

## OCS A-0501 South - April

### Weather Days

Wave Height > 5.0 ft    Mean: 12.7 days    Range: 8.8 - 16.6 days    p50: 13 days    p90: 20 days

Wave Height > 6.0 ft    Mean: 9.1 days    Range: 5.6 - 12.6 days    p50: 9 days    p90: 15 days

Wave Height > 7.0 ft    Mean: 6.2 days    Range: 3.3 - 9.1 days    p50: 6 days    p90: 11 days

### Working Window Probability

Wave Height < 5.0 ft                      3 days or longer: 38%

5 days or longer: 8%

7 days or longer: 3%

Wave Height < 6.0 ft                      3 days or longer: 55%

5 days or longer: 16%

7 days or longer: 7%

Wave Height < 7.0 ft                      3 days or longer: 63%

5 days or longer: 28%

7 days or longer: 15%

### Waves

Mean Height: 4 - 6 ft

The wave heights will occasionally reach 12 - 14 ft, but rarely higher.

Mean Period: 6 - 8 sec

The wave periods will occasionally reach 12 - 14 sec, but rarely longer.

Principle Direction, from: SSW

WindSea/Swell: 30% / 70%

### Winds

Mean Speed: 10 - 15 kts

The winds will occasionally reach 30 - 35 kts, but rarely greater.

