

Road user sensitization through the analysis of Road accident Data from 2021 in Germany

Presented By

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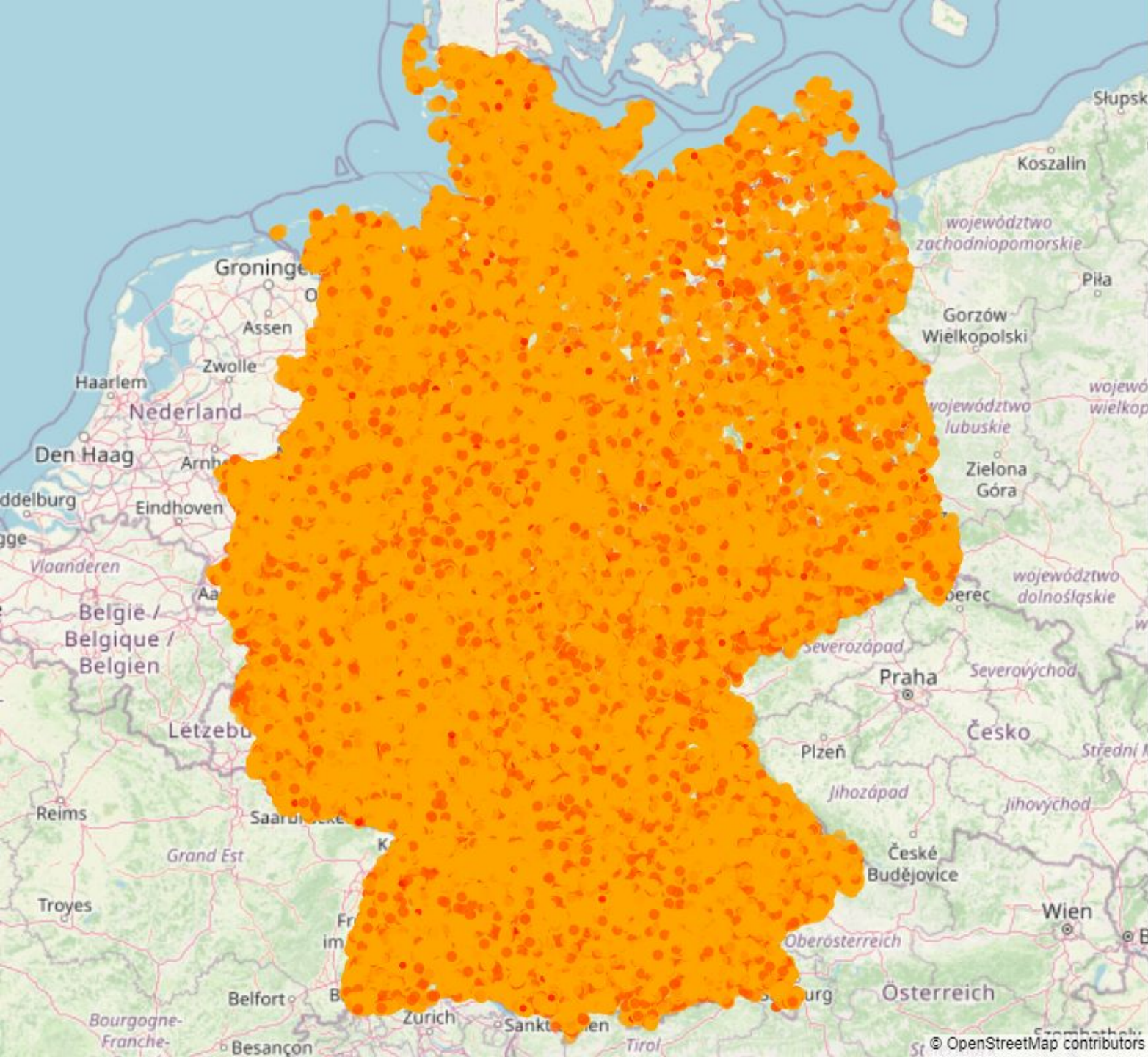


Aims & Objectives of the Project

- Visualisation of the Data.
- Comparing accidents per States with the respective population of each States.
- Accidents per square Kilometer for each State.
- Accident categorization based on the nature of the injured victims.
- Accident categorization using Months and Weeks, Days and Hours.
- Accident categorization using Hours and Road conditions.
- Seasonal categorization both for the Germany and North Rhein-Westfalen.
- Various means of road accidents.
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Plot of accidents in Germany



2.5

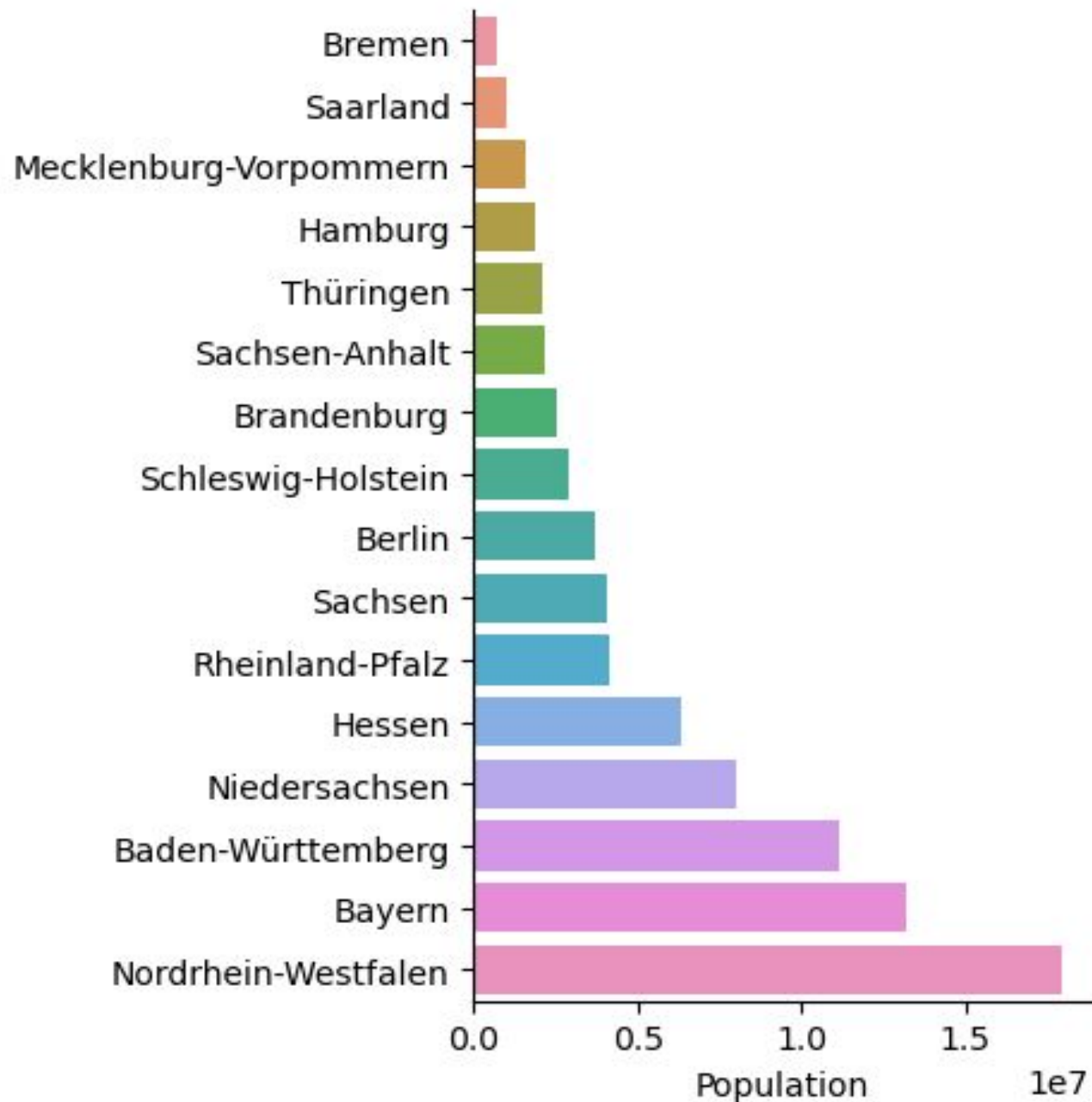
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1.5

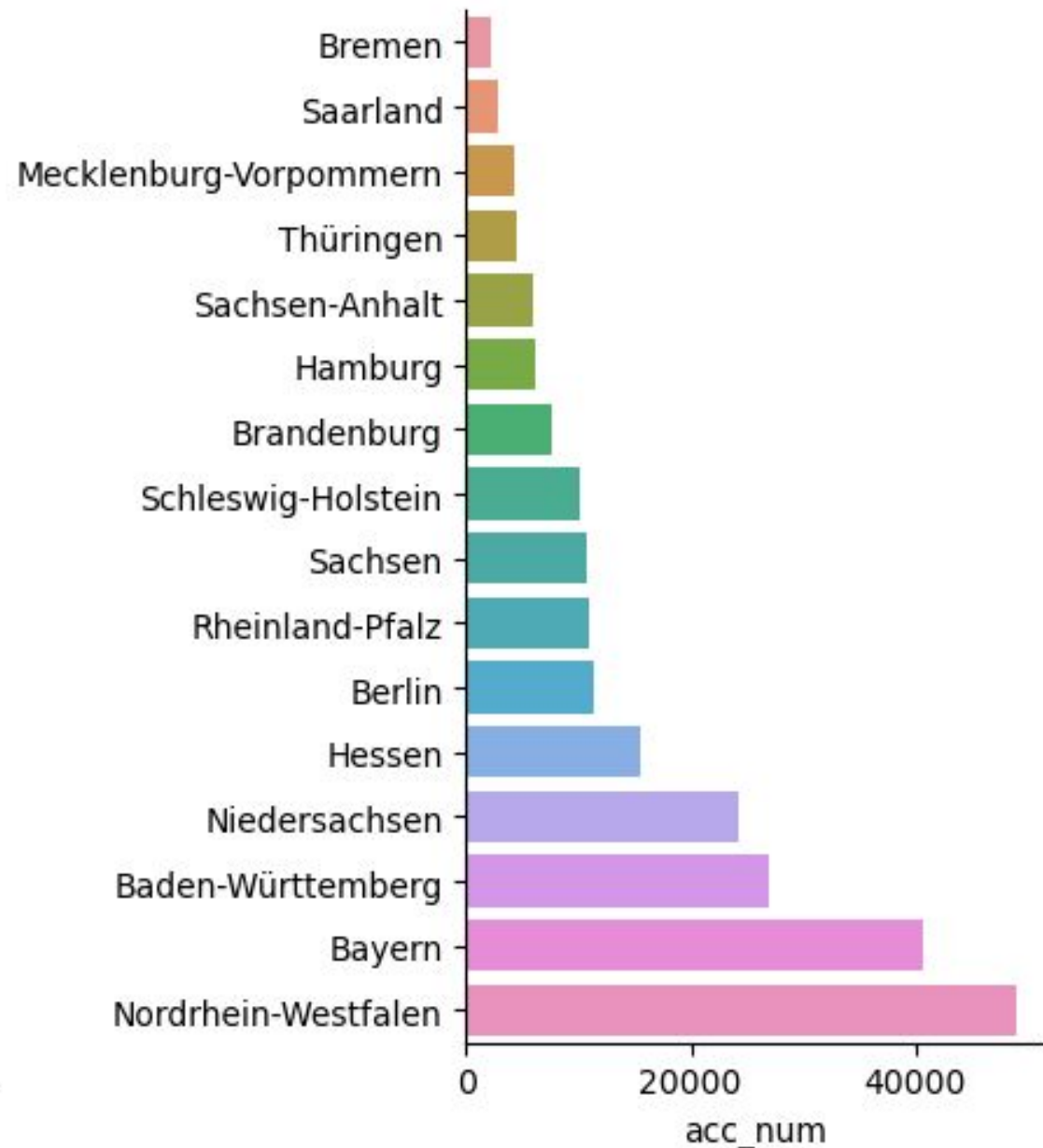
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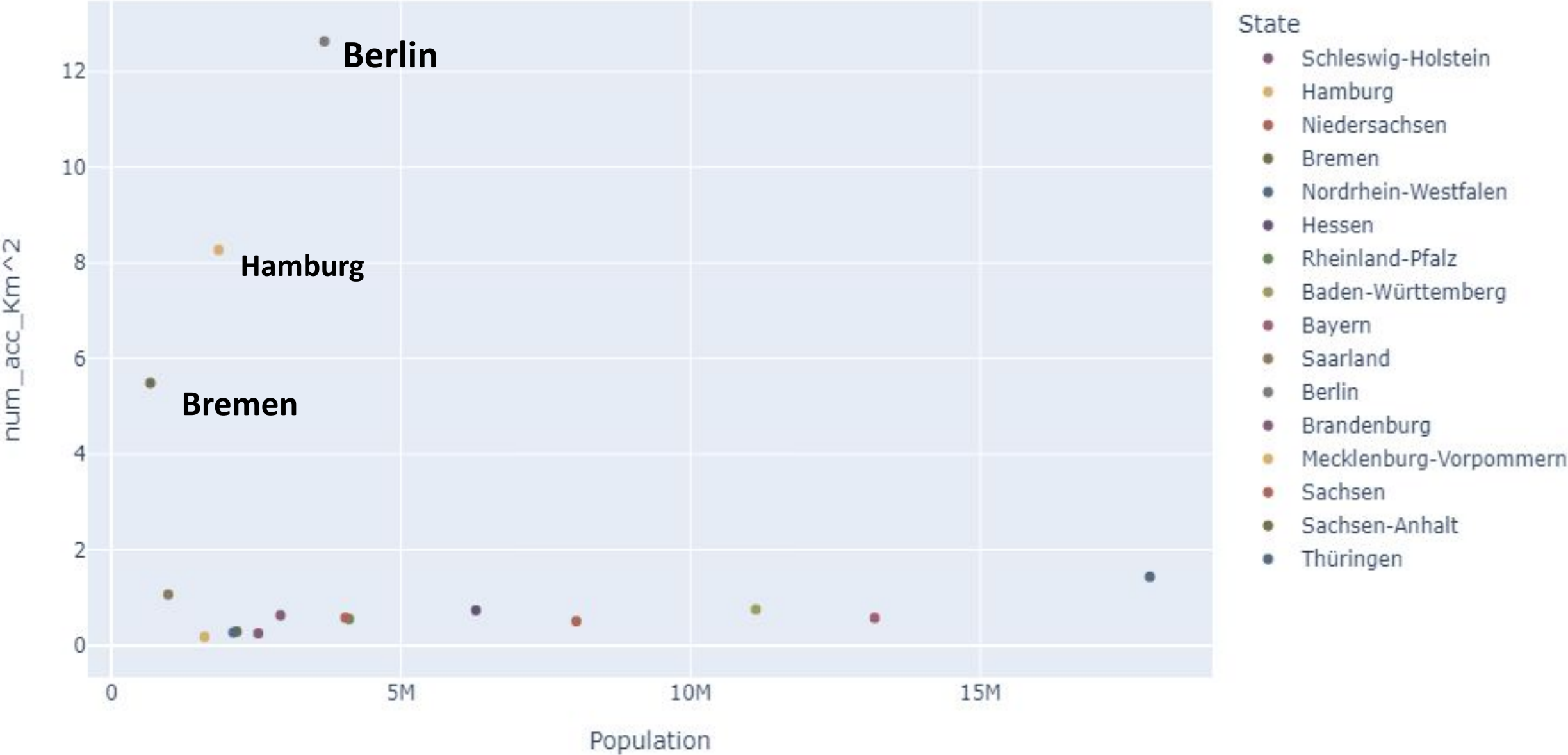
Population per States



