

Exploratory Data Analysis (EDA)

Statsomat.com

19 April 2021

Basic Information

Automatic statistics for the file:

File
AMR_Monthly_2014-03-28.csv

Your selection for the encoding: UTF-8

Your selection for the decimal character: Auto

Observations (rows with at least one non-missing value): 84

Variables (columns with at least one non-missing value): 25

Variables considered continuous: 25

Variables considered continuous
Aachen
Bielefeld
Bochum
Bonn
Bottrop
Dortmund
Duesseldorf
Duisburg
Essen
Gelsenkirchen
Hagen
Hamm
Herne
Koeln
Krefeld
Leverkusen
Moenchengladbach
Muehlheim
Muenster
Oberhausen
Paderborn
Remscheid
Siegen
Solingen
Wuppertal

Variables considered categorical: 0

Results for Numerical Variables

Descriptive Statistics

Variables are sorted alphabetically. Missings are omitted in stats. CV only for positive variables.

	N Obs	N Missing	N Valid	% Complete	N Unique	Mean	SD	Median	MAD	Min	Max	Skewness	Kurtosis	CV
Aachen	84	0	84	100	84	114.03	15.65	110.37	13.01	55.41	149.33	0.08	1.41	0.14
Bielefeld	84	0	84	100	84	107.16	7.79	106.62	9.76	93.91	125.15	0.37	-0.76	0.07
Bochum	84	0	84	100	84	90.76	5.03	91.76	4.09	76.44	100	-0.9	0.5	0.06
Bonn	84	0	84	100	84	106.97	9.36	103.77	8.57	92.45	130.69	0.74	-0.52	0.09
Bottrop	84	0	84	100	84	97.36	7.12	98.04	7.4	71.45	111.12	-0.56	0.85	0.07
Dortmund	84	0	84	100	84	91.03	4.95	90.97	5.11	78.06	101.39	-0.09	-0.25	0.05
Duesseldorf	84	0	84	100	84	111.71	14.86	106.59	11.15	95.14	144.13	0.9	-0.47	0.13
Duisburg	84	0	84	100	84	85.31	7.82	85.97	6.87	64.64	101.26	-0.45	0.16	0.09
Essen	84	0	84	100	84	88.45	5.13	87.57	4.77	78.17	104.7	0.73	0.91	0.06
Gelsenkirchen	84	0	84	100	84	89.94	8.29	88.98	6.8	70.89	112.01	0.41	0.2	0.09
Hagen	84	0	84	100	84	93.31	6.26	93.34	6.25	75.04	106.03	-0.23	0.02	0.07
Hamm	84	0	84	100	84	110.86	14.74	110.98	12.59	72.64	151.36	0.11	0.68	0.13
Herne	84	0	84	100	84	86.21	9.55	86.66	9.06	61.08	104.12	-0.26	-0.31	0.11
Koeln	84	0	84	100	84	111.93	10.42	107.45	7.97	99.92	137.24	0.9	-0.42	0.09
Krefeld	84	0	84	100	84	92.71	5.29	93.58	3.72	73.65	102.48	-1.2	2.51	0.06
Leverkusen	84	0	84	100	84	96.08	7.27	96.05	7.26	74.31	114.87	0.05	0.42	0.08
Moenchengladbach	84	0	84	100	84	99.5	5.05	99.89	6.16	83.34	108.41	-0.36	-0.08	0.05
Muehlheim	84	0	84	100	84	97.51	6.09	96.89	4.88	84.86	116.61	0.53	0.59	0.06
Muenster	84	0	84	100	84	115.13	14.87	110.02	11.67	95.04	157.97	0.92	-0.14	0.13
Oberhausen	84	0	84	100	84	95.47	4.11	95	4.65	84.94	105.37	0.13	-0.49	0.04
Paderborn	84	0	84	100	84	106.06	10.93	103.87	7.94	85.46	144.77	1.17	1.77	0.1
Remscheid	84	0	84	100	84	97.64	6.32	97.58	4.96	81.4	116.98	0.16	1.1	0.06
Siegen	84	0	84	100	84	104.9	13.32	105.57	12.74	69.14	174.4	1.38	7.96	0.13
Solingen	84	0	84	100	84	95.47	4.11	95	4.65	84.94	105.37	0.13	-0.49	0.04
Wuppertal	84	0	84	100	84	95.85	5.19	95.09	4.05	84.42	116.28	1.05	2.33	0.05

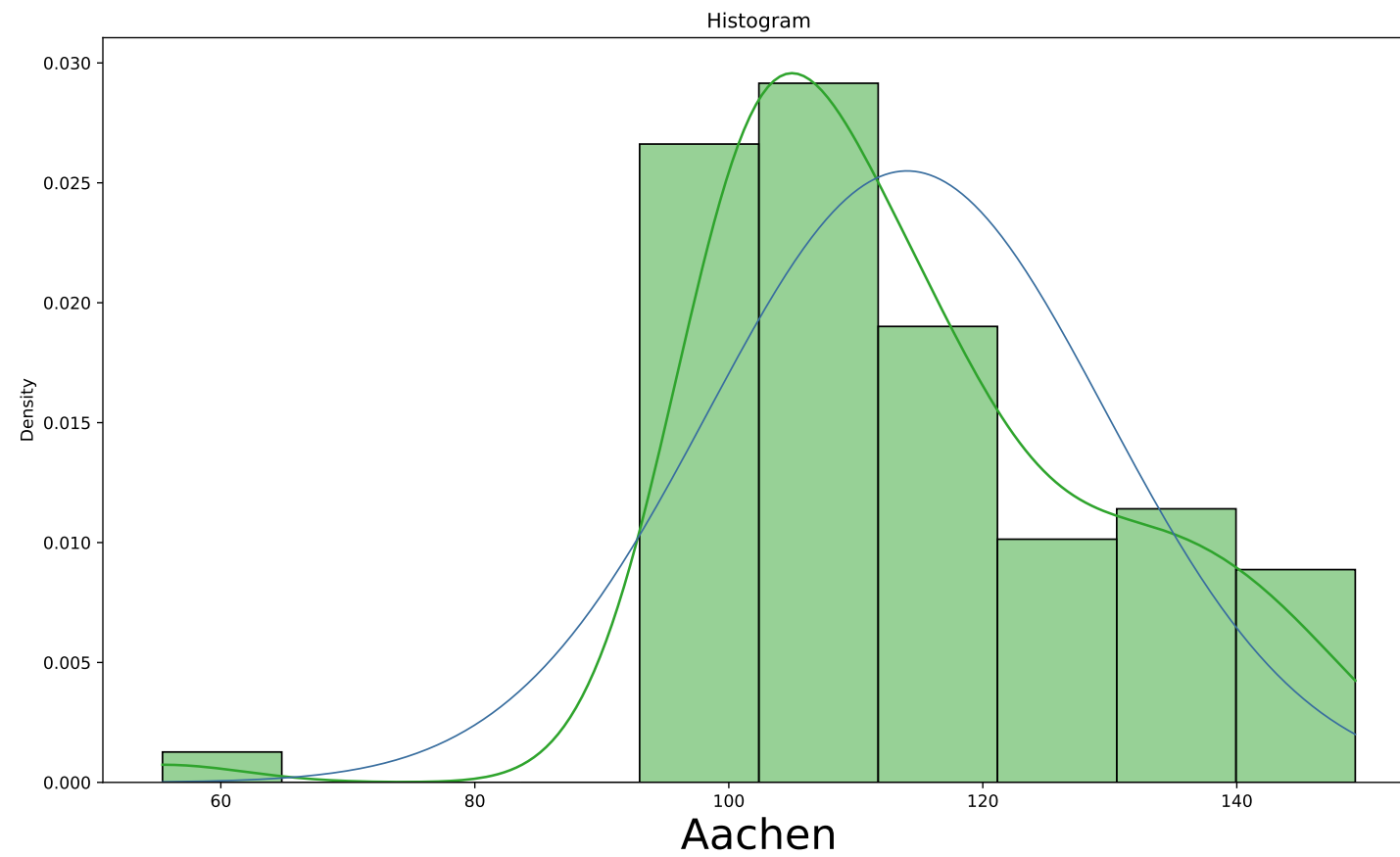
Graphics

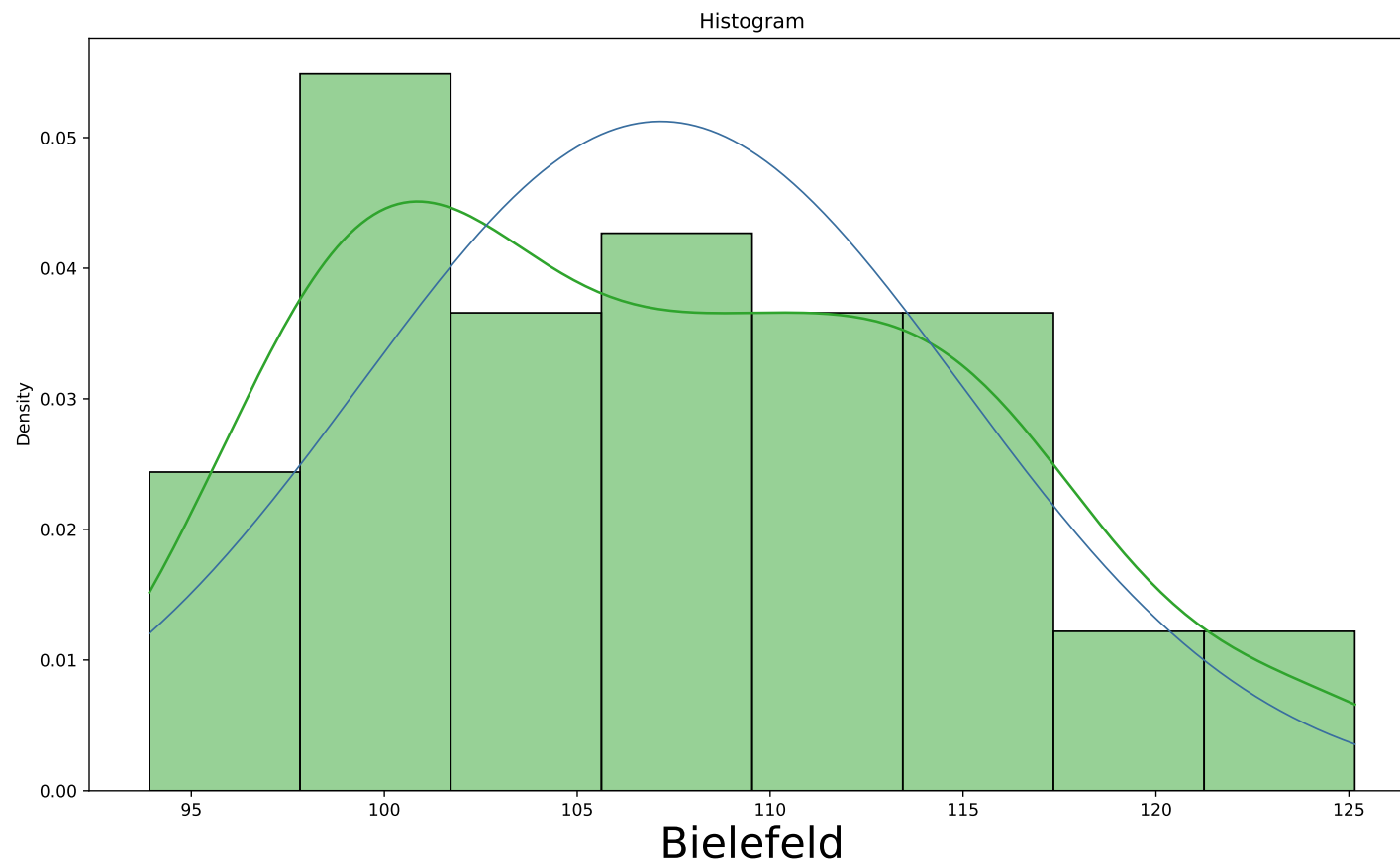
Histograms

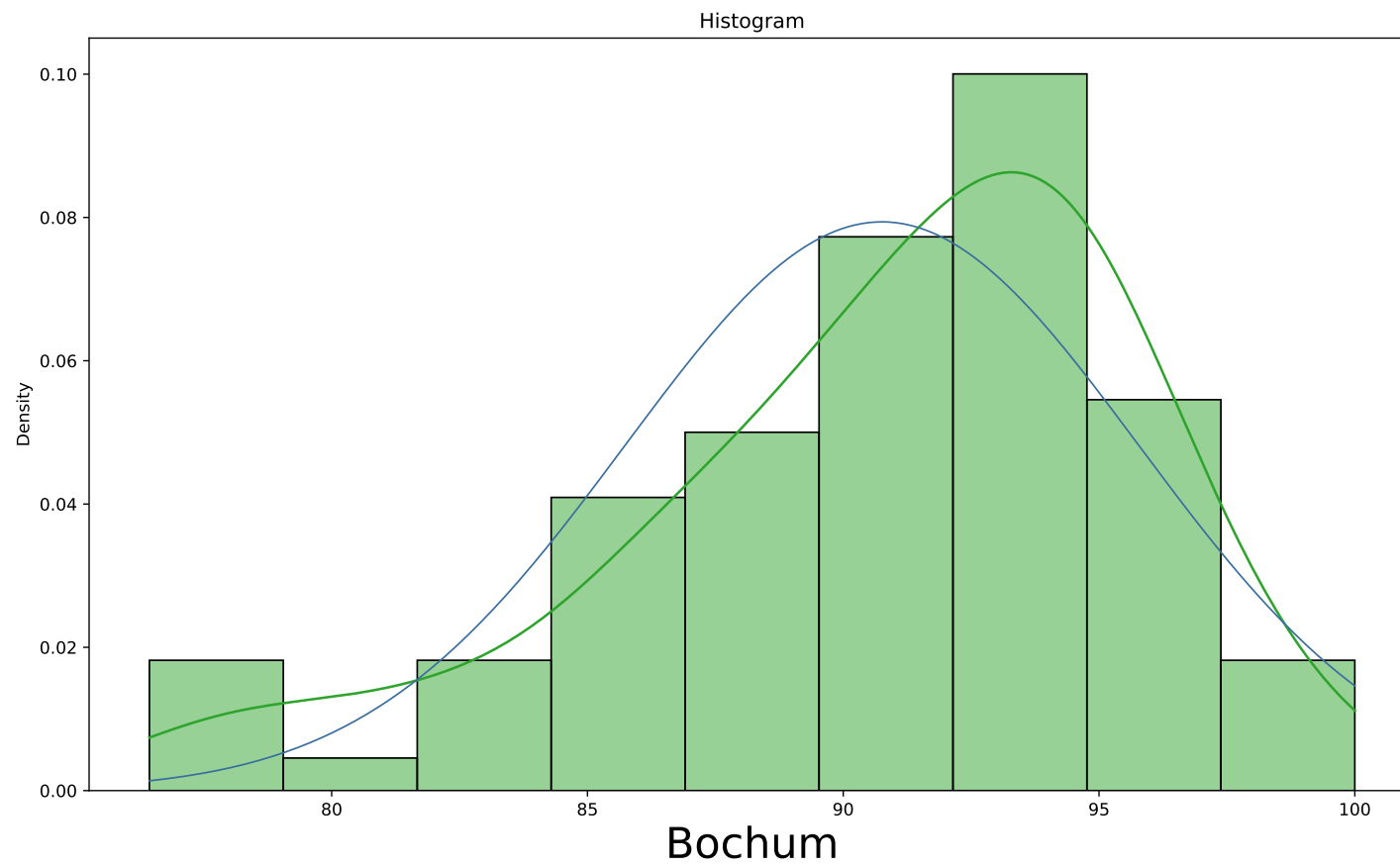
Details: Density Histograms. One large figure per page for each variable, sorted alphabetically. The blue line represents the normal density approximation. The green line represents a special kernel density approximation.

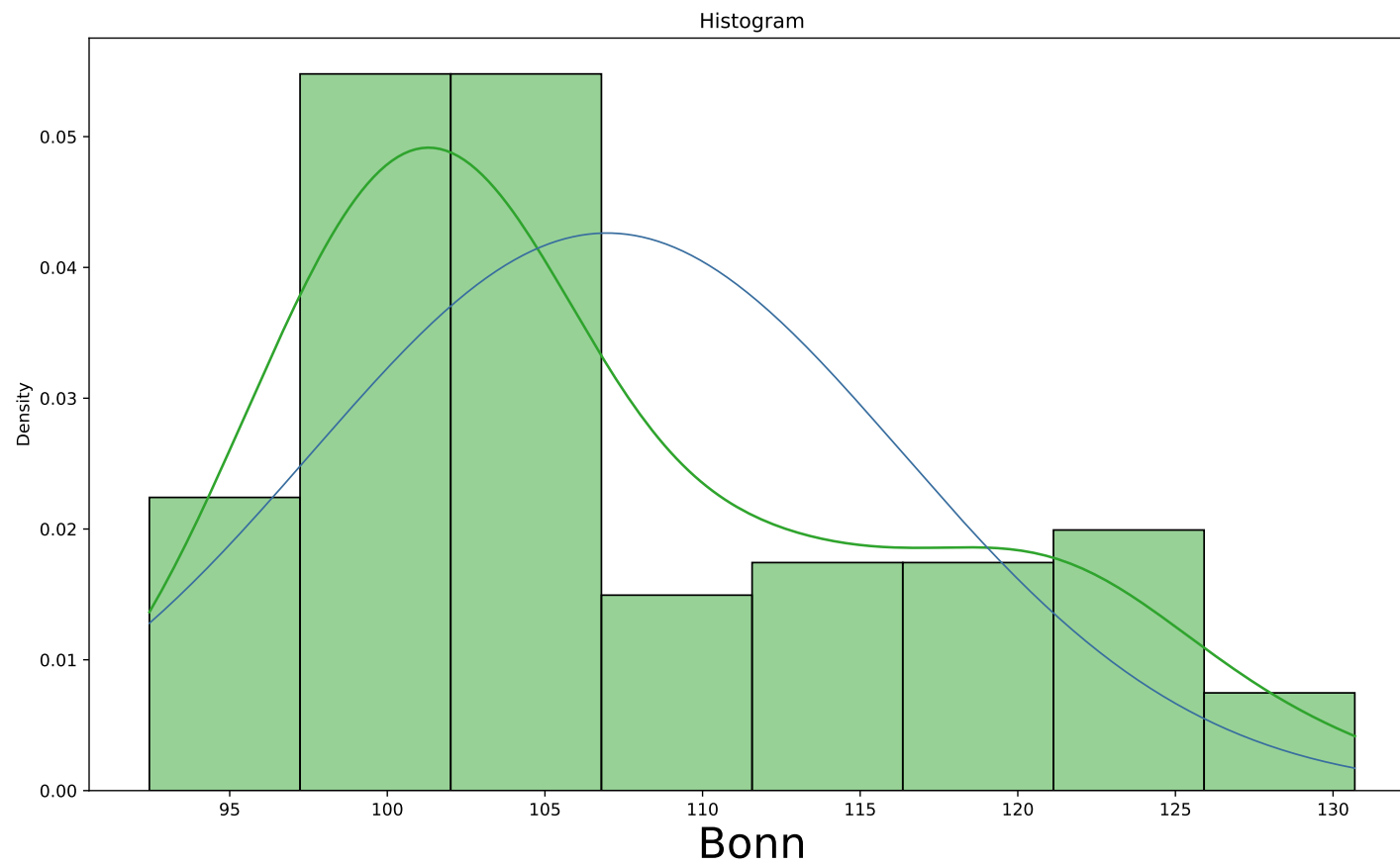
See figures on next page.

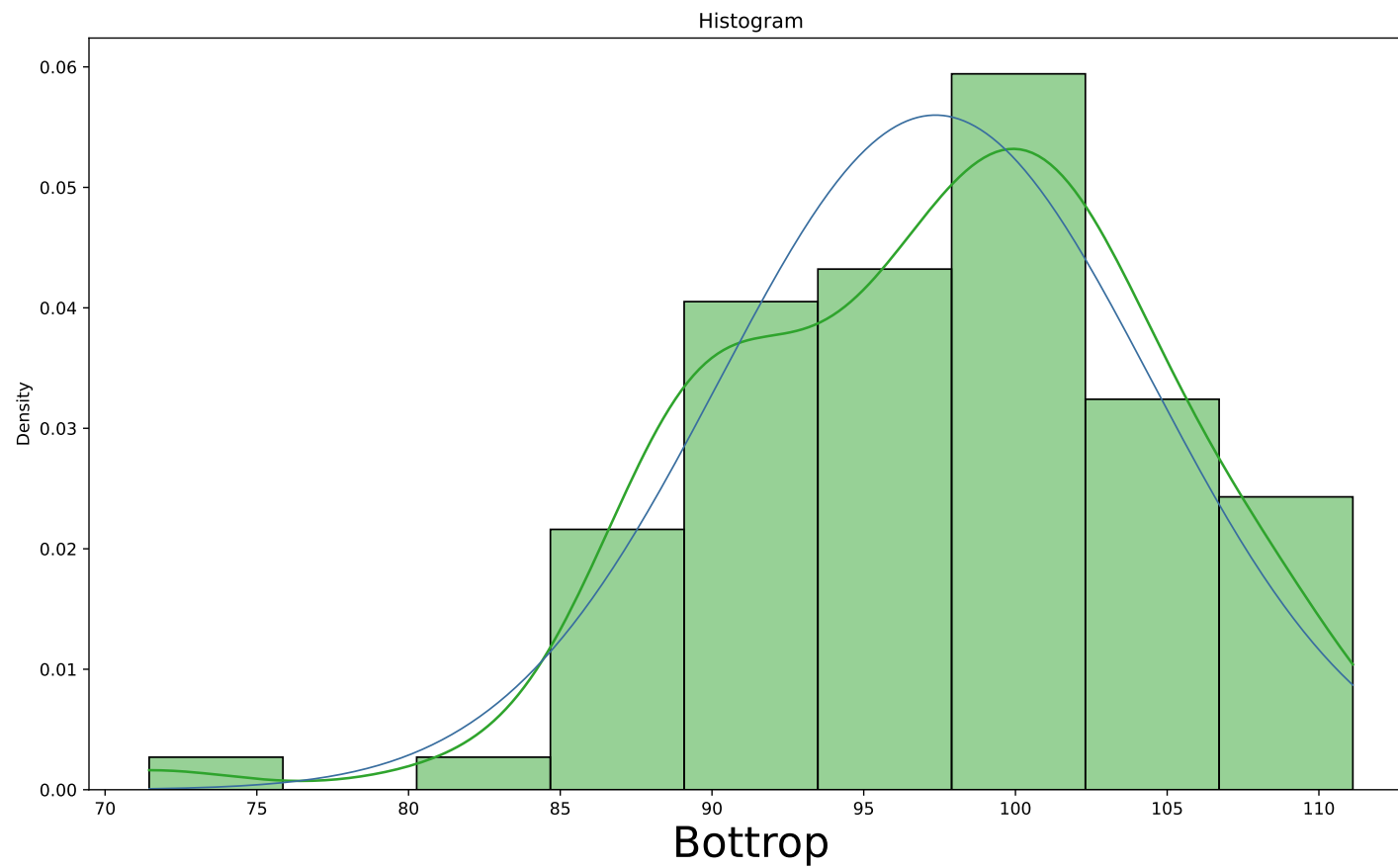
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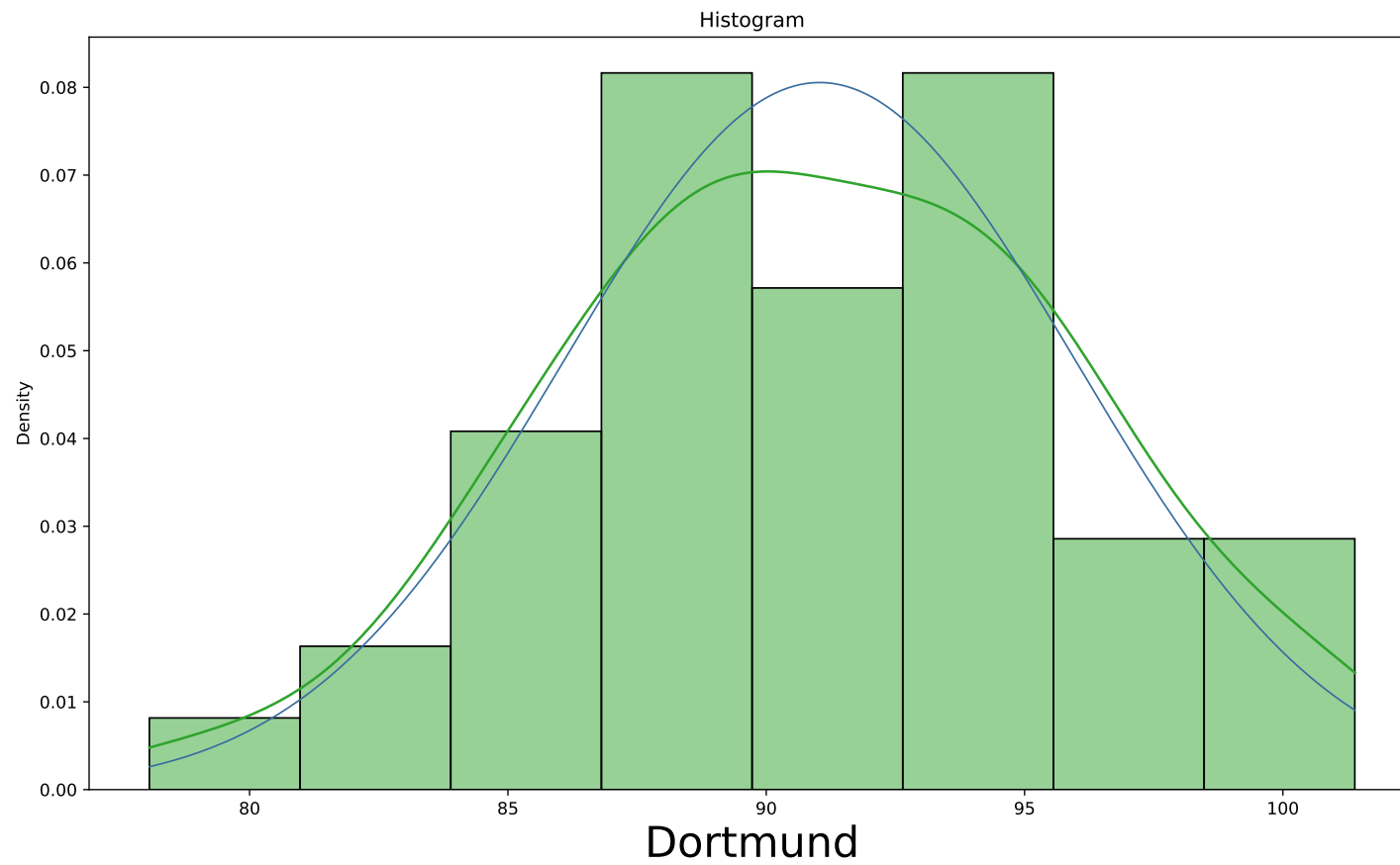