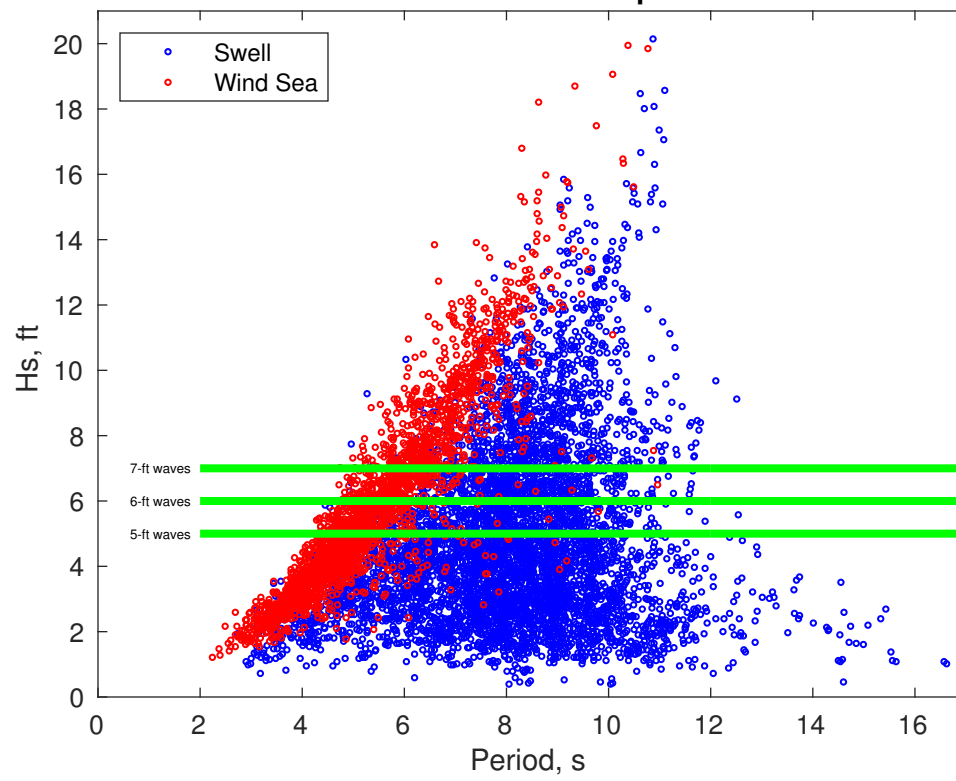
Principle Direction, from: WSW

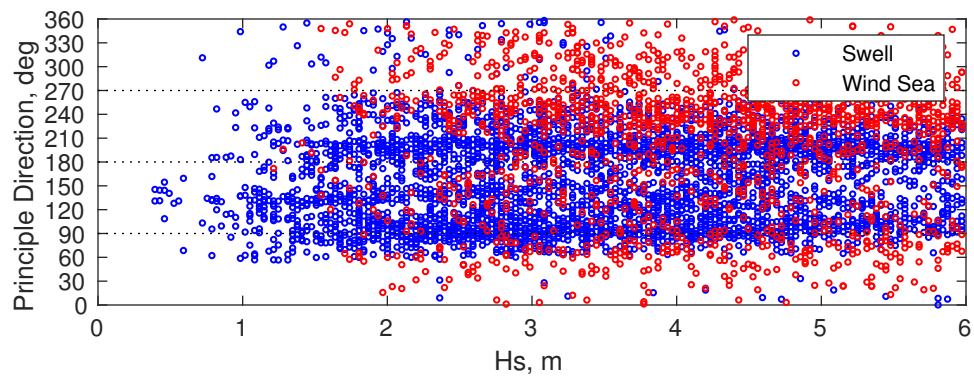
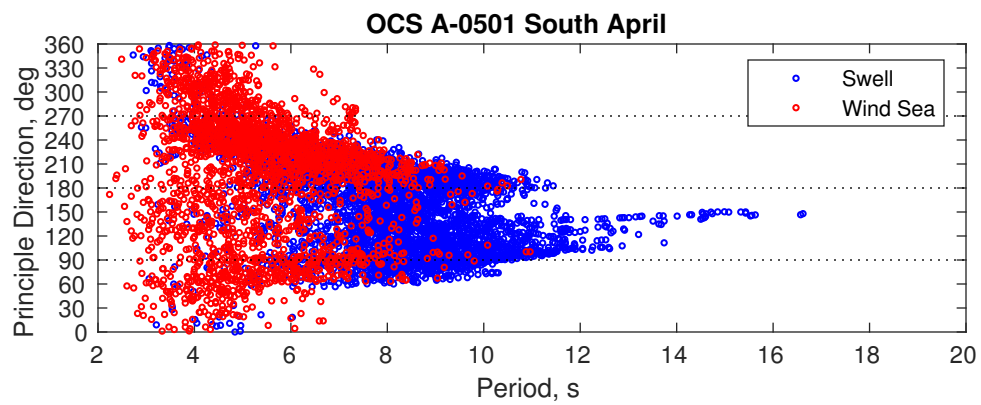
### Severe Storms

There is a 40 % chance of a storm with winds peaking above 34 kts.

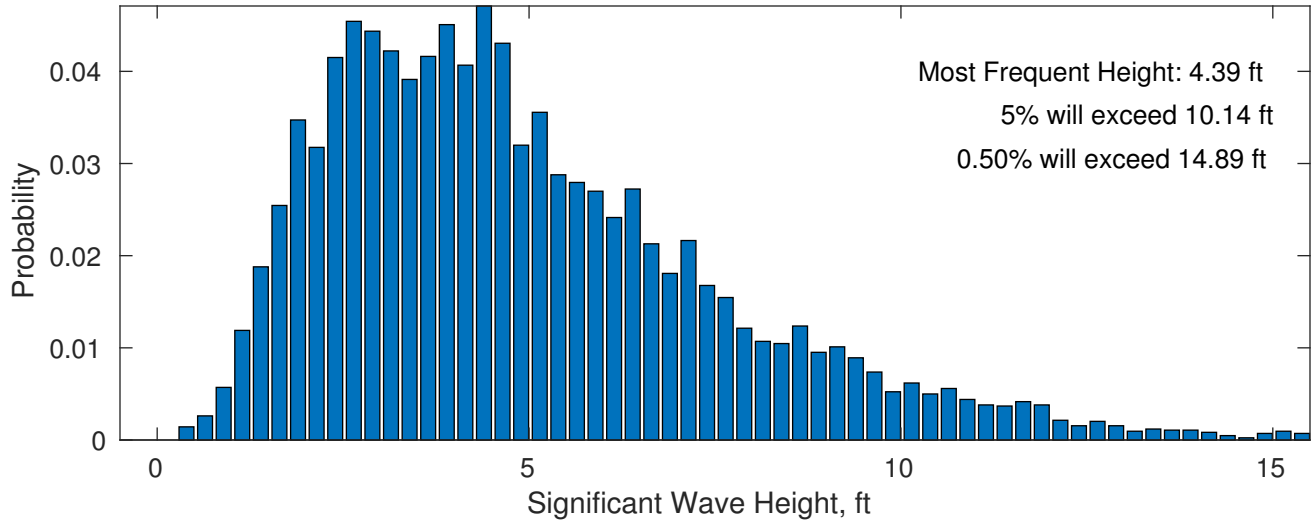
There is a 51 % chance of a storm with waves peaking at 4m (13 ft) or greater.

