

SpaceX GOM Launch Platform - November

Weather Days

Wave Height > 3.0 ft Mean: 18.5 days Range: 14.4 - 22.5 days p50: 19 days p90: 20 days
Wave Height > 4.0 ft Mean: 11.5 days Range: 8.2 - 14.8 days p50: 13 days p90: 16 days
Wave Height > 5.0 ft Mean: 6.1 days Range: 4.0 - 8.3 days p50: 6 days p90: 10 days

Working Window Probability

Wave Height < 3.0 ft	3 days or longer: 27%
	5 days or longer: 4%
	7 days or longer: 1%
Wave Height < 4.0 ft	3 days or longer: 38%
	5 days or longer: 11%
	7 days or longer: 6%
Wave Height < 5.0 ft	3 days or longer: 52%
	5 days or longer: 21%
	7 days or longer: 14%

Waves

Mean Height: 2 - 4 ft
The wave heights will occasionally reach 8 - 10 ft, but rarely higher.

Currents

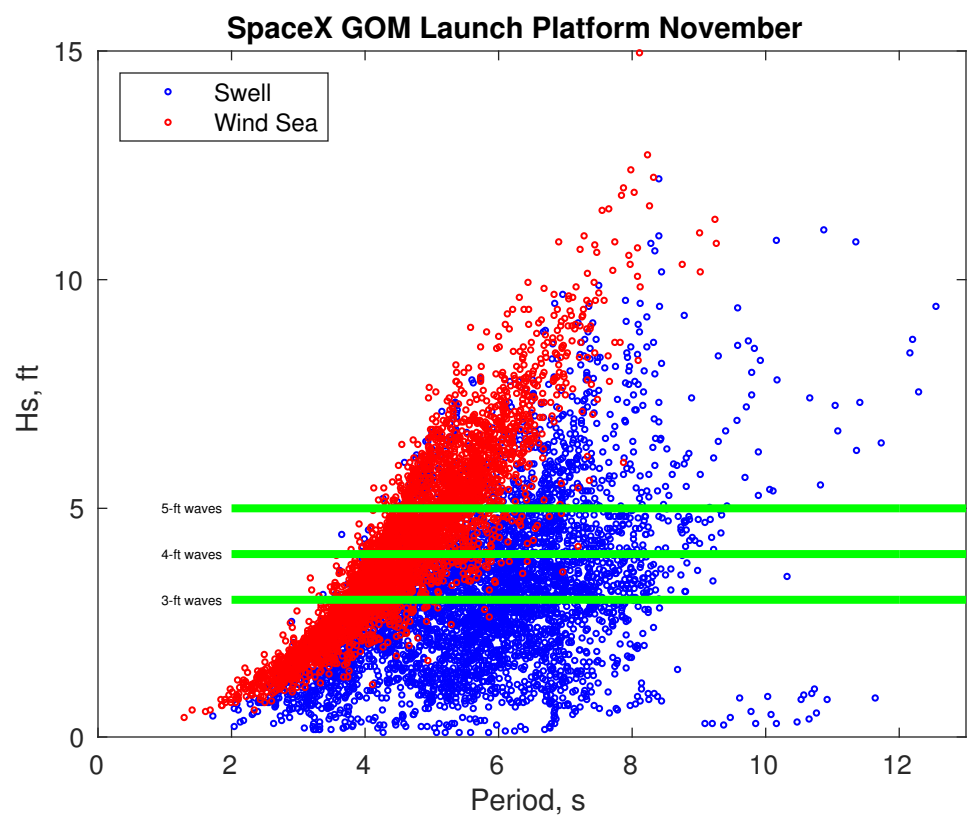
Period: 4 - 6 sec
The wave periods will occasionally reach 8 - 10 sec, but rarely longer.
Mean Speed: 0.25-0.50 kts
Principle Direction, from: ESE
The currents will occasionally reach 0.75-1.00 kts, but rarely greater.
WindSea/Swell: 53% / 47%

