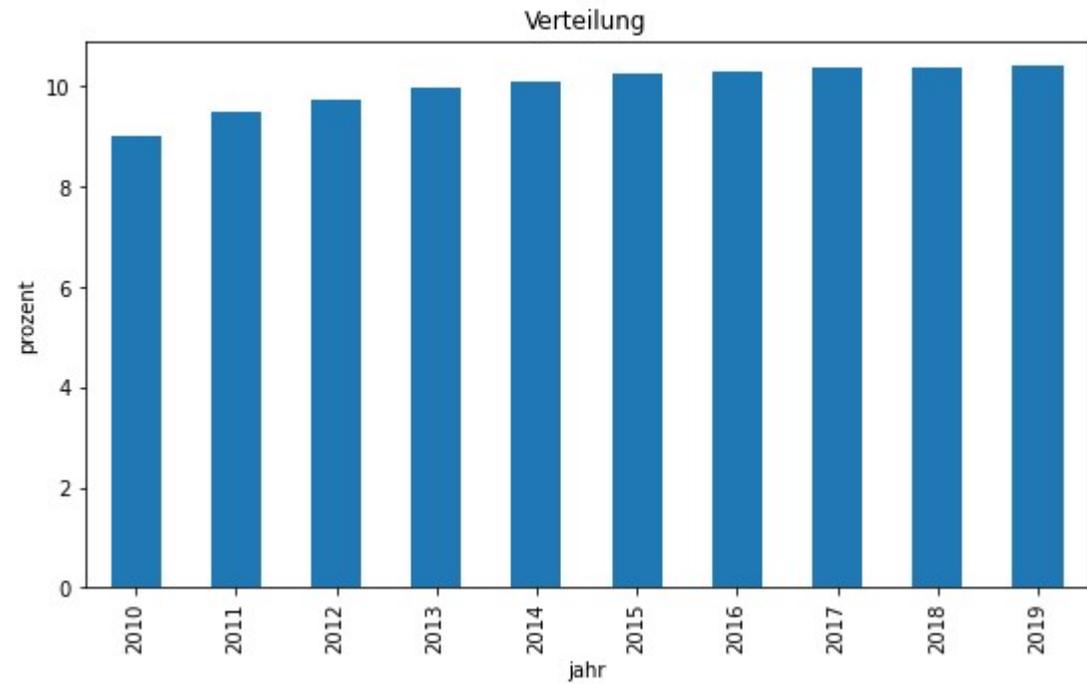


Spalten		
userid	integer	Nutzerkennung
card	integer	Kreditkartennummer
ts	timestamp	Zeitpunkt der Transaktion
amount	float	Betrag der Transaktion
use_chip	varchar	
mname	integer	Verkäufer, als Zahl kodiert
mcity	varchar	
mstate	varchar	
zip	varchar	
mcc	integer	
err1	varchar	
err2	varchar	
err3	varchar	
is_fraud	varchar	'Yes' oder 'No'
ccfid	integer	Anonymer Schlüssel

	anz_jahr	anz_gesamt	anteil_pro_jahr
jahr			
2010	1.491.225	16.575.073	9.0
2011	1.570.551	16.575.073	9.5
2012	1.610.829	16.575.073	9.7
2013	1.650.917	16.575.073	10.0
2014	1.672.343	16.575.073	10.1
2015	1.701.371	16.575.073	10.3
2016	1.708.924	16.575.073	10.3
2017	1.723.360	16.575.073	10.4
2018	1.721.615	16.575.073	10.4
2019	1.723.938	16.575.073	10.4

