

## Madagascar MBES - October

Latitude: 14.97 S Longitude: 45.59 E

### Weather Days

Wave Height > 5.0 ft Mean: 0.4 days Range: 0.0 - 0.9 days p50:30 days p75:1 days p90:0.5 days

Wave Height > 6.5 ft Mean: 0.0 days Range: 0.0 - 0.1 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: 4.2 days Range: 2.6 - 5.8 days p50:4.5 days p75:3.5 days p90:2.5 days

Wind Speed > 20.0 knots Mean: 0.7 days Range: 0.0 - 1.3 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 - 0.1 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 1.6 times per month  
A 2 day or longer window will statistically occur 1.5 times per month  
A 3 day or longer window will statistically occur 1.5 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 0.9 times per month  
A 3 day or longer window will statistically occur 0.9 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 8 - 10 sec, but rarely longer.

Principle Direction, from: E

WindSea/Swell: 27% / 73%

### 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: W

### Weather Days

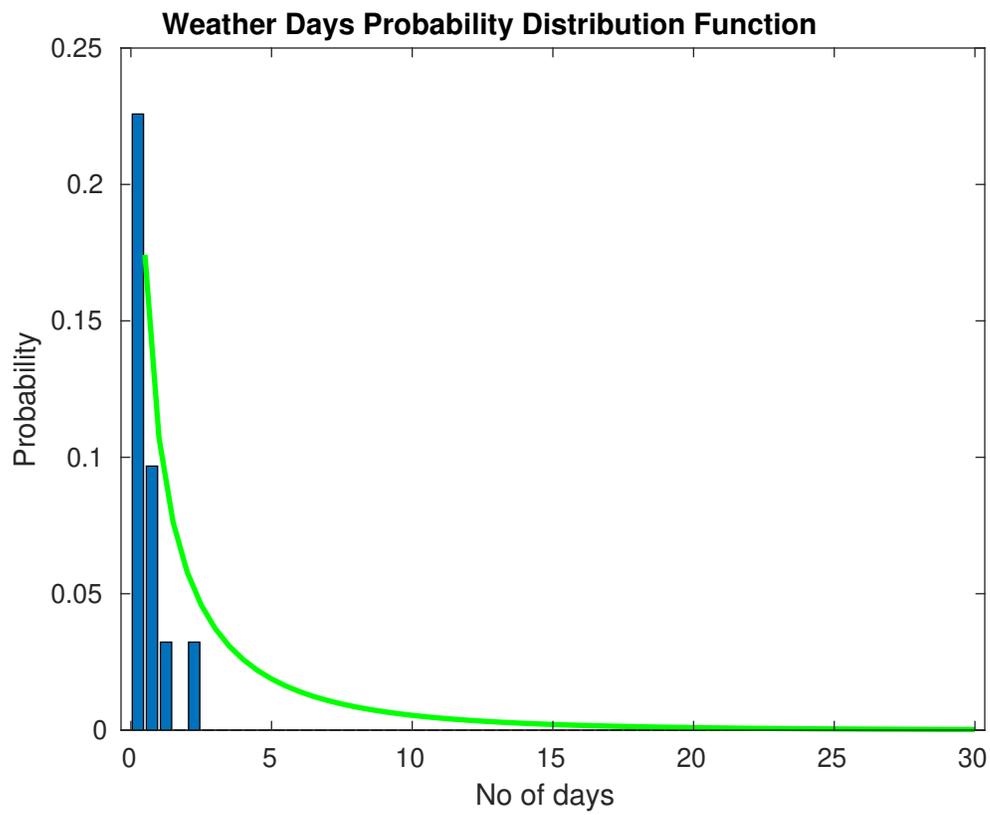
Current Speed > 0.5 knots Mean: 16.7 days Range: 9.7 - 23.7 days p50:18 days p75:12 days p90:9 days

