

Correlation between monthly figures for traffic accidents and weather figures in Münster region.

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Introduction

- Numerous accidents have been reported in recent months
- Adverse weather presents distinct challenges for drivers, affecting visibility and road conditions.
- The country's extensive road network and diverse climate give rise to a intricate interplay between traffic patterns and atmospheric influences.

Is there are relationship between the monthly figures of traffic accidents and the number of weather figures in Munich region?

- Analyzing the frequency of accidents involves a comprehensive examination of variables such as month and year, intricately combined with corresponding weather conditions.
- Looking at the development over the time.

Datasources

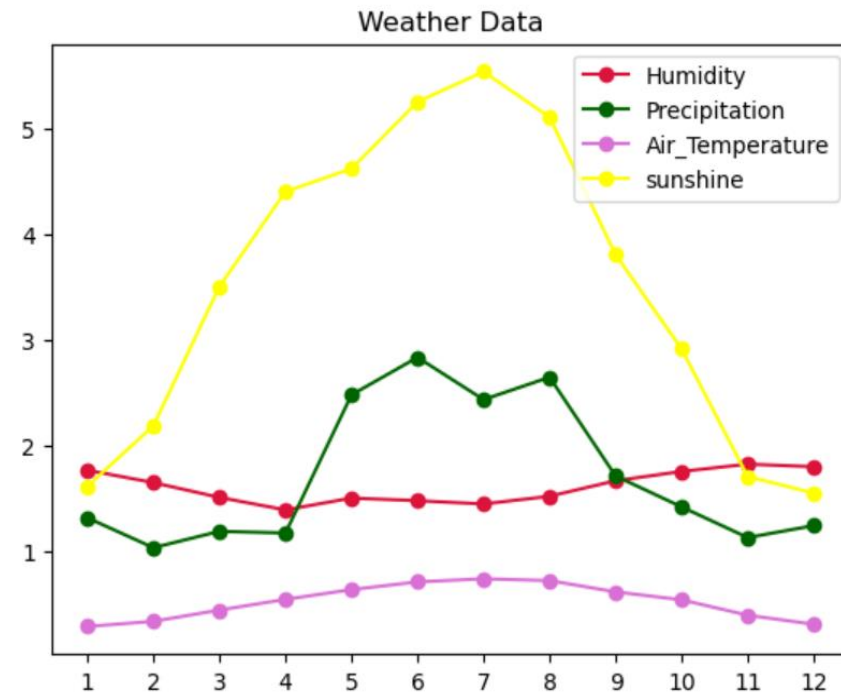
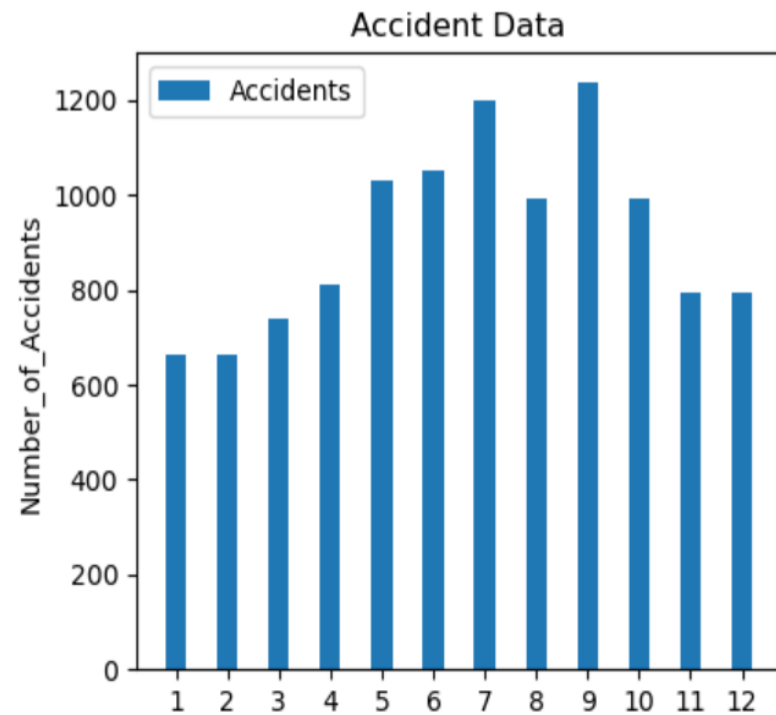
Monthly figures for traffic accidents

