

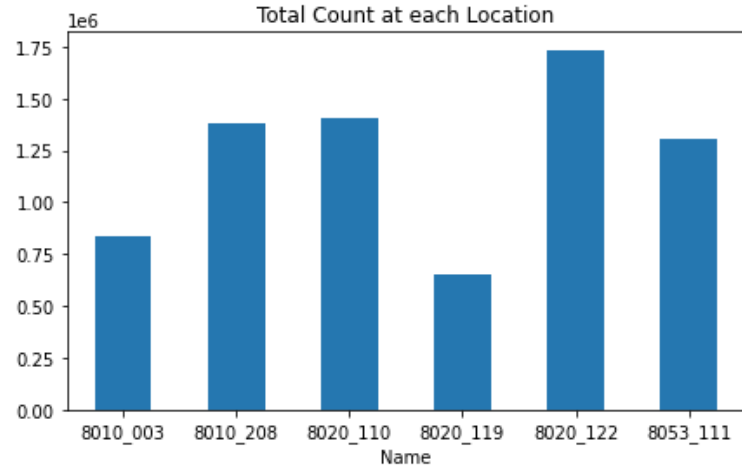
# Graz Traffic Data

10.01.2022

# Content

- *DZS\_24h-Zählung-180101\_211205.csv*
- *DZS\_div\_24h-Zählung-180101\_211205.csv*
- *Verkehr Graz\_Vergleich CoVID19\_bis KW45\_2021 mit DZS 111.xlsx*

# DZS\_24h-Zählung-180101\_211205.csv



## Negative counts

	Name	Q@KFZ	value_count
0	8010_003	0	164
1	8010_003	-1	9
2	8020_110	-1	4
3	8020_110	0	2
4	8020_119	0	2
5	8020_119	-1	1
6	8020_122	-1	3
7	8053_111	0	2
8	8053_111	-1	1

8010_003	Keplerbrücke	Brückenquerschnitt	Gesamt	
			Ri. Ost	501.81
			Ri. Ost	501.82
			Ri. West	501.83AD
			Ri. West	501.84AD

8010_208	Glacis	vor Geidorfplatz	Gesamt	
			Ri. Nord	504.31
			Ri. Nord	504.32
			Ri. Süd	505.11
			Ri. Süd	505.31A
			Ri. Süd	505.32A

8020_110	Kärntner Straße Q2	südl. d. Wetzelsdorfer Straße	Gesamt	
			Ri. Nord	801.31
			Ri. Nord	801.32
			Ri. Süd	801.33A
			Ri. Süd	801.34A

8020_119	Rösselmühlgasse	Griesplatz – Elisabethinergasse	Gesamt	
			Ri. West	107.81A
			Ri. Ost	108.21A

8020_122	Karlauergürtel	östl. d. Herrgottwiesgasse	Gesamt	
			Ri. West	719.21D
			Ri. West	719.22D
			Ri. West	719.23
			Ri. Ost	720.41D
			Ri. Ost	720.42D

8053_111	Kärntner Straße Q3	nördl. d. Kapellenstraße	Gesamt	
			Ri. Süd	805.11
			Ri. Süd	805.12
			Ri. Nord	805.13A

Some dates sampled at 23:00

Time Q@KFZ Unnamed: 3 hour

Name	start	end	#expected_days	#actual_days	missing (days)
8010_003	2018-01-02	2021-12-06	1435	1427	8
8010_208	2018-01-02	2021-12-06	1435	1427	8
8020_110	2018-01-02	2021-12-06	1435	1427	8
8020_119	2018-01-02	2021-12-06	1435	1427	8
8020_122	2018-01-02	2021-12-06	1435	1427	8
8053_111	2018-01-02	2021-12-06	1435	1427	8

Name	Time	Q@KFZ	Unnamed: 3	hour
8010_003	2018-10-28 23:00:00	529	33655	23
8010_208	2018-10-28 23:00:00	761	8759	23
8020_110	2018-10-28 23:00:00	748	6699	23
8020_119	2018-10-28 23:00:00	358	54443	23
8020_122	2018-10-28 23:00:00	940	0	23
8053_111	2018-10-28 23:00:00	698	8655	23
8010_003	2019-10-27 23:00:00	534	9991	23
8010_208	2019-10-27 23:00:00	664	9199	23
8020_110	2019-10-27 23:00:00	825	555	23
8020_119	2019-10-27 23:00:00	344	2926	23
8020_122	2019-10-27 23:00:00	920	8563	23
8053_111	2019-10-27 23:00:00	710	8563	23
8010_003	2020-10-25 23:00:00	446	14365	23
8010_208	2020-10-25 23:00:00	760	6237	23
8020_110	2020-10-25 23:00:00	343	38348	23
8020_119	2020-10-25 23:00:00	310	5395	23
8020_122	2020-10-25 23:00:00	762	30804	23
8053_111	2020-10-25 23:00:00	629	45905	23
8010_003	2021-10-31 23:00:00	525	5843	23
8010_208	2021-10-31 23:00:00	837	82965	23
8020_110	2021-10-31 23:00:00	539	53845	23
8020_119	2021-10-31 23:00:00	336	7074	23
8020_122	2021-10-31 23:00:00	958	207	23
8053_111	2021-10-31 23:00:00	648	847	23

