

## Madagascar MBES - June

Latitude: 14.97 S Longitude: 45.59 E

### Weather Days

Wave Height > 5.0 ft Mean: 2.1 days Range: 0.8 - 3.5 days p50:2 days p75:1 days p90:1 days

Wave Height > 6.5 ft Mean: 0.1 days Range: 0.0 - 0.4 days p50:30 days p75:30 days p90:0.5 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: 11.5 days Range: 9.1 - 13.8 days p50:12 days p75:10 days p90:8.5 days

Wind Speed > 20.0 knots Mean: 3.1 days Range: 1.5 - 4.7 days p50:3.5 days p75:2.5 days p90:1.5 days

Wind Speed > 25.0 knots Mean: 0.2 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 3.1 times per month  
A 2 day or longer window will statistically occur 2.7 times per month  
A 3 day or longer window will statistically occur 2.1 times per month

Wave Height < 6.5 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

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: 2 - 4 ft

The wave heights will occasionally reach 6 - 8 ft, but rarely higher.

Mean Period: 4 - 6 sec

The wave periods will occasionally reach 6 - 8 sec, but rarely longer.

Principle Direction, from: E

WindSea/Swell: 50% / 50%

### Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 25 - 30 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: W

### Weather Days

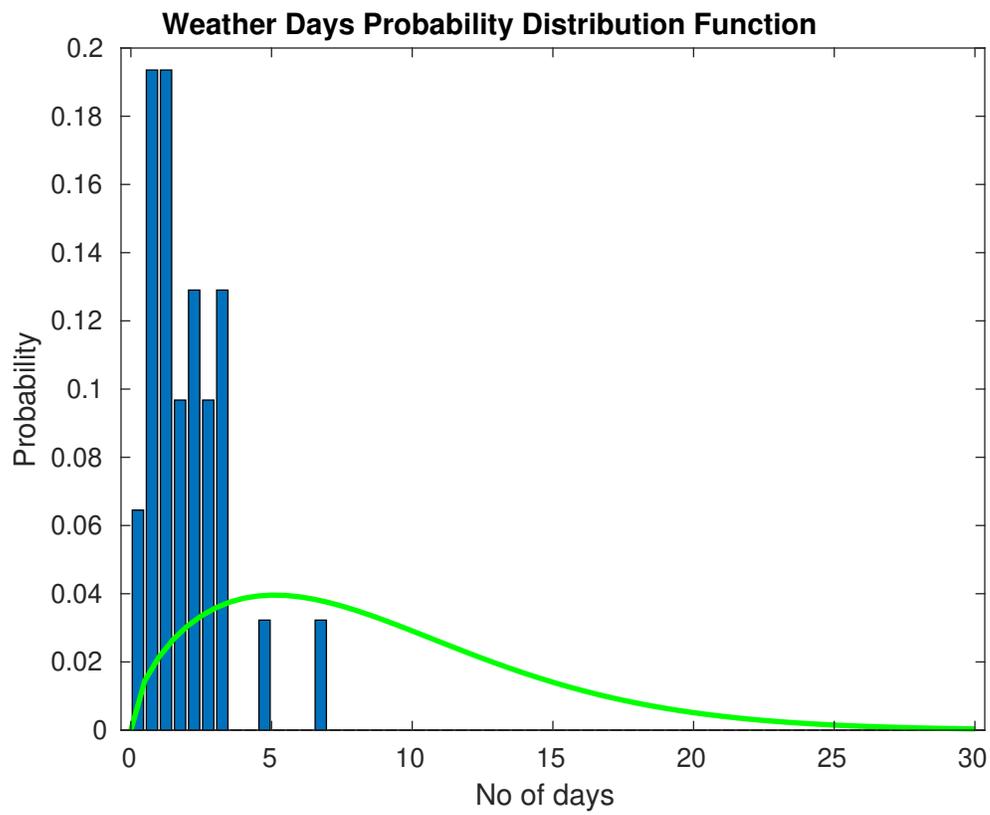
Current Speed > 0.5 knots Mean: 15.7 days Range: 9.3 - 22.2 days p50:18 days p75:11 days p90:8 days

