Air Quality in the UK

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1 Introduction and observations

In this brief document, we will try to analyse the graph in the figure 1 that presents the air quality changes from 2015 to 2020.

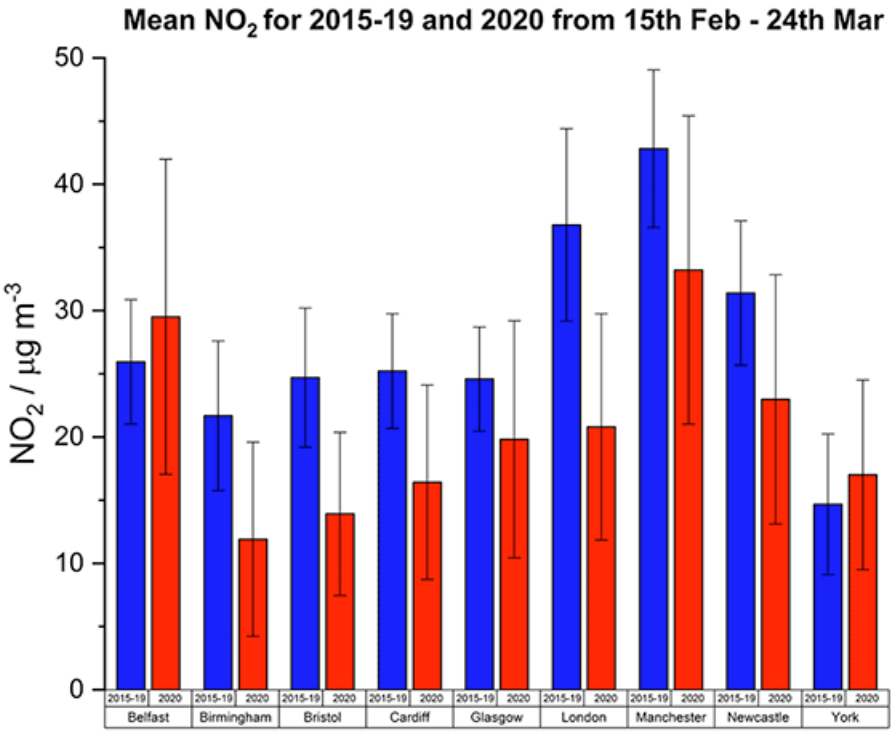

Figure 1: Air quality in the UK

The title contains important informations about the data presented in the graph. Firstly, the graph contains measurements of NO_2, we can see that the

measurements are the mean concentrations of NO_2 presented in $\mu g/m^3$, and these values are between 0 $\mu g/m^3$ and 50 $\mu g/m^3$. In addition to that, the graph is a comparaison between the period of 2015-2019 and 15th feb-24th March.

Moreover, the labels at the bottom of the graph represents different cities in the UK, the commun thing between them is that they are all big cities.

Finaly, the graph is an histogram that uses two colors "Blue" and "Red" to represent the measurements of NO_2 of the two periods mentionned earlier.

2 Analysis and interpretations

Why NO_2 ? NO_2 is one of the most air pollutant nowadays, and it is mostly generated by cars and vehicles and industrial activities. So measuring thids gaz can give an idea about the rate of industrial activities and traffic in a location.

Interpretation We can observe that the concentration of NO_2 has decreased in the year 2020 in comparaison to previous years. This can be interpreted in different ways, for example this can be explained by supposing that the UK made a plan in the year 2020 to decrease pollution by different means such as encouraging people to use public transportation instead of their own vehicles and imposing more laws to industries in order to decrease activities that cause more pollution.

However, the choice of the period 15th feb to 24th March of 2020 was not arbitrary. This period corresponds to the period of the lockdown in the UK because of the pandemic of covid19. During this lockdown, most of industrial activities was shut down and people spent most of their time at home, which led to a decrease of air pollution, particularly the gaz NO_2.

We can observe the opposite in two cities (Belfast and York), and this can be interpreted by the fact that some activities disdn't stop during the lockdown but they increased to provide the population with necessity goods like food, clothes, masks (yeah I think that they became necessity goods this year !!).