

Angola Namibia CRS Oranjemund (BU-OR) - December

Latitude: 27.84 S Longitude: 14.78 E

Weather Days

Wave Height > 5.0 ft Mean: 25.3 days Range: 22.3 - 28.2 days p50:26 days p75:22.5 days p90:21 days
Wave Height > 6.5 ft Mean: 19.3 days Range: 15.4 - 23.1 days p50:19 days p75:16.5 days p90:15.5 days
Wave Height > 8.0 ft Mean: 11.6 days Range: 8.1 - 15.1 days p50:11 days p75:9.5 days p90:8.5 days

Wind Speed > 15.0 knots Mean: 18.8 days Range: 14.7 - 22.9 days p50:19.5 days p75:17.5 days p90:13 days
Wind Speed > 20.0 knots Mean: 10.3 days Range: 6.8 - 13.9 days p50:10.5 days p75:8 days p90:7 days
Wind Speed > 25.0 knots Mean: 2.8 days Range: 1.1 - 4.5 days p50:2.5 days p75:2 days p90:1 days

Working Window

Wave Height < 5.0 ft	A 1 day or longer window will statistically occur 0.8 times per month A 2 day or longer window will statistically occur 0.2 times per month A 3 day or longer window will statistically occur 0.0 times per month
Wave Height < 6.5 ft	A 1 day or longer window will statistically occur 2.1 times per month A 2 day or longer window will statistically occur 1.2 times per month A 3 day or longer window will statistically occur 0.6 times per month
Wave Height < 8.0 ft	A 1 day or longer window will statistically occur 3.6 times per month A 2 day or longer window will statistically occur 2.3 times per month A 3 day or longer window will statistically occur 1.3 times per month

Waves

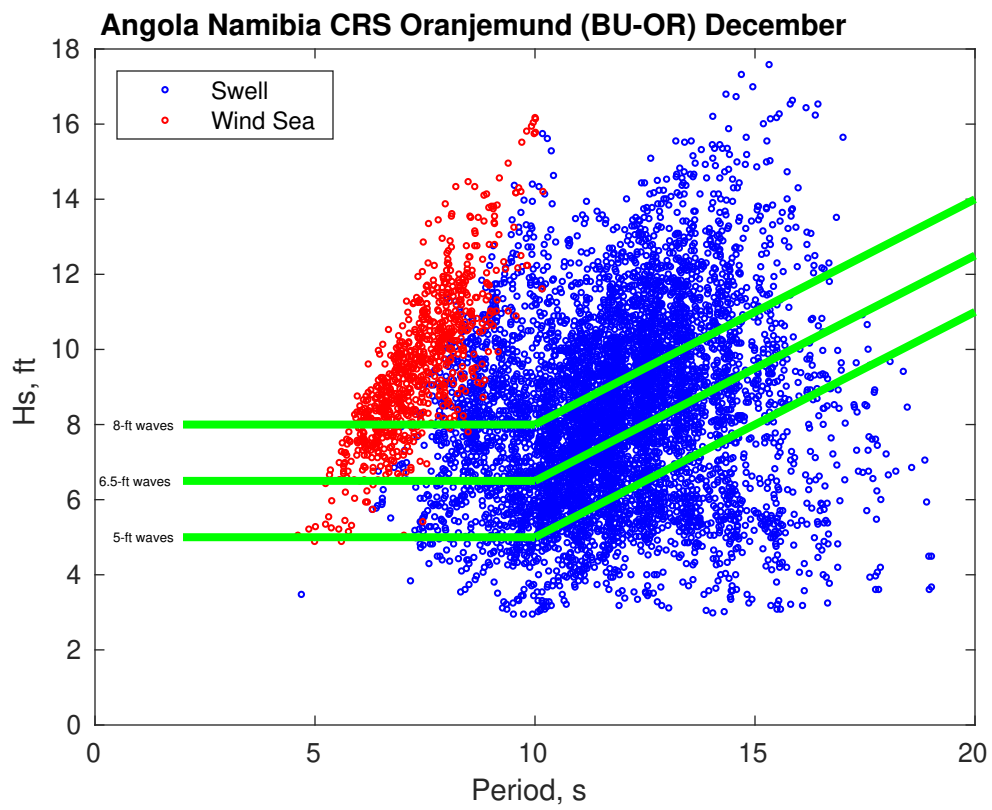
Mean Height: 8 - 10 ft
The wave heights will occasionally reach 14 - 16 ft, but rarely higher.
Mean Period: 10 - 12 sec
The wave periods will occasionally reach 18 - 20 sec, but rarely longer.
Principle Direction, from: SW
WindSea/Swell: 11% / 89%

