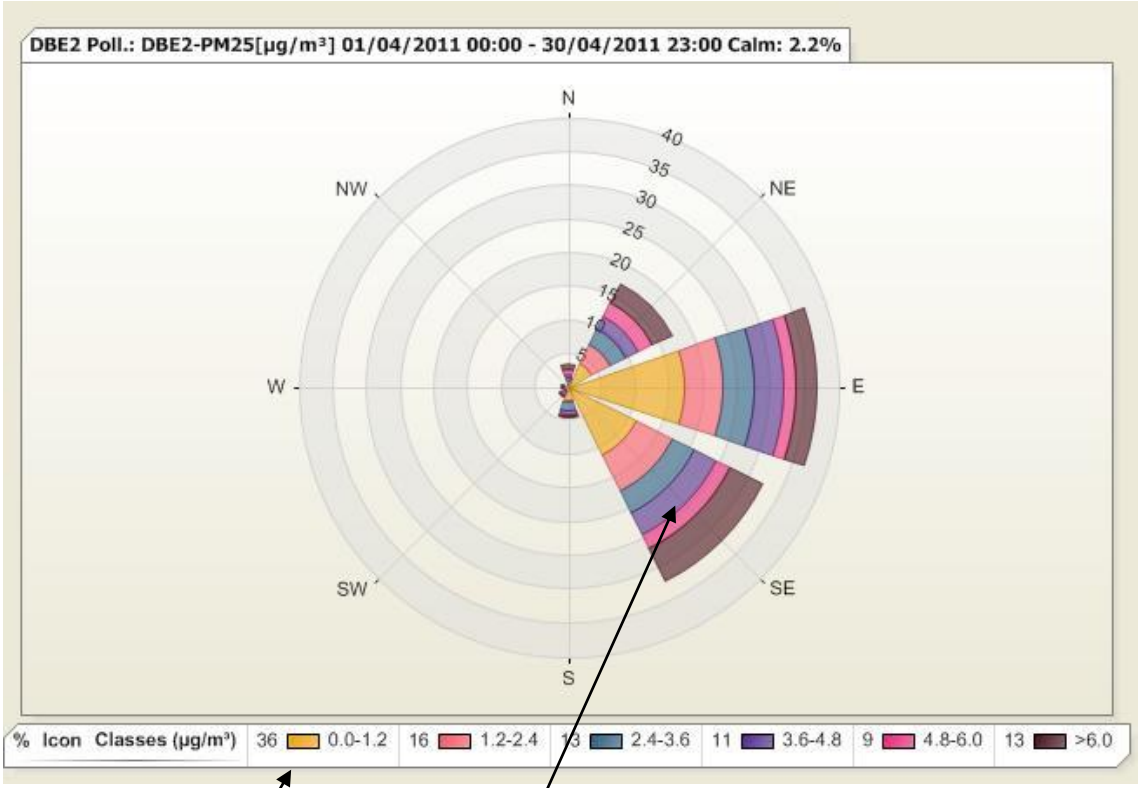
Explanation of pollution wind rose used in quarterly reports



The pollution rose is basically another means of illustrating the frequency distribution of wind direction temporally correlated with a chosen pollutant.

In the example above for $PM_{2.5}$ the pollution rose can be explained as follows:

Legend: 36% of the total readings for the month lie between 0.0 and 1.2 μgm^{-3} (note that negative readings are treated as zero)

16% of the total readings for the month lie between 1.2 and 2.4 μgm^{-3} and so on.

Taking the SE quadrant …..

Approx 12% of (of the monthly total of 36%) winds from the south east are between 0 and 1.2 μgm^{-3}

Approx 7% of (of the monthly total of 16%) winds from the south east are between 1.2 and 2.4 μgm^{-3}

Approx 4% of (of the monthly total of 13%) winds from the south east are between 2.4 and 3.6 μgm^{-3}

Approx 4% of (of the monthly total of 11%) winds from the south east are between 3.6 and 4.8 μgm^{-3}

Approx 2% of (of the monthly total of 9%) winds from the south east are between 4.8 and 6.0 μgm^{-3}

Approx 5% of (of the monthly total of 13%) winds from the south east are <6.0 μgm^{-3}

At first glance it can be seen that the majority of $PM_{2.5}$ is coming from the east and south east directions and distributed according to the concentration colour sectors.