

RWE Humboldt Bay OCS-P-0561 - January

Latitude: 41.00 N Longitude: 125.00 W

Weather Days

Wave Height > 6.0 ft Mean: 22.6 days Range: 20.6 - 24.5 days p50:28.5 days p75:27 days p90:25.5 days

Wave Height > 7.0 ft Mean: 19.6 days Range: 16.6 - 22.7 days p50:26.5 days p75:24.5 days p90:21.5 days

Wave Height > 8.0 ft Mean: 16.5 days Range: 12.7 - 20.3 days p50:24.5 days p75:22 days p90:18 days

Wind Speed > 10.0 knots Mean: 20.4 days Range: 17.1 - 23.7 days p50:21 days p75:19 days p90:16 days

Wind Speed > 15.0 knots Mean: 14.2 days Range: 10.3 - 18.2 days p50:15 days p75:13 days p90:8.5 days

Wind Speed > 20.0 knots Mean: 8.6 days Range: 5.1 - 12.1 days p50:8.5 days p75:7.5 days p90:4 days

Working Window

Wave Height < 6.0 ft
A 1 day or longer window will statistically occur 0.7 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 0.1 times per month

Wave Height < 7.0 ft
A 1 day or longer window will statistically occur 1.3 times per month
A 2 day or longer window will statistically occur 0.5 times per month
A 3 day or longer window will statistically occur 0.3 times per month

Wave Height < 8.0 ft
A 1 day or longer window will statistically occur 2.0 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 0.5 times per month

Waves

Mean Height: 10 - 12 ft

The wave heights will occasionally reach > 18 ft, but rarely higher.

Mean Period: 12 - 14 sec

The wave periods will occasionally reach 22 - 24 sec, but rarely longer.

Principle Direction, from: WNW

WindSea/Swell: 3% / 97%

Winds

Mean Speed: 10 - 15 kts

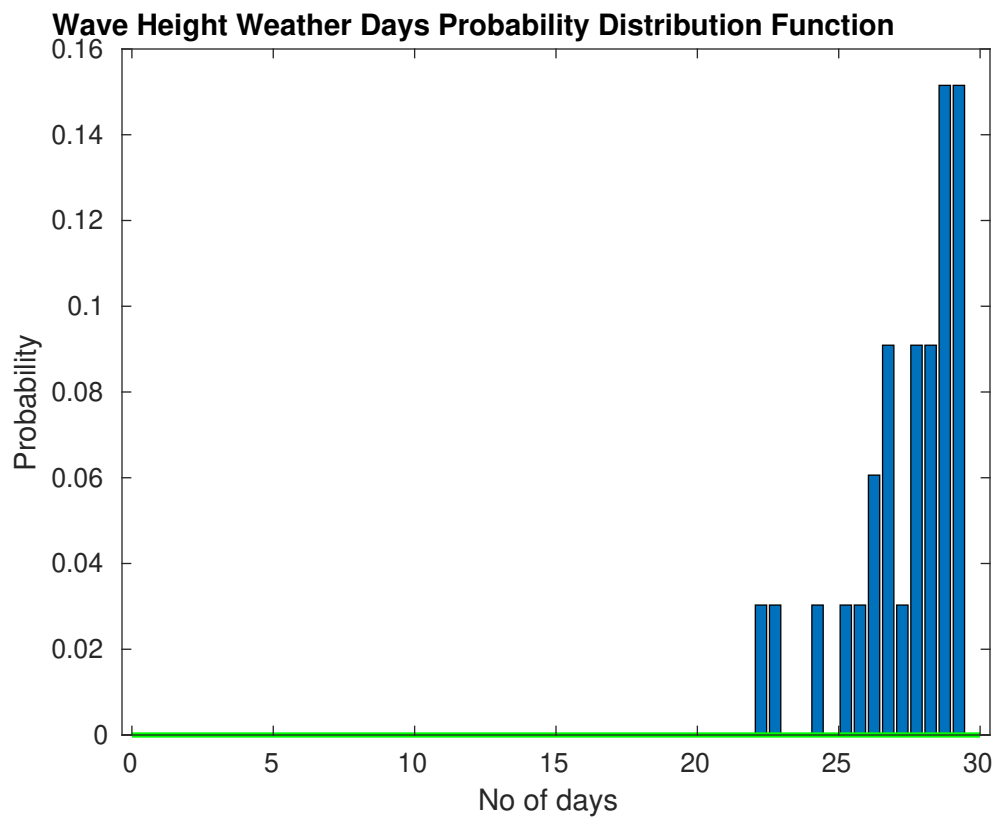
The winds will occasionally reach 40 - 45 kts, but rarely greater.