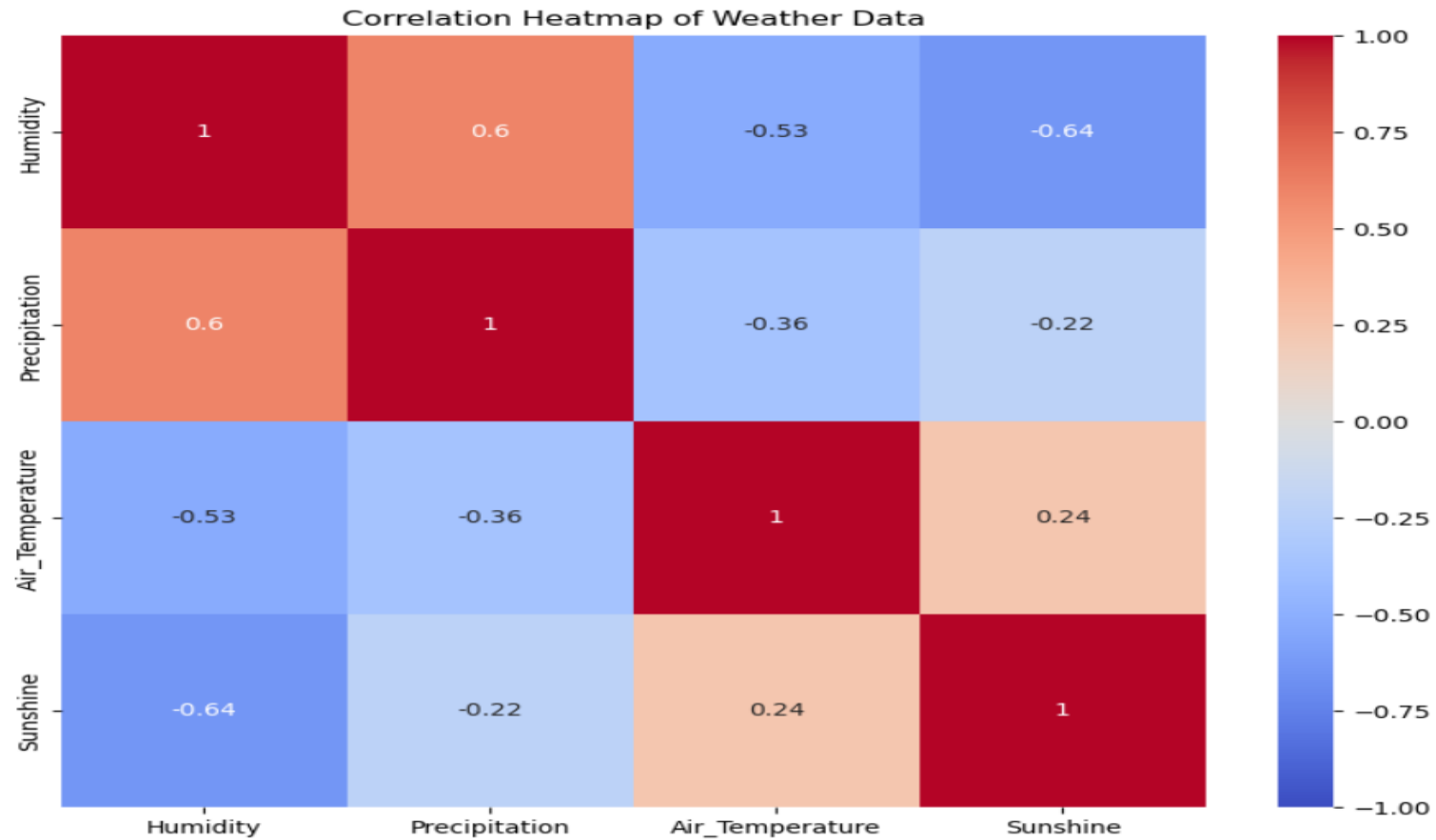
- By Munich Statistical Office
- Provides the number of accidents for Munich region with month and year

Monthly weather figures

- By Munich Statistical Office
- Provides the monthly weather data with features like humidity, air temperature since year 2000

Results





Pearson Correlation: (-0.3396796871368906, 0.7098640931282802, 0.8525866669633674, 0.7069217592170773)

Spearman Correlation: (-0.44755244755244755, 0.7412587412587414, 0.8531468531468532, 0.7552447552447553)

Conclusion

- The correlation analysis between Munich's monthly accident figures and weather variables provides crucial insights into their dynamic relationships.
- A good correlation was found between the rate of accident and the weather data, particularly between temperature, humidity, and sunshine exhibit substantial positive correlations, indicating synchronized fluctuations and interconnected dynamics.
- A marked negative relationship is observed between sunshine and precipitation, emphasizing opposing variations in these weather factors.
- Adapting to seasonal variations and weather impacts is vital for ensuring proactive decision-making and maintaining safe transportation in Munich.

Thank you😊