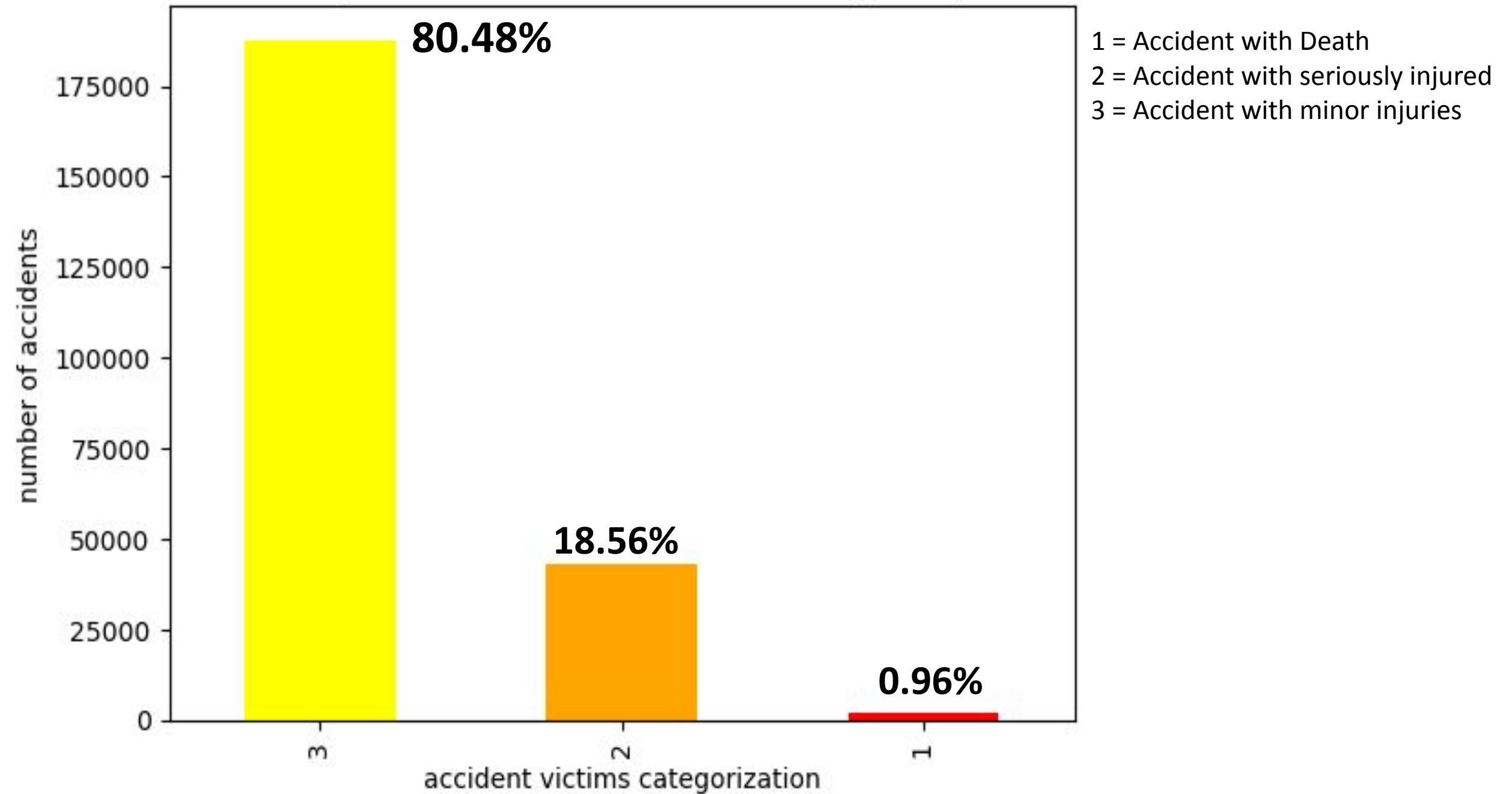
Accidents per State



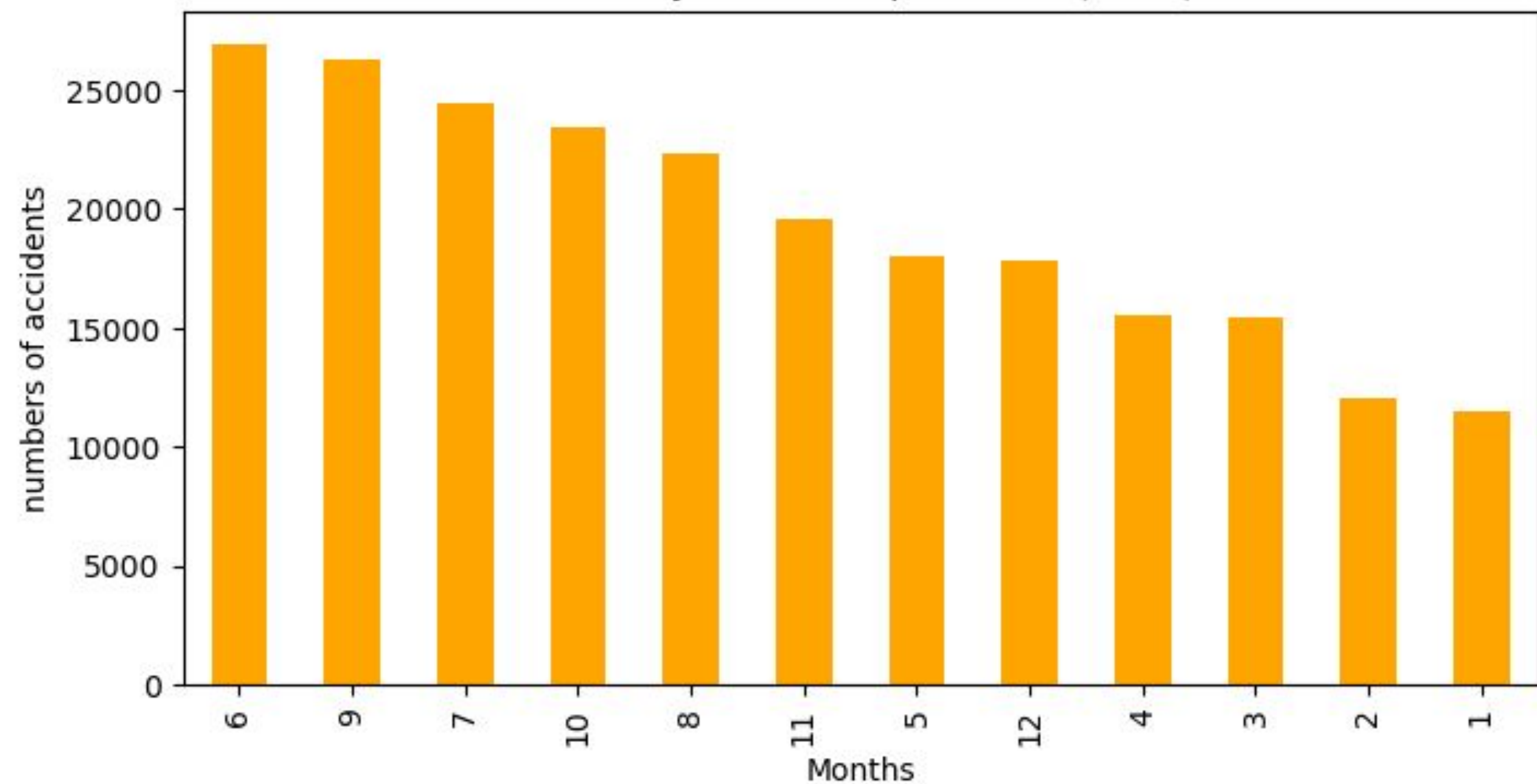
Accidents per square kilometer for States in Germany(2021)



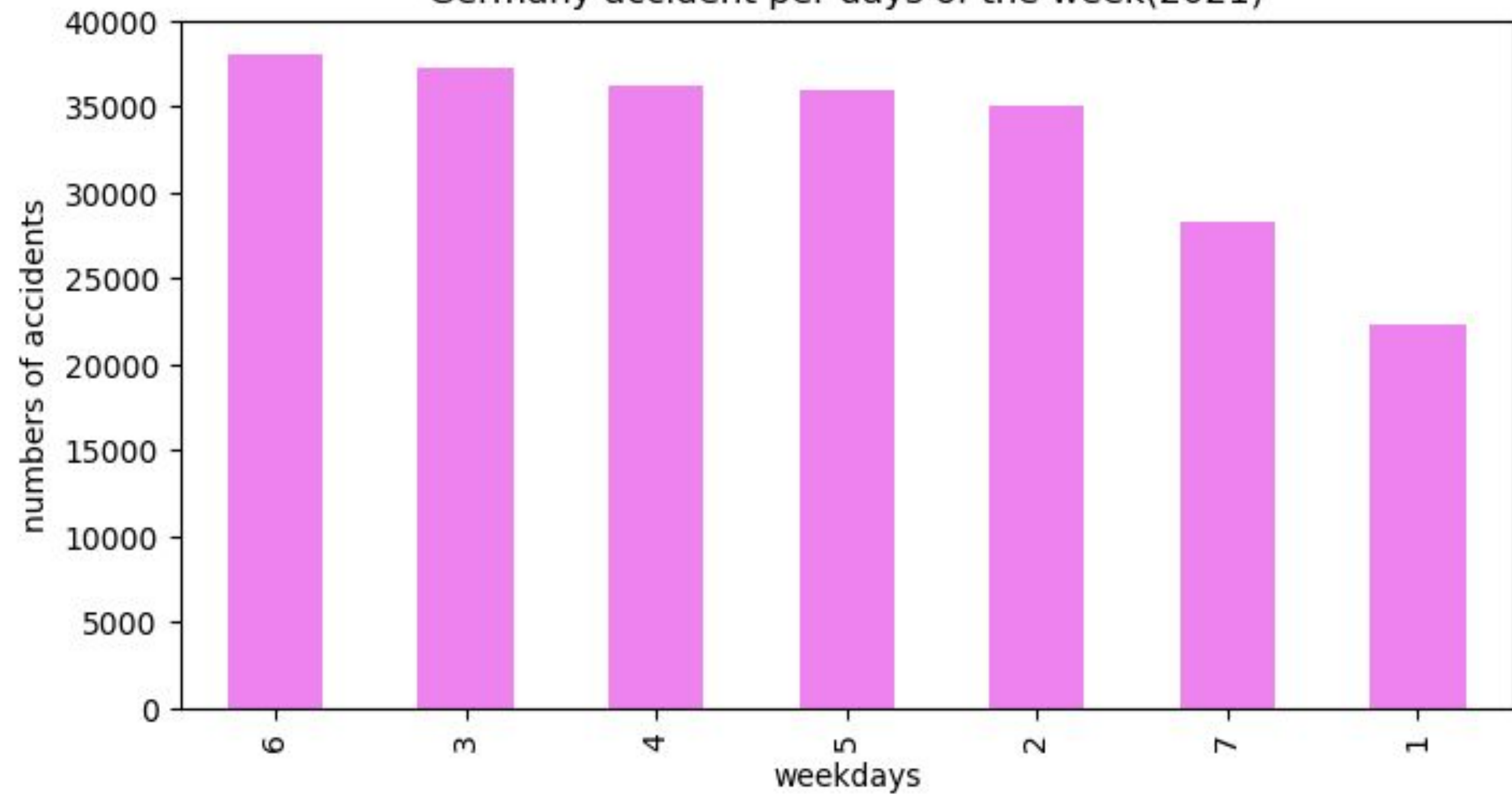
categorization of accidents in Germany(2021)



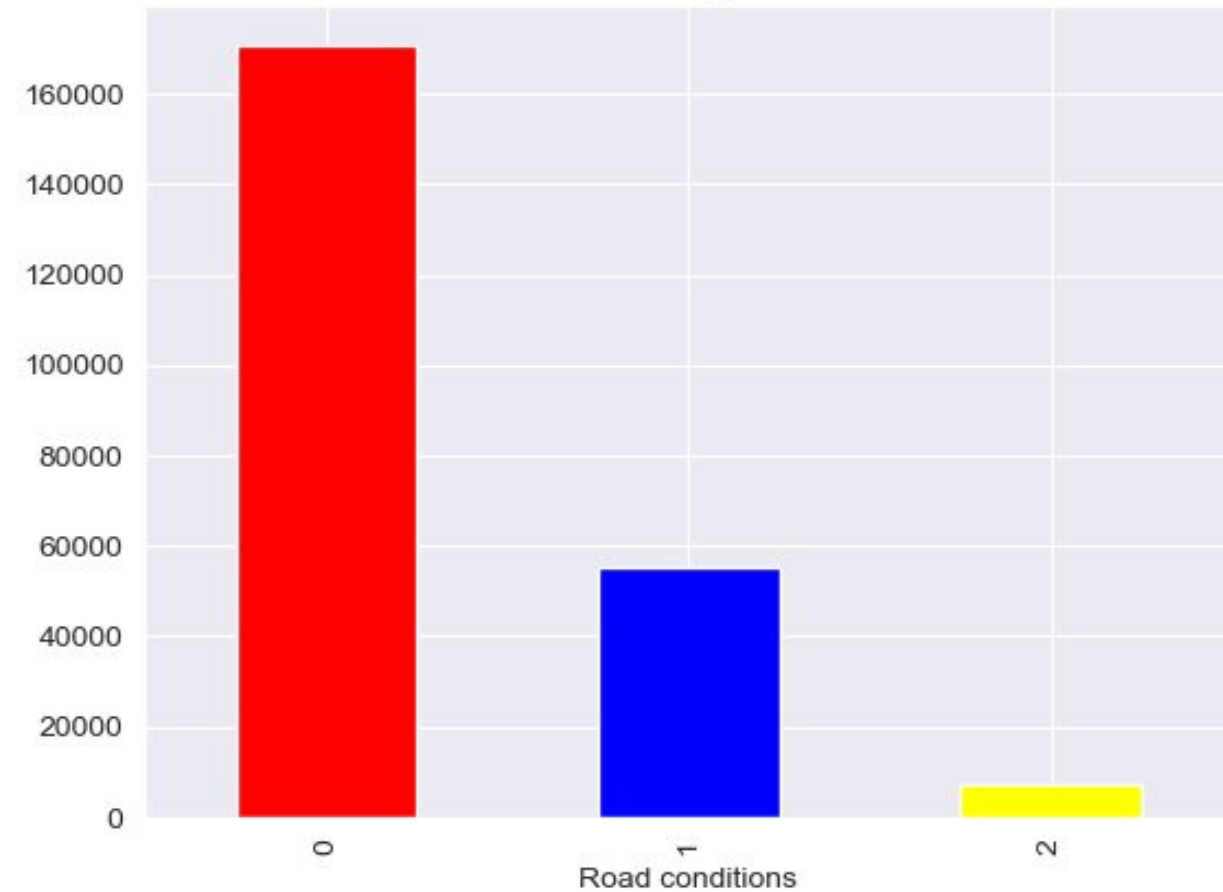
Germany accidents per Month(2021)