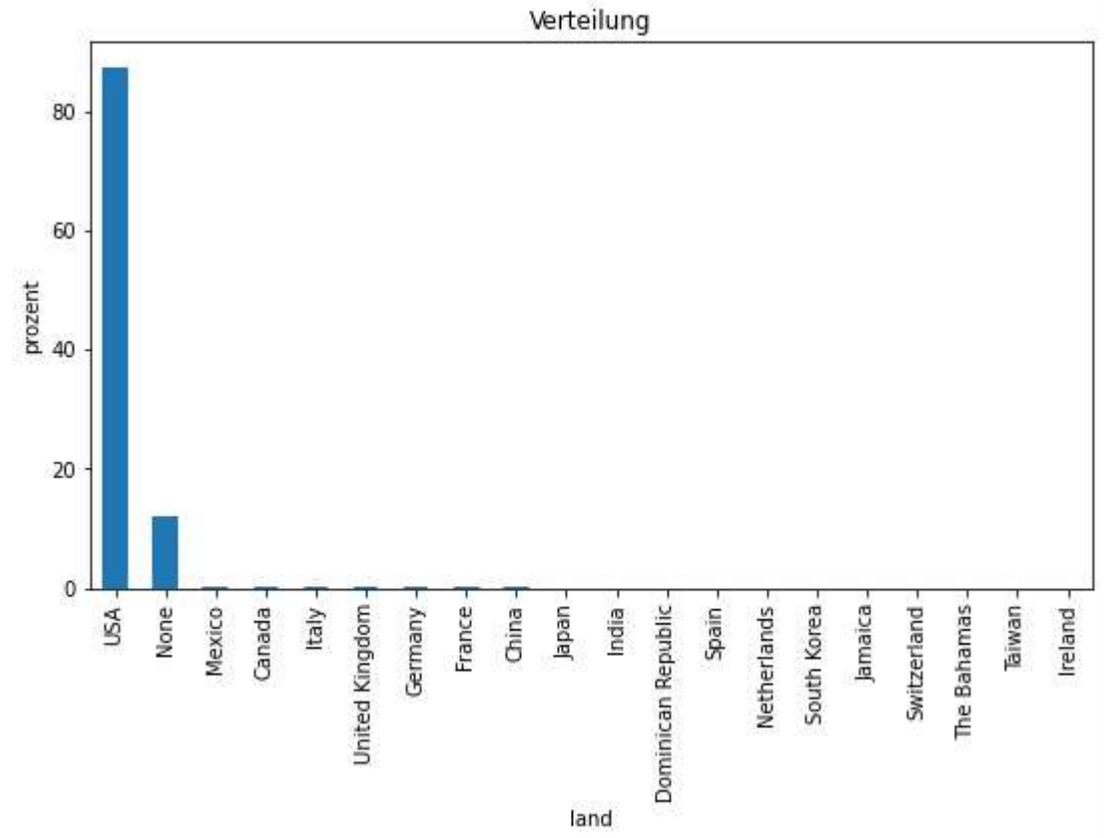


	<b>anz</b>	<b>anteil</b>
<b>is_fraud</b>		
No	16.555.087	0.99879
Yes	19.986	0.00121

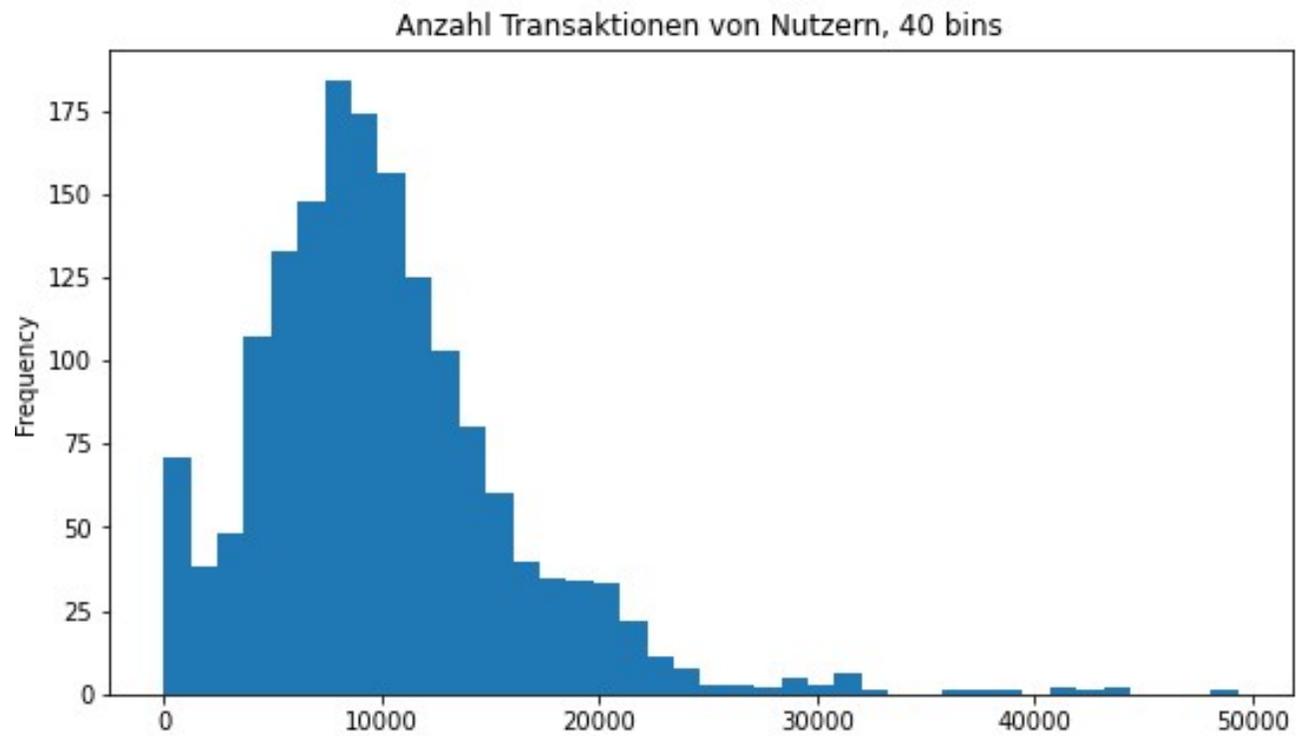
# Anteil Datensätze pro Land (Top 20)

Freitag, 5. August 2022 08:17

	anz	anteil_land
land		
USA	14.479.993	87.36
None	1.987.649	11.99
Mexico	33.032	0.20
Canada	13.280	0.08
Italy	7.583	0.05
United Kingdom	5.662	0.03
Germany	3.614	0.02
France	3.583	0.02
China	3.372	0.02
Japan	2.601	0.02
India	2.083	0.01
Dominican Republic	1.980	0.01
Spain	1.976	0.01
Netherlands	1.766	0.01
South Korea	1.435	0.01
Jamaica	1.324	0.01
Switzerland	1.273	0.01
The Bahamas	1.262	0.01
Taiwan	1.085	0.01
Ireland	1.049	0.01



