

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

Presented By

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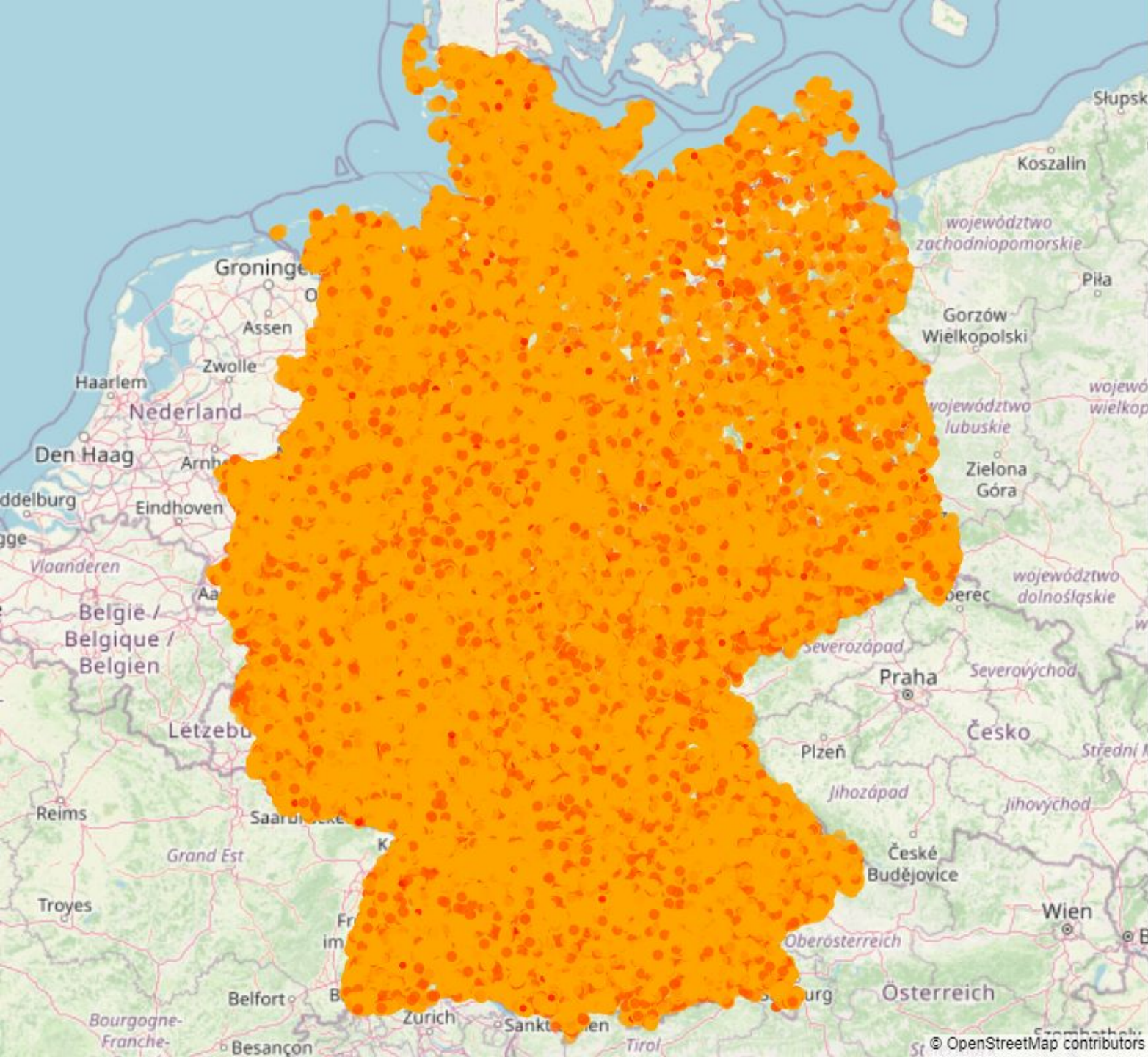


Aims & Objectives of the Project

- Visualisation of the Data.
- Accidents categorization using States.
- 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