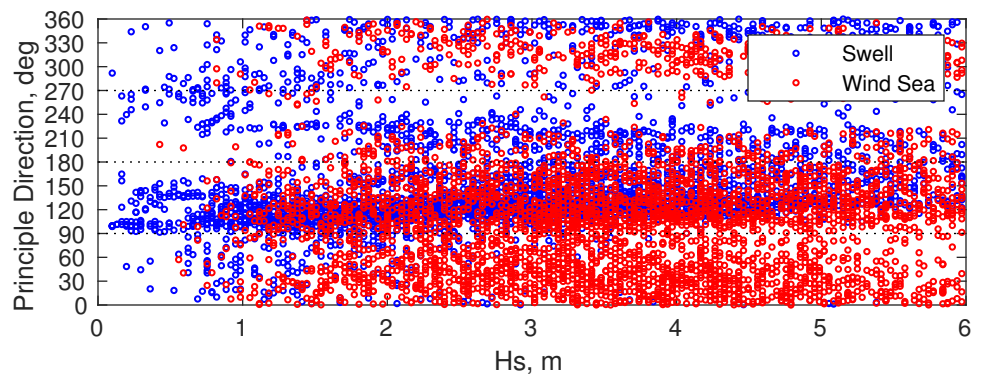
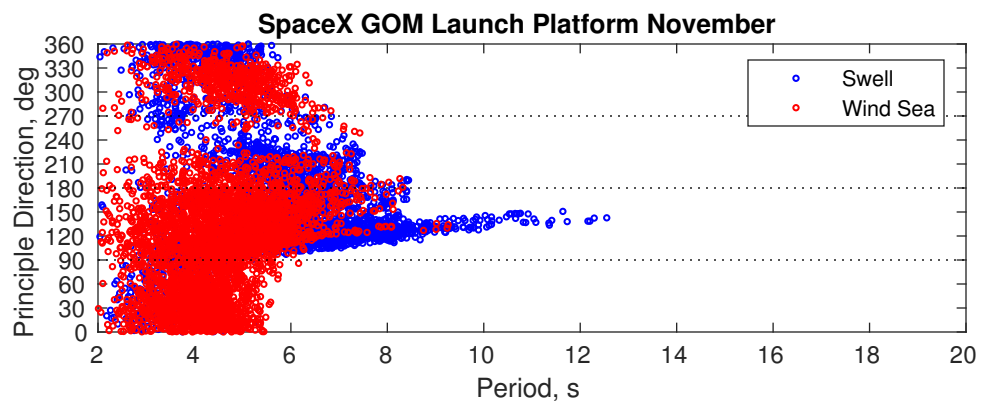
Winds

Principle Direction, from: WNW
Mean Speed: 10 - 15 kts
The winds will occasionally reach 25 - 30 kts, but rarely greater.
Principle Direction, from: NNE

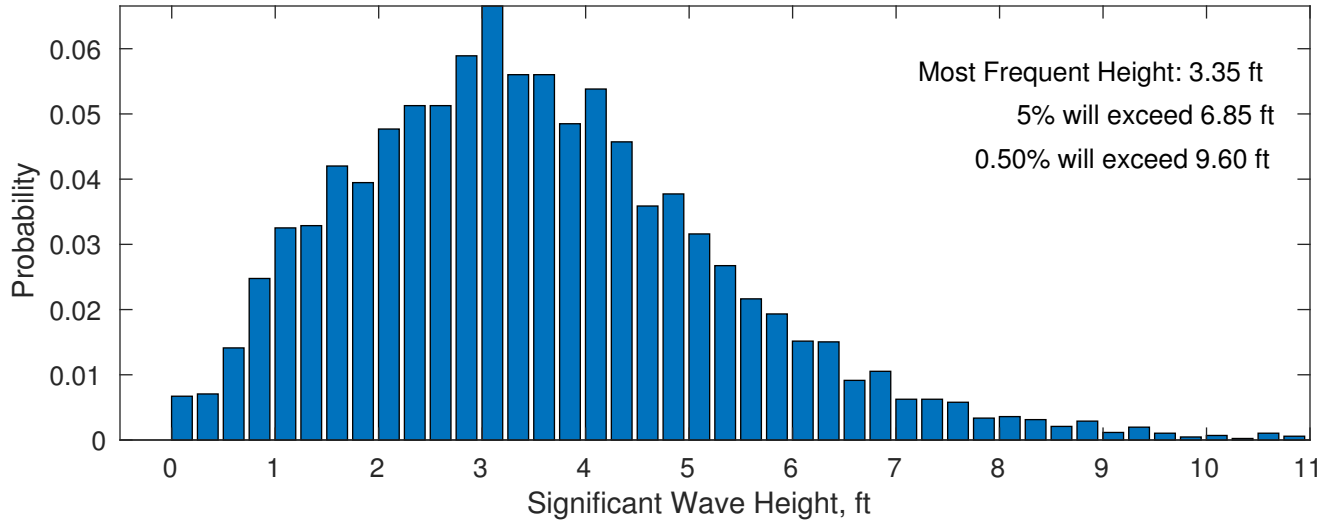
Severe Storms

There is a 3 % chance of a storm with winds peaking above 34 kts.
There is little chance of a storm with waves peaking at 4m (13 ft) or greater.