Can be used for the next day

Dates missing

0 1 2 3 4 5 6 7

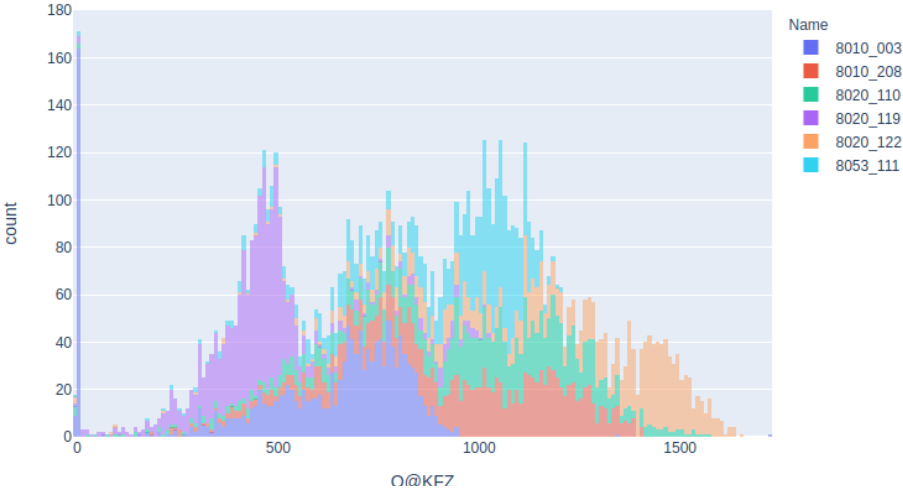
Name	0	1	2	3	4	5	6	7
8010_003	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01
8010_208	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01
8020_110	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01
8020_119	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01
8020_122	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01
8053_111	2018-03-26	2018-10-29	2019-04-01	2019-10-28	2020-03-30	2020-10-26	2021-03-29	2021-11-01

4 dates could not be filled

- 26.03.2018
- 01.04.2019
- 30.03.2020
- 29.03.2021

# Value Check

Distribution of values

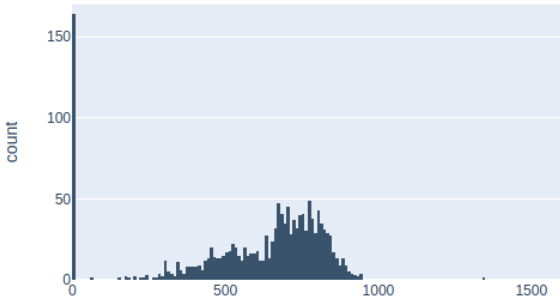


Q@KFZ

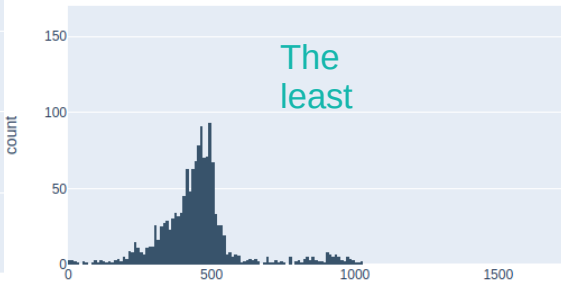
count mean std min 25% 50% 75% max

Name								
8010_003	1431	583	262	-1	481	675	770	1720
8010_208	1431	963	249	181	786	999	1164	1409
8020_110	1431	981	276	-1	815	1024	1184	1575
8020_119	1431	454	153	-1	382	452	496	1025
8020_122	1431	1212	281	-1	1008	1283	1443	1655
8053_111	1431	912	198	-1	793	982	1059	1209