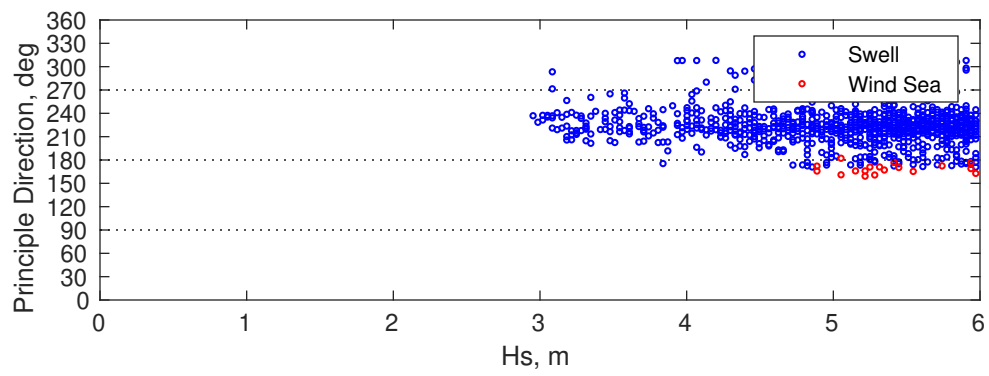
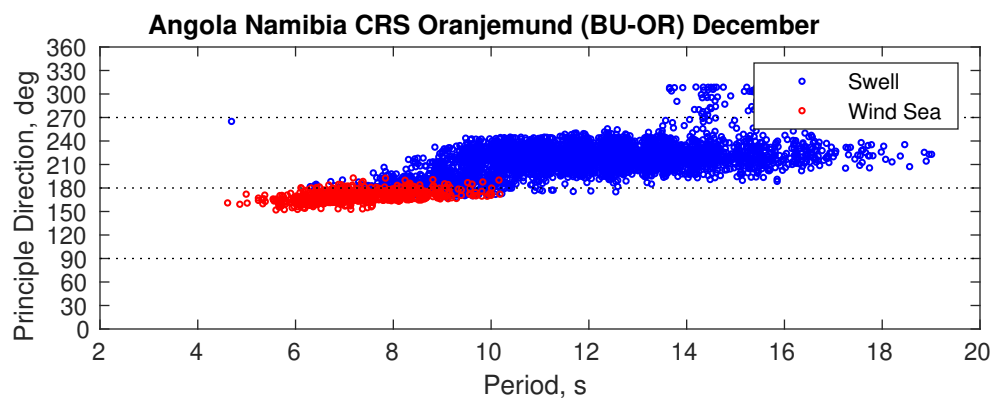
Winds

Mean Speed: 15 - 20 kts
The winds will occasionally reach 30 - 35 kts, but rarely greater.
Principle Direction, from: SSE