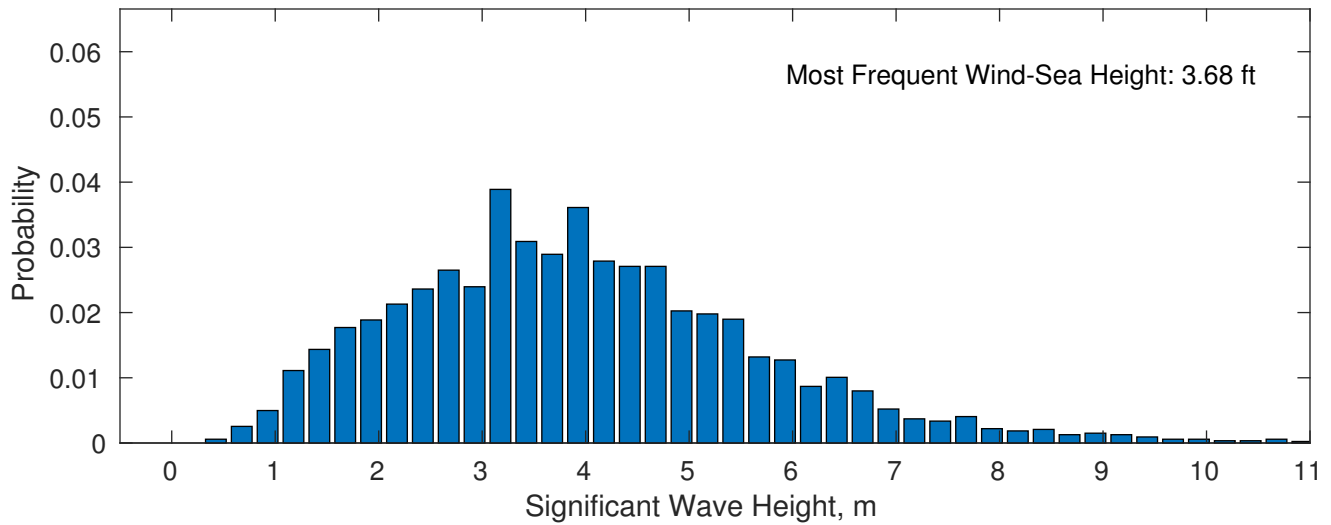




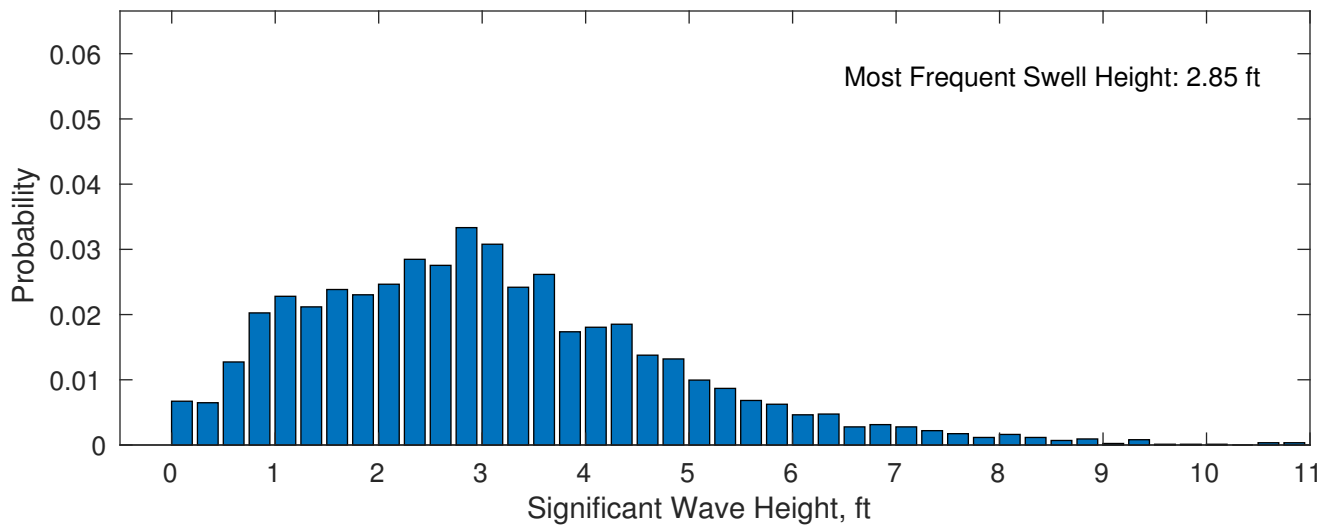
November Wave Height PDF: 1979 - 2015