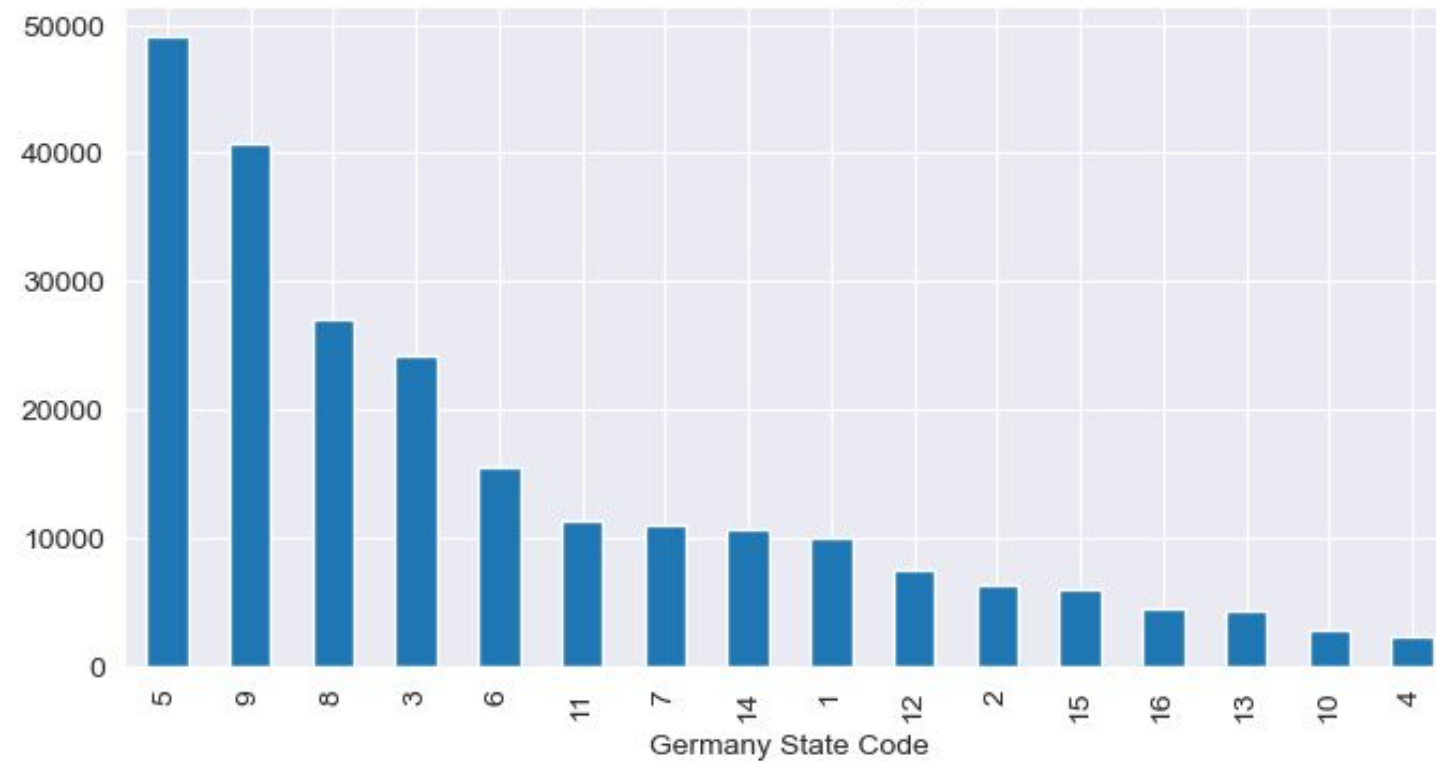
2.5

2

1.5

1

Plot of German accident per States



Bundesland

01 = Schleswig-Holstein

02 = Hamburg

03 = Niedersachsen

04 = Bremen

05 = Nordrhein-Westfalen

06 = Hessen

07 = Rheinland-Pfalz

08 = Baden-Württemberg

09 = Bayern

10 = Saarland

11 = Berlin

12 = Brandenburg

13 = Mecklenburg-Vorpommern

14 = Sachsen

15 = Sachsen-Anhalt

16 = Thüringen

Population

2 922 005

1 853 935

8 027 031

676 463

17 924 591

6 295 017

4 106 485

11 124 642

13 176 989

982 348

3 677 472

2 537 868

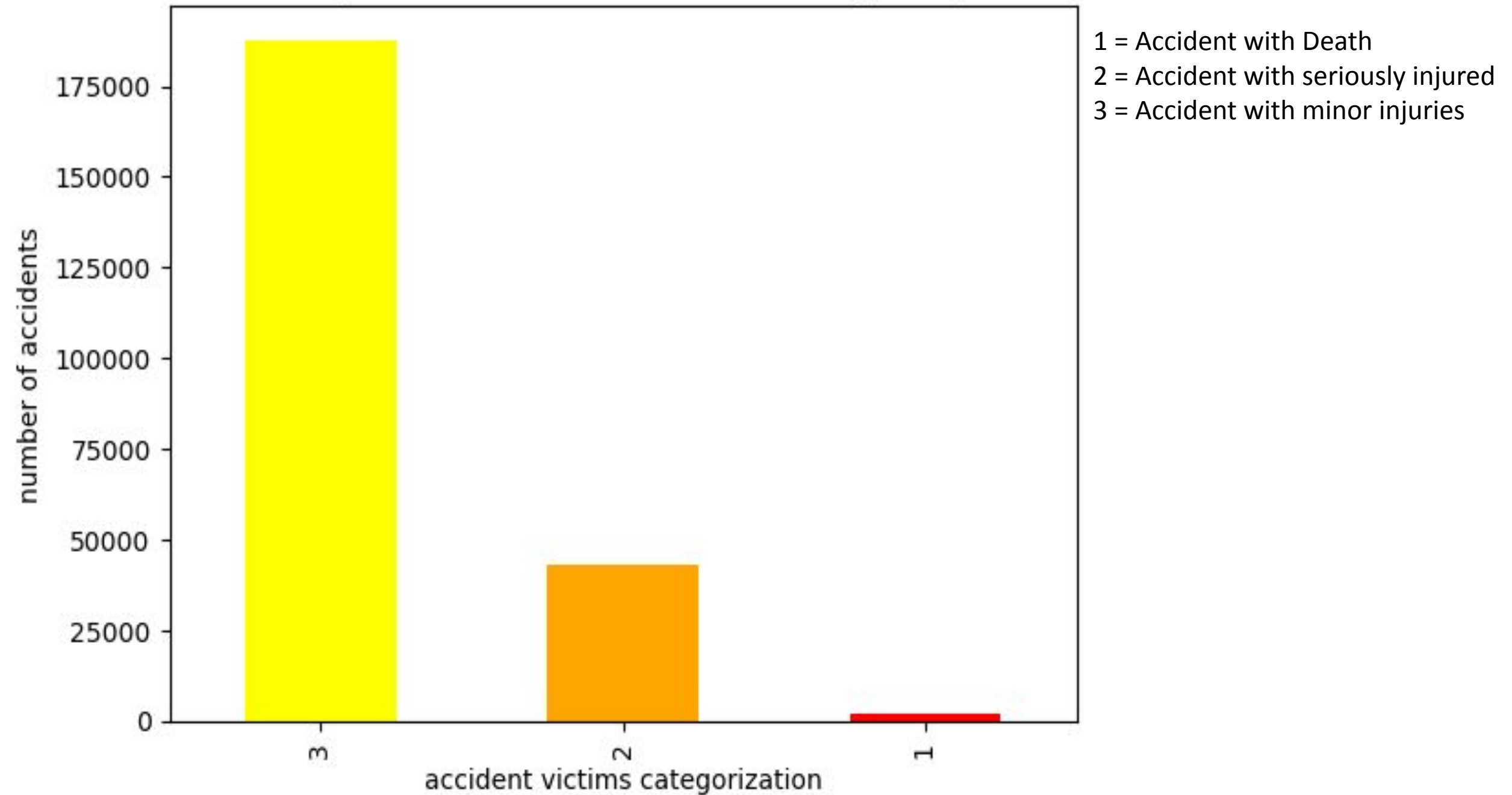
1 611 160

4 043 002

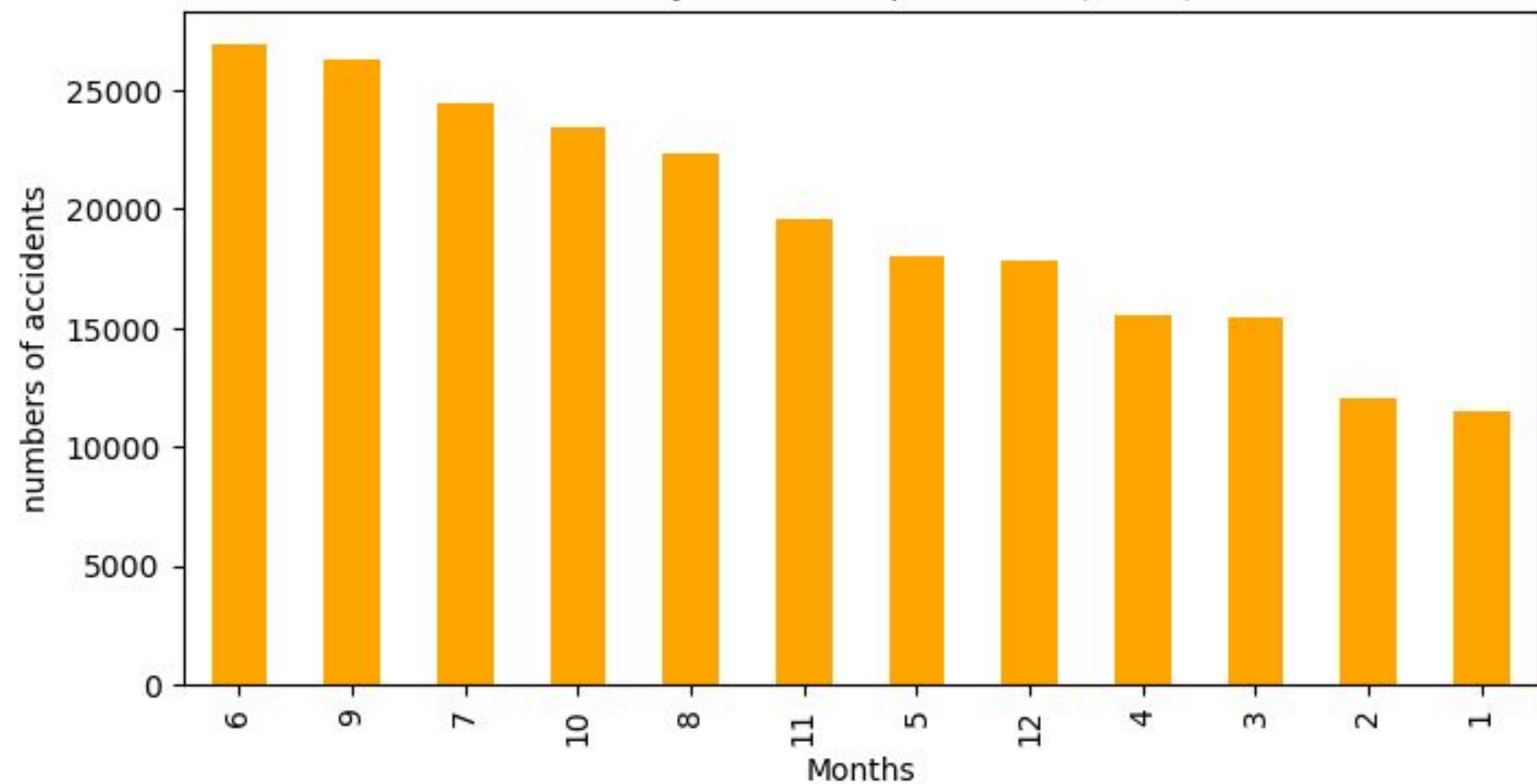
2 169 253

2 108 863

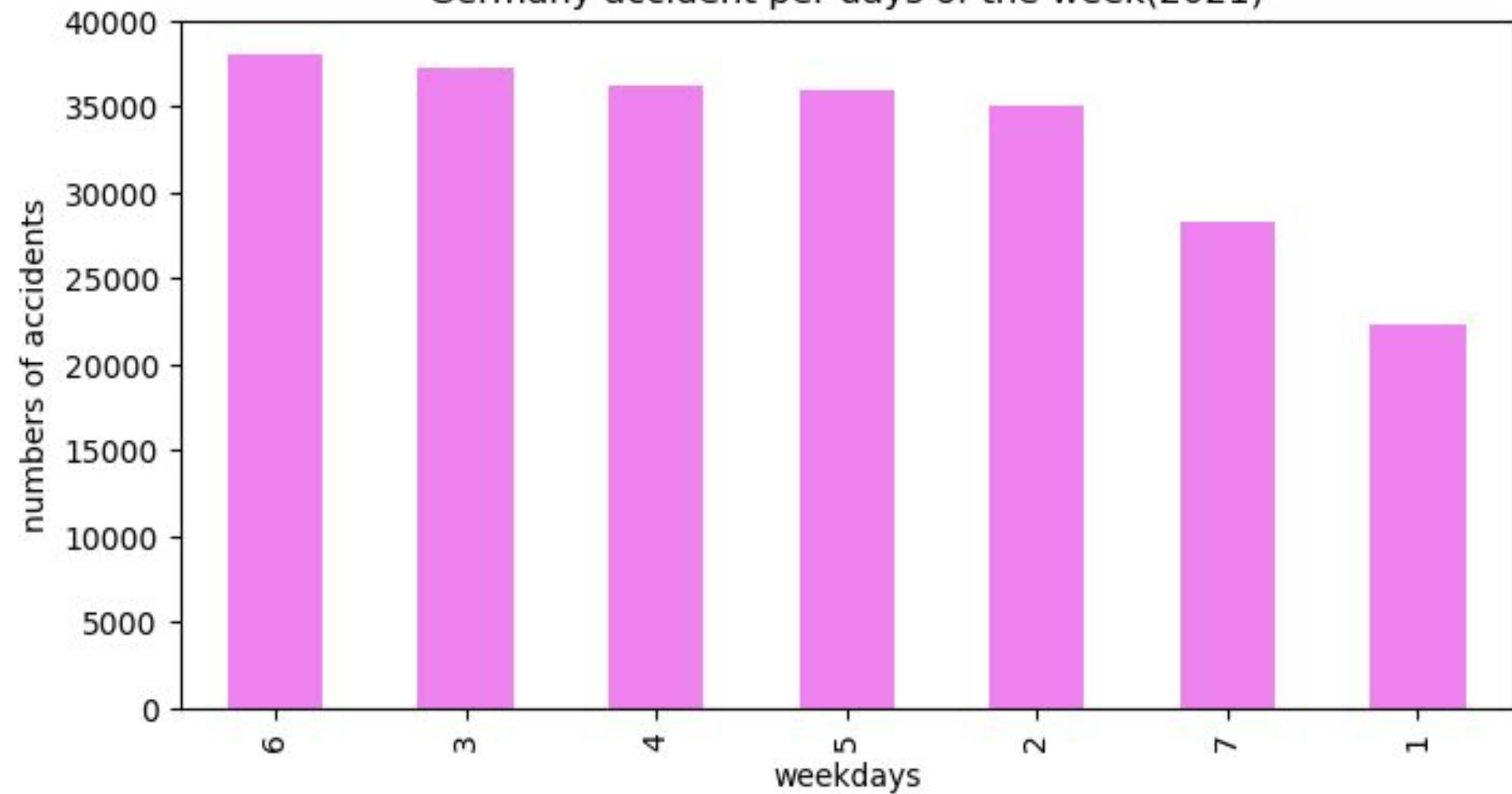
categorization of accidents in Germany(2021)



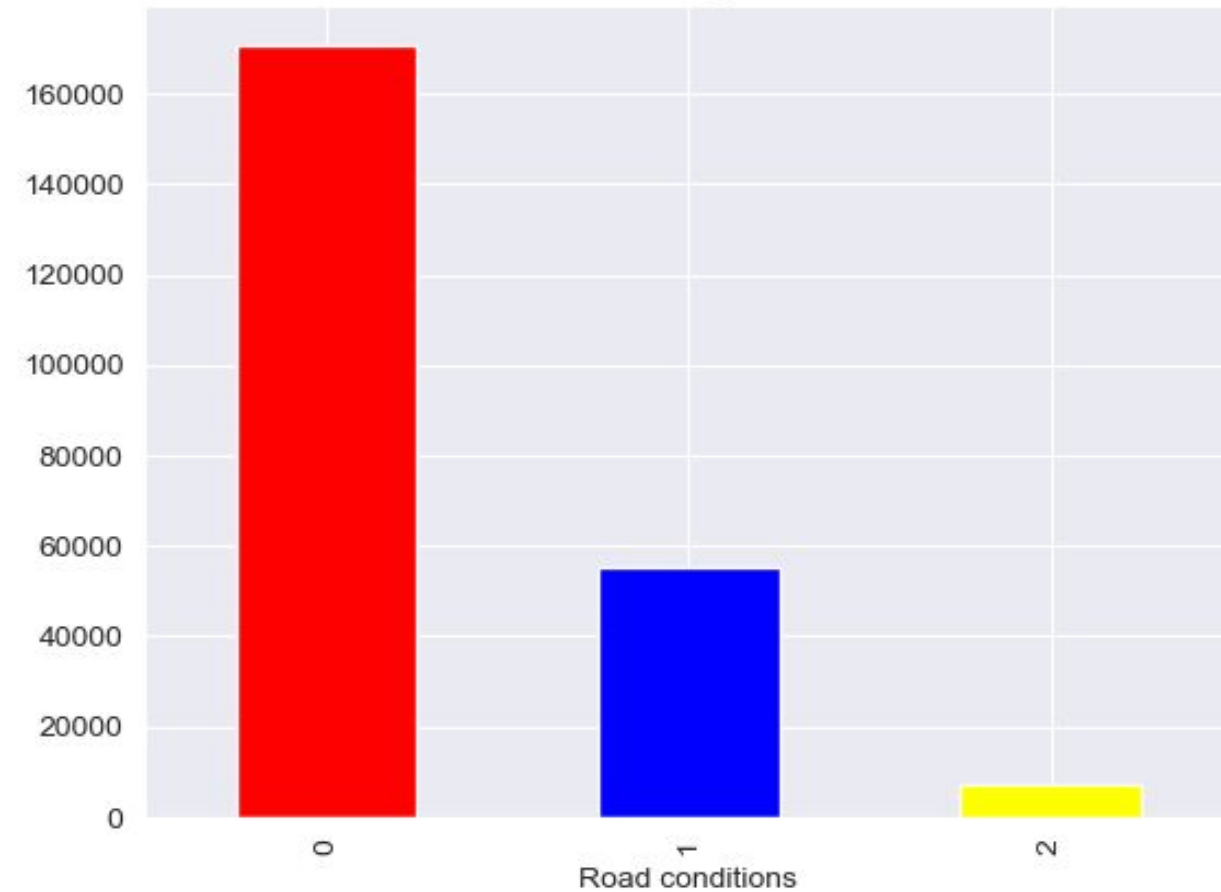
Germany accidents per Month(2021)



Germany accident per days of the week(2021)



Plot of accident relating to road conditions



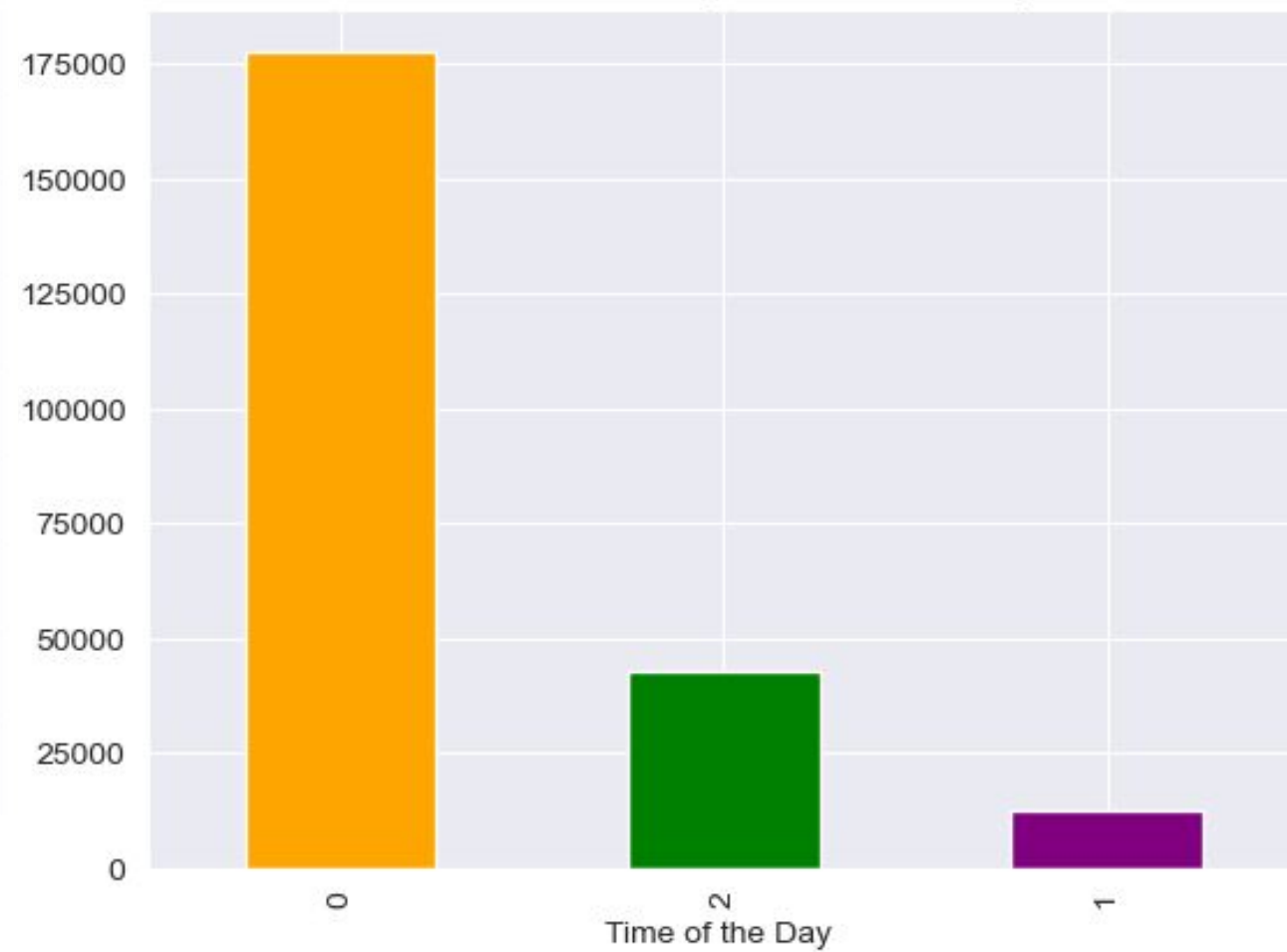
Road Conditions:

0 = Dry

1 = Wet/Damp/Slippery

2 = Winter Slippery

Accidents relating to time of the Day



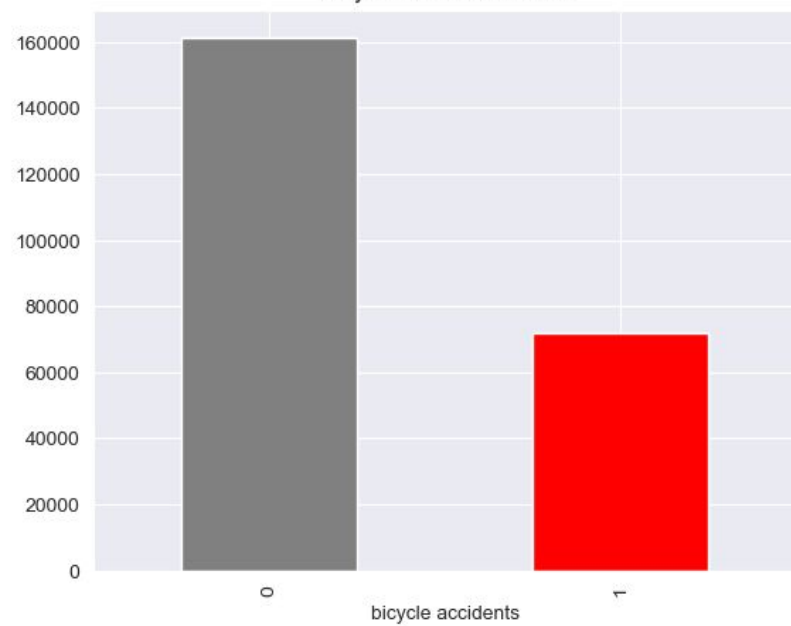
Time of the Day:

0 = Daylight

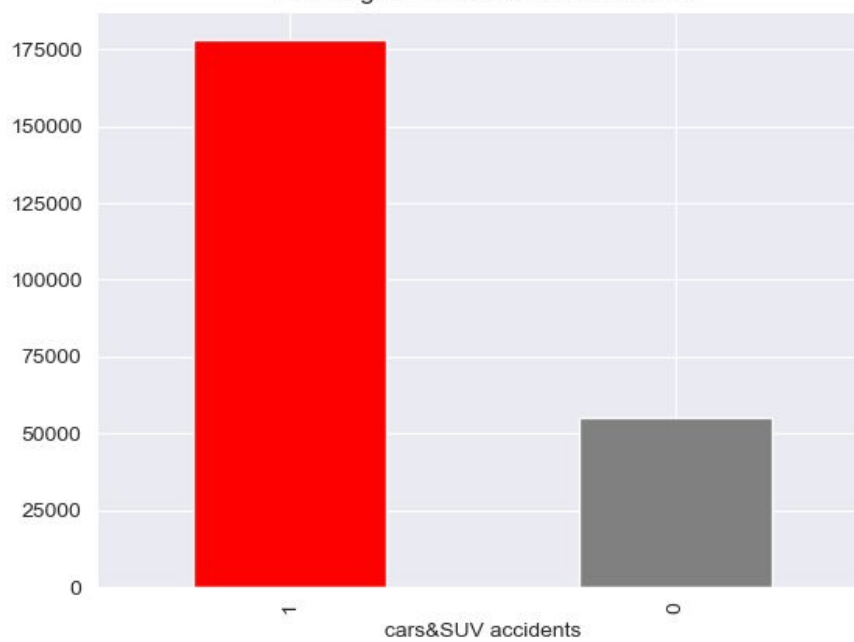
1 = Twilight

2 = Darkness

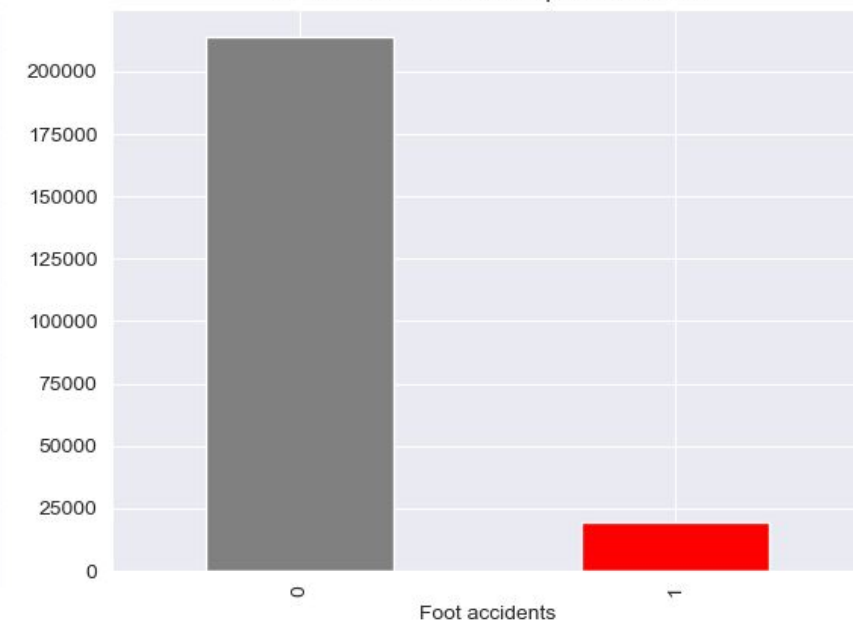
Bicycle related accident



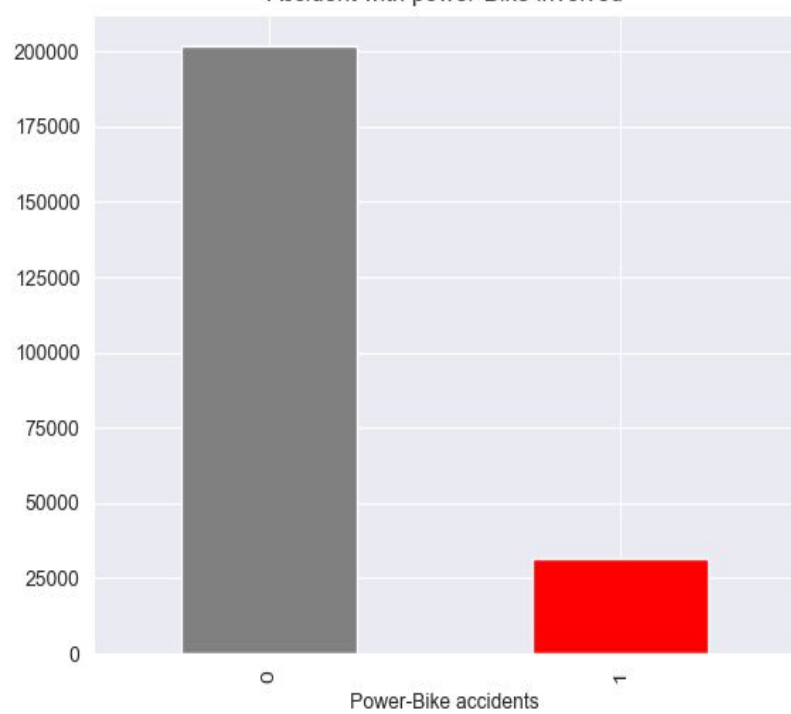
Passengers Vehicle related accident



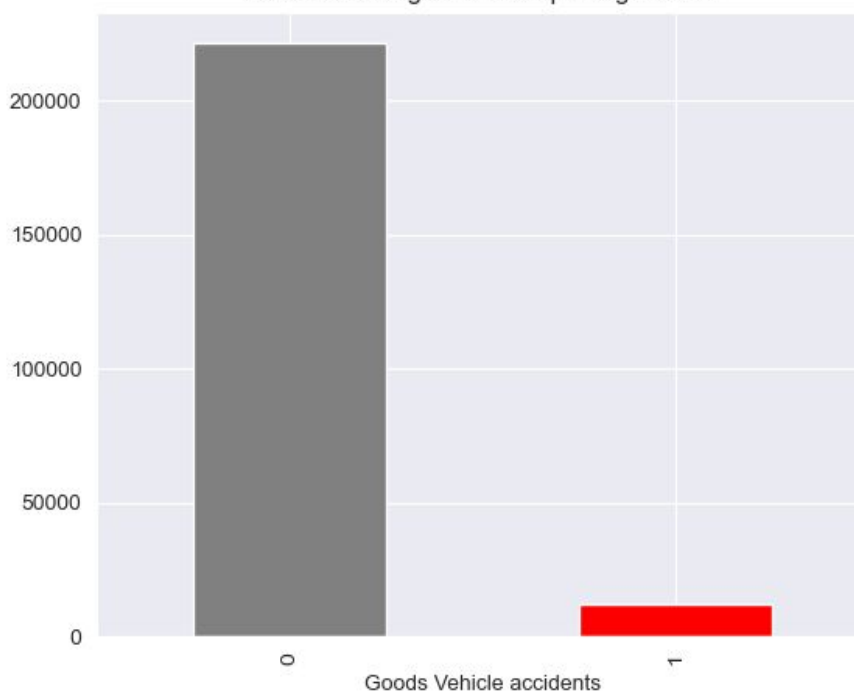
Accidents where on feet person related



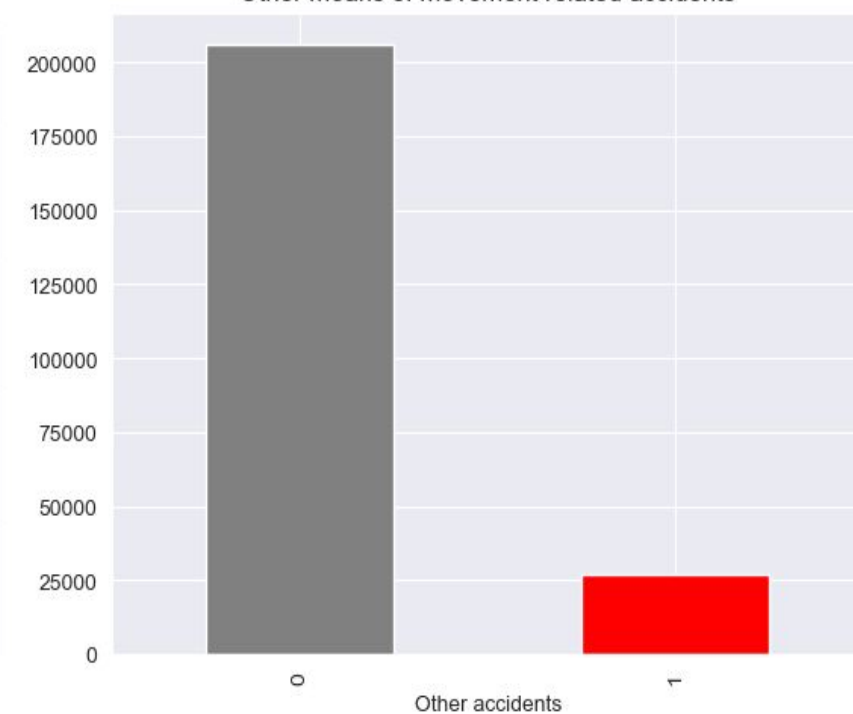
Accident with power-Bike involved



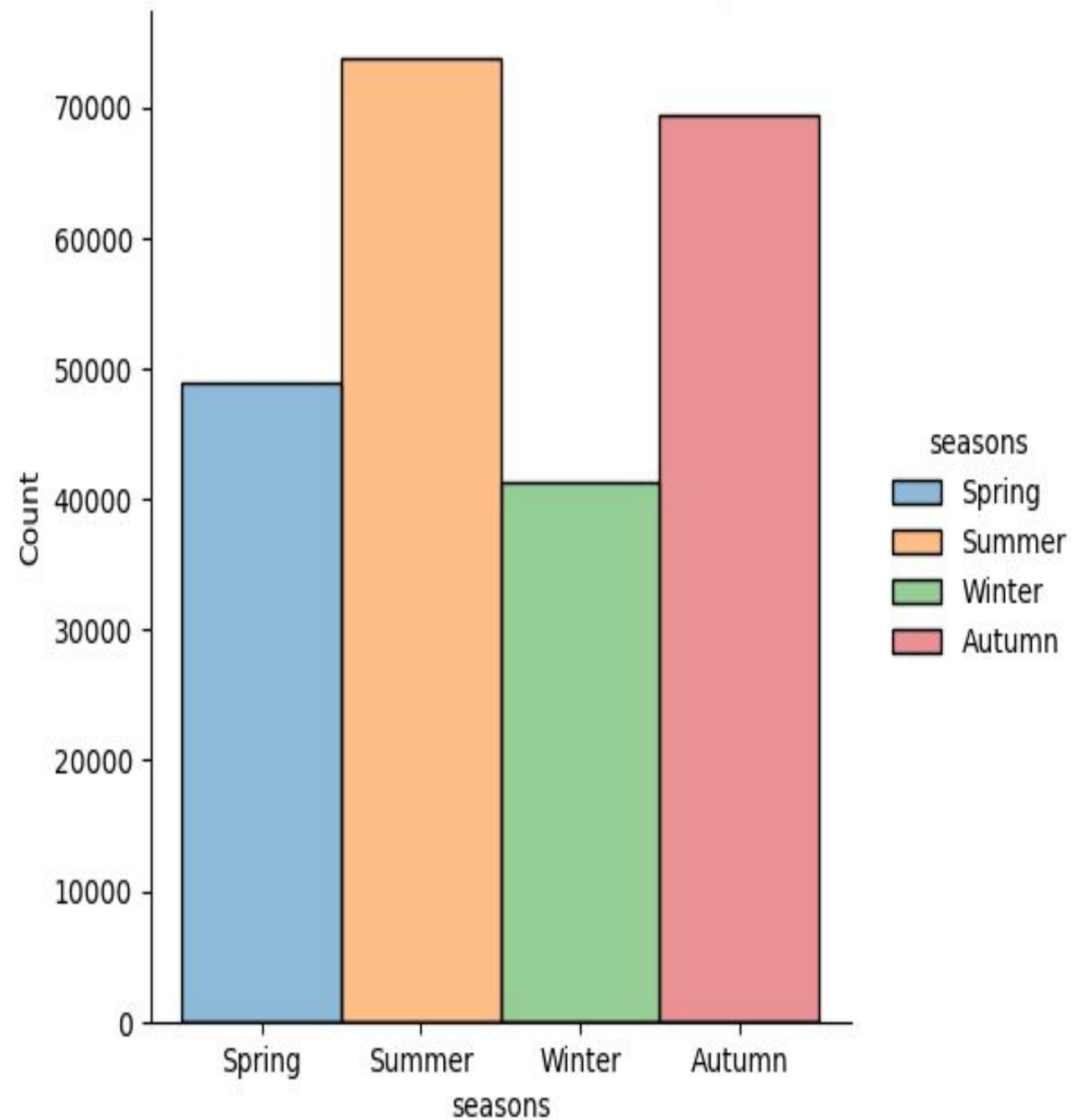
Accident with goods Transporting vehicle



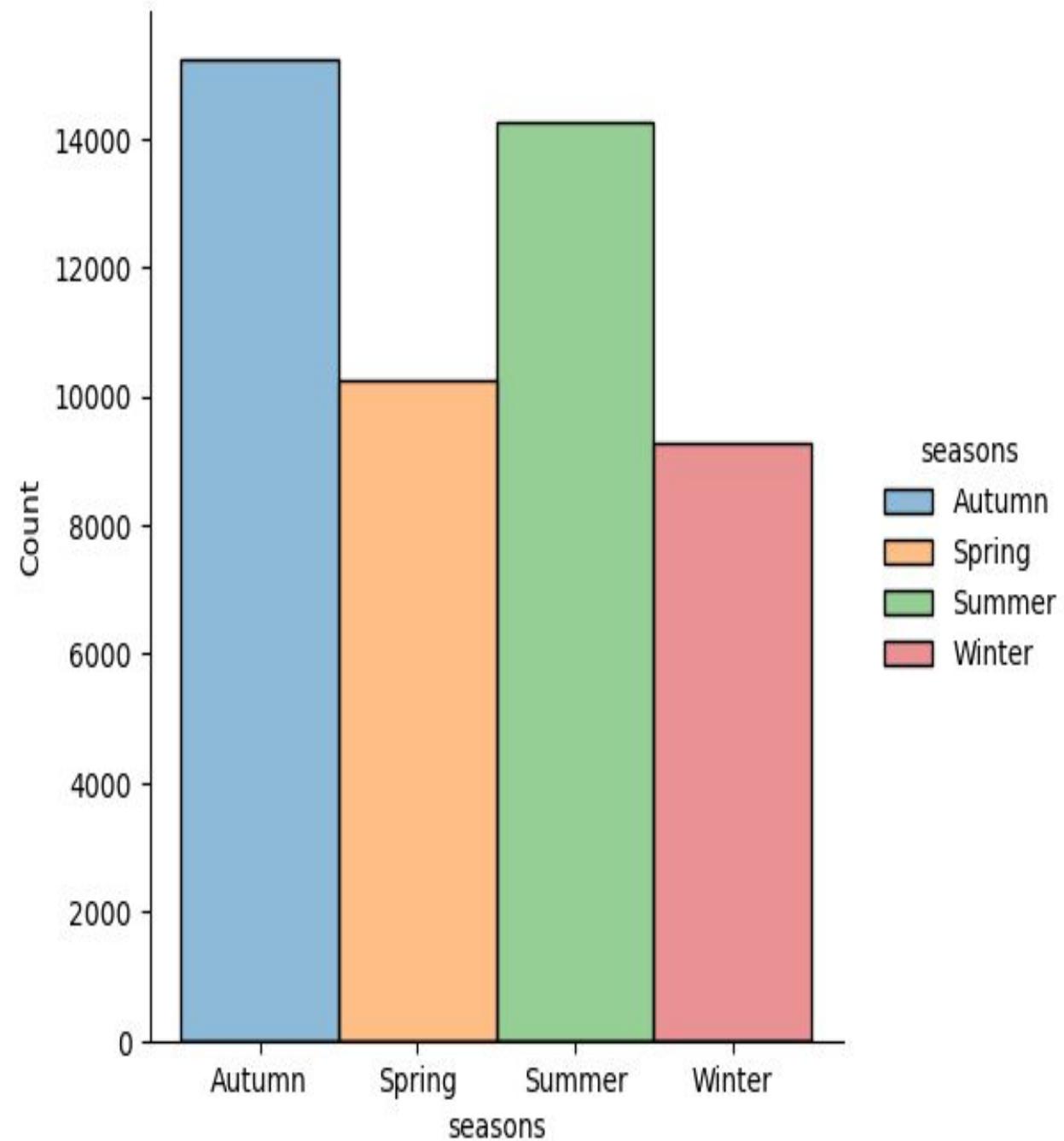
Other means of movement related accidents



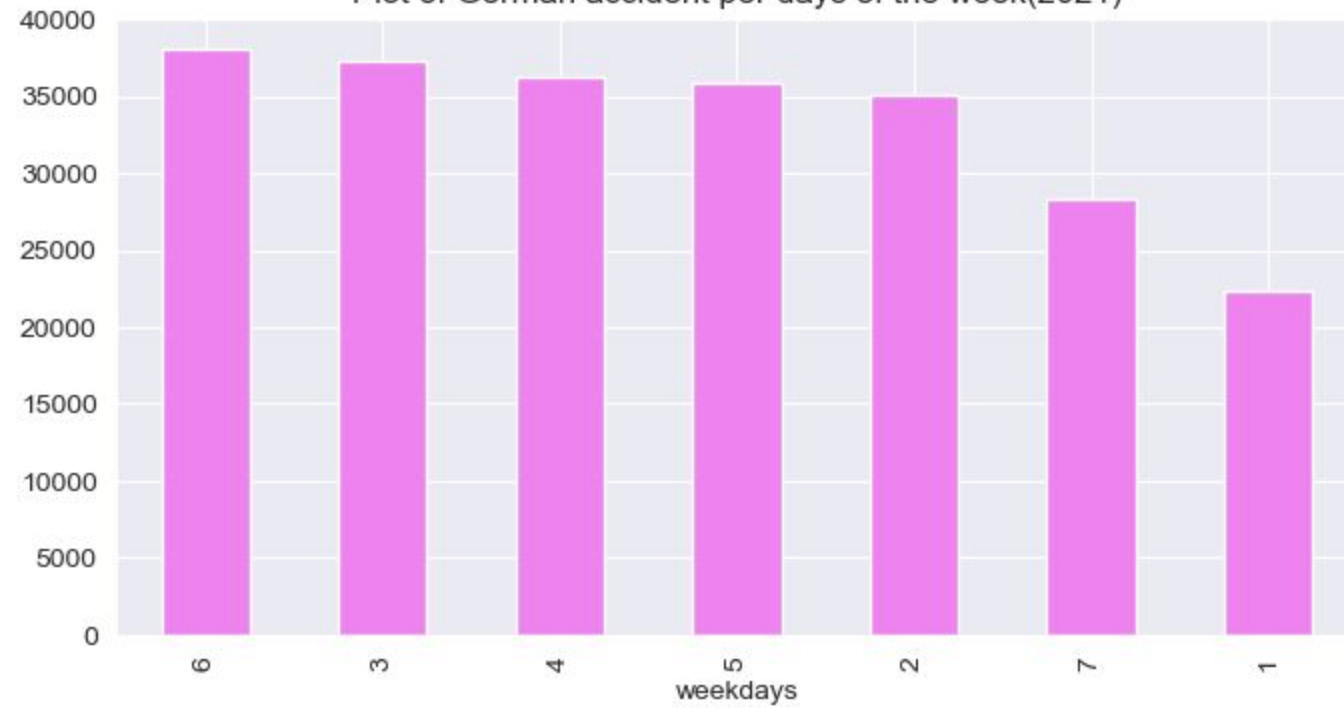
Seasonal accidents in Germany



Seasonal accidents in North Rhein-Westfalen



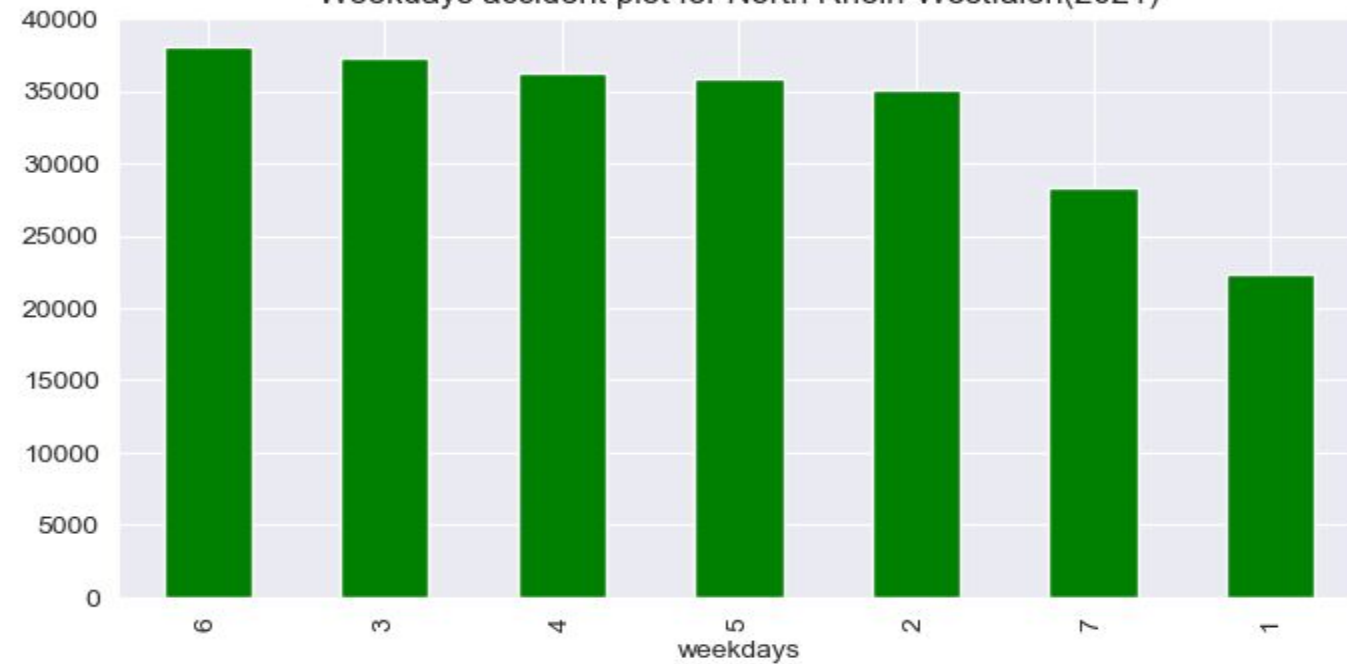
Plot of German accident per days of the week(2021)