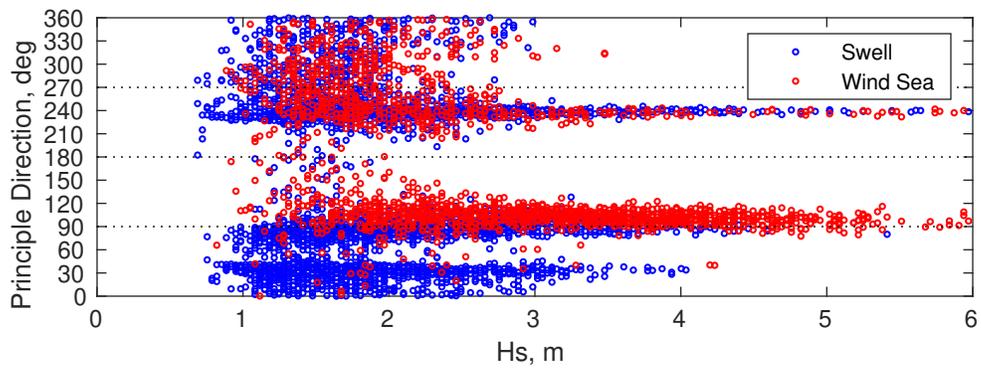
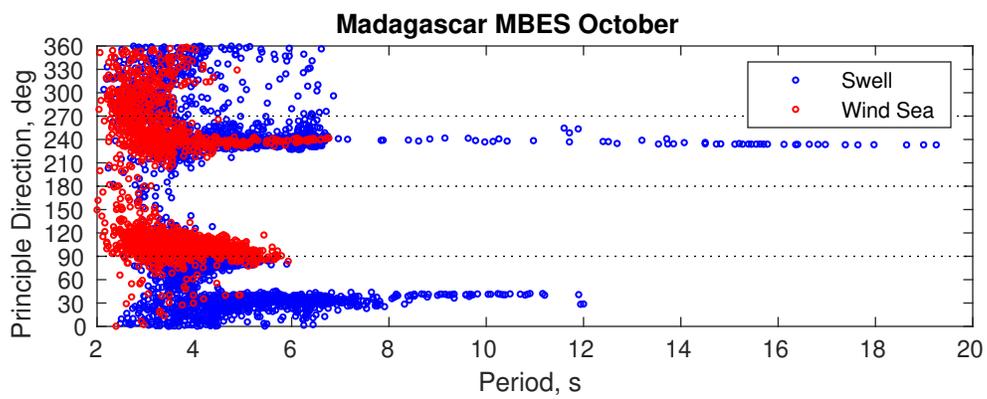
Current Speed > 1.0 knots Mean: 5.0 days Range: 0.0 - 11.3 days p50:4 days p75:2 days p90:1 days

Current Speed > 1.5 knots Mean: 0.3 days Range: 0.0 - 1.5 days p50:1 days p75:1 days p90:1 days