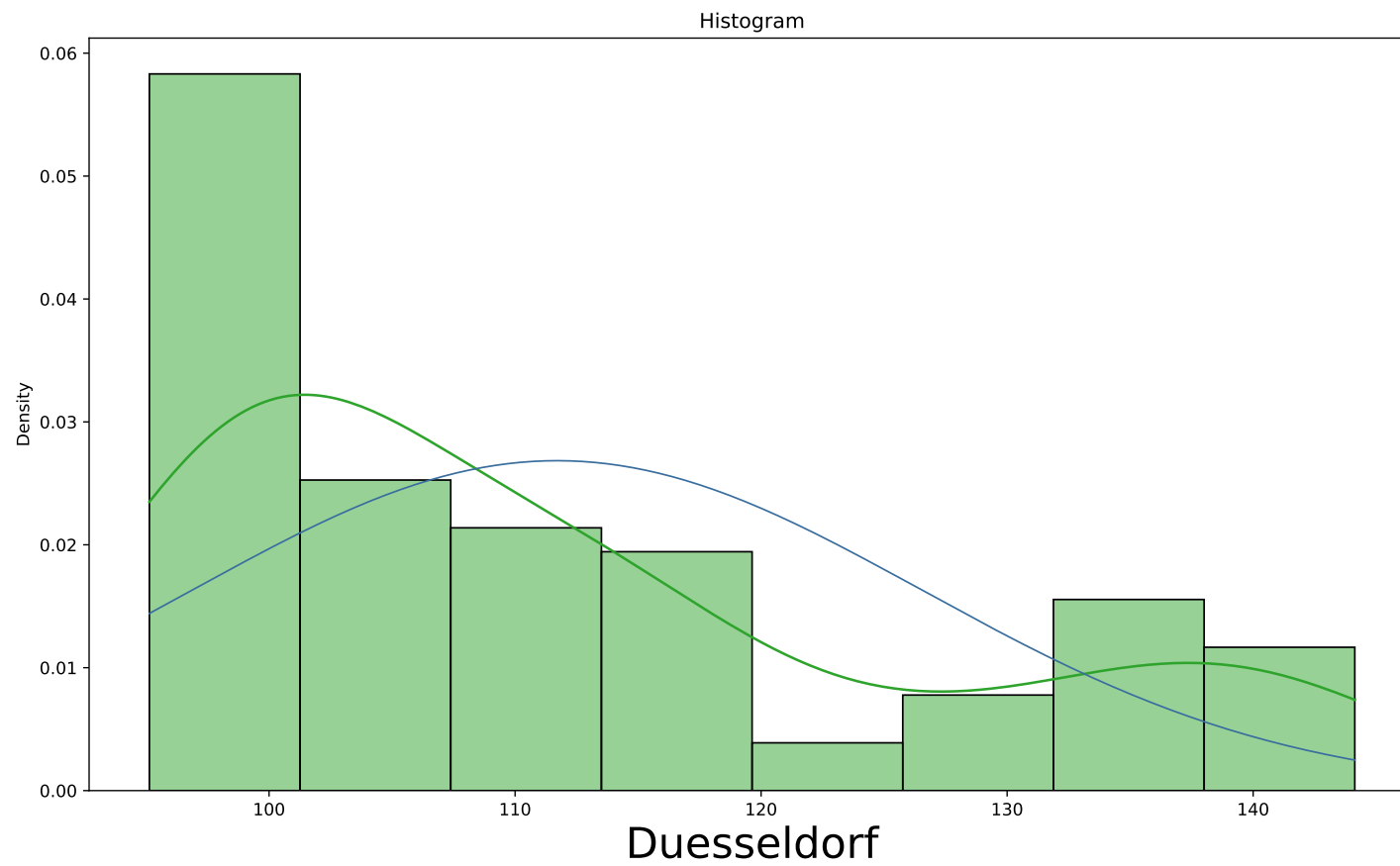


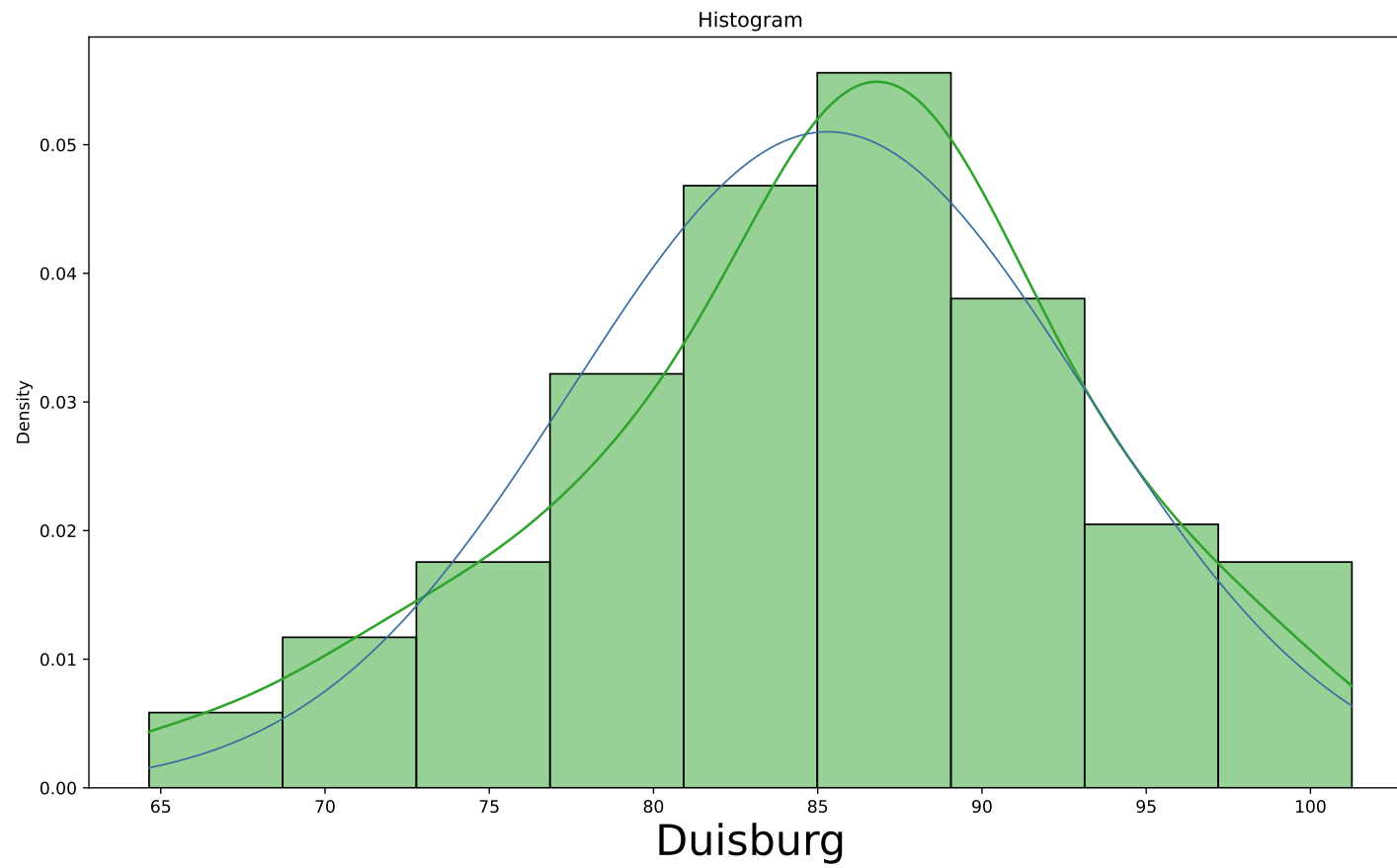


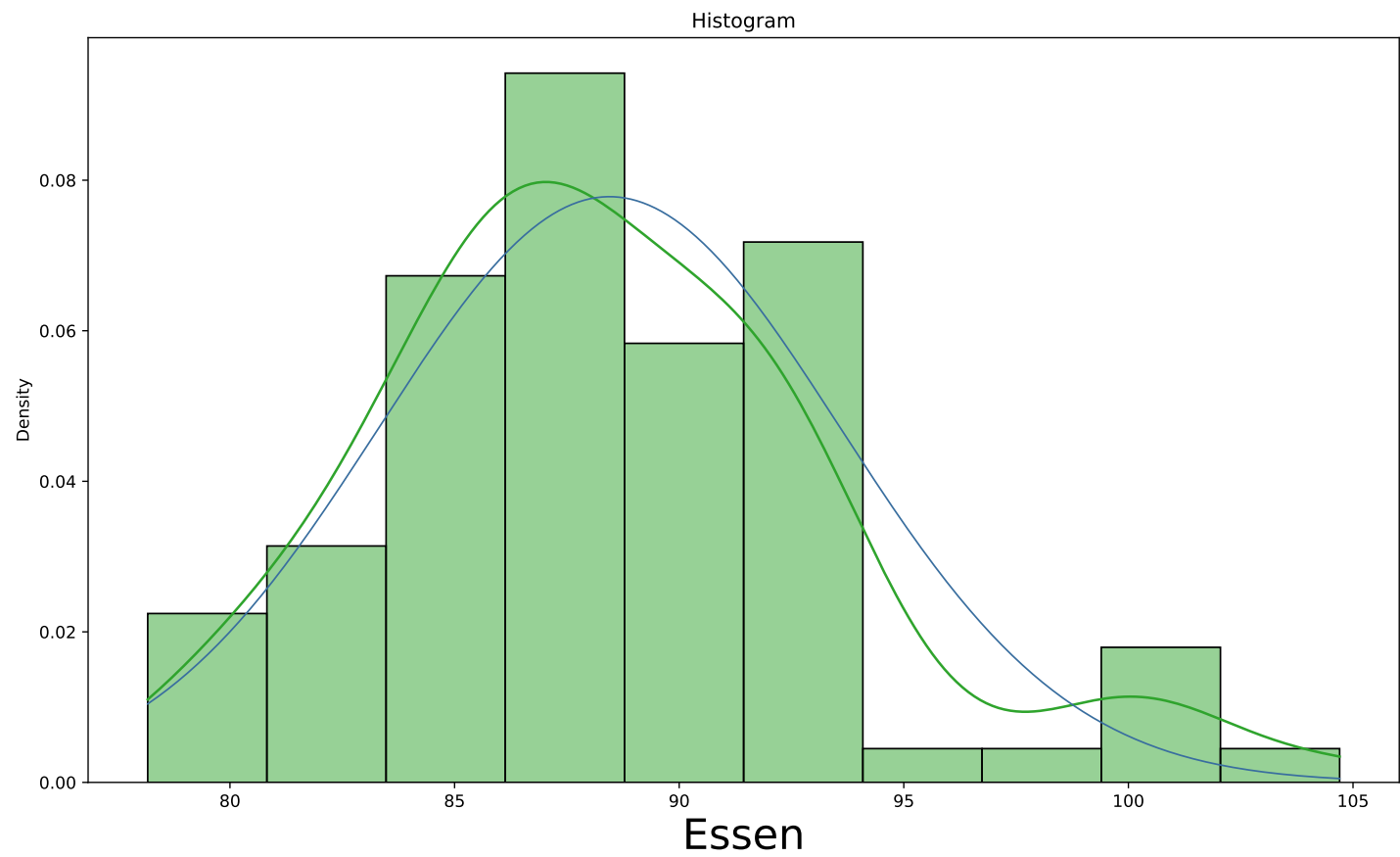


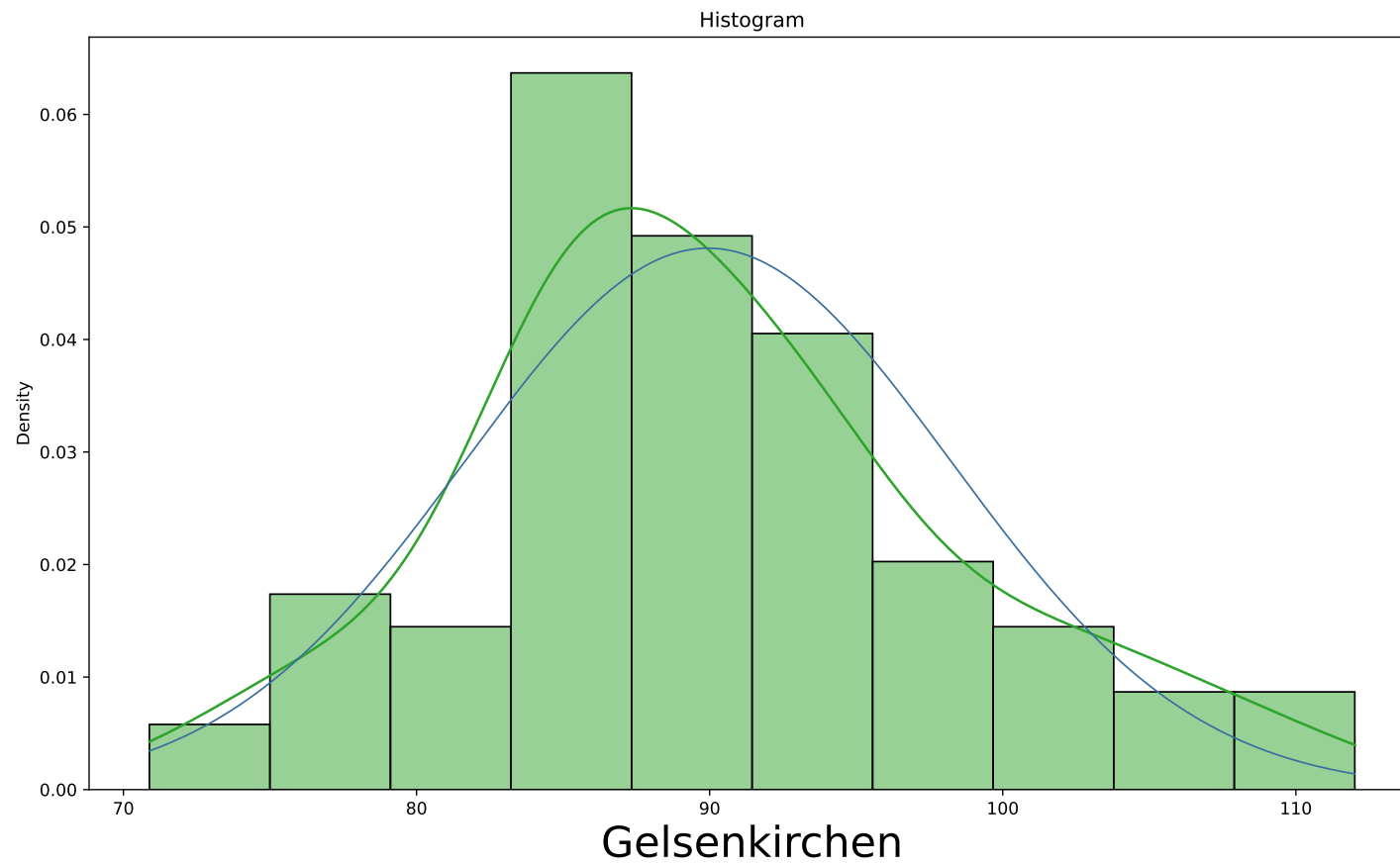


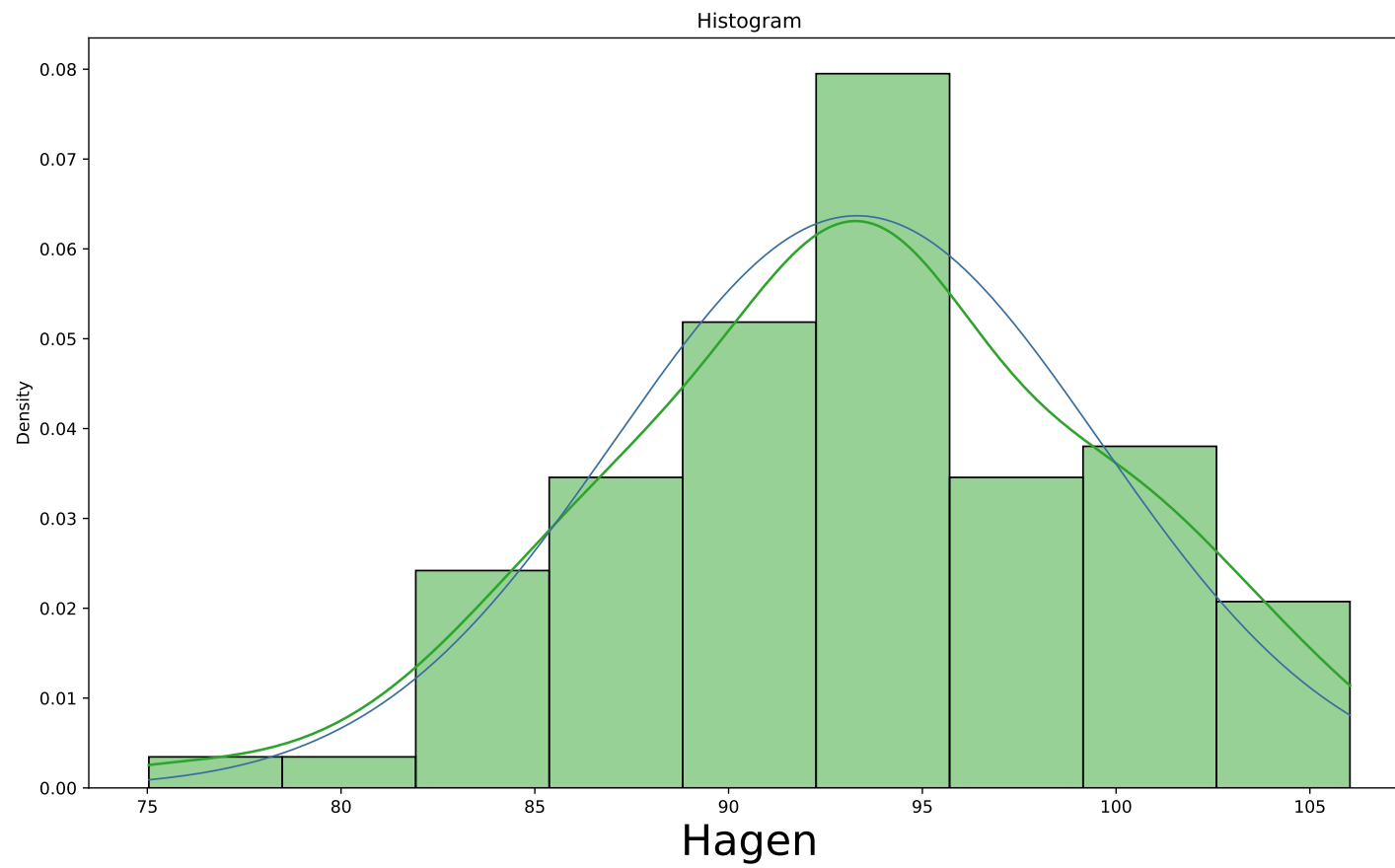


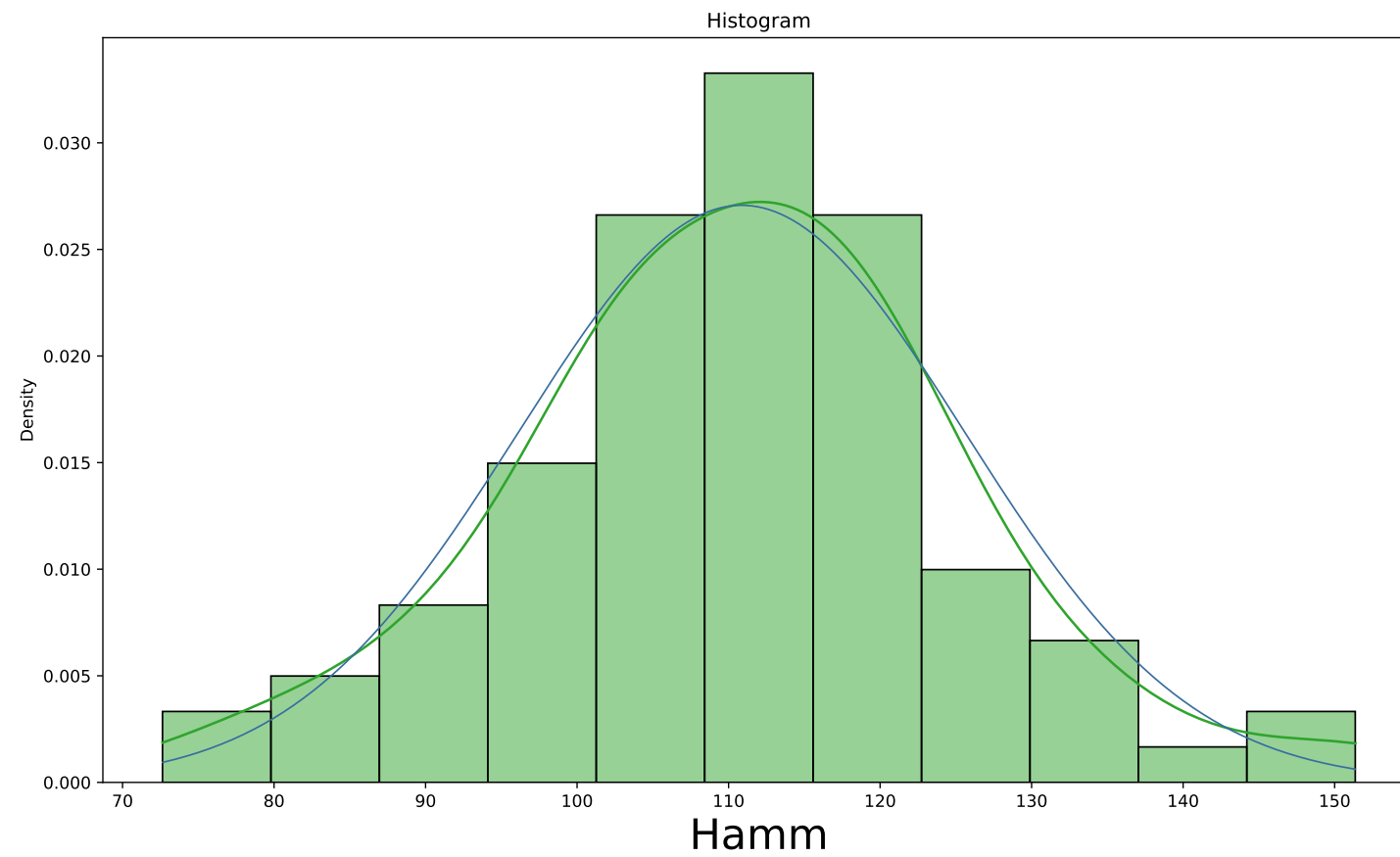


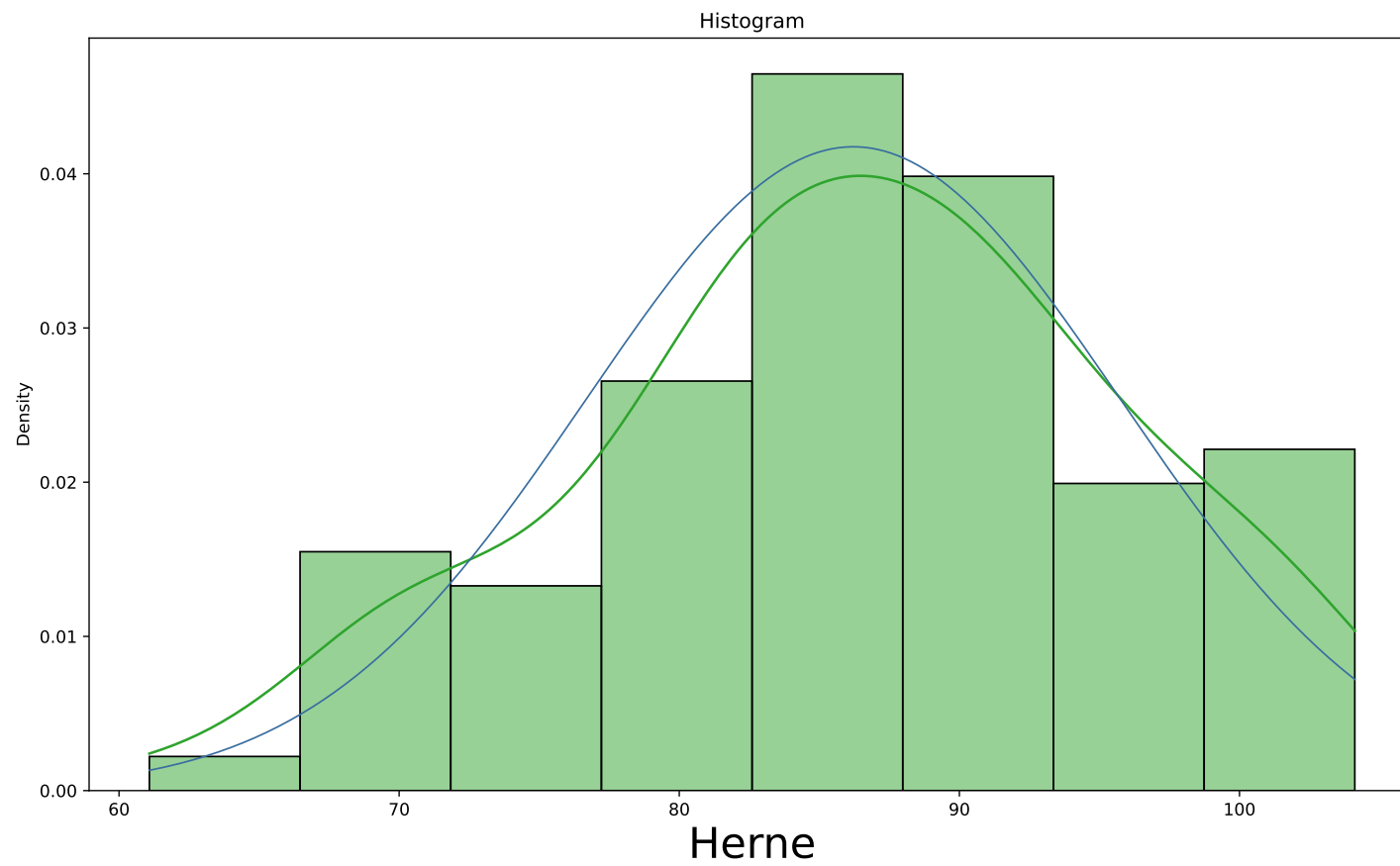


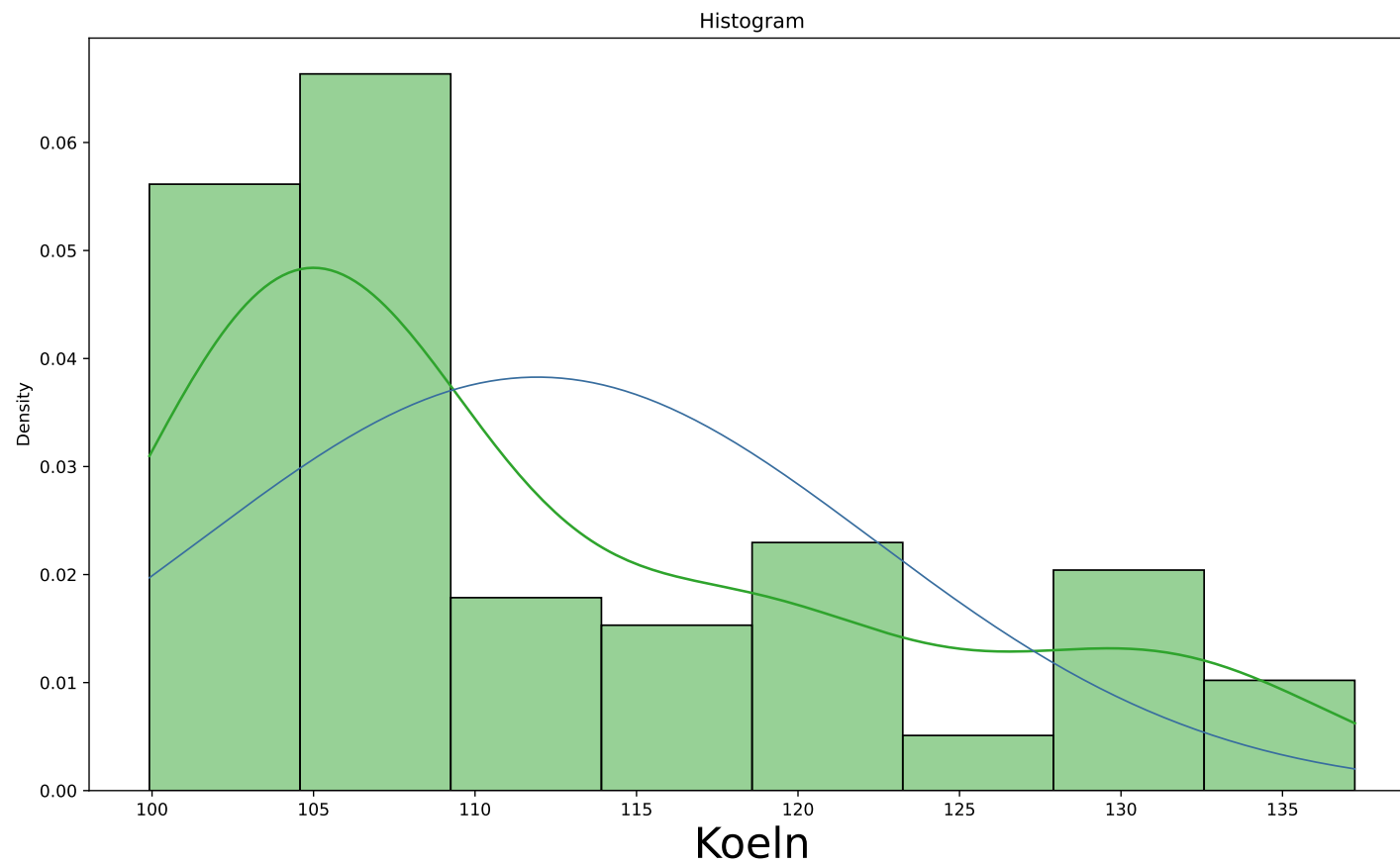


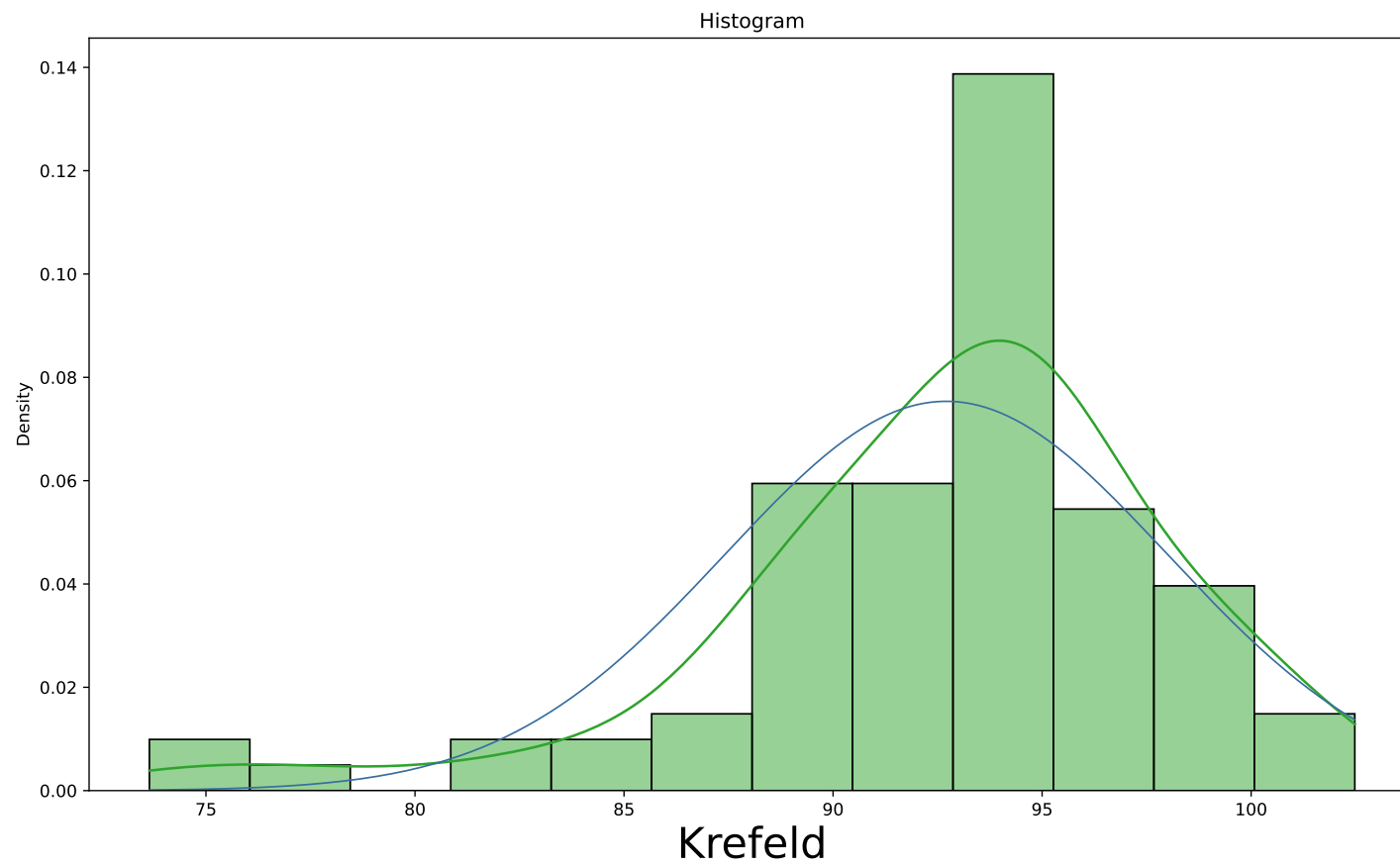


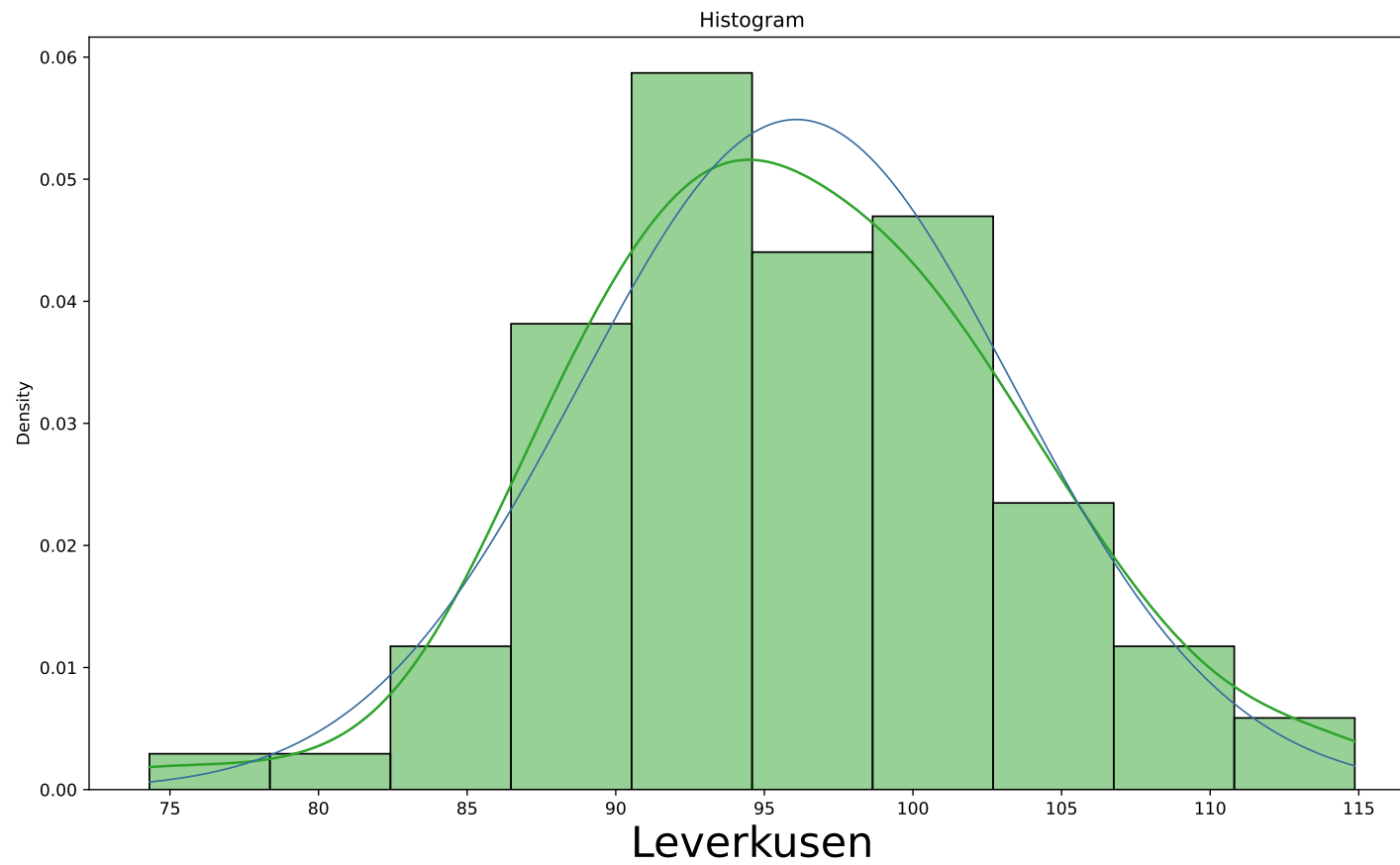


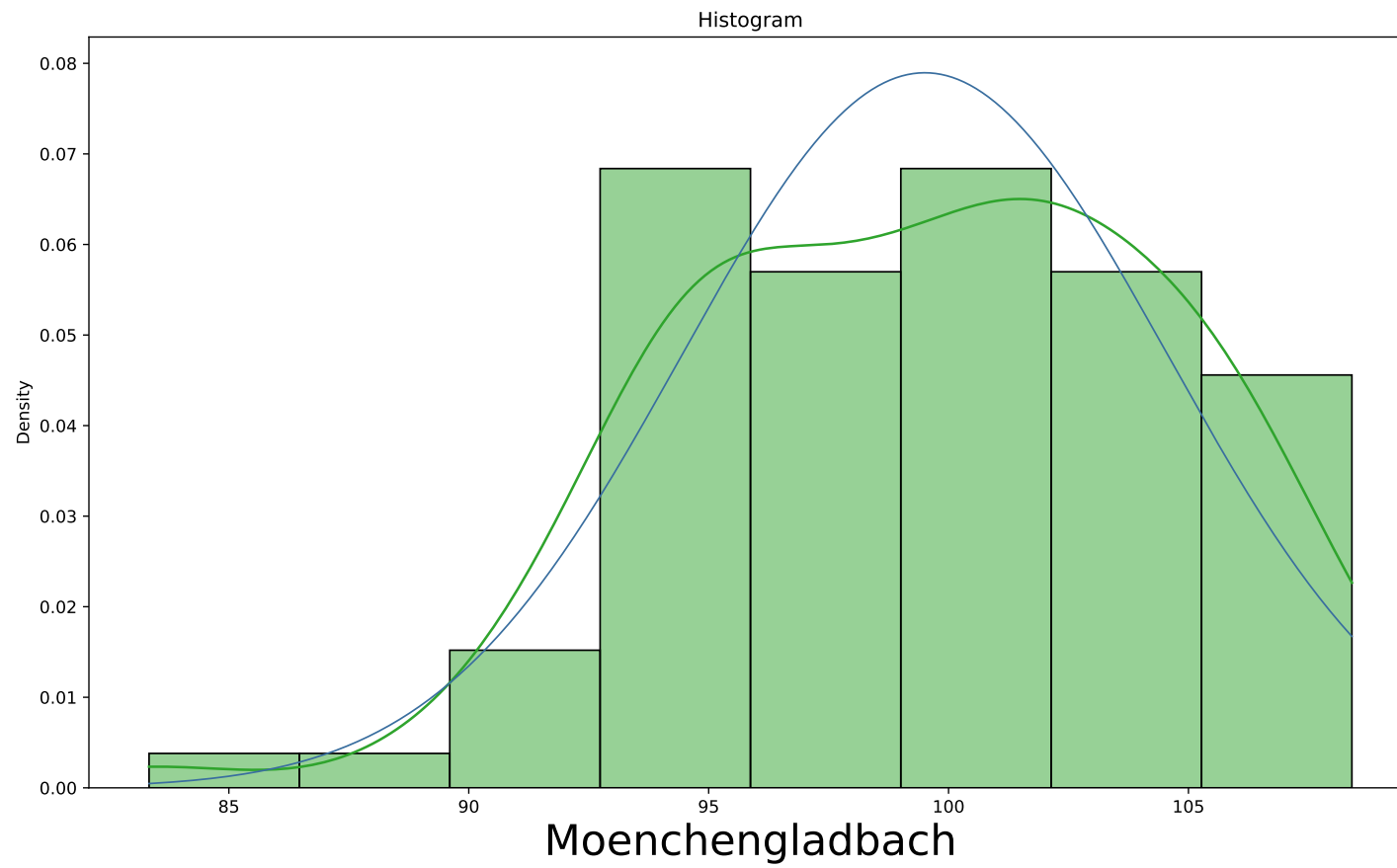


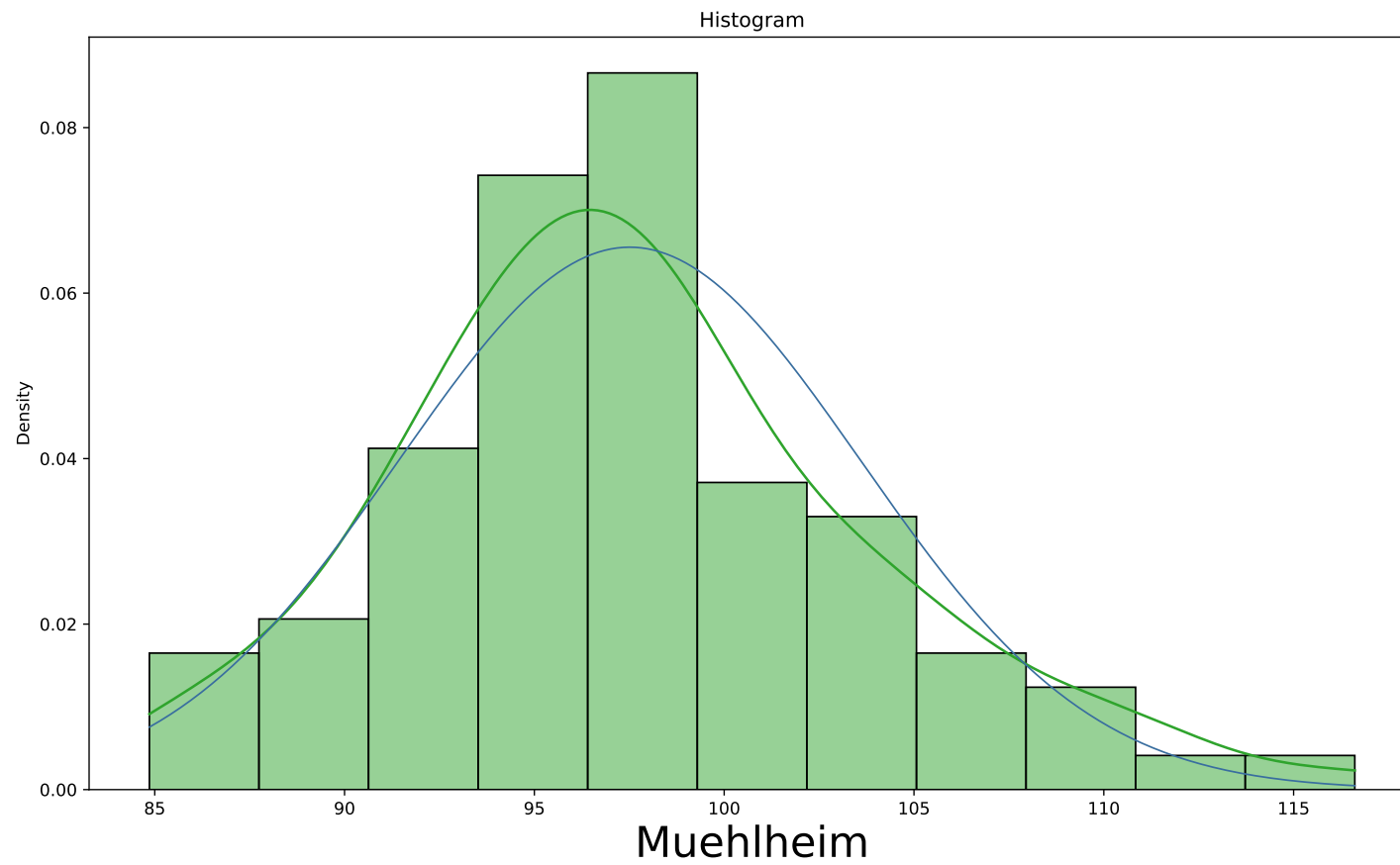


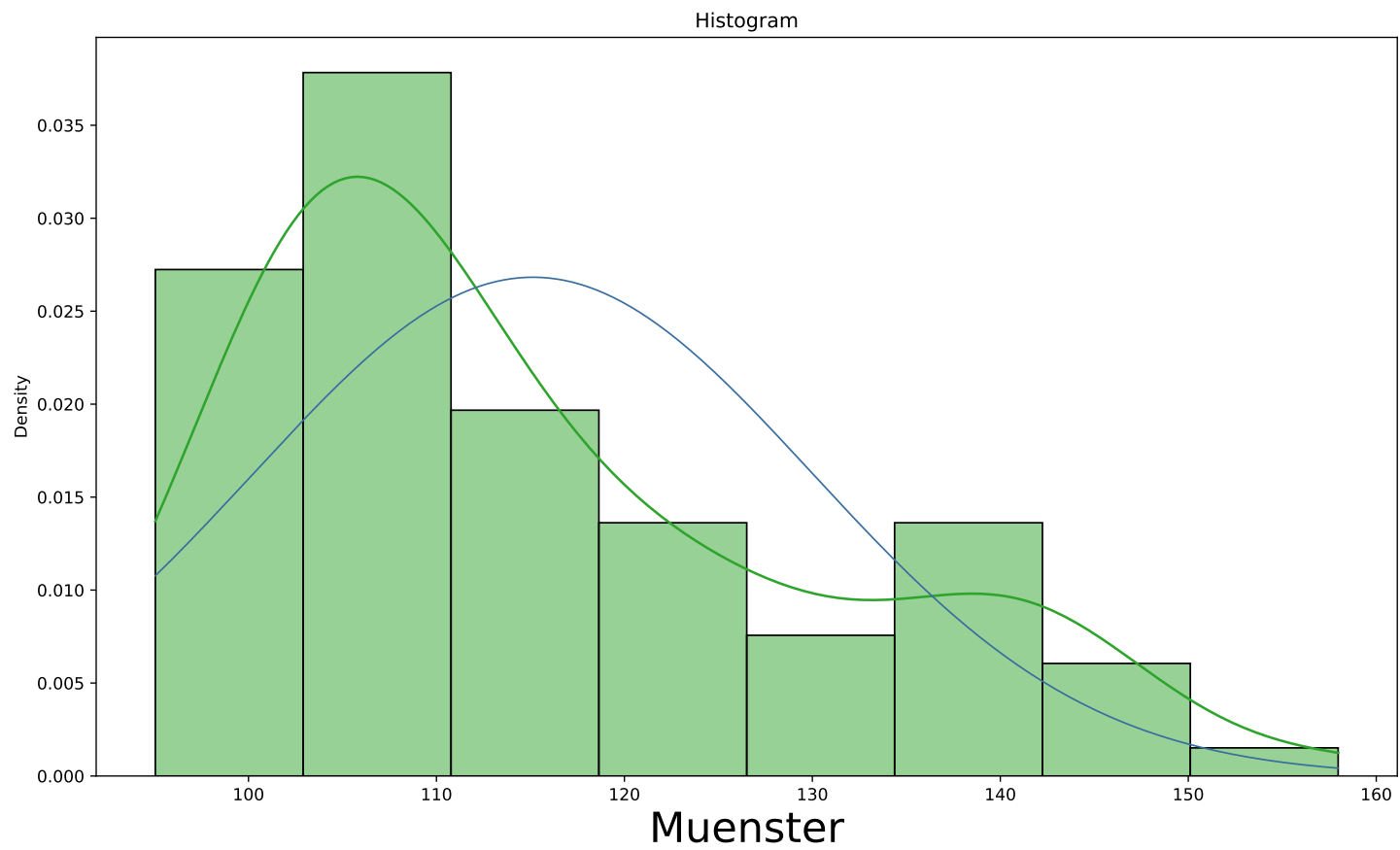