Germany accident per days of the week(2021)



Plot of accident relating to road conditions



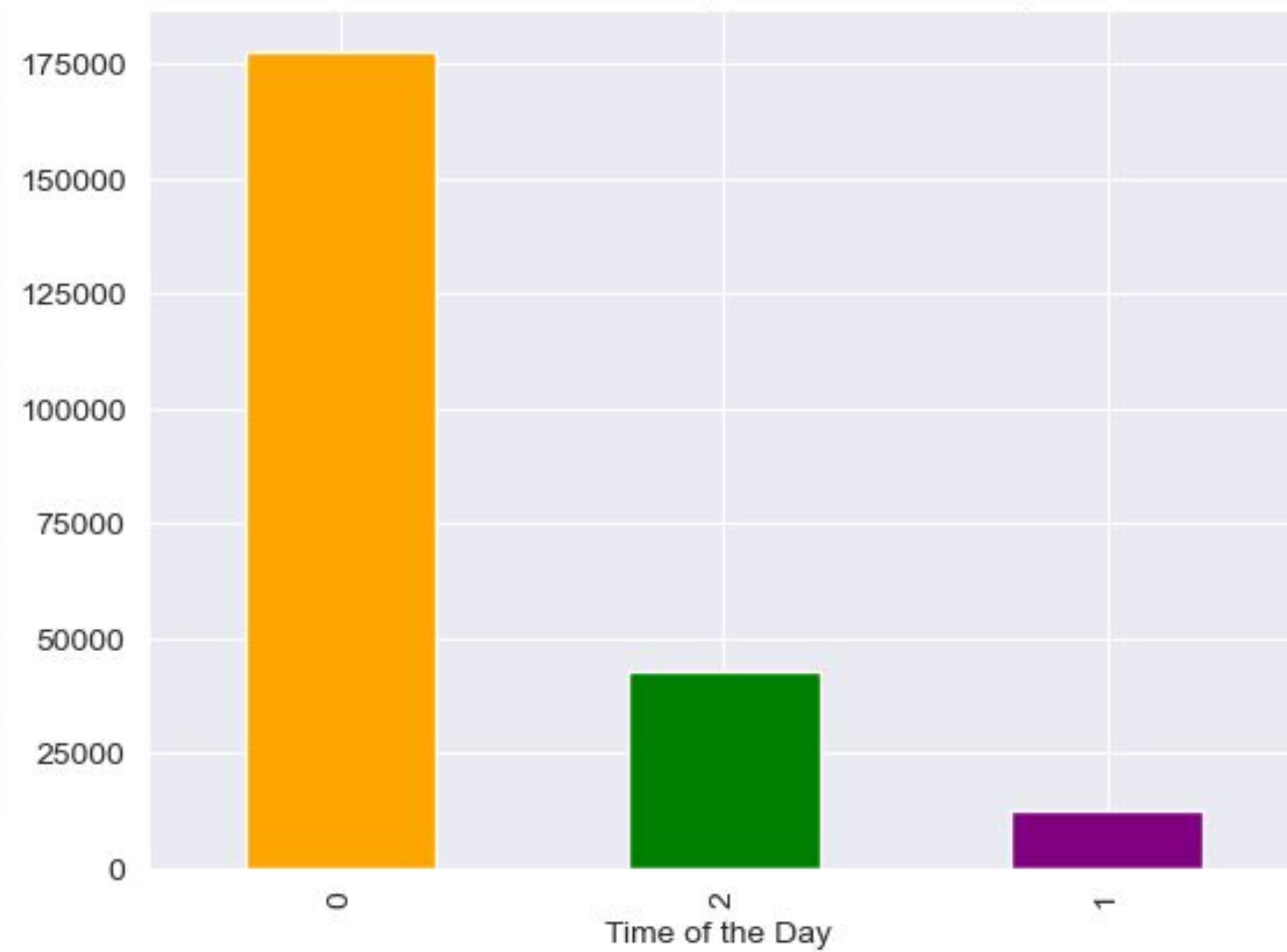
Road Conditions:

0 = Dry

1 = Wet/Damp/Slippery

2 = Winter Slippery

Accidents relating to time of the Day



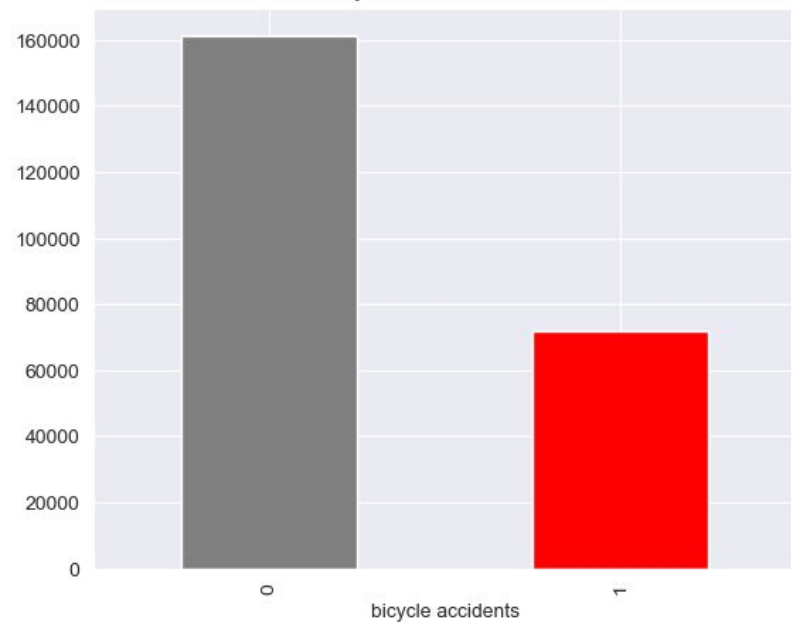
Time of the Day:

0 = Daylight

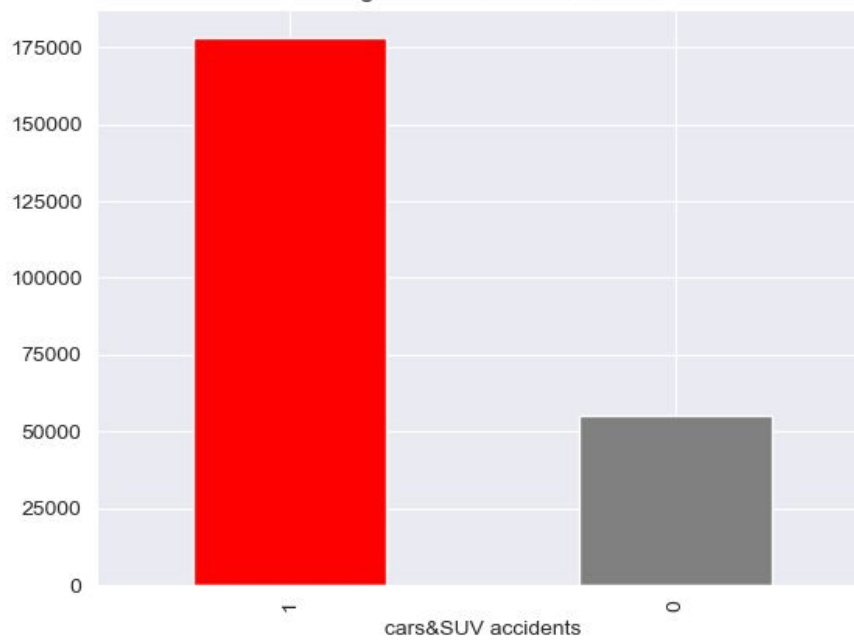
1 = Twilight

2 = Darkness

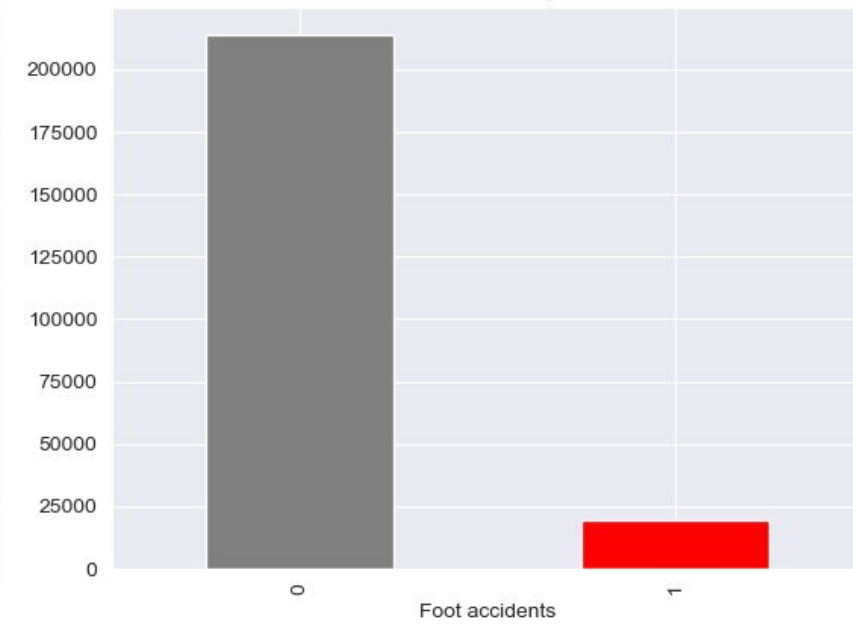
Bicycle related accident



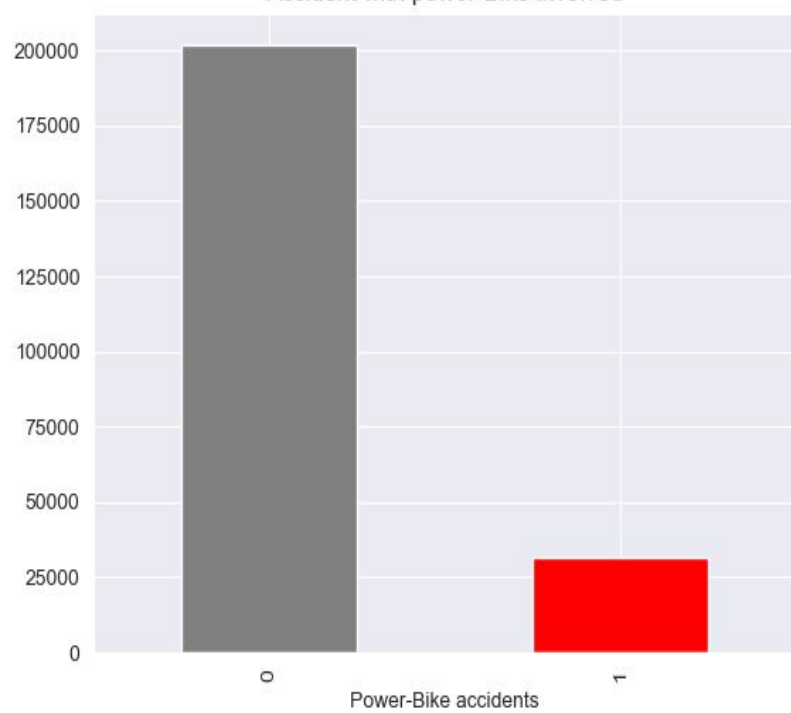
Passengers Vehicle related accident



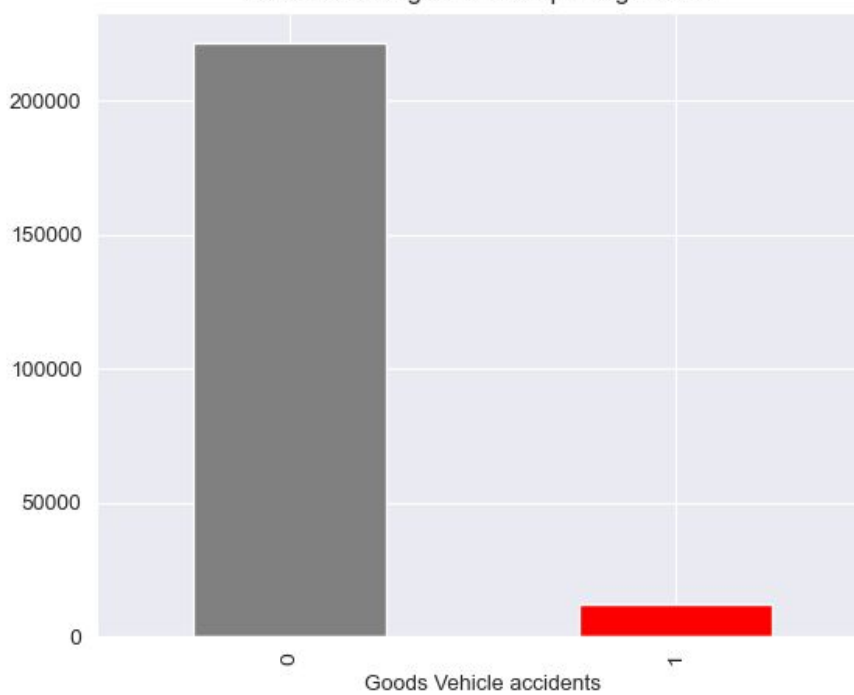
Accidents where on feet person related



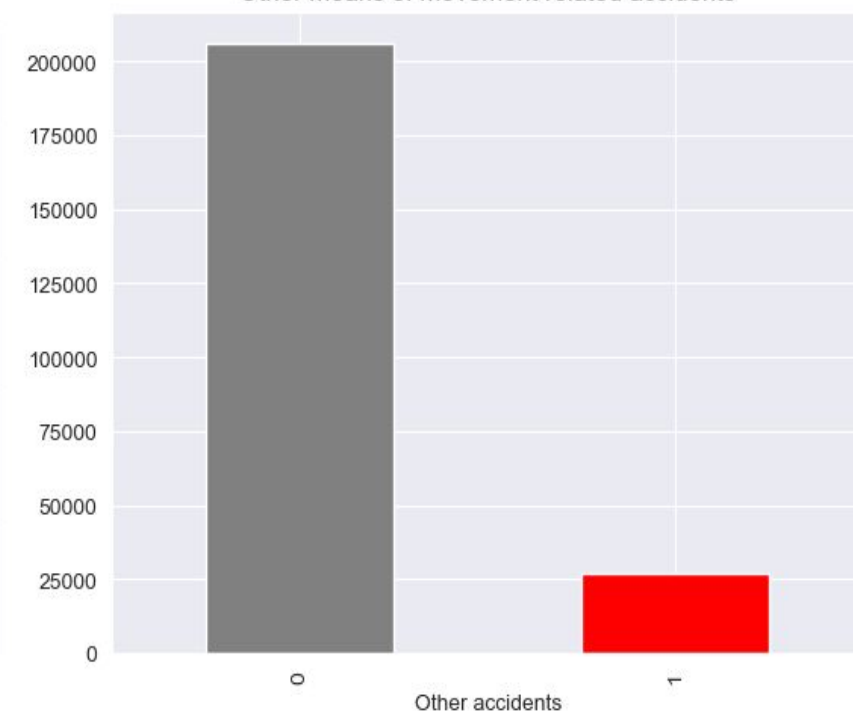
Accident with power-Bike involved



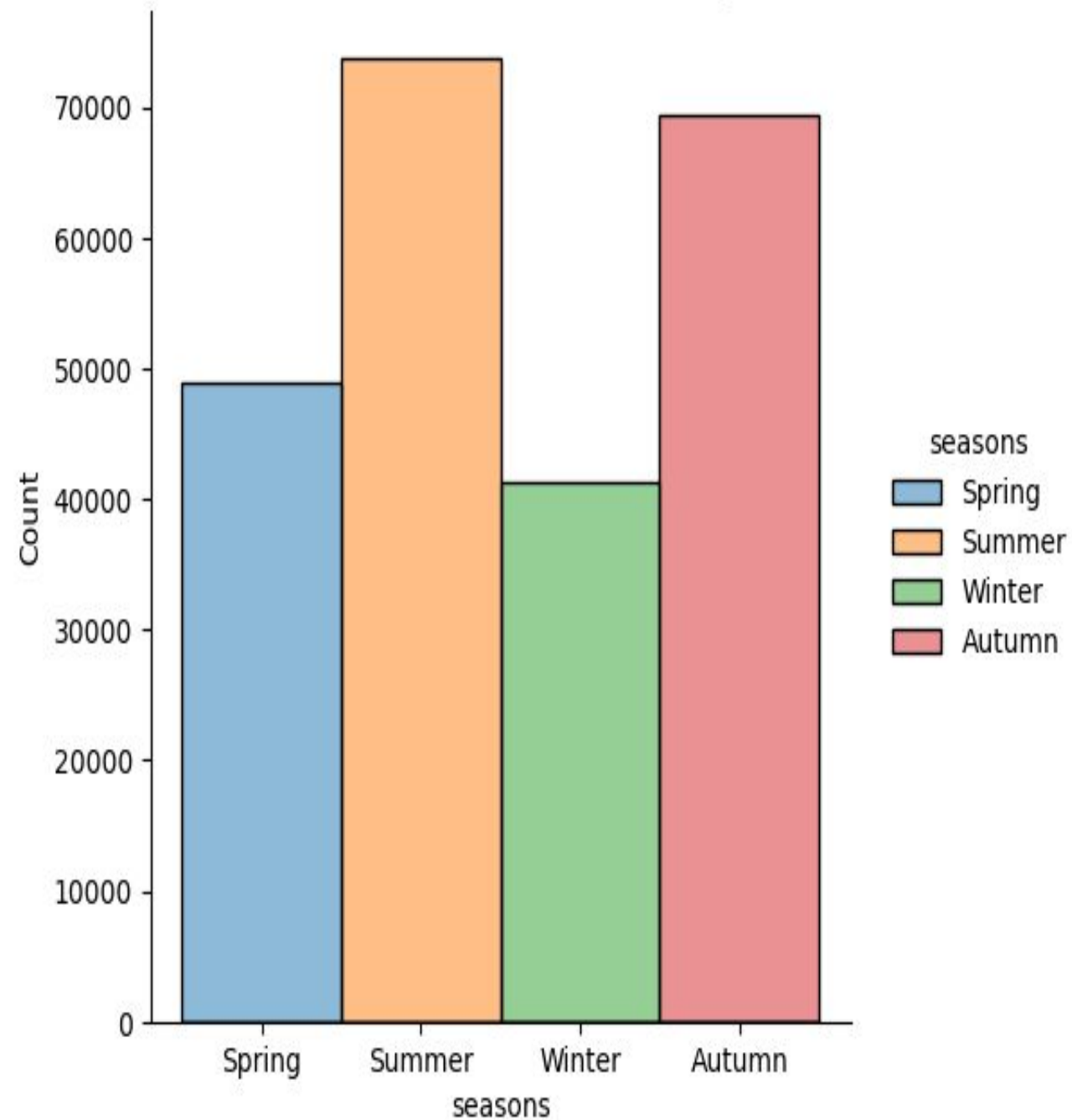
Accident with goods Transporting vehicle



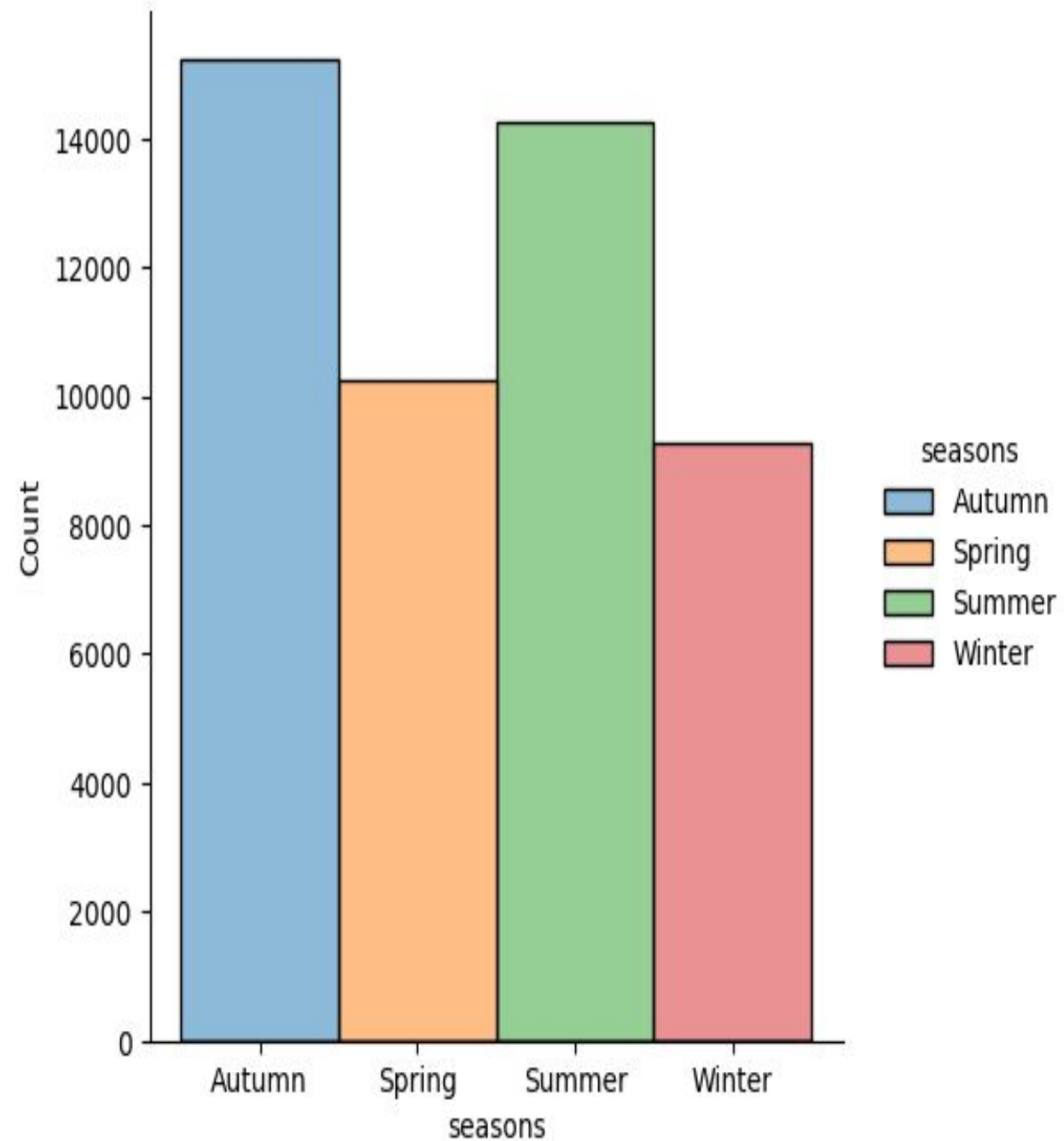
Other means of movement related accidents



Seasonal accidents in Germany

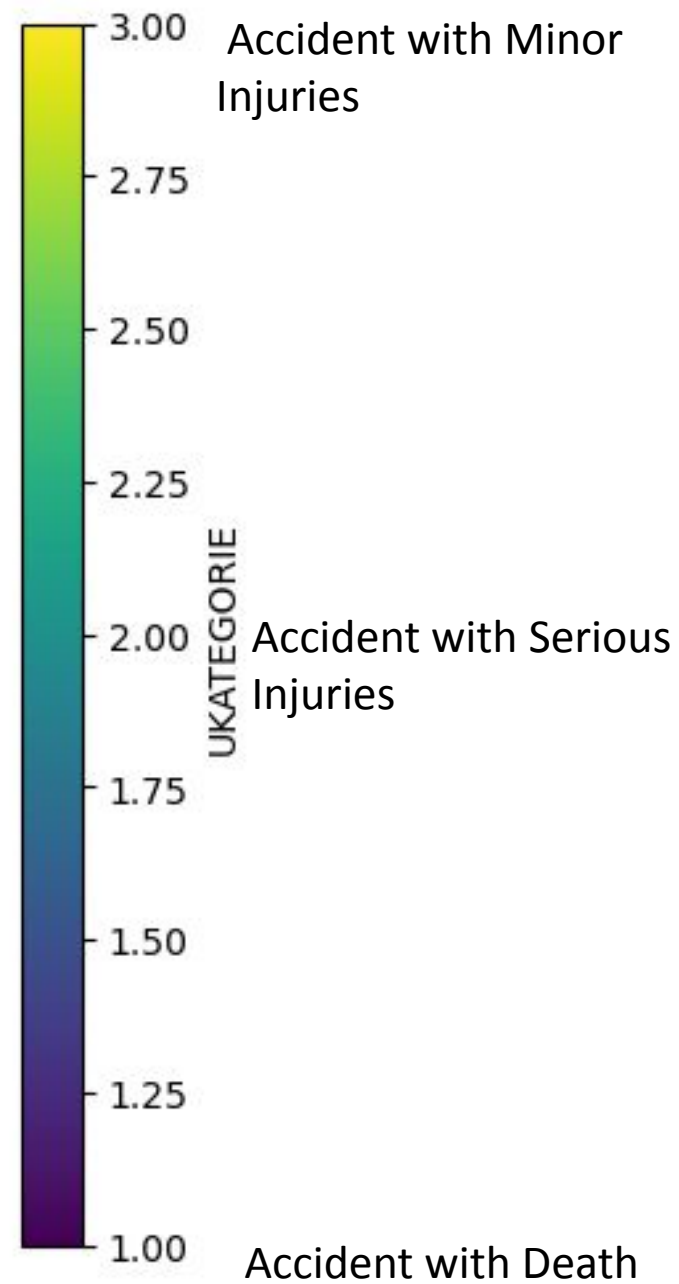
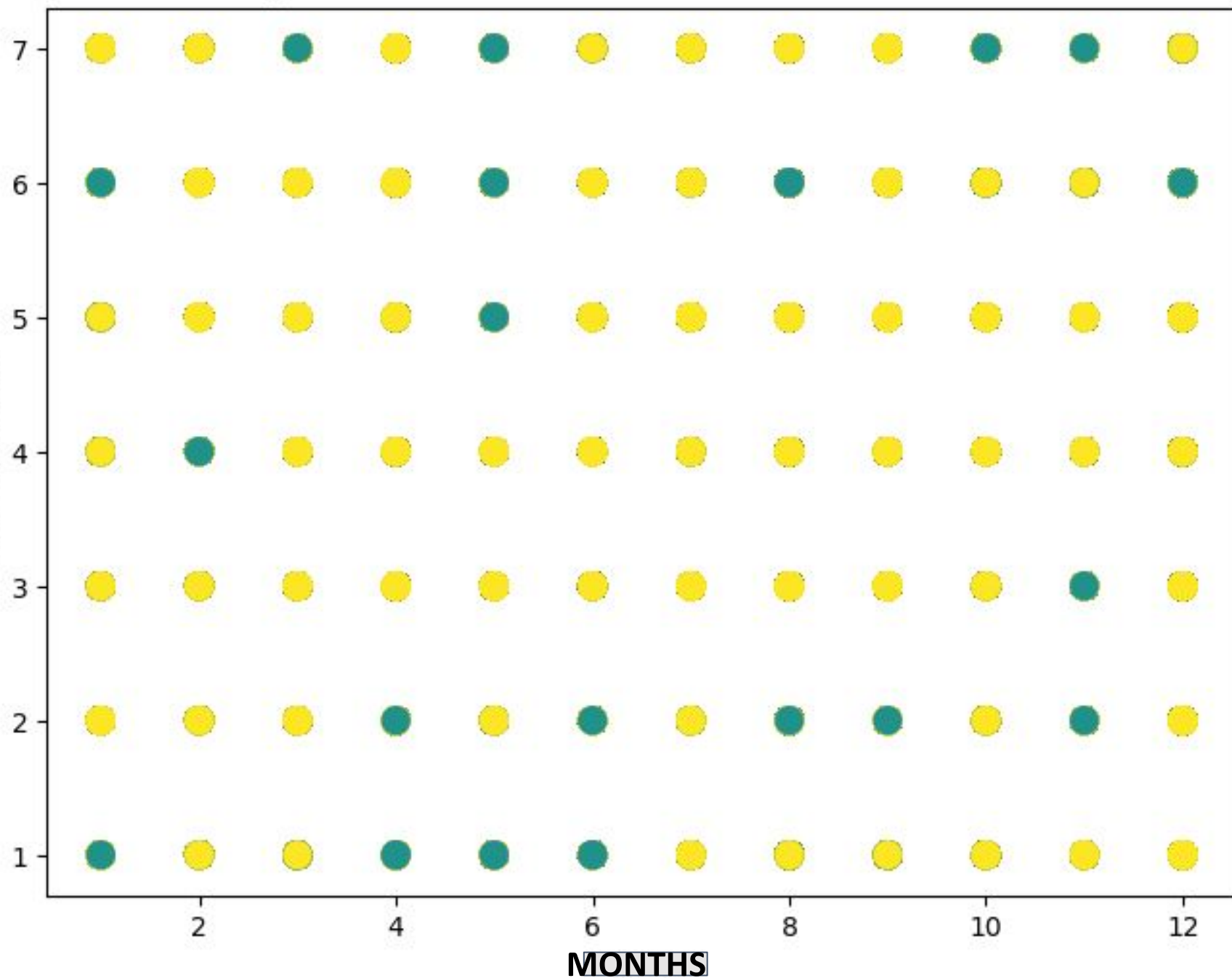