Principle Direction, from: S

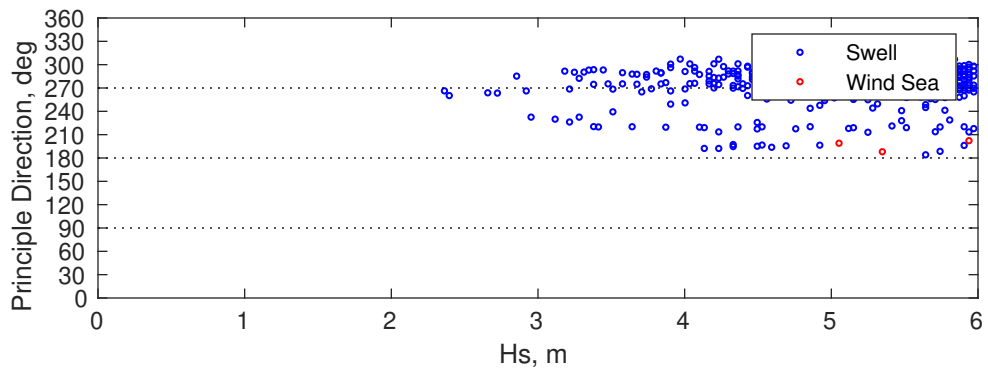
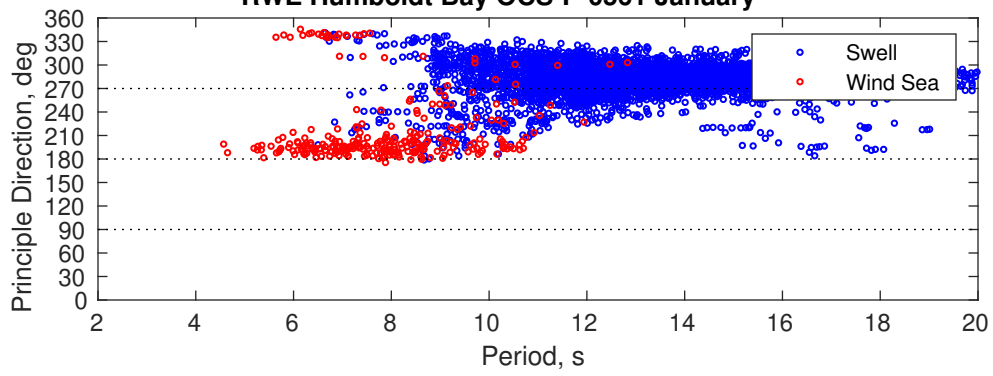
Severe Storms

There is a 61 % chance of a storm occurring in the month with winds peaking above 34 kts.

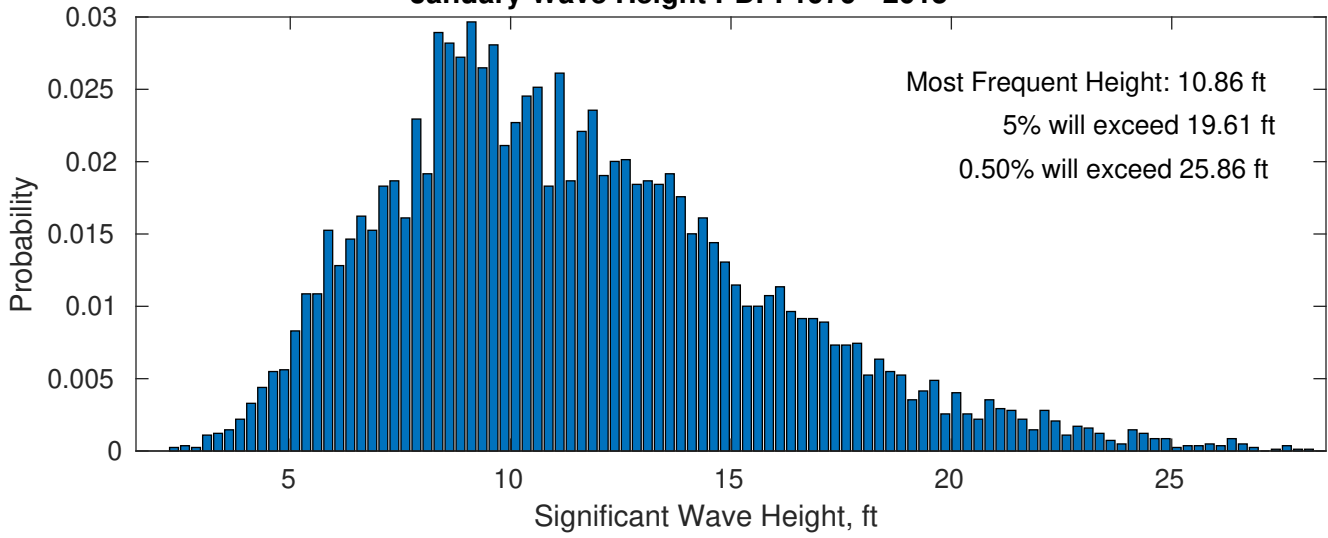
There is a 48 % chance of a storm occurring in the month with waves exceeding 3 m (10 ft) above the mean wave height.