### OCS A-0501 South April

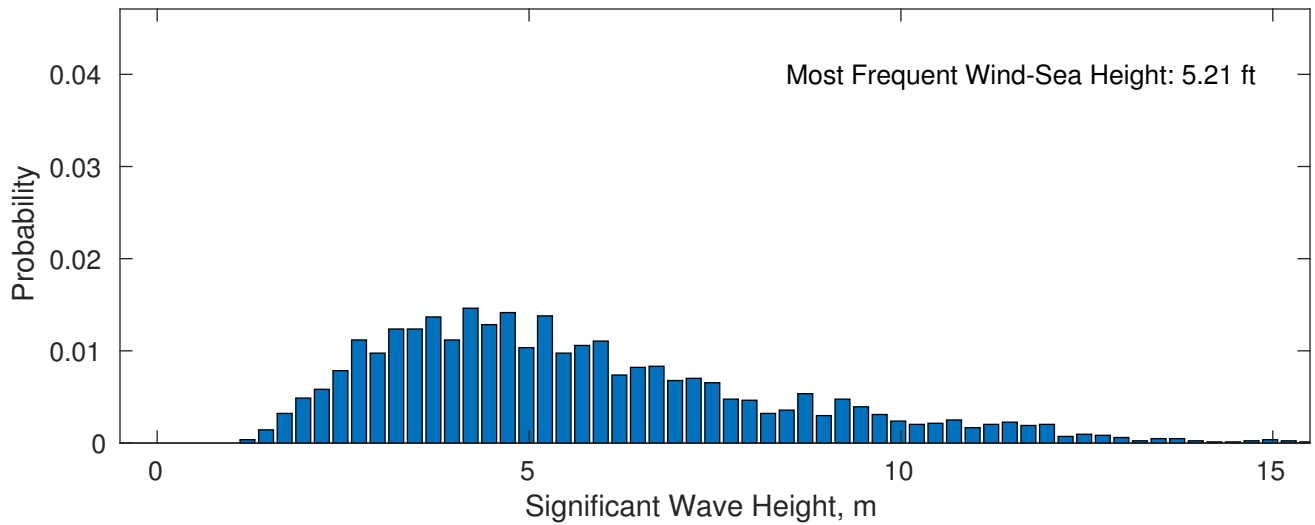




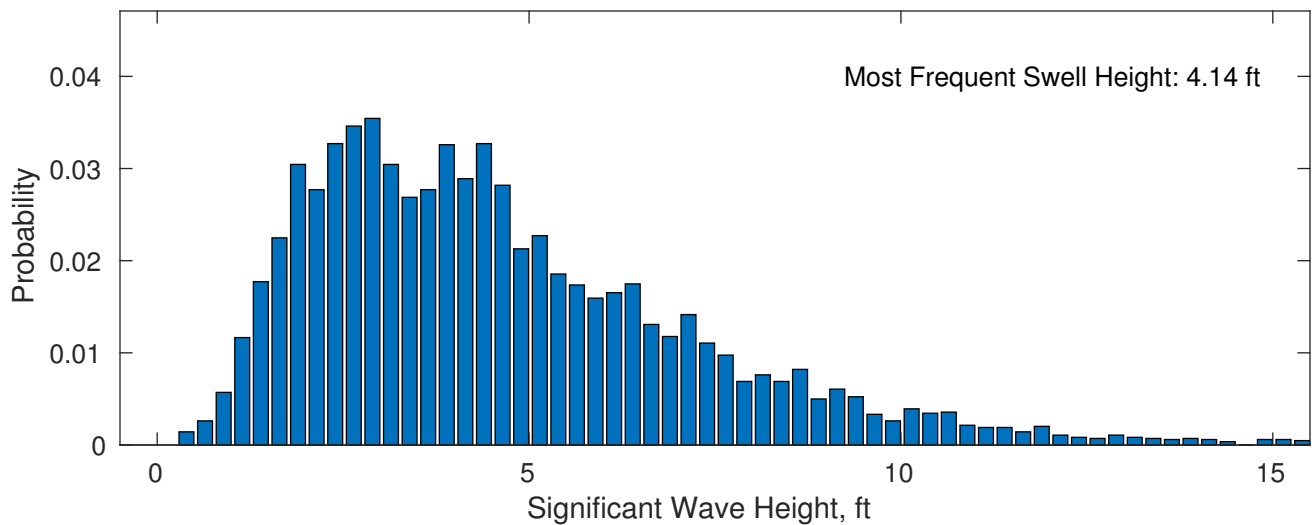
**April Wave Height PDF: 1979 - 2015**



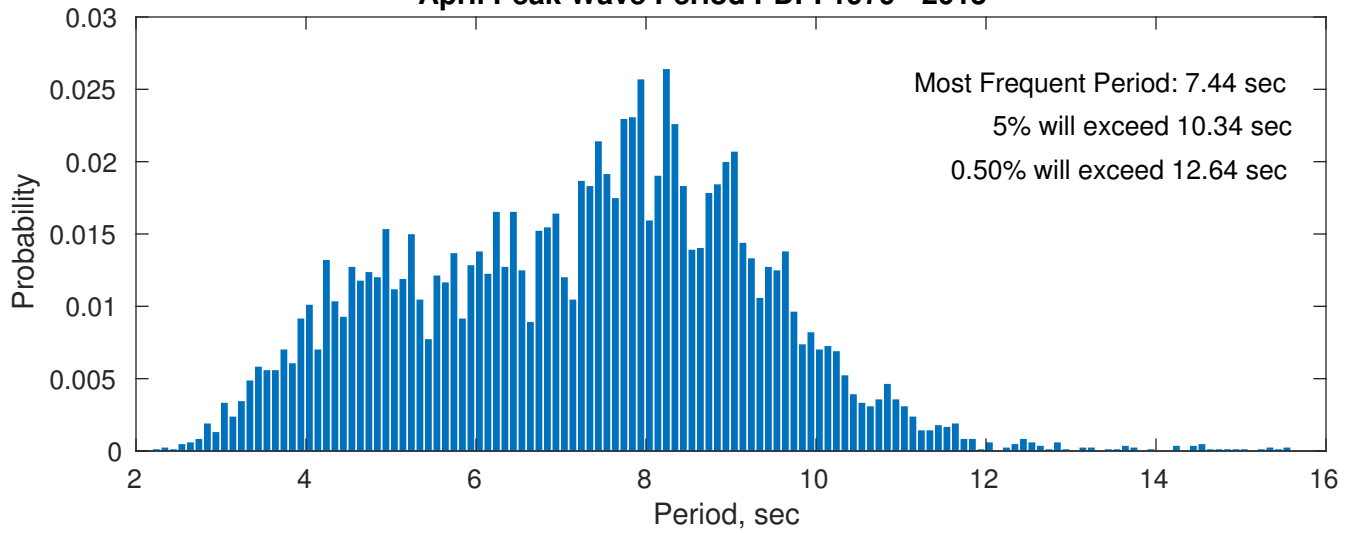