Seasonal accidents in North Rhein-Westfalen



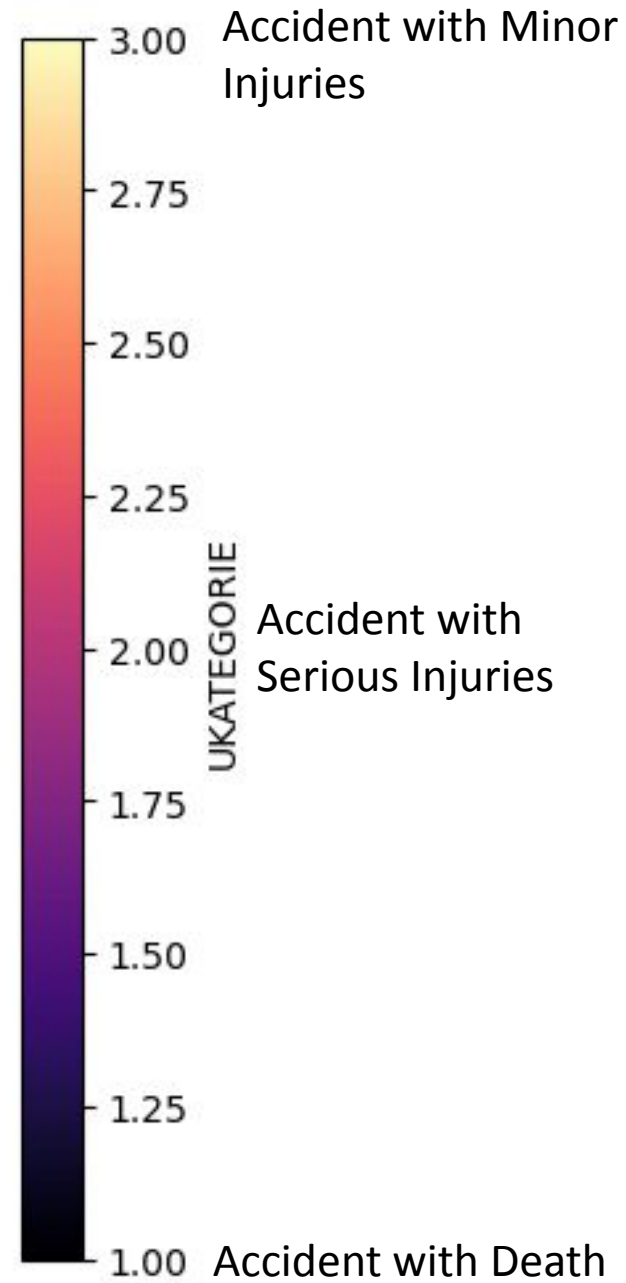
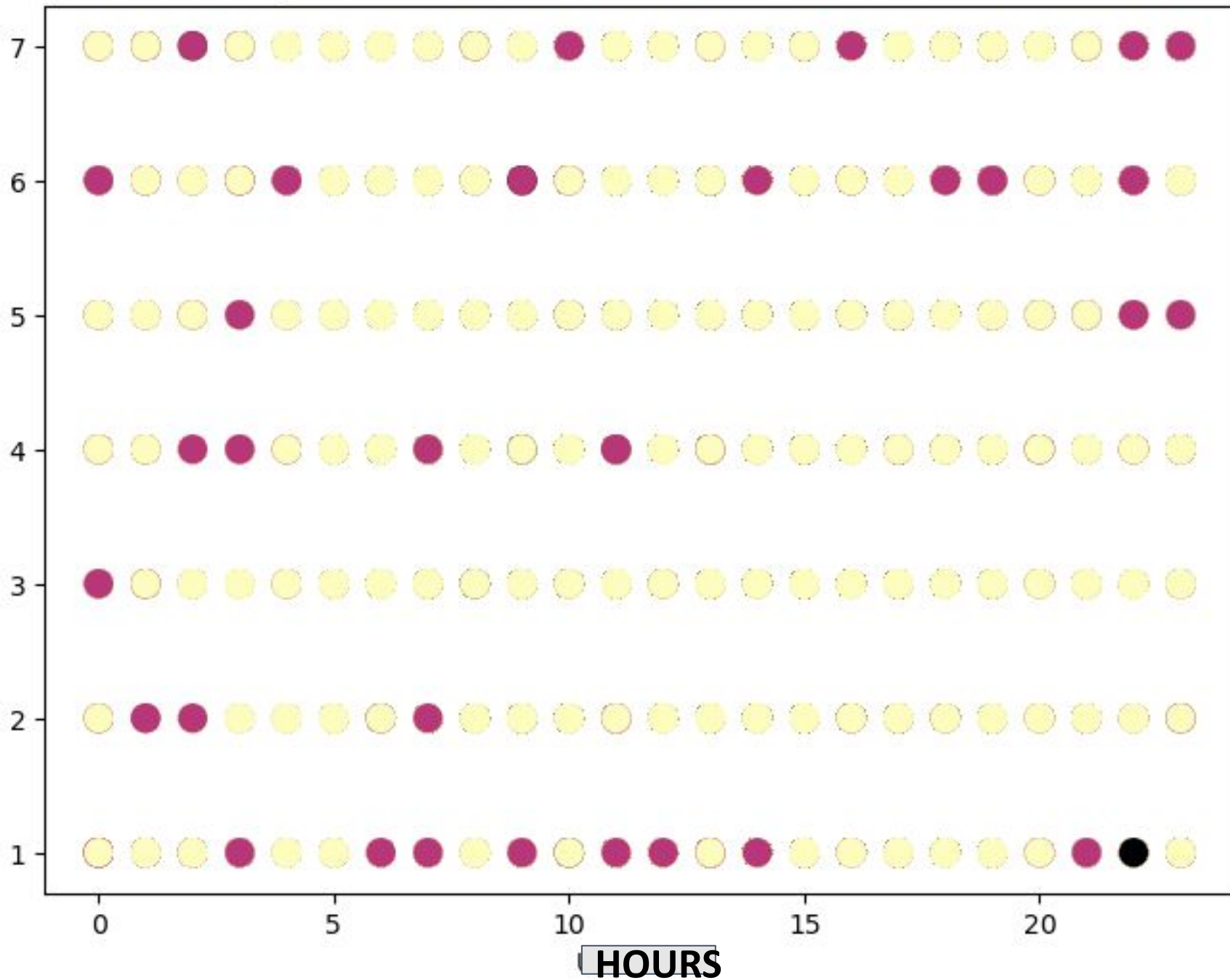
Days and Months accident in North Rhein-Westfalen

W
E
E
K
D
A
Y
S

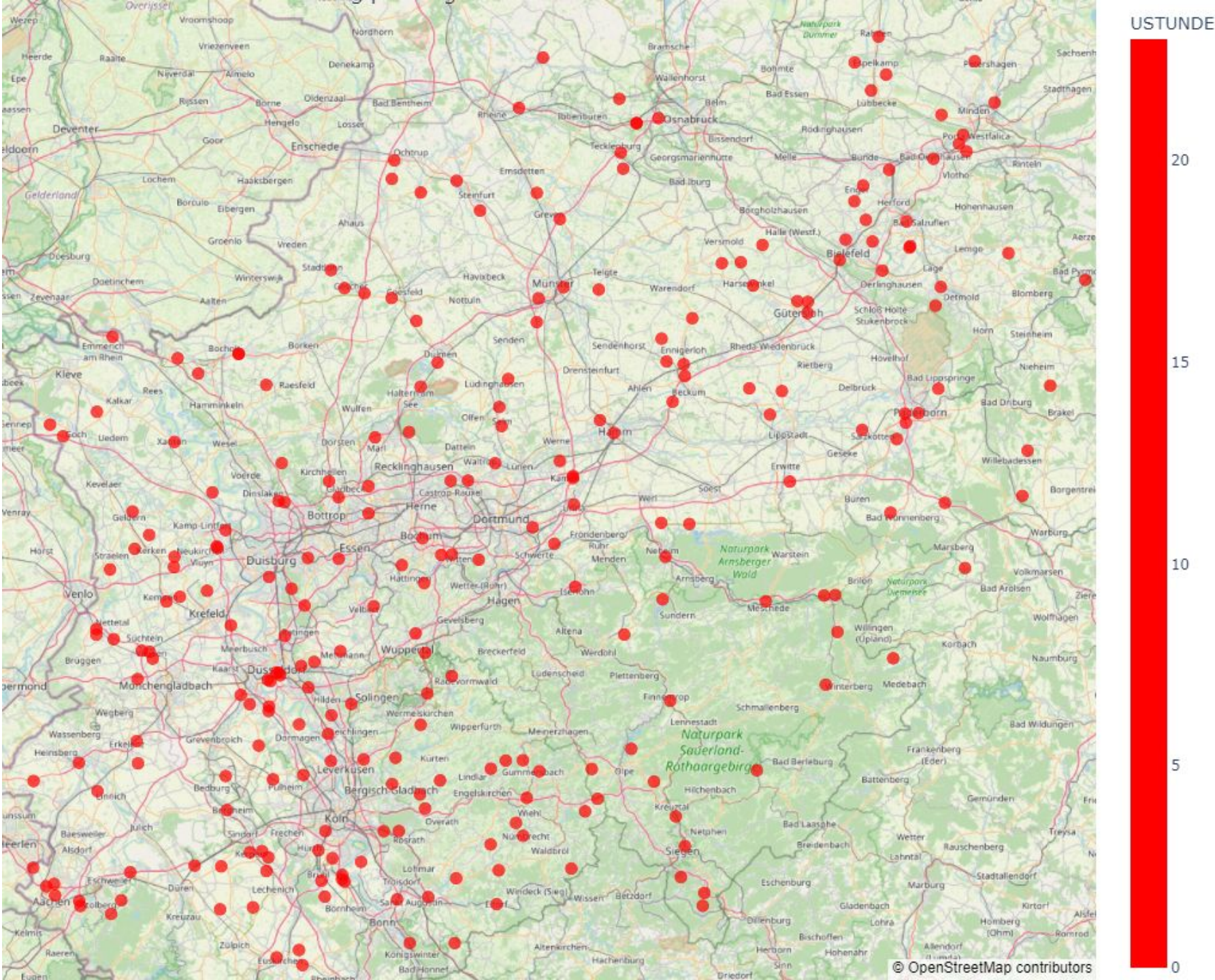


Days and Hours accident in North Rhein-Westfalen

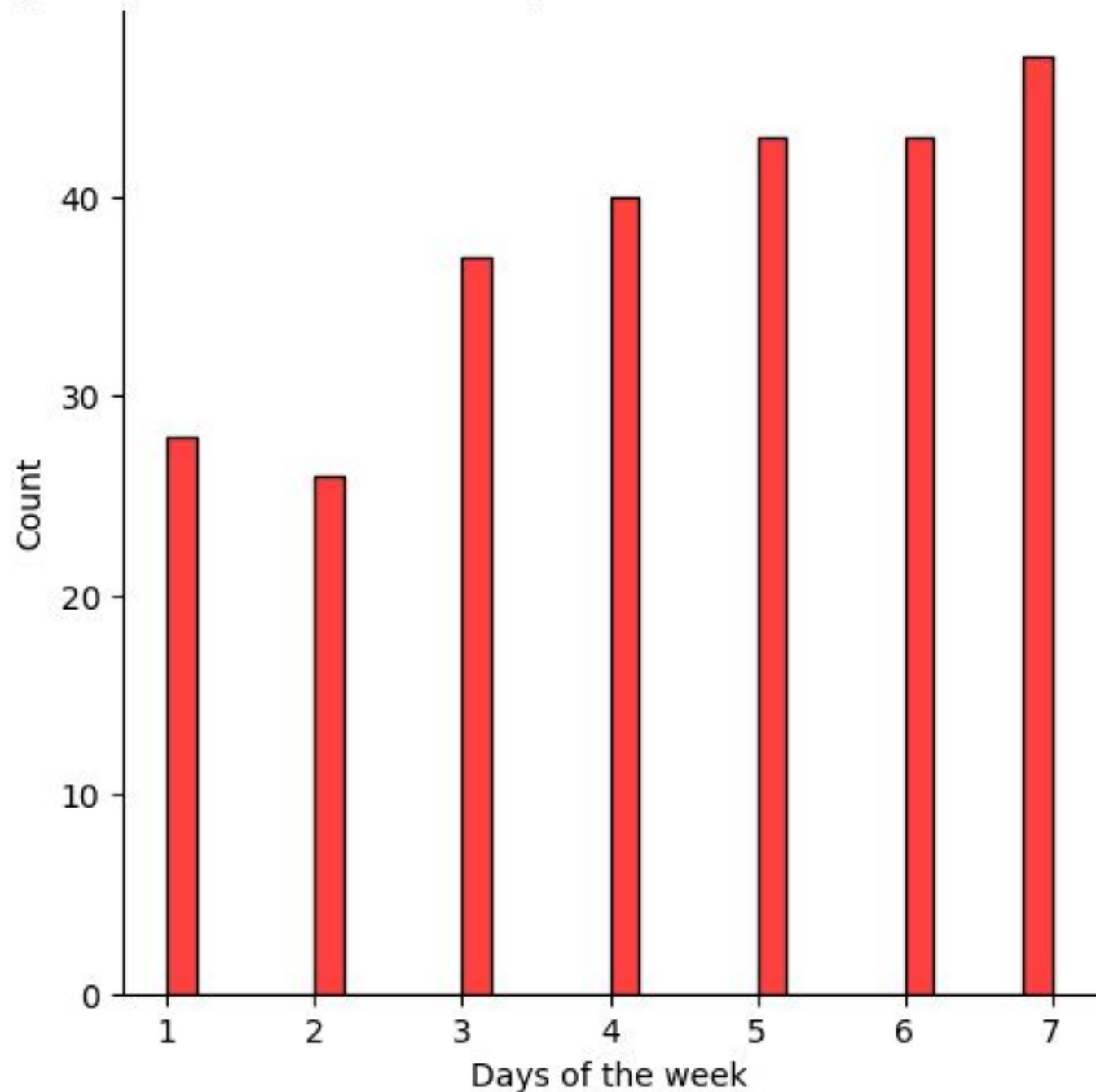
W
E
E
K
D
A
Y
S



Death related accident in North Rhein-Westfalen



Weekdays accident death victims plot for North Rhein-Westfalen(Cars&SUVs)