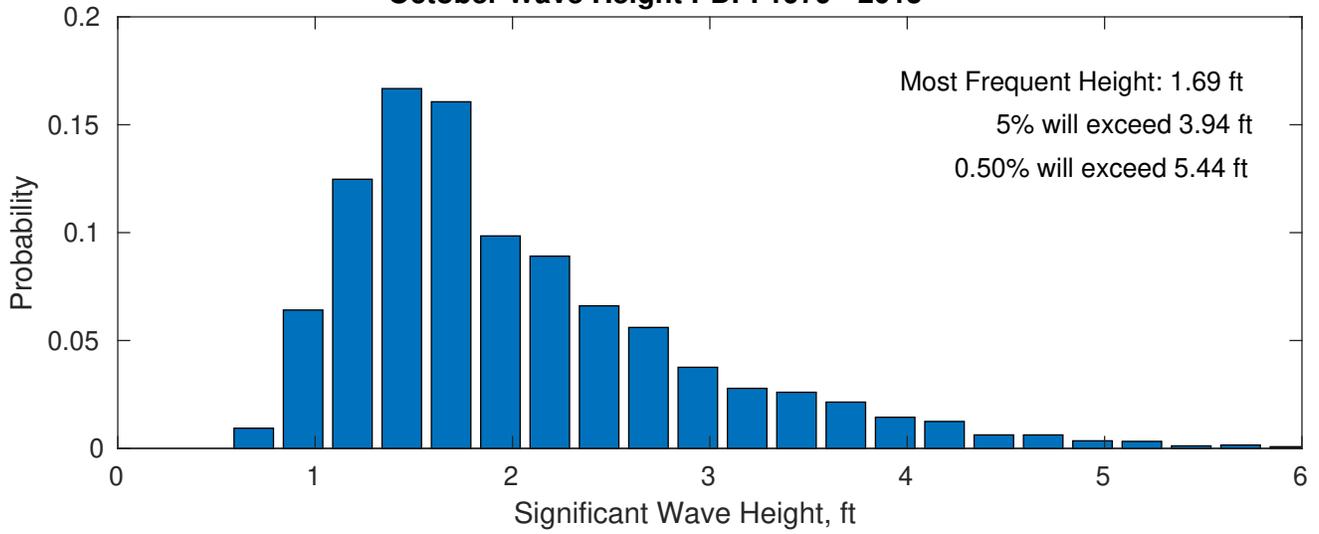
### Severe Storms

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