**Wind-Sea: 29.78%**



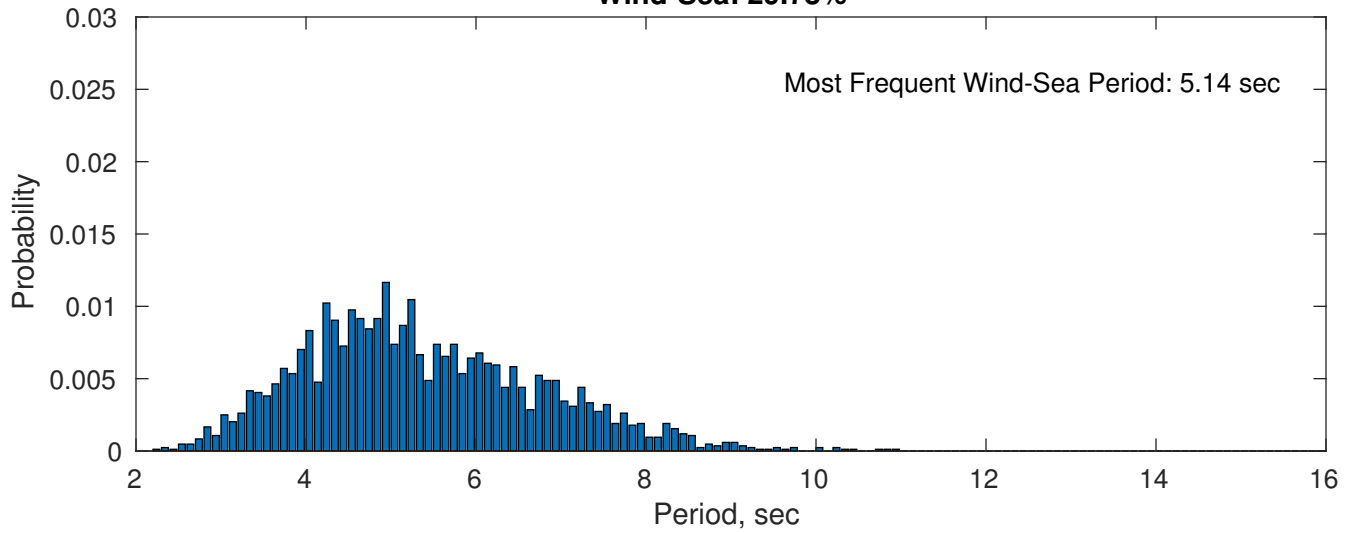
**Swell: 70.22%**



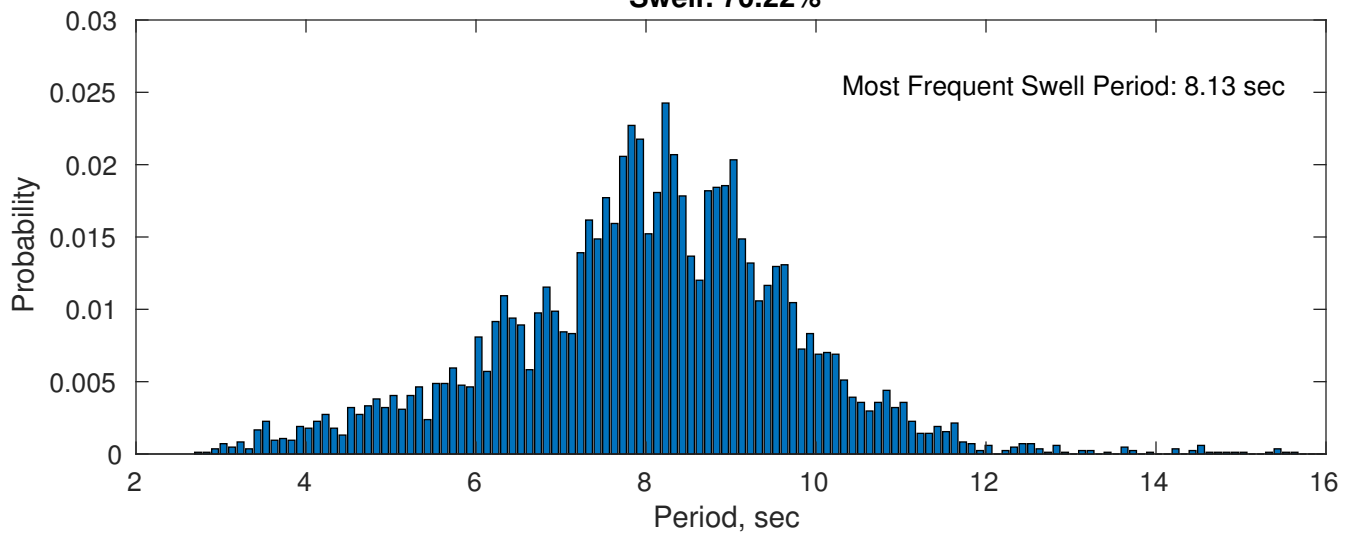
**April Peak Wave Period PDF: 1979 - 2015**