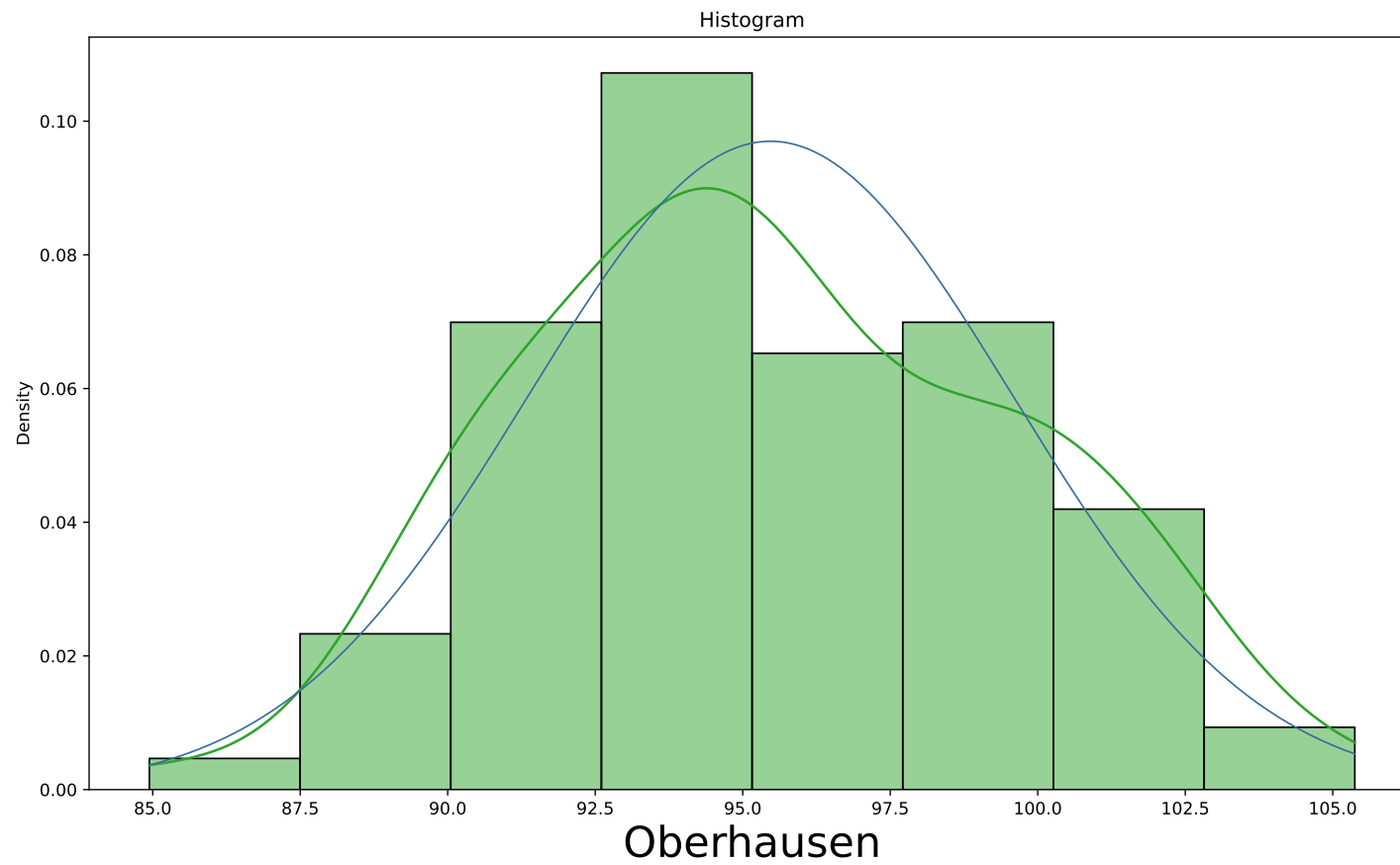


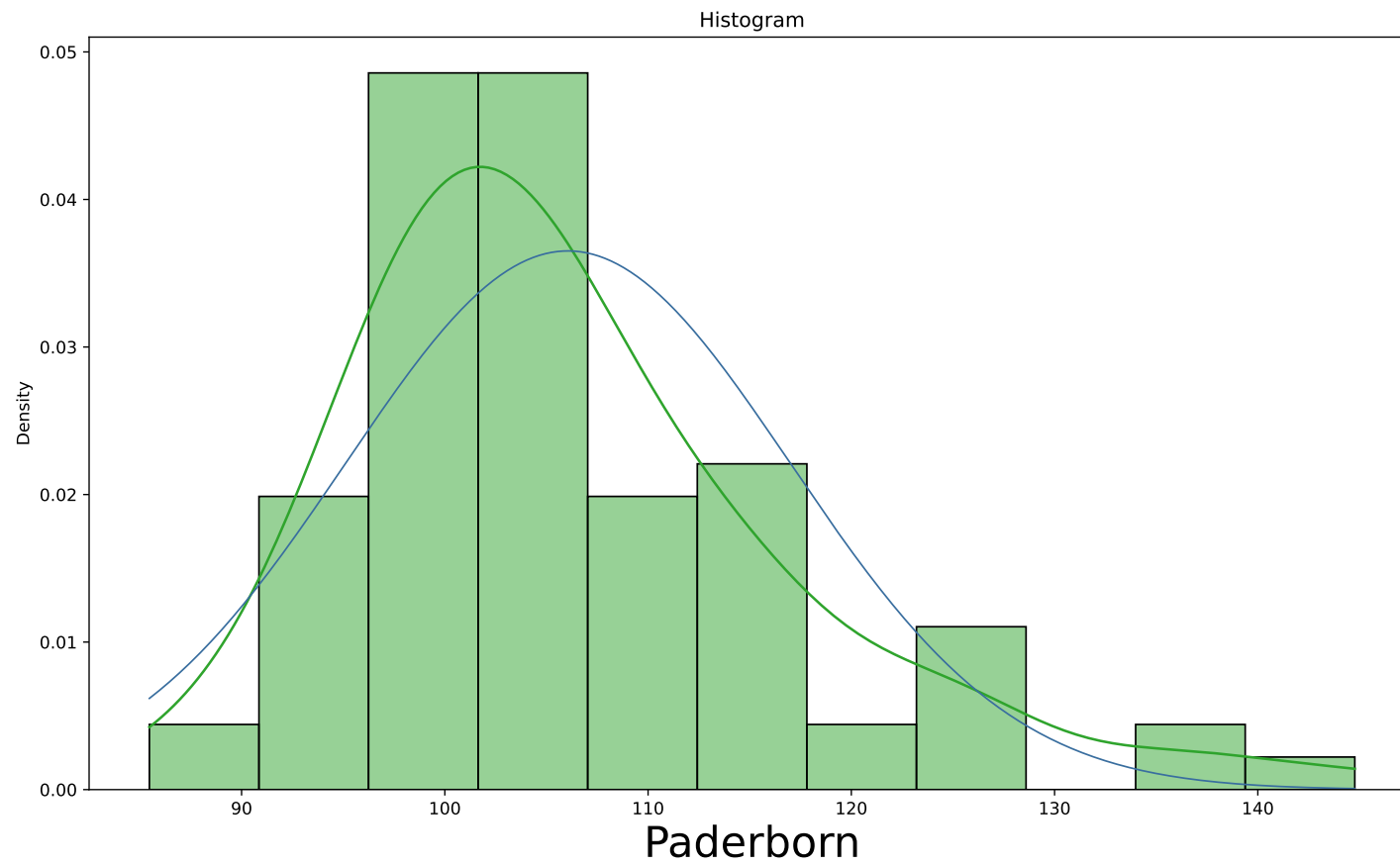


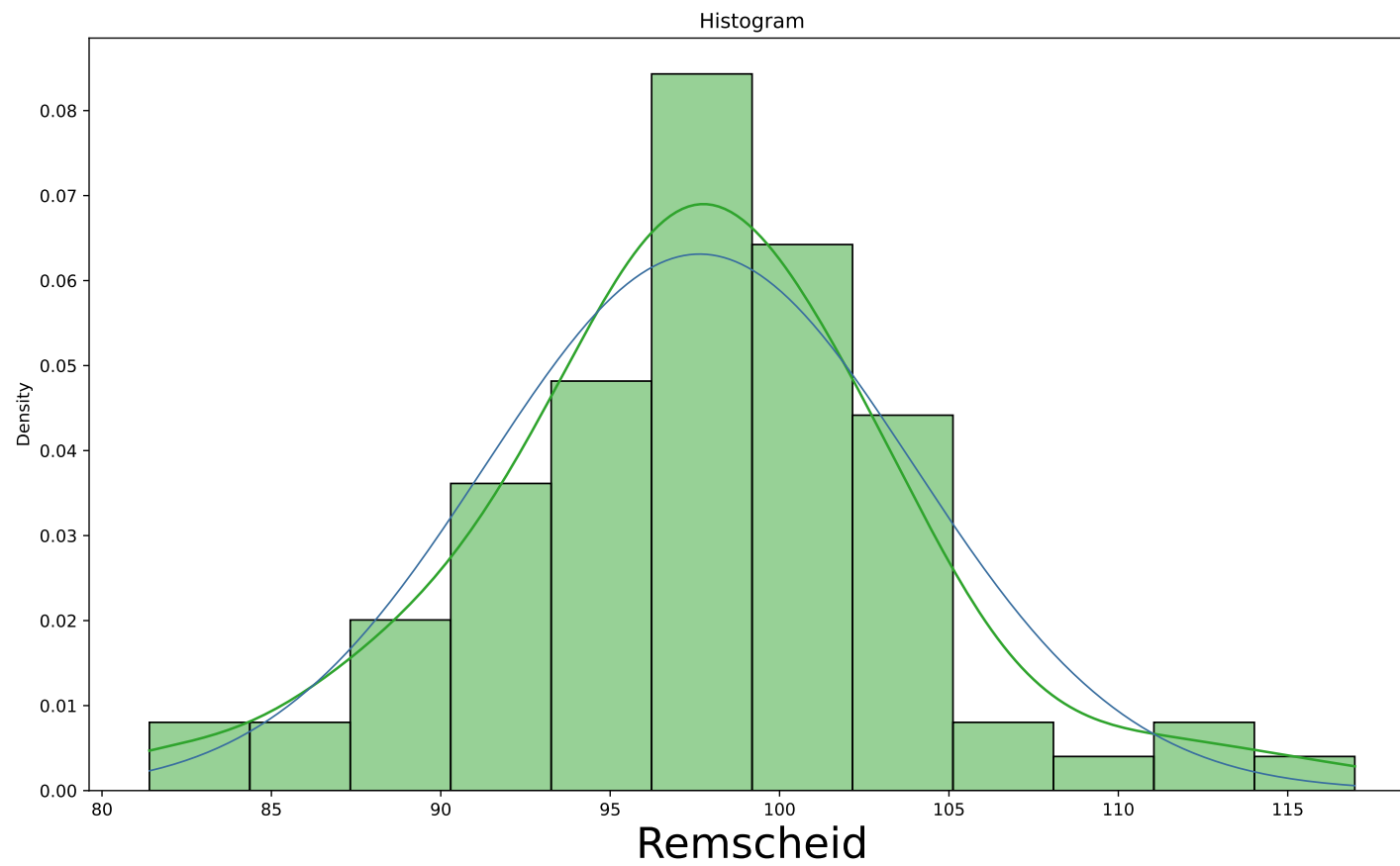


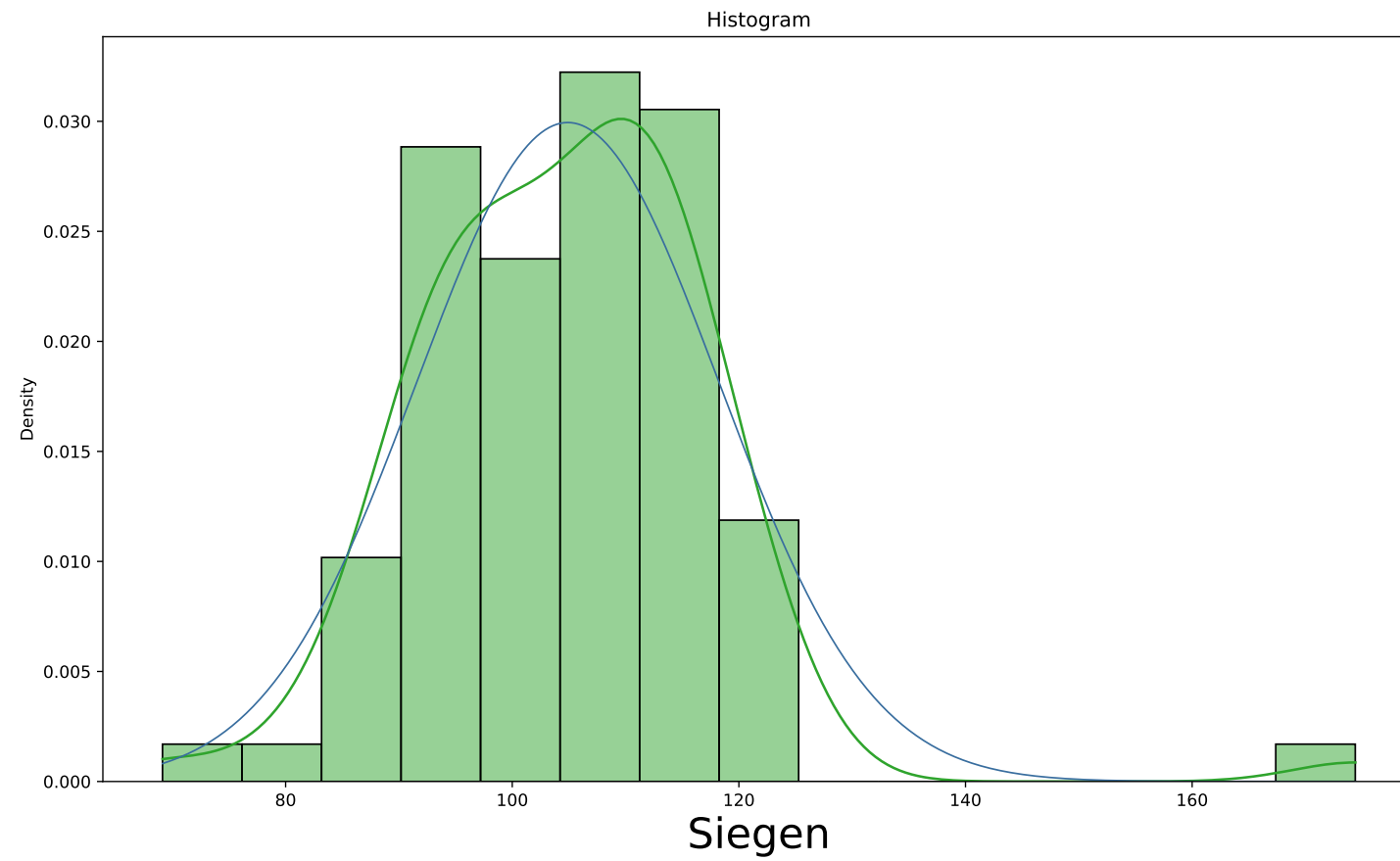


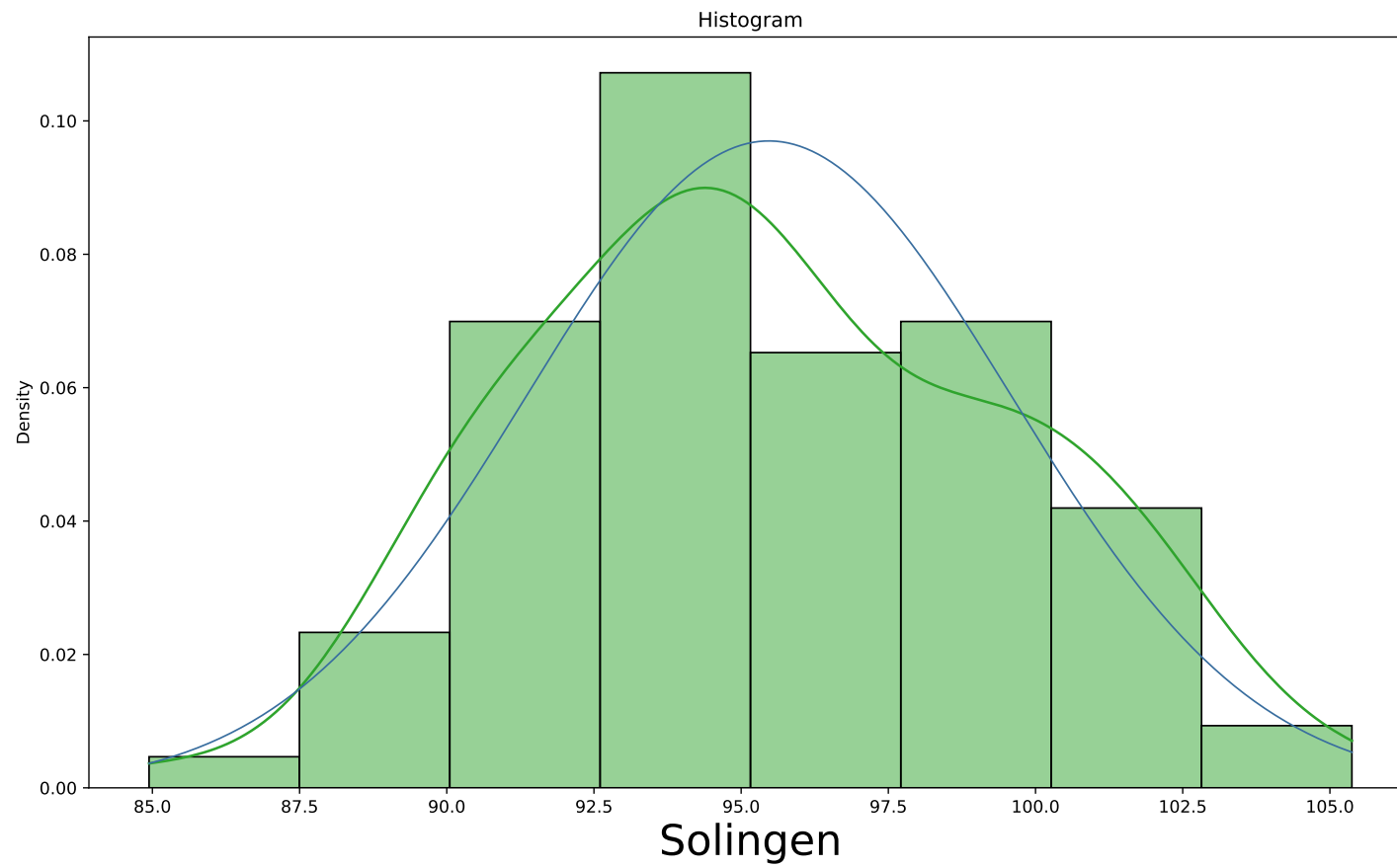


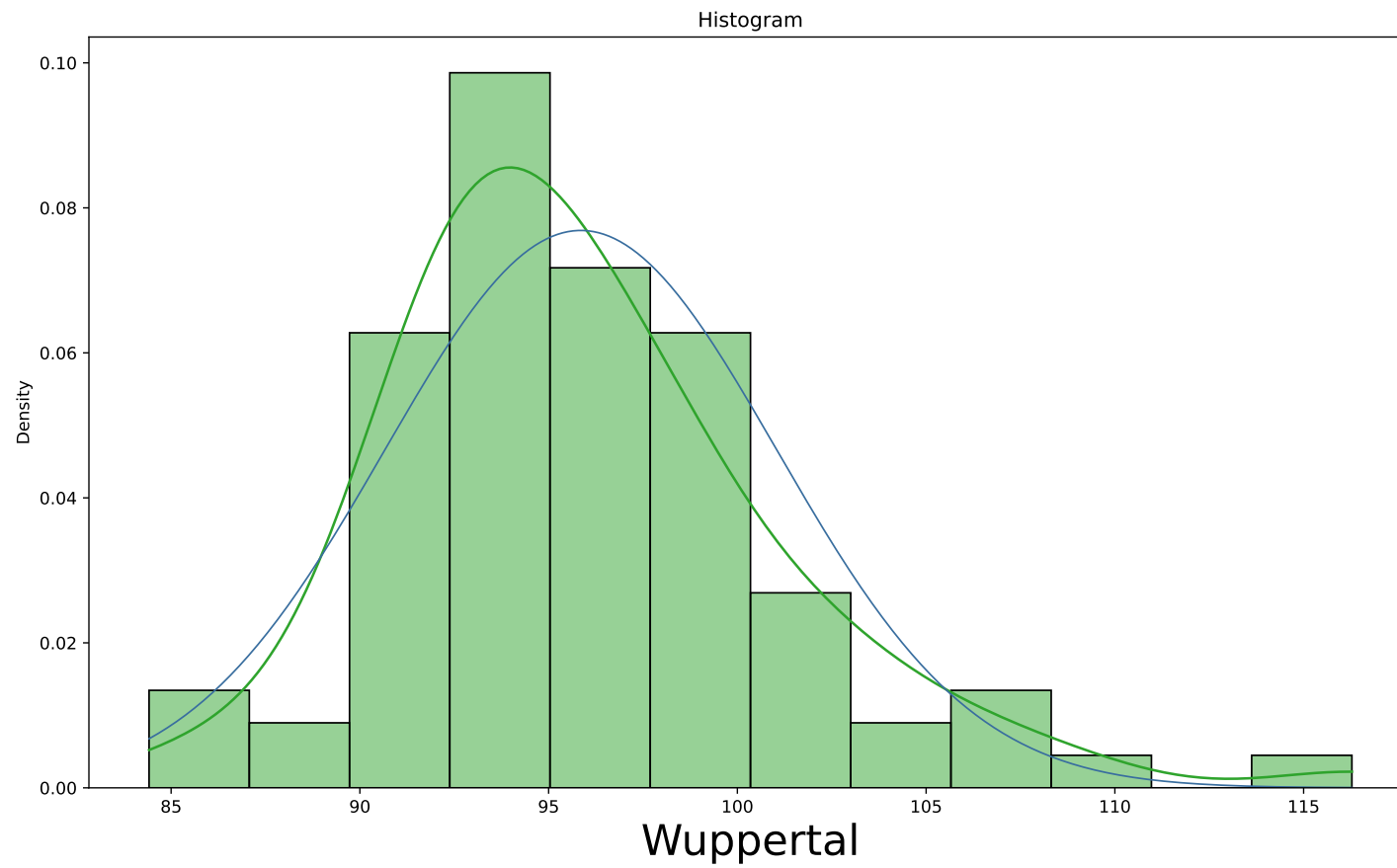






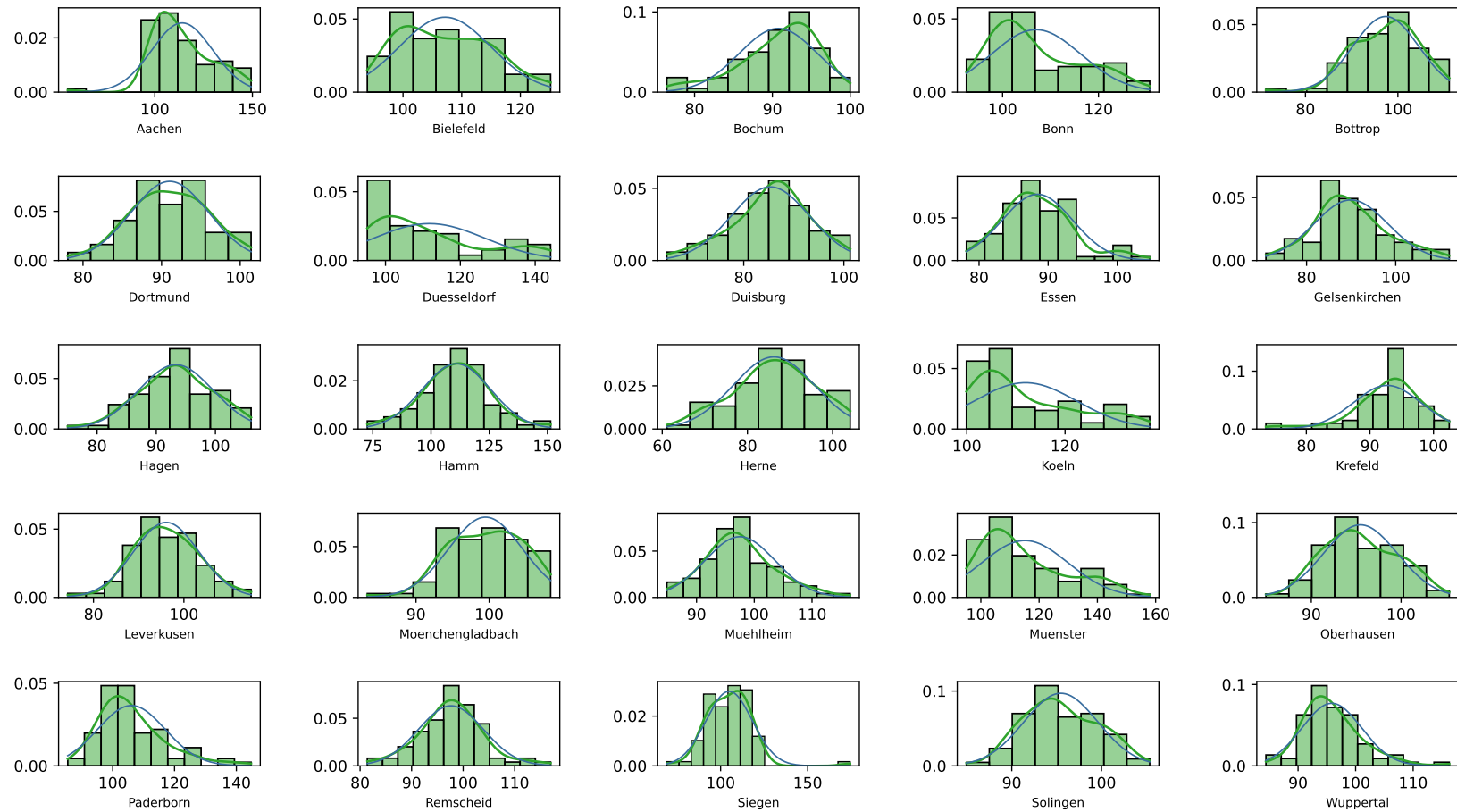






Histograms Summary

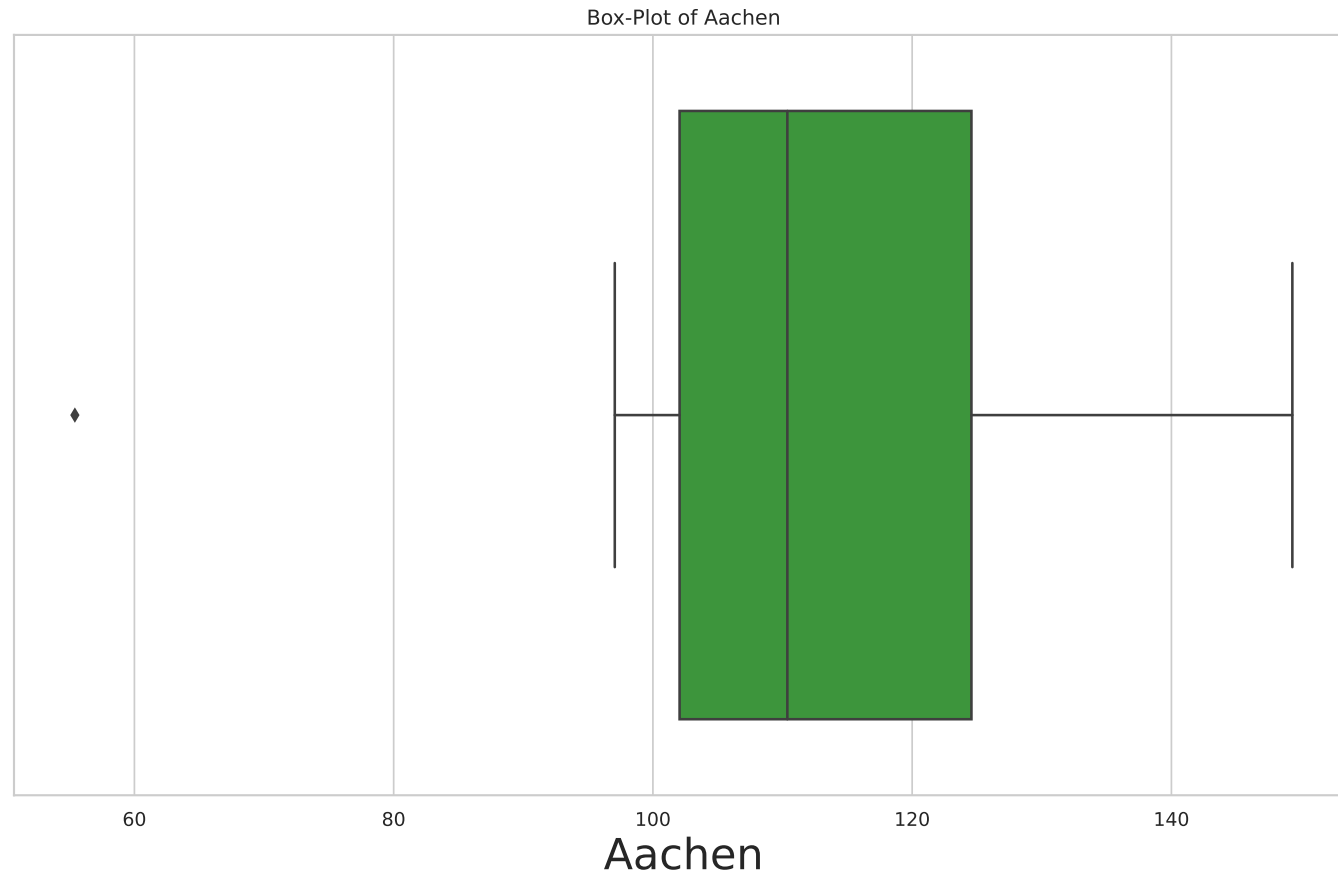
Multiple Relative Frequency Histogram in one figure. Variables are sorted alphabetically. The blue line represents the normal density approximation. The green line represents a special kernel density approximation.