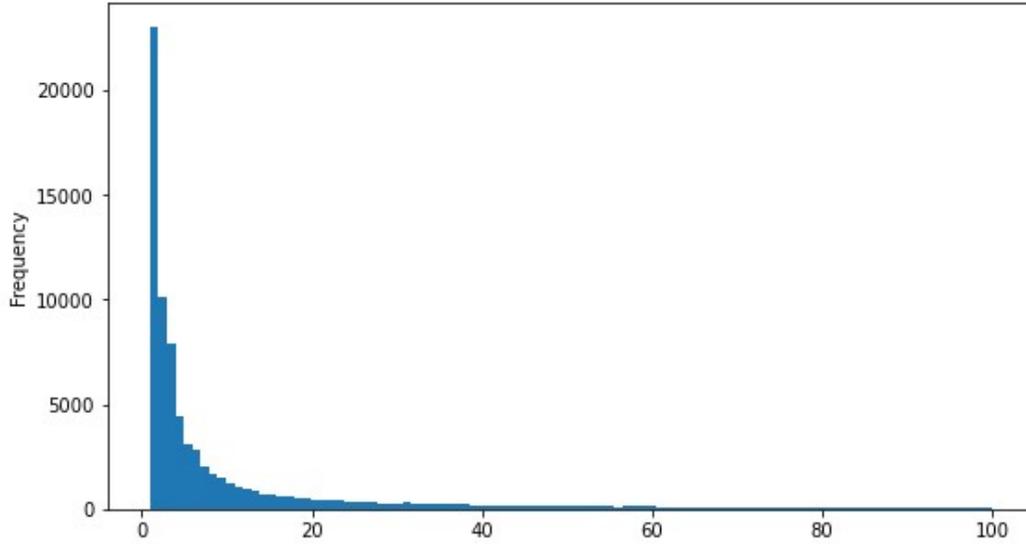
	anz_nutzer	avg_anz_trx	min_anz_trx	max_anz_trx	
	0	1.642	10.094	1	49.337



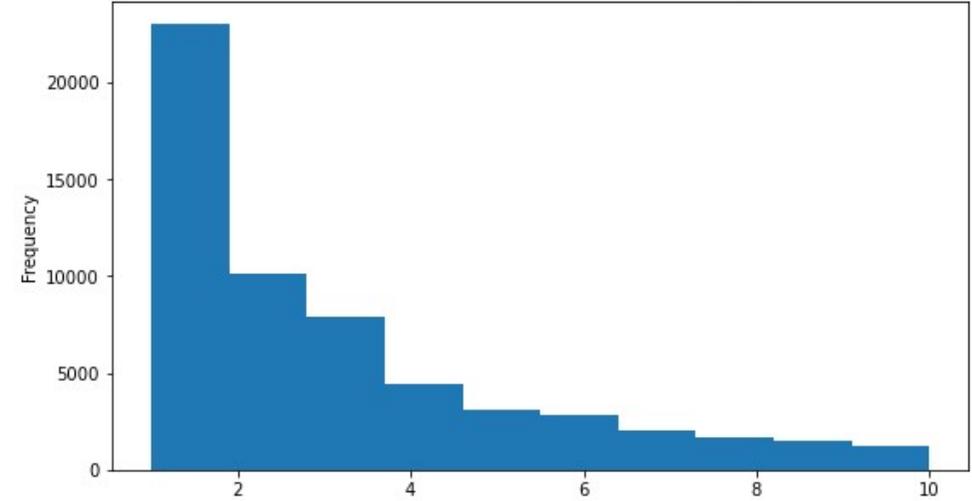
Freitag, 5. August 2022 08:17

	anz_unternehmen	avg_anz_trx	min_anz_trx	max_anz_trx
0	85.567	194	1	752.991

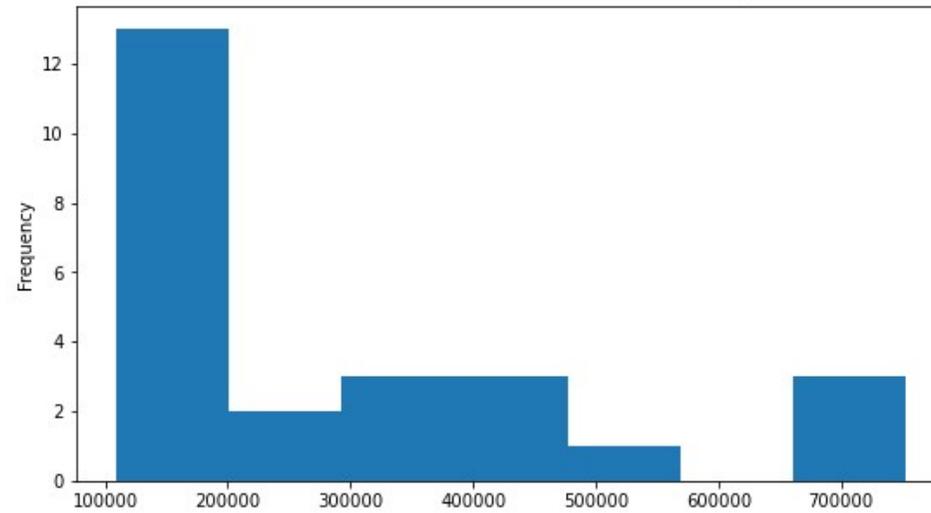
Anzahl Transaktionen von Unternehmen <= 100, 100 bins



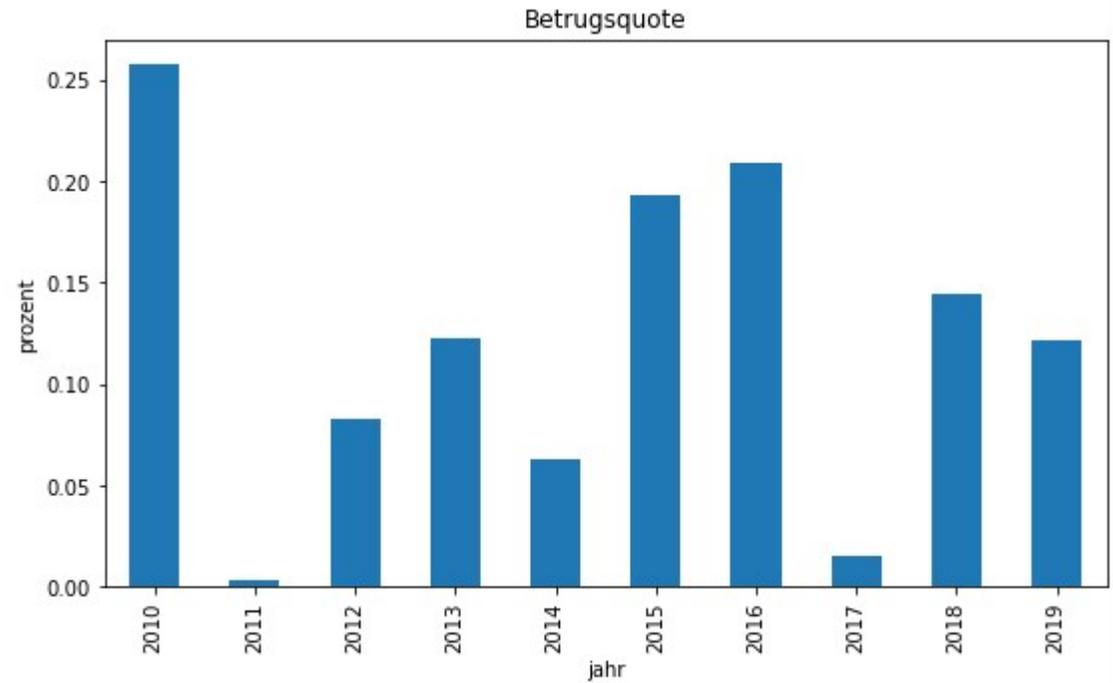
Anzahl Transaktionen von Unternehmen <= 10, 10 bins