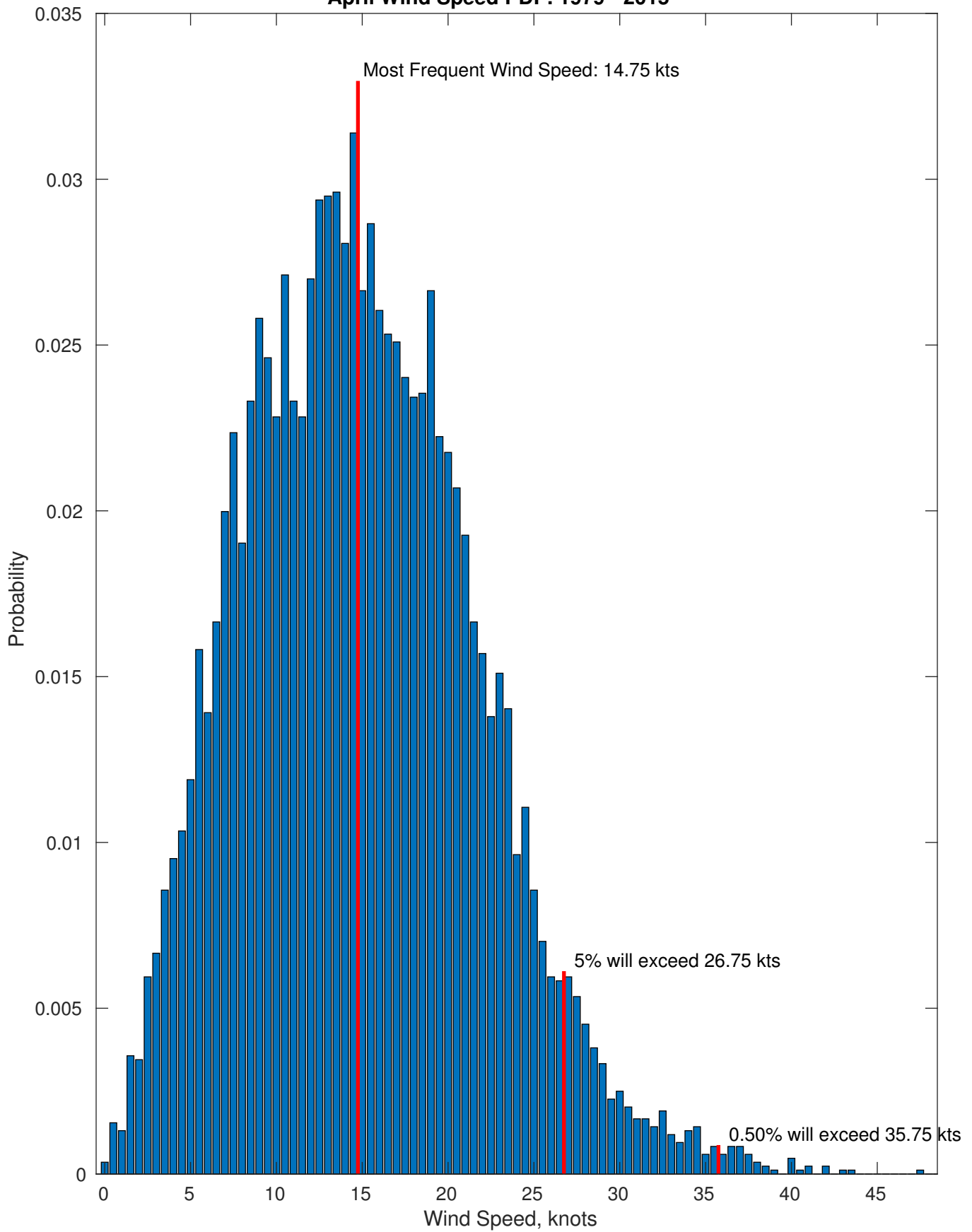
**Wind-Sea: 29.78%**



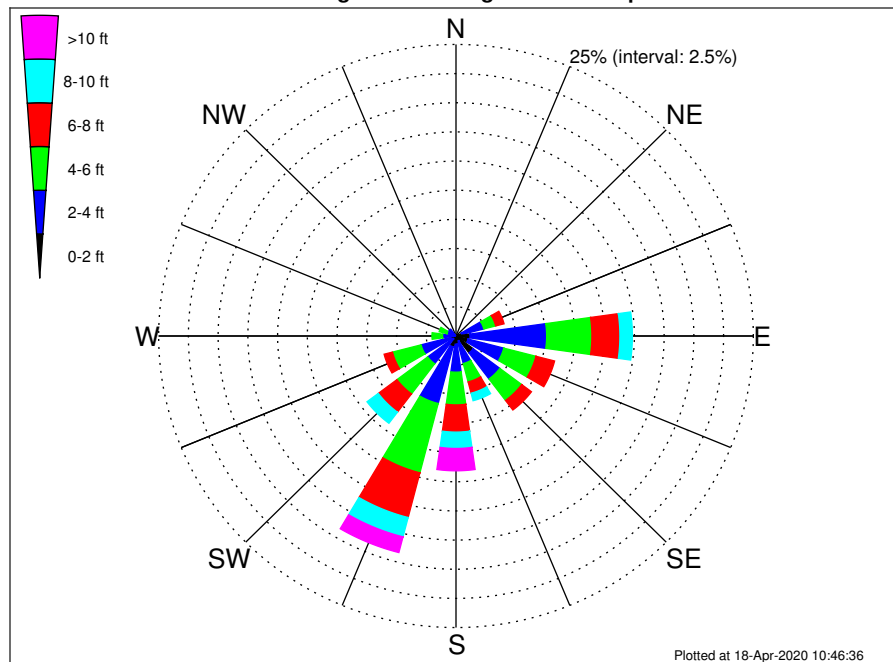
**Swell: 70.22%**



April Wind