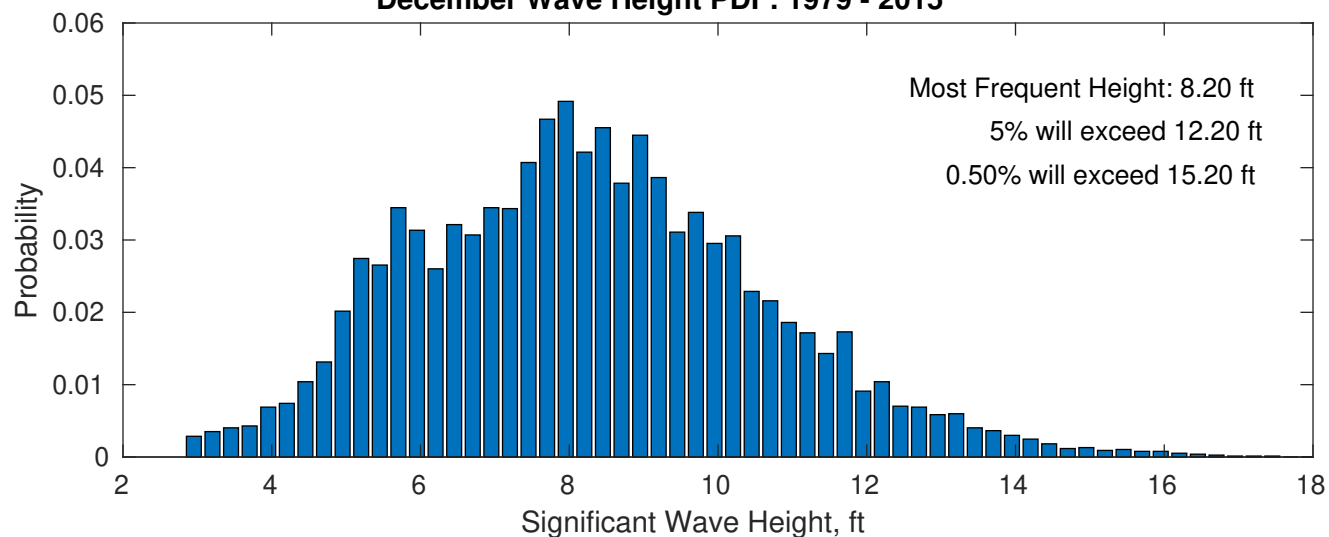
Severe Storms

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

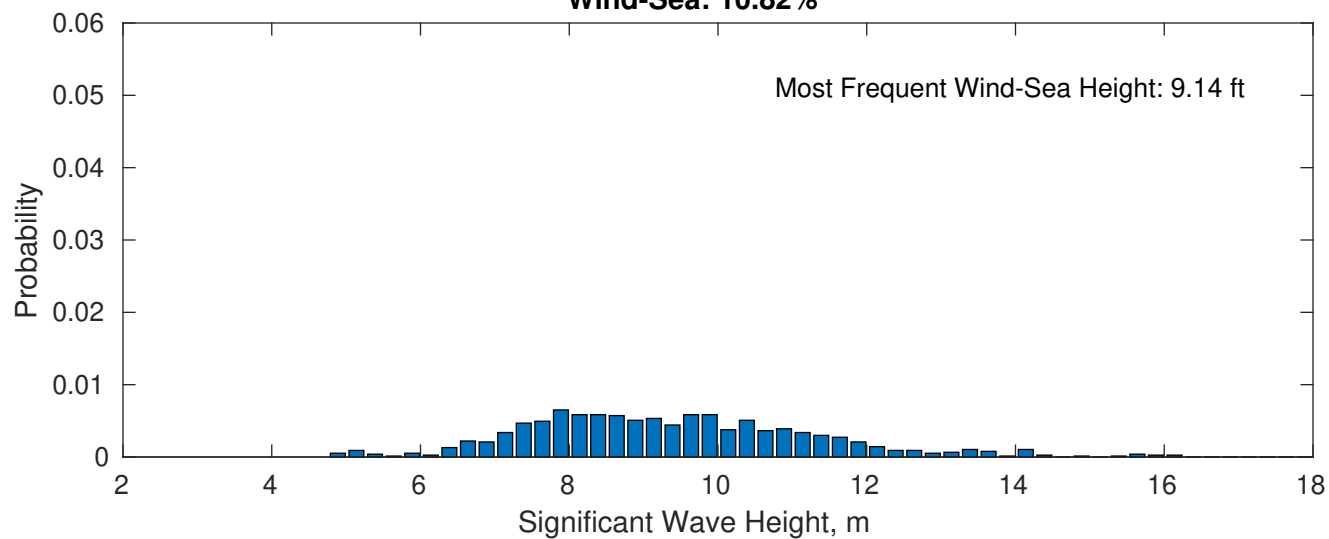