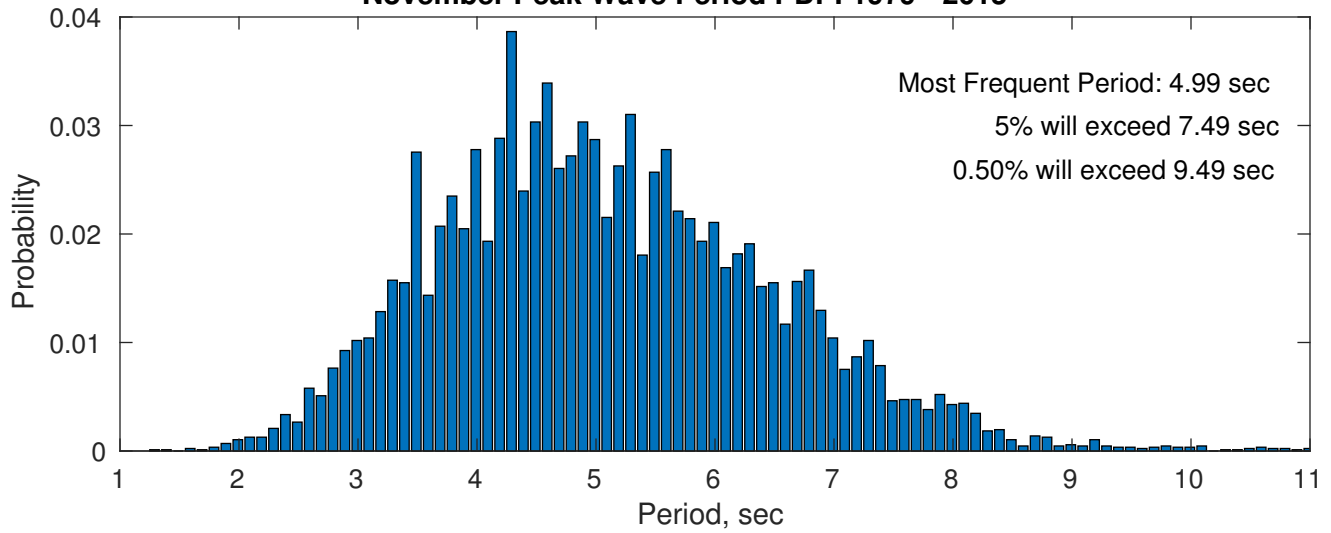
Wind-Sea: 52.55%



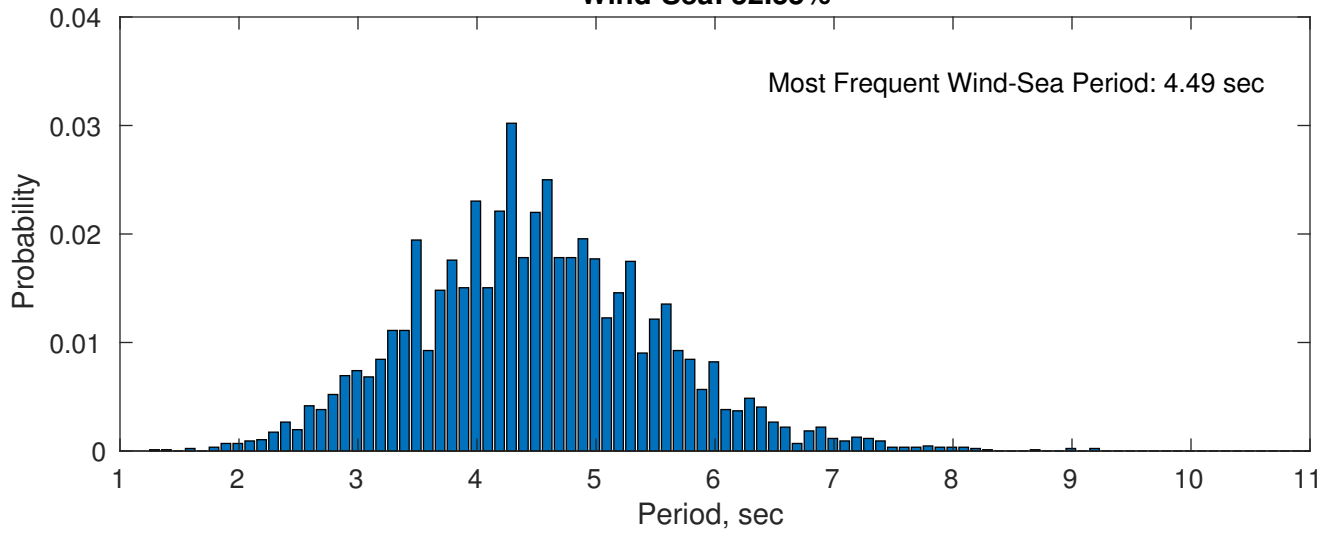