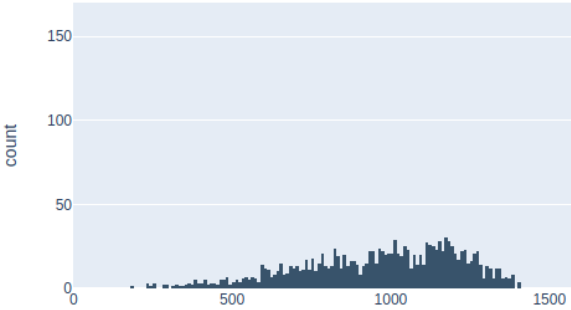
Name: 8010\_003



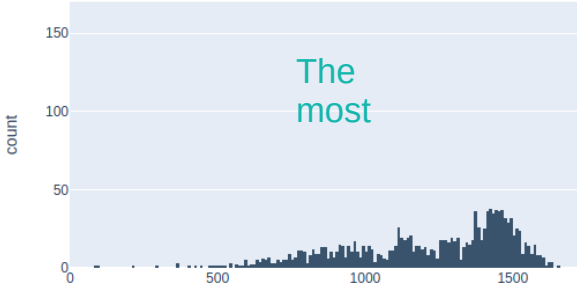
Name: 8020\_119



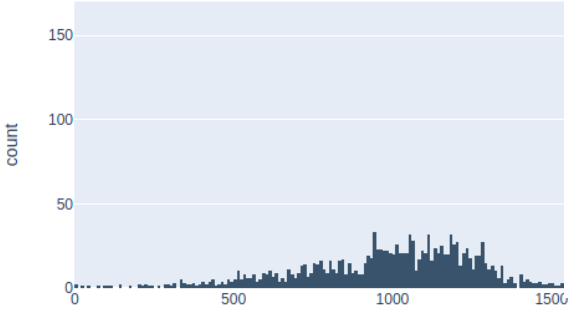
Name: 8010\_208



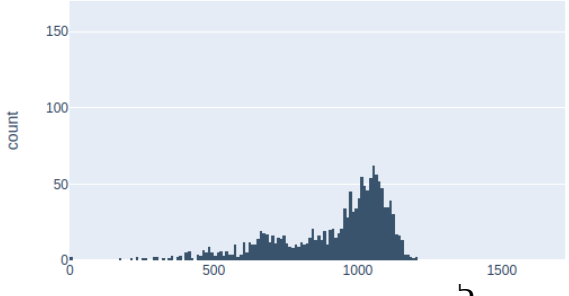
Name: 8020\_122



Name: 8020\_110



Name: 8053\_111



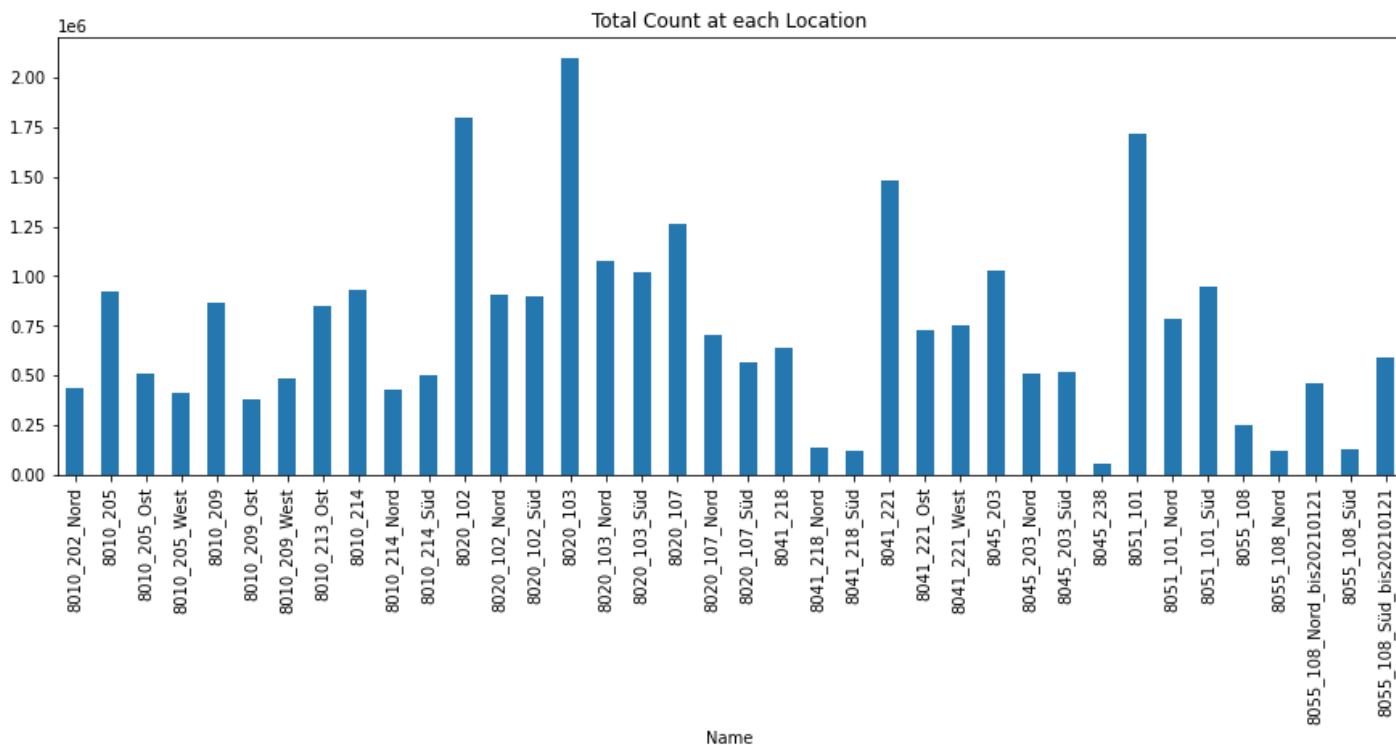
DZS\_div\_24h-Zählung-180101\_211205.csv

0	8010_202_Nord
1	8010_205
2	8010_205_Ost
3	8010_205_West
4	8010_209
5	8010_209_Ost
6	8010_209_West
7	8010_213_Ost
8	8010_214
9	8010_214_Nord
10	8010_214_Süd
11	8020_102
12	8020_102_Nord
13	8020_102_Süd
14	8020_103
15	8020_103_Nord
16	8020_103_Süd
17	8020_107
18	8020_107_Nord
19	8020_107_Süd
20	8041_218
21	8041_218_Nord
22	8041_218_Süd
23	8041_221
24	8041_221_Ost
25	8041_221_West
26	8045_203
27	8045_203_Nord
28	8045_203_Süd
29	8045_238
30	8051_101
31	8051_101_Nord
32	8051_101_Süd
33	8055_108
34	8055_108_Nord
35	8055_108_Nord_bis20210121
36	8055_108_Süd
37	8055_108_Süd_bis20210121

# DZS\_div\_24h-Zählung-180101\_211205.csv

Value Check

## Negative counts



	Name	Q@KFZ	value_count
0	8041_218_Süd	-1	857
1	8041_218_Nord	-1	676
2	8045_203_Süd	-1	259
3	8045_203_Nord	-1	259
4	8045_203	-1	259
5	8041_221	-1	88
6	8041_221_West	-1	87
7	8041_221_Ost	-1	87
8	8010_214_Nord	-1	63
9	8041_218	-1	41
10	8020_107	-1	30
11	8020_107_Nord	-1	30
12	8010_205_Ost	-1	14
13	8010_214	-1	13
14	8010_214_Süd	-1	13
15	8010_202_Nord	-1	9
16	8020_107_Süd	-1	5
17	8051_101_Nord	-1	3
18	8041_218_Nord	-9	1
19	8020_102_Süd	-1	1
20	8020_102_Nord	-1	1
21	8020_102	-1	1
22	8010_213_Ost	-1	1

# DZS\_div\_24h-Zählung-180101\_211205.csv

## Time Check

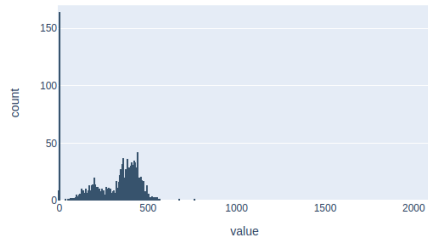
### Distinct Locations

'8010\_202'  
'8010\_205'  
'8010\_209'  
'8010\_213'  
'8010\_214'  
'8020\_102'  
'8020\_103'  
'8020\_107'  
'8041\_218'  
'8041\_221'  
'8045\_203'  
'8045\_238'  
'8051\_101'  
'8055\_108'