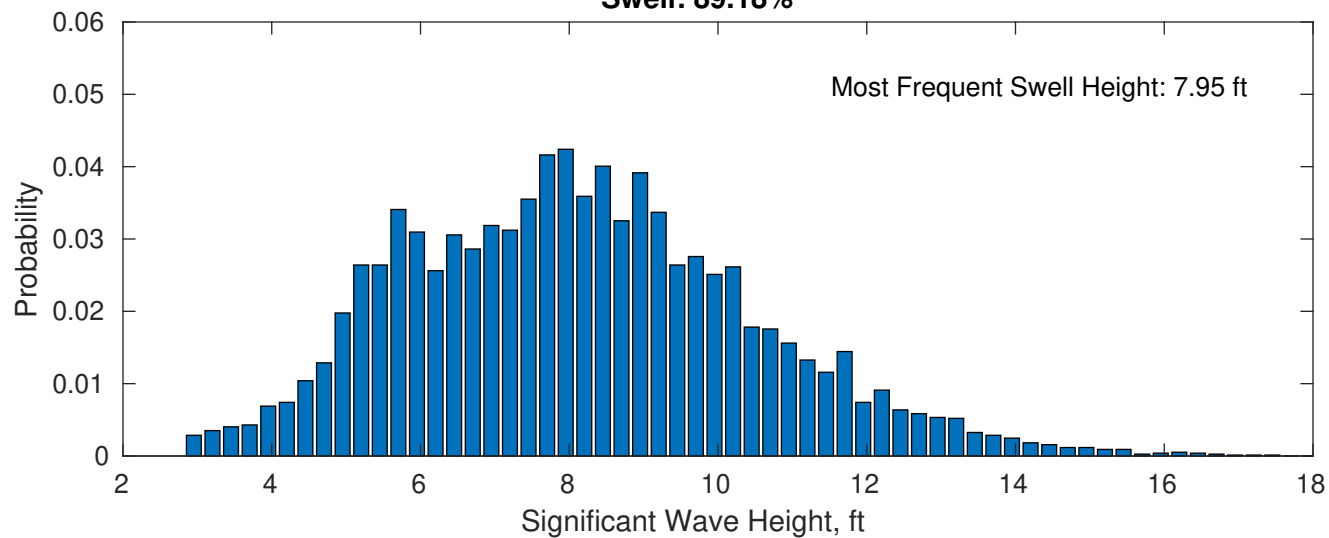
December Wave Height PDF: 1979 - 2015



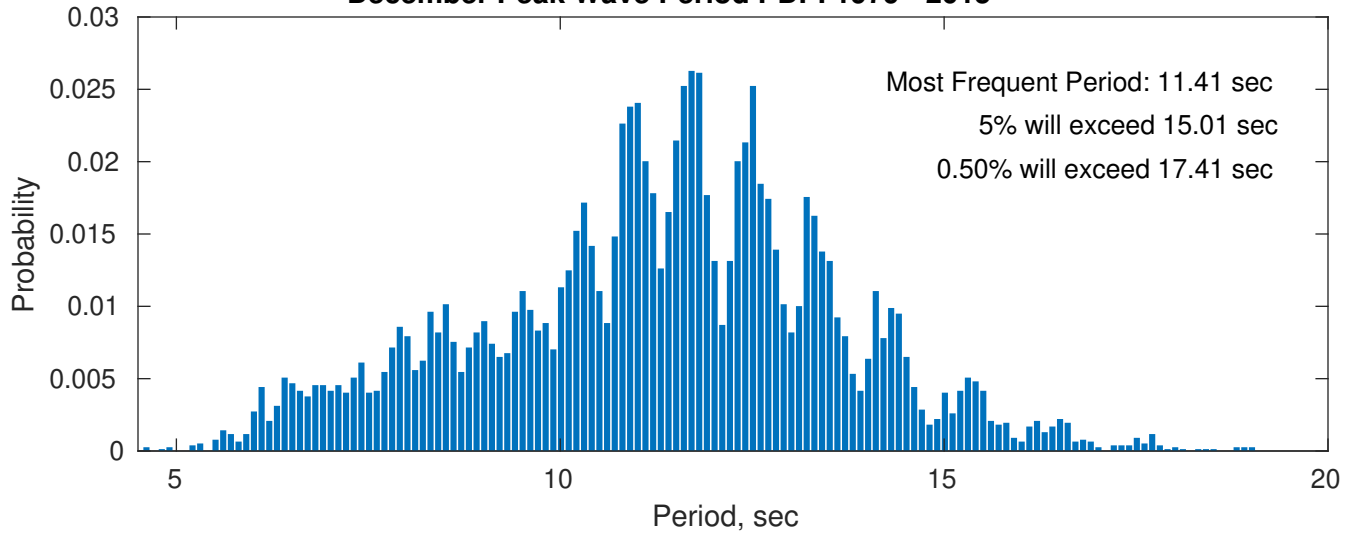
Wind-Sea: 10.82%