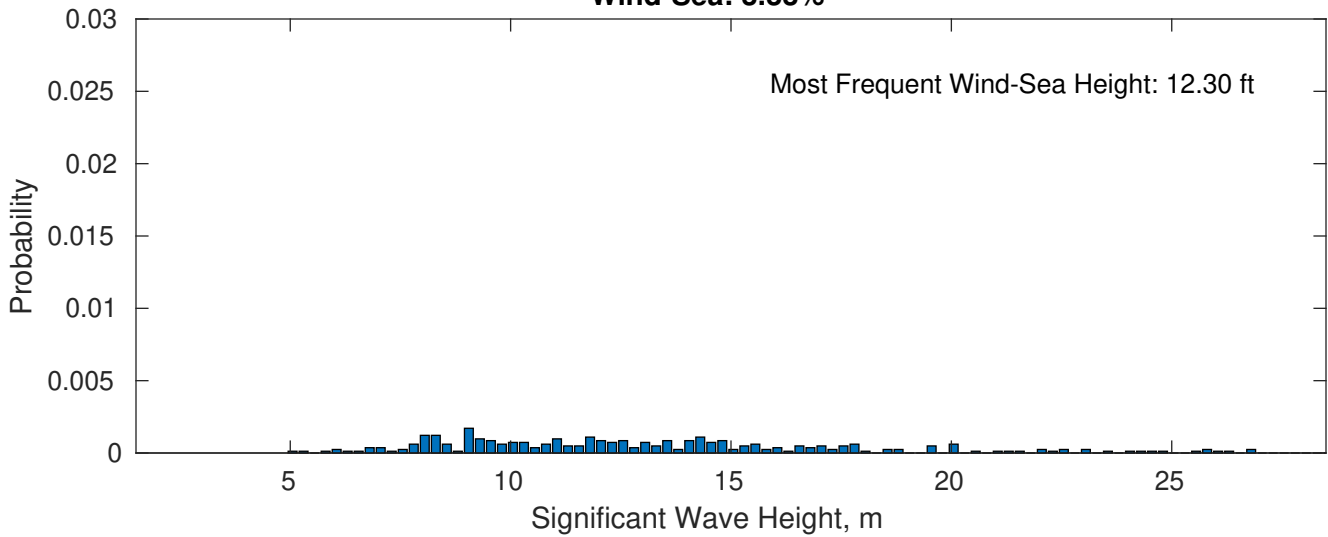
RWE Humboldt Bay OCS-P-0561 January



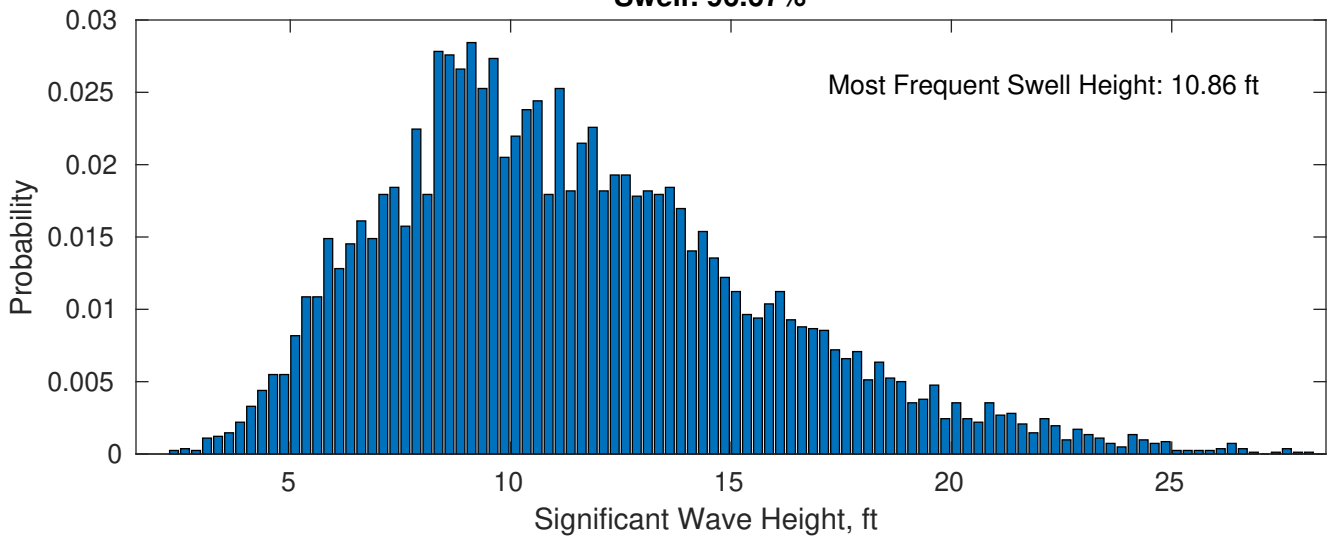