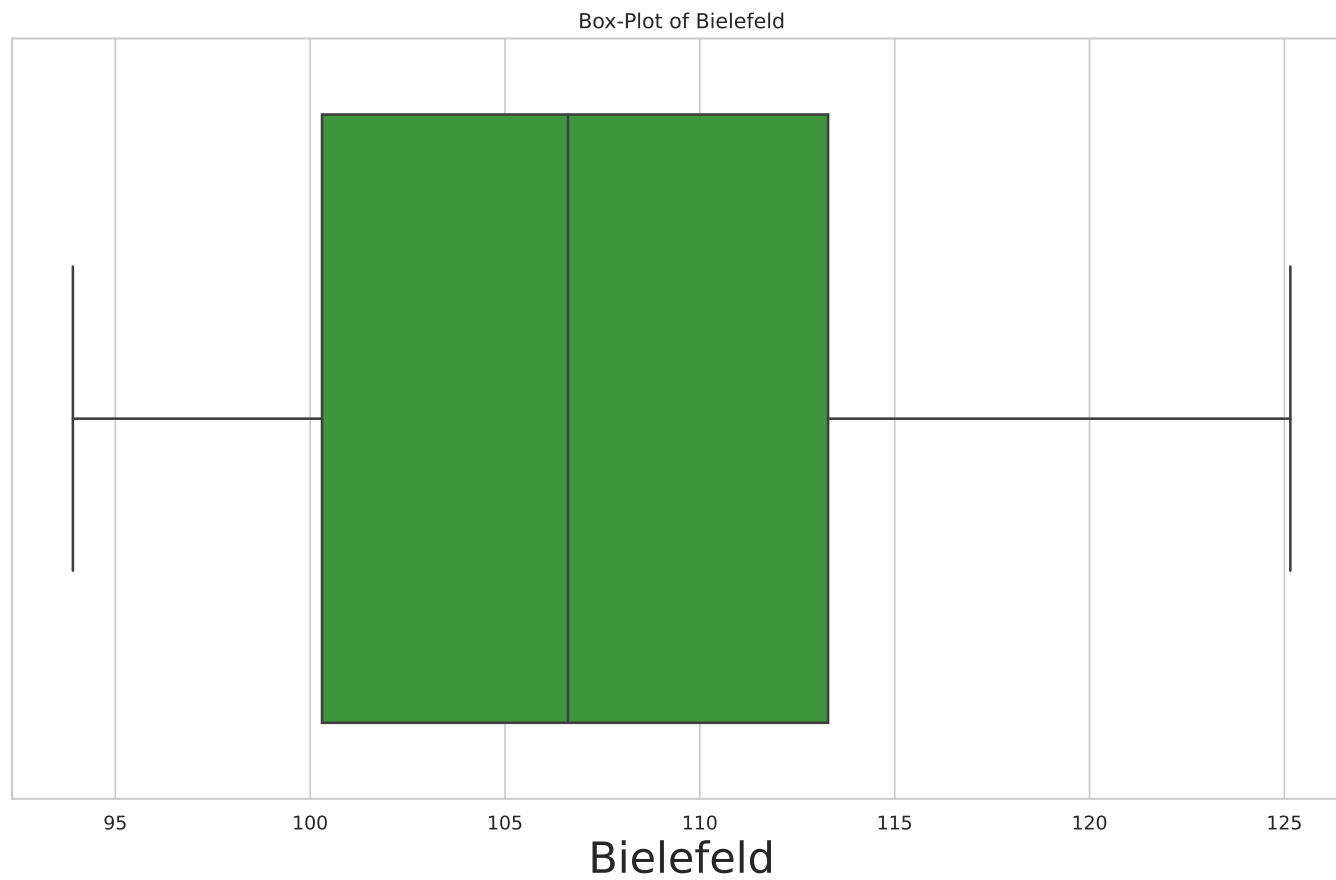


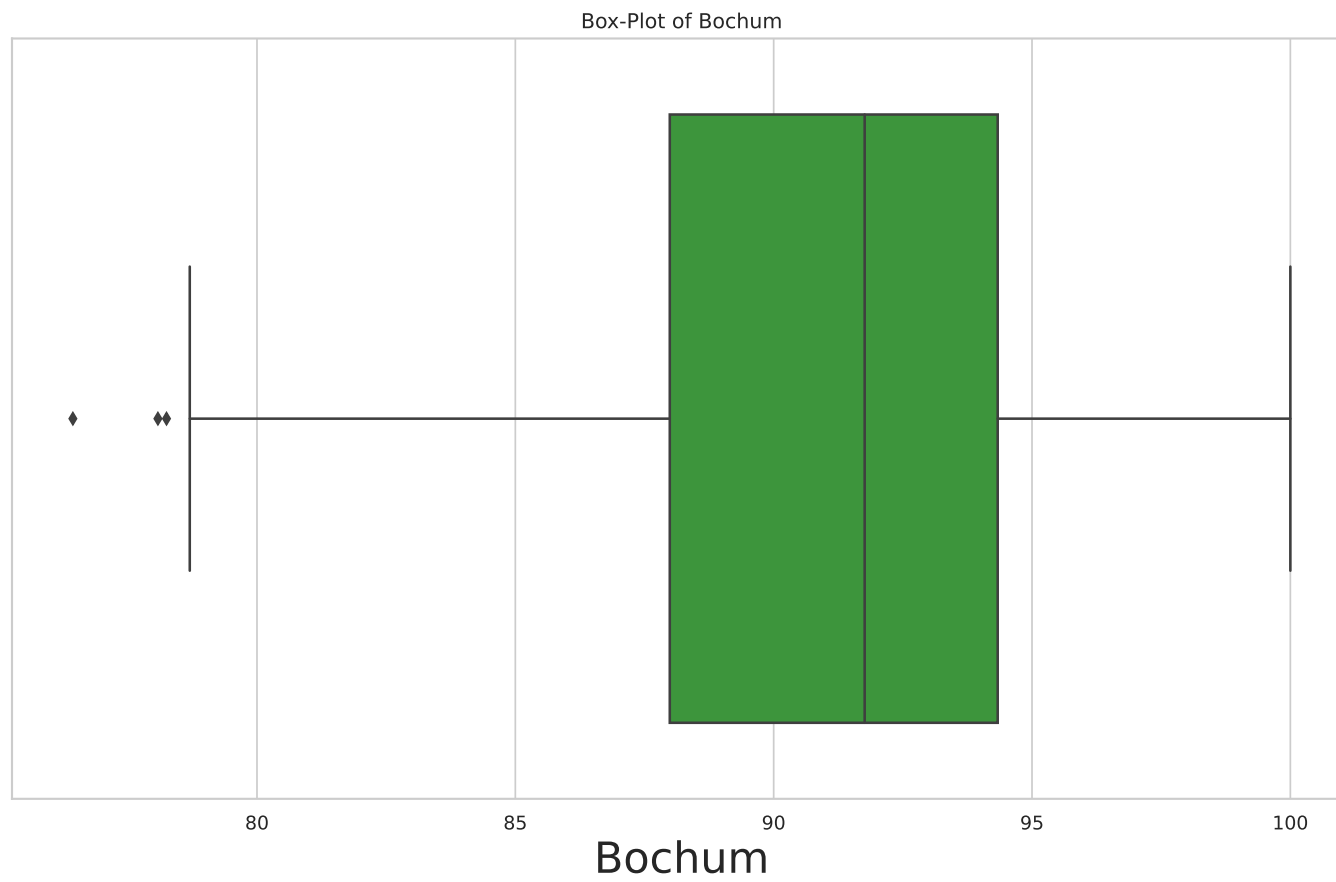
Box-Plots

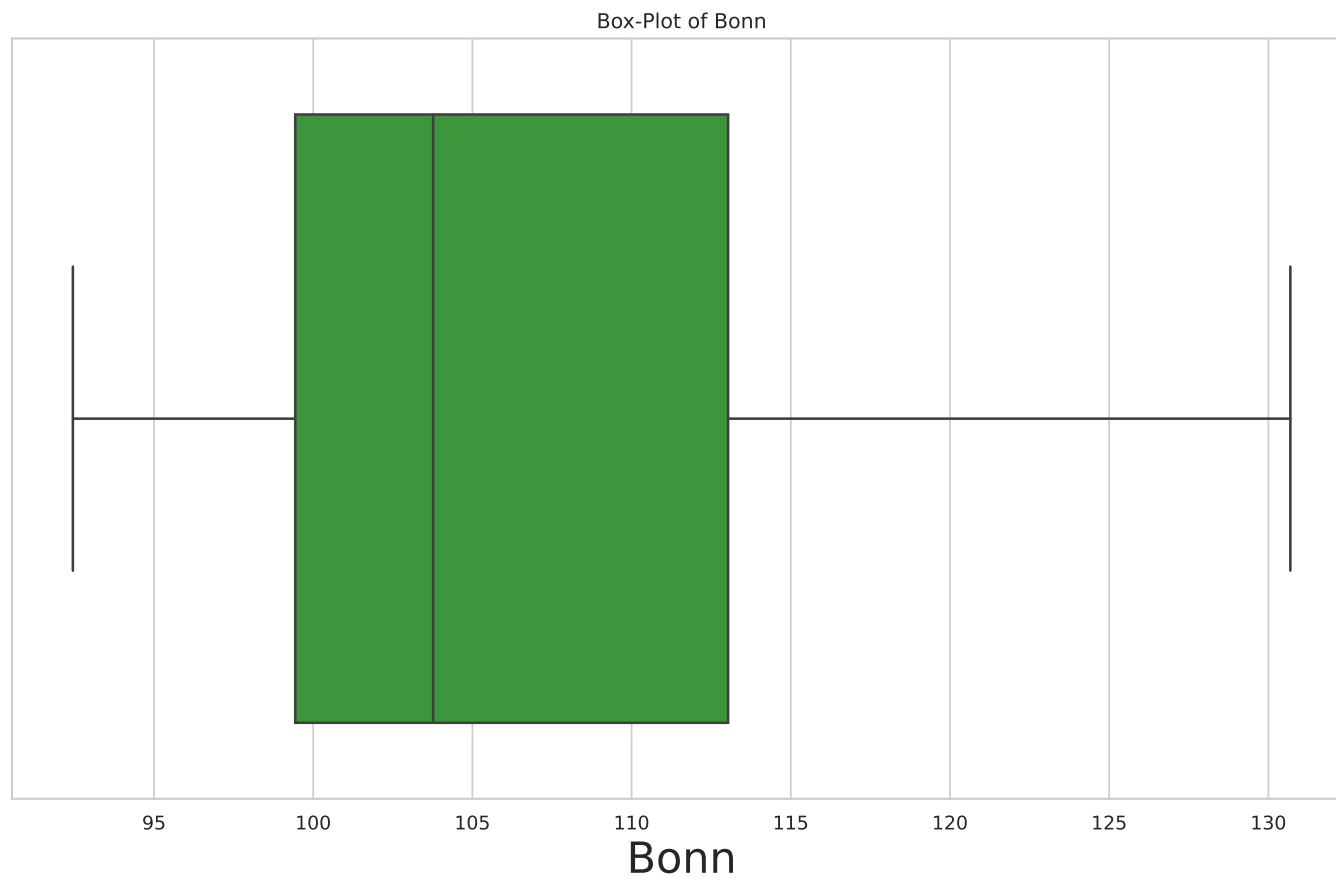
One Box-Plot per page for each variable. Variables are sorted alphabetically.

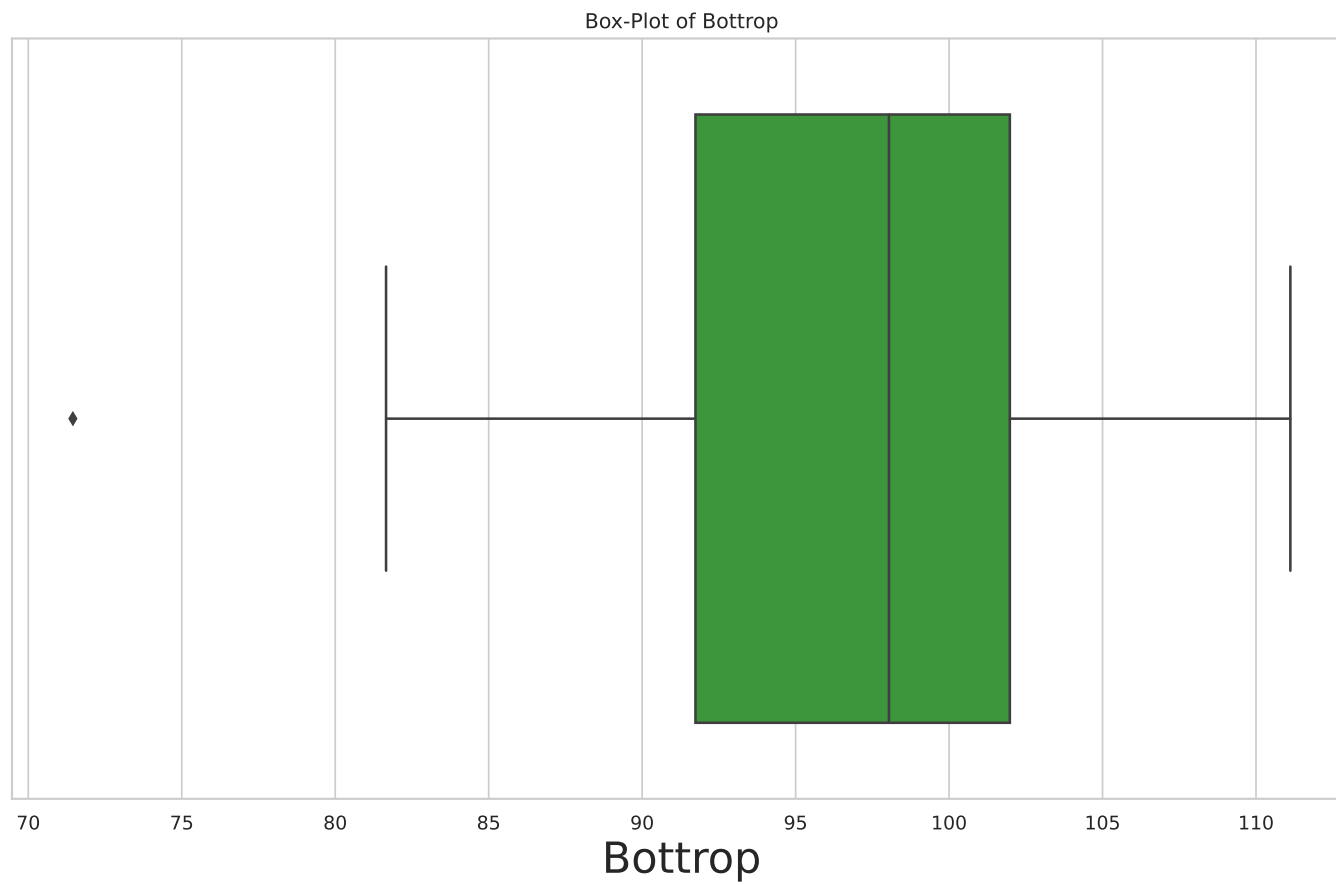
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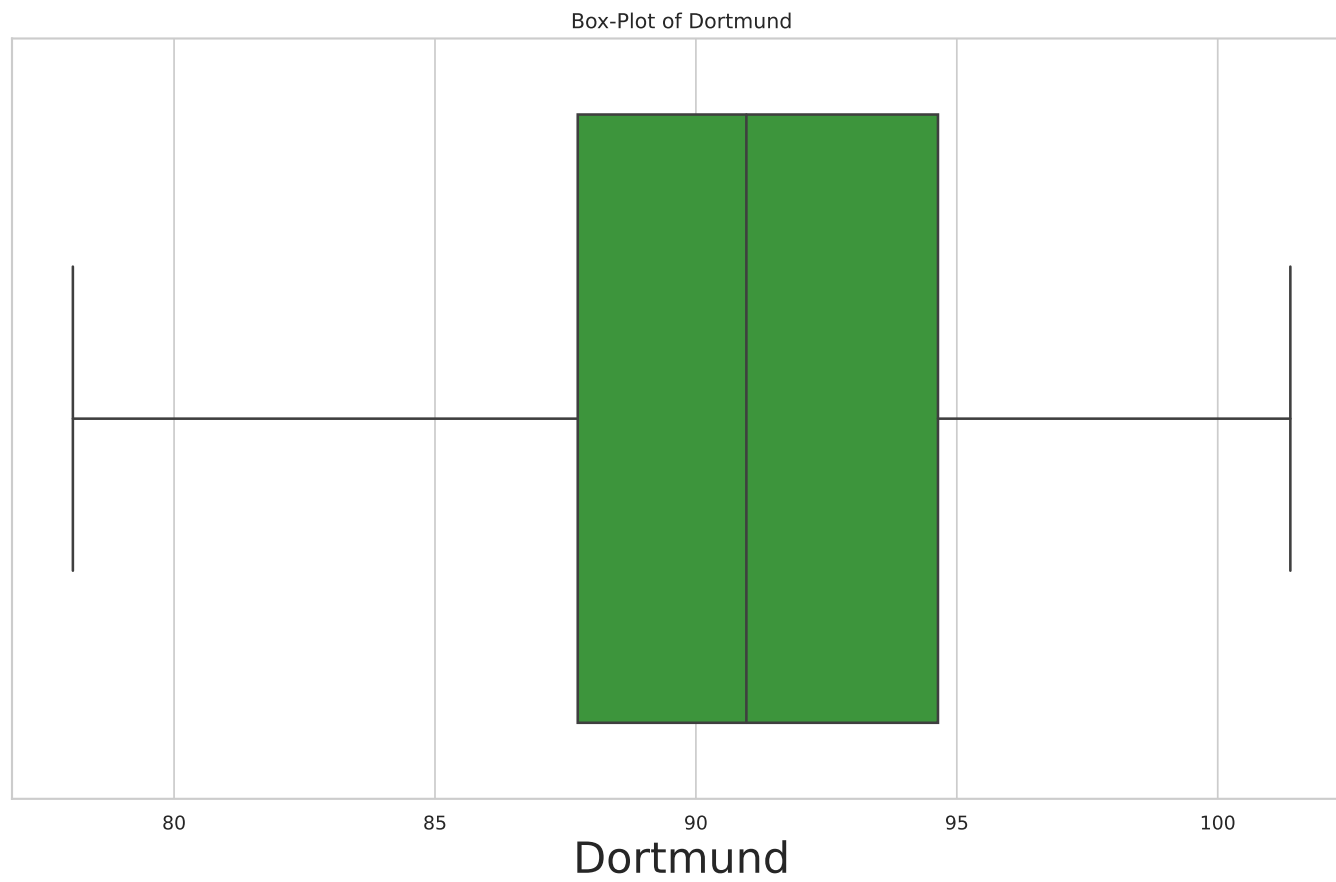