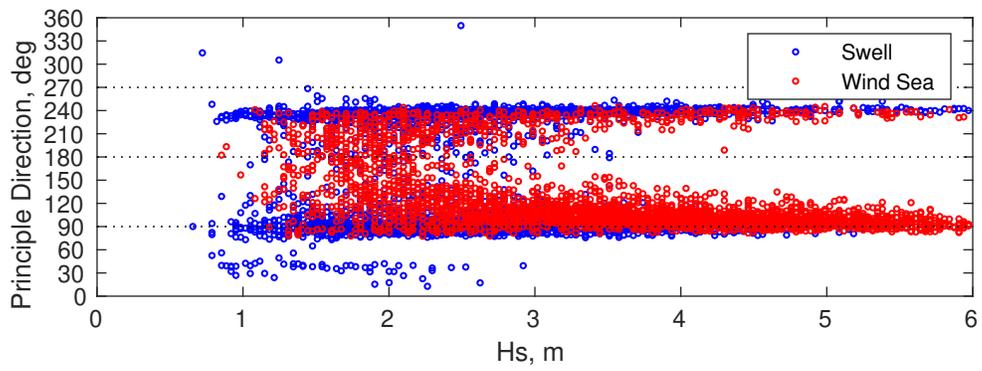
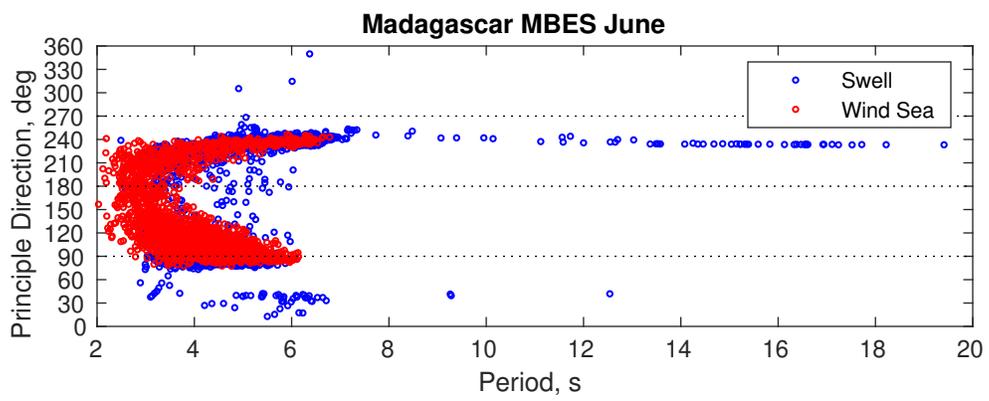
Current Speed > 1.0 knots Mean: 2.9 days Range: 0.0 - 6.2 days p50:3 days p75:1 days p90:1 days

Current Speed > 1.5 knots Mean: 0.2 days Range: 0.0 - 0.7 days p50:1 days p75:1 days p90:1 days