January Wave Height PDF: 1979 - 2015



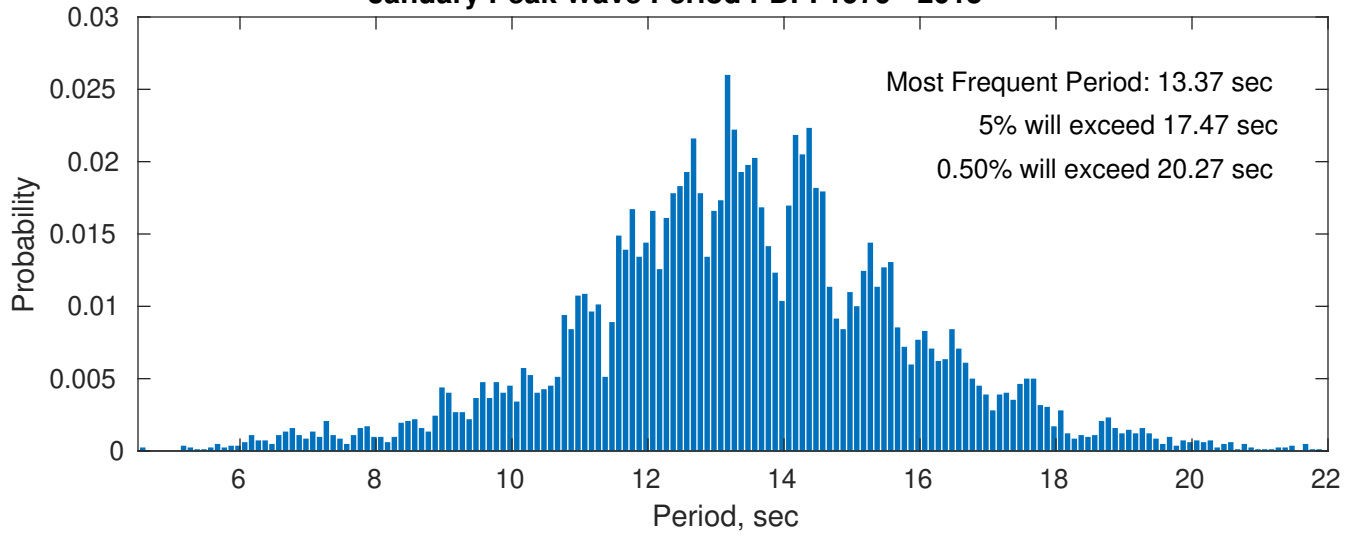
Wind-Sea: 3.33%



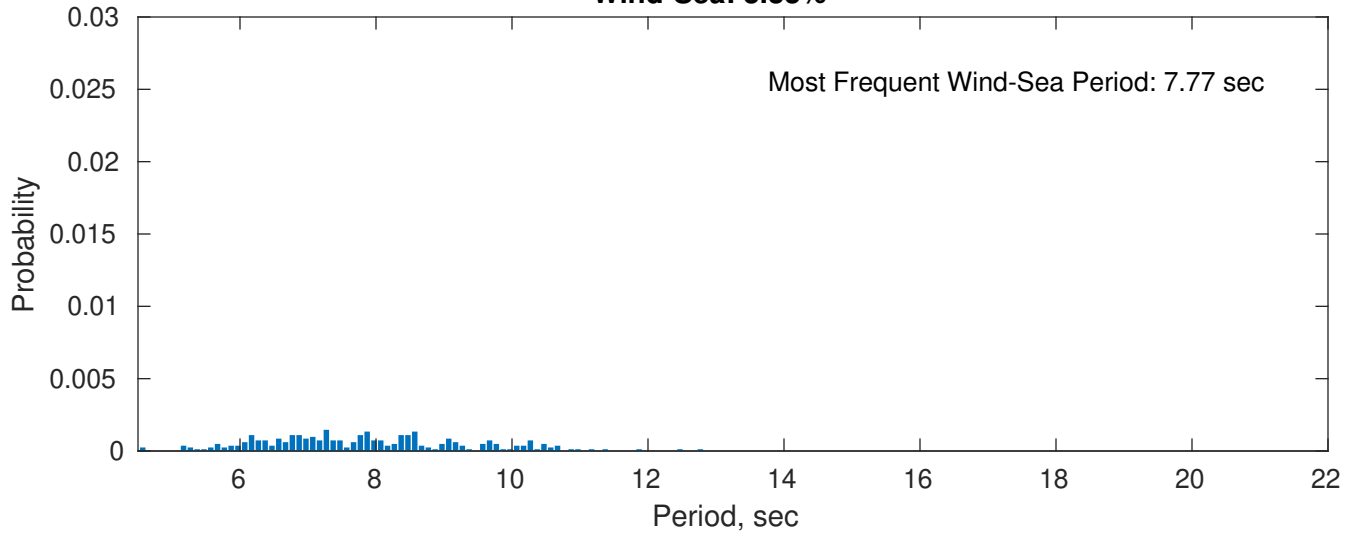