Days of the week

1 = Sunday

2 = Monday

3 = Tuesday

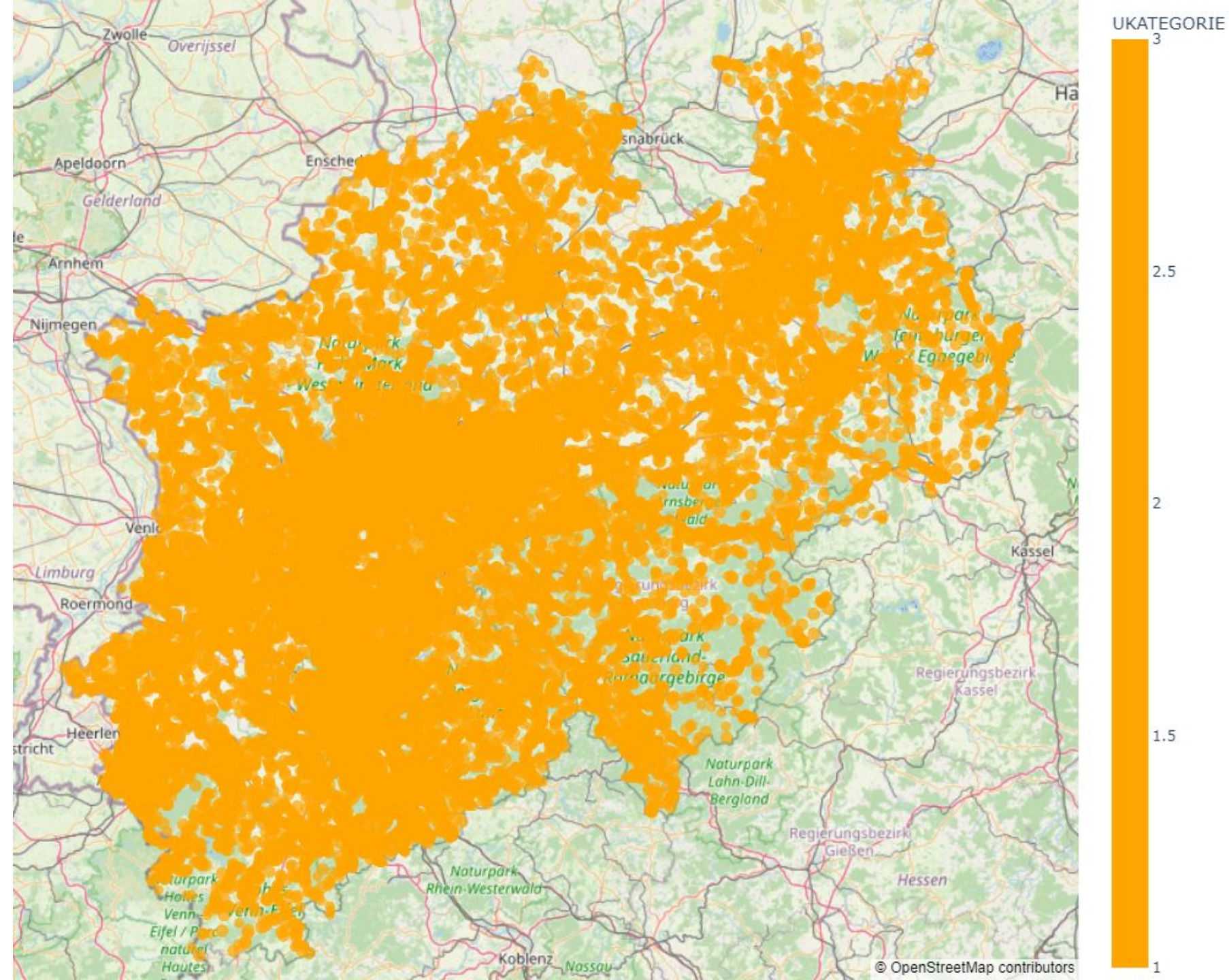
4 = Wednesday

5 = Thursday

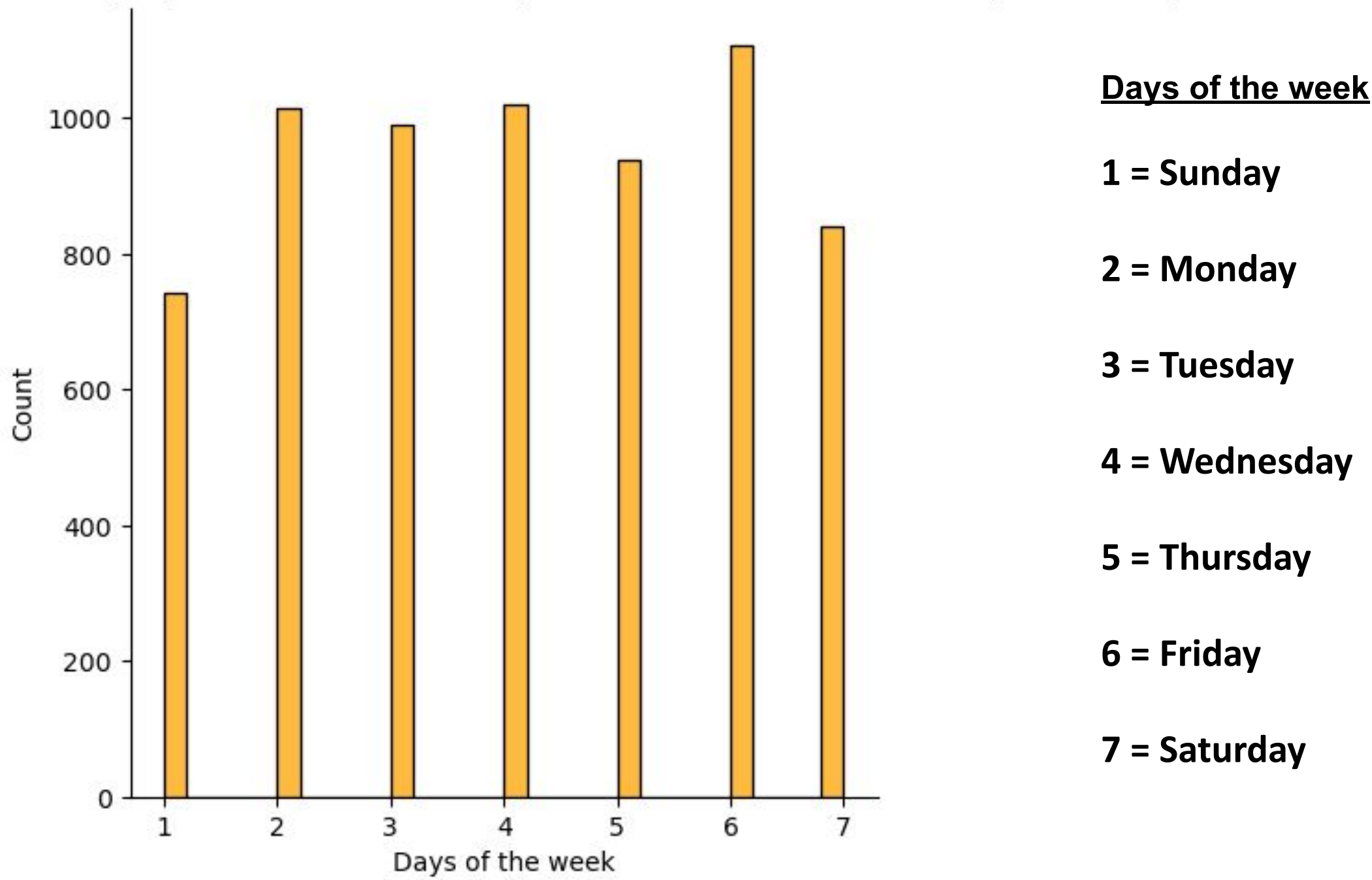
6 = Friday

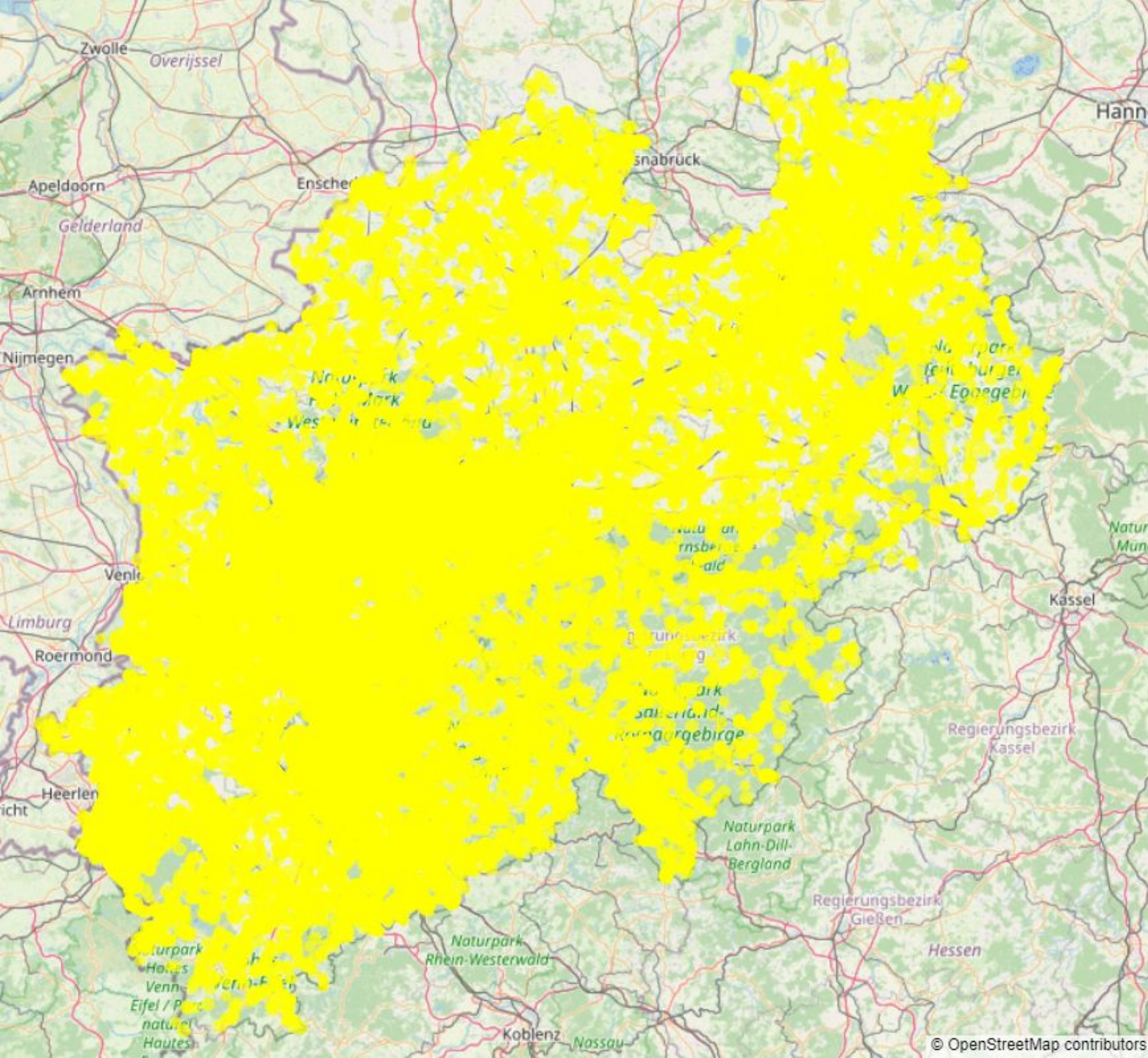
7 = Saturday

Accident with Serious Injuries in North Rhein-Westfalen



Weekdays seriously injured accident victims plot for North Rhein-Westfalen(Cars&SUVs)