Speed PDF: 1979 - 2015



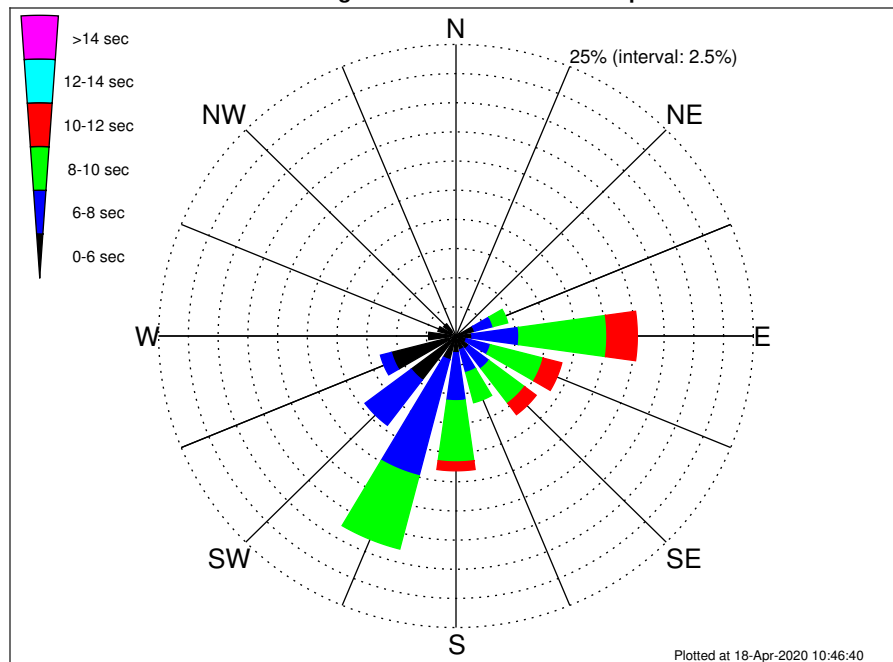
OCS A-0501 South Climatological WaveHeight Rose for April: 1979 - 2015