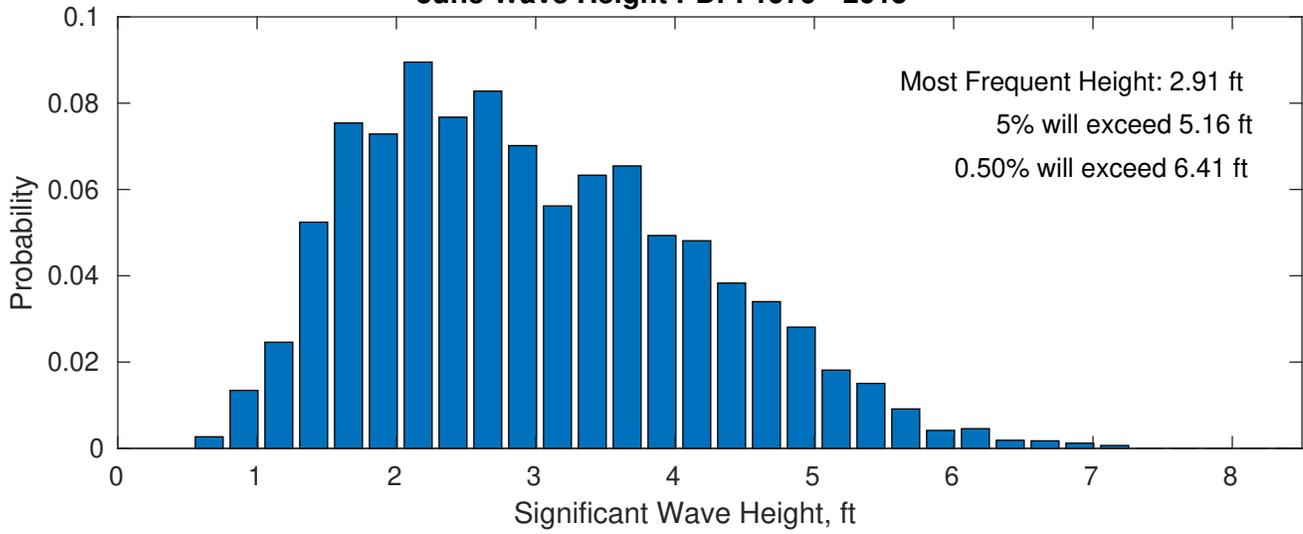
### Severe Storms

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

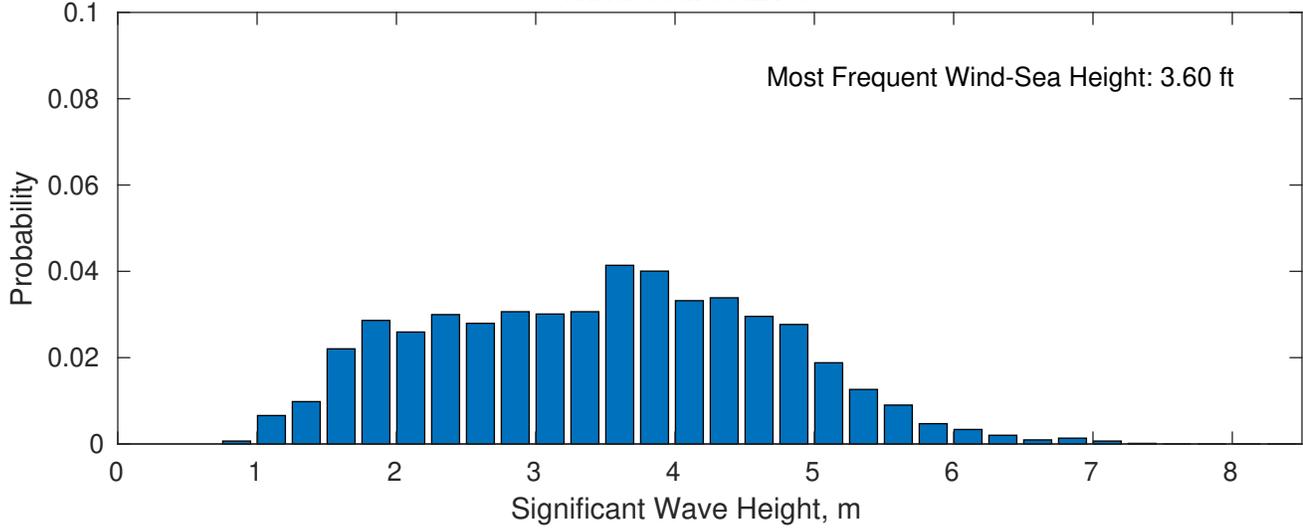