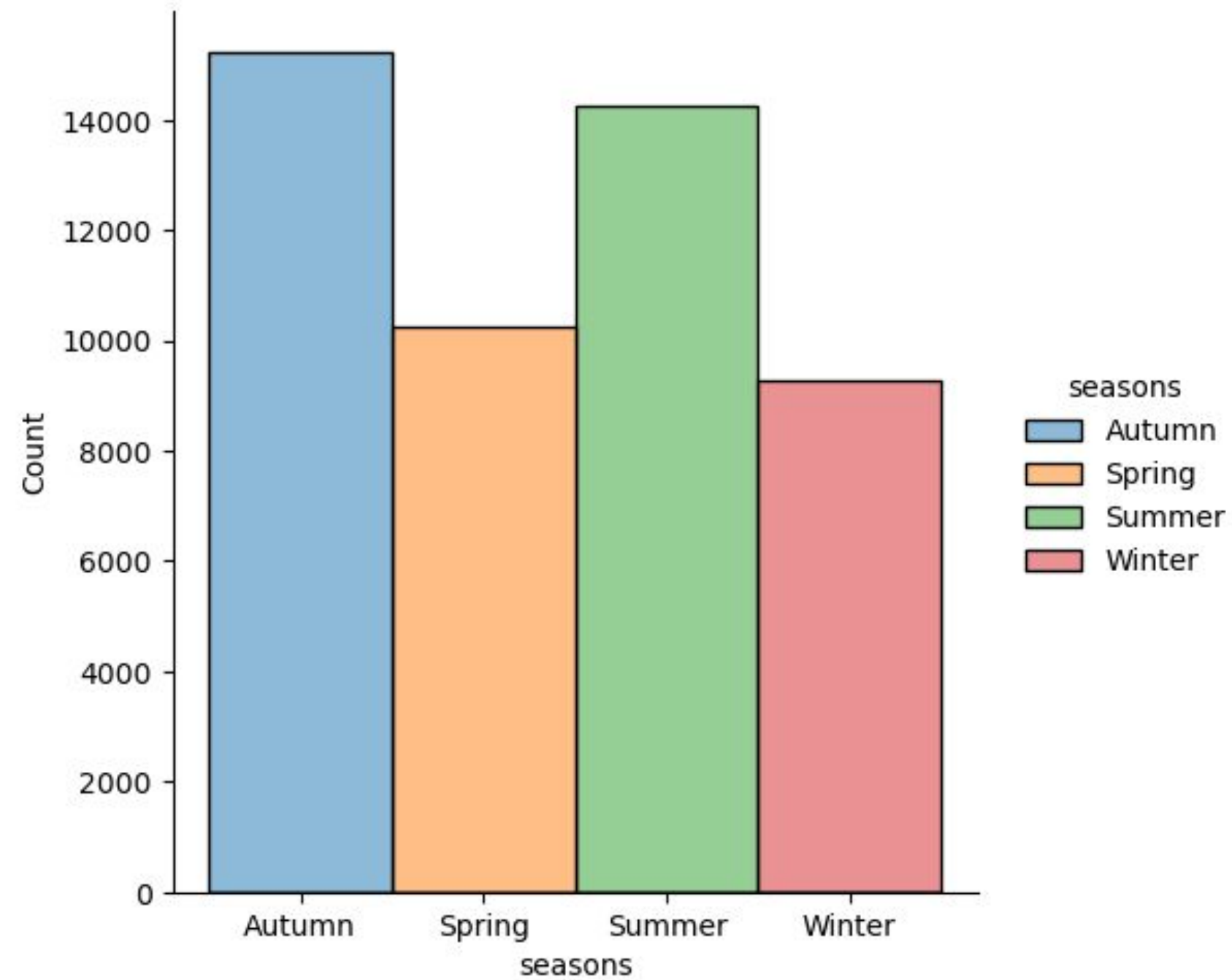
Weekdays

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

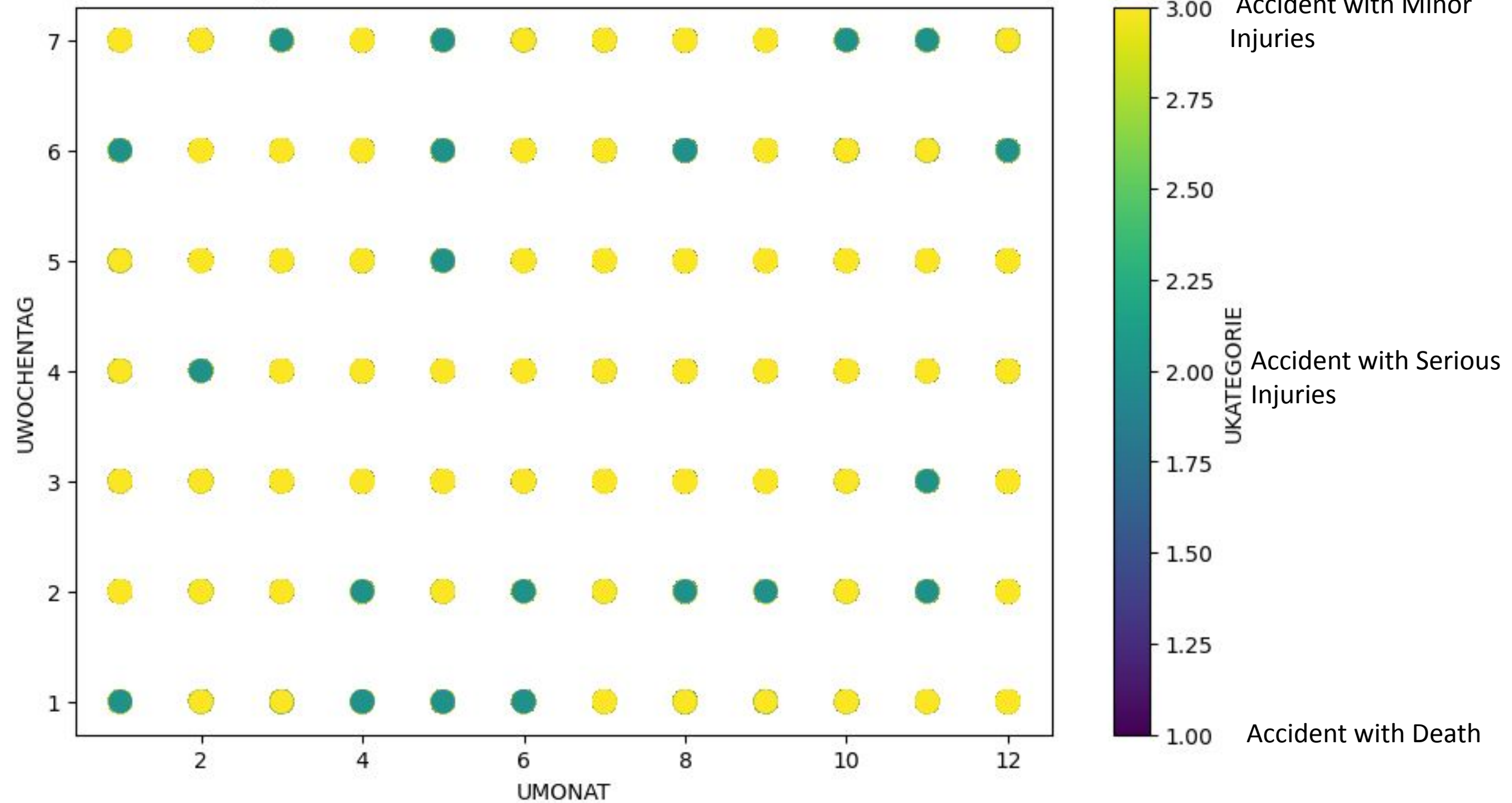
Weekdays accident plot for North Rhein-Westfalen(2021)



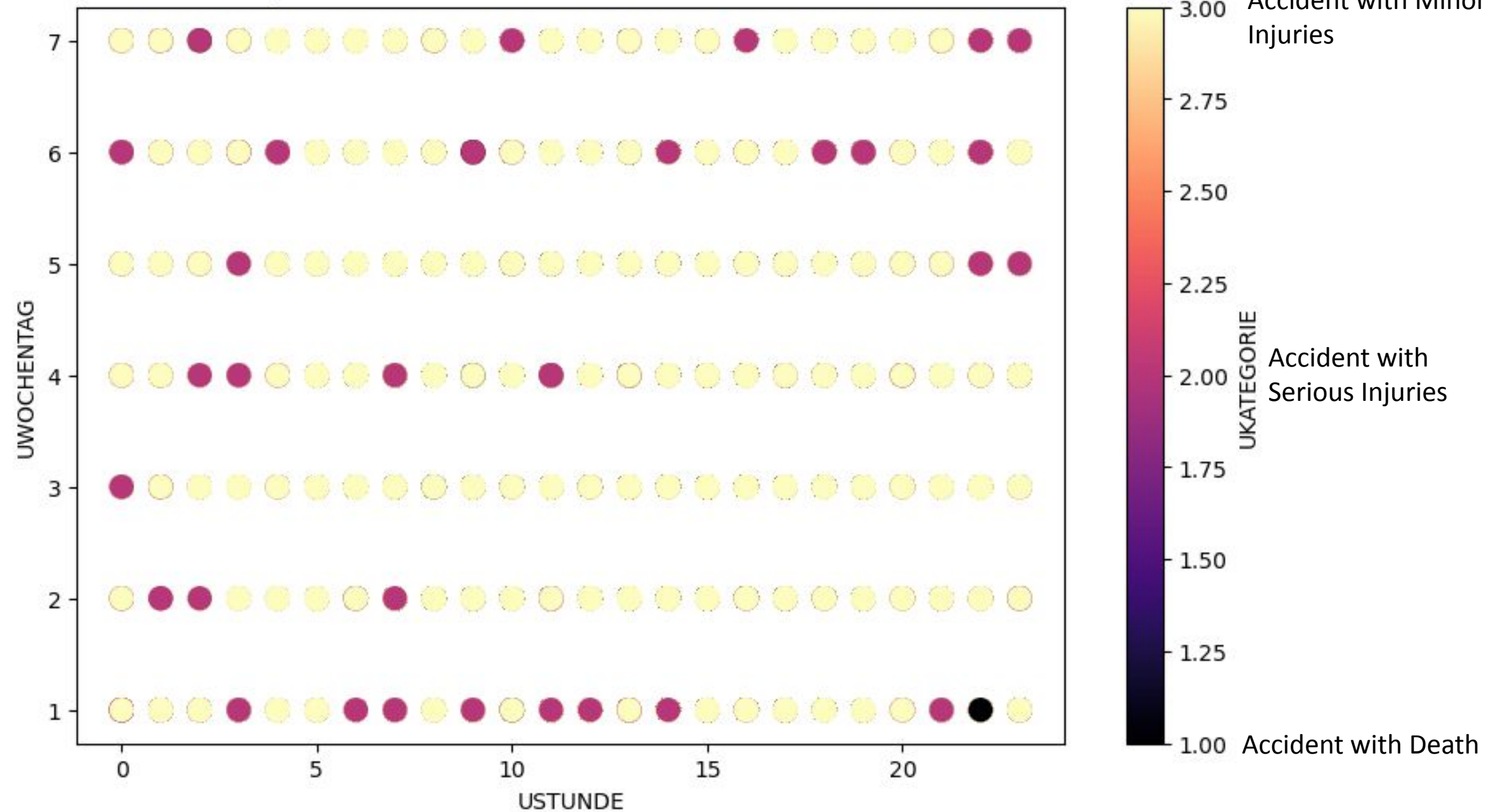
Seasonal accidents in North Rhein-Westfalen