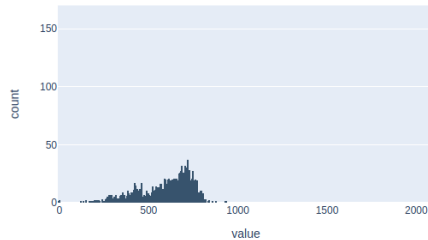
	Name	start	end	#expected_days	#actual_days	missing (days)
	8010_202_Nord	2018-01-02	2021-12-06	1435	1427	8
	8010_205	2018-01-02	2021-12-06	1435	1427	8
	8010_205_Ost	2018-01-02	2021-12-06	1435	1427	8
	8010_205_West	2018-01-02	2021-12-06	1435	1427	8
	8010_209	2018-01-02	2021-12-06	1435	1427	8
	8010_209_Ost	2018-01-02	2021-12-06	1435	1427	8
	8010_209_West	2018-01-02	2021-12-06	1435	1427	8
	8010_213_Ost	2018-01-02	2021-12-06	1435	1427	8
	8010_214	2018-01-02	2021-12-06	1435	1427	8
	8010_214_Nord	2018-01-02	2021-12-06	1435	1427	8
	8010_214_Süd	2018-01-02	2021-12-06	1435	1427	8
	8020_102	2018-01-02	2021-12-06	1435	1427	8
	8020_102_Nord	2018-01-02	2021-12-06	1435	1427	8
	8020_102_Süd	2018-01-02	2021-12-06	1435	1427	8
	8020_103	2018-01-02	2021-12-06	1435	1427	8
	8020_103_Nord	2018-01-02	2021-12-06	1435	1427	8
	8020_103_Süd	2018-01-02	2021-12-06	1435	1427	8
	8020_107	2018-01-02	2021-12-06	1435	1427	8
	8020_107_Nord	2018-01-02	2021-12-06	1435	1427	8
	8020_107_Süd	2018-01-02	2021-12-06	1435	1427	8
	8041_218	2018-01-02	2021-12-06	1435	1427	8
	8041_218_Nord	2018-01-02	2021-12-06	1435	1427	8
	8041_218_Süd	2018-01-02	2021-12-06	1435	1427	8
	8041_221	2018-01-02	2021-12-06	1435	1427	8
	8041_221_Ost	2018-01-02	2021-12-06	1435	1427	8
	8041_221_West	2018-01-02	2021-12-06	1435	1427	8
	8045_203	2018-01-02	2021-12-06	1435	1427	8
	8045_203_Nord	2018-01-02	2021-12-06	1435	1427	8
	8045_203_Süd	2018-01-02	2021-12-06	1435	1427	8
	8045_238	2021-05-27	2021-12-06	194	193	1
	8051_101	2018-01-02	2021-12-06	1435	1427	8
	8051_101_Nord	2018-01-02	2021-12-06	1435	1427	8
	8051_101_Süd	2018-01-02	2021-12-06	1435	1427	8
	8055_108	2021-01-25	2021-12-06	316	314	2
	8055_108_Nord	2021-01-25	2021-12-06	316	314	2
	8055_108_Nord_bis20210121	2018-01-02	2021-12-06	1435	1427	8
	8055_108_Süd	2021-01-25	2021-12-06	316	314	2
	8055_108_Süd_bis20210121	2018-01-02	2021-12-06	1435	1427	8