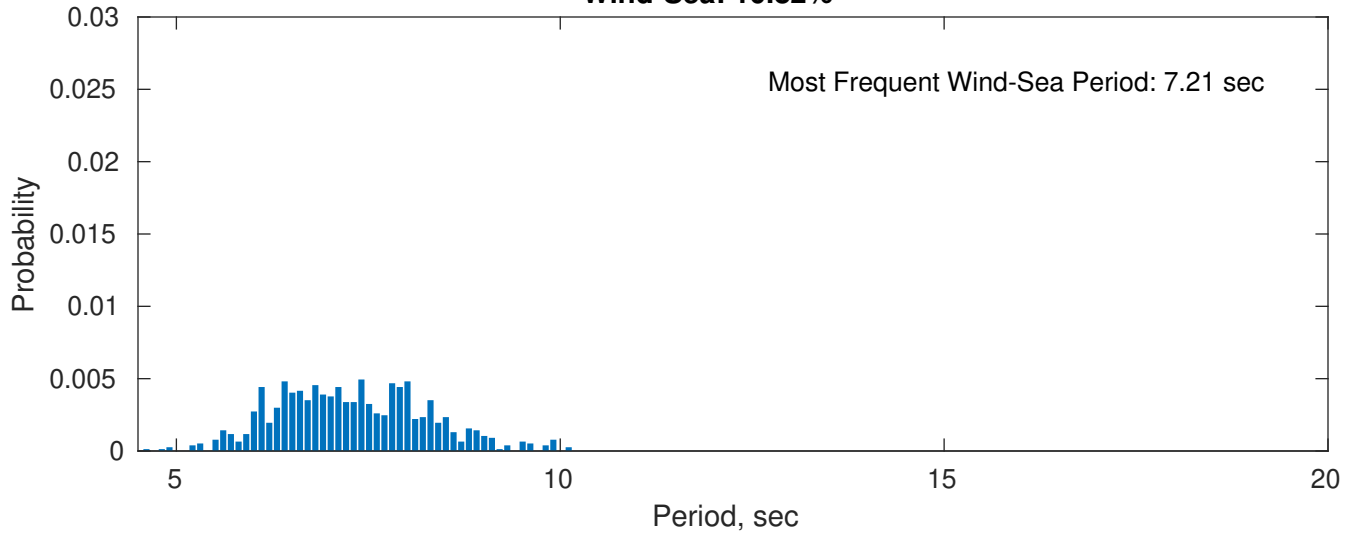
Swell: 89.18%



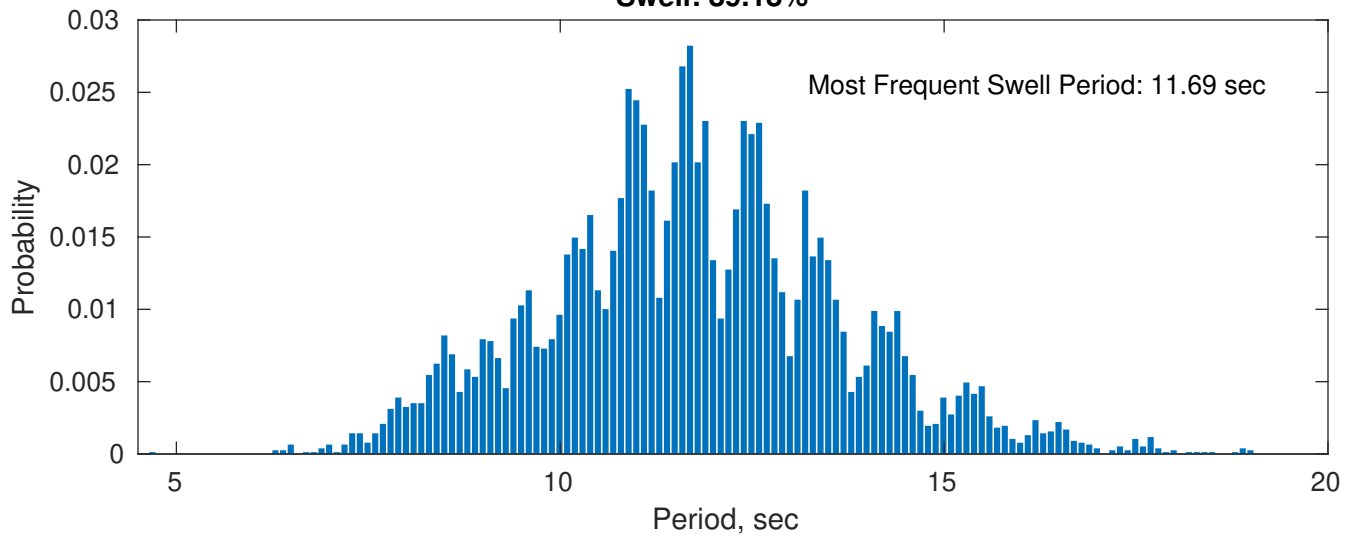
December Peak Wave Period PDF: 1979 - 2015



