

This "Air Quality" dataset contains information about hourly air quality measurements in a city in Italy. The data includes attributes such as date and time of measurement, concentrations of various air pollutants, temperature, relative humidity, and absolute humidity.

Attribute	Description	Data Type
Date	Date of measurement	String
Time	Time of measurement	String
CO(GT)	Carbon Monoxide concentration	Continuous numerical
PT08.S1(CO)	Pt08.S1 monitoring, hourly based CO concentration	Continuous numerical
NMHC(GT)	Non-Methane Hydrocarbon concentration	Continuous numerical
C6H6(GT)	Benzene concentration	Continuous numerical
PT08.S2(NMHC)	Pt08.S2 monitoring, hourly based Non-Methane Hydrocarbon concentration	Continuous numerical
NOx(GT)	Nitrogen Oxide concentration	Continuous numerical
PT08.S3(NOx)	Pt08.S3 monitoring, hourly based Nitrogen Oxide concentration	Continuous numerical
NO2(GT)	Nitrogen Dioxide concentration	Continuous numerical
PT08.S4(NO2)	Pt08.S4 monitoring, hourly based Nitrogen Dioxide concentration	Continuous numerical
PT08.S5(O3)	Pt08.S5 monitoring, hourly based ozone concentration	Continuous numerical
T	Temperature	Continuous numerical
RH	Relative Humidity	Continuous numerical
AH	Absolute Humidity	Continuous numerical

The beneficiaries of this data include environmental agencies, city planners, health organizations, businesses, and researchers. The analysis of this data can help answer research questions related to the overall air quality in the city, common pollutants present, the relationship between environmental factors and air quality, the ability to predict air quality, the cause of high levels of certain pollutants and the sources of air pollution.

Expected outcomes of this analysis include descriptive statistics, visualizations, predictive models, and recommendations for reducing air pollution and improving air quality.

However, the data has limitations such as being limited to a specific city in Italy, a specific time period, and possibly missing important variables that could impact the results of the analysis. Assumptions made include that the data is representative and accurate, the environmental factors are relevant predictors of air quality, and the models developed are valid. Disclosures include the limitations of the data and the limitations of the models developed.