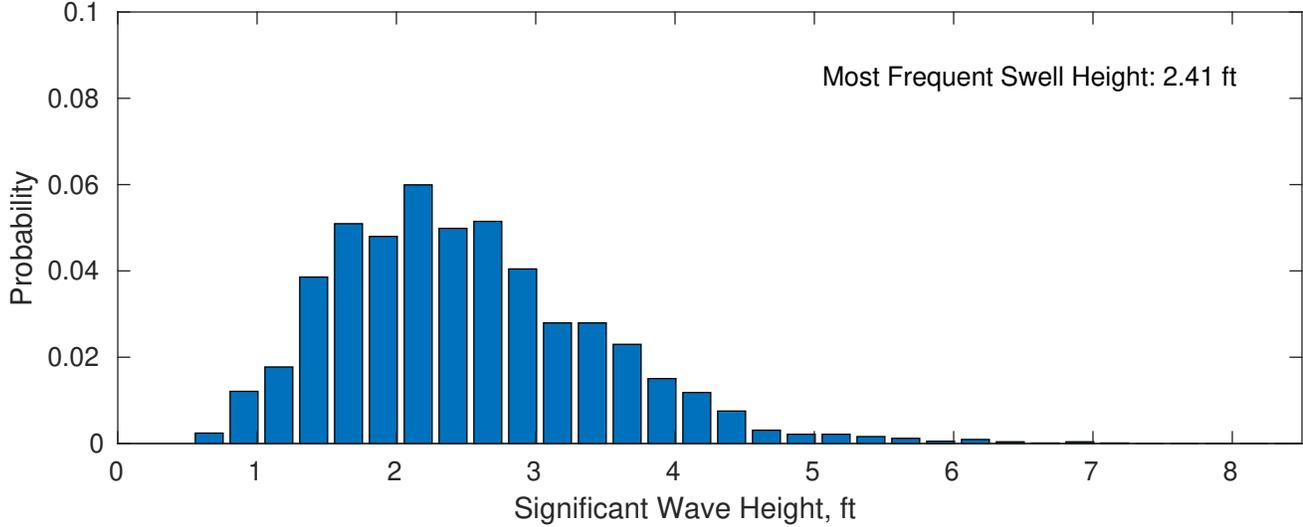
**June Wave Height PDF: 1979 - 2015**



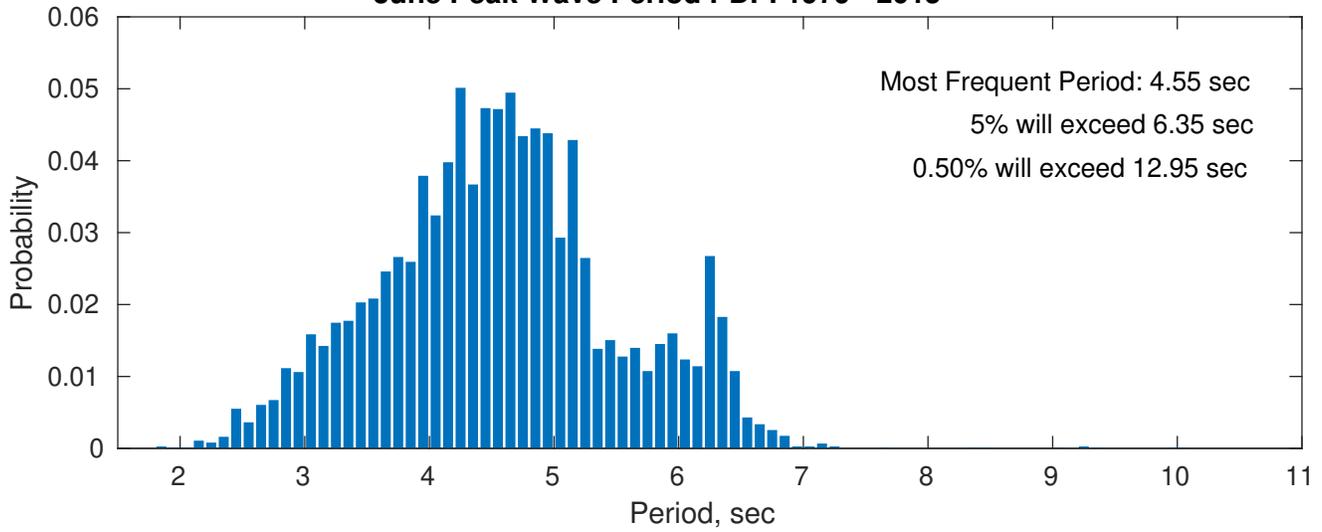