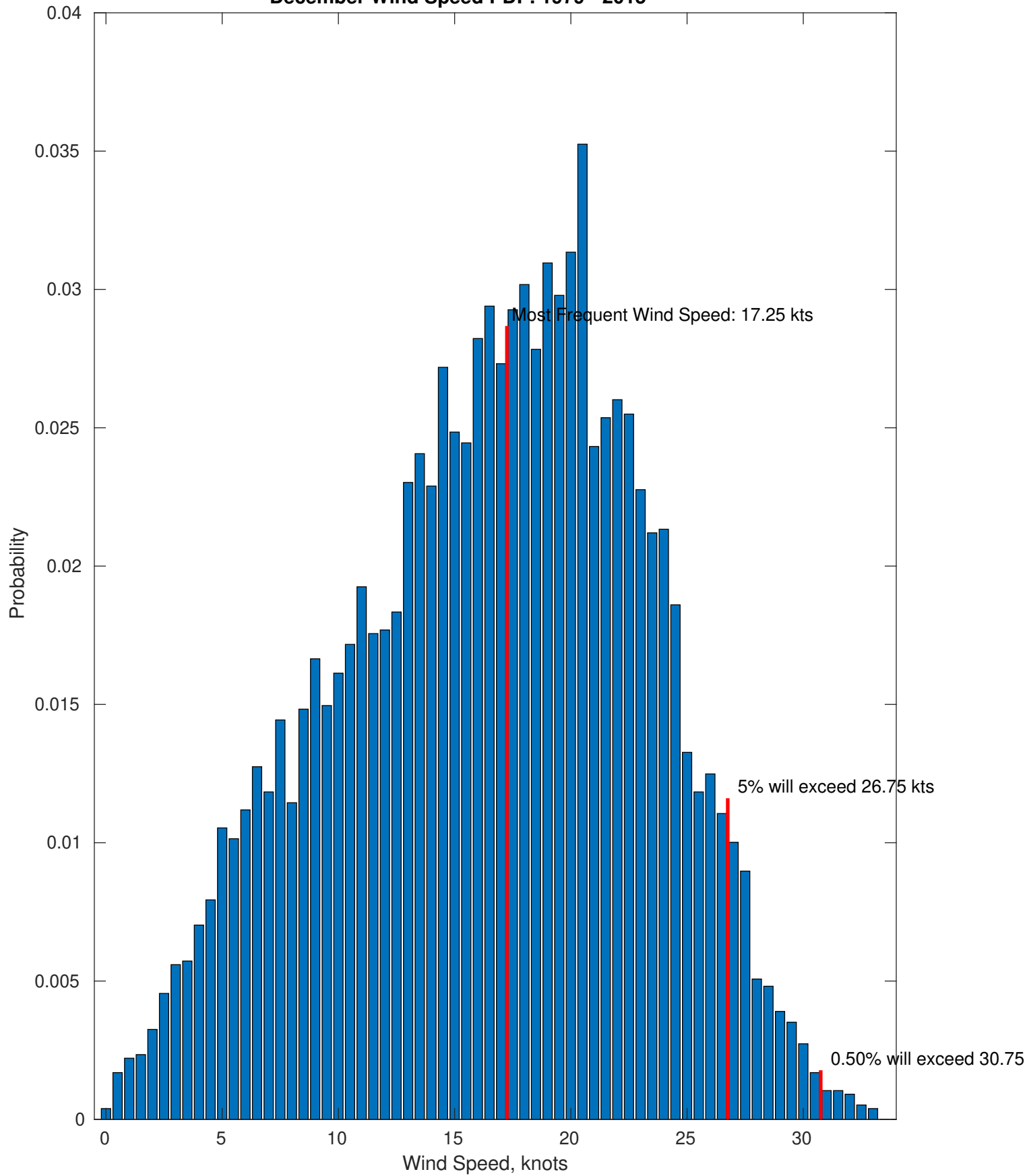
Wind-Sea: 10.82%



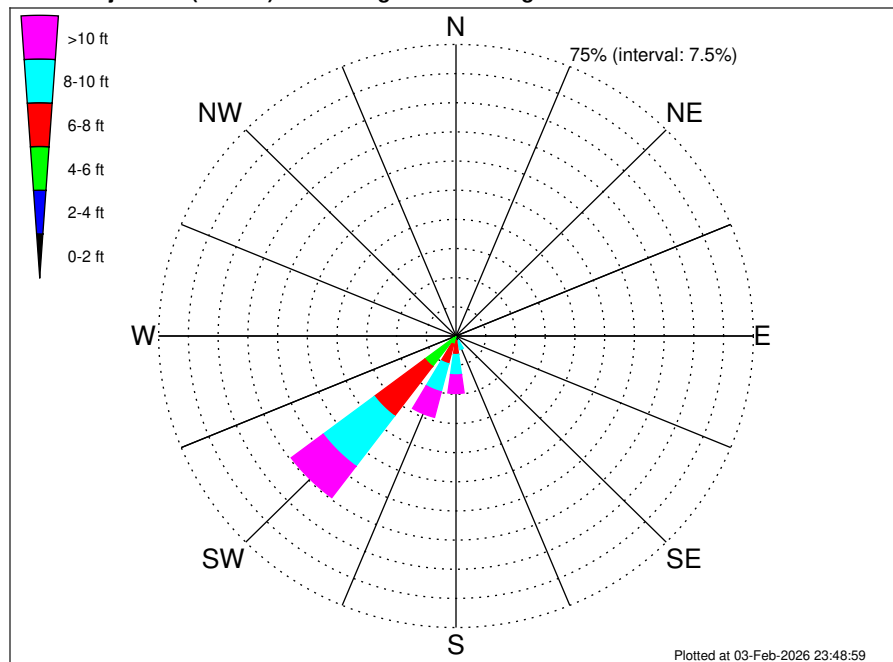
Swell: 89.18%



December Wind Speed PDF: 1979 - 2015



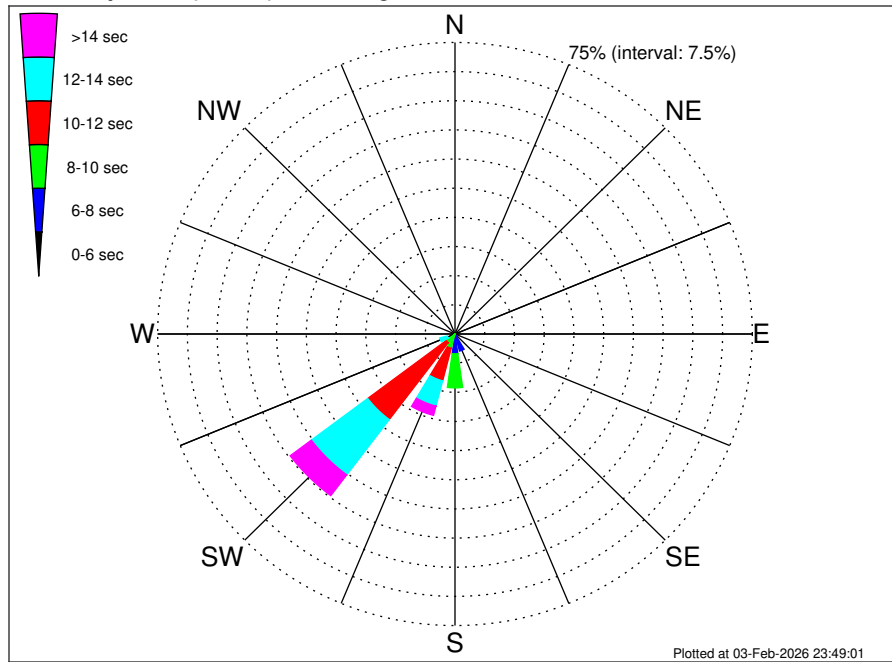
Angola Namibia CRS Oranjemund (BU-OR) Climatological WaveHeight Rose for December: 1979 - 2015



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	•	•	•	•	•	•	•	•	0.01	0.26	0.77	0.38	0.07	0.01	0.03	•	1.52
4 - 6 ft	•	•	•	•	•	•	•	0.12	1.18	1.94	9.04	1.80	0.18	0.30	0.44	•	15.00
6 - 8 ft	•	•	•	•	•	•	•	1.20	3.59	5.18	16.00	1.70	0.07	0.09	0.08	•	27.90
8 - 10 ft	•	•	•	•	•	•	•	2.33	5.23	7.45	16.17	0.85	•	0.07	0.04	•	32.13
10 - 12 ft	•	•	•	•	•	•	•	1.24	3.43	4.57	7.30	0.21	•	•	•	•	16.74
12 - 14 ft	•	•	•	•	•	•	•	0.27	1.01	1.68	2.25	0.04	•	•	•	•	5.25
14 - 16 ft	•	•	•	•	•	•	•	0.05	0.27	0.44	0.46	•	•	•	•	•	1.22
16 - 18 ft	•	•	•	•	•	•	•	•	0.05	0.10	0.08	•	•	•	•	•	0.23
> 18 ft	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	•	•	•	•	•	•	•	5.20	14.79	21.62	52.06	4.97	0.31	0.47	0.59	•	100.00