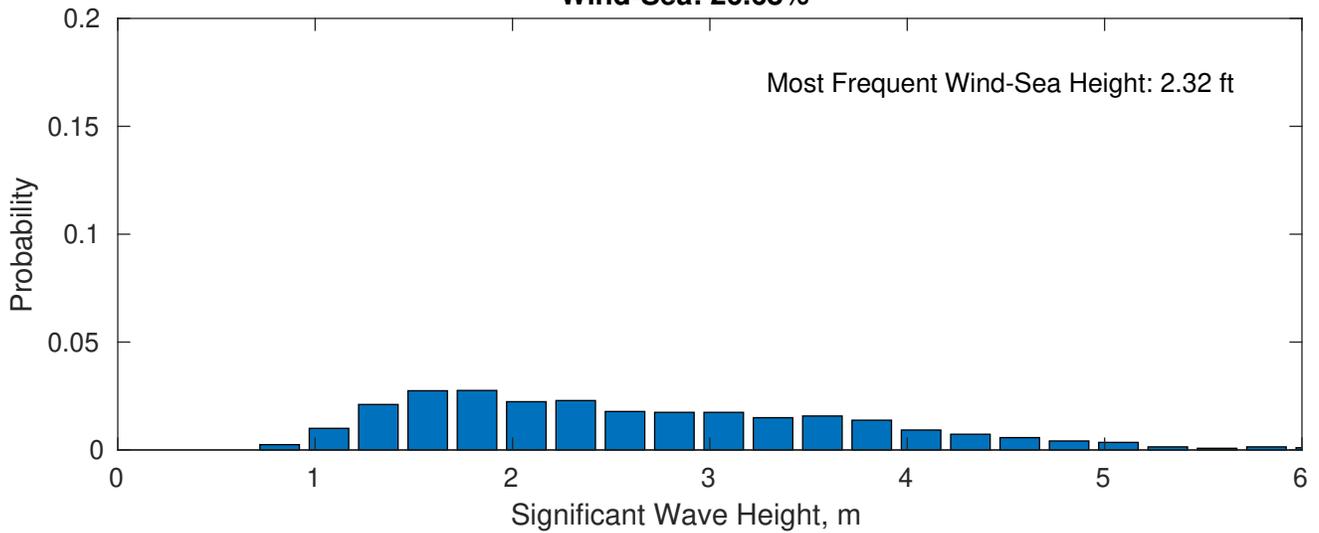




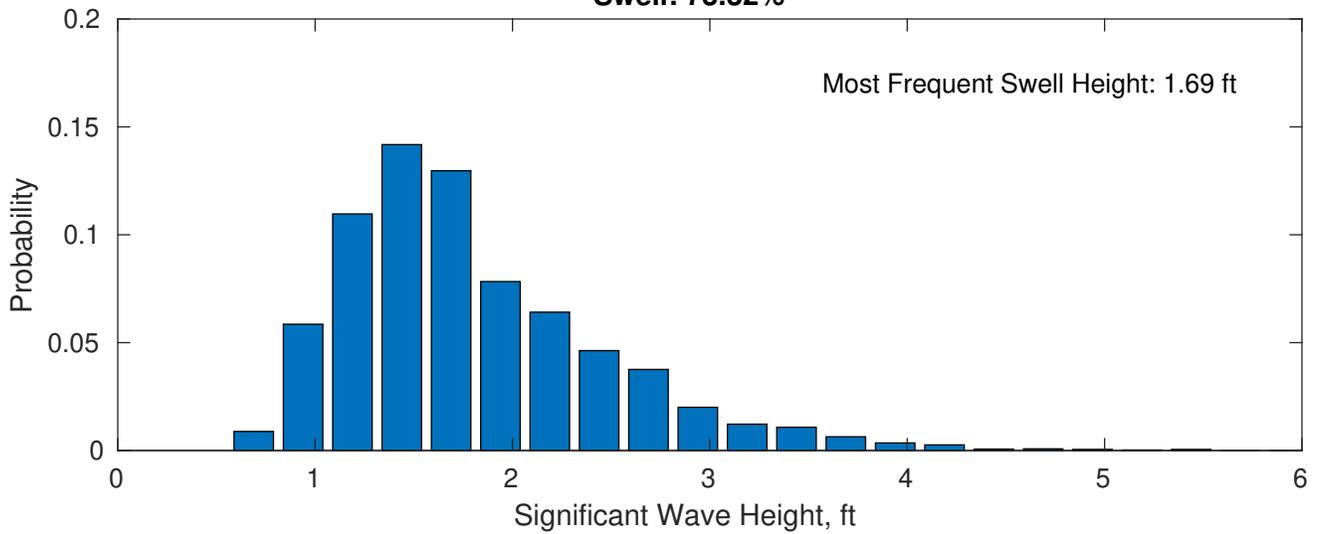
**October Wave Height PDF: 1979 - 2015**