Anzahl Transaktionen von Unternehmen >= 100000, 7 bins



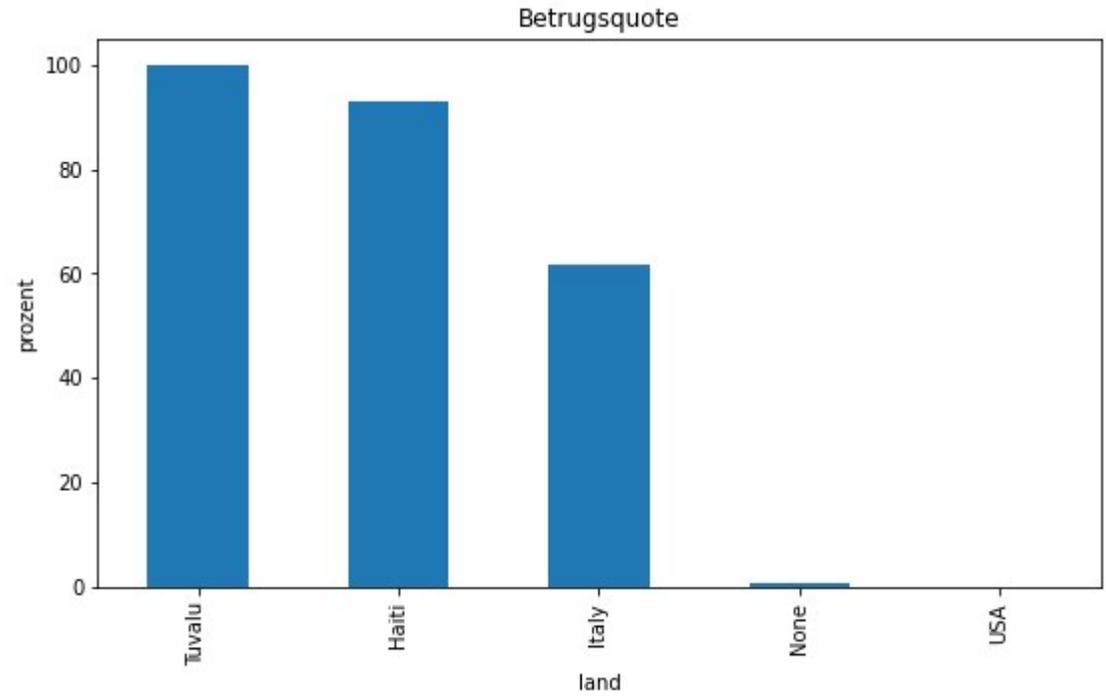
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
jahr					
2010	1.491.225	1.487.390	3.835	99.7428	0.2572
2011	1.570.551	1.570.496	55	99.9965	0.0035
2012	1.610.829	1.609.496	1.333	99.9172	0.0828
2013	1.650.917	1.648.899	2.018	99.8778	0.1222
2014	1.672.343	1.671.291	1.052	99.9371	0.0629
2015	1.701.371	1.698.090	3.281	99.8072	0.1928
2016	1.708.924	1.705.345	3.579	99.7906	0.2094
2017	1.723.360	1.723.105	255	99.9852	0.0148
2018	1.721.615	1.719.124	2.491	99.8553	0.1447
2019	1.723.938	1.721.851	2.087	99.8789	0.1211