Swell: 47.45%



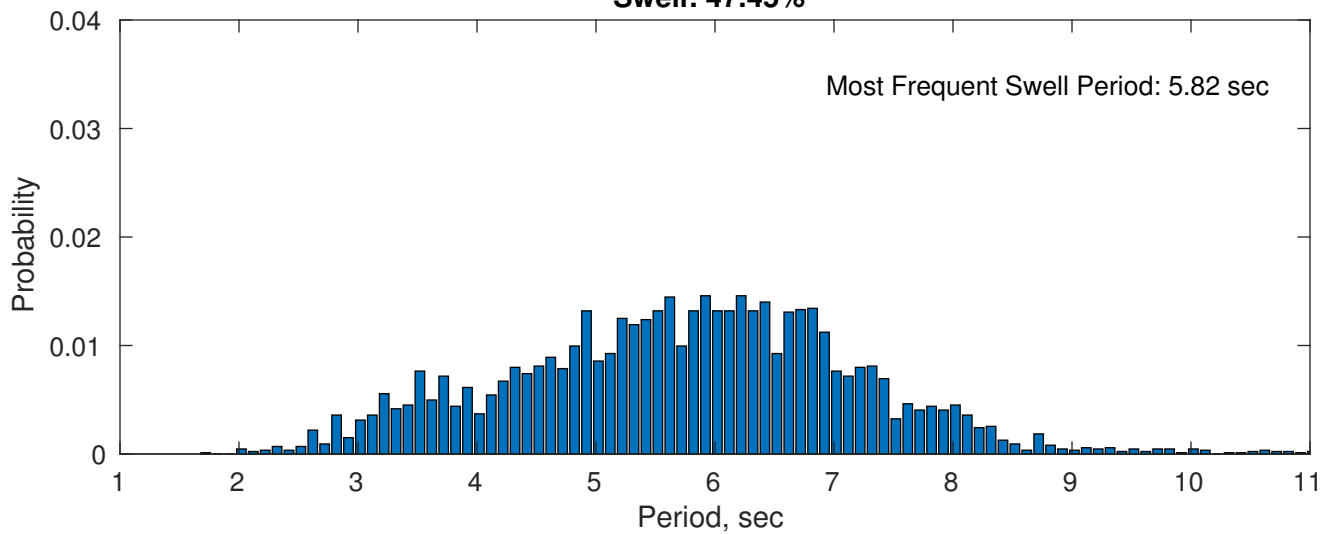
November Peak Wave Period PDF: 1979 - 2015