**Wind-Sea: 50.24%**



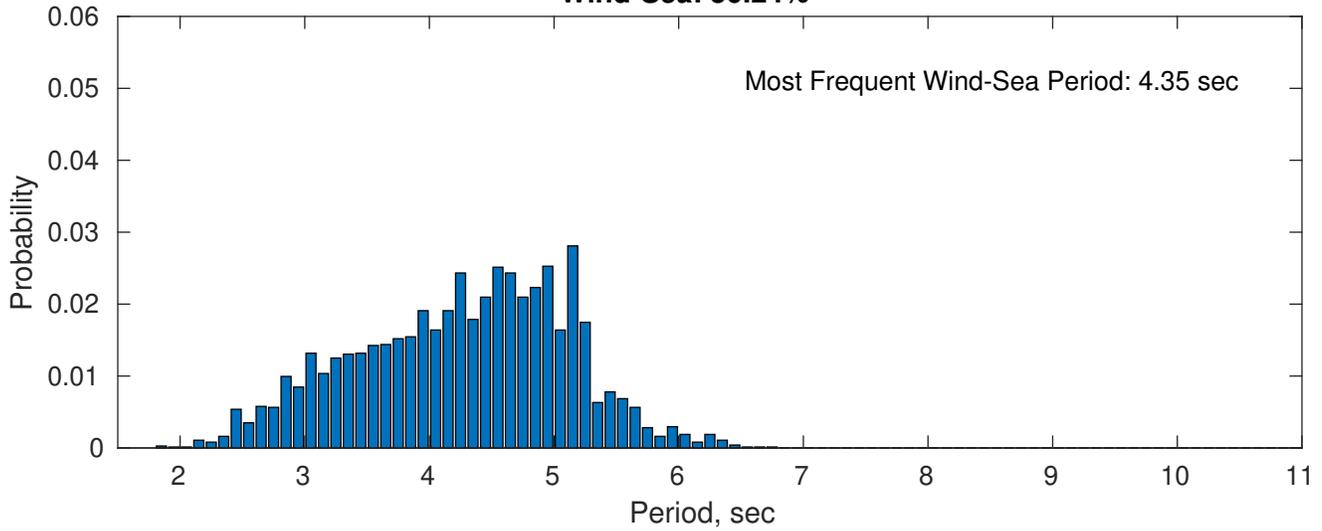
**Swell: 49.76%**



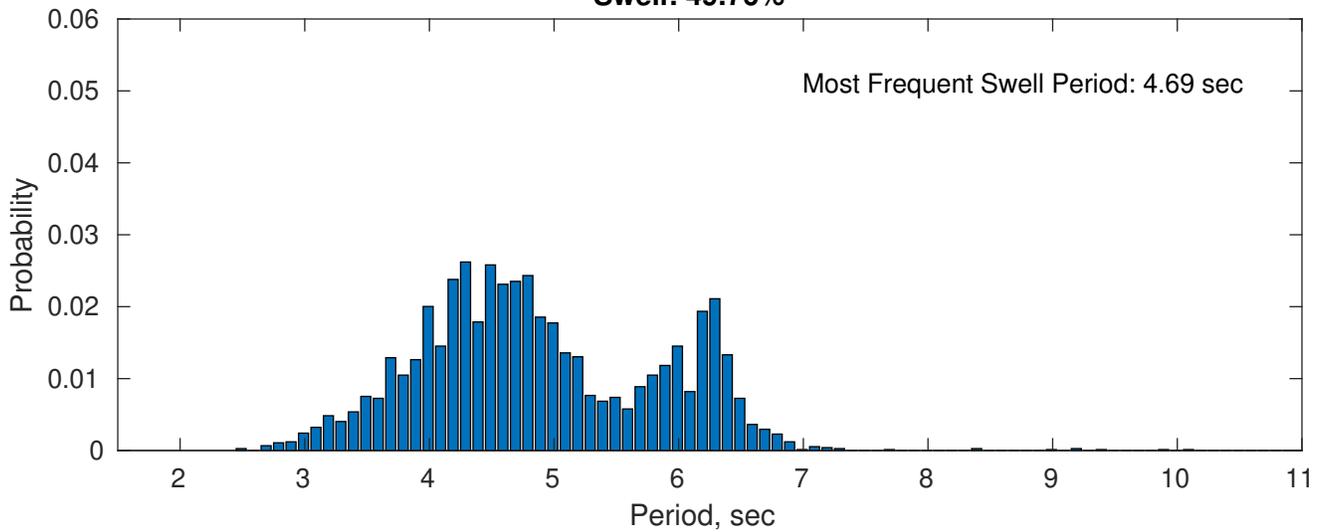
### June Peak Wave Period PDF: 1979 - 2015



