

Frequency of Astoria's Wind DIRECTION¹, based on Weather Conditions

Using this chart: Each direction totals ~100%. Within that direction are the frequencies (%) of weather (- indicates less than 1%).

Example: In January, when wind is from the south (S), it rains 28% of the time, but has no weather occurring 62% of time.

| | | Calm | VRB | N 349° to 11° | NNE 11° to 34° | NE 34° to 56° | ENE 56° to 79° | E 79° to 101° | ESE 101° - 124° | SE 124° - 146° | SSE 146° - 169° | S 169° - 191° | SSW 191° - 214° | SW 214° - 236° | WSW 236° - 259° | W 259° - 281° | WNW 281° - 304° | NW 304° - 326° | NNW 326° - 349° |
|--------------------------------------|------|------|-----|---------------------|----------------------|---------------------|----------------------|---------------------|-----------------------|----------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|
| J A N U A R Y | RA | 32 | 44 | 9 | 13 | 13 | 13 | 16 | 15 | 14 | 17 | 28 | 26 | 23 | 19 | 14 | 12 | 15 | 31 |
| | RW | 4 | 6 | 3 | 5 | 4 | 3 | 3 | 4 | 5 | 3 | 4 | 7 | 8 | 8 | 8 | 12 | 10 | 10 |
| | DZ | 5 | 3 | 3 | 6 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 5 | 2 | 1 | 3 |
| | FZRA | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.4 | 0.4 | 0.4 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SN | 2 | 0.3 | 1 | 0 | 2 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 2 |
| | TS | 0 | 0.3 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0 |
| | FG | 26 | 22 | 13 | 20 | 12 | 10 | 11 | 9 | 10 | 8 | 14 | 17 | 18 | 17 | 12 | 10 | 6 | 14 |
| | MIFG | 4 | - | 0 | 1 | 0 | - | 1 | 1 | 2 | 1 | - | - | - | - | - | - | 0 | 1 |
| | None | 48 | 44 | 78 | 70 | 77 | 75 | 72 | 73 | 73 | 73 | 62 | 58 | 61 | 61 | 67 | 68 | 72 | 54 |
| F E B R U A R Y | RA | 24 | 42 | 7 | 4 | 6 | 15 | 13 | 14 | 15 | 16 | 27 | 29 | 19 | 17 | 10 | 12 | 11 | 30 |
| | RW | 6 | 10 | 4 | 2 | 3 | 2 | 4 | 5 | 6 | 6 | 6 | 8 | 7 | 7 | 11 | 11 | 8 | 7 |
| | DZ | 5 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 5 | 2 | 2 | 3 | 1 | 2 |
| | FZRA | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.1 | 0 | 0.2 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SN | 0.4 | 0.3 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | - | 1 | 1 | 1 | 1 | 1 |
| | TS | 0 | 0.3 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0 | 0 | 0.2 |
| | FG | 23 | 20 | 9 | 9 | 5 | 7 | 9 | 7 | 8 | 8 | 12 | 15 | 18 | 11 | 10 | 9 | 7 | 11 |
| | MIFG | 5 | 0 | 2 | - | 1 | - | 1 | 2 | 2 | 1 | - | 1 | - | 1 | 1 | 1 | 1 | - |
| | None | 55 | 45 | 81 | 85 | 86 | 78 | 76 | 74 | 72 | 73 | 62 | 57 | 64 | 69 | 72 | 69 | 75 | 58 |