Joint Frequency Distribution Table

|            | N    | NNE  | NE   | ENE  | E     | ESE  | SE   | SSE  | S     | SSW   | SW   | WSW  | W    | WNW  | NW   | NNW  | Total  |
|------------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|------|------|------|--------|
| calm       | •    | •    | •    | 0.04 | 0.05  | 0.07 | 0.25 | 0.04 | 0.06  | •     | 0.01 | 0.02 | •    | •    | 0.01 | 0.01 | 0.56   |
| 1 - 2 ft   | 0.04 | 0.01 | 0.01 | 0.48 | 1.13  | 0.98 | 1.56 | 0.43 | 0.64  | 0.95  | 0.31 | 0.43 | 0.13 | 0.07 | 0.06 | 0.08 | 7.30   |
| 2 - 4 ft   | 0.25 | 0.14 | 0.36 | 1.90 | 6.45  | 3.10 | 2.81 | 1.97 | 2.40  | 5.03  | 2.66 | 2.58 | 1.00 | 0.71 | 0.67 | 0.56 | 32.60  |
| 4 - 6 ft   | 0.19 | 0.25 | 0.36 | 1.03 | 3.81  | 2.79 | 2.31 | 1.63 | 2.81  | 6.14  | 3.23 | 2.49 | 0.89 | 0.68 | 0.49 | 0.19 | 29.28  |
| 6 - 8 ft   | 0.04 | 0.07 | 0.14 | 0.73 | 2.35  | 1.62 | 1.02 | 1.00 | 2.33  | 3.96  | 1.96 | 0.73 | 0.33 | 0.11 | 0.08 | 0.07 | 16.54  |
| 8 - 10 ft  | 0.04 | 0.01 | 0.07 | 0.24 | 1.05  | 0.58 | 0.62 | 0.67 | 1.40  | 1.71  | 1.19 | 0.21 | 0.06 | •    | •    | 0.02 | 7.87   |
| 10 - 12 ft | 0.01 | 0.02 | 0.01 | 0.08 | 0.37  | 0.18 | 0.20 | 0.31 | 0.99  | 0.88  | 0.42 | 0.11 | 0.14 | 0.06 | 0.01 | 0.01 | 3.81   |
| 12 - 14 ft | •    | 0.02 | •    | 0.07 | 0.05  | 0.06 | 0.06 | 0.13 | 0.54  | 0.36  | 0.05 | •    | 0.02 | •    | •    | •    | 1.36   |
| 14 - 16 ft | •    | •    | •    | •    | •     | •    | 0.01 | 0.10 | 0.21  | 0.15  | •    | •    | •    | •    | •    | •    | 0.48   |
| 16 - 18 ft | •    | •    | •    | •    | •     | •    | 0.01 | •    | 0.08  | •     | •    | •    | •    | •    | •    | •    | 0.10   |
| > 18 ft    | •    | •    | •    | •    | •     | •    | 0.01 | 0.01 | 0.10  | •     | •    | •    | •    | •    | •    | •    | 0.12   |
| Total      | 0.56 | 0.54 | 0.95 | 4.57 | 15.25 | 9.38 | 8.86 | 6.28 | 11.56 | 19.18 | 9.83 | 6.56 | 2.58 | 1.63 | 1.32 | 0.95 | 100.00 |