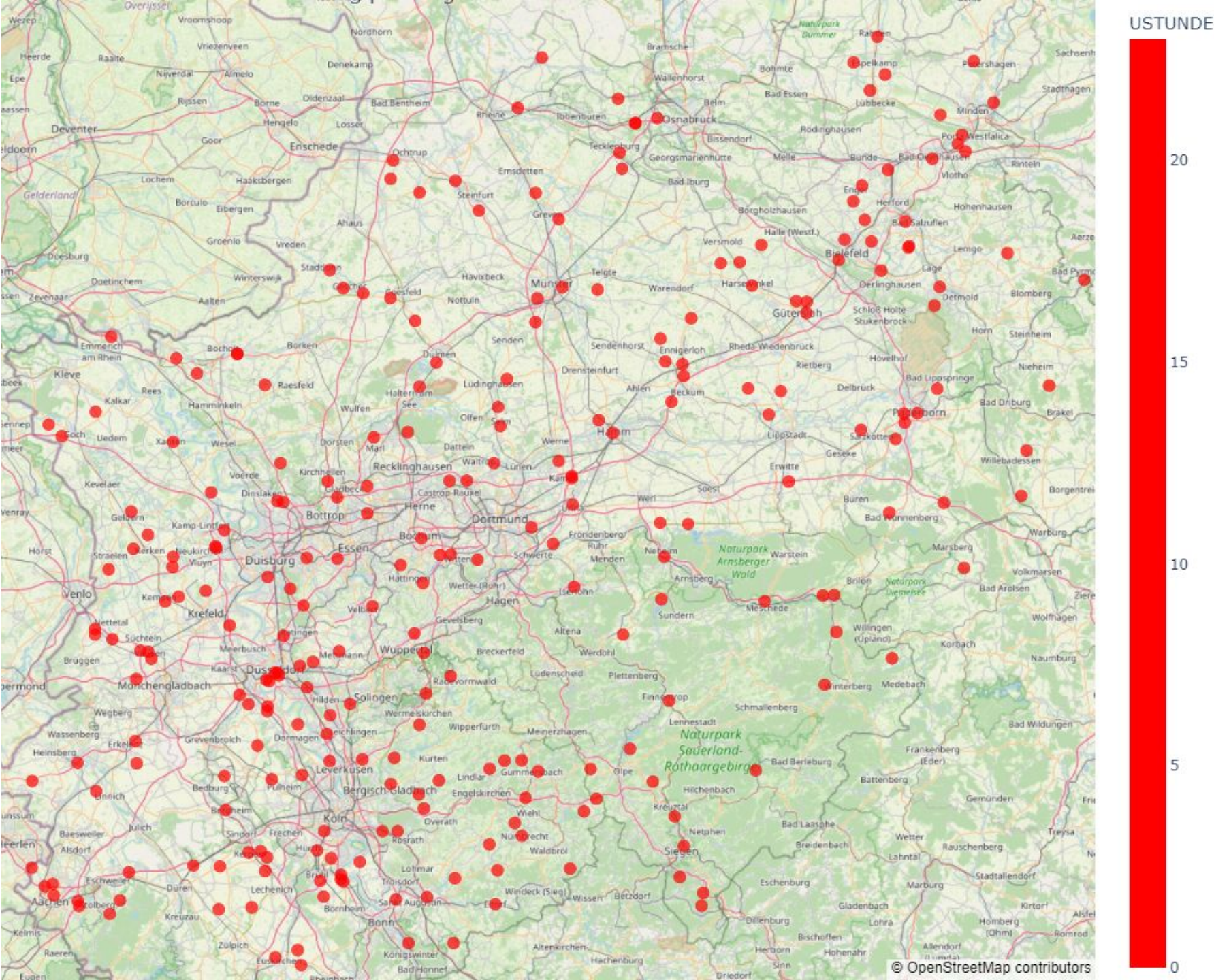
Days and Months accident in North Rhein-Westfalen



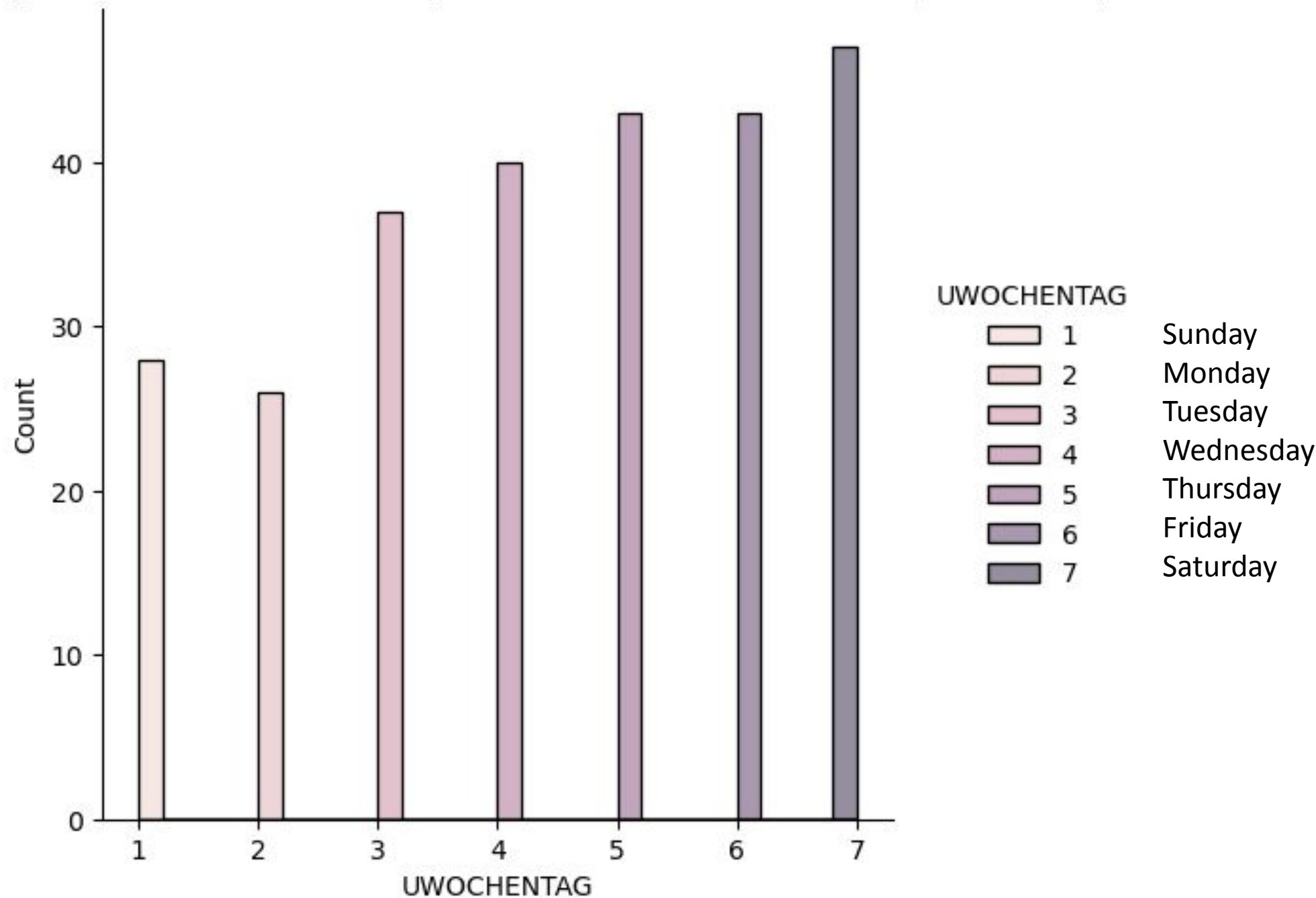
Days and Hours accident in North Rhein-Westfalen



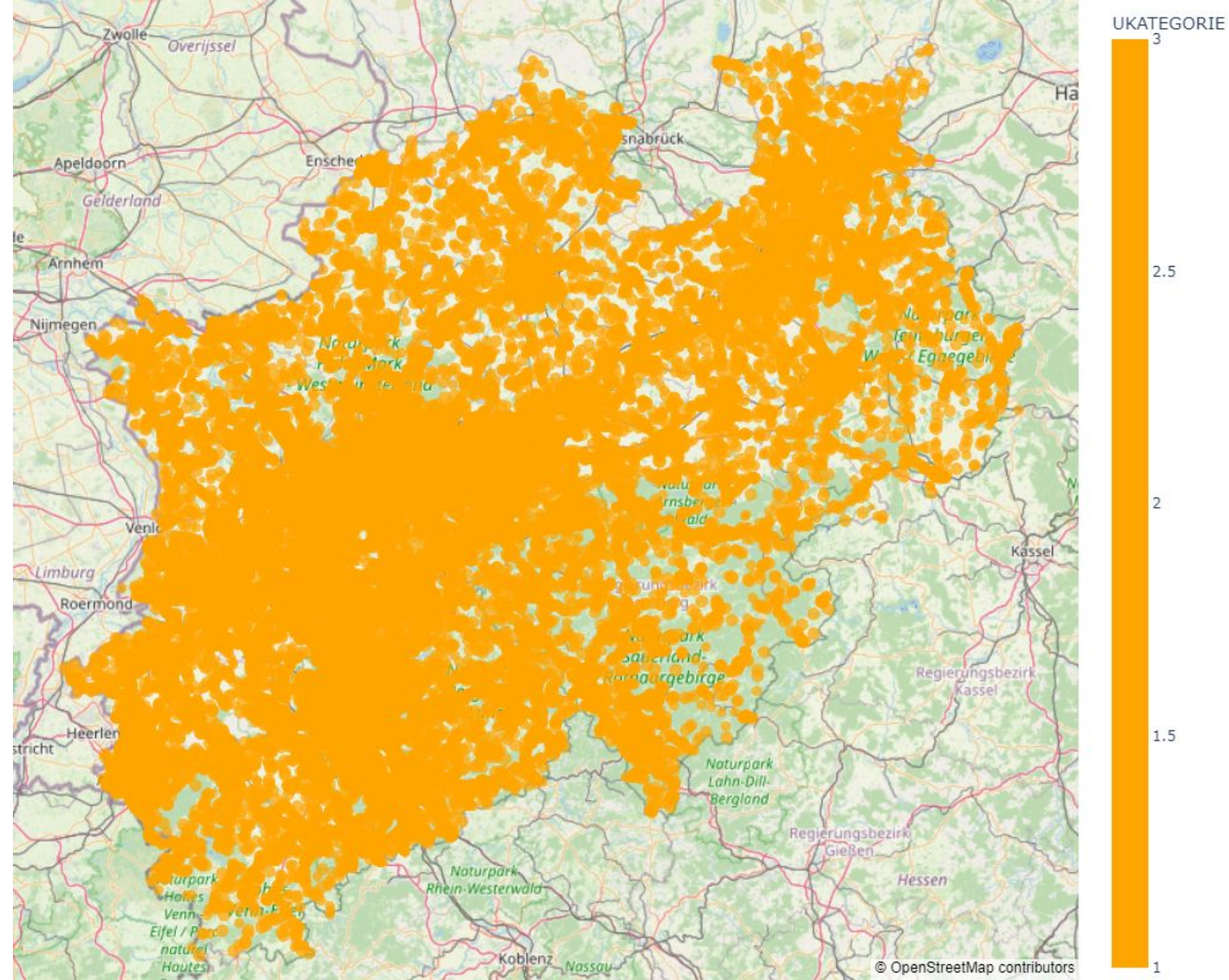
Death related accident in North Rhein-Westfalen