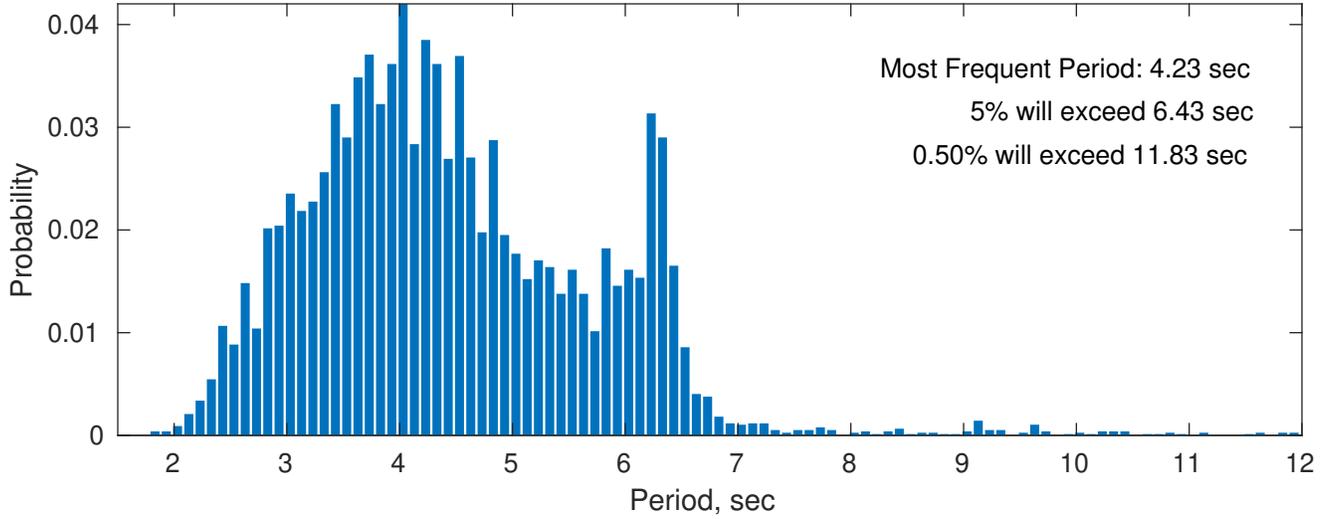
**Wind-Sea: 26.68%**



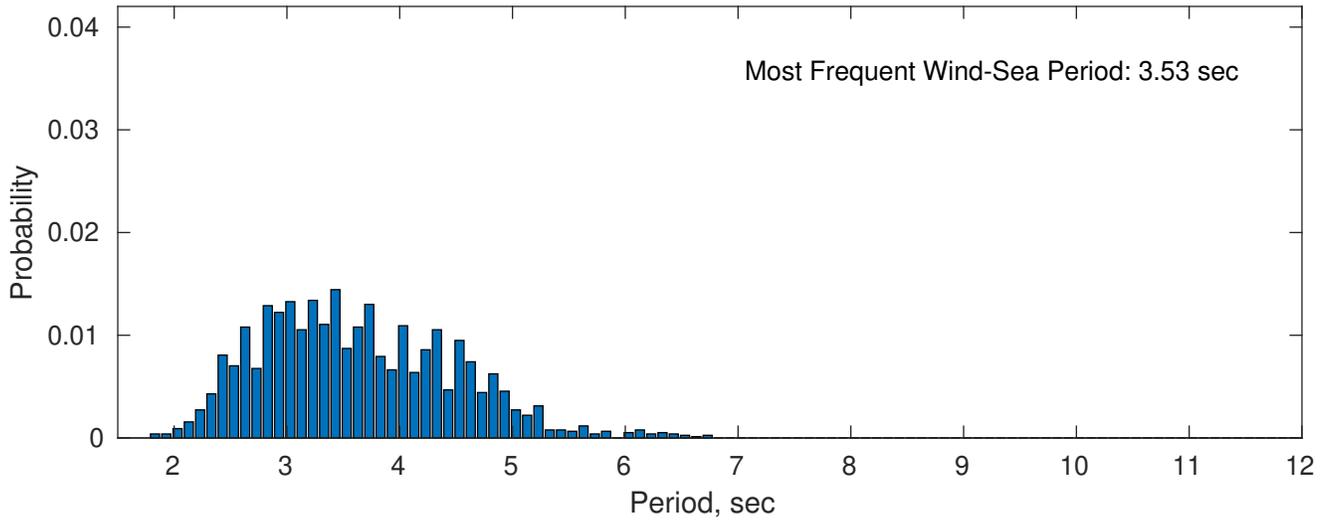
**Swell: 73.32%**



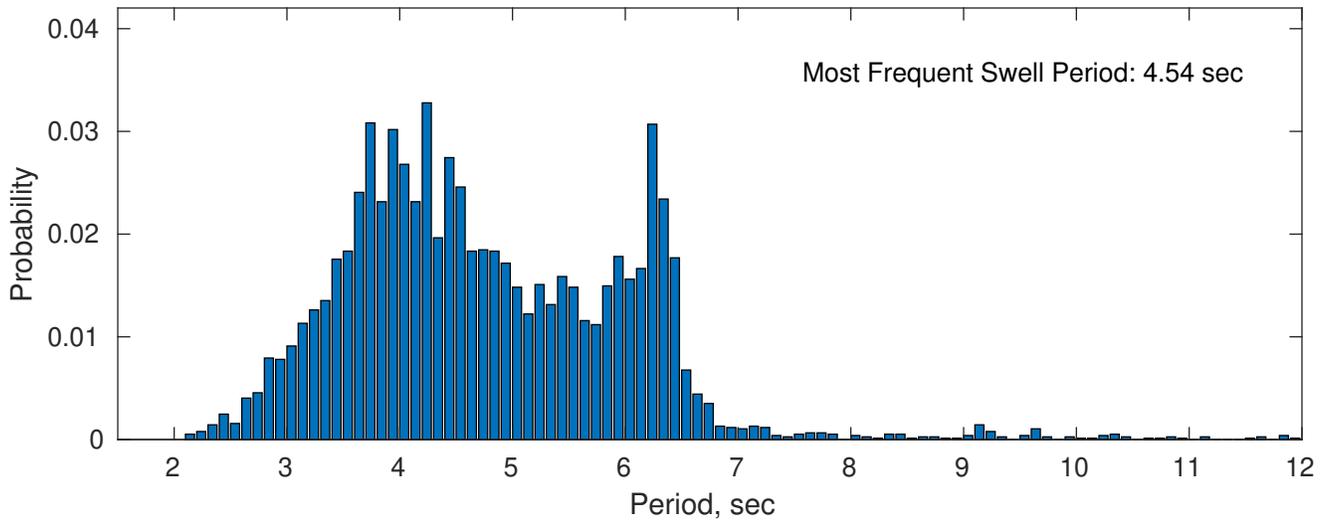
**October Peak Wave Period PDF: 1979 - 2015**