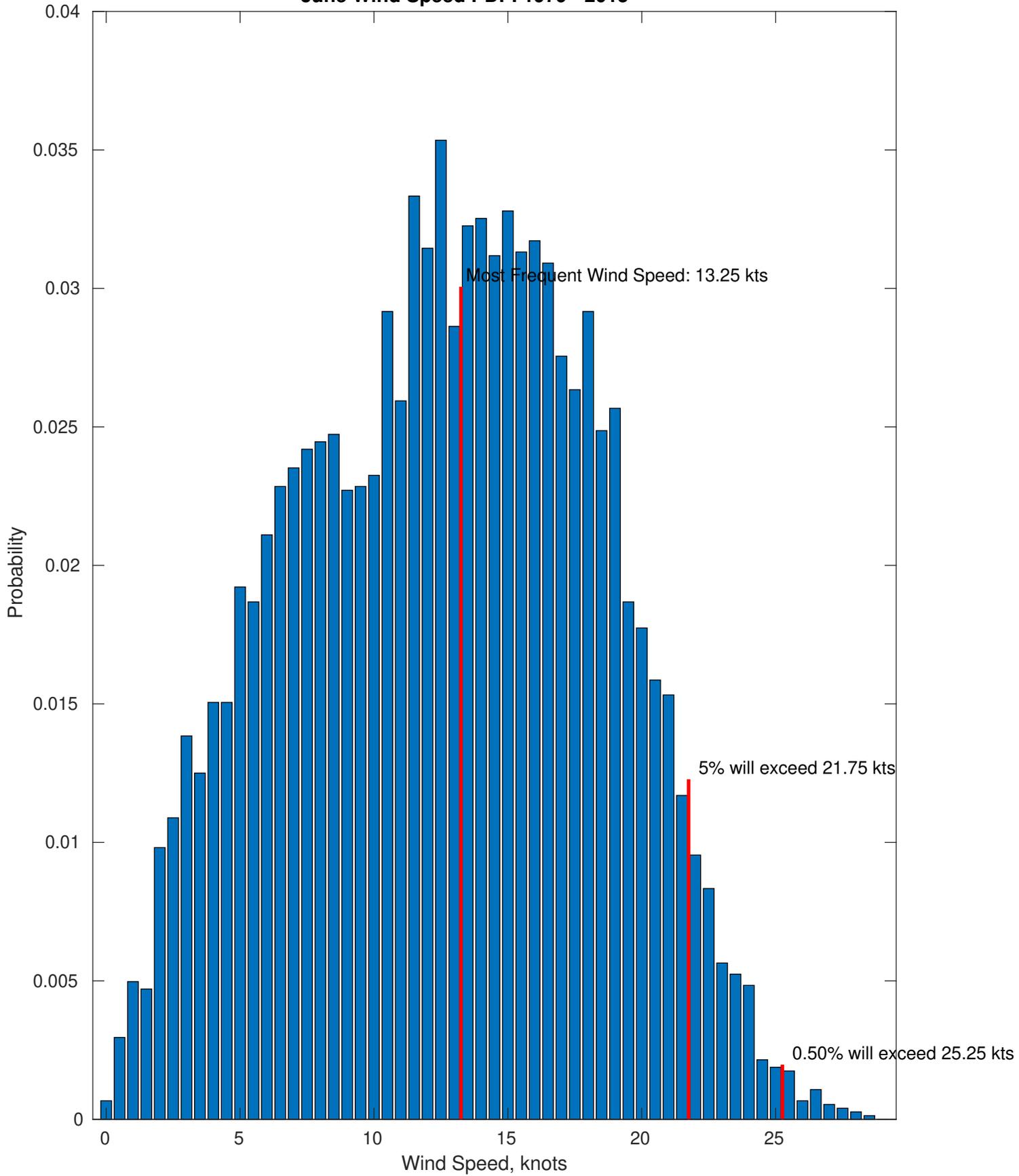
### Wind-Sea: 50.24%



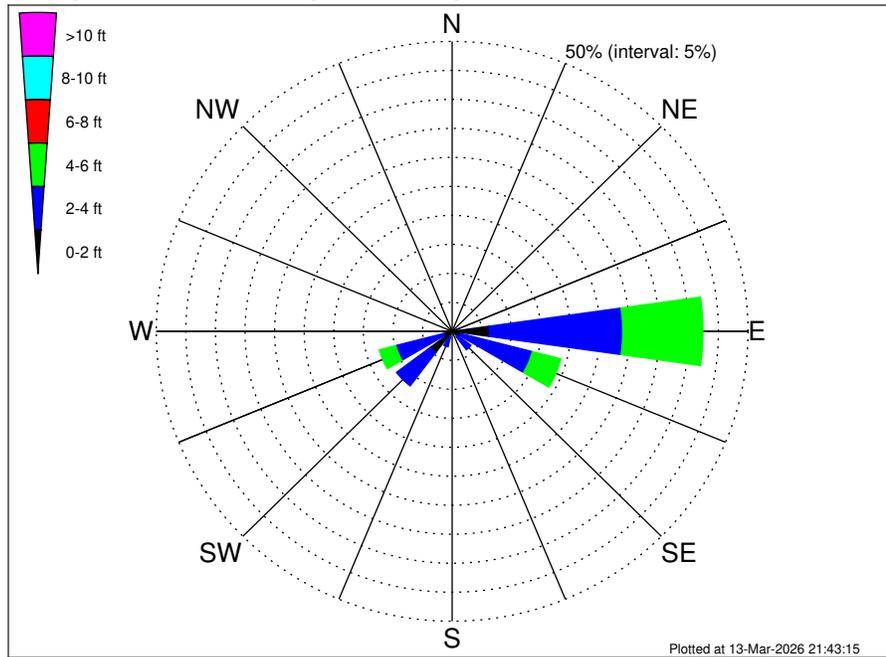
### Swell: 49.76%



June Wind Speed PDF: 1979 - 2015



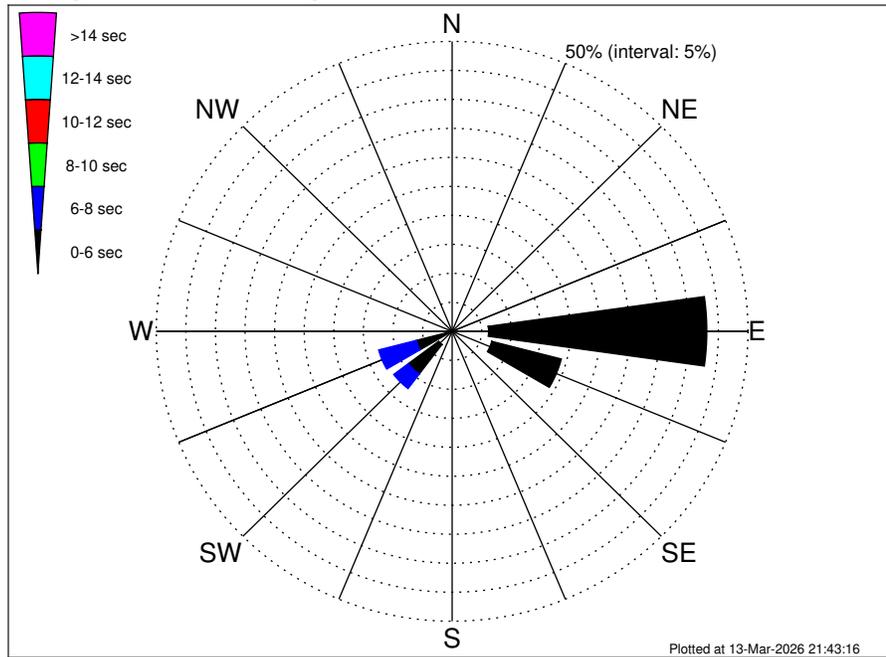
Madagascar MBES Climatological WaveHeight Rose for June: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	0.03	0.09	0.03	0.17	0.01	0.01	0.01	0.01	0.01	0.20	0.05	•	•	0.01	•	0.66
1 - 2 ft	•	0.08	0.32	0.31	6.13	1.53	1.09	0.69	1.08	1.09	4.38	1.38	0.03	•	0.01	•	18.12
2 - 4 ft	0.01	0.11	0.08	0.31	22.53	12.46	2.89	0.85	0.73	1.68	7.19	8.40	•	•	•	•	57.23
4 - 6 ft	•	•	•	0.03	13.55	4.96	0.28	•	0.01	•	1.02	2.86	•	•	•	•	22.72
6 - 8 ft	•	•	•	•	0.79	0.09	•	•	•	•	0.08	0.31	•	•	•	•	1.28
8 - 10 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10 - 12 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
12 - 14 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.01	0.22	0.50	0.67	43.17	19.06	4.27	1.55	1.83	2.78	12.88	13.01	0.03	•	0.03	•	100.00