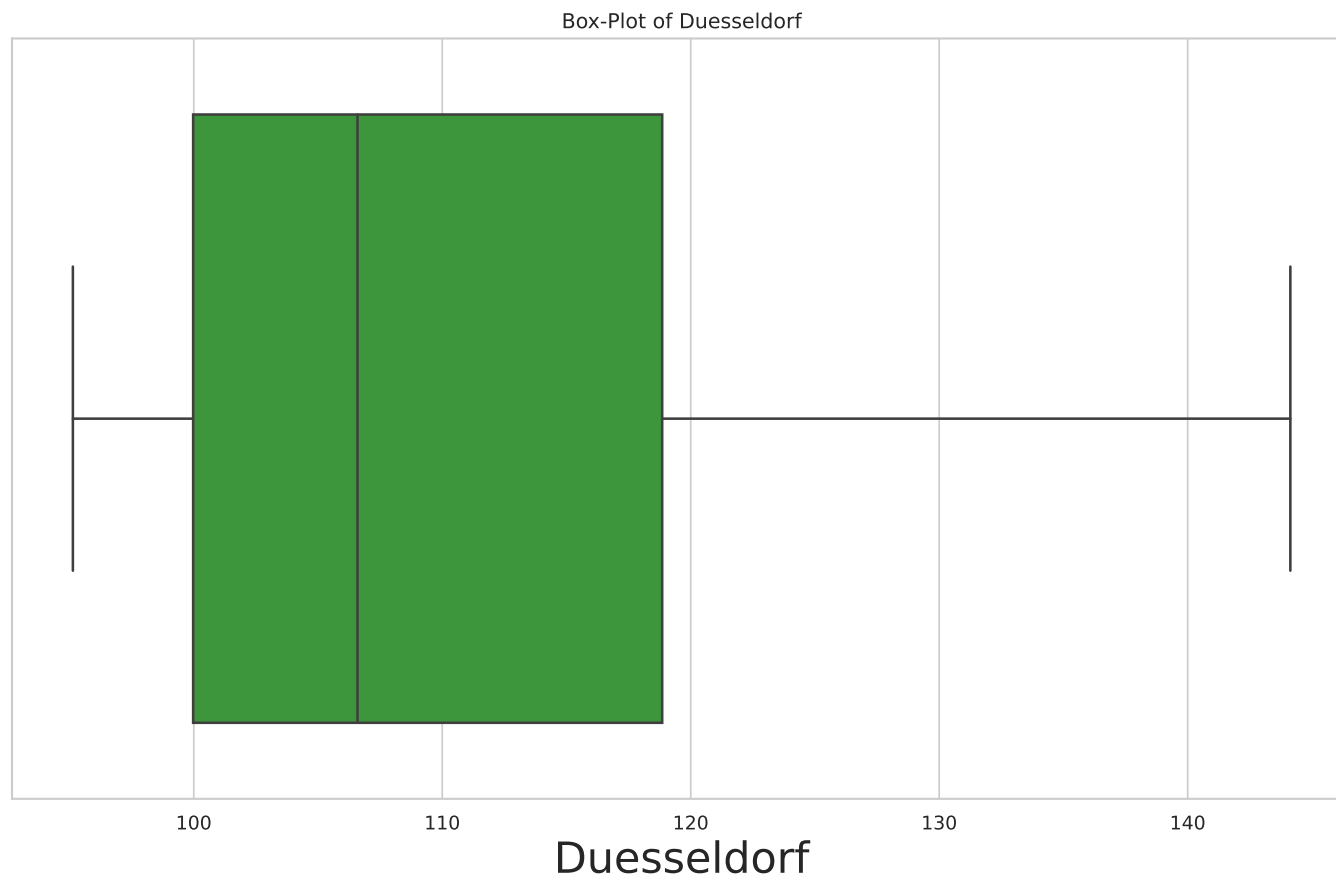


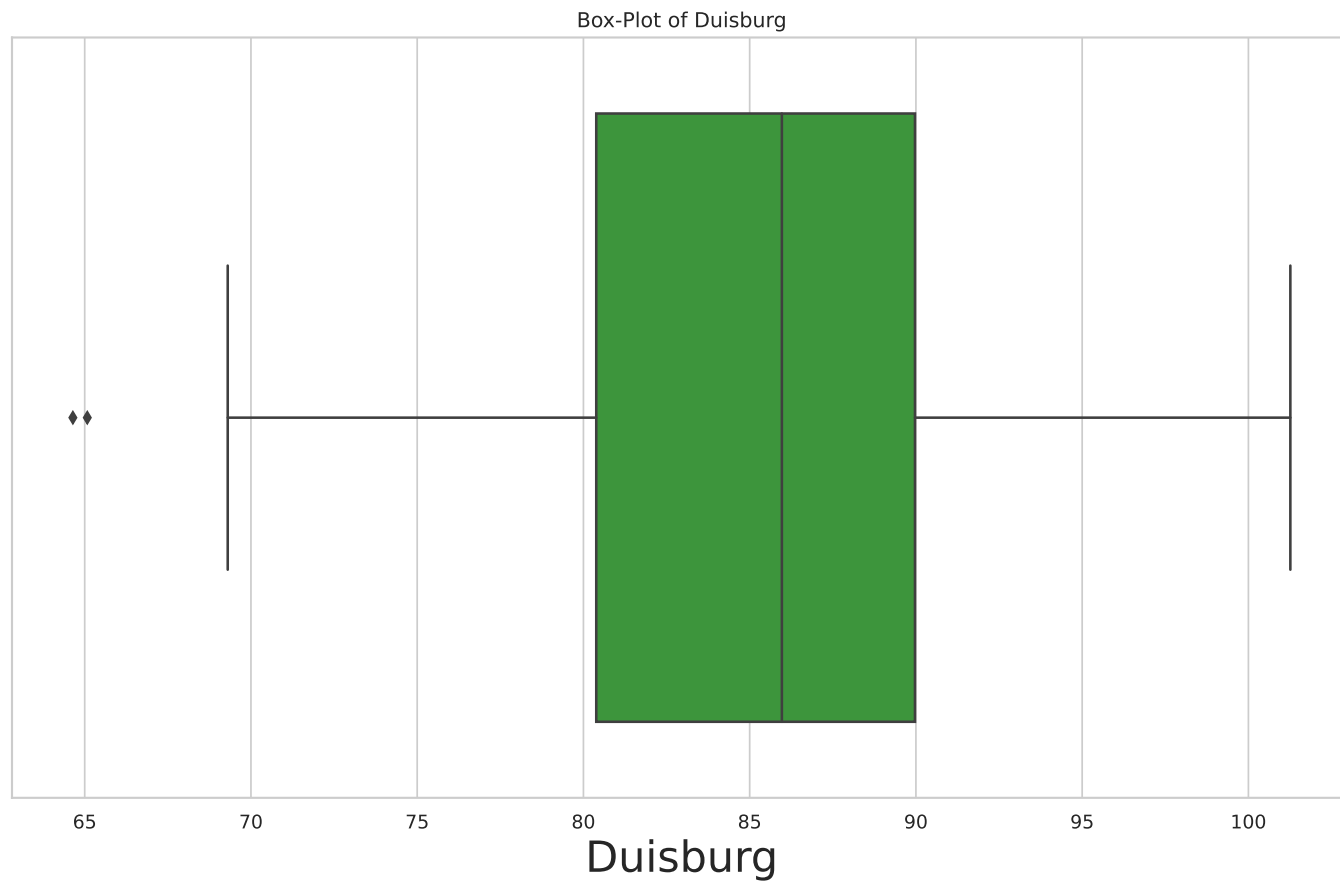


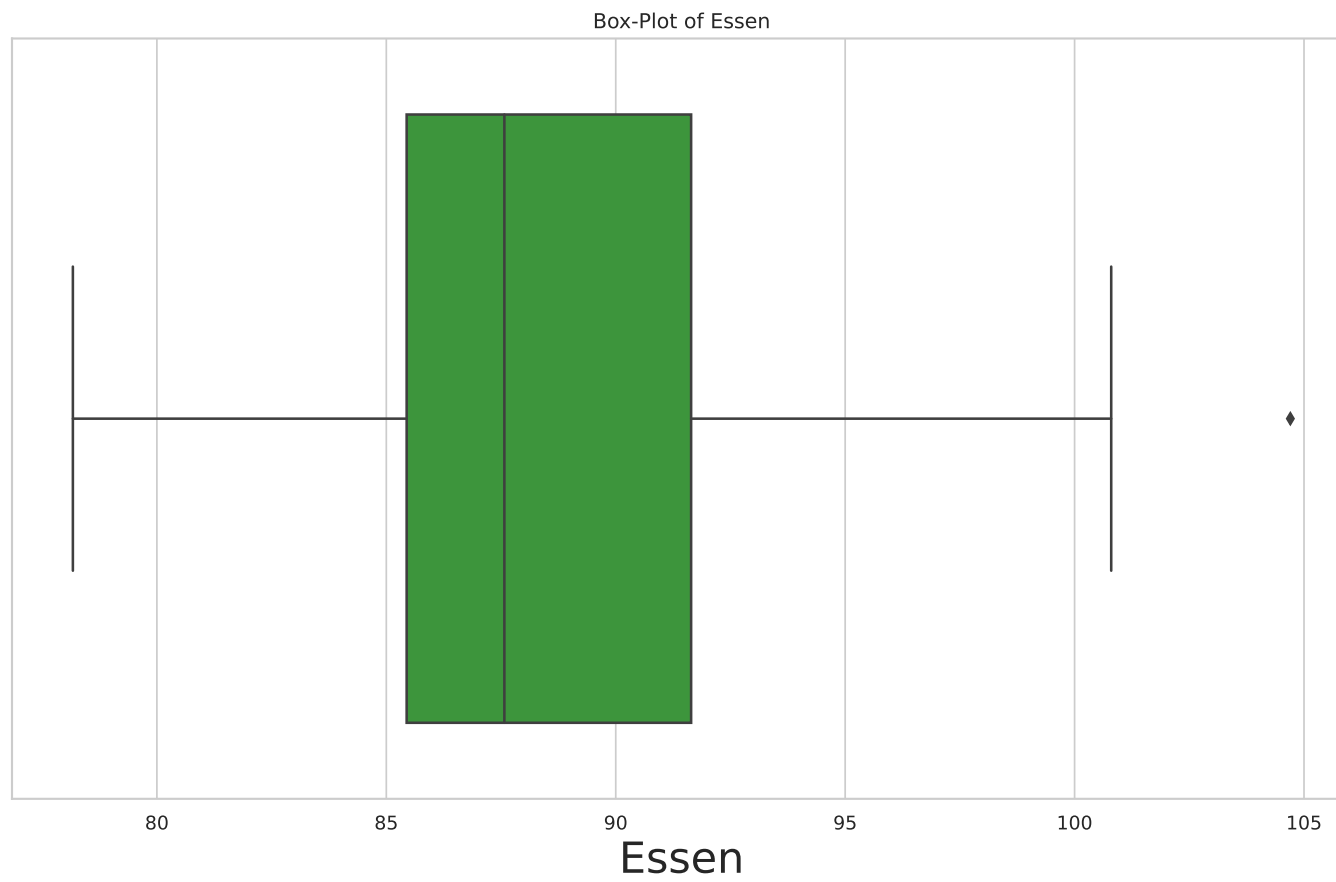


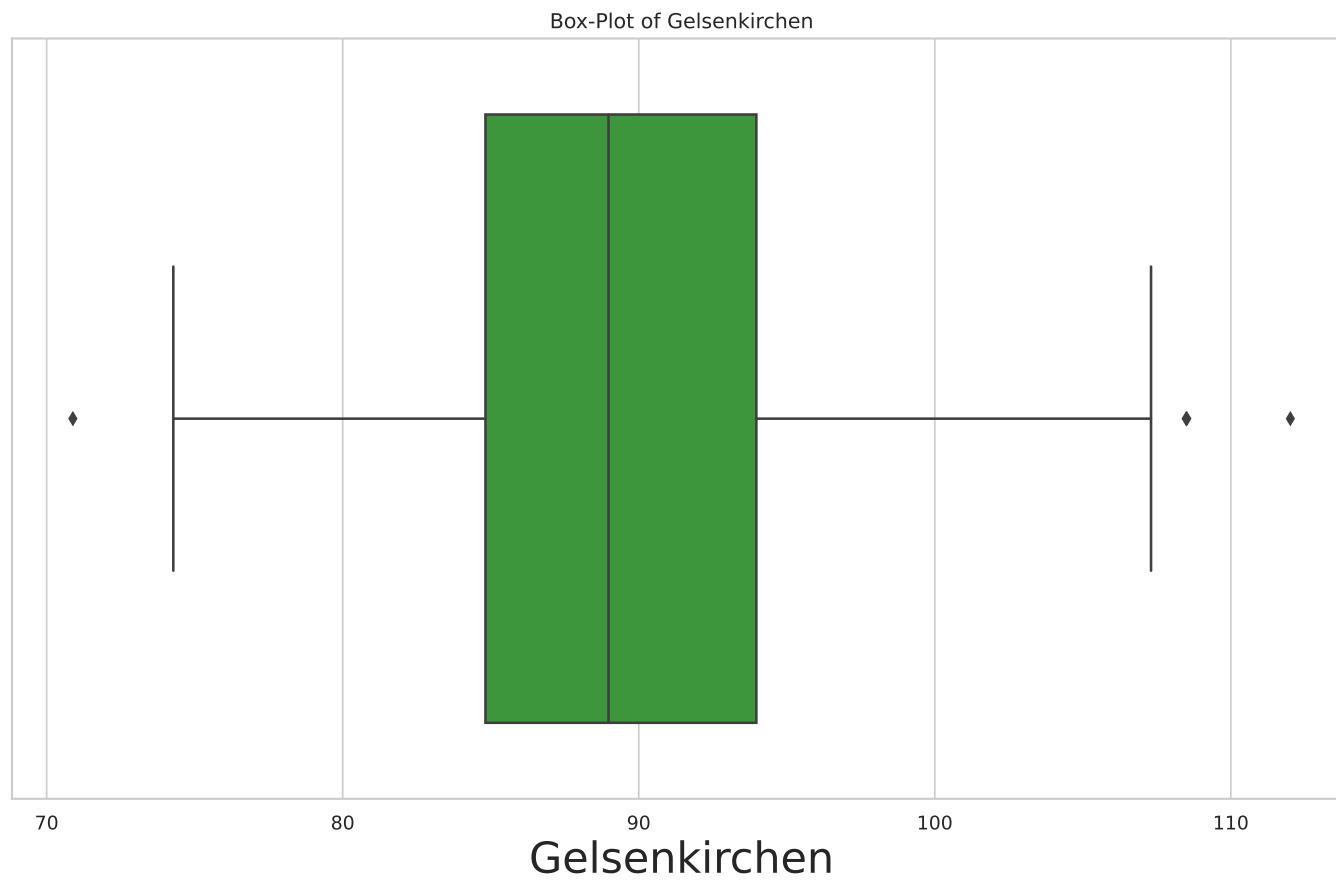


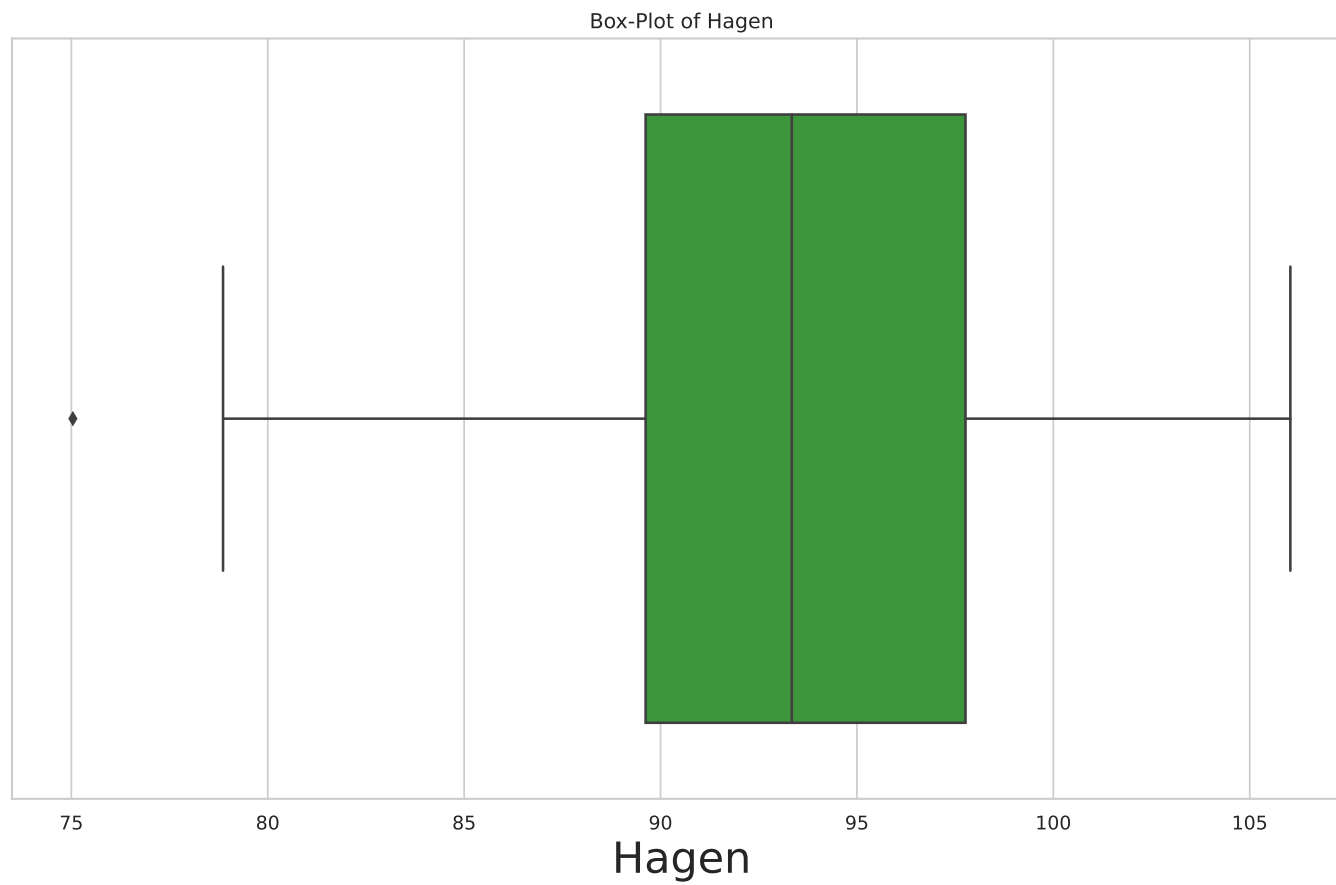


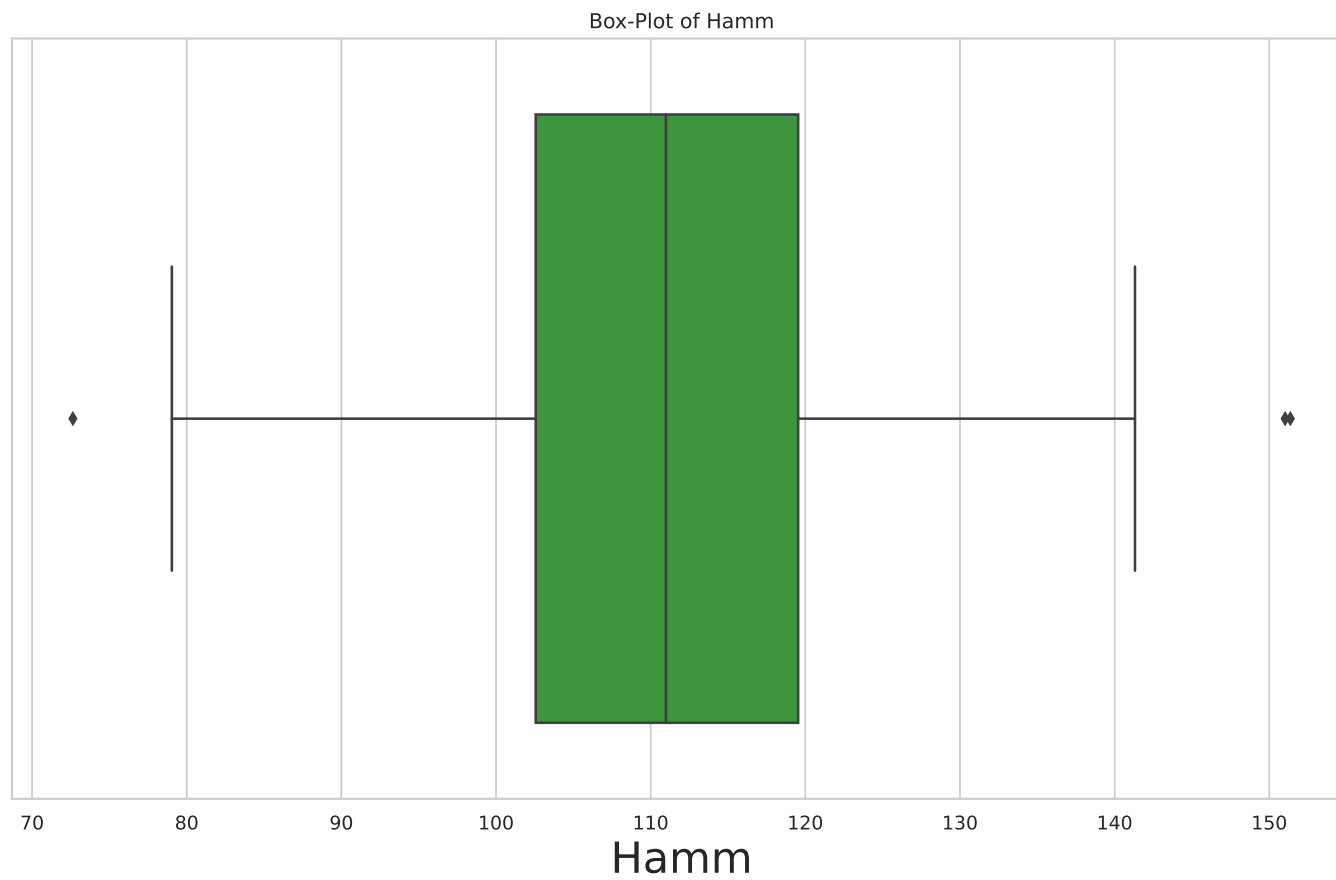


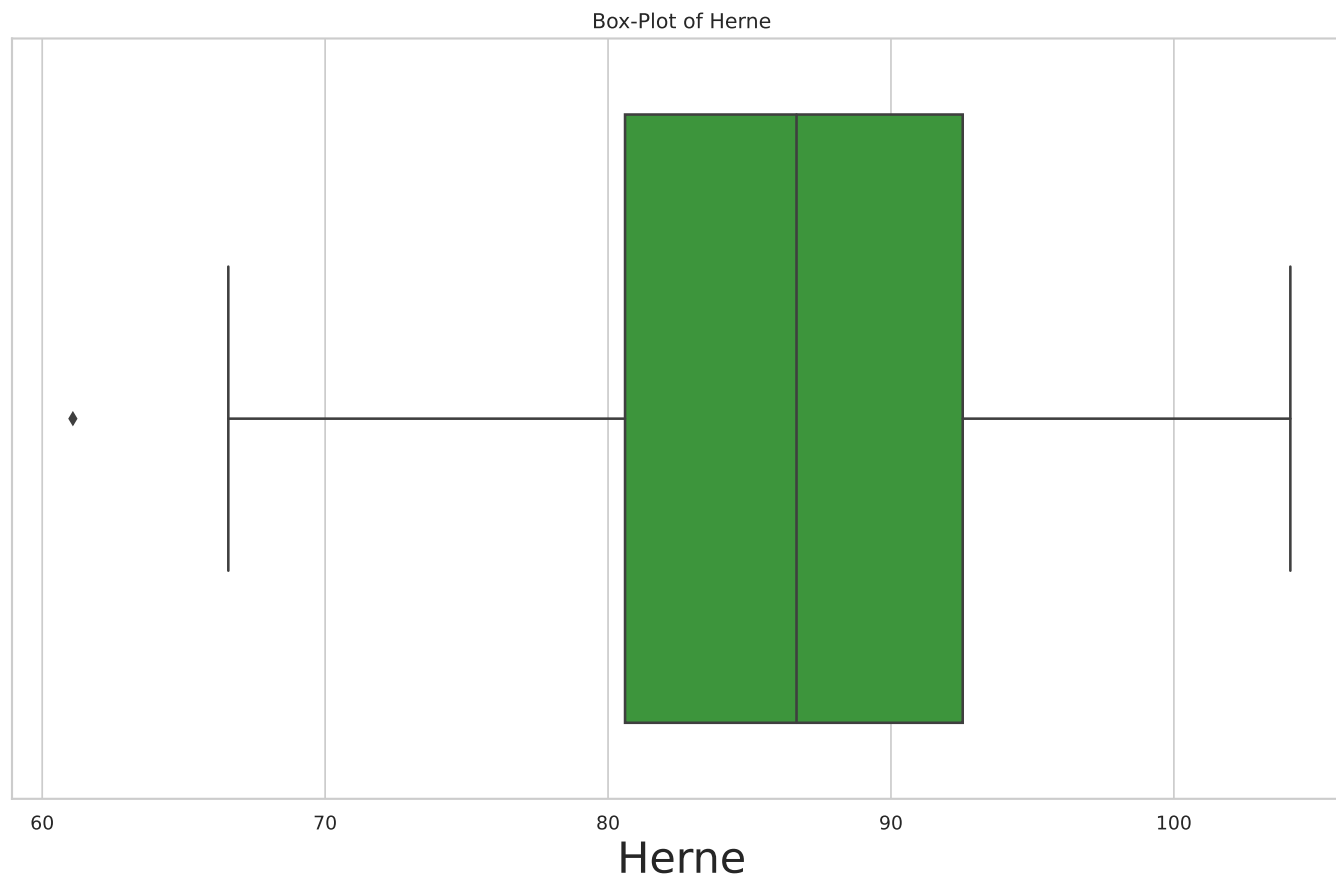


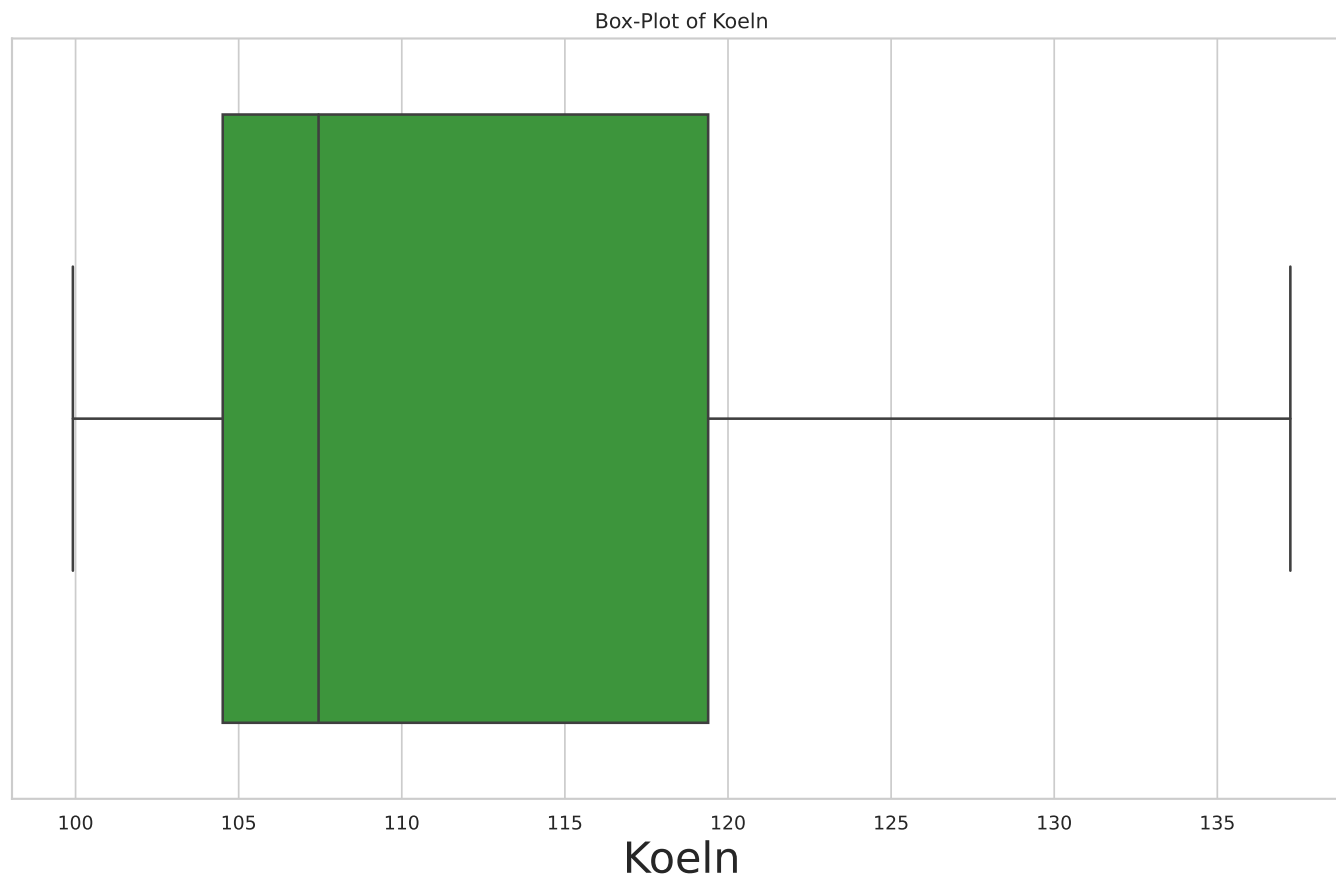


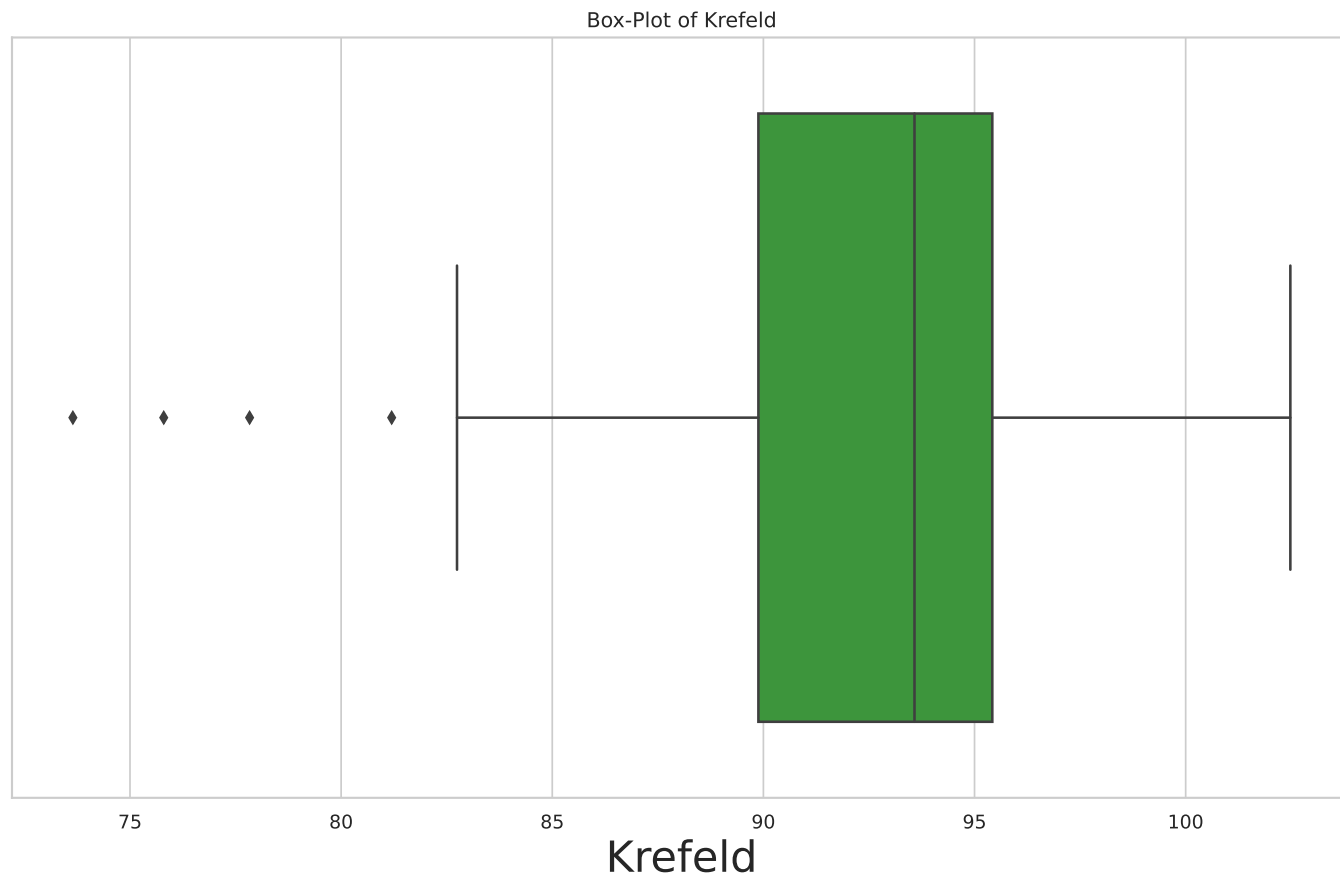


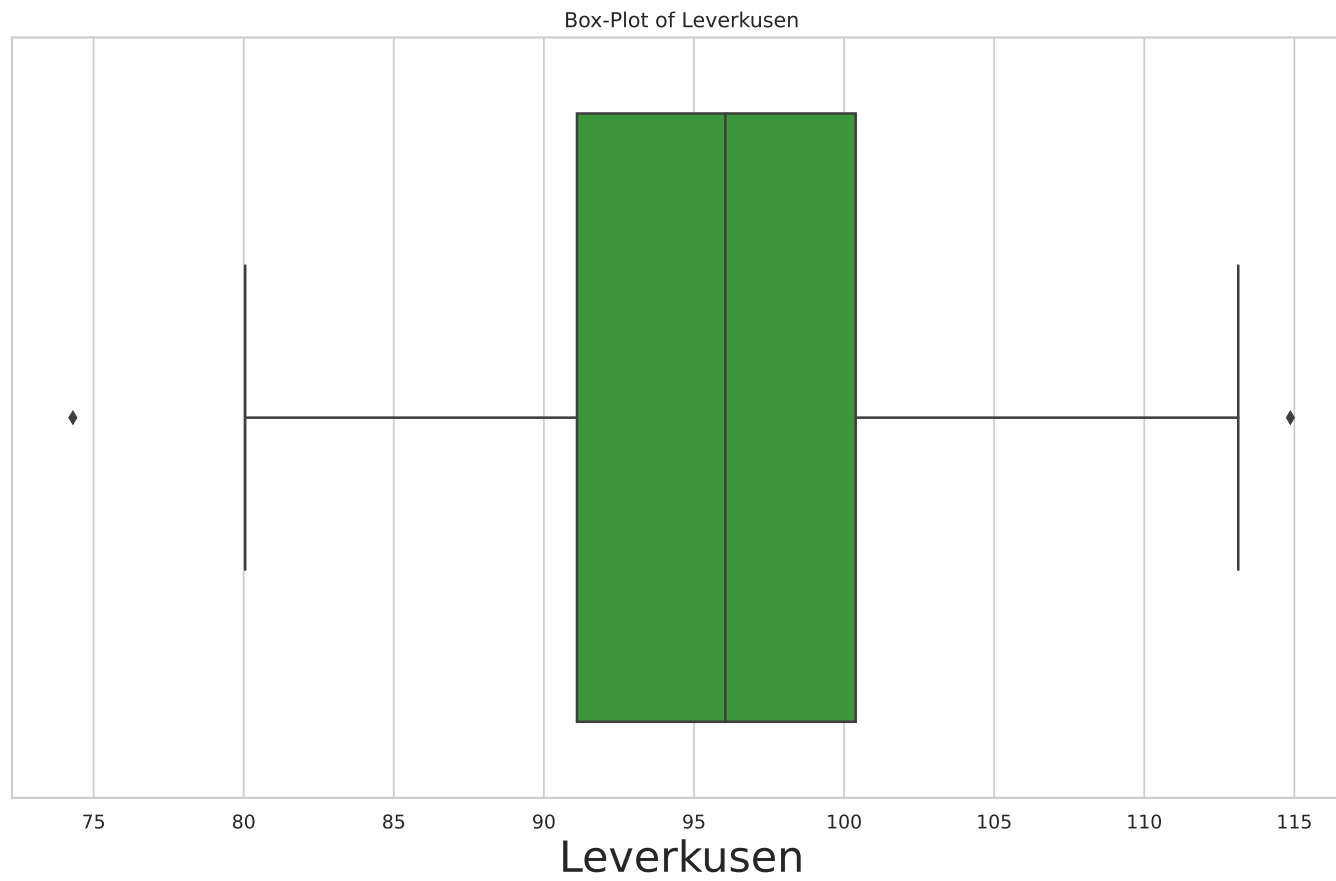


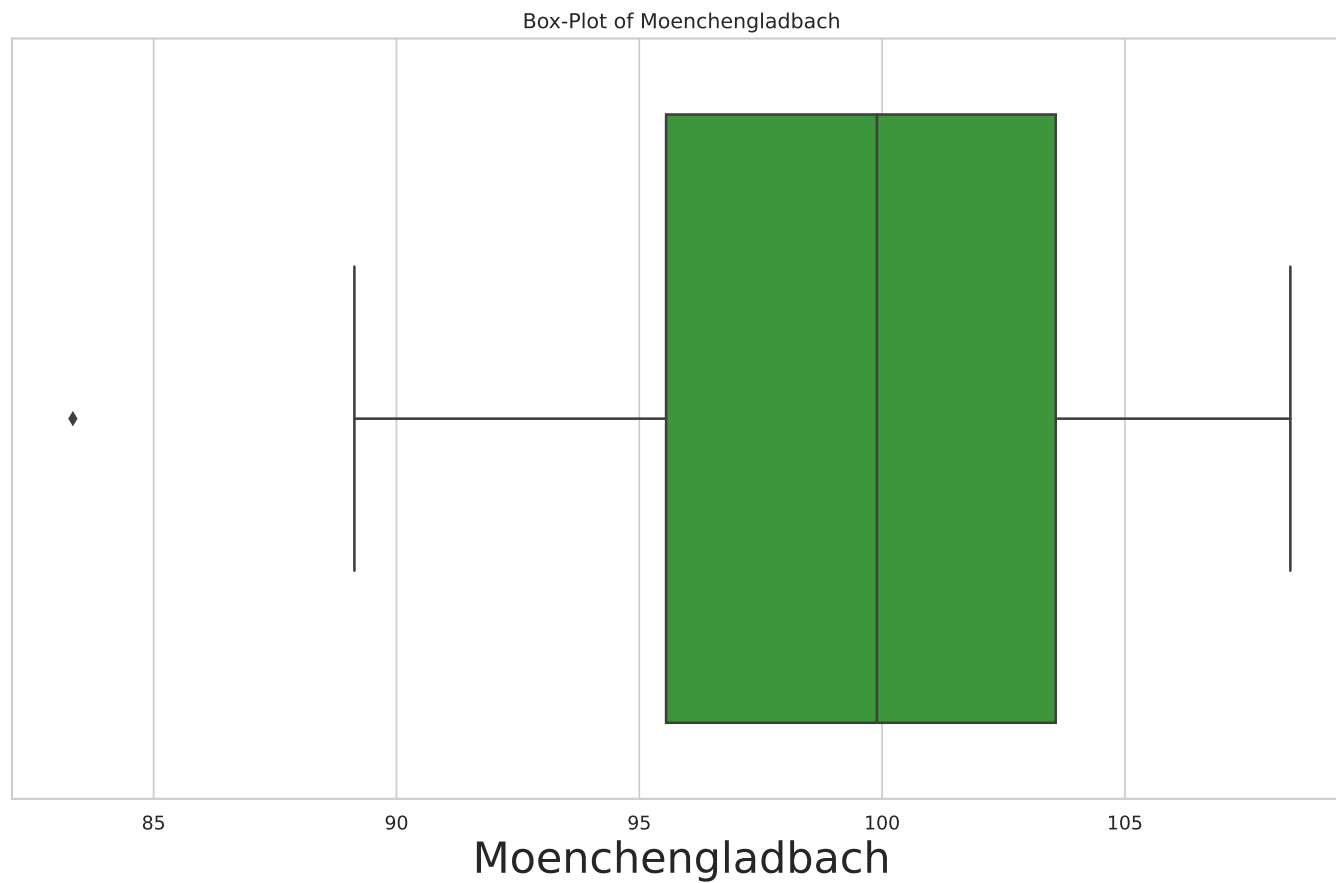


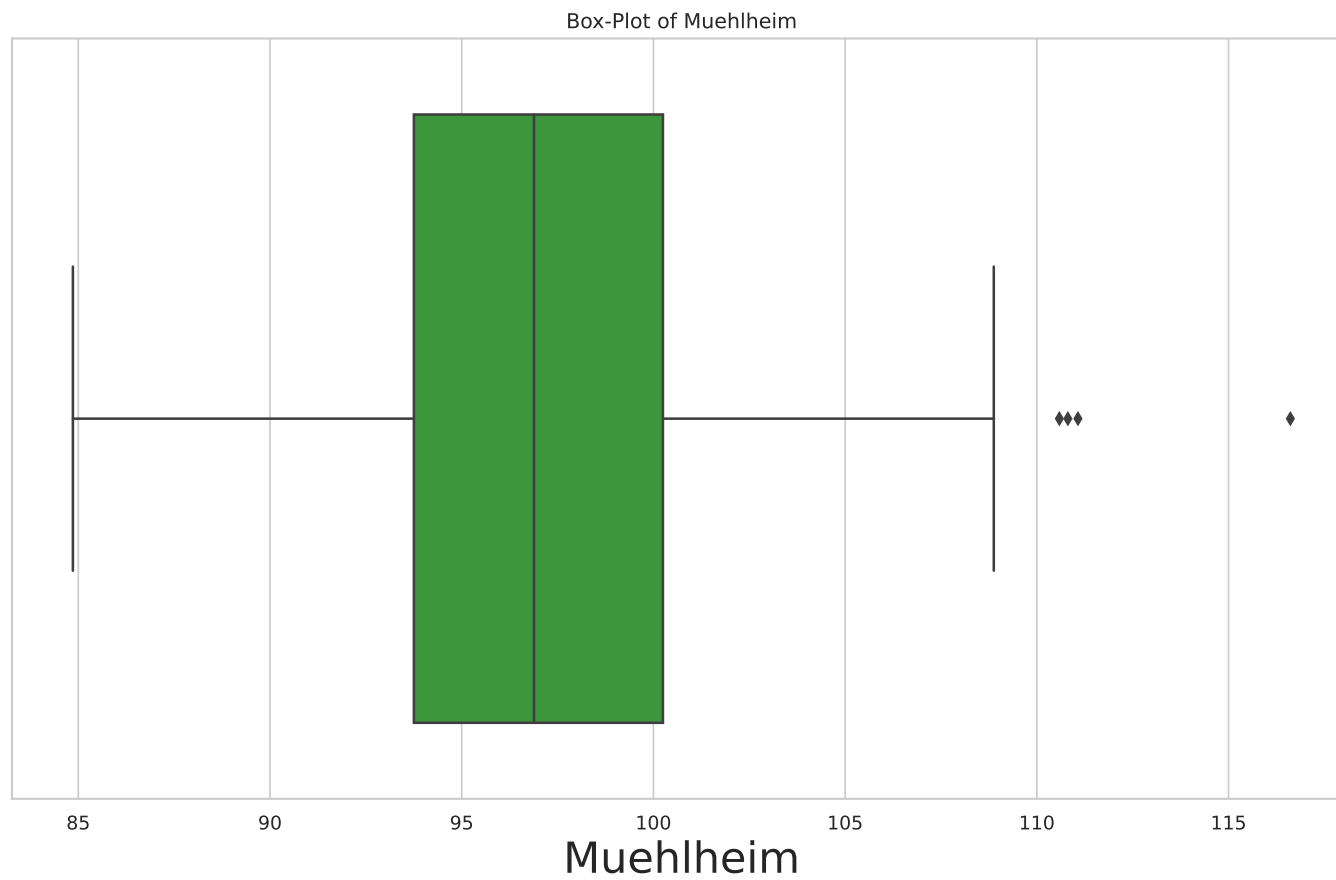




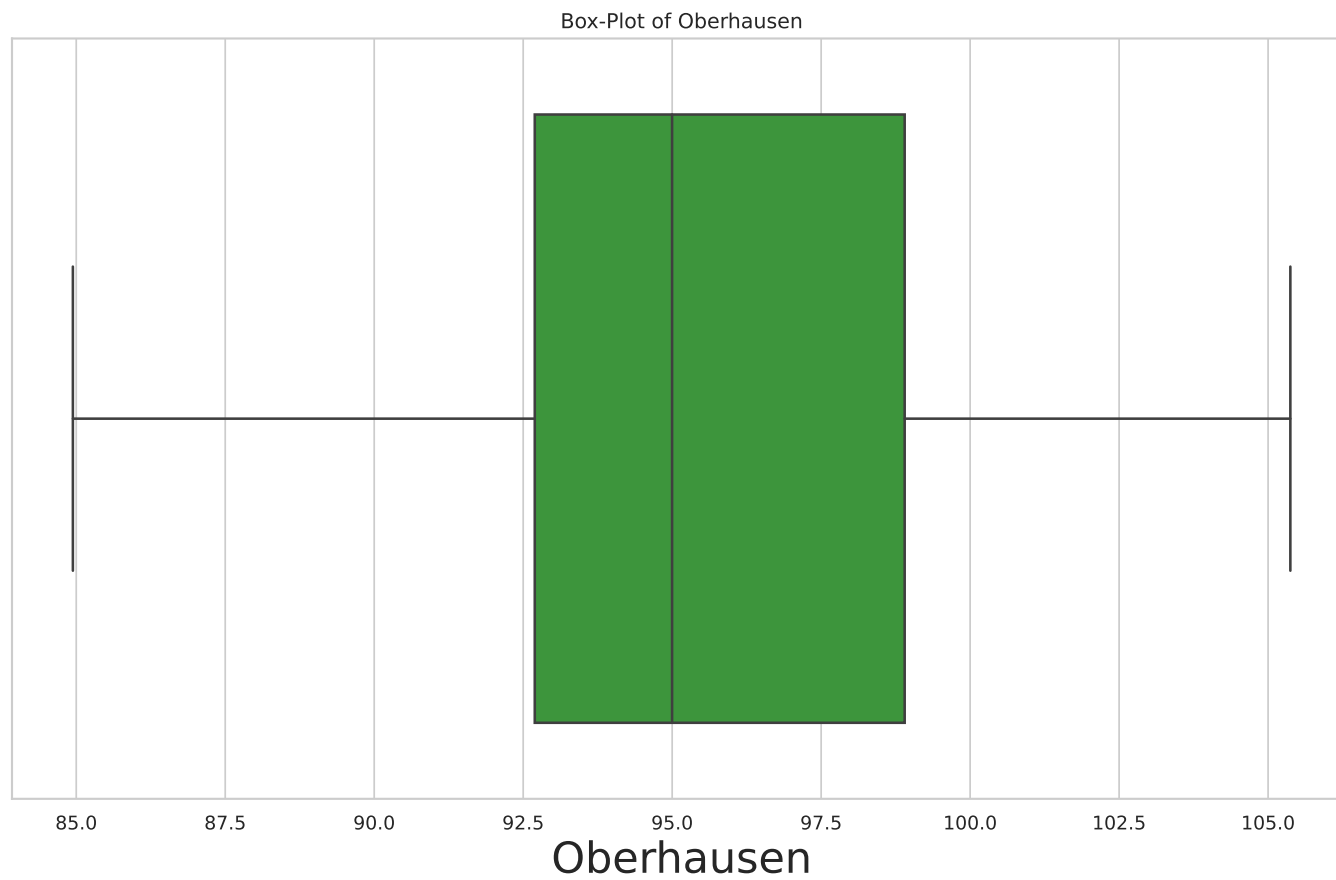


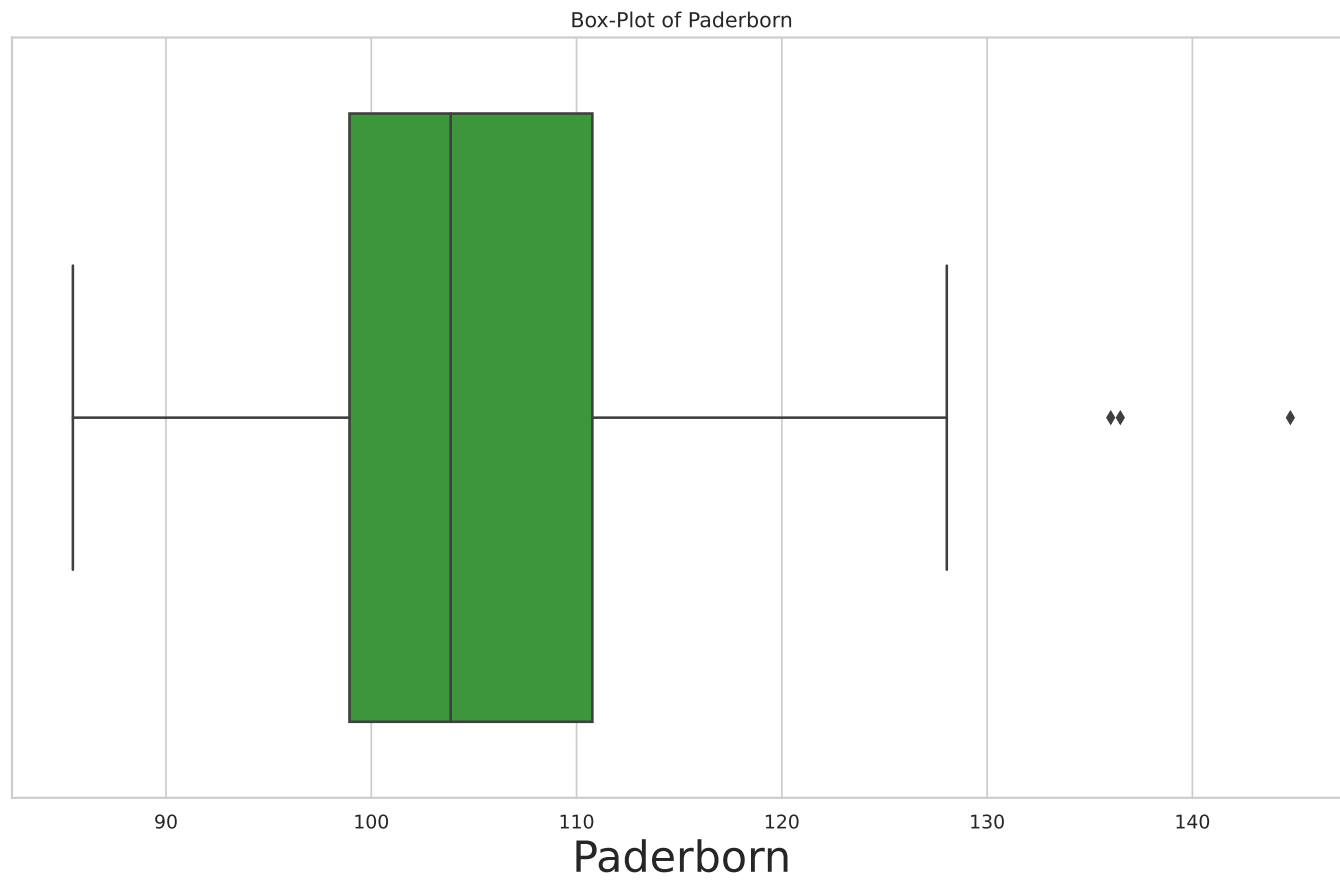


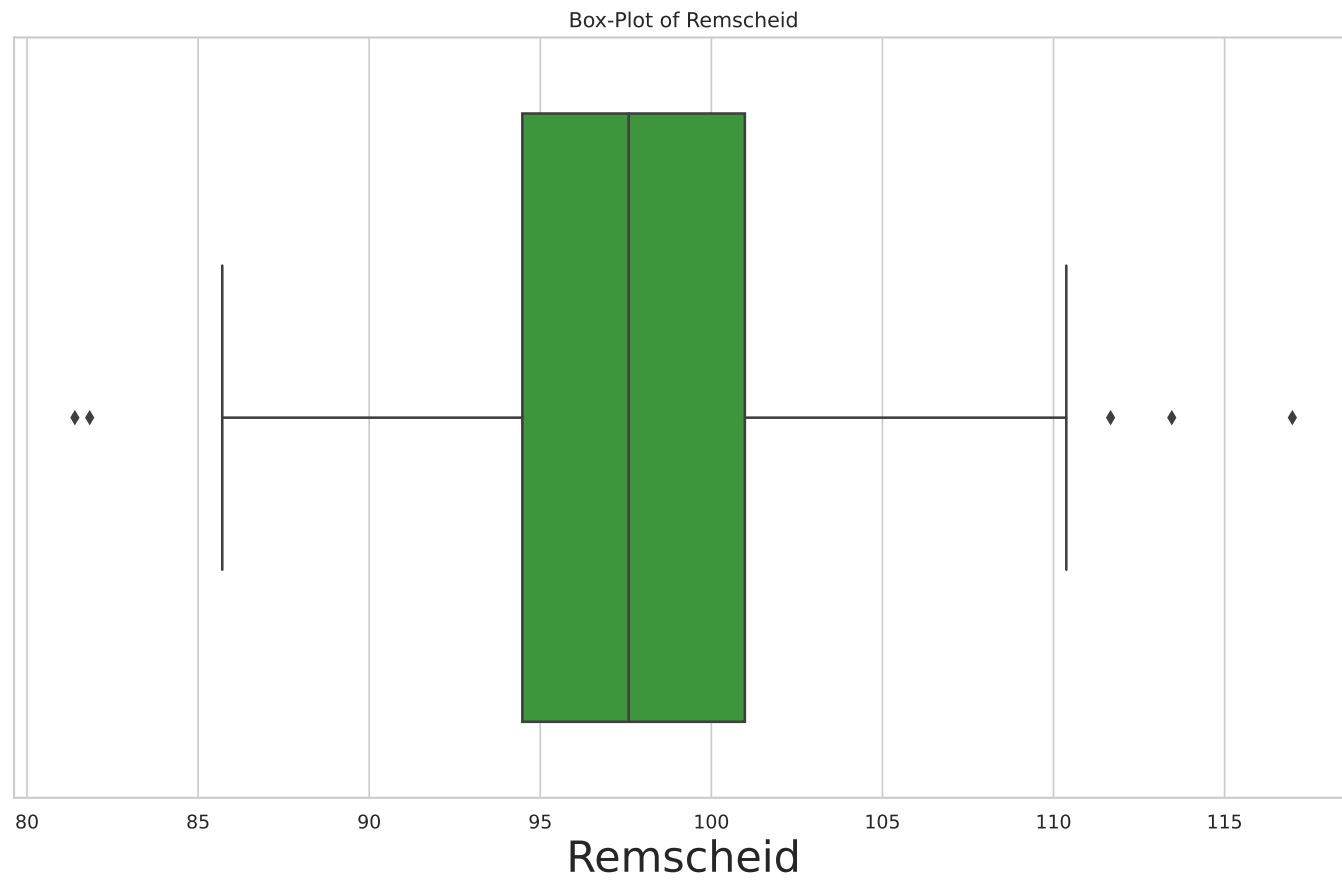


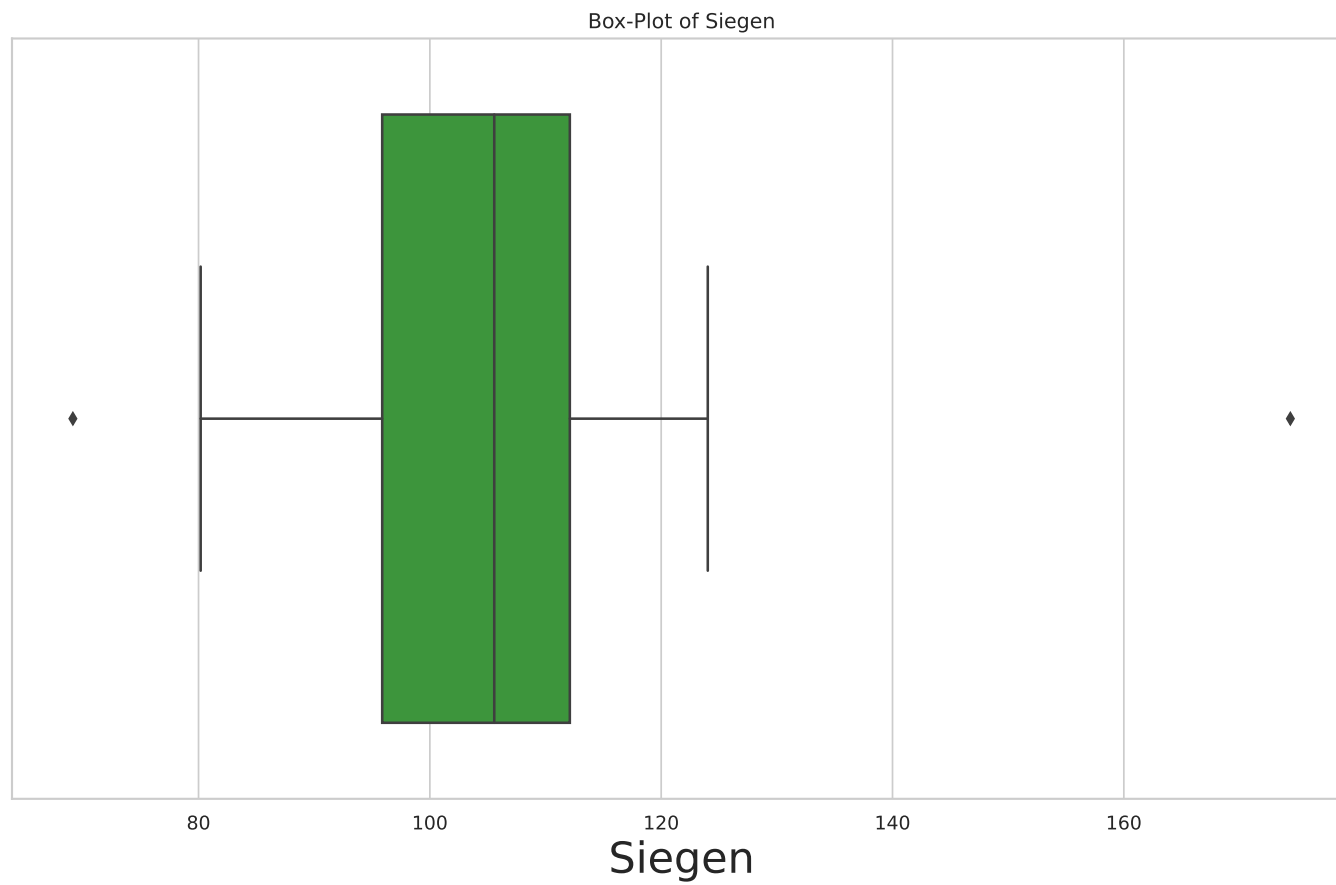


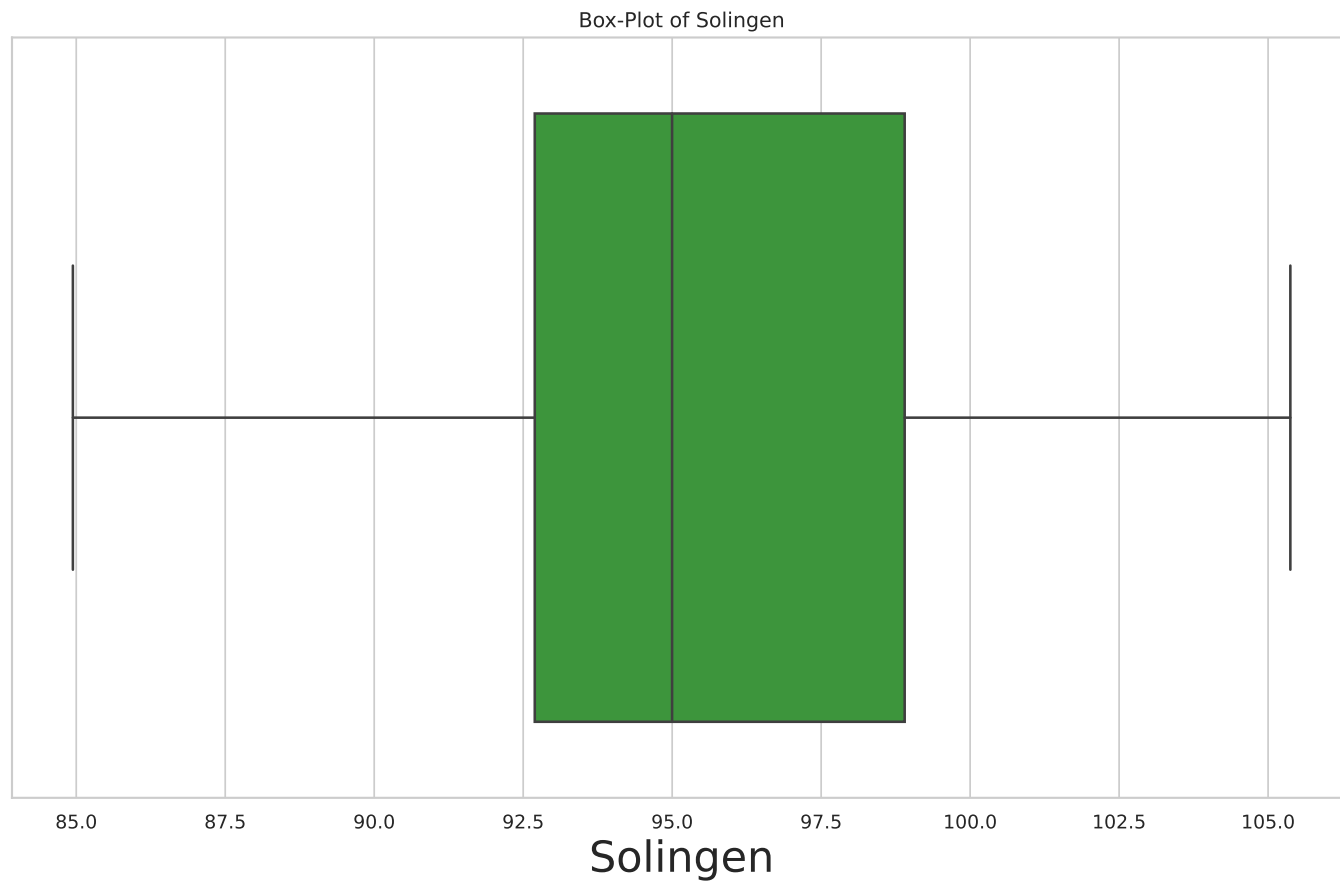


