

COURSEWORK 1

GROUP: 5

Part II: Group Task – Data Set and Basic Statistics

Write something here.

Identifying a Data Set

We build a Github Repository and upload the data set, it is public to check from this link: [The Data Set](#). And the data source is from the UK AIR Air Information Resource, it can be check with some steps from this link: [The Data Source](#).

Background on the importance of pollutant and legislation on thresholds

Nitrogen Dioxide (NO_2) is one of a group of highly reactive gases known as oxides of nitrogen or nitrogen oxides (NO_x). Other nitrogen oxides include nitrous acid and nitric acid. NO_2 is used as the indicator for the larger group of nitrogen oxides. NO_2 primarily gets in the air from the burning of fuel. NO_2 forms from emissions from cars, trucks and buses, power plants, and off-road equipment.

Health effects of NO_2 : Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2 . NO_2 along with other NO_x reacts with other chemicals in the air to form both particulate matter and ozone. Both of these are also harmful when inhaled due to effects on the respiratory system. Learn more about Particulate Matter and Ozone.

Basic statistics on the data set

The figures of 12 months average during this year are showed below as Figure 1:

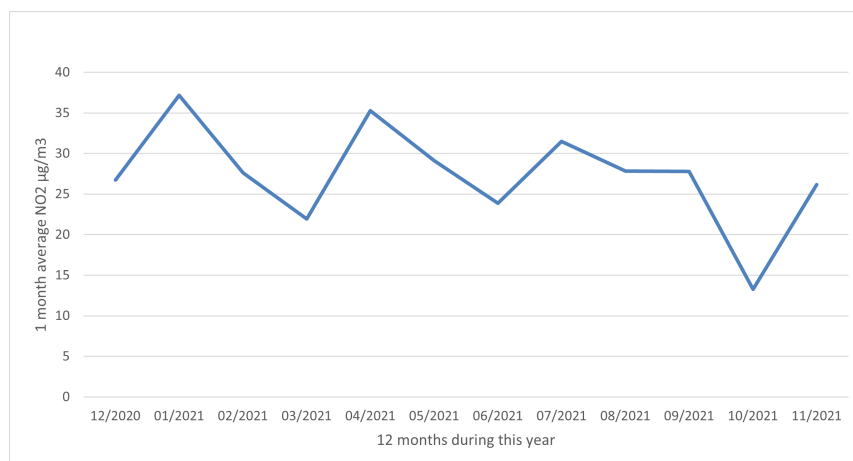


Figure 1: 12 months average during this year

The figures of 4 season 15th comparison are showed below as Figure 2:

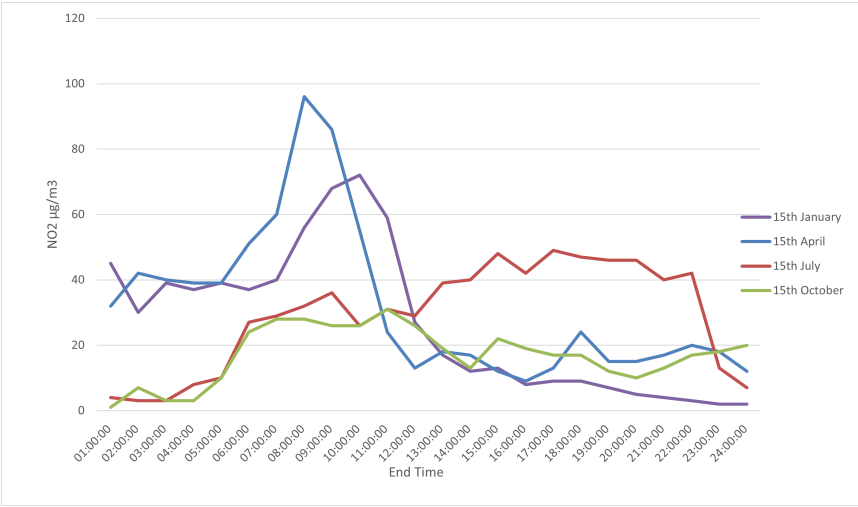


Figure 2: 4 season 15th comparison