Swell: 96.67%



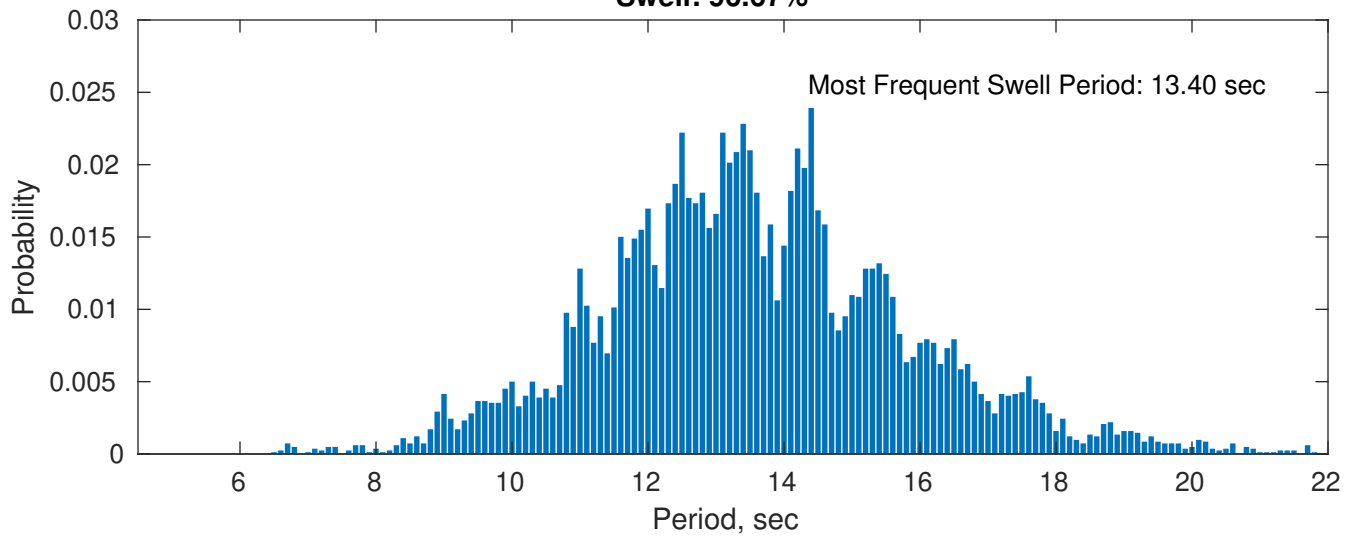
January Peak Wave Period PDF: 1979 - 2015



