How to read a wind rose

The wind rose located in the top right corner of each data map shows the general wind direction and speed for each sampling period. The circular format of the wind rose shows the direction the winds blew from and the length of each "spoke" around the circle shows how often the wind blew from that direction. For example, the wind rose above shows that during this particular sampling period the wind blew from the west 30% of the time, and from the north and the northeast 12% of the time, etc.

The different colors of each spoke provide details on the speed, in knots (1 knot=1.15 mph), of the wind from each direction. Using the example above, the longest spoke shows the wind blew from the west at speeds between 1-4 knots (light blue) about 4% of the time, 4-7 knots (dark green) about 18% of the time and 7-11 knots (dark blue) about 7% of the time.

The source of the data in the example is from an EPA meteorological monitor located on the roof of the EPA Willowbrook Warehouse.