# Betrugsanteil pro Land, nur > 0

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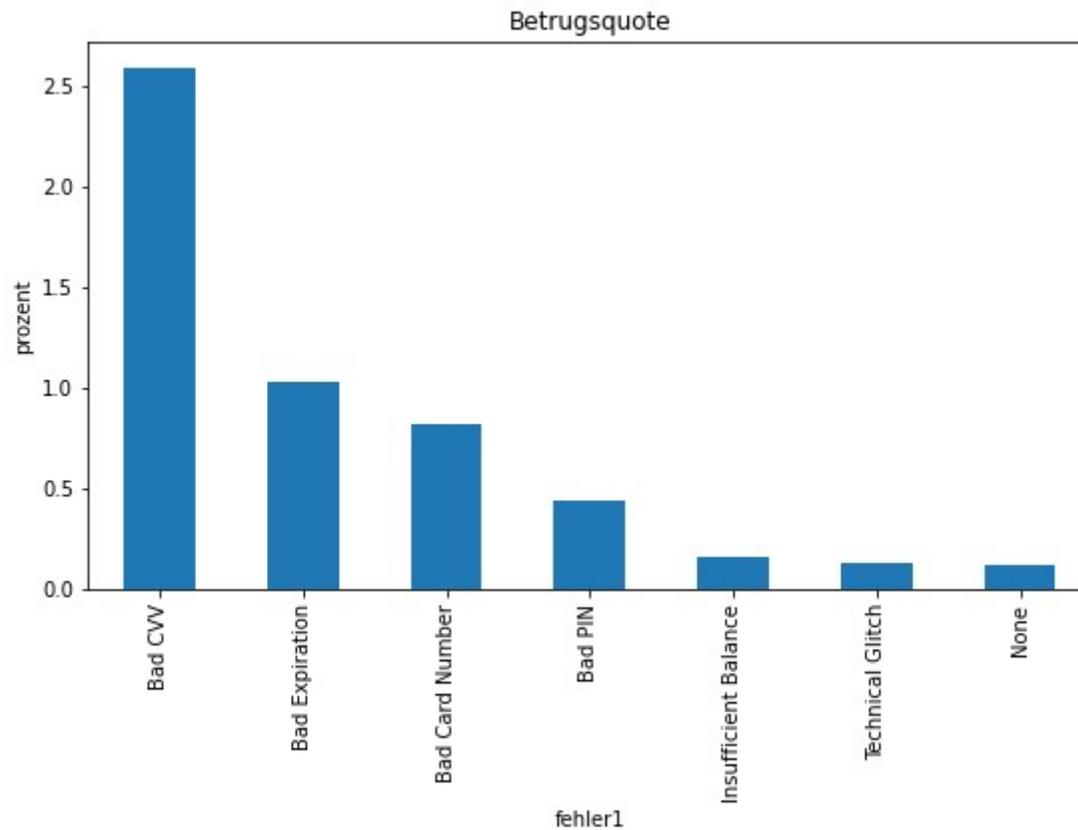
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
land					
Tuvalu	5	0	5	0.0000	100.0000
Haiti	403	28	375	6.9479	93.0521
Italy	7.583	2.901	4.682	38.2566	61.7434
None	1.987.649	1.974.569	13.080	99.3419	0.6581
USA	14.479.993	14.478.149	1.844	99.9873	0.0127



# Betrugsanteil pro Fehler1, nur > 0

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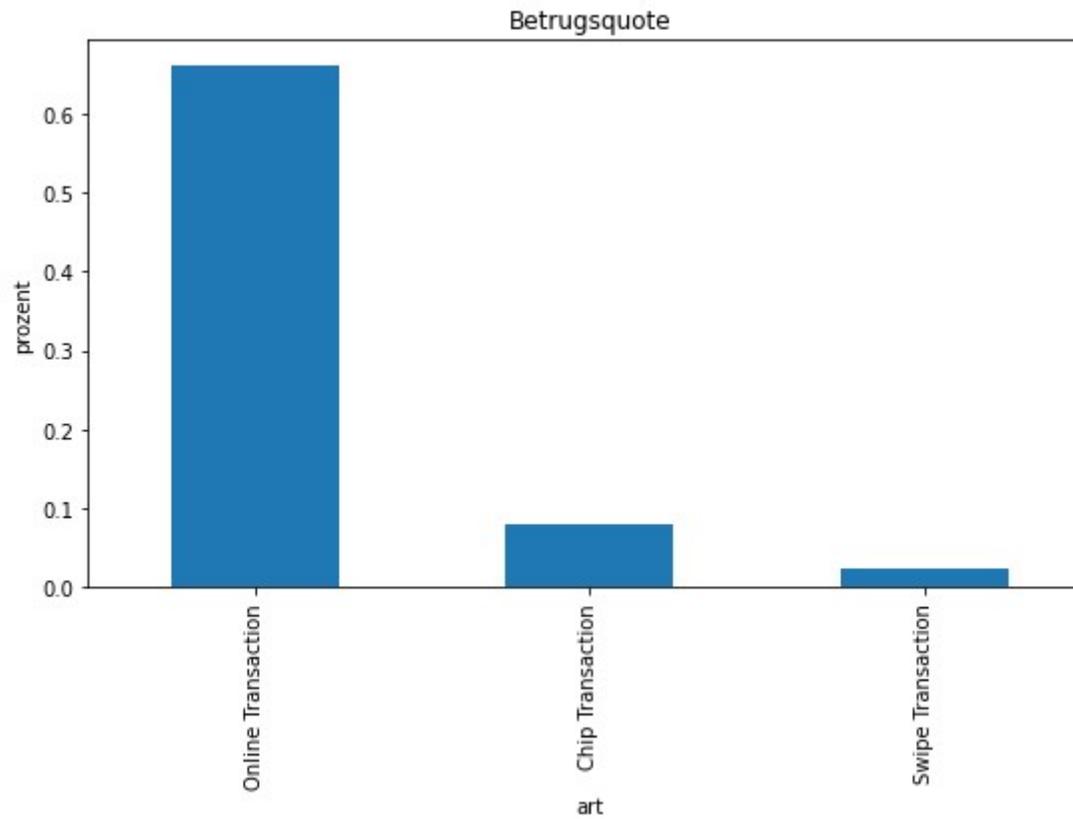
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
fehler1					
Bad CVV	7.851	7.648	203	97.4143	2.5857
Bad Expiration	7.954	7.872	82	98.9691	1.0309
Bad Card Number	10.066	9.984	82	99.1854	0.8146
Bad PIN	40.172	39.997	175	99.5644	0.4356
Insufficient Balance	162.029	161.764	265	99.8364	0.1636
Technical Glitch	32.893	32.852	41	99.8754	0.1246
None	16.312.669	16.293.531	19.138	99.8827	0.1173