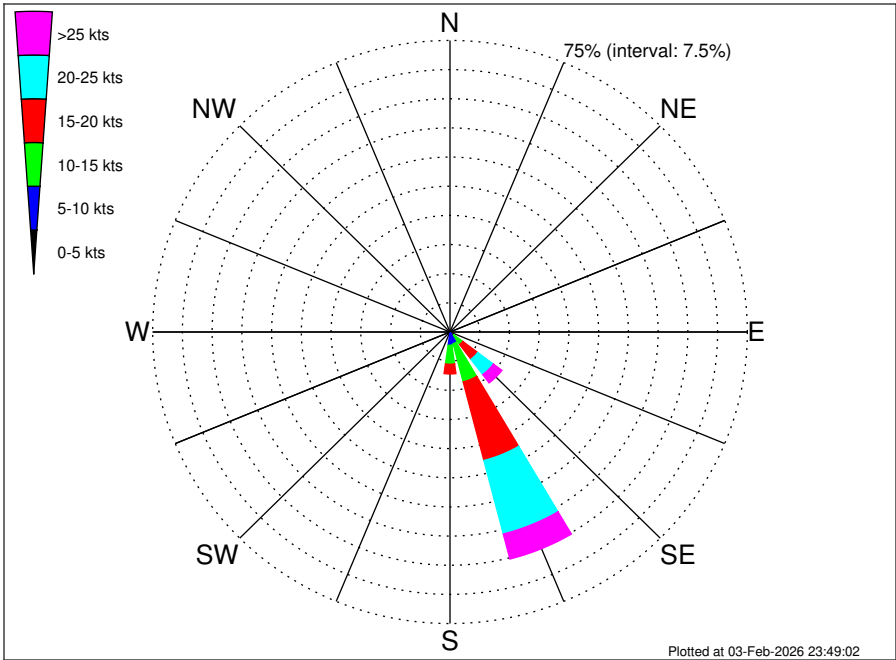
Angola Namibia CRS Oranjemund (BU-OR) Climatological WavePeriod Rose for December: 1979 - 2015



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	•	•	•	•	•	•	•	0.57	0.09	•	•	•	0.01	•	•	•	0.68
6 - 8 sec	•	•	•	•	•	•	•	3.97	5.02	0.20	•	•	•	•	•	•	9.18
8 - 10 sec	•	•	•	•	•	•	•	0.66	8.75	3.60	2.78	0.22	•	•	•	•	16.02
10 - 12 sec	•	•	•	•	•	•	•	•	0.72	8.64	24.78	1.78	•	•	•	•	35.91
12 - 14 sec	•	•	•	•	•	•	•	•	0.16	6.72	17.82	1.98	0.05	0.01	0.08	•	26.82
14 - 16 sec	•	•	•	•	•	•	•	•	0.05	2.15	5.55	0.78	0.22	0.36	0.29	•	9.40
18 - 20 sec	•	•	•	•	•	•	•	•	•	0.29	1.01	0.21	0.03	0.09	0.20	•	1.82
22 - 24 sec	•	•	•	•	•	•	•	•	•	0.03	0.10	•	•	•	0.03	•	0.16
Total	•	•	•	•	•	•	•	5.20	14.79	21.62	52.06	4.97	0.31	0.47	0.59	•	100.00

Angola Namibia CRS Oranjemund (BU-OR) Climatological Wind Rose for December: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	•	•	•	•	0.01	0.01	0.01	0.01	•	•	0.04	0.03	0.05	0.01	0.01	0.01	0.21
0 - 5 kts	0.07	0.05	0.10	0.12	0.05	0.10	0.22	0.31	0.47	0.51	0.40	0.35	0.36	0.35	0.22	0.17	3.86
5 - 10 kts	0.03	0.04	0.03	0.05	0.09	0.31	0.96	2.76	2.95	1.70	1.18	0.64	0.69	0.73	0.52	0.20	12.88
10 - 15 kts	0.04	•	•	•	•	0.07	2.85	10.17	4.88	0.91	0.21	0.09	0.08	0.38	0.47	0.20	20.33
15 - 20 kts	0.03	•	•	•	•	0.01	4.73	20.88	2.50	0.04	•	•	•	•	•	0.04	28.23
20 - 25 kts	0.01	•	•	•	0.01	0.01	4.94	19.55	0.59	0.01	•	•	•	•	•	0.04	25.17
25 - 30 kts	•	•	•	•	•	0.01	2.30	6.18	•	•	•	•	•	•	•	•	8.49
30 - 35 kts	•	•	•	•	•	•	0.36	0.47	•	•	•	•	•	•	•	•	0.83
35 - 40 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40 - 45 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	0.17	0.09	0.13	0.17	0.17	0.53	16.39	60.33	11.38	3.17	1.83	1.11	1.18	1.47	1.22	0.65	100.00