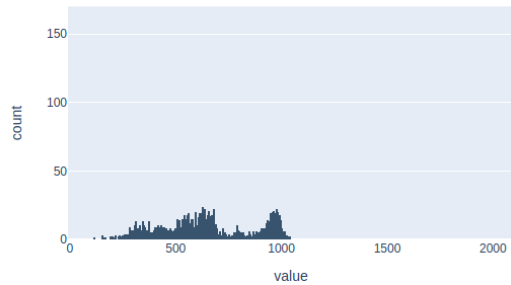
Name: 8010\_202\_Nord



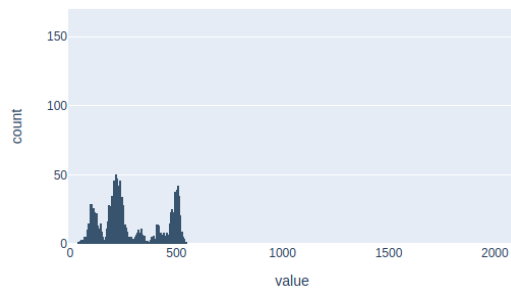
Name: 8010\_213\_Ost



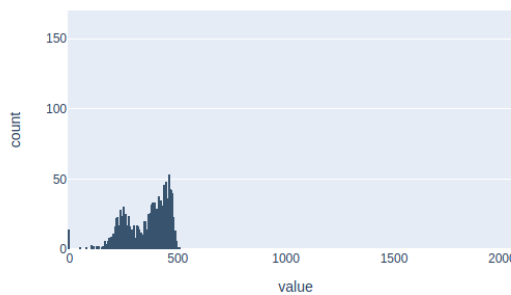
Name: 8010\_205



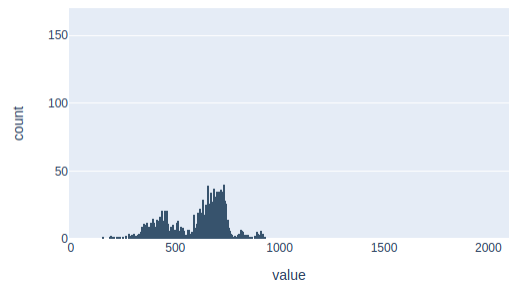
Name: 8010\_205\_West



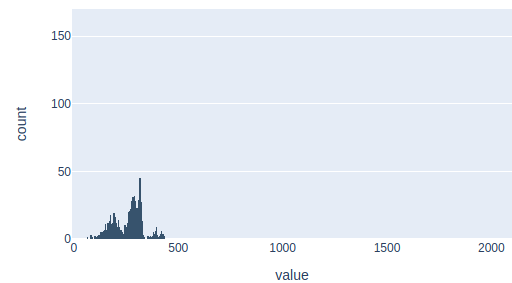
Name: 8010\_205\_Ost



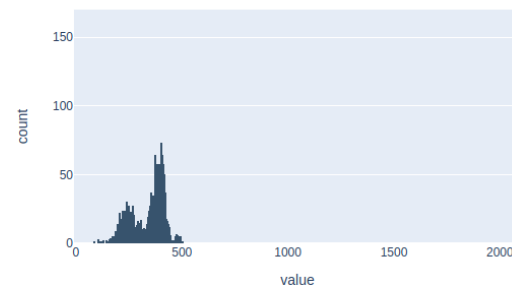
Name: 8010\_209



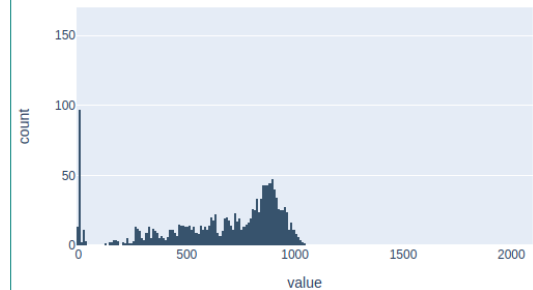
Name: 8010\_209\_Ost



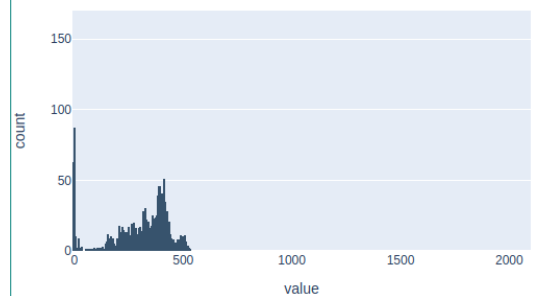
Name: 8010\_209\_West



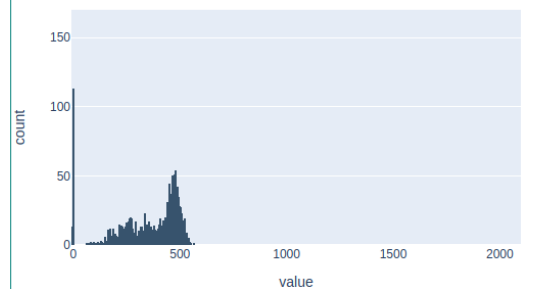
Name: 8010\_214



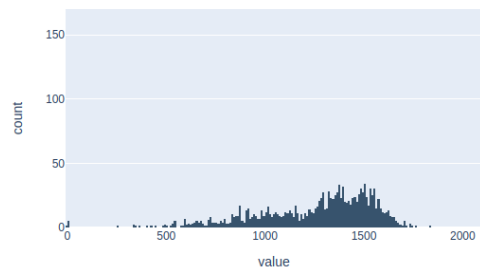
Name: 8010\_214\_Nord



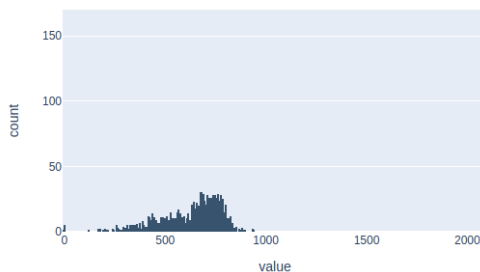
Name: 8010\_214\_Süd



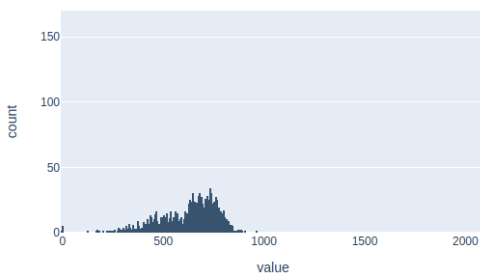
Name: 8020\_102



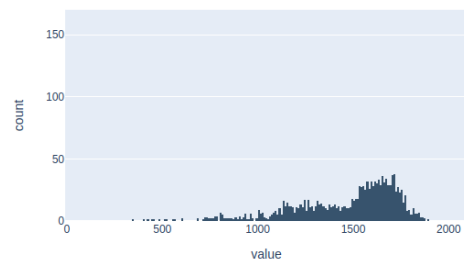
Name: 8020\_102\_Nord