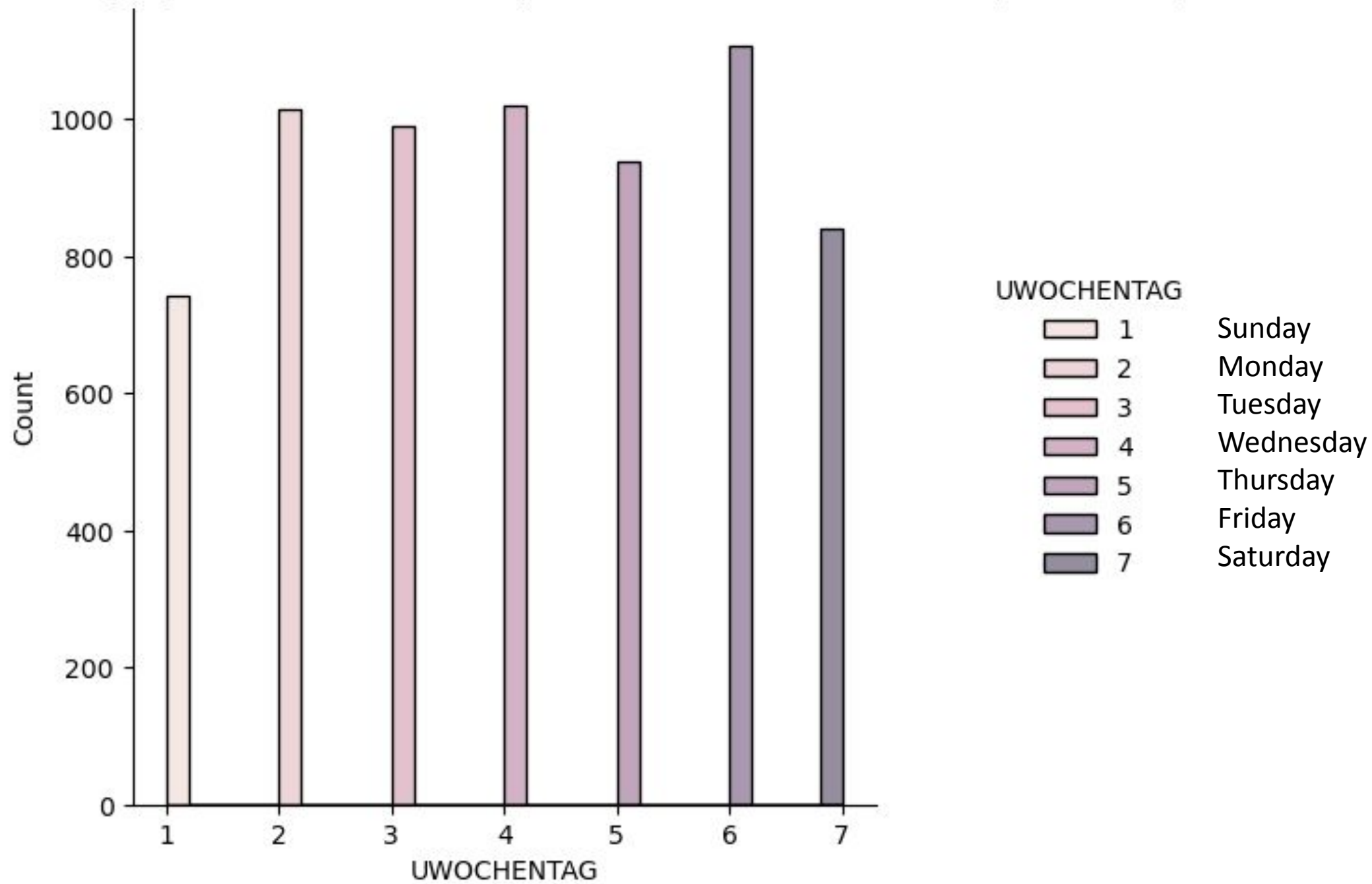
Weekdays accident death victims plot for North Rhein-Westfalen(Cars&SUVs)

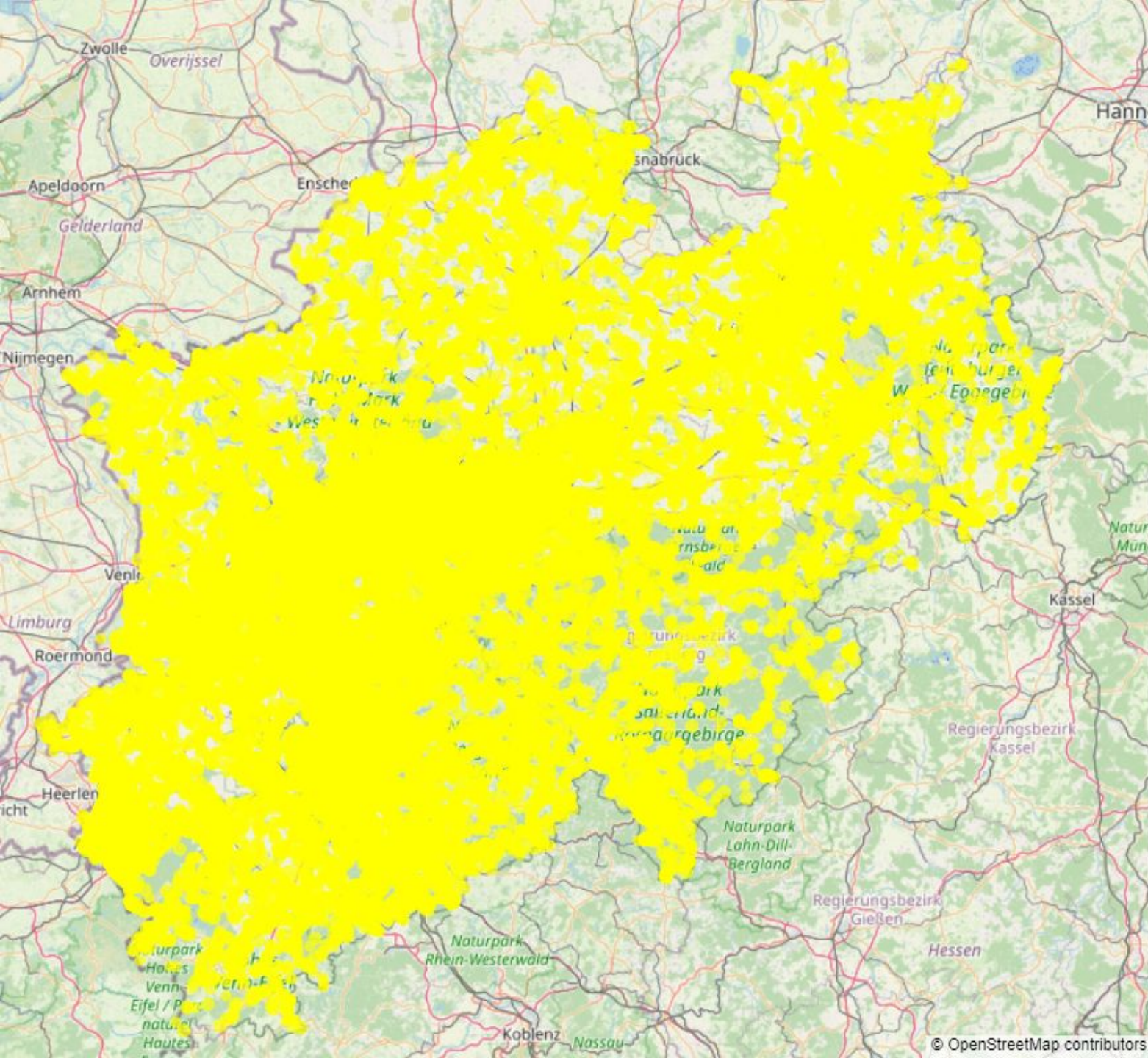


Accident with Serious Injuries in North Rhein-Westfalen



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





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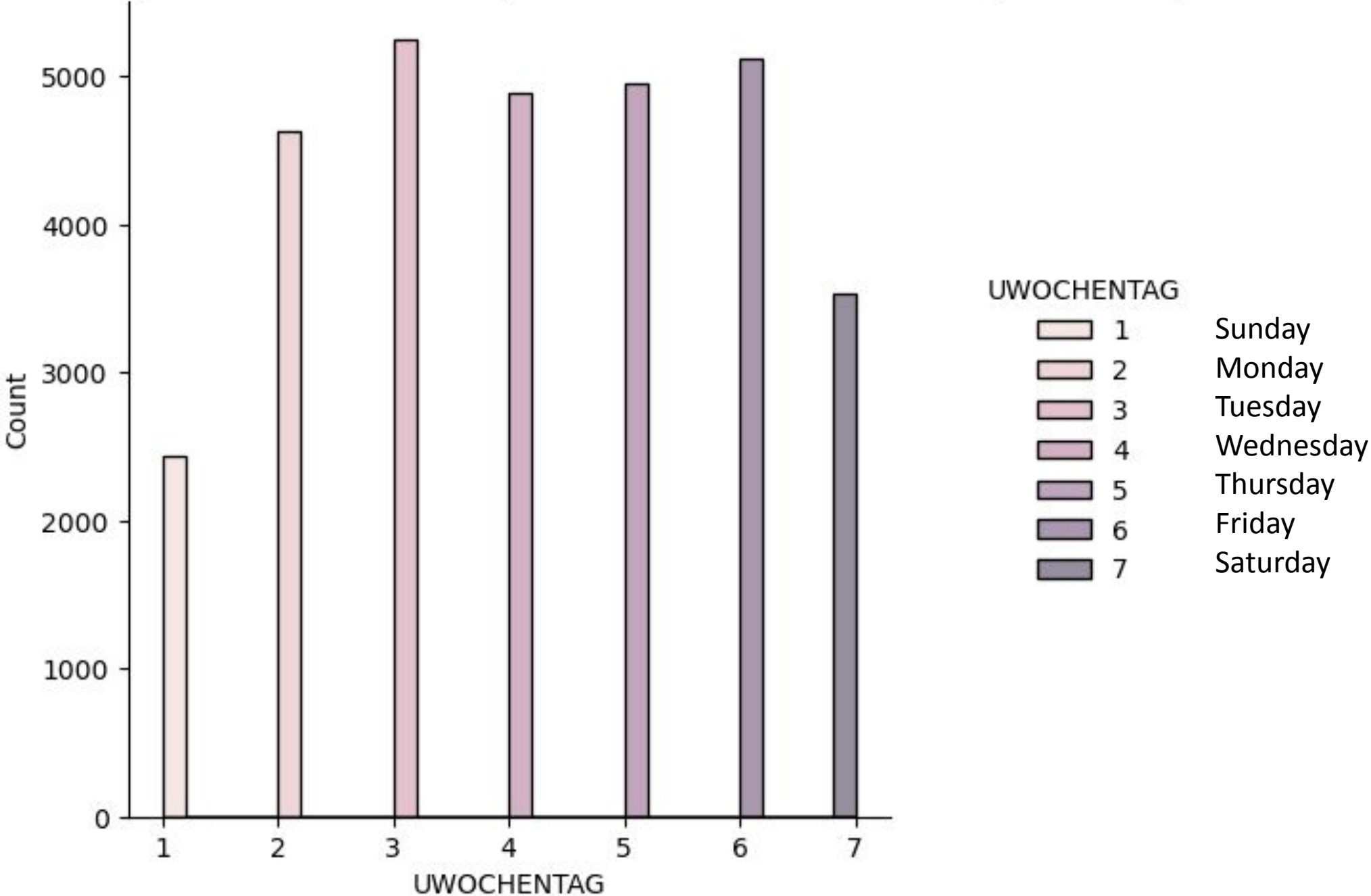
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1

Accident with Minor Injuries in North Rhein-Westfalen

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



Accident with Death recorded using weekdays

Weekday:

1 = Sunday

2 = Monday

3 = Tuesday

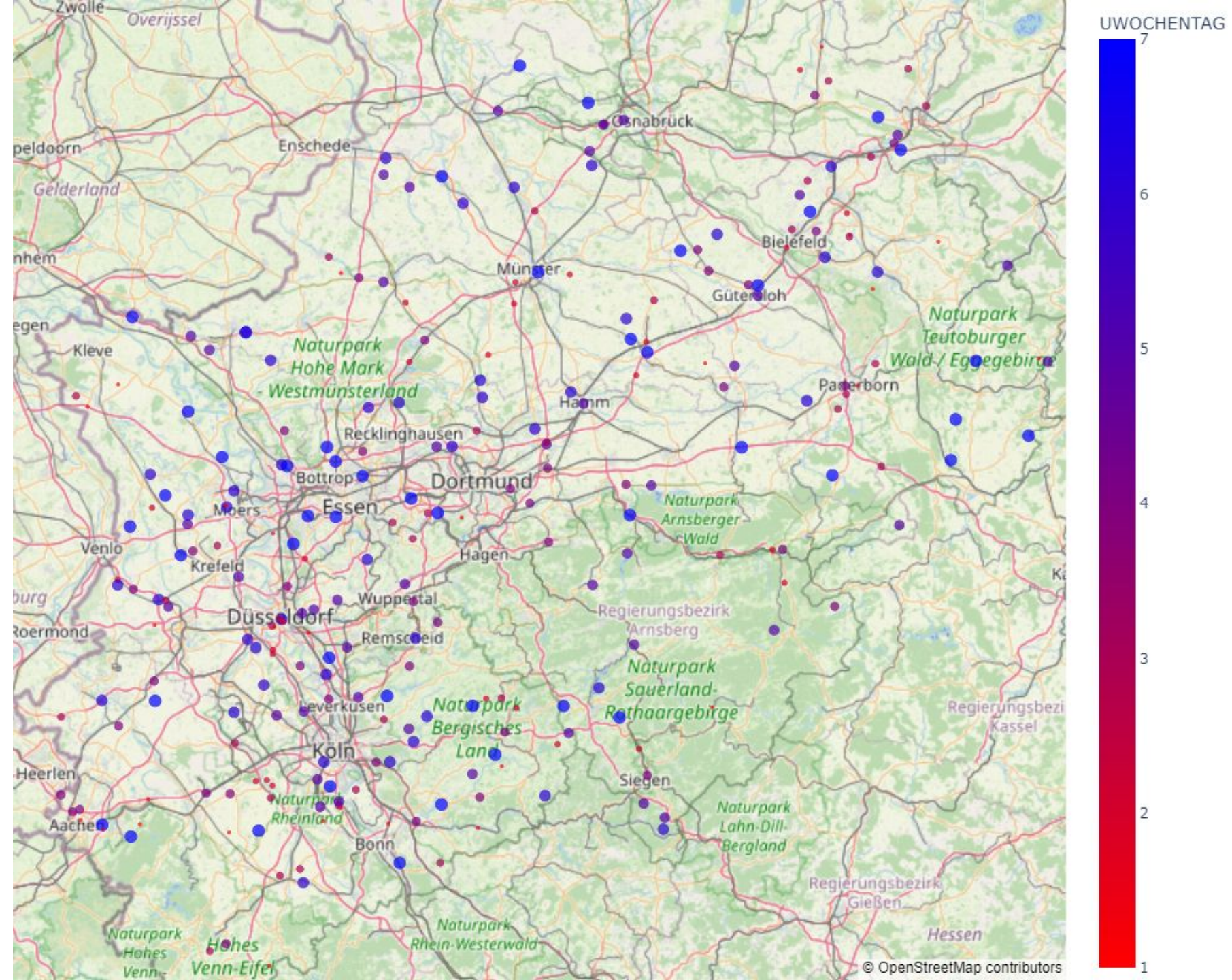
4 =

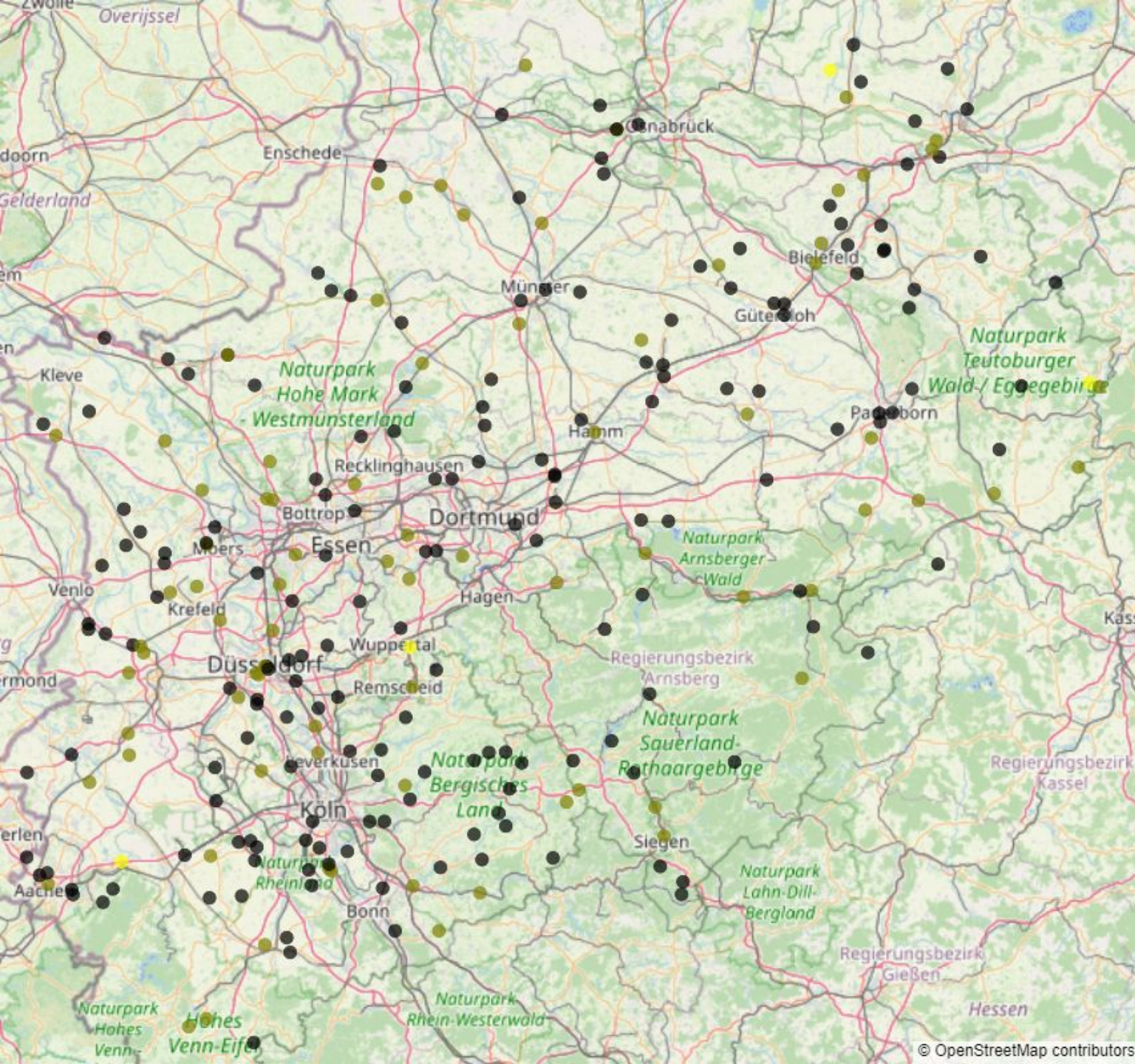
Wednesday

5 = Thursday

6 = Friday

7 = Saturday





USTRZUSTAND

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Winter Slippery

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

1

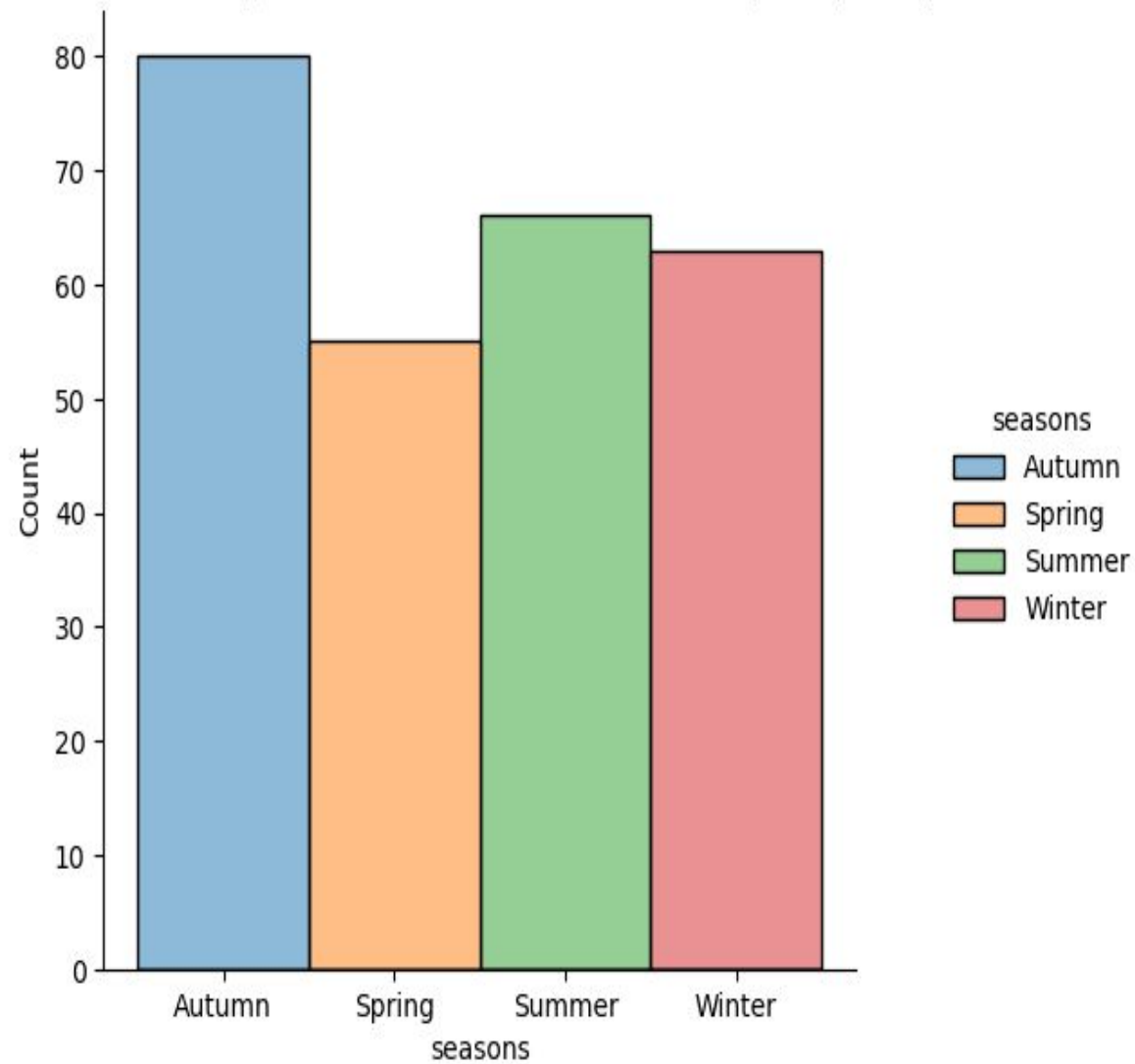
Wet/Damp/Slippery

0.5

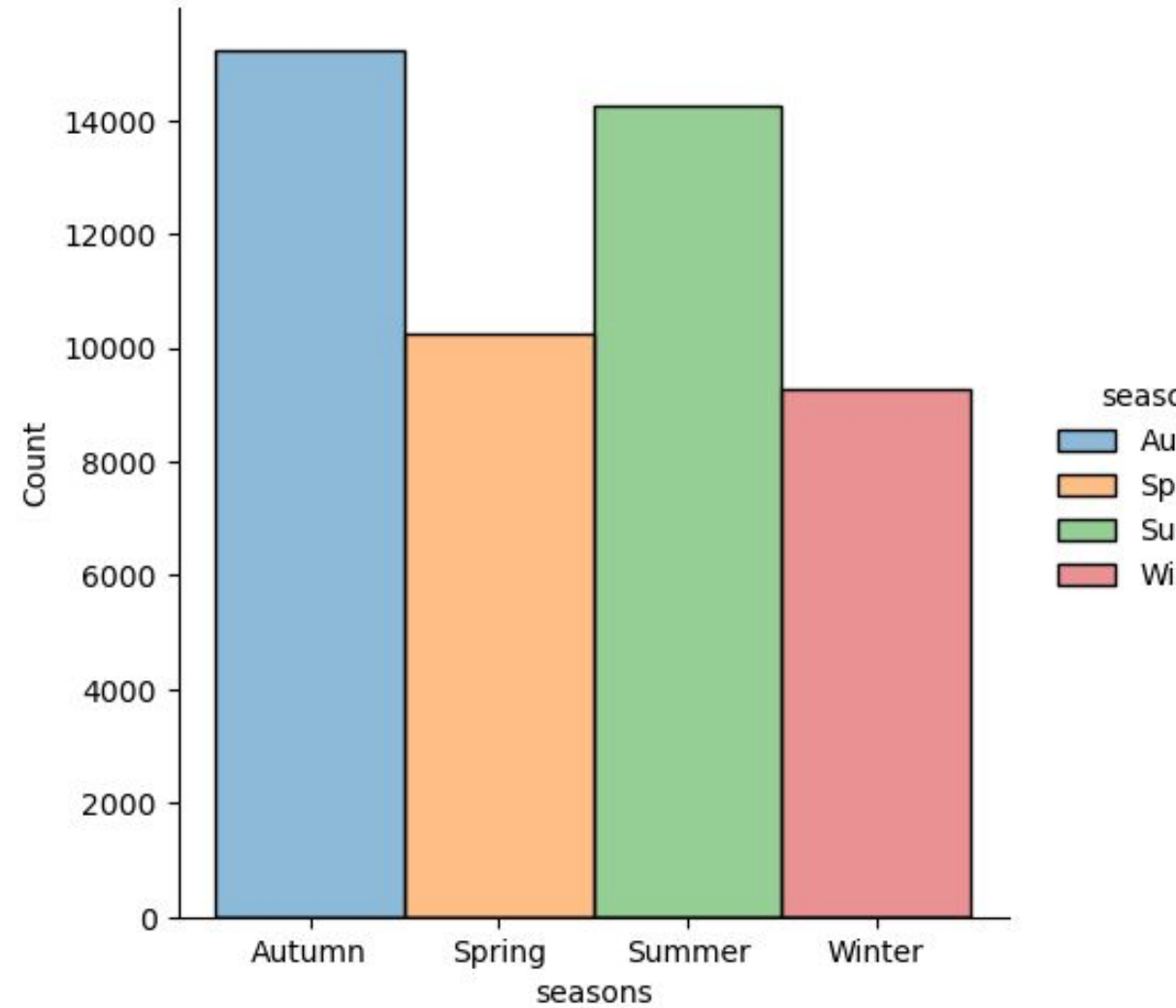
0

Dry

Seasonal 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. Number of accidents happening during the day time and when the roads are dry are far more than the accidents that happens during Wet, Damp, Slippery, Winter Slippery, night time and Twilight put together.**
- 5.**