OCS A-0501 South Climatological WavePeriod Rose for April: 1979 - 2015

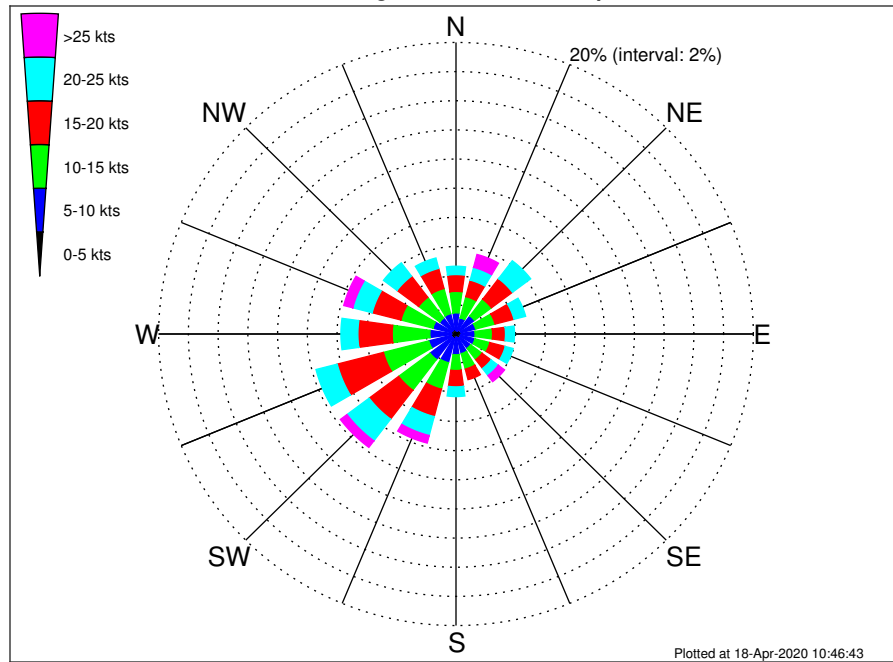


Joint Frequency Distribution Table

|             | N    | NNE  | NE   | ENE  | E     | ESE  | SE   | SSE  | S     | SSW   | SW   | WSW  | W    | WNW  | NW   | NNW  | Total  |
|-------------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|------|------|------|--------|
| calm        | •    | •    | •    | •    | •     | •    | •    | •    | •     | •     | •    | •    | •    | •    | •    | •    | •      |
| 1 - 2 sec   | •    | •    | •    | •    | •     | •    | •    | •    | •     | •     | •    | •    | •    | •    | •    | •    | •      |
| 2 - 4 sec   | 0.27 | 0.13 | 0.31 | 0.33 | 0.13  | 0.24 | 0.33 | 0.42 | 0.25  | 0.20  | 0.30 | 0.64 | 0.48 | 0.43 | 0.51 | 0.62 | 5.59   |
| 4 - 6 sec   | 0.27 | 0.36 | 0.56 | 1.27 | 1.21  | 0.67 | 1.01 | 0.80 | 1.19  | 1.89  | 4.42 | 4.97 | 1.83 | 1.14 | 0.80 | 0.32 | 22.71  |
| 6 - 8 sec   | 0.01 | 0.05 | 0.08 | 1.62 | 3.95  | 2.09 | 2.14 | 2.02 | 4.11  | 10.29 | 4.86 | 0.95 | 0.27 | 0.06 | 0.01 | 0.01 | 32.54  |
| 8 - 10 sec  | •    | •    | •    | 1.27 | 7.40  | 4.58 | 3.73 | 2.68 | 5.24  | 6.49  | 0.25 | •    | •    | •    | •    | •    | 31.64  |
| 10 - 12 sec | •    | •    | •    | 0.07 | 2.56  | 1.62 | 1.22 | 0.17 | 0.76  | 0.31  | •    | •    | •    | •    | •    | •    | 6.71   |
| 12 - 14 sec | •    | •    | •    | •    | •     | 0.19 | 0.33 | •    | •     | •     | •    | •    | •    | •    | •    | •    | 0.52   |
| 14 - 16 sec | •    | •    | •    | •    | •     | •    | 0.08 | 0.18 | •     | •     | •    | •    | •    | •    | •    | •    | 0.26   |
| 18 - 20 sec | •    | •    | •    | •    | •     | •    | •    | 0.02 | •     | •     | •    | •    | •    | •    | •    | •    | 0.02   |
| 22 - 24 sec | •    | •    | •    | •    | •     | •    | •    | •    | •     | •     | •    | •    | •    | •    | •    | •    | •      |
| Total       | 0.56 | 0.54 | 0.95 | 4.57 | 15.25 | 9.38 | 8.86 | 6.28 | 11.56 | 19.18 | 9.83 | 6.56 | 2.58 | 1.63 | 1.32 | 0.95 | 100.00 |



OCS A-0501 South Climatological Wind Rose for April: 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 | •    | 0.05 | 0.01 | •     | 0.02 | •    | •    | 0.02 | 0.19   |
| 0 - 5 kts   | 0.25 | 0.21 | 0.36 | 0.33 | 0.36 | 0.31 | 0.37 | 0.29 | 0.23 | 0.32 | 0.32 | 0.34  | 0.27 | 0.36 | 0.30 | 0.32 | 4.94   |
| 5 - 10 kts  | 1.18 | 0.92 | 1.19 | 1.02 | 0.92 | 1.01 | 0.87 | 1.09 | 1.20 | 1.66 | 1.86 | 1.55  | 1.46 | 1.25 | 1.07 | 1.09 | 19.34  |
| 10 - 15 kts | 1.47 | 1.51 | 1.43 | 1.34 | 1.18 | 1.03 | 0.96 | 1.09 | 1.08 | 1.88 | 2.64 | 3.15  | 2.53 | 2.22 | 1.78 | 1.78 | 27.10  |
| 15 - 20 kts | 1.15 | 1.17 | 1.77 | 1.32 | 0.87 | 1.07 | 0.76 | 0.75 | 1.12 | 1.94 | 2.49 | 3.21  | 2.31 | 2.00 | 1.82 | 1.43 | 25.16  |
| 20 - 25 kts | 0.57 | 0.90 | 1.53 | 0.81 | 0.61 | 0.55 | 0.61 | 0.48 | 0.67 | 1.34 | 1.87 | 1.47  | 1.14 | 1.34 | 1.14 | 0.74 | 15.77  |
| 25 - 30 kts | 0.27 | 0.57 | 0.31 | 0.25 | 0.17 | 0.36 | 0.31 | 0.29 | 0.34 | 0.42 | 0.51 | 0.27  | 0.24 | 0.42 | 0.27 | 0.26 | 5.26   |
| 30 - 35 kts | 0.10 | 0.25 | 0.13 | 0.17 | 0.02 | 0.12 | 0.12 | 0.10 | 0.05 | 0.11 | 0.05 | 0.04  | 0.10 | 0.13 | 0.07 | 0.07 | 1.61   |
| 35 - 40 kts | 0.02 | 0.05 | 0.01 | 0.01 | •    | 0.02 | 0.08 | 0.02 | 0.01 | 0.01 | •    | •     | 0.04 | 0.08 | 0.12 | 0.01 | 0.50   |
| 40 - 45 kts | 0.05 | 0.05 | •    | 0.01 | •    | •    | 0.01 | •    | •    | •    | •    | •     | •    | •    | 0.01 | •    | 0.13   |
| 45 - 50 kts | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    | •     | •    | •    | •    | 0.01 | 0.01   |
| Total       | 5.09 | 5.64 | 6.74 | 5.28 | 4.13 | 4.47 | 4.09 | 4.11 | 4.70 | 7.73 | 9.74 | 10.04 | 8.11 | 7.80 | 6.59 | 5.74 | 100.00 |