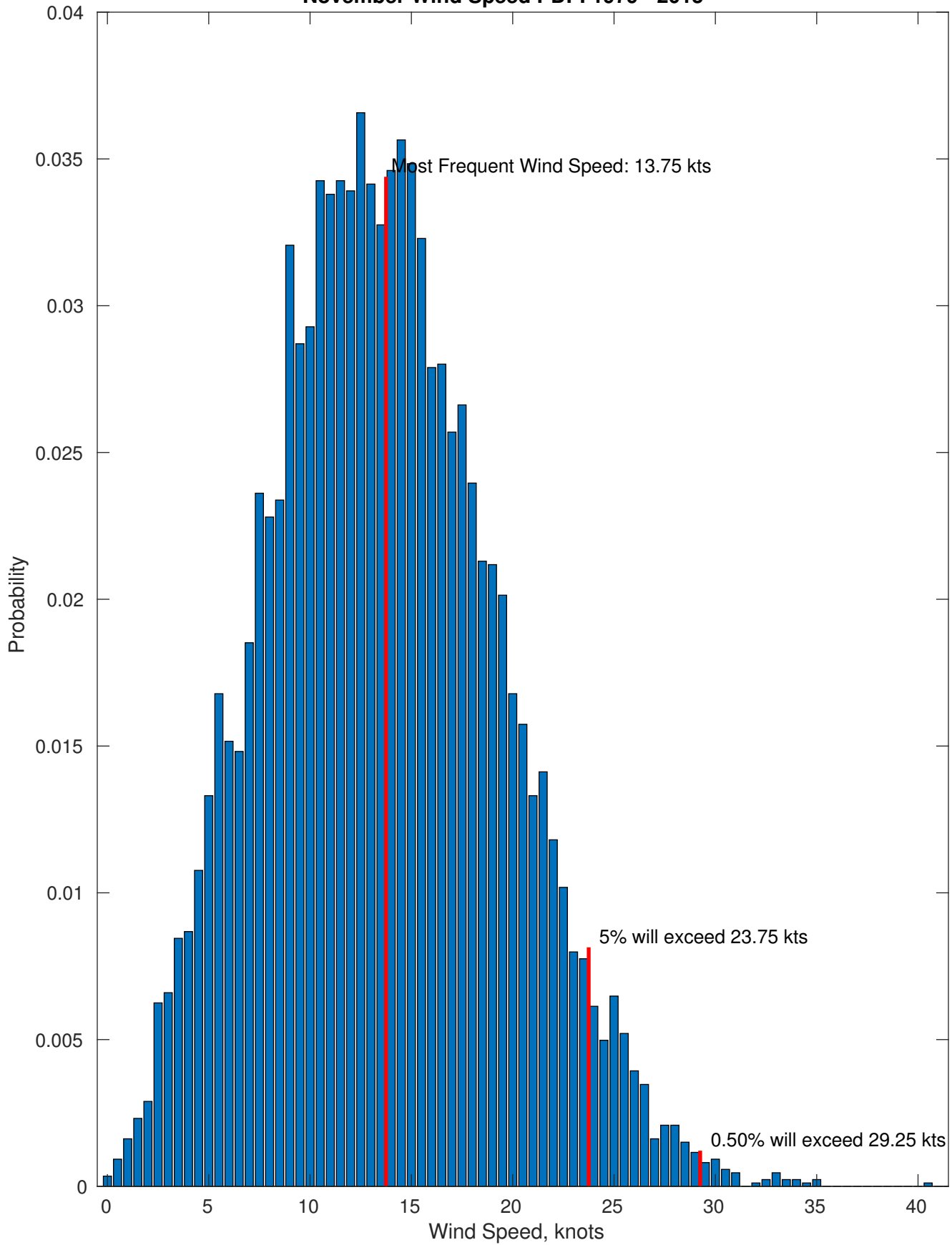
Wind-Sea: 52.55%



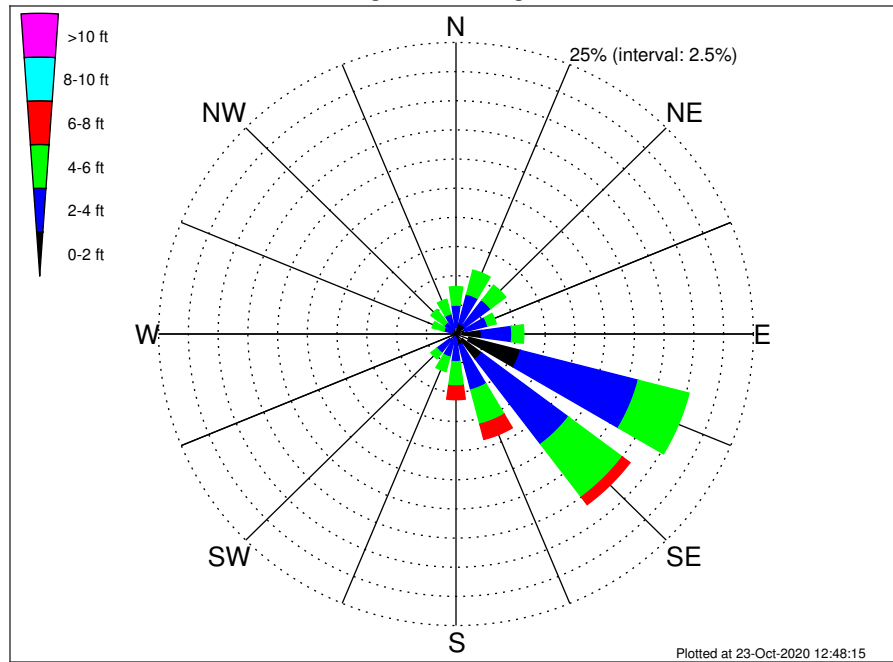
Swell: 47.45%



November Wind Speed PDF: 1979 - 2015



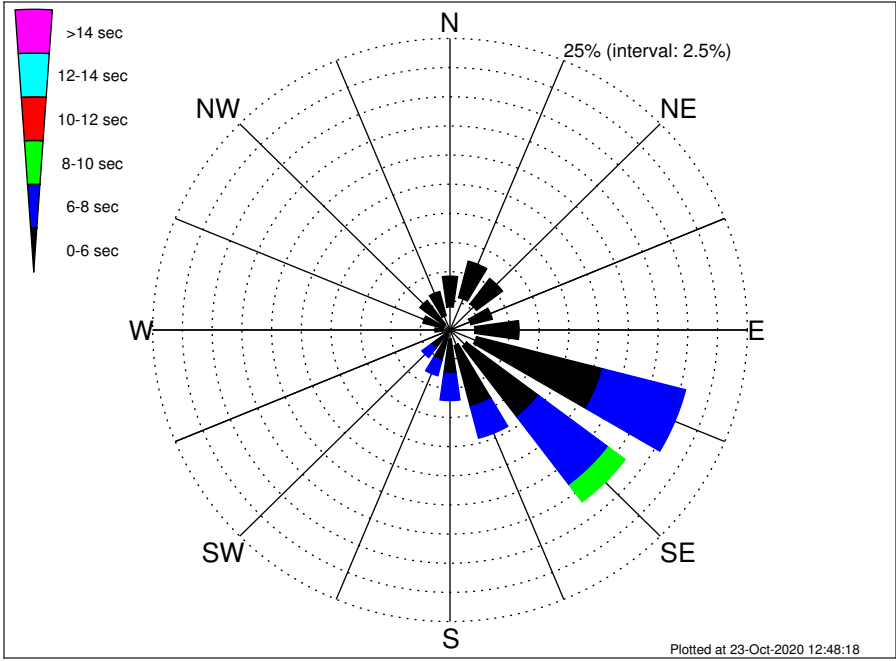
SpaceX GOM Launch Platform Climatological WaveHeight Rose for November: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.08	0.17	0.22	0.20	0.58	1.15	0.67	0.20	0.02	0.03	0.20	0.17	0.31	0.13	0.05	0.07	4.25
1 - 2 ft	0.49	0.75	0.71	0.61	1.56	4.44	2.01	0.79	0.39	0.23	0.46	0.19	0.35	0.29	0.27	0.38	13.92
2 - 4 ft	1.91	2.62	2.71	1.94	2.56	10.24	9.14	3.97	1.96	1.77	1.35	0.21	0.25	0.65	0.91	1.33	43.53
4 - 6 ft	1.59	2.12	1.61	0.74	1.01	4.41	5.68	3.03	2.08	1.30	0.64	0.14	0.34	1.02	1.42	1.30	28.41
6 - 8 ft	0.54	0.44	0.27	0.17	0.13	0.56	0.81	1.35	1.18	0.54	0.23	0.08	0.22	0.41	0.53	0.31	7.78
8 - 10 ft	0.01	.	0.02	0.01	0.01	0.02	0.24	0.39	0.45	0.15	0.08	0.08	0.10	0.02	0.06	0.03	1.70
10 - 12 ft	.	.	.	.	.	.	0.14	0.07	0.09	0.03	.	.	.	.	.	.	0.34
12 - 14 ft	.	.	.	.	.	.	.	0.01	0.05	.	.	.	.	.	.	.	0.06
14 - 16 ft	.	.	.	.	.	.	.	0.01	.	.	.	.	.	.	.	.	0.01
16 - 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
> 18 ft	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	4.62	6.10	5.53	3.68	5.84	20.82	18.70	9.83	6.23	4.06	2.96	0.87	1.57	2.51	3.24	3.43	100.00