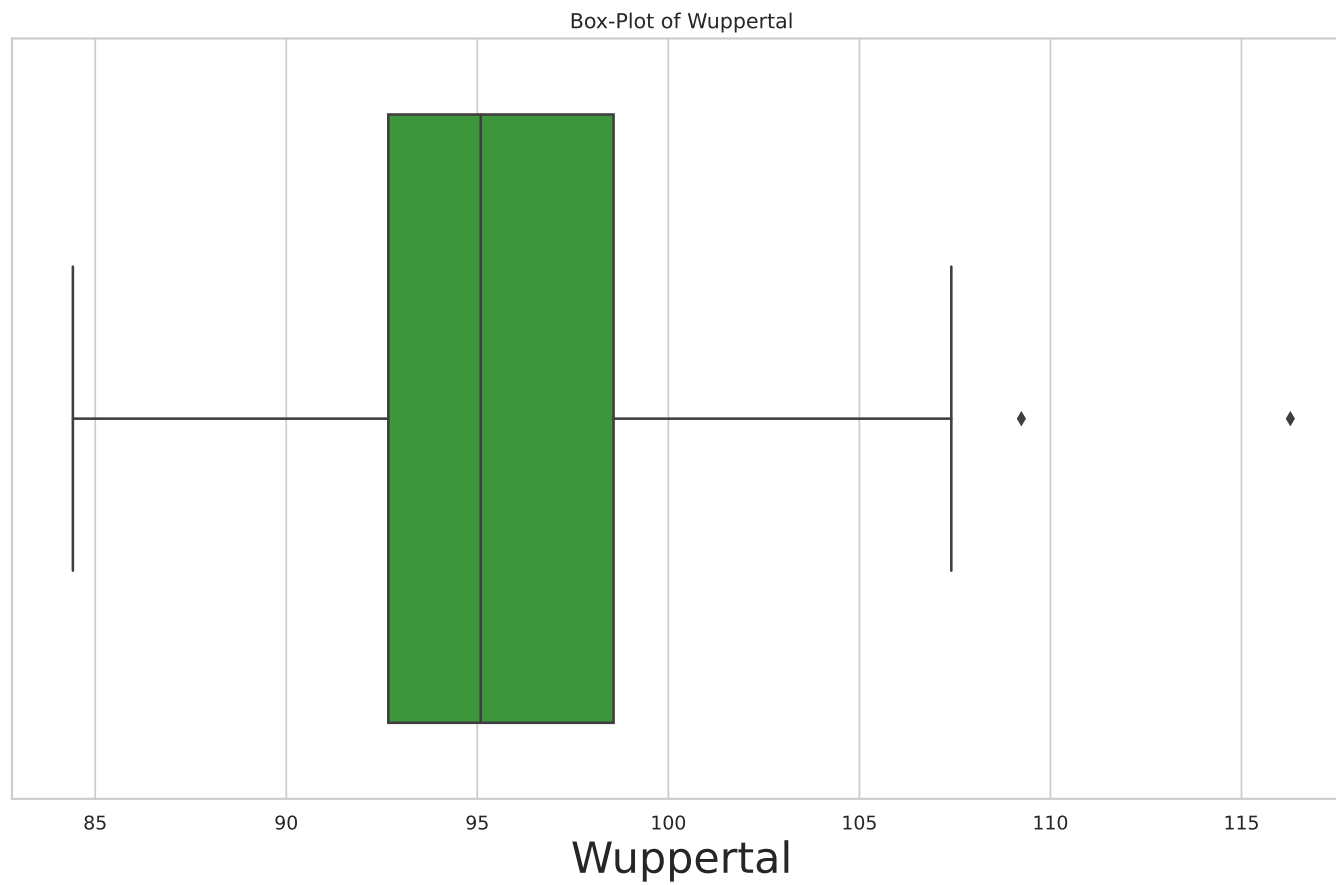






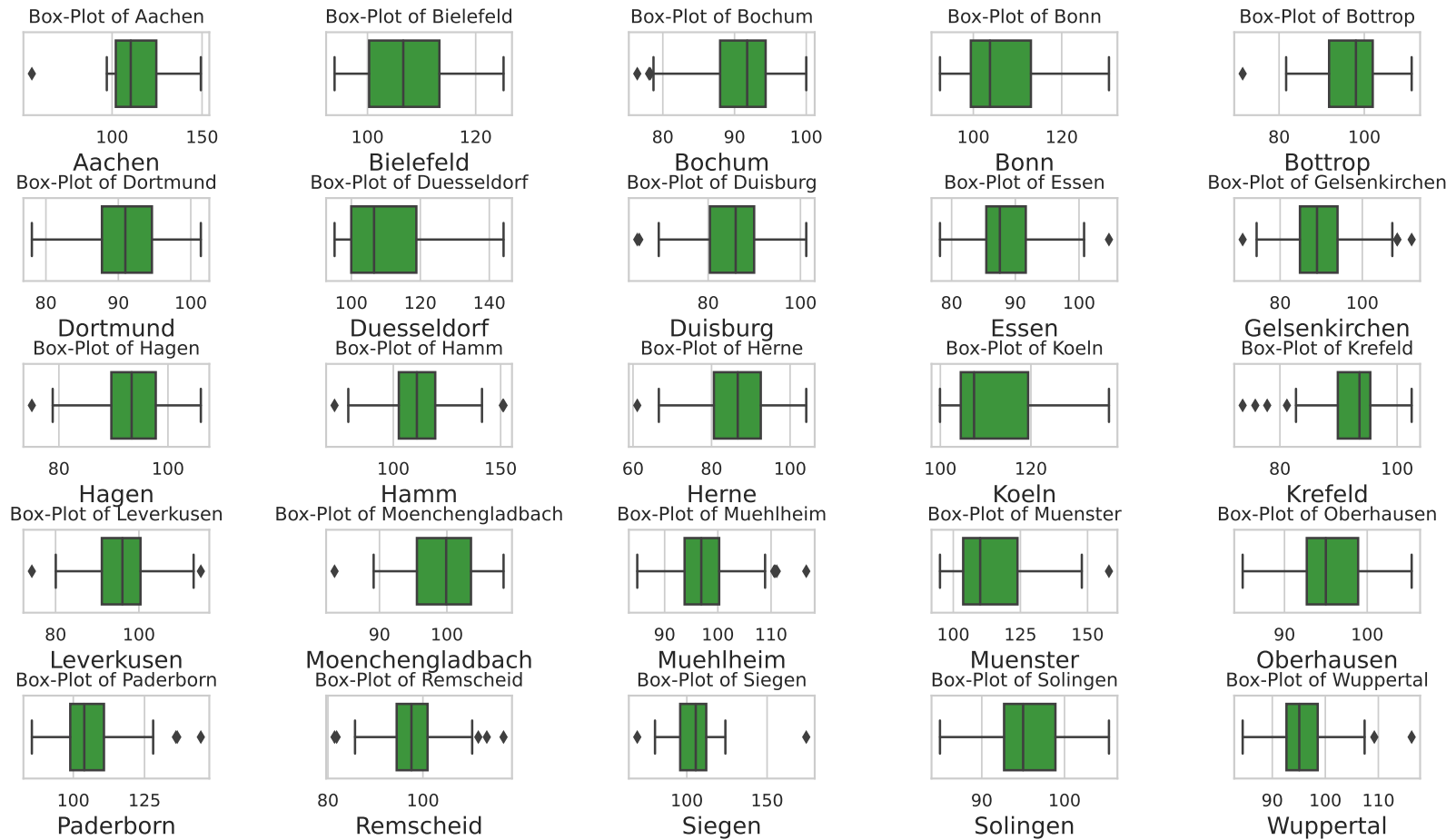






Box-Plots Summary

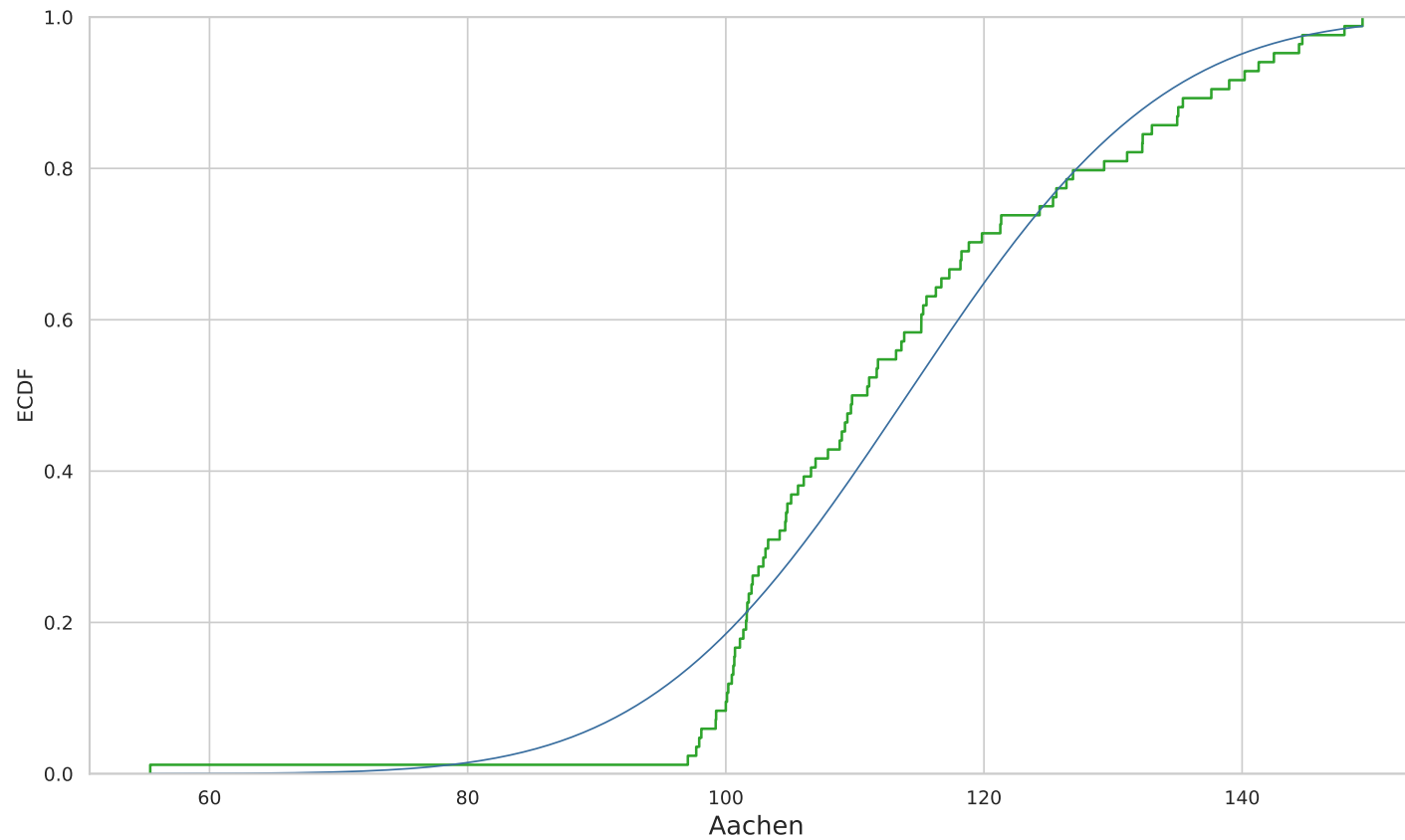
Multiple Box-Plots of variables in one figure. Variables are sorted alphabetically.

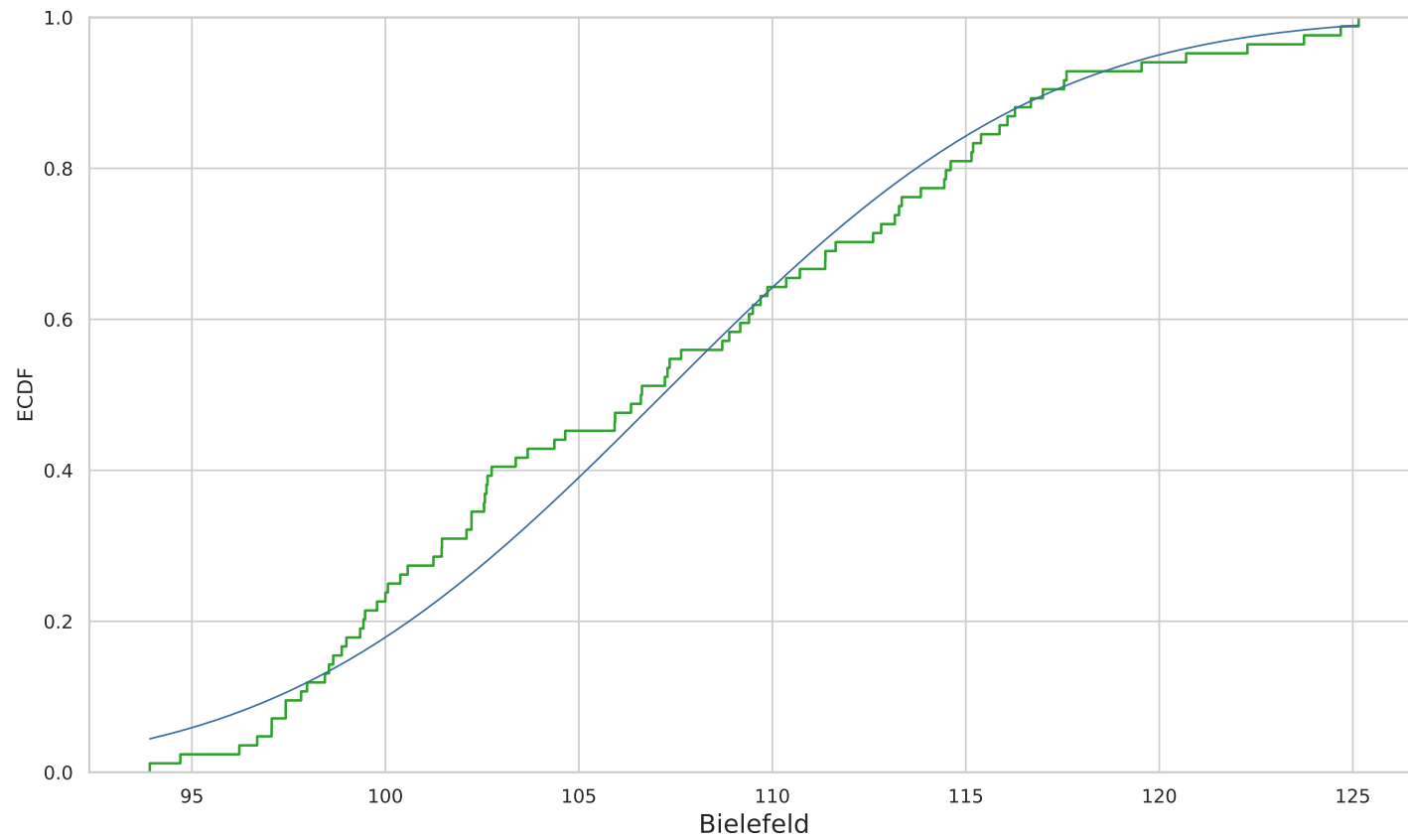


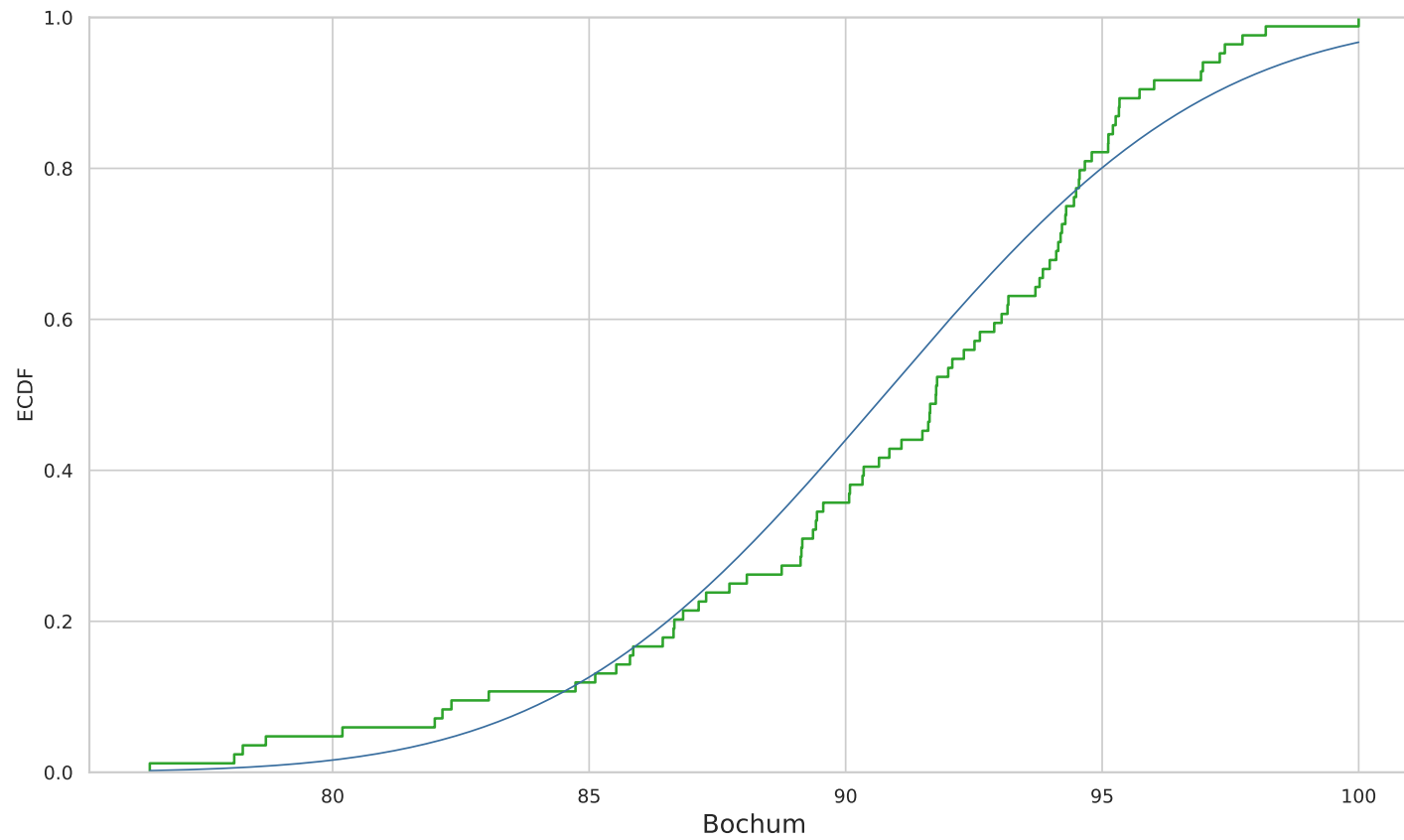
ECDF Plots

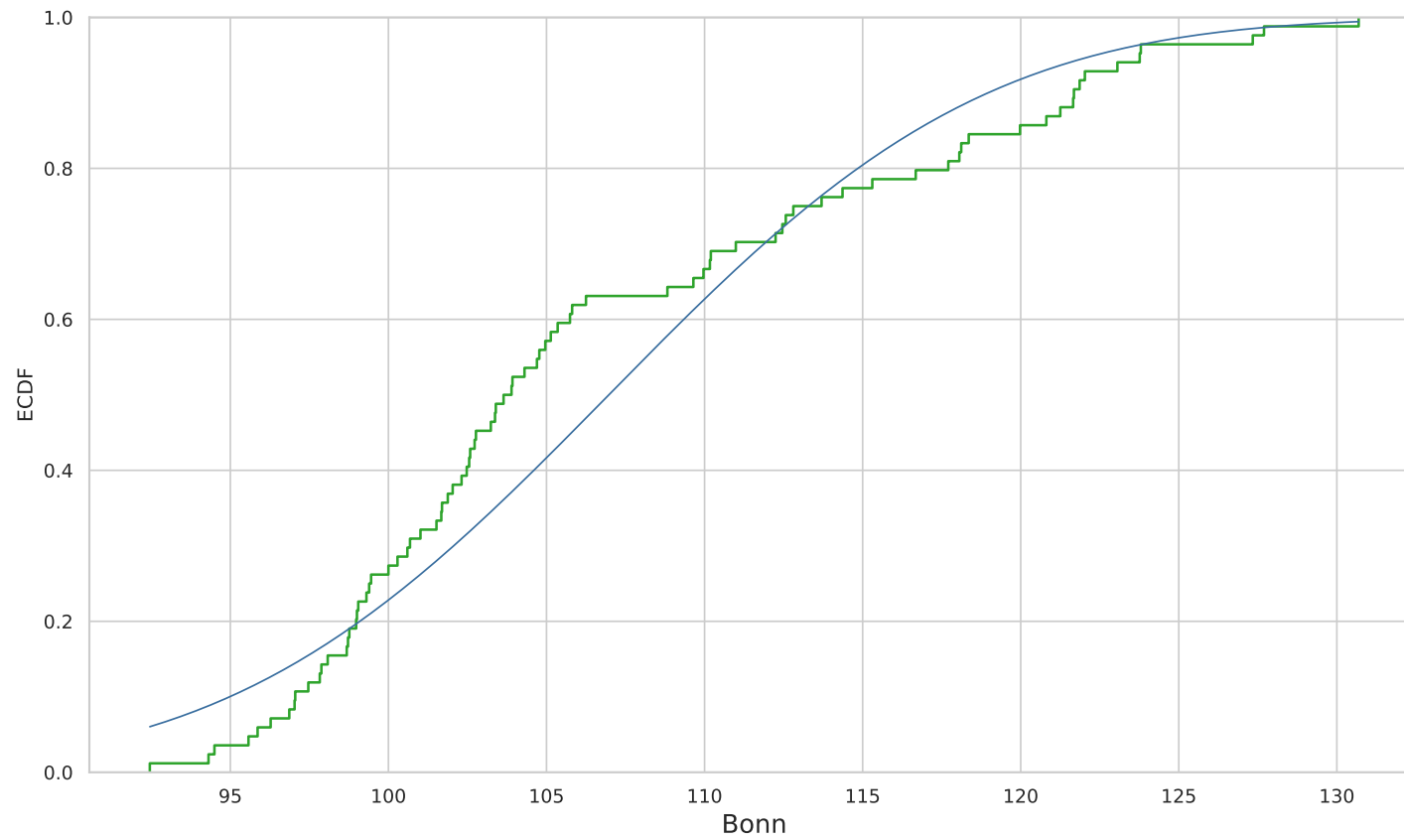
One ECDF (Empirical Cumulative Distribution Function) Plot per page for each variable. Variables are sorted alphabetically. The blue line represents the CDF of a normal distribution. If the variable is normally distributed, the blue line approximates well the ECDF.

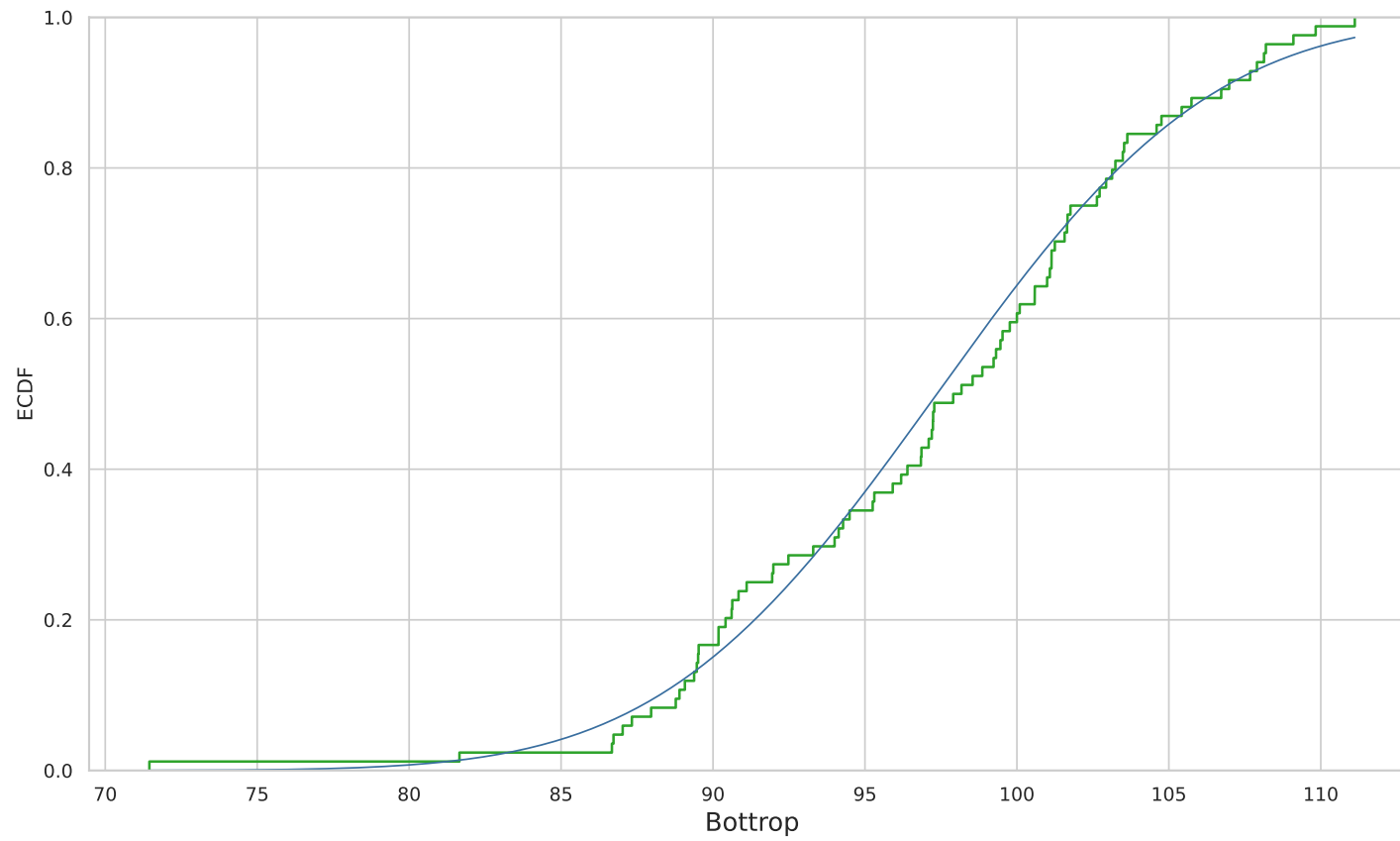
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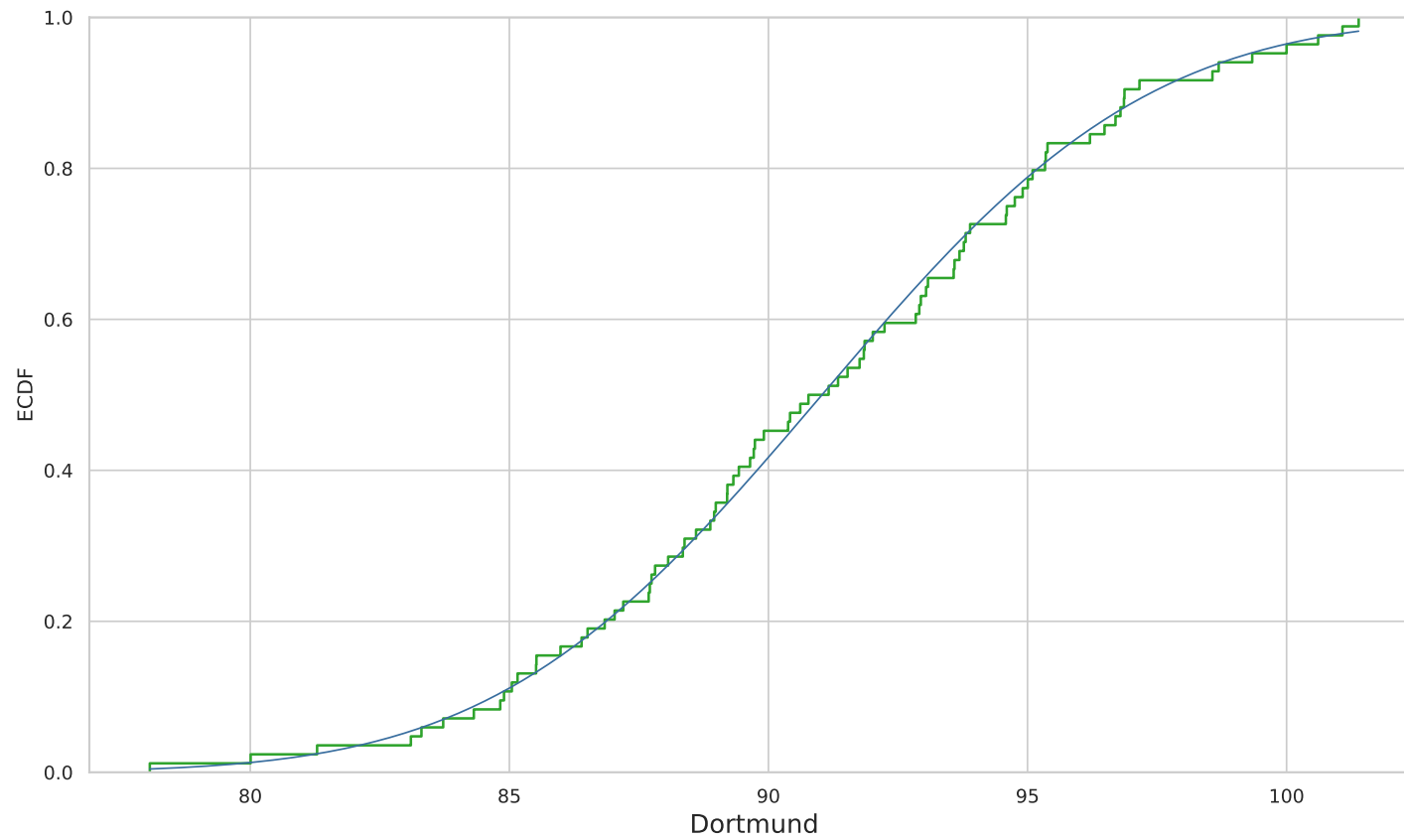