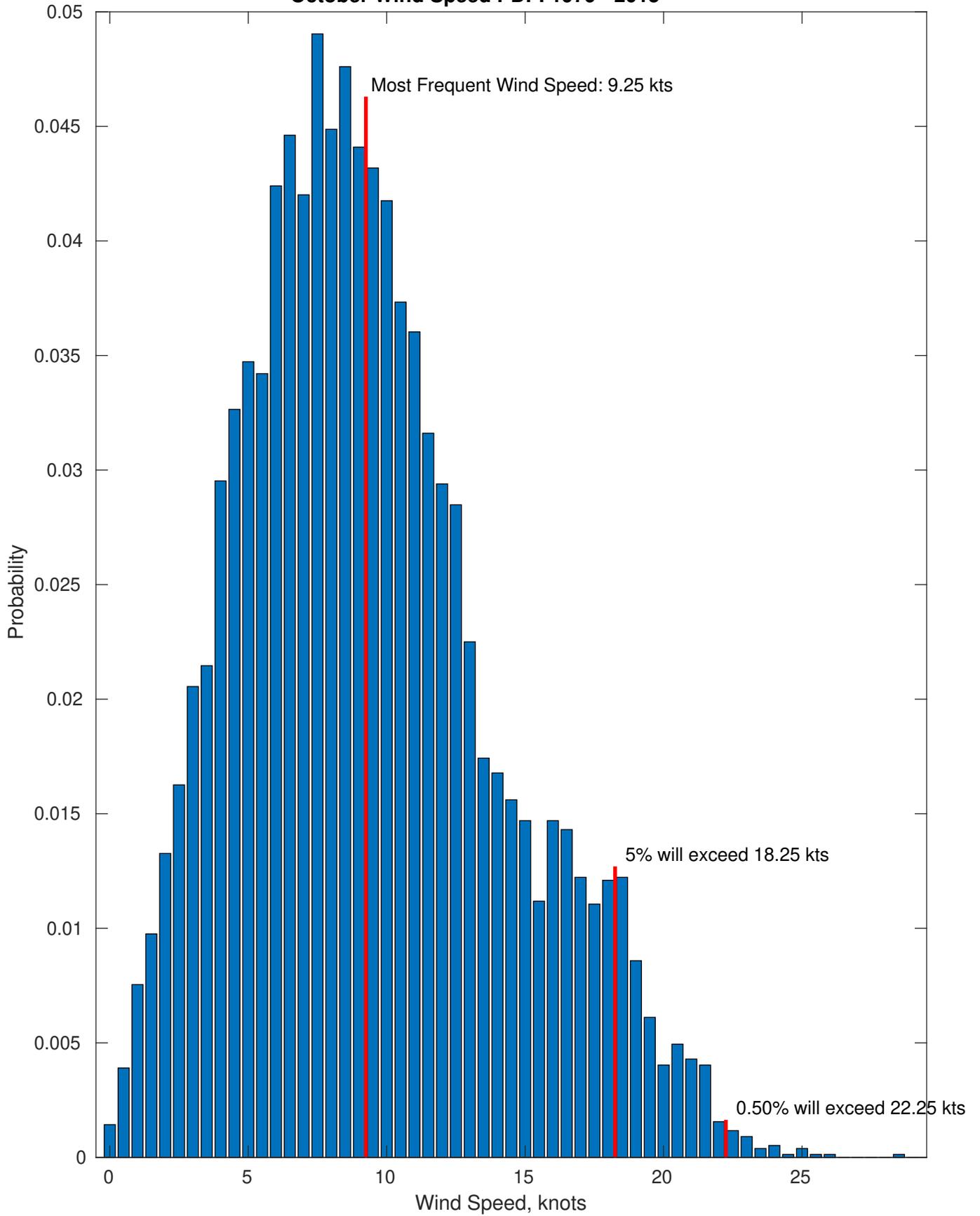
**Wind-Sea: 26.68%**



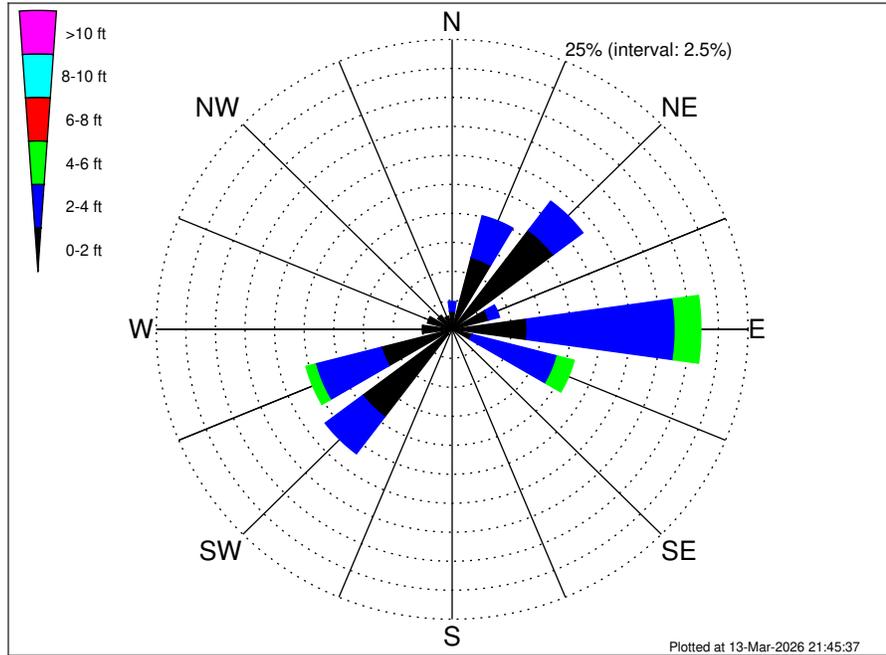
**Swell: 73.32%**



October Wind Speed PDF: 1979 - 2015



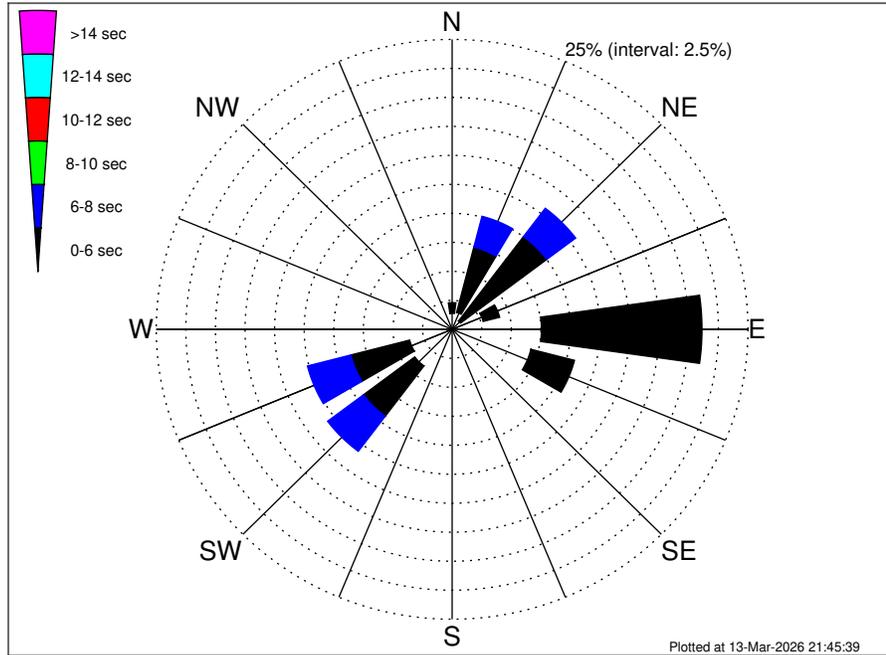
Madagascar MBES Climatological WaveHeight Rose for October: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.05	0.10	0.36	0.10	0.08	0.01	0.01	•	0.03	0.01	0.49	0.17	0.14	0.08	0.04	0.03	1.72
1 - 2 ft	1.51	6.30	10.35	3.08	6.26	1.72	0.40	0.33	0.29	0.27	8.98	6.01	2.38	2.08	1.48	1.14	52.58
2 - 4 ft	0.85	3.72	3.12	0.95	12.53	7.44	0.38	0.04	•	0.21	3.97	5.76	0.53	0.25	0.47	0.57	40.78
4 - 6 ft	•	•	0.05	0.01	2.16	1.48	•	•	•	•	0.14	0.82	•	•	•	•	4.67
6 - 8 ft	•	•	•	•	0.09	0.03	•	•	•	•	•	0.14	•	•	•	•	0.26
8 - 10 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10 - 12 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
12 - 14 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
14 - 16 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16 - 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	2.41	10.12	13.89	4.15	21.11	10.68	0.79	0.36	0.31	0.49	13.58	12.90	3.06	2.41	1.99	1.74	100.00