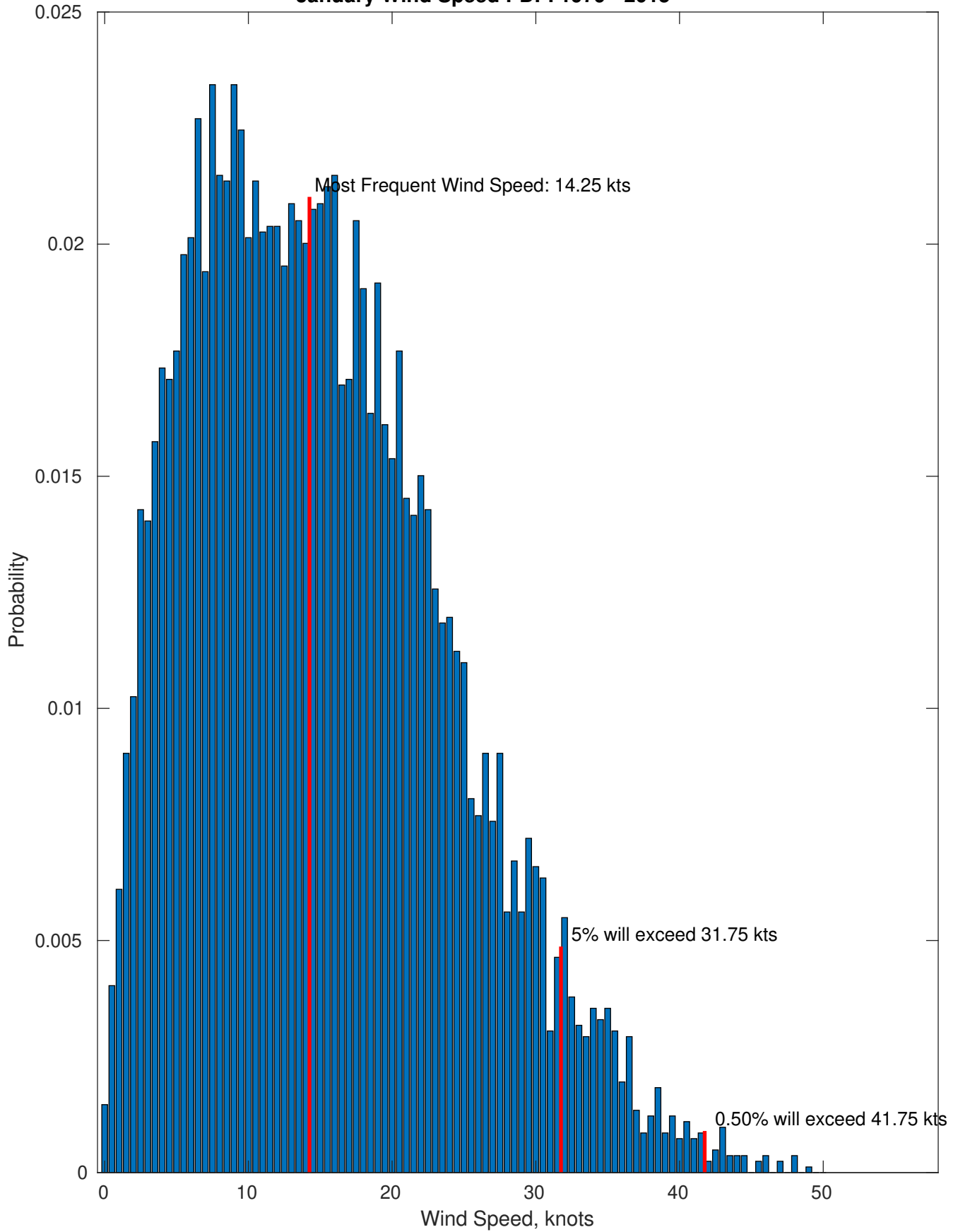
Wind-Sea: 3.33%



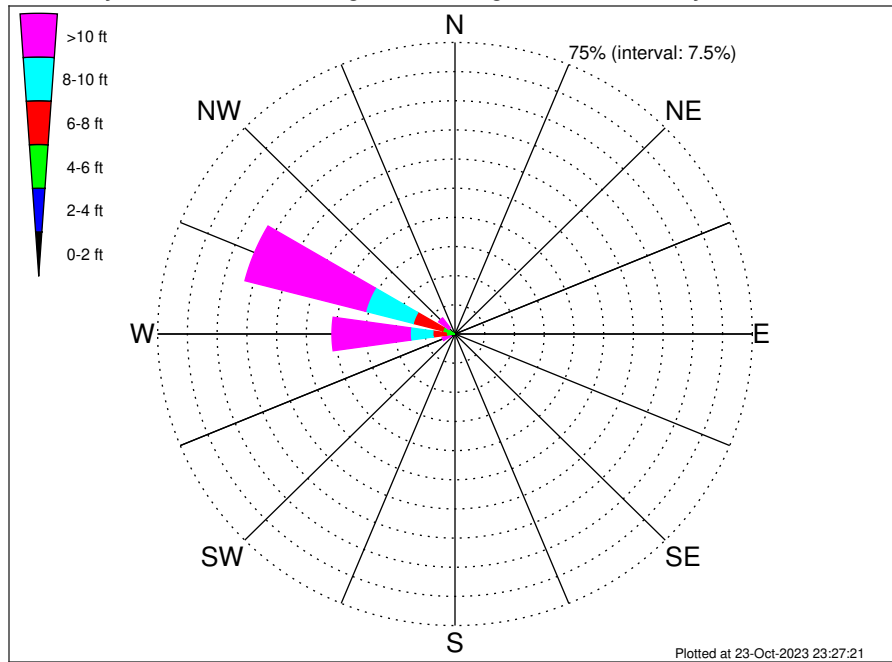
Swell: 96.67%



January Wind Speed PDF: 1979 - 2015



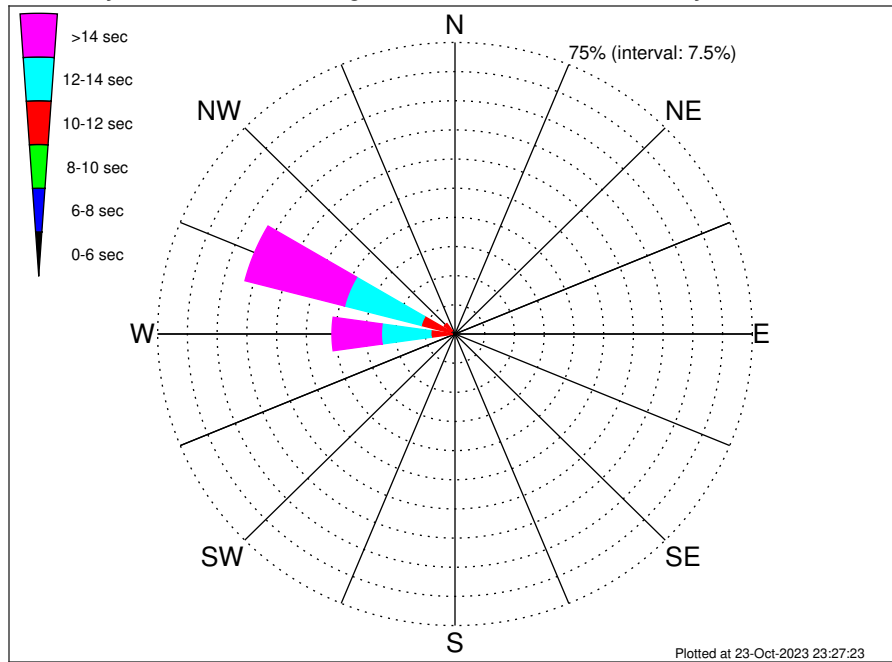
RWE Humboldt Bay OCS-P-0561 Climatological WaveHeight Rose for January: 1979 - 2015



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	•	•	•	•	•	•	•	•	•	•	0.10	0.02	0.20	0.22	0.01	•	0.55
4 - 6 ft	•	•	•	•	•	•	•	•	0.04	0.20	0.23	0.28	1.98	2.99	0.13	•	5.85
6 - 8 ft	•	•	•	•	•	•	•	•	0.10	0.18	0.21	0.48	3.43	7.69	0.76	0.26	13.10
8 - 10 ft	•	•	•	•	•	•	•	•	0.17	0.48	0.18	0.38	5.71	12.40	1.12	0.41	20.86
10 - 12 ft	•	•	•	•	•	•	•	•	0.16	0.33	0.27	0.41	5.09	10.86	0.71	0.15	17.98
12 - 14 ft	•	•	•	•	•	•	•	•	0.20	0.34	0.13	0.52	4.33	8.98	1.07	0.01	15.60
14 - 16 ft	•	•	•	•	•	•	•	•	0.17	0.29	0.11	0.40	3.31	5.31	0.78	•	10.37
16 - 18 ft	•	•	•	•	•	•	•	•	0.06	0.15	0.11	0.32	2.61	3.53	0.34	•	7.12
> 18 ft	•	•	•	•	•	•	•	•	0.07	0.28	0.32	0.52	4.38	2.75	0.26	•	8.58
Total	•	•	•	•	•	•	•	•	0.96	2.25	1.66	3.34	31.04	54.73	5.19	0.83	100.00

