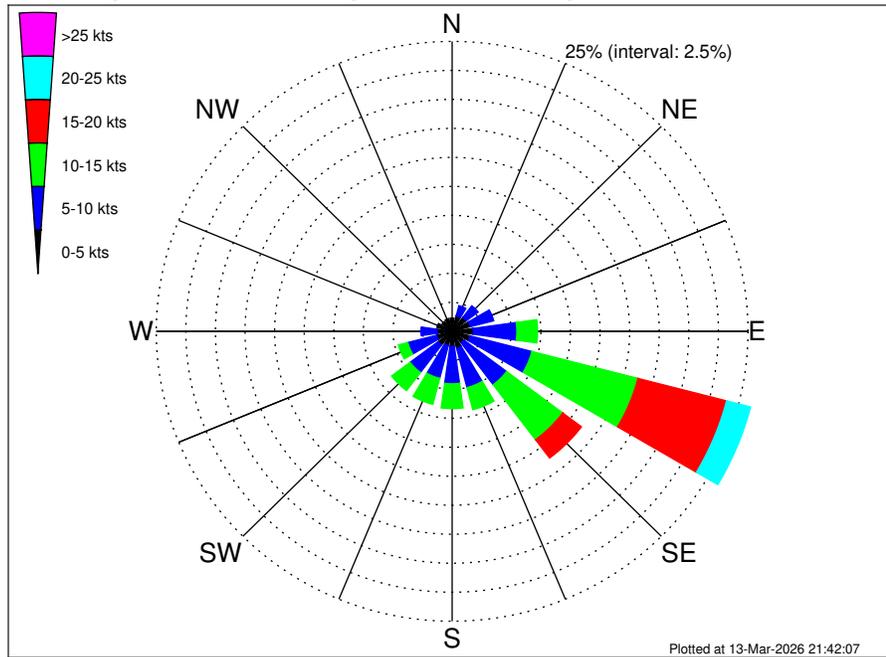
Madagascar MBES Climatological WavePeriod Rose for April: 1979 - 2015



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	•	•	•	•	•	•	•	0.03	0.04	•	0.01	•	•	•	•	0.01	0.09
2 - 4 sec	0.09	0.91	0.95	1.61	11.34	11.98	3.87	1.73	1.47	1.59	3.15	0.89	0.07	0.05	0.09	0.12	39.92
4 - 6 sec	0.47	3.37	3.32	0.35	15.28	5.56	0.42	0.22	0.04	0.09	5.38	10.52	0.31	0.11	0.11	0.17	45.73
6 - 8 sec	0.39	1.32	0.40	•	•	•	•	•	•	•	3.56	5.09	0.09	0.01	0.03	0.20	11.10
8 - 10 sec	•	0.05	0.11	•	•	•	•	•	•	•	0.01	0.19	•	•	•	0.01	0.38
10 - 12 sec	•	0.03	0.01	•	•	•	•	•	•	•	•	0.08	•	•	•	•	0.12
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	0.67	•	•	•	•	•	0.67
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	1.36	•	•	•	•	•	1.36
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	0.51	•	•	•	•	•	0.51
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	0.12	•	•	•	•	•	0.12
Total	0.95	5.69	4.80	1.96	26.63	17.54	4.29	1.98	1.55	1.68	14.77	16.77	0.47	0.17	0.23	0.52	100.00

Madagascar 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	0.04	0.08	0.03	0.11	0.11	0.09	0.05	0.01	0.09	0.09	0.07	0.04	0.12	0.08	•	0.03	1.05
0 - 5 kts	1.10	1.30	1.48	1.51	1.68	1.49	1.20	1.51	1.21	1.17	1.42	1.32	1.16	1.25	1.06	1.12	20.97
5 - 10 kts	0.62	0.90	1.25	2.02	3.68	5.38	4.52	3.49	3.23	2.93	2.96	2.51	1.36	0.52	0.43	0.54	36.33
10 - 15 kts	0.03	0.09	0.15	0.30	1.75	9.26	5.94	1.96	2.14	2.31	1.95	0.82	0.09	0.07	0.04	0.03	26.92
15 - 20 kts	0.09	0.03	0.04	0.04	0.31	7.73	1.98	0.26	0.23	0.60	0.32	0.07	0.05	•	•	•	11.75
20 - 25 kts	•	•	•	•	0.03	2.10	0.27	0.05	0.03	0.08	0.01	•	•	•	•	•	2.57
25 - 30 kts	•	0.05	•	•	•	•	0.09	•	0.04	•	•	0.01	•	•	•	•	0.20
30 - 35 kts	•	0.01	•	0.01	0.01	•	0.01	•	•	•	•	0.01	•	•	•	•	0.07
35 - 40 kts	•	•	•	•	0.04	•	•	•	•	0.01	•	0.01	•	•	•	•	0.07
40 - 45 kts	•	•	•	•	0.01	•	•	•	•	•	0.01	•	•	•	•	•	0.03
45 - 50 kts	•	•	•	•	0.04	•	•	•	•	•	•	0.01	•	•	•	•	0.05
Total	1.88	2.47	2.94	3.98	7.66	26.05	14.06	7.28	6.96	7.20	6.75	4.81	2.78	1.92	1.53	1.71	100.00