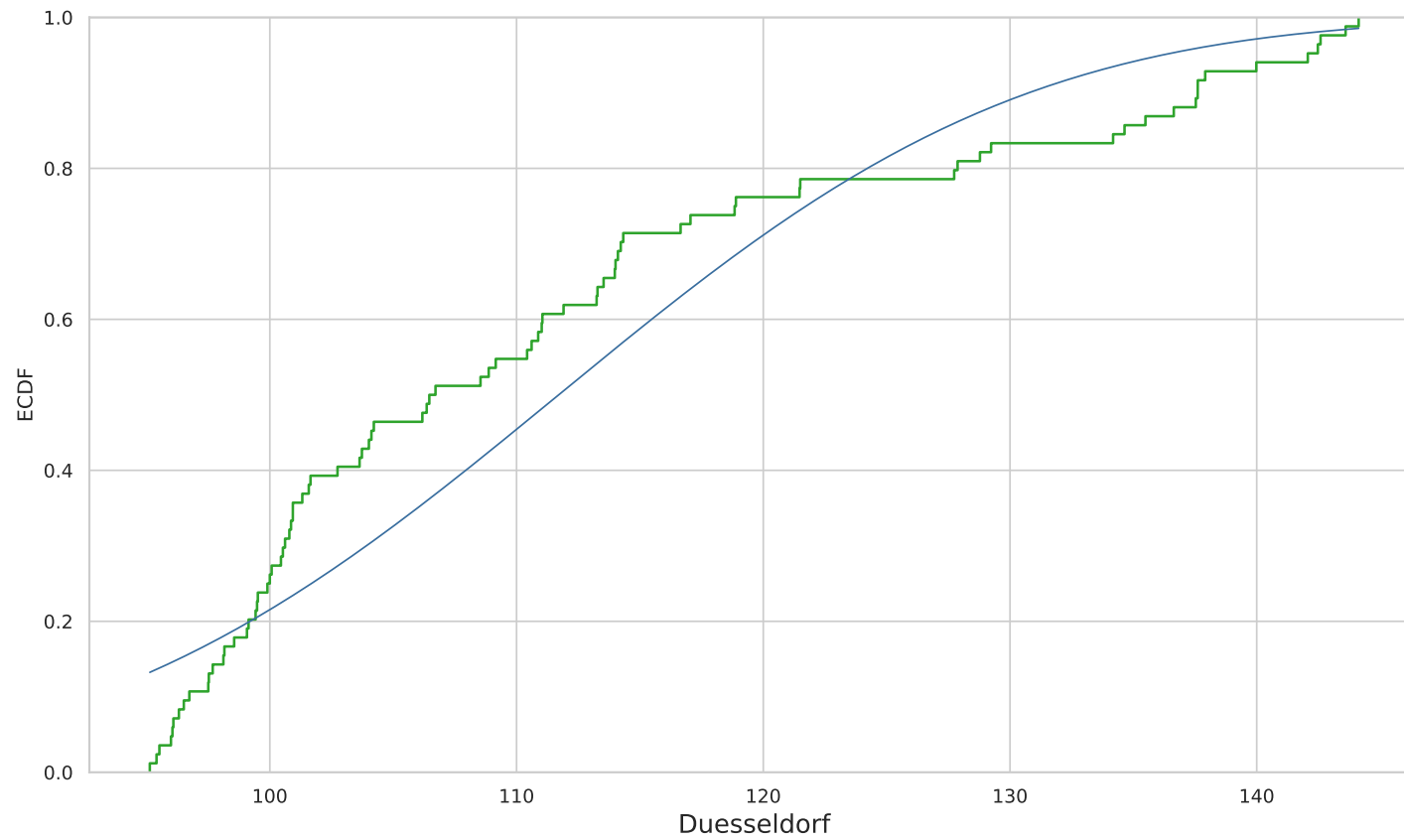


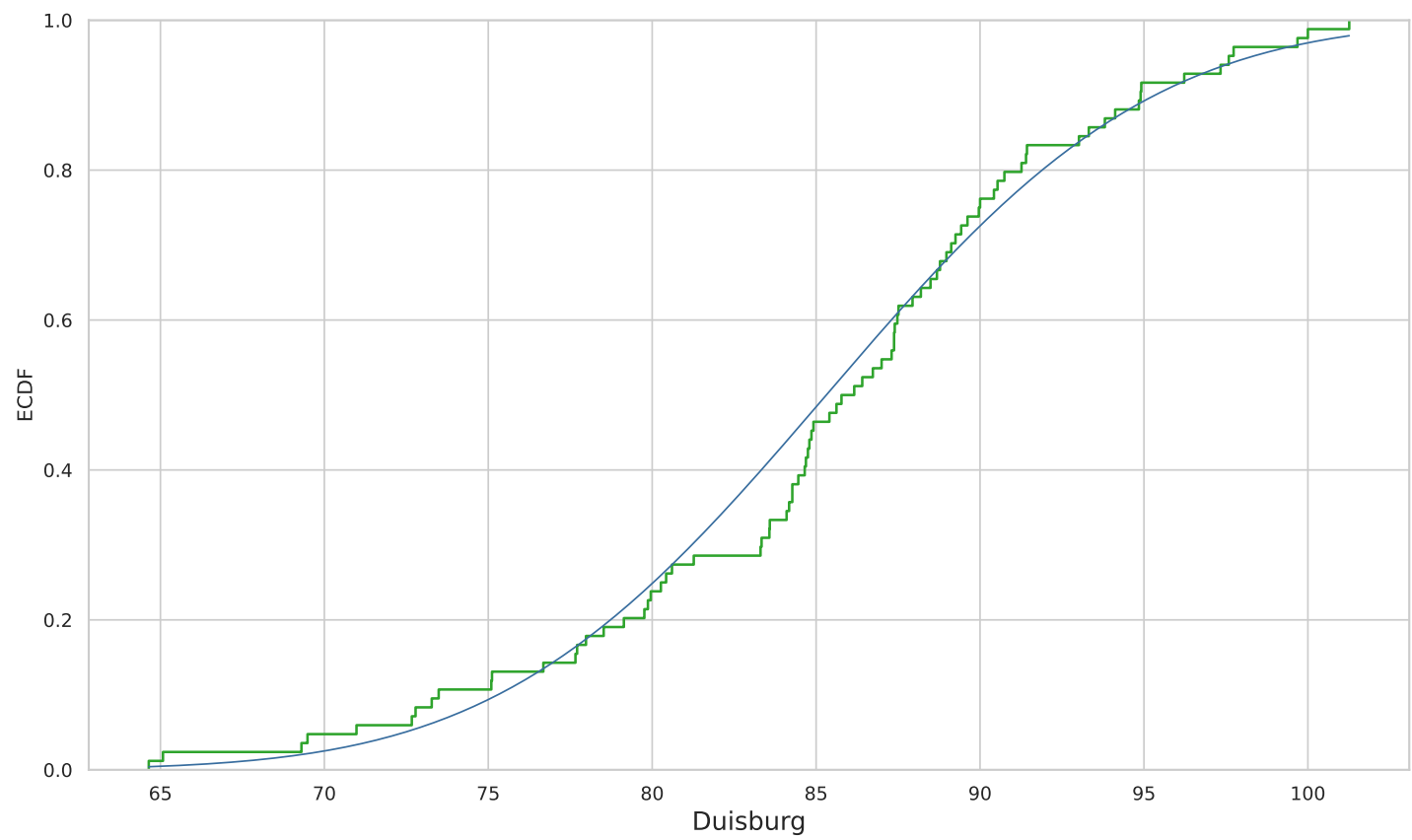


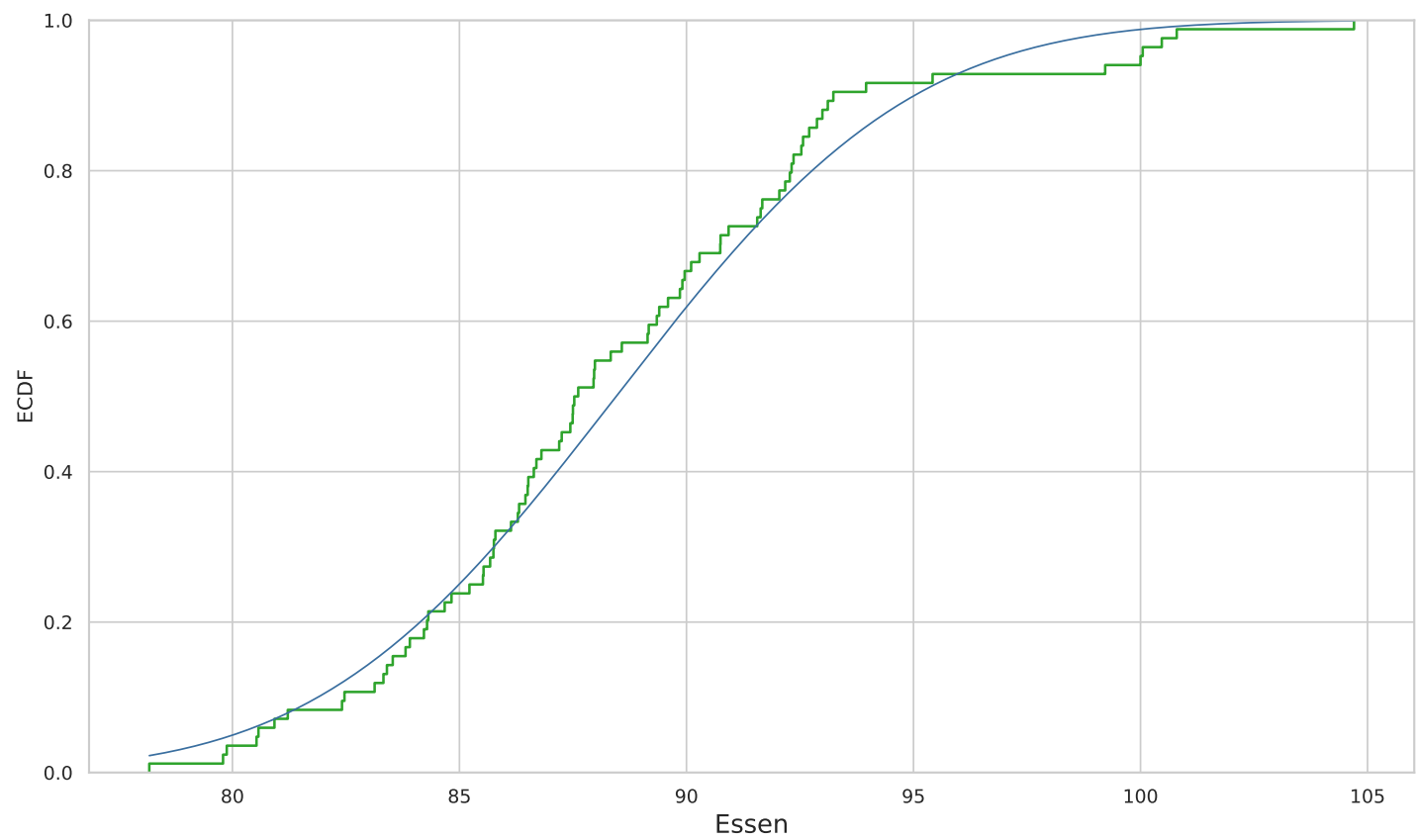


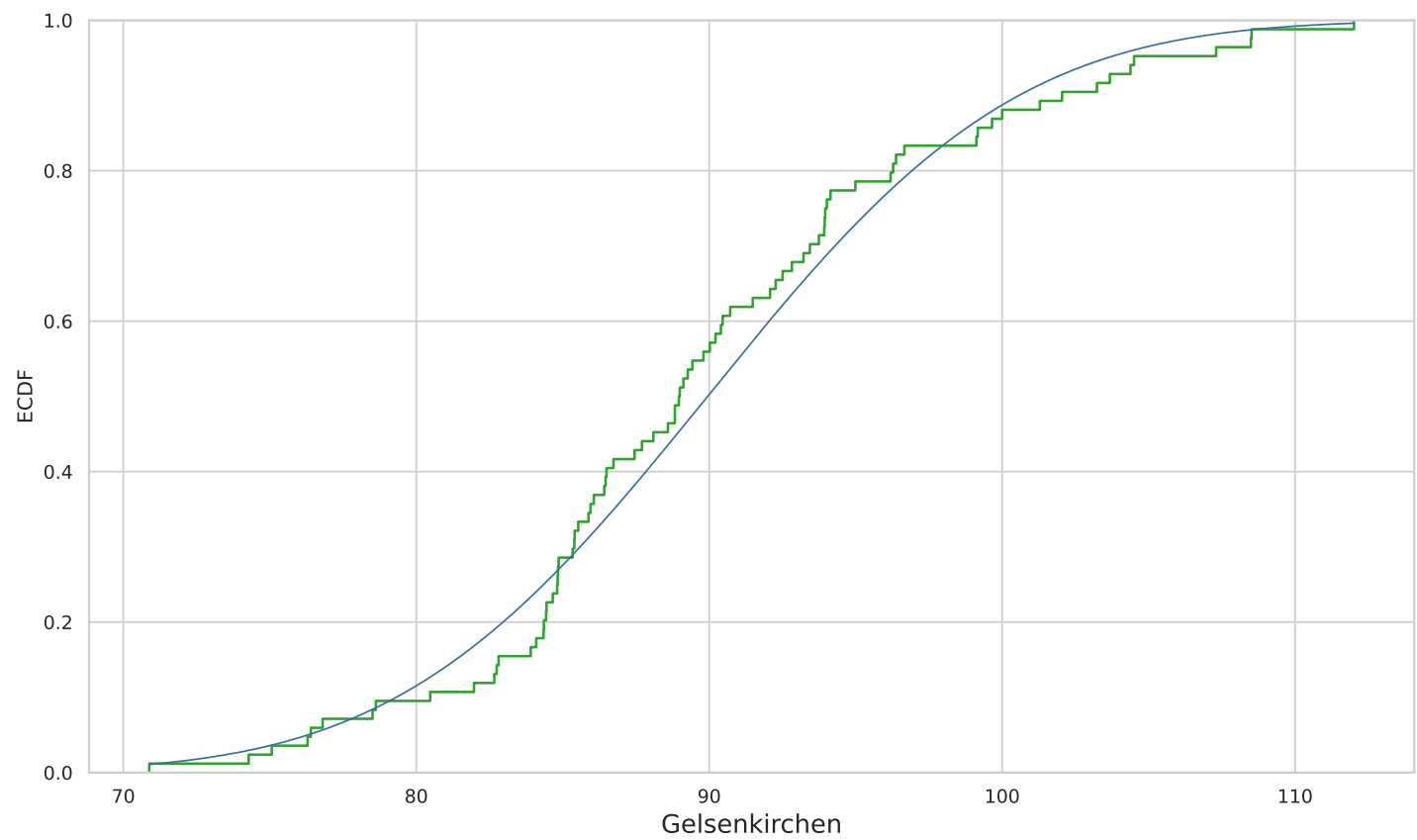


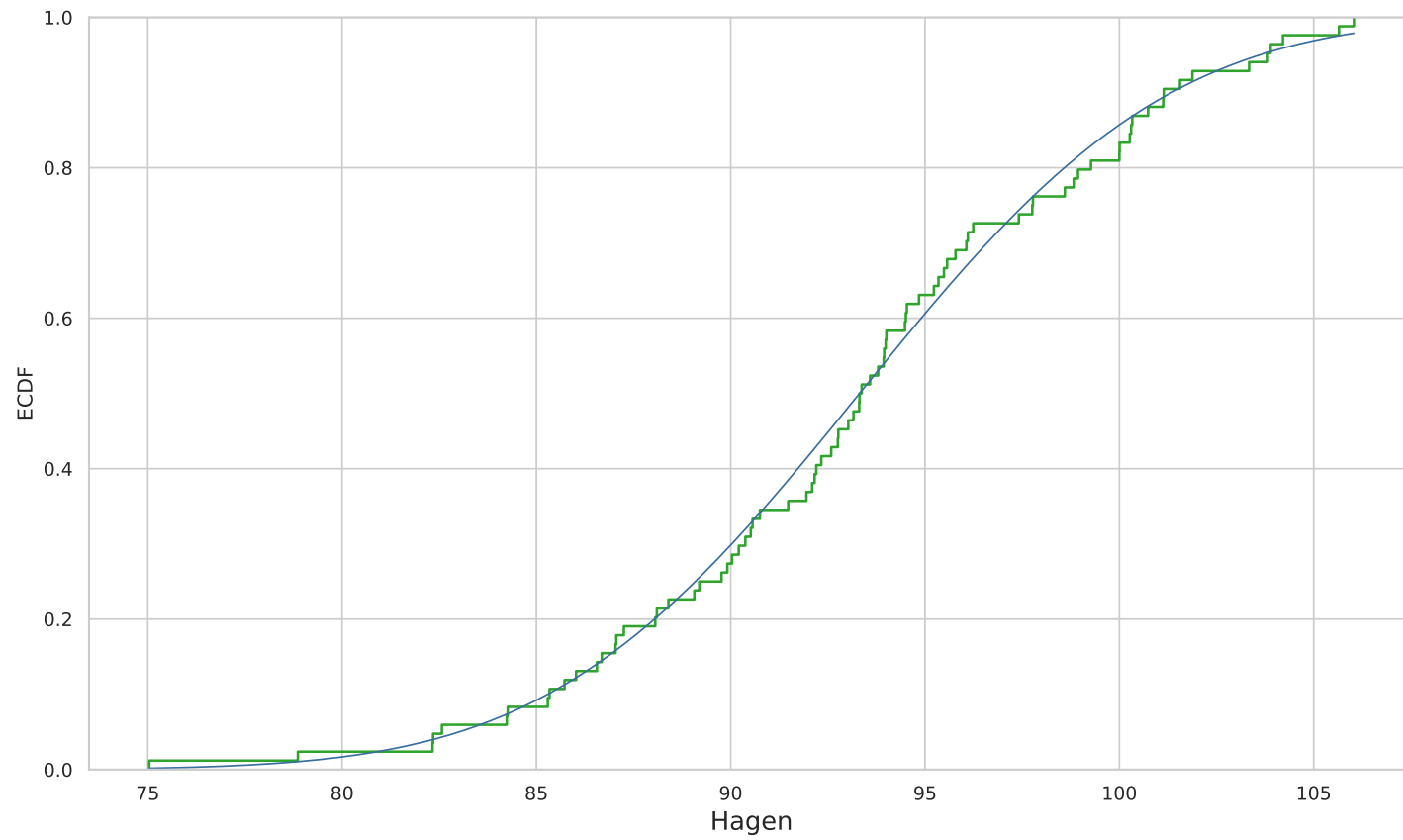


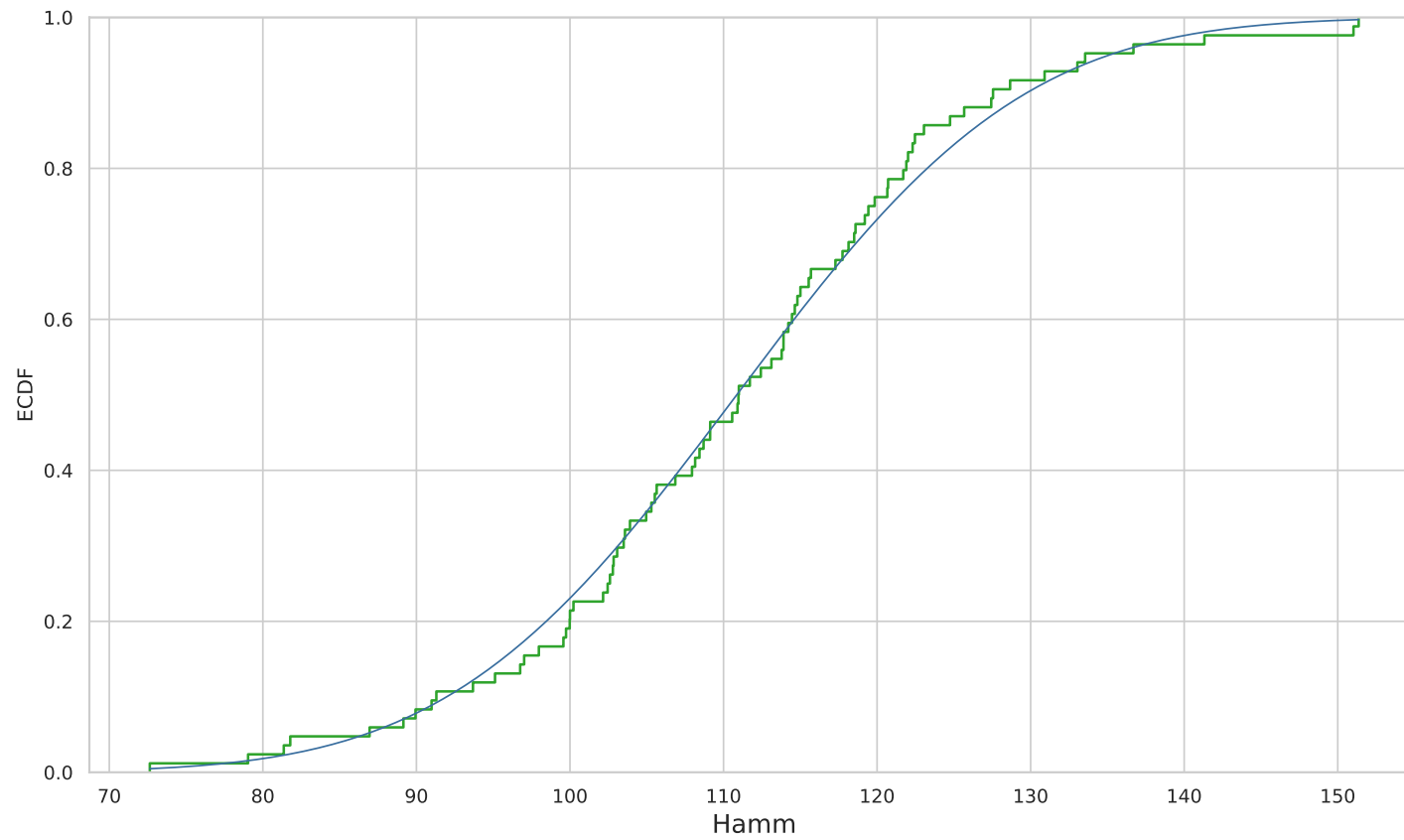


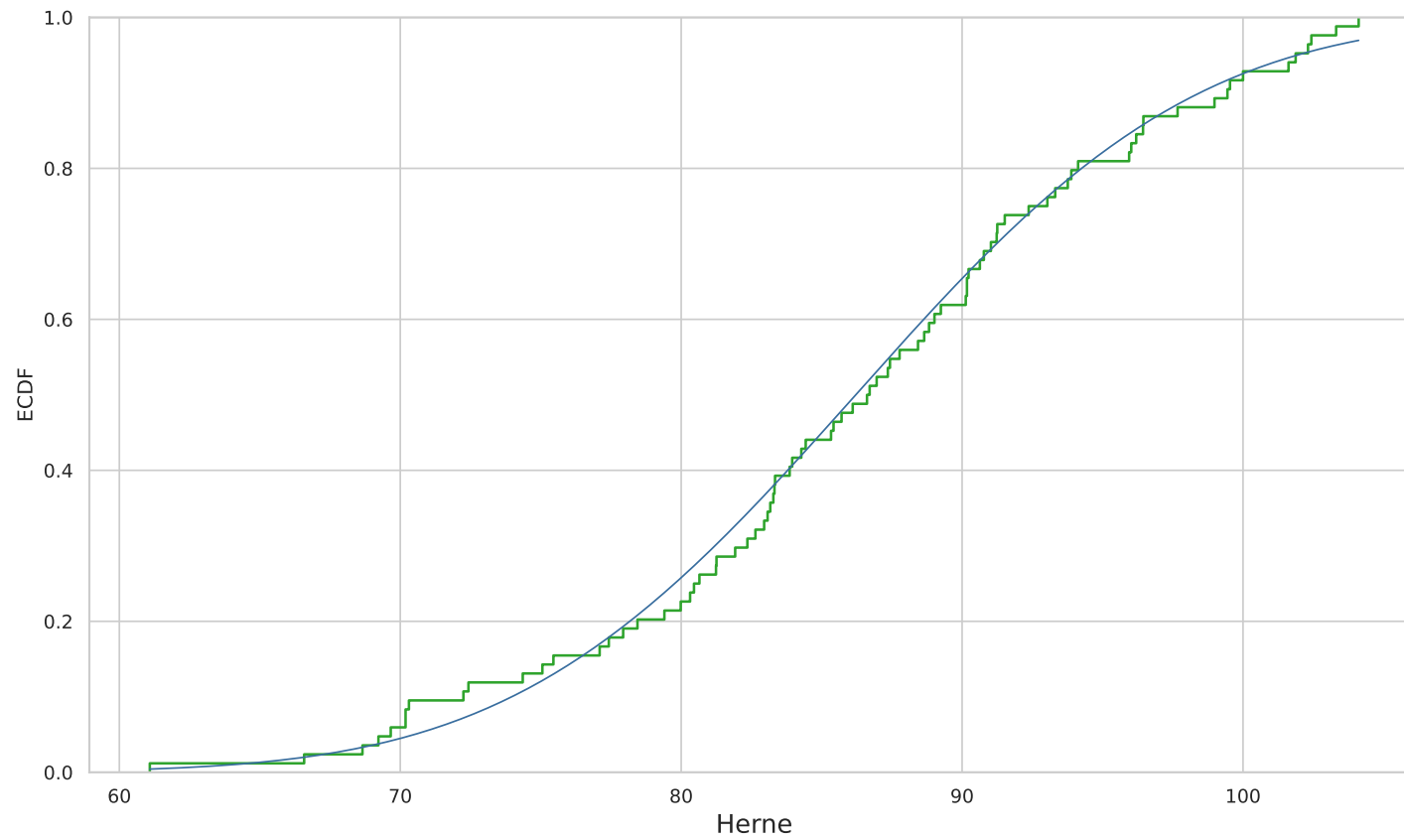


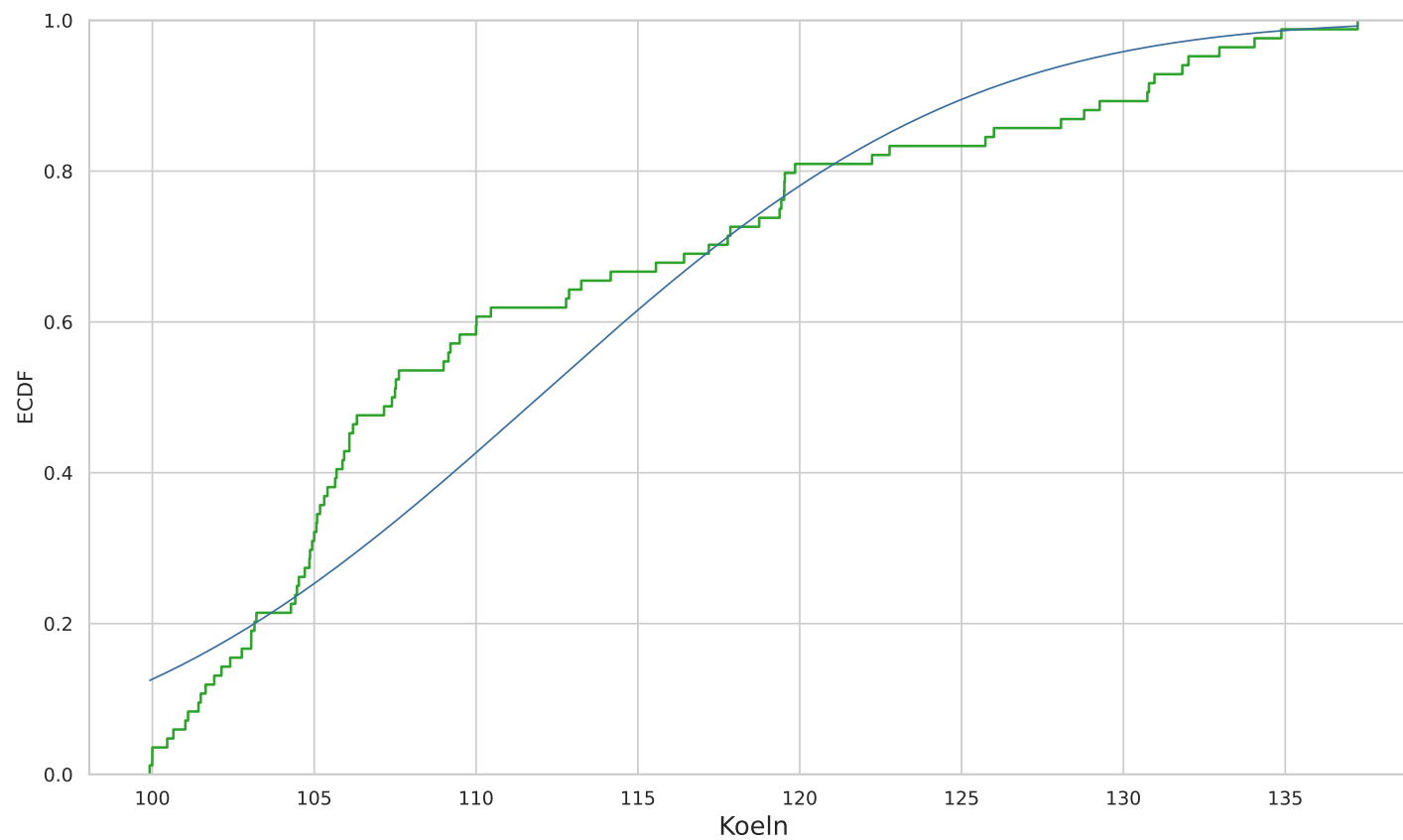


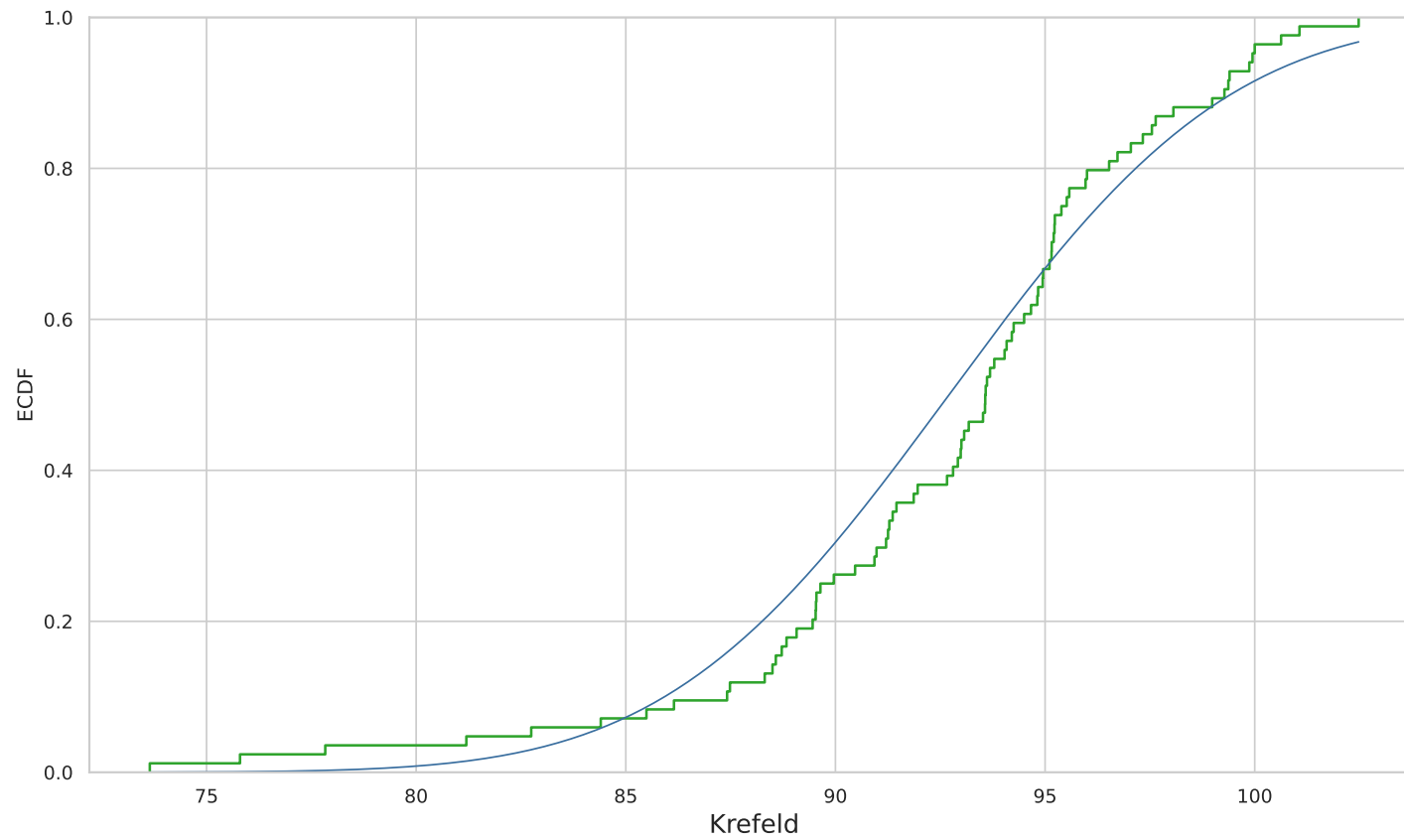


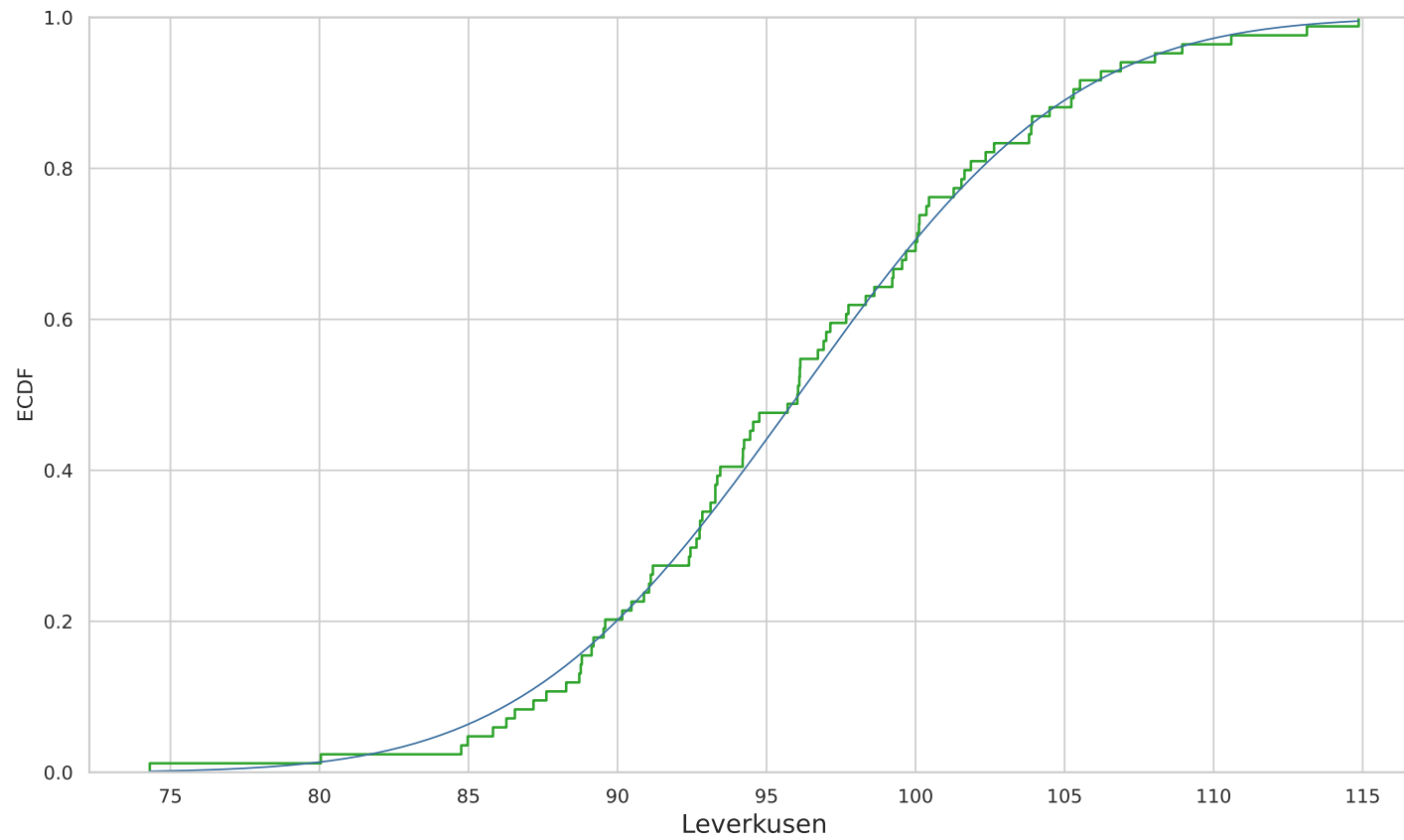