# Betrugsanteil pro Art (Online, Chip, Vorort), nur > 0

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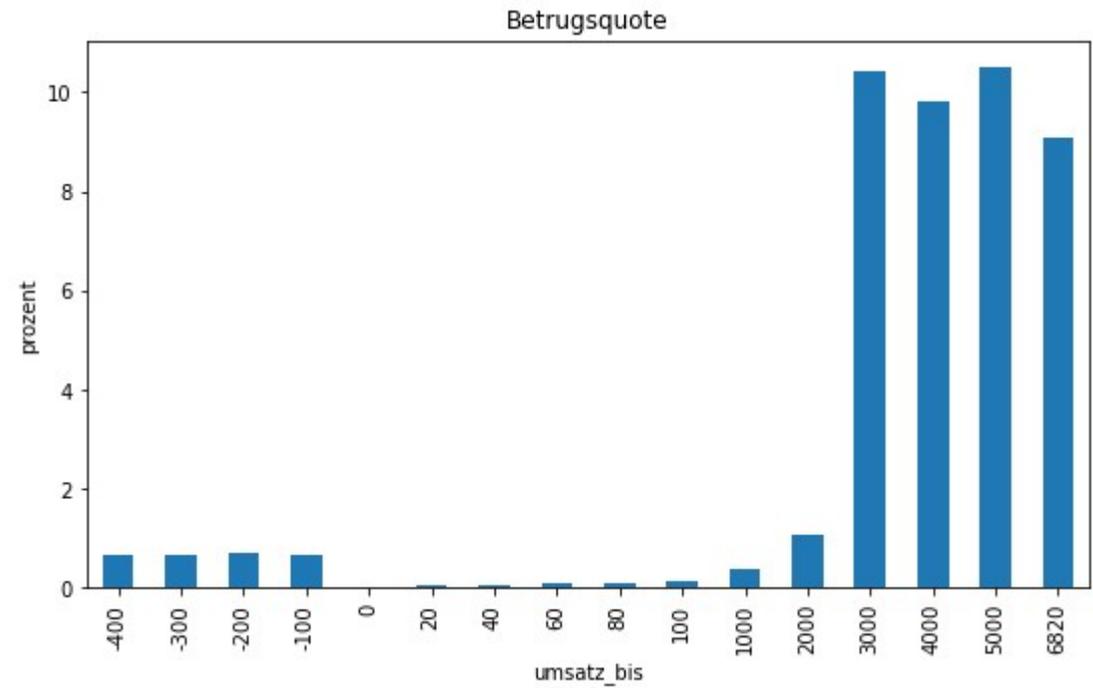
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
art					
Online Transaction	1.980.302	1.967.222	13.080	99.3395	0.6605
Chip Transaction	6.051.735	6.046.899	4.836	99.9201	0.0799
Swipe Transaction	8.543.036	8.540.966	2.070	99.9758	0.0242



# Betrugsanteil pro Umsatzbereich

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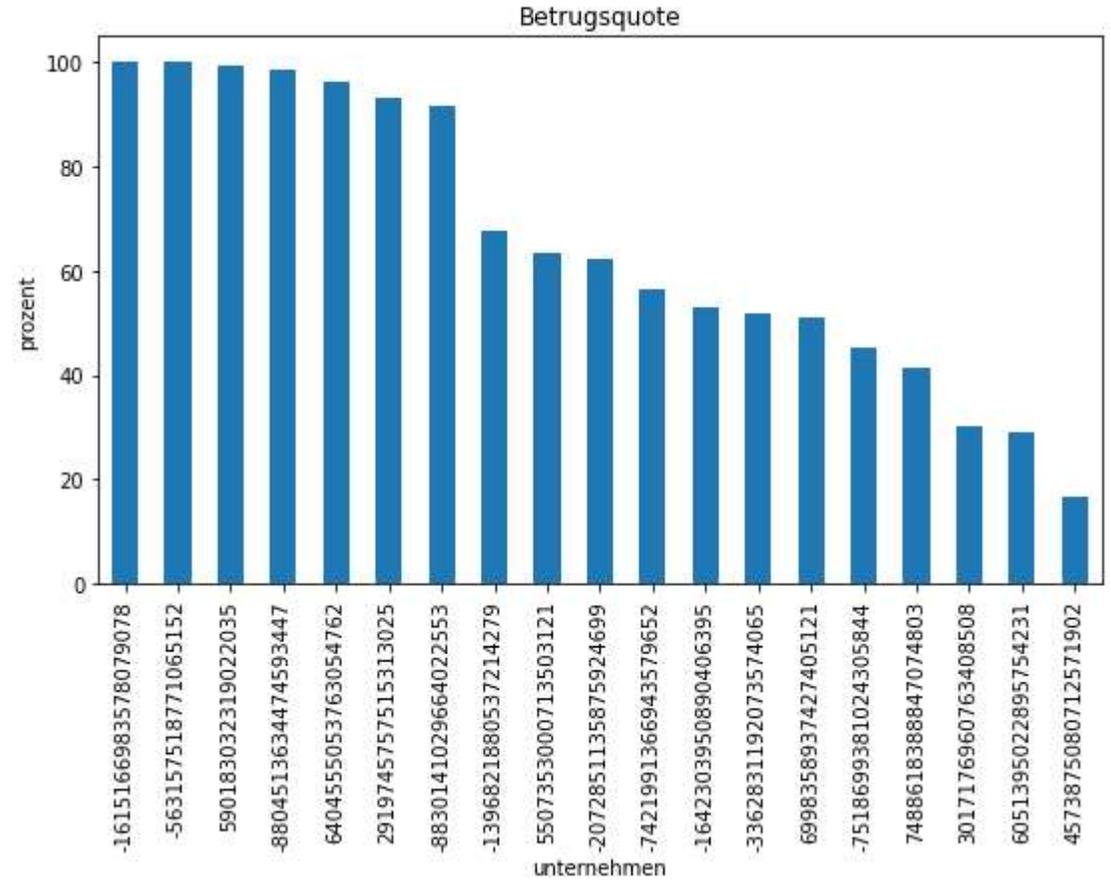
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
umsatz_bis					
-400	24.823	24.653	170	99.3152	0.6848
-300	24.694	24.528	166	99.3278	0.6722
-200	24.973	24.799	174	99.3032	0.6968
-100	24.899	24.731	168	99.3253	0.6747
0	712.424	712.375	49	99.9931	0.0069
20	5.948.663	5.944.122	4.541	99.9237	0.0763
40	3.015.025	3.013.050	1.975	99.9345	0.0655
60	2.231.143	2.229.299	1.844	99.9174	0.0826
80	1.518.384	1.516.605	1.779	99.8828	0.1172
100	1.113.443	1.111.889	1.554	99.8604	0.1396
1000	1.925.371	1.917.963	7.408	99.6152	0.3848
2000	10.824	10.708	116	98.9283	1.0717
3000	316	283	33	89.5570	10.4430
4000	61	55	6	90.1639	9.8361
5000	19	17	2	89.4737	10.5263
6820	11	10	1	90.9091	9.0909