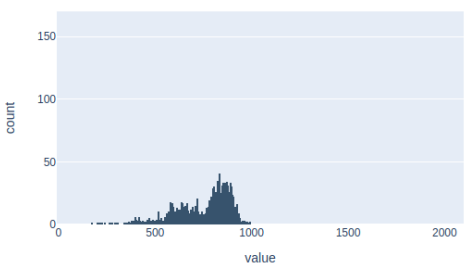
Name: 8020\_102\_Süd



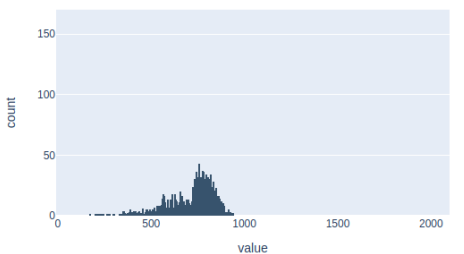
Name: 8020\_103



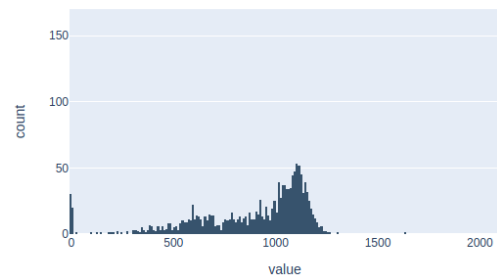
Name: 8020\_103\_Nord



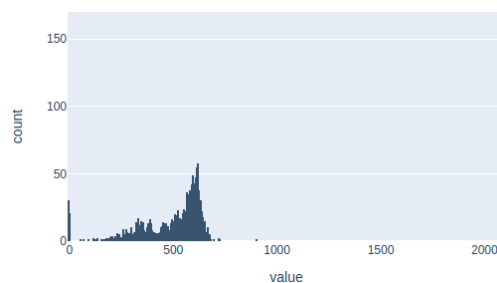
Name: 8020\_103\_Süd



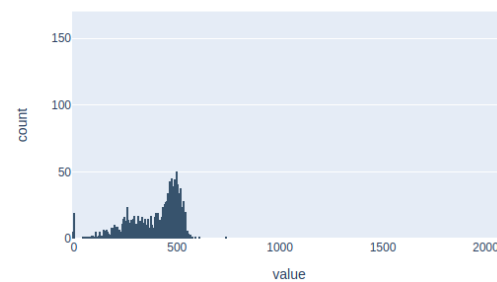
Name: 8020\_107



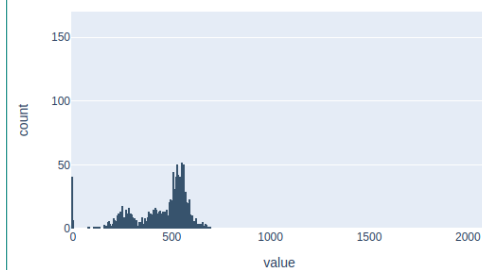
Name: 8020\_107\_Nord



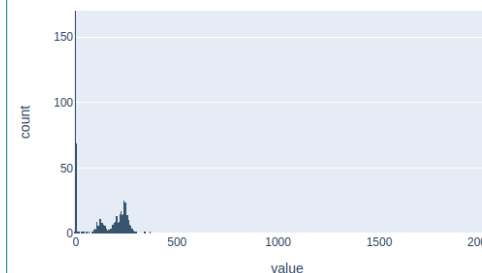
Name: 8020\_107\_Süd



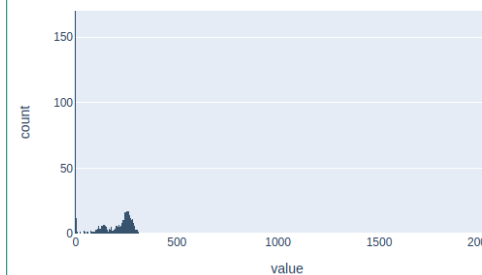
Name: 8041\_218



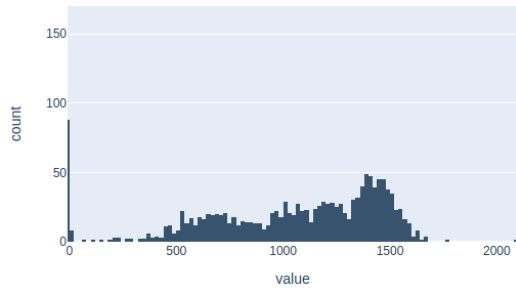
Name: 8041\_218\_Nord



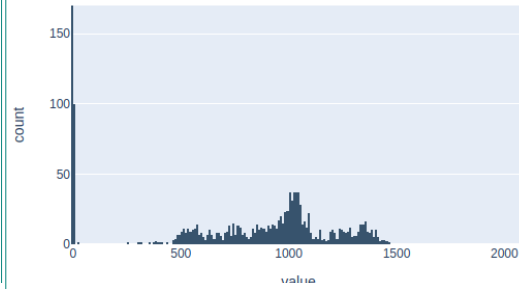
Name: 8041\_218\_Süd



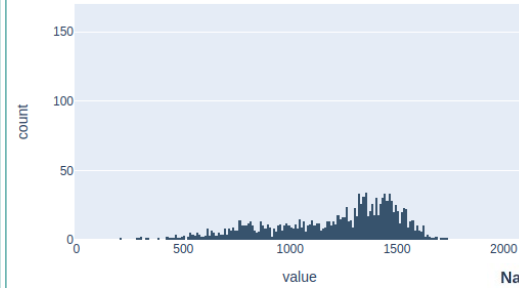
Name: 8041\_221



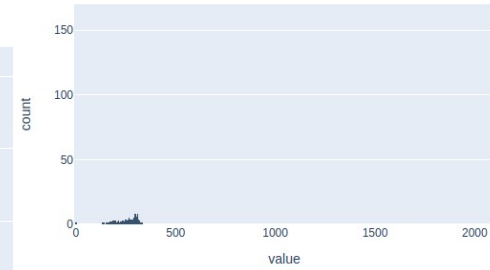
Name: 8045\_203



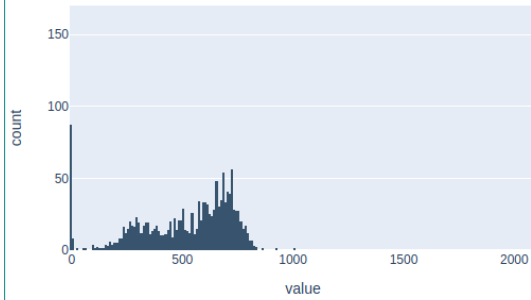
Name: 8051\_101