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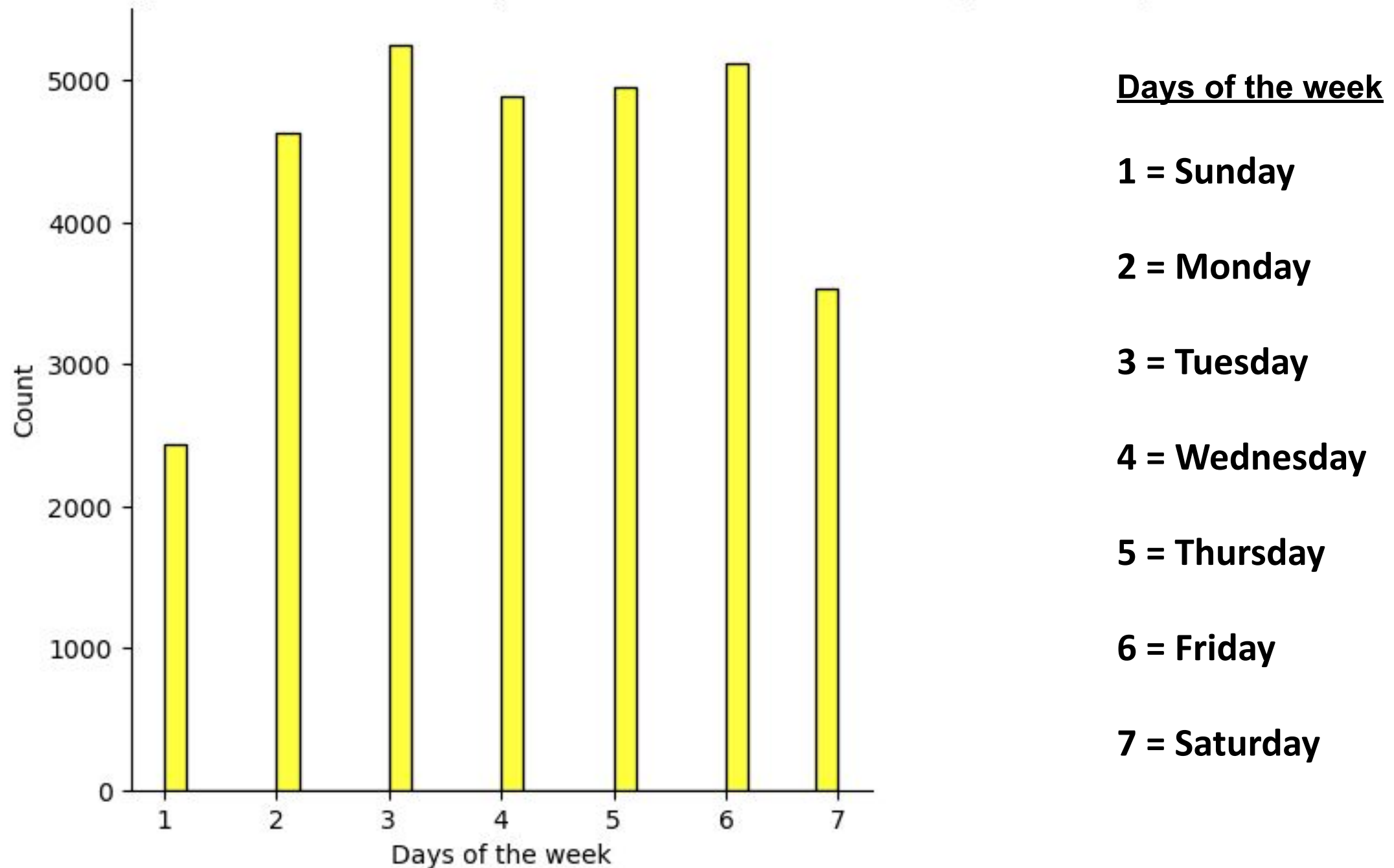
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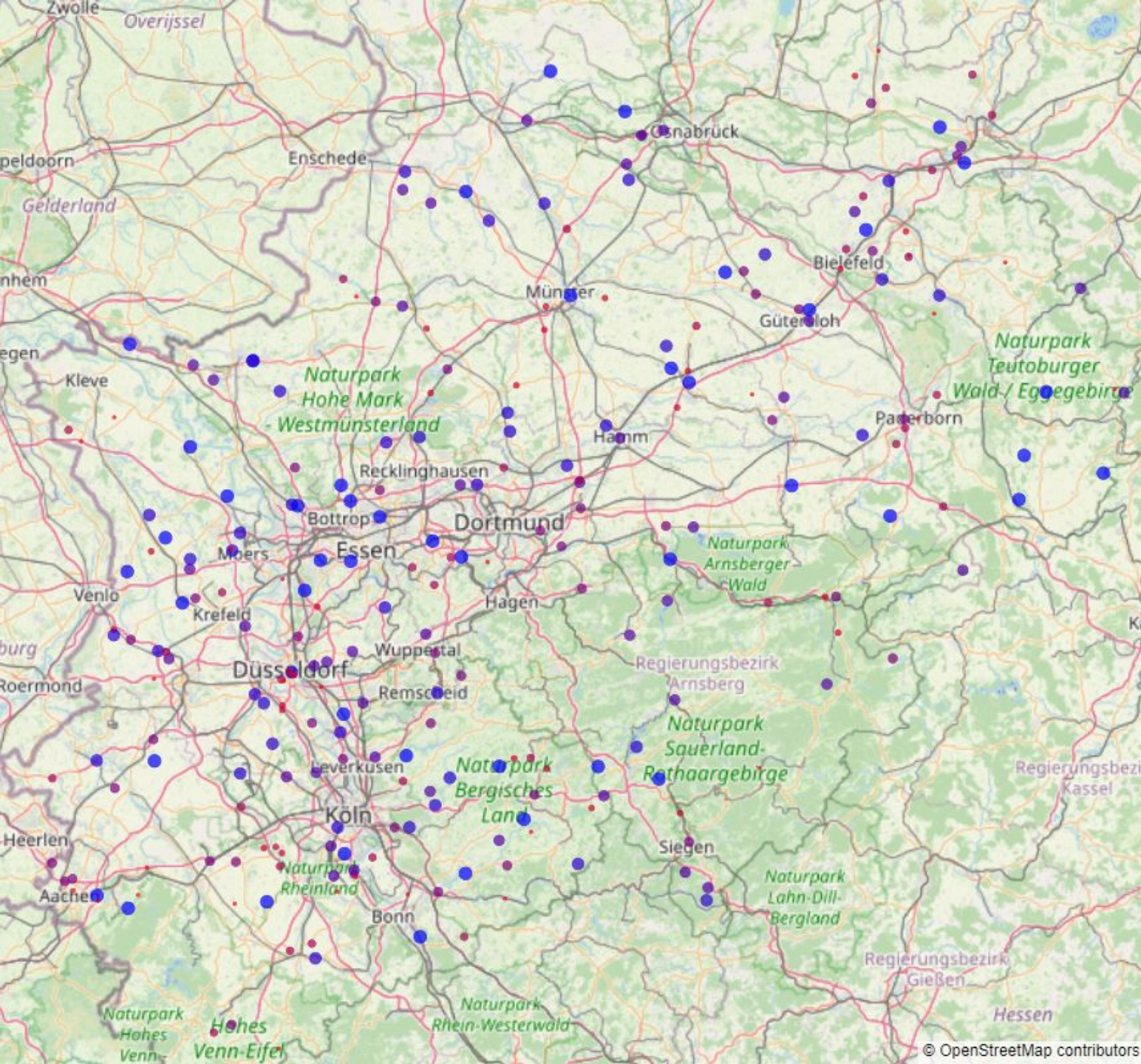
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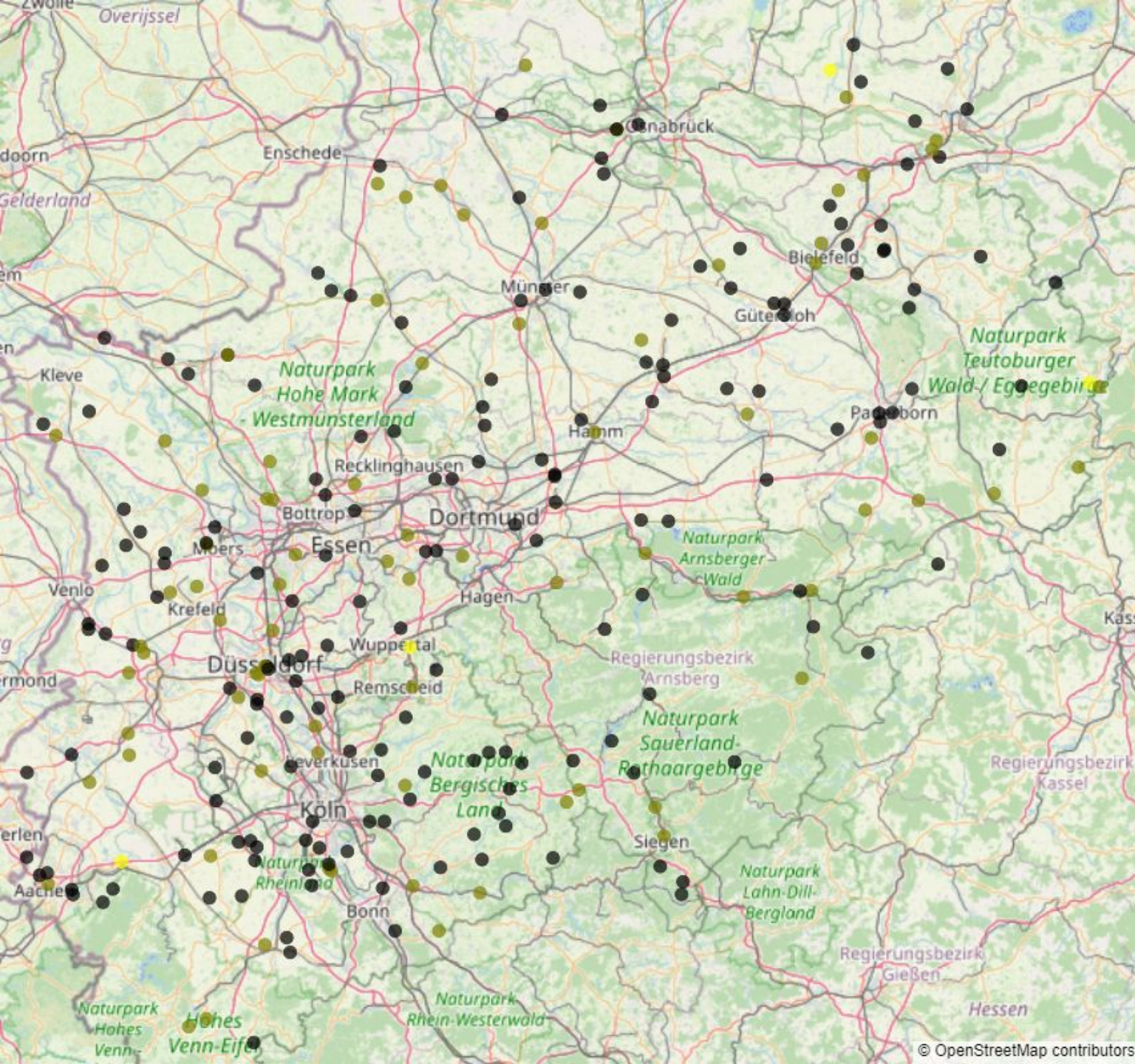
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Accident with Minor Injuries in North Rhein-Westfalen

Weekdays minor injured accident victims plot for North Rhein-Westfalen(Cars&SUVs)







USTRZUSTAND

2

Winter Slippery

1.5

**Death related accident due
to Road Conditions:**

1

Wet/Damp/Slippery

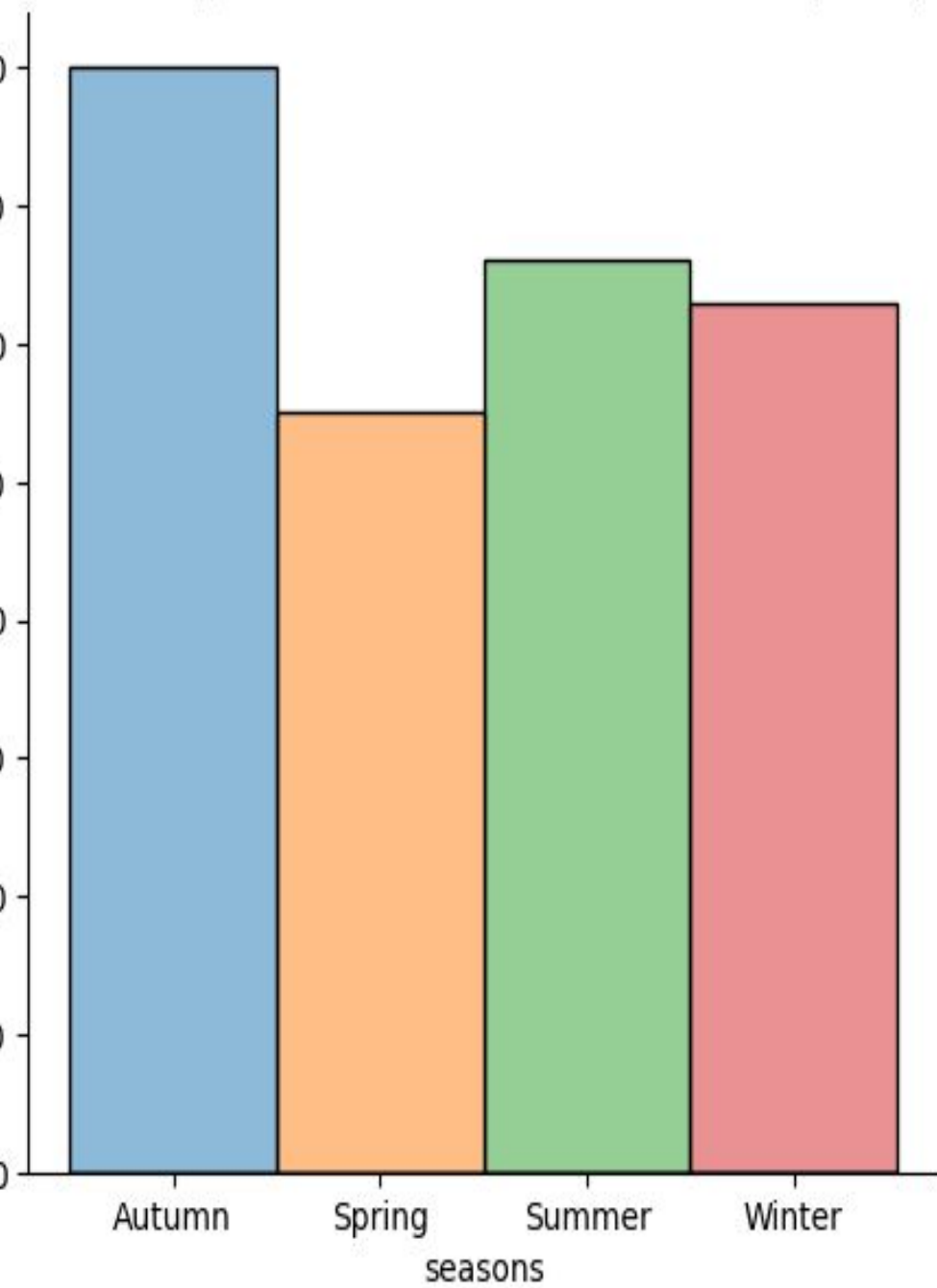
0.5

0

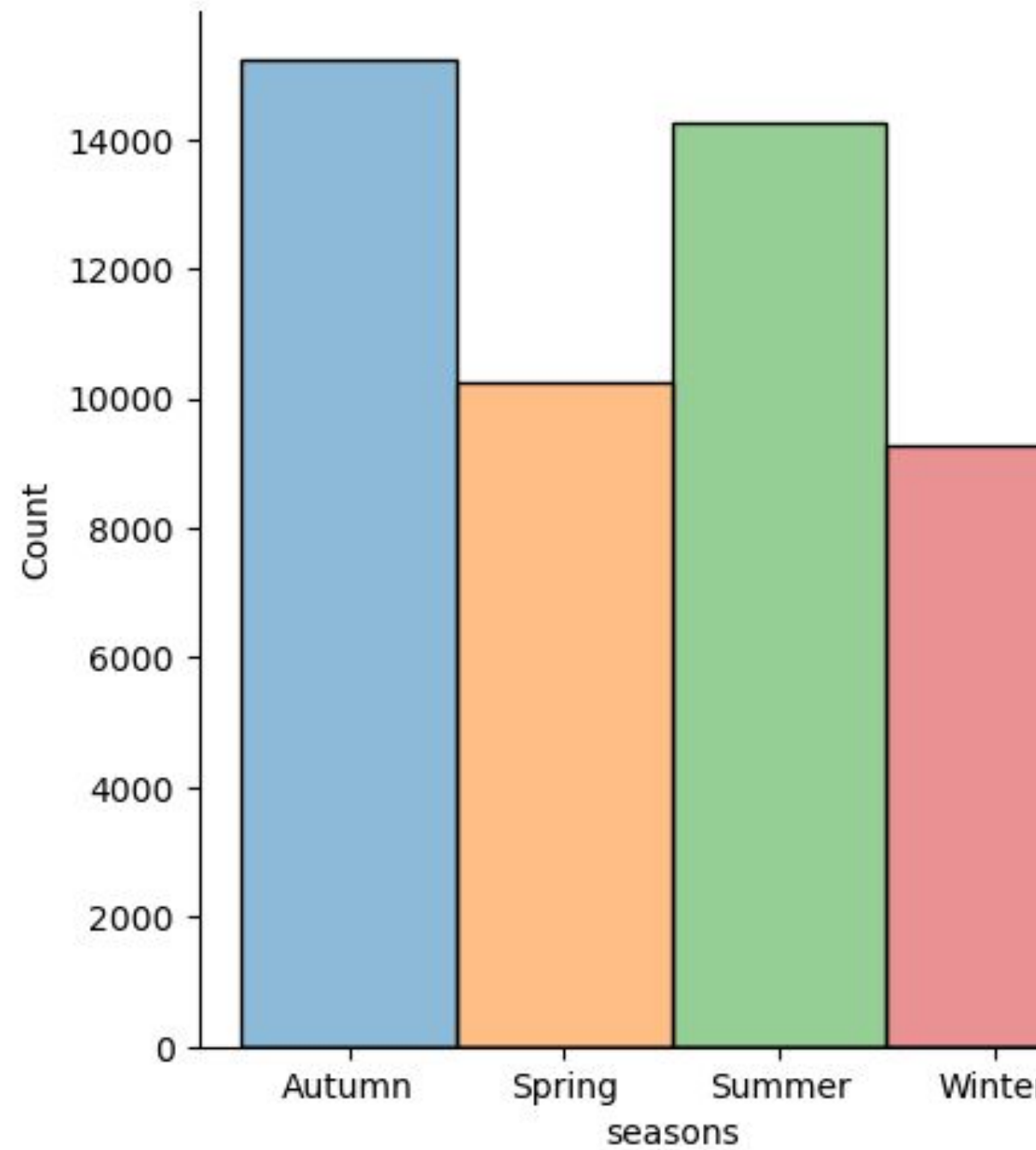
Dry

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Accidents involving Death in North Rhein-Westfalen(2021) using Cars & SUVs