# Betrugsanteil pro Unternehmen, nur > 30 Fälle und Quote > 0.1

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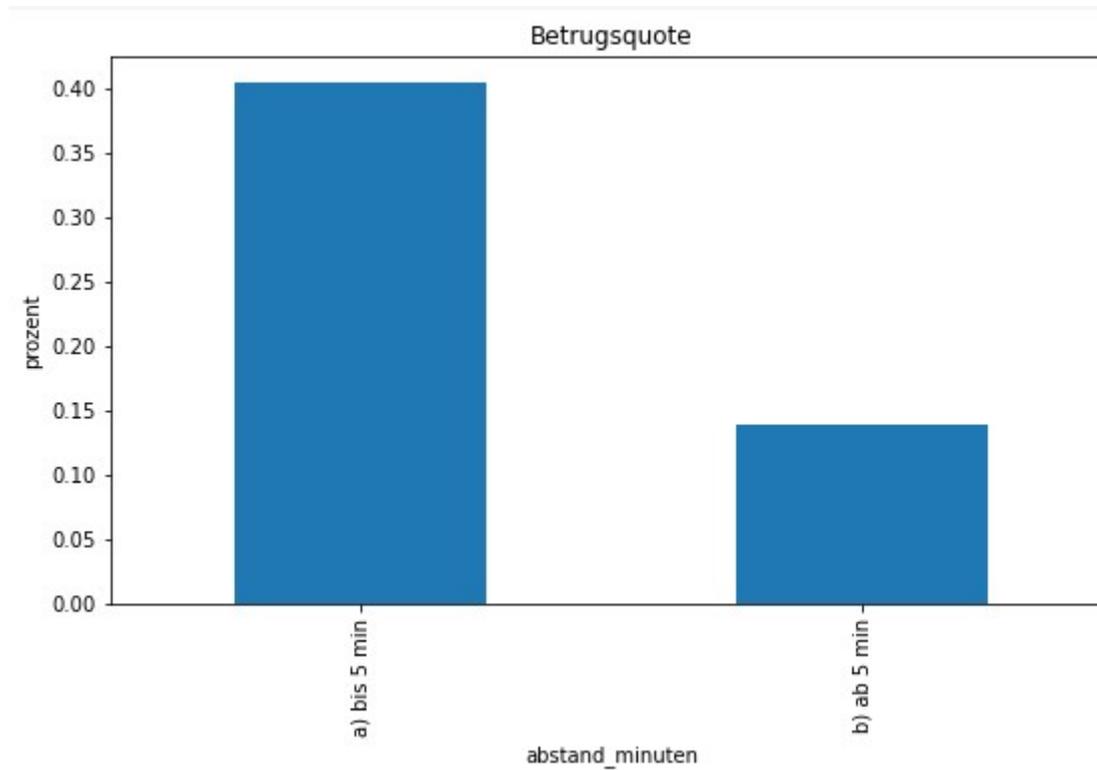
	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
<b>unternehmen</b>					
-1615166983578079078	60	0	60	0.0000	100.0000
-563157518771065152	53	0	53	0.0000	100.0000
590183032319022035	127	1	126	0.7874	99.2126
-8804513634474593447	75	1	74	1.3333	98.6667
6404555053763054762	81	3	78	3.7037	96.2963
2919745757515313025	101	7	94	6.9307	93.0693
-8830141029664022553	82	7	75	8.5366	91.4634
-1396821880537214279	93	30	63	32.2581	67.7419
5507353000713503121	253	93	160	36.7589	63.2411
-2072851135875924699	98	37	61	37.7551	62.2449
-7421991366943579652	94	41	53	43.6170	56.3830
-1642303950890406395	443	208	235	46.9526	53.0474
-3362831192073574065	145	70	75	48.2759	51.7241
6998358937427405121	426	209	217	49.0610	50.9390
-7518699381024305844	190	104	86	54.7368	45.2632
7488618388847074803	228	134	94	58.7719	41.2281
3017176960763408508	189	132	57	69.8413	30.1587
6051395022895754231	1.309	929	380	70.9702	29.0298
4573875080712571902	910	760	150	83.5165	16.4835