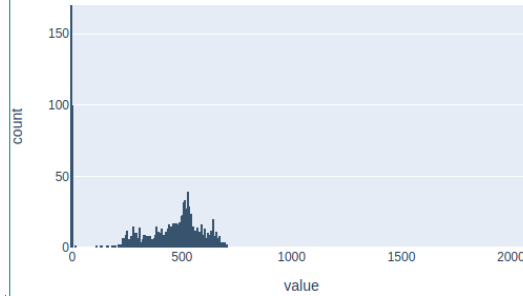
Name: 8045\_238



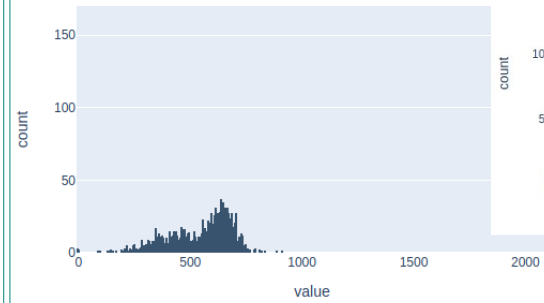
Name: 8041\_221\_Ost



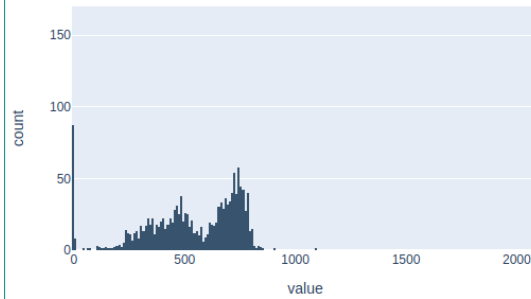
Name: 8045\_203\_Nord



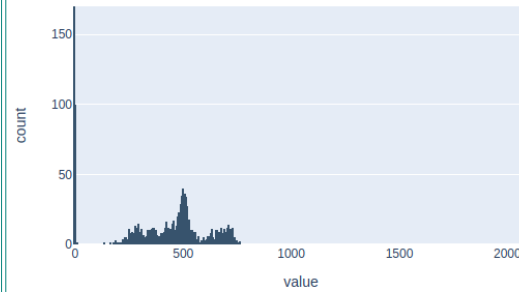
Name: 8051\_101\_Nord



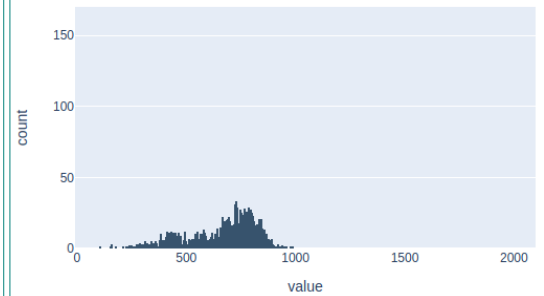
Name: 8041\_221\_West



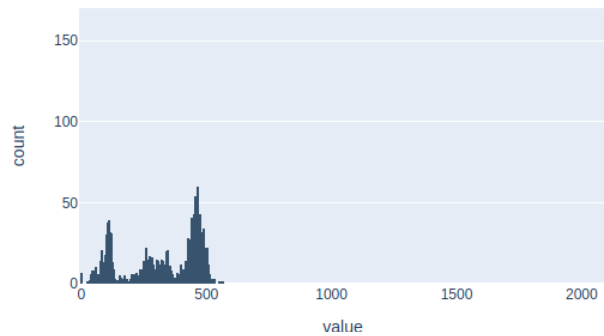
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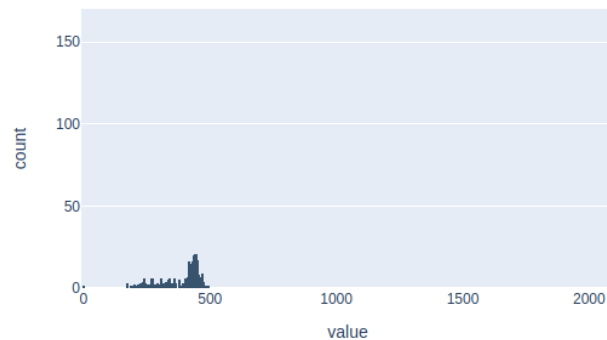
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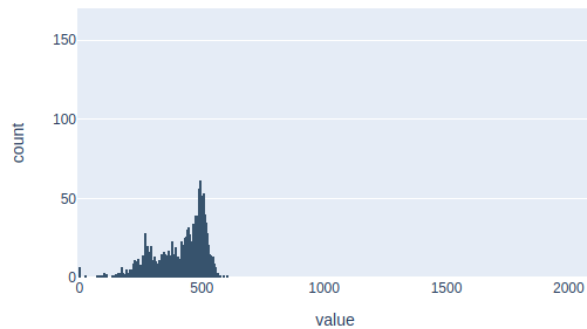
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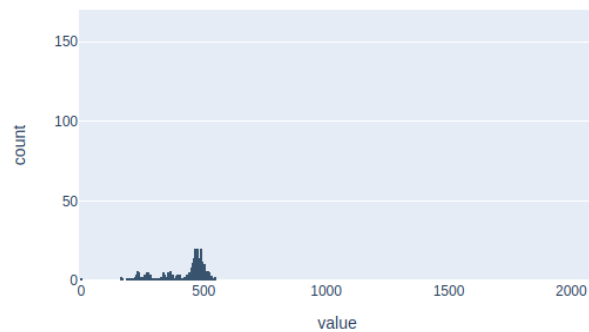
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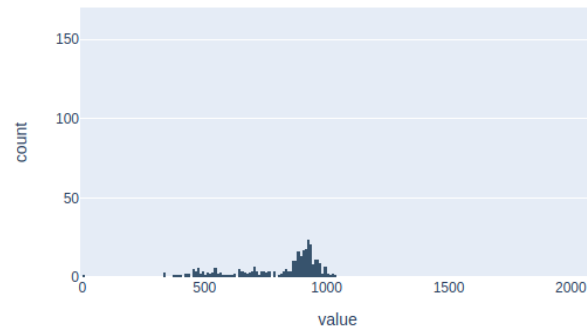
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Name: 8055\_108\_Süd