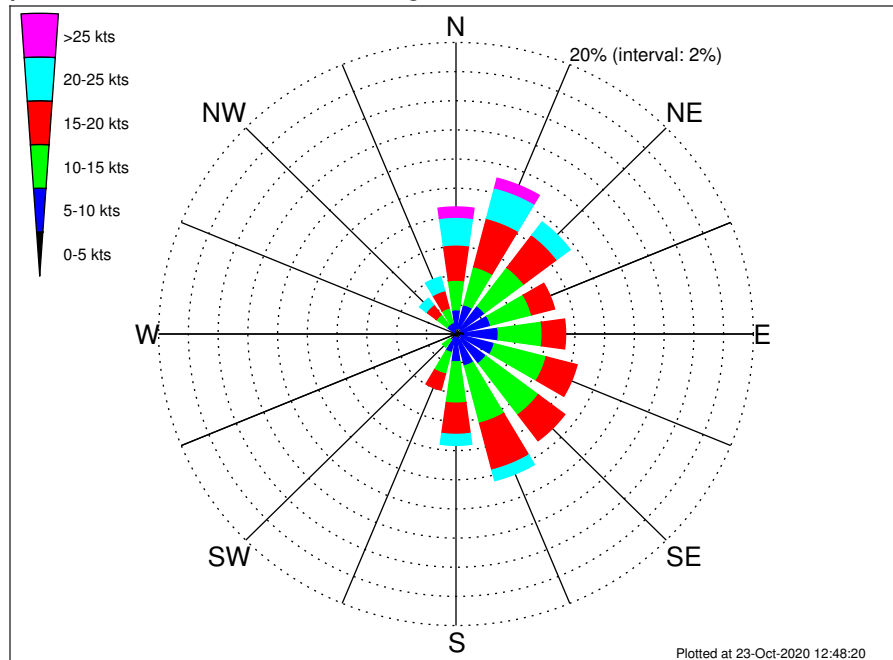
SpaceX GOM Launch Platform Climatological WavePeriod Rose for November: 1979 - 2015



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	0.03	0.01	0.02	0.02	0.01	0.02	0.01	.	.	.	.	0.01	0.16
2 - 4 sec	1.98	2.87	2.79	1.79	2.05	2.29	1.71	1.35	0.76	0.43	0.17	0.20	0.61	0.58	0.64	1.26	21.49
4 - 6 sec	2.64	3.23	2.74	1.88	3.73	10.96	7.60	5.42	2.99	2.23	1.79	0.43	0.66	1.78	2.55	2.14	52.77
6 - 8 sec	.	.	.	.	0.03	7.20	7.34	2.79	2.29	1.37	0.98	0.24	0.30	0.15	0.06	0.01	22.77
8 - 10 sec	.	.	.	.	.	0.36	1.77	0.15	0.17	0.01	.	.	.	.	.	.	2.47
10 - 12 sec	.	.	.	.	.	.	0.21	0.09	.	.	.	.	.	.	.	.	0.30
12 - 14 sec	.	.	.	.	.	.	0.05	.	.	.	.	.	.	.	.	.	0.05
14 - 16 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
18 - 20 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
22 - 24 sec	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	4.62	6.10	5.53	3.68	5.84	20.82	18.70	9.83	6.23	4.06	2.96	0.87	1.57	2.51	3.24	3.43	100.00

SpaceX GOM Launch Platform Climatological Wind Rose for November: 1979 - 2015



Joint Frequency Distribution Table

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
calm	0.02	0.01	0.01	•	0.01	0.01	0.01	0.01	0.01	0.01	•	•	•	0.01	•	•	0.13
0 - 5 kts	0.34	0.42	0.44	0.41	0.59	0.34	0.45	0.27	0.35	0.23	0.09	0.20	0.09	0.15	0.17	0.23	4.76
5 - 10 kts	1.31	1.64	1.94	2.00	2.25	2.31	2.05	1.98	1.55	1.06	0.43	0.49	0.38	0.36	0.59	0.57	20.91
10 - 15 kts	2.03	2.70	3.31	2.85	2.95	3.61	4.42	4.06	2.84	1.53	0.62	0.41	0.28	0.39	0.89	1.04	33.92
15 - 20 kts	2.42	3.43	2.79	1.60	1.57	2.14	2.23	3.32	2.14	1.15	0.38	0.23	0.24	0.47	0.84	1.23	26.19
20 - 25 kts	1.90	2.16	1.12	0.41	0.47	0.35	0.42	0.75	0.75	0.35	0.13	0.07	0.09	0.36	0.57	0.98	10.88
25 - 30 kts	0.56	0.64	0.23	0.09	0.08	0.03	0.05	0.14	0.19	0.08	0.03	0.01	0.08	0.07	0.21	0.35	2.84
30 - 35 kts	0.14	0.05	•	•	•	•	0.01	0.01	•	0.01	•	•	•	0.02	0.03	0.06	0.34
35 - 40 kts	0.01	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0.01	0.02
40 - 45 kts	•	•	•	•	•	•	•	•	0.01	•	•	•	•	•	•	•	0.01
45 - 50 kts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Total	8.72	11.04	9.85	7.35	7.93	8.80	9.64	10.54	7.84	4.42	1.69	1.40	1.17	1.84	3.31	4.47	100.00