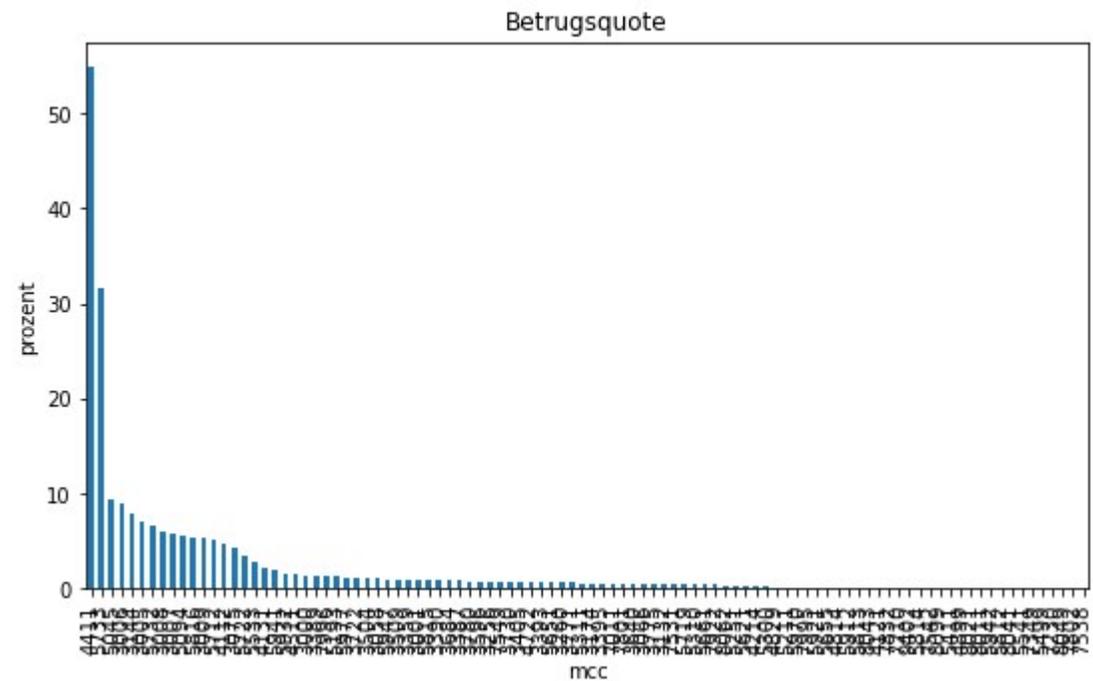
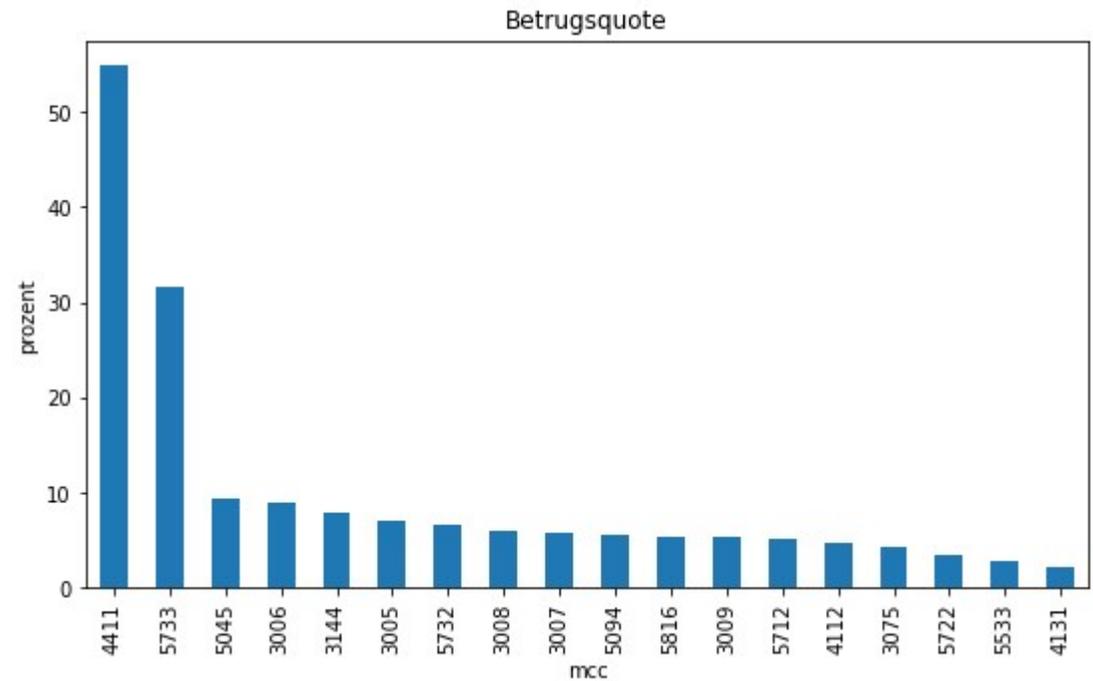
# Betrugsanteil pro Abstand in Minuten für gleichen User und Stadt unterschiedlich

Freitag, 5. August 2022 08:17

	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
<b>abstand_minuten</b>					
a) bis 5 min	118.571	118.091	480	99.5952	0.4048
b) ab 5 min	7.709.592	7.698.855	10.737	99.8607	0.1393



	anz_trx	ant_ok	ant_fraud	quote_ok	quote_fraud
mcc					
4411	471	213	258	45.2229	54.7771
5733	364	249	115	68.4066	31.5934
5045	3.365	3.053	312	90.7281	9.2719
3006	434	395	39	91.0138	8.9862
3144	391	360	31	92.0716	7.9284
3005	482	448	34	92.9461	7.0539
5732	8.596	8.020	576	93.2992	6.7008
3008	481	452	29	93.9709	6.0291
3007	443	417	26	94.1309	5.8691
5094	6.462	6.105	357	94.4754	5.5246
5816	3.351	3.172	179	94.6583	5.3417
3009	492	466	26	94.7154	5.2846
5712	4.804	4.552	252	94.7544	5.2456
4112	2.756	2.625	131	95.2467	4.7533
3075	422	404	18	95.7346	4.2654
5722	428	413	15	96.4953	3.5047
5533	1.477	1.434	43	97.0887	2.9113
4131	2.723	2.661	62	97.7231	2.2769



109 verschiedene Codes