| M A R C H | RA | 21 | 35 | 3 | 5 | 7 | 10 | 14 | 17 | 17 | 17 | 28 | 24 | 16 | 11 | 10 | 14 | 11 | 25 |
| | RW | 6 | 13 | 2 | 3 | 4 | 3 | 3 | 5 | 6 | 8 | 10 | 12 | 11 | 10 | 10 | 10 | 8 | 8 |
| | DZ | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | - |
| | SN | 0.5 | 0.5 | 0 | - | - | 1 | 2 | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 0 |
| | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0.2 | 0.1 | 0 | 0.1 | 0 | 0 | 0 |
| | FG | 14 | 14 | 5 | 6 | 6 | 8 | 7 | 8 | 6 | 6 | 12 | 13 | 13 | 8 | 8 | 8 | 5 | 9 |
| | MIFG | 1 | 0 | 0 | 0 | - | 1 | 1 | 1 | 2 | 2 | - | - | - | 1 | - | - | - | 0 |
| | None | 65 | 50 | 91 | 87 | 85 | 83 | 74 | 71 | 72 | 70 | 57 | 58 | 64 | 73 | 72 | 71 | 76 | 65 |
| A P R I L | RA | 19 | 36 | 5 | 4 | 6 | 8 | 11 | 16 | 11 | 17 | 26 | 27 | 13 | 12 | 8 | 8 | 6 | 14 |
| | RW | 5 | 10 | 2 | 3 | 3 | 2 | 5 | 4 | 6 | 7 | 6 | 8 | 9 | 8 | 8 | 10 | 6 | 6 |
| | DZ | 3 | 1 | 1 | 1 | - | 2 | 2 | 1 | 1 | - | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 1 |
| | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.2 | 0.1 | 0 | 0.1 | 0 | 0 | 0.5 |
| | FG | 13 | 13 | 3 | 7 | 7 | 5 | 9 | 5 | 7 | 5 | 11 | 17 | 10 | 9 | 7 | 4 | 4 | 6 |
| | MIFG | 2 | 0 | - | 0 | 0 | - | 2 | 4 | 5 | 1 | - | - | - | - | - | - | - | - |
| | None | 67 | 53 | 90 | 87 | 86 | 85 | 77 | 73 | 73 | 73 | 64 | 59 | 72 | 75 | 78 | 79 | 85 | 77 |
| M A Y | RA | 12 | 24 | 2 | 5 | 5 | 8 | 9 | 11 | 10 | 12 | 14 | 14 | 8 | 6 | 4 | 4 | 4 | 9 |
| | RW | 5 | 7 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 5 | 11 | 10 | 7 | 6 | 5 | 8 | 4 | 5 |
| | DZ | 2 | 4 | 1 | 1 | 1 | 0 | 3 | 1 | 2 | 2 | 2 | 3 | 4 | 2 | 2 | 3 | 1 | 2 |
| | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0.2 | 0 | 0.1 | 0.3 | 0 | 0.1 | 0.1 | 0 | 0 |
| | FG | 10 | 14 | 3 | 1 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 8 | 7 | 5 | 3 | 3 | 3 | 5 |
| | MIFG | 2 | 0 | 0 | 0 | 0 | 0 | - | 2 | 3 | 1 | - | - | 0 | 1 | - | - | - | 0 |
| | None | 75 | 65 | 94 | 93 | 89 | 89 | 82 | 80 | 78 | 79 | 71 | 71 | 79 | 83 | 87 | 85 | 90 | 83 |
| J U N E | RA | 13 | 18 | 2 | 1 | 8 | 3 | 15 | 13 | 7 | 12 | 18 | 17 | 9 | 9 | 4 | 4 | 3 | 6 |
| | RW | 3 | 5 | 2 | 3 | 1 | 0 | 2 | 5 | 6 | 6 | 9 | 12 | 9 | 6 | 5 | 4 | 3 | 3 |
| | DZ | 5 | 4 | 3 | 0 | 1 | 1 | 2 | 3 | 1 | 3 | 3 | 5 | 7 | 4 | 4 | 3 | 2 | 4 |
| | TS | 0 | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.2 | 0.2 | 0 | 0 | 0 | 0 | 0 |
| | FG | 12 | 9 | 3 | 4 | 4 | 3 | 9 | 8 | 4 | 6 | 13 | 11 | 11 | 8 | 5 | 5 | 3 | 6 |
| | MIFG | 1 | 0.4 | 0 | 0 | 0 | 0 | 3 | 4 | 4 | 3 | 0 | 0 | - | - | - | - | - | 0 |
| | None | 73 | 70 | 92 | 93 | 88 | 95 | 74 | 74 | 80 | 74 | 67 | 63 | 71 | 78 | 85 | 87 | 90 | 87 |