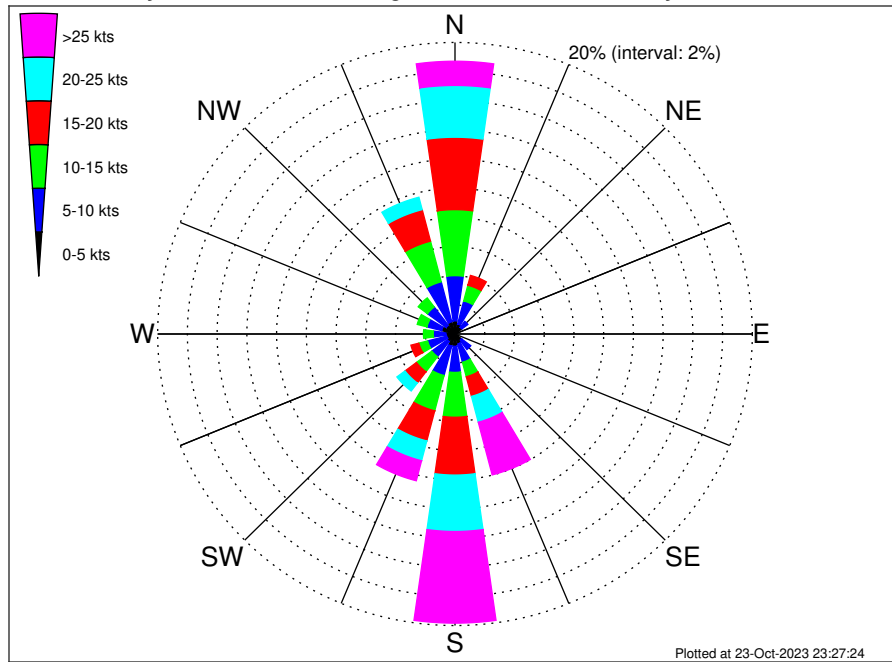
RWE Humboldt Bay OCS-P-0561 Climatological WavePeriod Rose for January: 1979 - 2015



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	•	•	•	•	•	•	•	•	0.07	0.15	0.01	•	•	•	•	0.04	0.27
6 - 8 sec	•	•	•	•	•	•	•	•	0.44	0.84	0.17	0.09	0.04	•	0.07	0.46	2.11
8 - 10 sec	•	•	•	•	•	•	•	•	0.39	0.78	0.40	0.46	0.76	1.23	1.03	0.26	5.31
10 - 12 sec	•	•	•	•	•	•	•	•	0.02	0.28	0.66	1.24	5.31	7.59	2.28	0.07	17.47
12 - 14 sec	•	•	•	•	•	•	•	•	•	•	0.13	1.03	12.46	19.97	1.34	•	34.93
14 - 16 sec	•	•	•	•	•	•	•	•	•	0.09	0.15	0.34	8.35	16.94	0.46	•	26.33
18 - 20 sec	•	•	•	•	•	•	•	•	0.04	0.10	0.09	0.17	3.06	6.91	•	•	10.36
22 - 24 sec	•	•	•	•	•	•	•	•	•	0.01	0.05	0.01	1.06	2.09	•	•	3.22
Total	•	•	•	•	•	•	•	•	0.96	2.25	1.66	3.34	31.04	54.73	5.19	0.83	100.00

RWE Humboldt Bay OCS-P-0561 Climatological Wind Rose for January: 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	0.05	0.02	0.04	0.02	0.01	0.04	•	0.06	0.09	0.01	0.05	0.04	0.06	0.02	0.02	0.55
0 - 5 kts	0.89	0.66	0.55	0.49	0.43	0.44	0.51	0.71	0.78	0.77	0.63	0.52	0.57	0.87	0.72	0.84	10.39
5 - 10 kts	3.10	1.64	0.51	0.31	0.46	0.29	0.78	1.29	1.79	2.09	1.31	1.33	0.85	1.03	1.57	2.83	21.19
10 - 15 kts	4.53	1.11	0.20	0.13	0.27	0.28	0.40	1.03	3.08	2.50	1.29	0.61	0.66	0.67	0.78	2.88	20.42
15 - 20 kts	4.97	0.70	0.01	0.04	0.07	0.09	0.44	1.39	3.97	2.14	0.96	0.55	0.40	0.48	0.45	2.23	18.88
20 - 25 kts	3.55	0.32	0.02	0.01	0.01	0.05	0.33	1.83	3.87	1.40	0.68	0.22	0.29	0.22	0.17	0.88	13.87
25 - 30 kts	1.29	0.18	•	0.01	•	•	0.11	1.49	2.90	0.92	0.16	0.15	0.21	0.10	0.04	0.20	7.75
30 - 35 kts	0.33	0.04	•	•	•	0.01	0.09	1.26	1.95	0.37	0.09	0.06	•	0.01	0.04	0.05	4.28
35 - 40 kts	0.04	0.01	•	•	•	•	0.05	0.72	0.94	0.11	0.01	•	•	•	•	•	1.88
40 - 45 kts	•	•	•	•	•	•	•	0.20	0.39	0.02	•	•	•	•	0.01	•	0.62
45 - 50 kts	•	•	•	•	•	•	•	0.07	0.10	•	•	•	•	•	•	•	0.17
Total	18.71	4.70	1.32	1.03	1.27	1.17	2.75	9.98	19.83	10.40	5.15	3.49	3.03	3.43	3.81	9.94	100.00