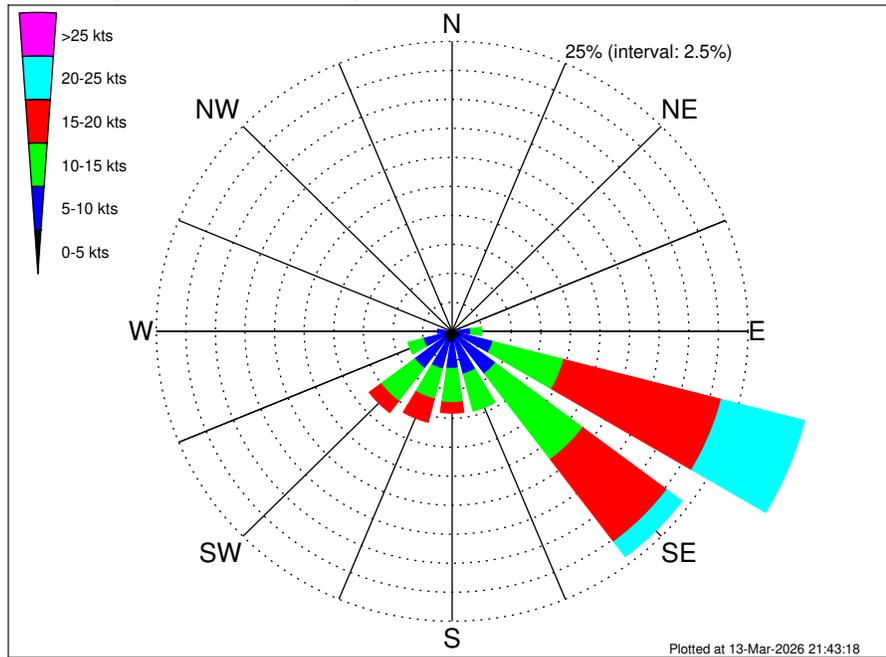
Madagascar MBES Climatological WavePeriod Rose for June: 1979 - 2015



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	•	•	•	•	•	•	•	•	0.01	0.01	•	•	•	•	•	•	0.03
2 - 4 sec	•	•	0.12	0.28	6.16	6.91	3.35	1.47	1.53	2.33	2.84	0.11	•	•	•	•	25.08
4 - 6 sec	•	0.15	0.20	0.39	36.88	12.15	0.93	0.08	0.28	0.43	6.42	6.14	0.03	•	0.01	•	64.10
6 - 8 sec	0.01	0.07	0.13	•	0.13	•	•	•	•	0.01	3.10	6.57	•	•	0.01	•	10.05
8 - 10 sec	•	•	0.03	•	•	•	•	•	•	•	•	0.07	•	•	•	•	0.09
10 - 12 sec	•	•	•	•	•	•	•	•	•	•	0.01	0.07	•	•	•	•	0.08
12 - 14 sec	•	•	0.01	•	•	•	•	•	•	•	0.07	0.05	•	•	•	•	0.13
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	0.20	•	•	•	•	•	0.20
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	0.20	•	•	•	•	•	0.20
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	0.03	•	•	•	•	•	0.03
Total	0.01	0.22	0.50	0.67	43.17	19.06	4.27	1.55	1.83	2.78	12.88	13.01	0.03	•	0.03	•	100.00

Madagascar MBES Climatological Wind Rose for June: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	0.03	0.03	0.03	0.07	0.03	•	0.01	•	0.09	•	0.03	0.04	0.01	•	0.36
0 - 5 kts	0.27	0.31	0.35	0.60	0.36	0.69	0.71	0.70	0.97	0.97	0.75	0.71	0.56	0.28	0.22	0.23	8.68
5 - 10 kts	0.16	0.11	0.16	0.42	1.20	2.81	3.83	3.10	2.23	2.39	3.12	1.83	0.63	0.22	0.13	0.09	22.43
10 - 15 kts	•	•	0.03	0.07	0.91	6.20	9.26	3.29	2.94	2.67	3.58	1.30	0.05	•	•	•	30.31
15 - 20 kts	•	•	•	•	0.39	13.75	8.90	0.59	0.89	2.06	1.21	0.12	•	•	•	•	27.90
20 - 25 kts	•	•	•	•	0.04	7.24	1.59	•	0.13	0.47	0.15	0.01	•	•	•	•	9.64
25 - 30 kts	•	•	•	•	•	0.60	0.07	•	•	•	•	•	•	•	•	•	0.67
30 - 35 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.43	0.42	0.56	1.12	2.93	31.36	24.38	7.69	7.18	8.56	8.90	3.98	1.28	0.54	0.36	0.32	100.00