Example: In December, best threat of freezing rain occurs with a south (S) wind (freezing rain/drizzle occurs 0.5% of time when wind is southerly. In fact, the threat of freezing rain is only when winds are east to south to southwest.

| | | Calm | VRB | N 349° to 11° | NNE 11° to 34° | NE 34° to 56° | ENE 56° to 79° | E 79° to 101° | ESE 101° - 124° | SE 124° - 146° | SSE 146° - 169° | S 169° - 191° | SSW 191° - 214° | SW 214° - 236° | WSW 236° - 259° | W 259° - 281° | WNW 281° - 304° | NW 304° - 326° | NNW 326° - 349° |
|---|------|------|-----|---------------------|----------------------|---------------------|----------------------|---------------------|-----------------------|----------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|
| J U L Y | RA | 7 | 10 | 0 | 2 | 0 | 6 | 9 | 5 | 3 | 7 | 10 | 12 | 5 | 3 | 2 | 1 | 1 | 2 |
| | RW | 3 | 6 | 1 | 2 | 0 | 2 | 3 | 1 | 3 | 4 | 7 | 8 | 4 | 4 | 3 | 1 | 1 | 2 |
| | DZ | 6 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 5 | 10 | 9 | 5 | 6 | 5 | 3 | 4 |
| | TS | 0.1 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | 0 | 0.1 | 0 | 0.1 | 0.1 | 0 | 0 | 0.2 |
| | FG | 14 | 16 | 2 | 1 | 3 | 6 | 8 | 4 | 4 | 4 | 10 | 17 | 13 | 8 | 8 | 4 | 2 | 3 |
| | MIFG | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 5 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | None | 77 | 70 | 94 | 95 | 97 | 90 | 84 | 89 | 84 | 83 | 72 | 65 | 77 | 84 | 85 | 90 | 95 | 91 |
| A U G U S T | RA | 5 | 7 | 0 | 0 | 0 | 5 | 11 | 9 | 4 | 5 | 6 | 9 | 4 | 3 | 3 | 2 | 1 | 3 |
| | RW | 3 | 4 | 1 | 0 | 2 | 0 | 3 | 4 | 4 | 3 | 7 | 5 | 4 | 3 | 2 | 1 | 1 | 1 |
| | DZ | 5 | 8 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 5 | 9 | 8 | 6 | 5 | 4 | 3 | 4 |
| | TS | 0.1 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.2 | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 | 0 |
| | FG | 21 | 16 | 1 | 2 | 4 | 5 | 7 | 11 | 9 | 6 | 16 | 16 | 17 | 13 | 12 | 10 | 4 | 6 |
| | MIFG | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | None | 70 | 73 | 97 | 98 | 94 | 91 | 79 | 74 | 78 | 82 | 72 | 70 | 75 | 81 | 83 | 86 | 92 | 90 |
| S E P T E M B E R | RA | 7 | 13 | 1 | 0 | 1 | 4 | 5 | 7 | 4 | 6 | 14 | 13 | 6 | 3 | 2 | 3 | 2 | 5 |
| | RW | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 3 | 5 | 6 | 4 | 3 | 2 | 2 | 2 | 4 |
| | DZ | 3 | 3 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 3 |
| | TS | 0.3 | 0.4 | 0.5 | 0 | 0 | 0.3 | 0.2 | 0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0 | 0 | 0.1 | 0.1 |
| | FG | 18 | 18 | 3 | 3 | 3 | 4 | 6 | 9 | 7 | 10 | 13 | 12 | 16 | 13 | 12 | 9 | 7 | 8 |