Seasonal accidents in North Rhein-Westfalen

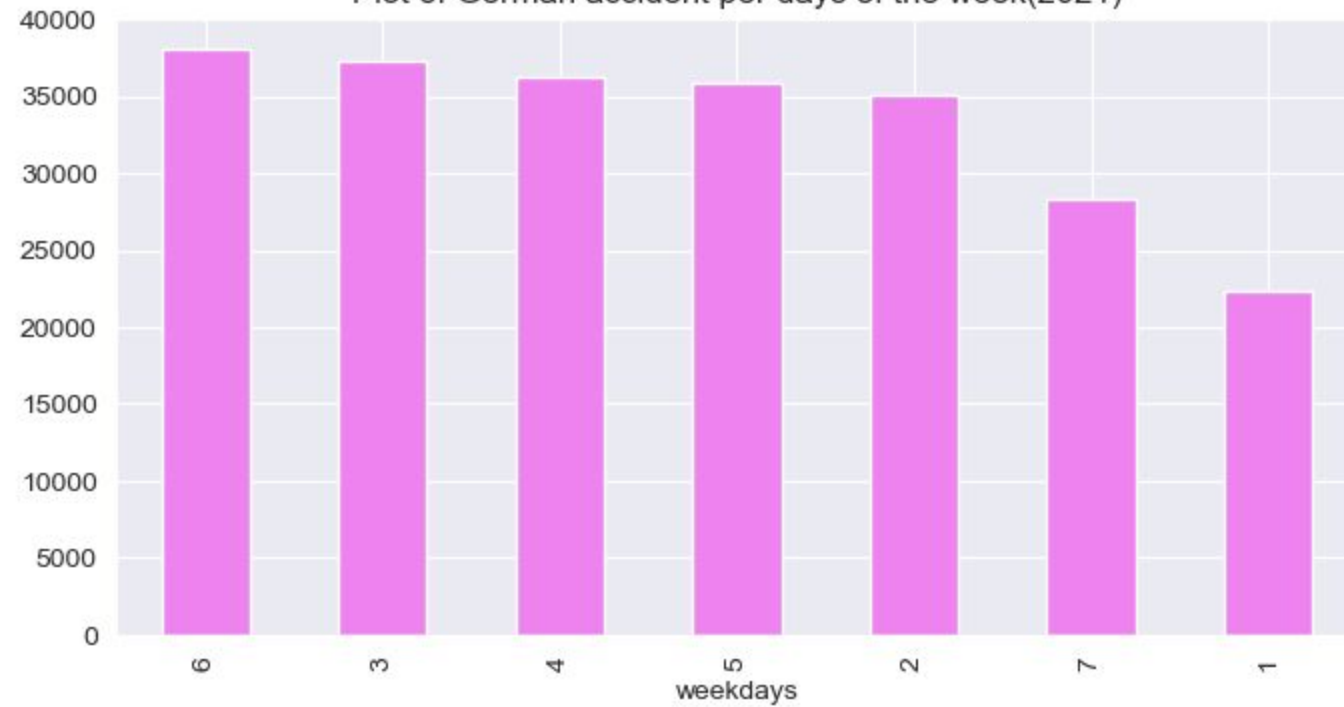


CONCLUSIONS

1. The greater the population of the state, the greater the amount of road accident happening with exception of Hamburg.
2. Death related accidents are ~ 1%, accident related to seriously injured are ~ 19%, accident related to minor injuries account for the rest 80% of the total accident recorded for the Year 2021 in Germany.
3. More accidents occur in the last six Months of the Year compare to the first six Months of the Year
4. Road user should be more careful while driving during Autumn and Summer since it's when the higher number of accident were recorded.
5. Road user on Friday, Saturday and Sunday especially at 22 o' Clock should be very very cautious because most accident with seriously injured and Death occur during this period.

Thanks for your attention!!!

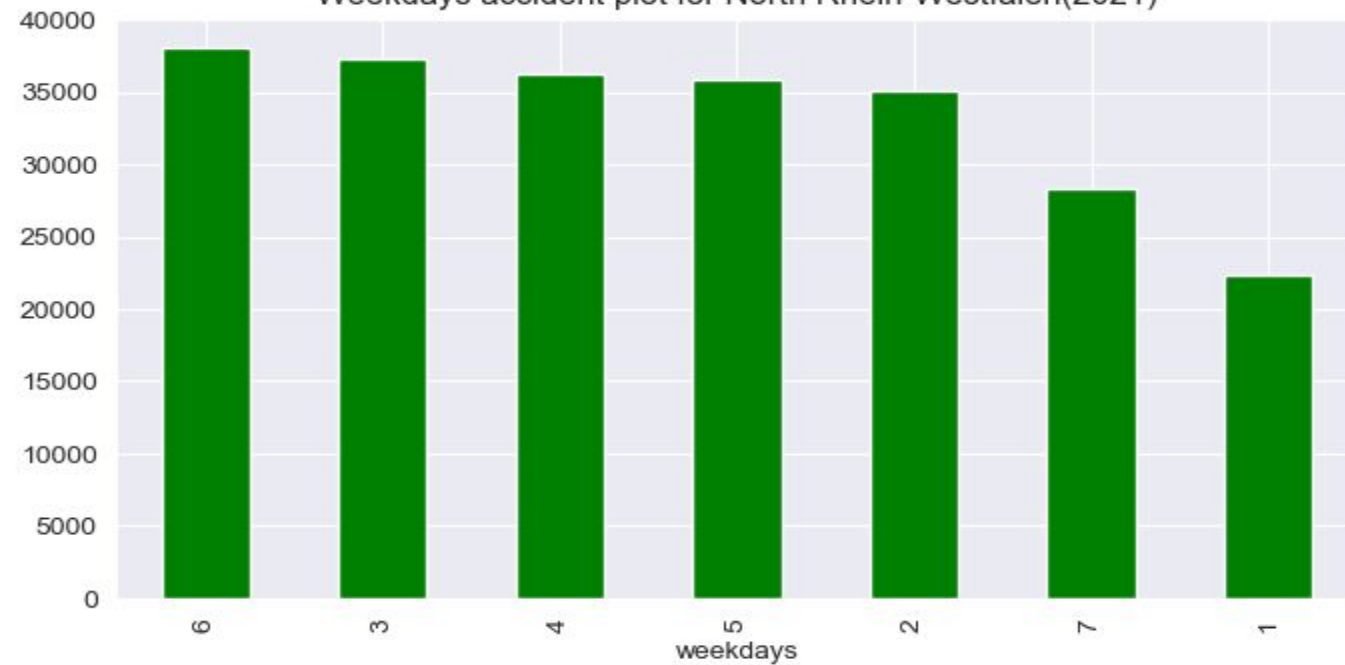
Plot of German accident per days of the week(2021)



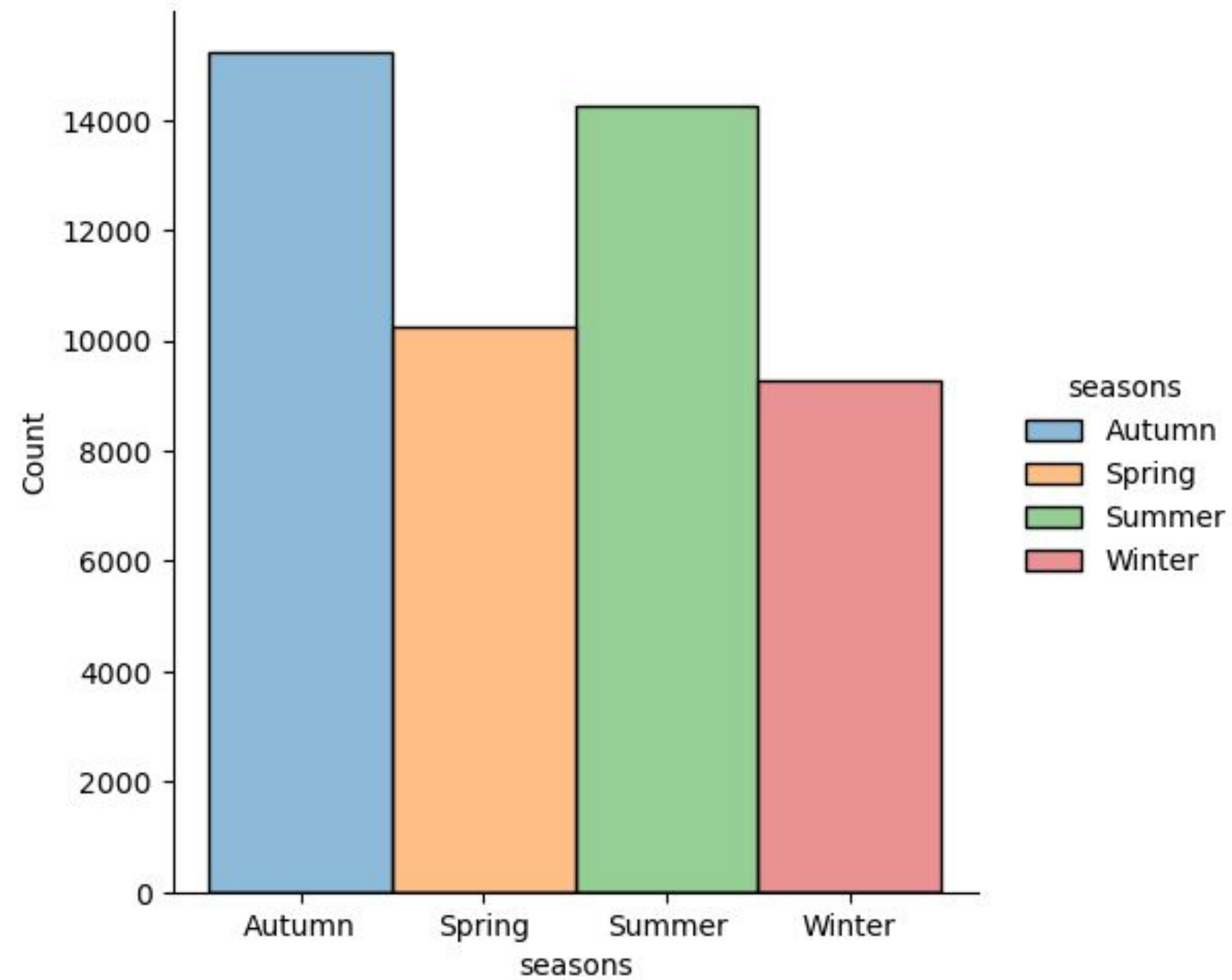
Weekdays

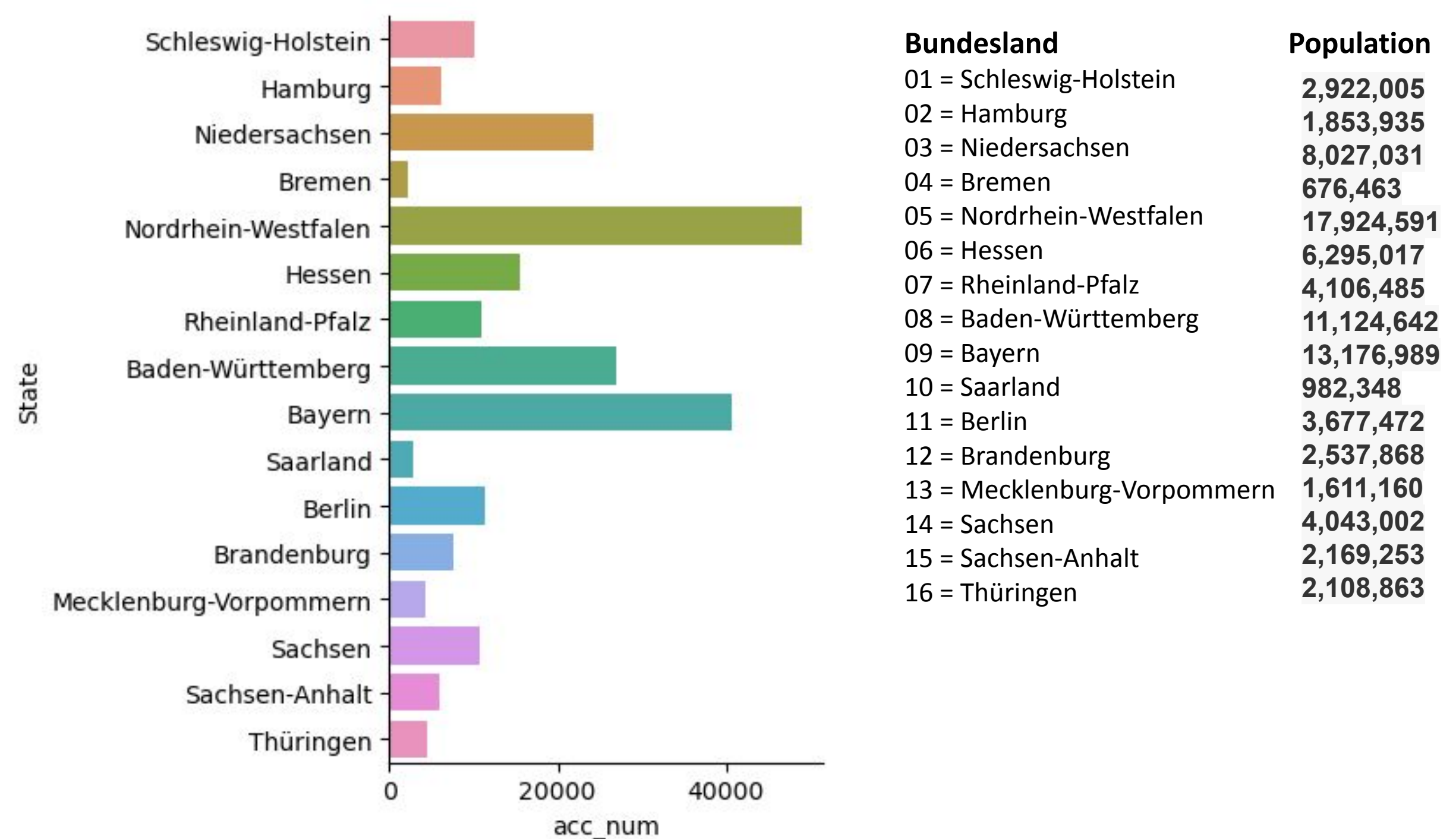
1 = Sunday
 2 = Monday
 3 = Tuesday
 4 = Wednesday
 5 = Thursday
 6 = Friday
 7 = Saturday

Weekdays accident plot for North Rhein-Westfalen(2021)



Seasonal accidents in North Rhein-Westfalen





For Germany

225 deaths in winter

356 deaths in Spring

445 deaths in Summer

463 deaths in Autumn

FOR NRW

63 deaths in winter

55 deaths in Spring

66 deaths in Summer

80 deaths in Autumn