Name: 8055\_108

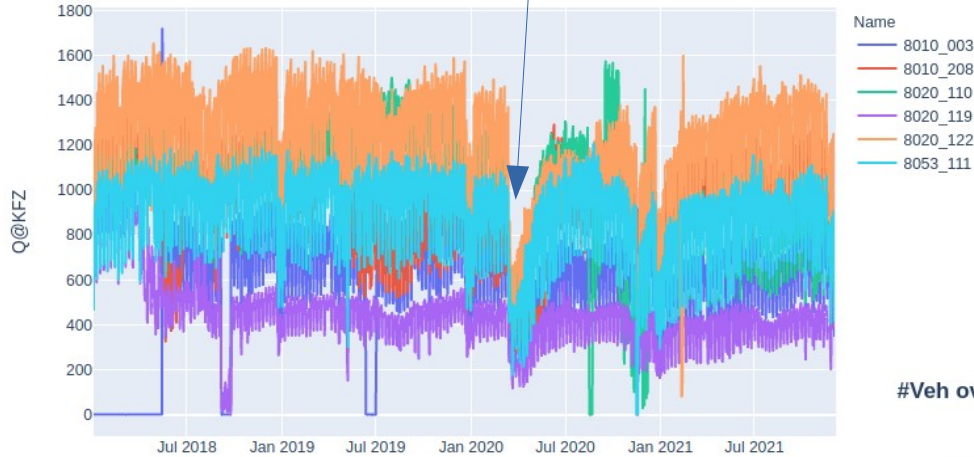


DZS\_24h-Zählung-180101\_211205.csv

# Time-Series

#Veh over time at different stations

Mar 2020

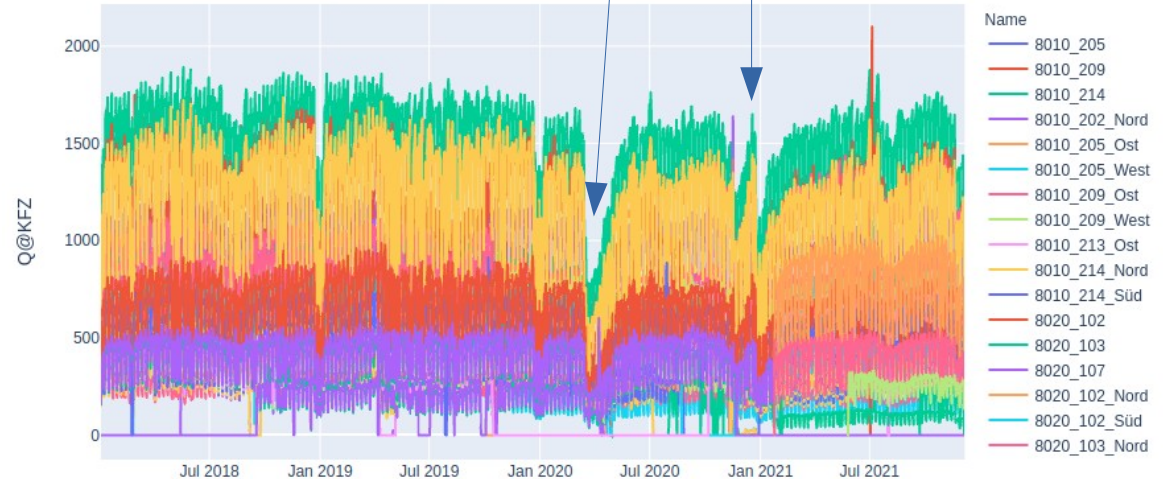


DZS\_div\_24h-Zählung-180101\_211205.csv

#Veh over time at different stations

Mar 2020

Dec 19, 2020



Verkehr Graz\_Vergleich CoVID19\_bis KW45\_2021 mit DZS 111

# Verkehr Graz\_Vergleich CoVID19\_bis KW45\_2021 mit DZS 111

## Time Check

transformed

	#rows	#cols
BvSuttner-Brücke	336	10
Keplerbrücke	336	76
Karlauer Gürtel	336	72
Rösselmühlgasse	336	76
Don Bosco	336	76
Glacis	336	76
Kärntner Straße	336	63

	#rows	#cols	2019	2020	2021	total
BvSuttner-Brücke	2688	3	7	49	NaN	56
Keplerbrücke	24864	3	14	186	318.0	518
Karlauer Gürtel	23520	3	14	158	318.0	490
Rösselmühlgasse	24864	3	14	186	318.0	518
Don Bosco	24864	3	14	186	318.0	518
Glacis	24864	3	14	186	318.0	518
Kärntner Straße	20496	3	14	95	318.0	427

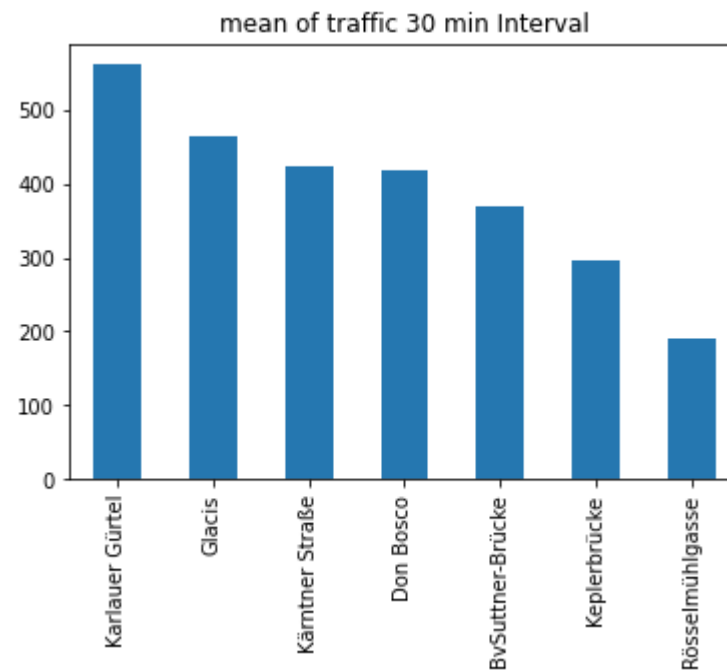
year	2019				2020				2021			
	actual	duration	max	min	actual	duration	max	min	actual	duration	max	min
BvSuttner-Brücke	7	7	2019-04-07	2019-04-01	49	91	2020-04-19	2020-01-20	NaN	NaN	NaT	NaT
Keplerbrücke	14	49	2019-05-19	2019-04-01	186	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01
Karlauer Gürtel	14	49	2019-05-19	2019-04-01	158	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01
Rösselmühlgasse	14	49	2019-05-19	2019-04-01	186	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01
Don Bosco	14	49	2019-05-19	2019-04-01	186	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01
Glacis	14	49	2019-05-19	2019-04-01	186	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01
Kärntner Straße	14	49	2019-05-19	2019-04-01	95	347	2020-12-31	2020-01-20	318	318	2021-11-14	2021-01-01

# Verkehr Graz\_Vergleich CoVID19\_bis KW45\_2021 mit DZS 111

## Value Check

	count	mean	std	min	25%	50%	75%	max
<b>BvSuttner-Brücke</b>	2688	369	352	0.0	63	283	564	1370
<b>Keplerbrücke</b>	24864	296	216	-0.5	75	287	502	923
<b>Karlauer Gürtel</b>	23520	562	381	-0.5	171	580	915	1334
<b>Rösselmühlgasse</b>	24864	189	125	-0.5	67	190	307	776
<b>Don Bosco</b>	24864	419	303	-0.5	117	407	698	1501
<b>Glacis</b>	24864	464	345	-0.5	111	429	794	1232
<b>Kärntner Straße</b>	20496	423	281	-0.5	127	444	697	1006

Negative counts





# Remarks

	<b>N ame</b>	<b>Street name</b>	<b>Code</b>	<b>Comment</b>
1	DonBosco	Peter-Rosegger-Straße_KärntnerStraße	8020_110	
2	Nord	Josef-Ornig-Straße	No data	8020_102
3	Ost	Petersgasse	8042_217	
4	Sud	Tiergartenweg_Herrgottwiesgasse	8020_142	
5	West	Gaswerkstraße	8020_121	

Thank you!