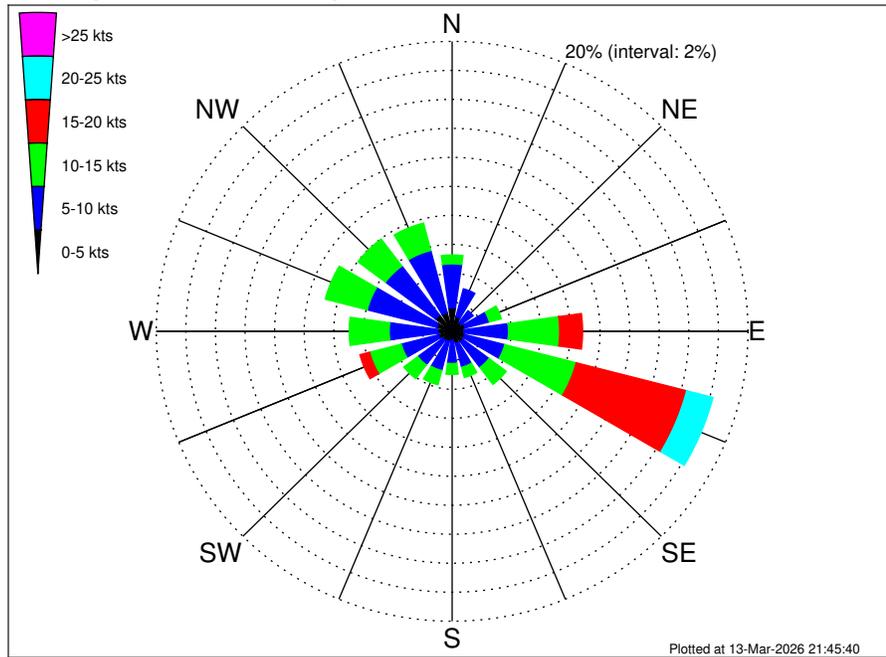
**Madagascar MBES Climatological WavePeriod Rose for October: 1979 - 2015**



**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	0.01	0.01	0.01	•	•	•	•	•	•	•	0.07
2 - 4 sec	1.38	1.51	0.90	2.71	7.54	6.85	0.75	0.35	0.30	0.48	3.95	3.71	2.64	2.28	1.76	1.43	38.54
4 - 6 sec	0.92	5.81	9.12	1.44	13.57	3.80	0.03	•	•	0.01	5.44	5.14	0.26	0.09	0.20	0.27	46.10
6 - 8 sec	0.10	2.74	3.06	•	•	•	•	•	•	•	3.79	3.79	0.16	0.04	0.04	0.04	13.75
8 - 10 sec	•	0.03	0.61	•	•	•	•	•	•	•	•	0.10	•	•	•	•	0.74
10 - 12 sec	•	0.03	0.21	•	•	•	•	•	•	•	•	0.10	•	•	•	•	0.34
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	0.05	0.07	•	•	•	•	0.12
14 - 16 sec	•	•	•	•	•	•	•	•	•	•	0.20	•	•	•	•	•	0.20
18 - 20 sec	•	•	•	•	•	•	•	•	•	•	0.12	•	•	•	•	•	0.12
22 - 24 sec	•	•	•	•	•	•	•	•	•	•	0.04	•	•	•	•	•	0.04
Total	2.41	10.12	13.89	4.15	21.11	10.68	0.79	0.36	0.31	0.49	13.58	12.90	3.06	2.41	1.99	1.74	100.00

Madagascar MBES Climatological Wind Rose for October: 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	0.04	0.03	0.05	0.07	0.04	0.01	0.07	0.03	0.03	0.03	0.03	0.01	0.01	0.03	0.04	0.53
0 - 5 kts	1.59	1.00	0.75	0.86	0.73	0.85	0.90	0.79	0.60	0.69	0.74	0.91	0.94	1.07	1.39	1.30	15.10
5 - 10 kts	3.03	1.99	1.00	1.69	3.02	2.80	2.21	1.70	1.60	2.08	2.13	2.61	3.30	4.85	4.23	4.42	42.68
10 - 15 kts	0.61	0.35	0.20	0.83	3.46	4.98	1.46	0.73	0.75	1.01	1.18	2.21	2.71	2.93	2.33	1.95	27.69
15 - 20 kts	0.03	0.01	0.03	0.07	1.55	7.71	0.42	0.03	0.07	0.18	0.46	0.68	0.21	0.12	0.08	0.10	11.72
20 - 25 kts	.	.	.	.	0.27	1.83	0.04	.	.	.	.	0.05	.	.	.	.	2.20
25 - 30 kts	.	.	.	.	.	0.08	.	.	.	.	.	.	.	.	.	.	0.08
30 - 35 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
35 - 40 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
40 - 45 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
45 - 50 kts	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	5.29	3.39	2.00	3.50	9.09	18.29	5.03	3.32	3.04	3.99	4.54	6.49	7.17	8.98	8.05	7.82	100.00