| | MIFG | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 8 | 4 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| | None | 70 | 70 | 94 | 95 | 95 | 92 | 88 | 82 | 79 | 79 | 70 | 73 | 75 | 80 | 84 | 86 | 87 | 82 |
| O C T O B E R | RA | 13 | 30 | 1 | 1 | 3 | 5 | 7 | 11 | 9 | 10 | 17 | 22 | 13 | 5 | 5 | 6 | 7 | 16 |
| | RW | 4 | 8 | 2 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 8 | 8 | 6 | 4 | 5 | 5 | 4 | 5 |
| | DZ | 5 | 6 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 |
| | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.4 | 0.2 | 0 | 0 |
| | FG | 18 | 22 | 5 | 6 | 3 | 5 | 9 | 10 | 9 | 13 | 14 | 20 | 18 | 15 | 13 | 16 | 11 | 14 |
| | MIFG | 5 | 0 | 1 | 0 | 1 | 1 | 1 | 2 | 6 | 4 | 1 | 1 | 2 | 3 | 1 | 1 | 0 | 0 |
| | None | 64 | 53 | 90 | 91 | 94 | 89 | 84 | 77 | 74 | 71 | 65 | 58 | 67 | 73 | 76 | 72 | 80 | 70 |
| N O V E M B E R | RA | 23 | 42 | 9 | 9 | 7 | 10 | 12 | 17 | 13 | 17 | 23 | 28 | 21 | 15 | 16 | 16 | 20 | 33 |
| | RW | 5 | 5 | 3 | 5 | 1 | 2 | 3 | 3 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 11 | 9 | 9 |
| | DZ | 3 | 0 | 1 | 0 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 0 |
| | FZRA | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SN | 0 | 0 | 0 | 0 | - | 1 | - | 1 | 1 | - | - | - | - | - | - | 1 | 1 | - |
| | TS | 0.3 | 0.2 | 0.6 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0.1 | 0.5 | 0.1 | 0 | 0.3 | 0.1 | 0 | 0.4 |
| | FG | 24 | 18 | 7 | 11 | 10 | 9 | 9 | 9 | 8 | 9 | 13 | 17 | 18 | 14 | 12 | 9 | 8 | 12 |
| | MIFG | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| | None | 54 | 51 | 83 | 82 | 84 | 81 | 78 | 73 | 75 | 70 | 63 | 57 | 62 | 67 | 69 | 66 | 66 | 56 |
| D E C E M B E R | RA | 25 | 44 | 12 | 14 | 13 | 11 | 13 | 15 | 15 | 18 | 23 | 29 | 24 | 16 | 14 | 15 | 20 | 29 |
| | RW | 4 | 10 | 4 | 6 | 5 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 8 | 11 | 12 | 11 | 11 |
| | DZ | 4 | 2 | 9 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 2 | 1 | 1 | 1 | 3 |
| | FZRA | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | 0.2 | 0.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.2 | 0 | 0 | 0 |
| | SN | 0.2 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | TS | 0.1 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0.2 | 0.2 | 0.5 | 0.3 | 0 | 0.3 |
| | FG | 26 | 22 | 20 | 19 | 16 | 11 | 11 | 11 | 10 | 11 | 14 | 20 | 18 | 12 | 10 | 10 | 10 | 16 |
| | MIFG | 6 | 0 | 1 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| | None | 54 | 43 | 69 | 71 | 73 | 79 | 76 | 74 | 70 | 69 | 63 | 58 | 60 | 68 | 67 | 66 | 64 | 54 |

¹VRB is variable (less than 3 mph). A - is near zero. Based on 1948-1995 observational data.

Numbers total may not equal 100%, as not all weather was included (such as blowing snow, hail, dust, smoke and haze).