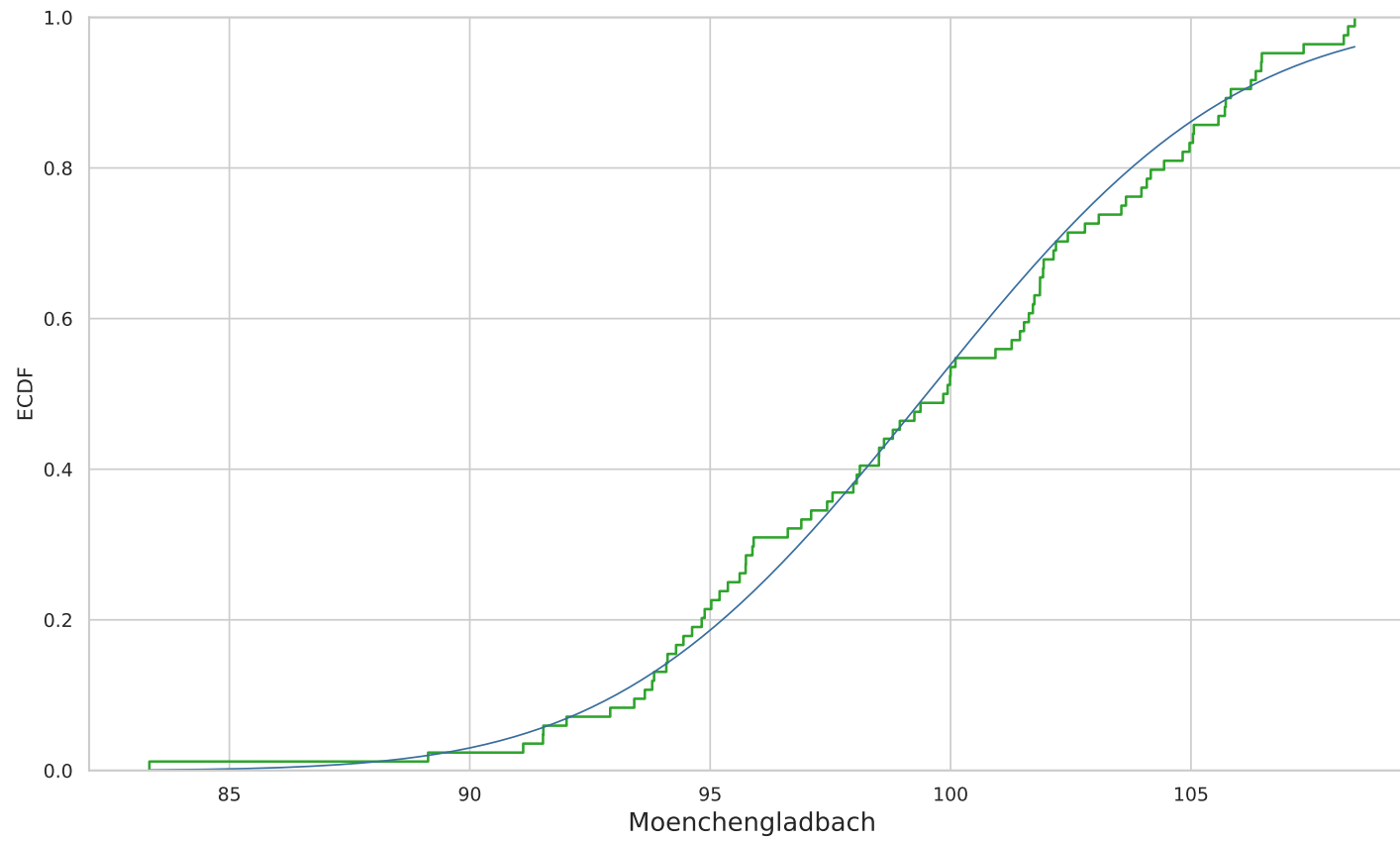


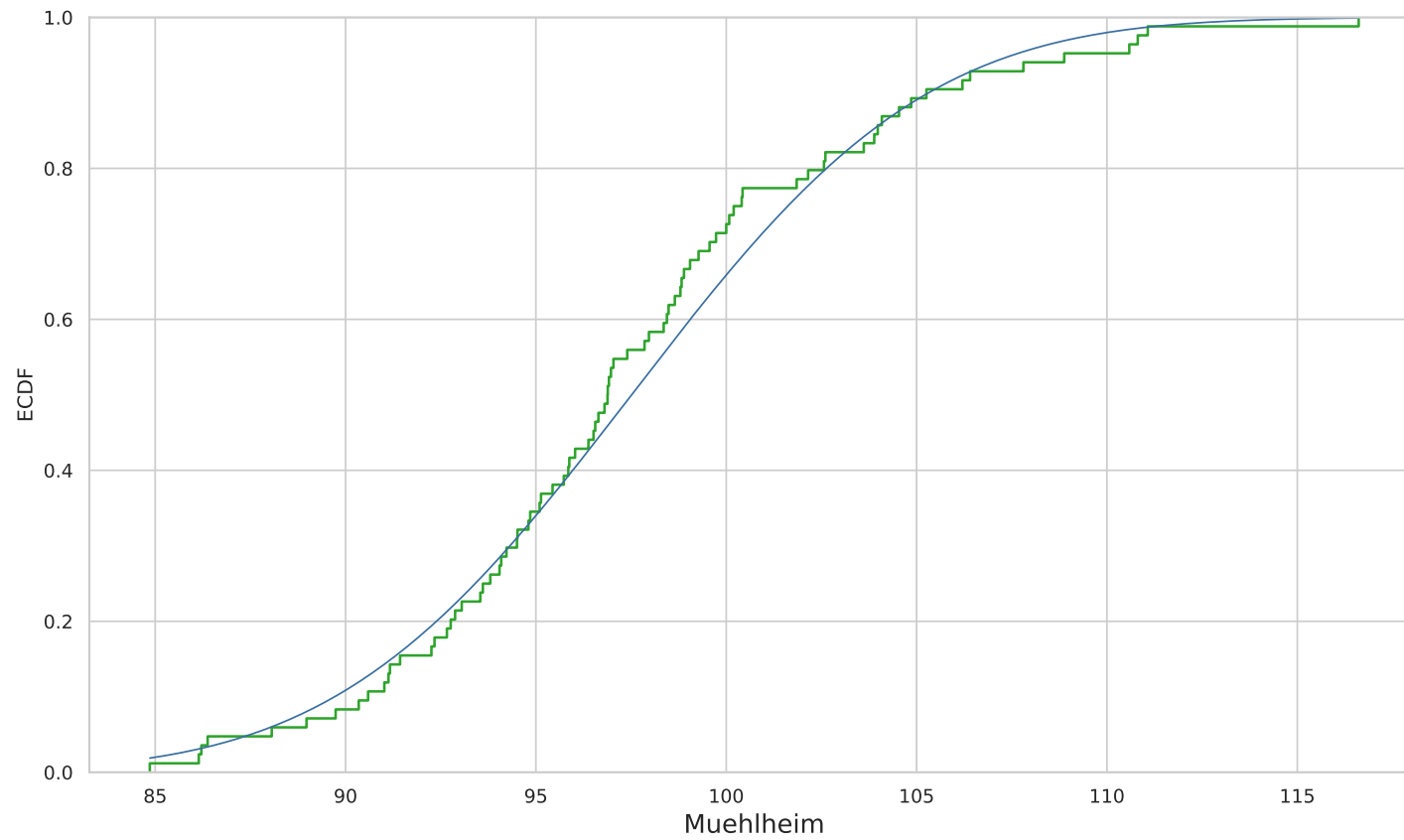


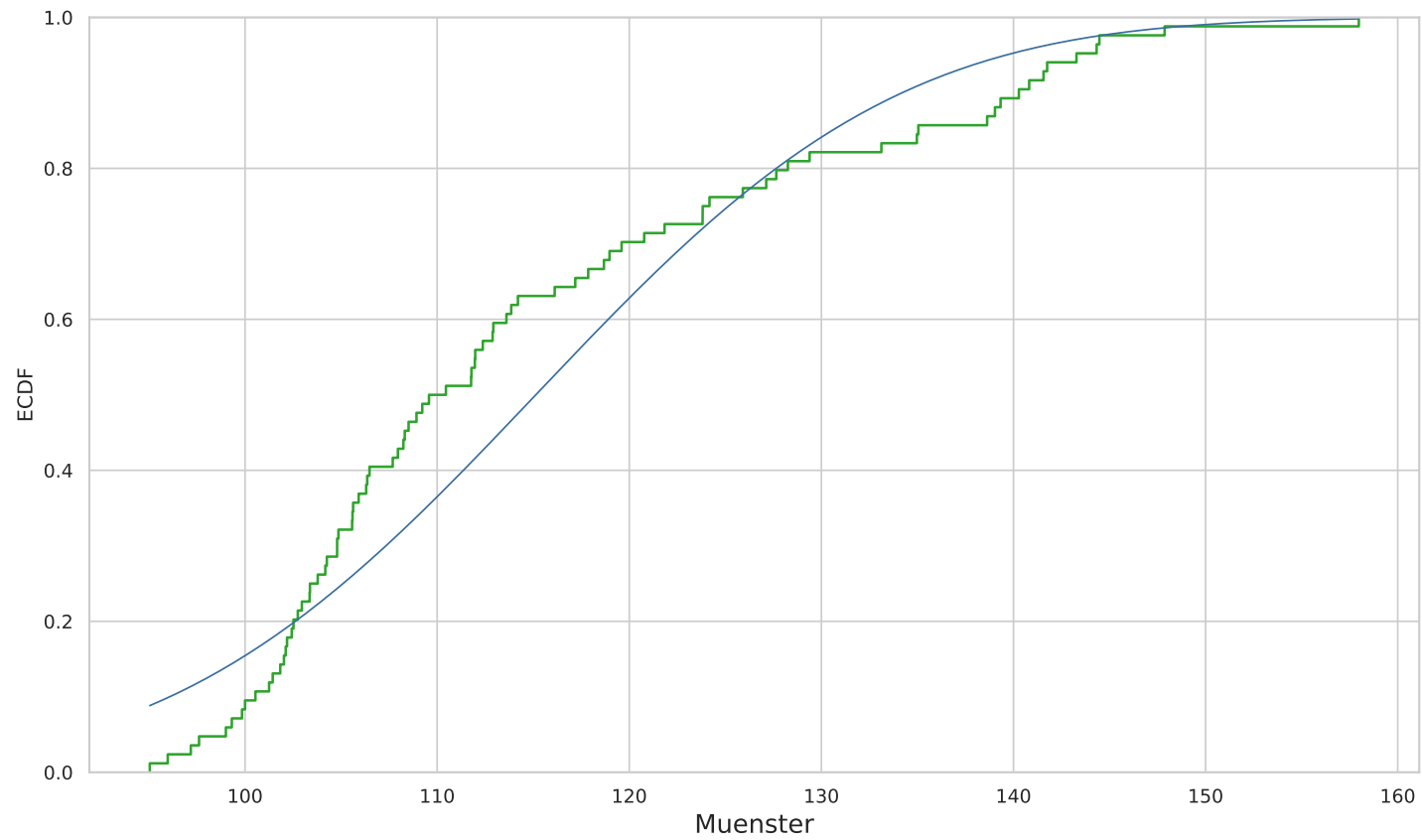


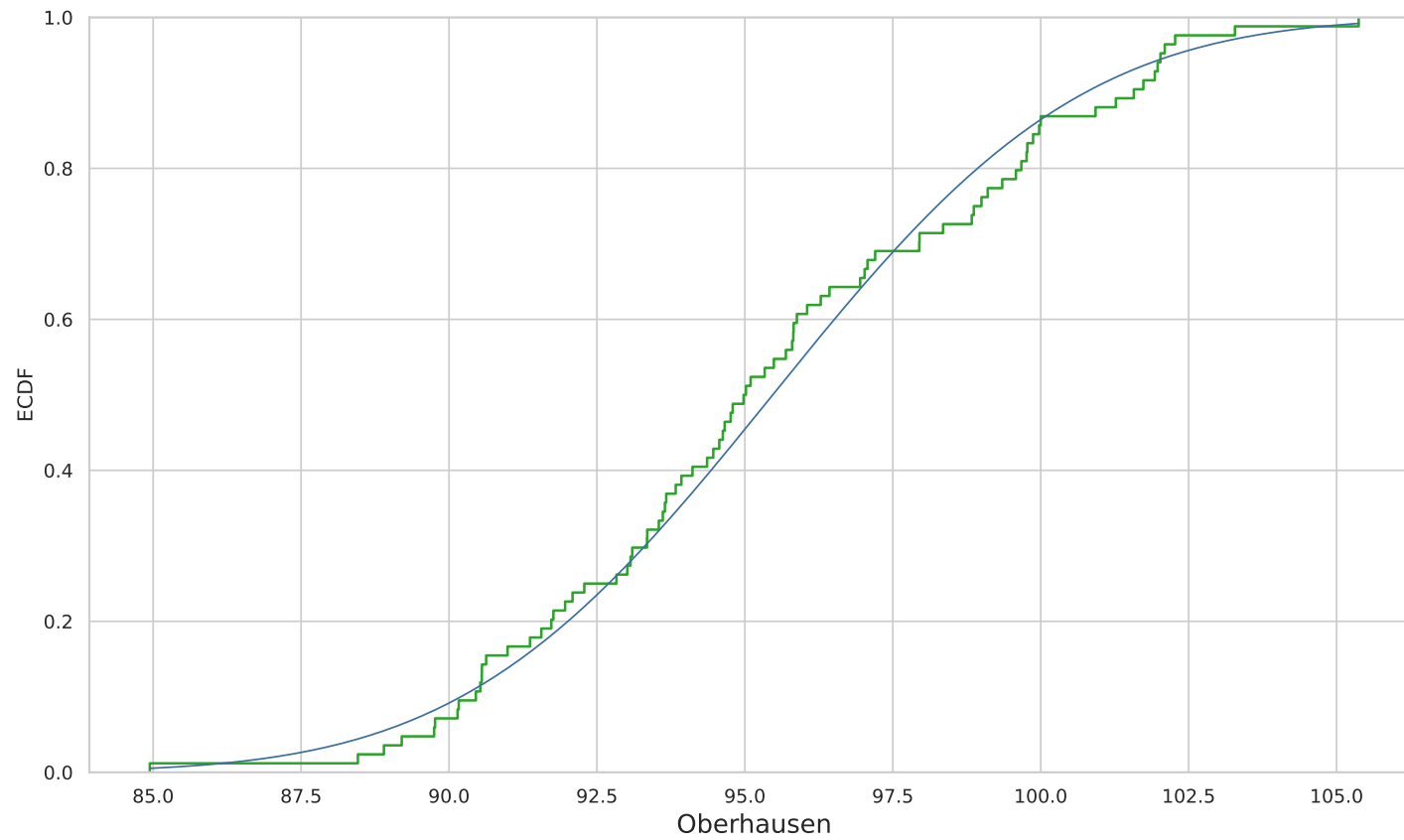


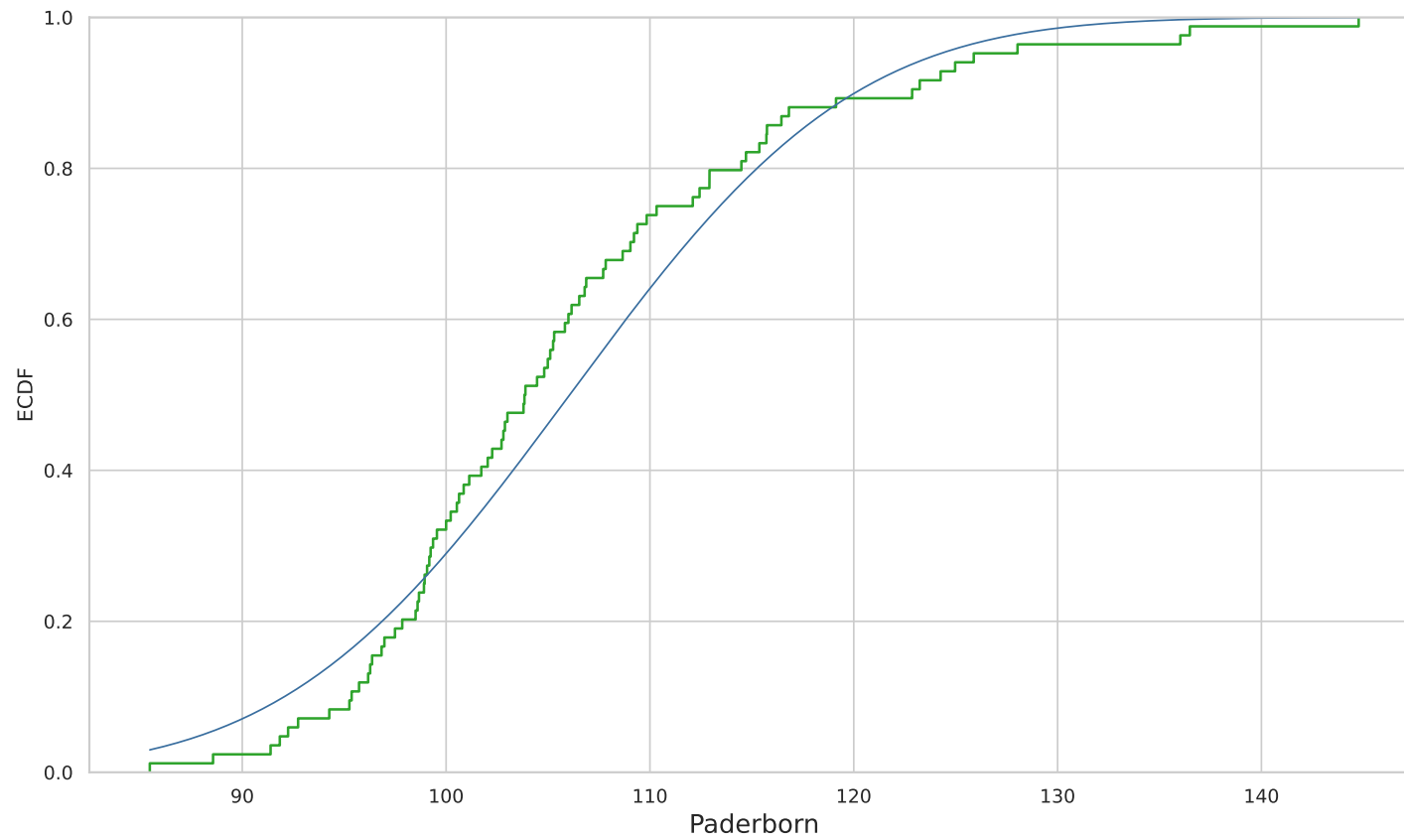


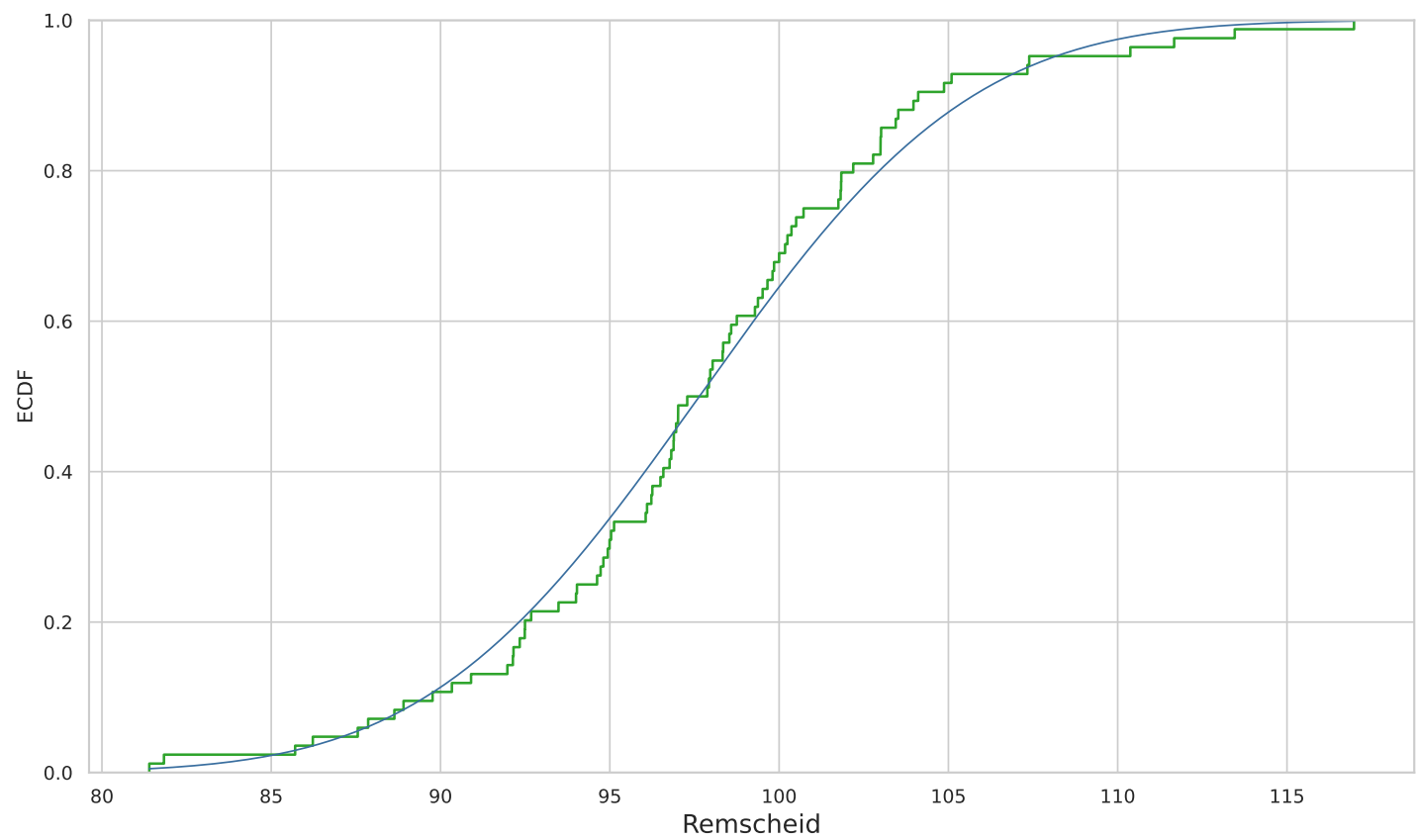


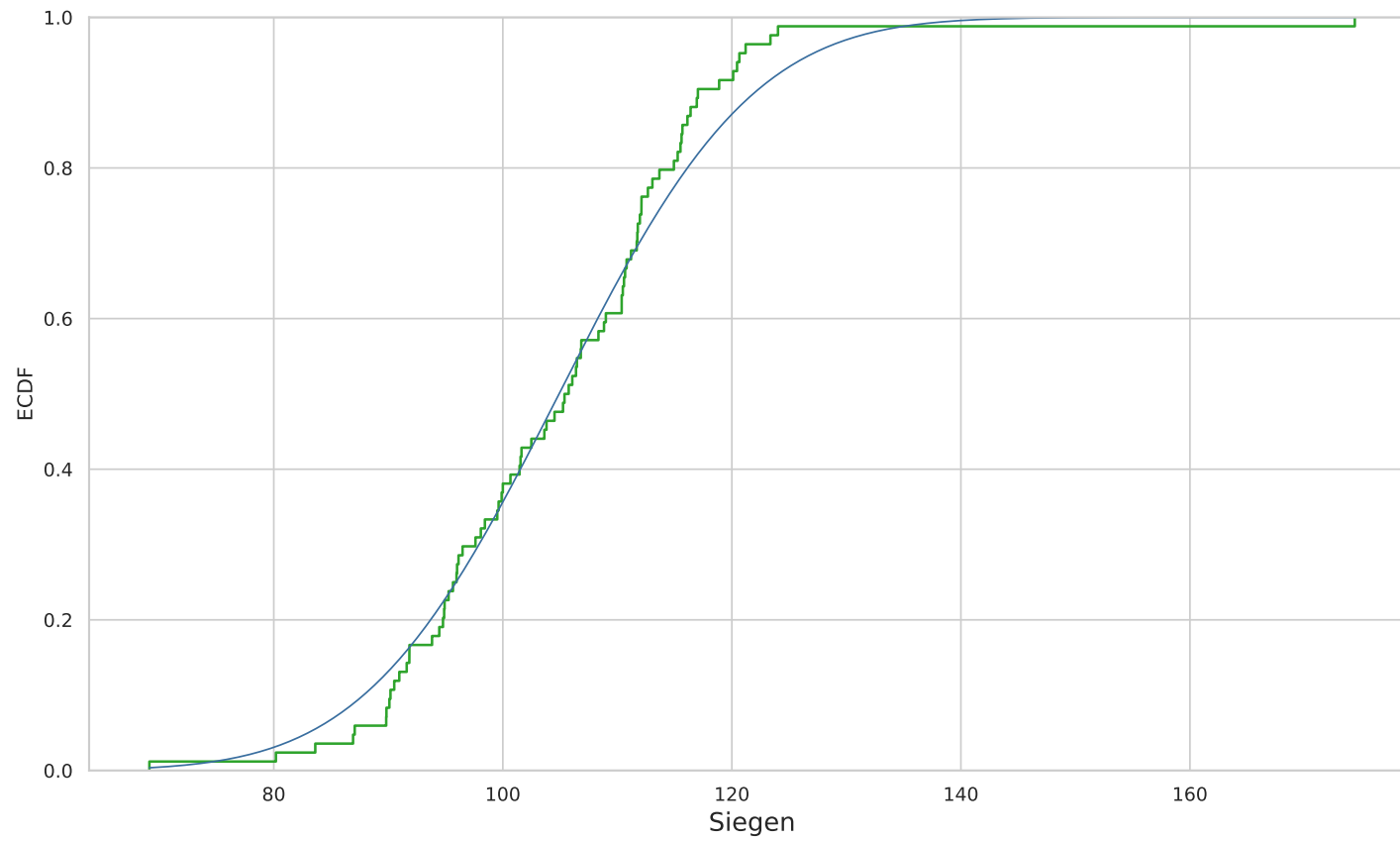


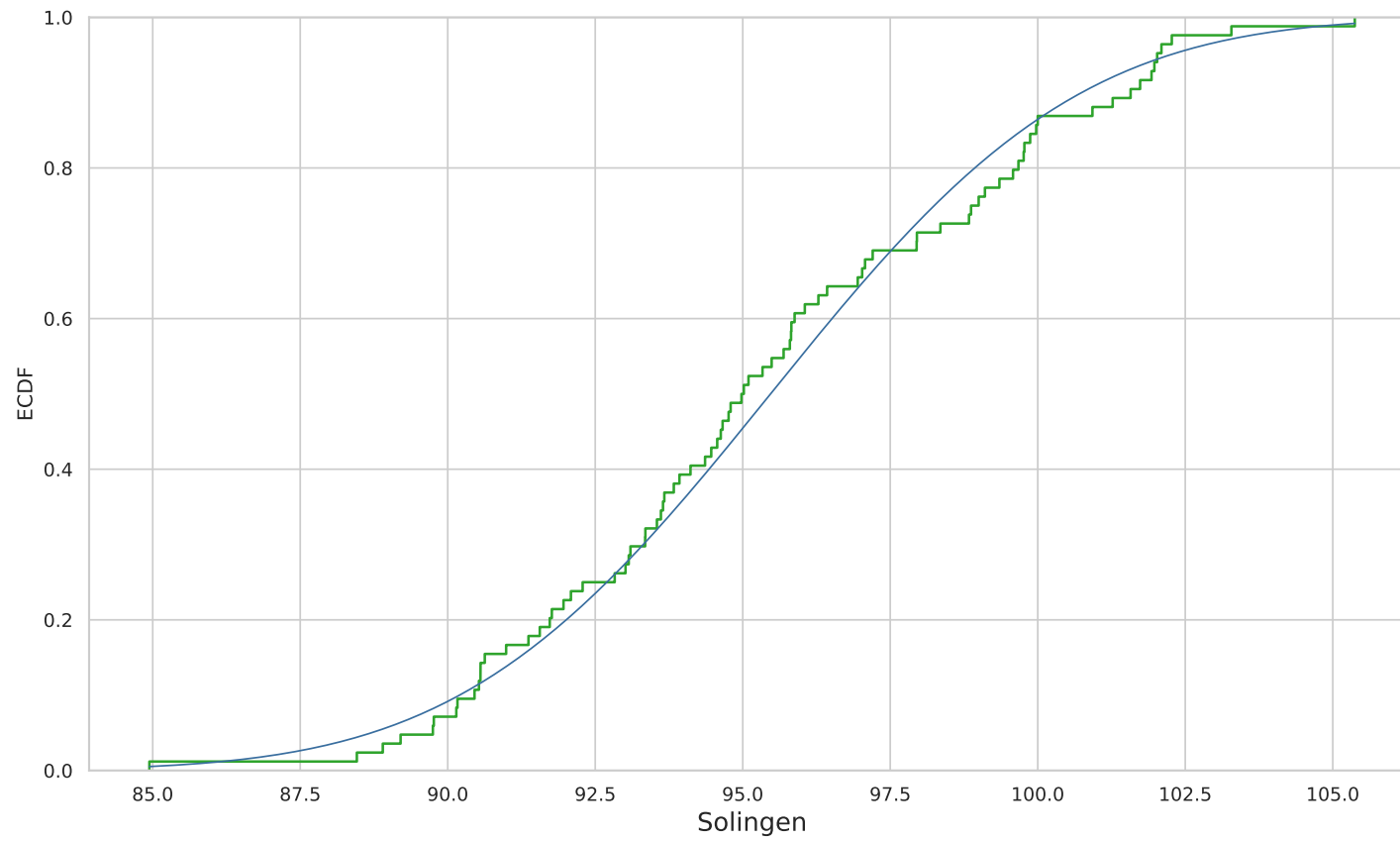


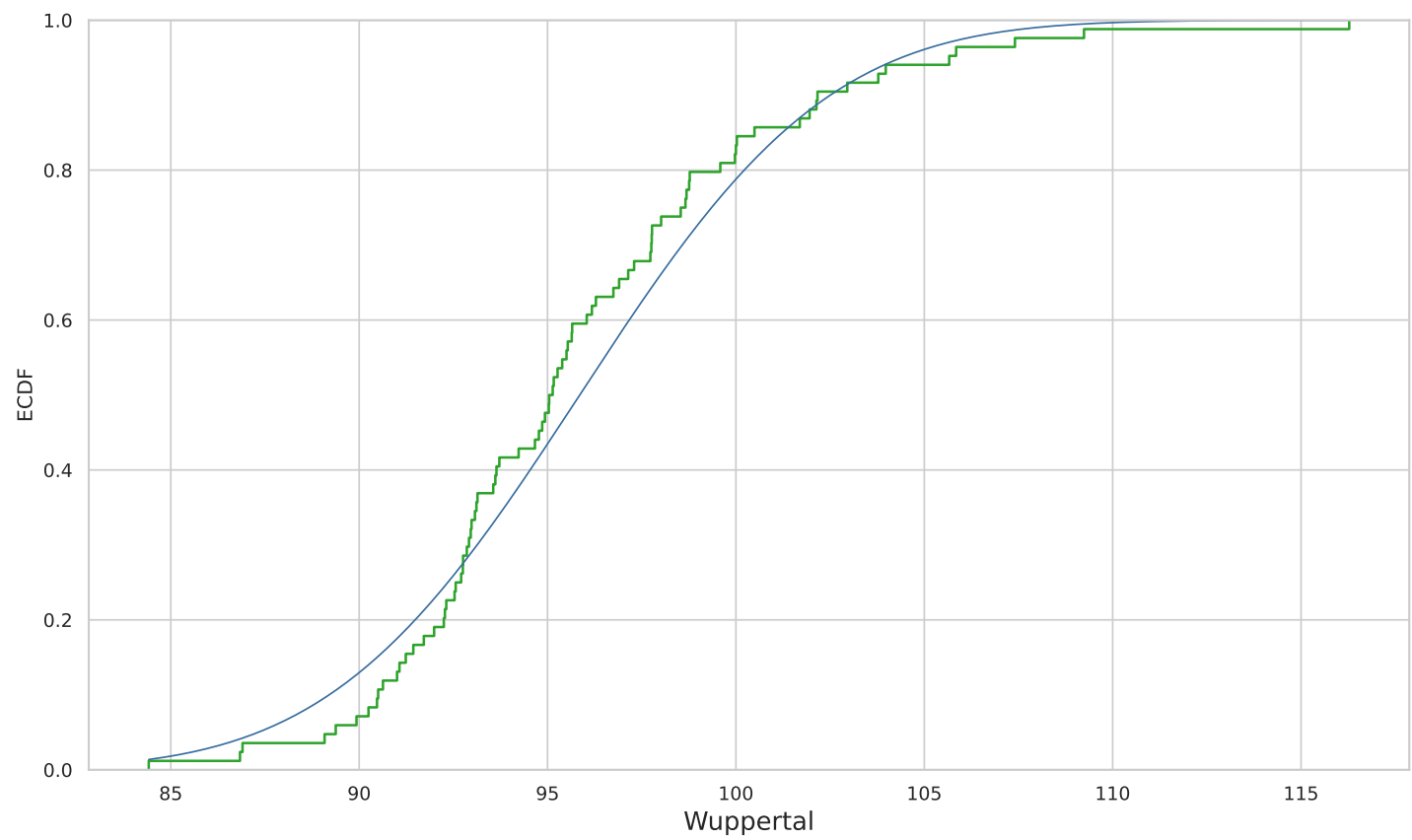






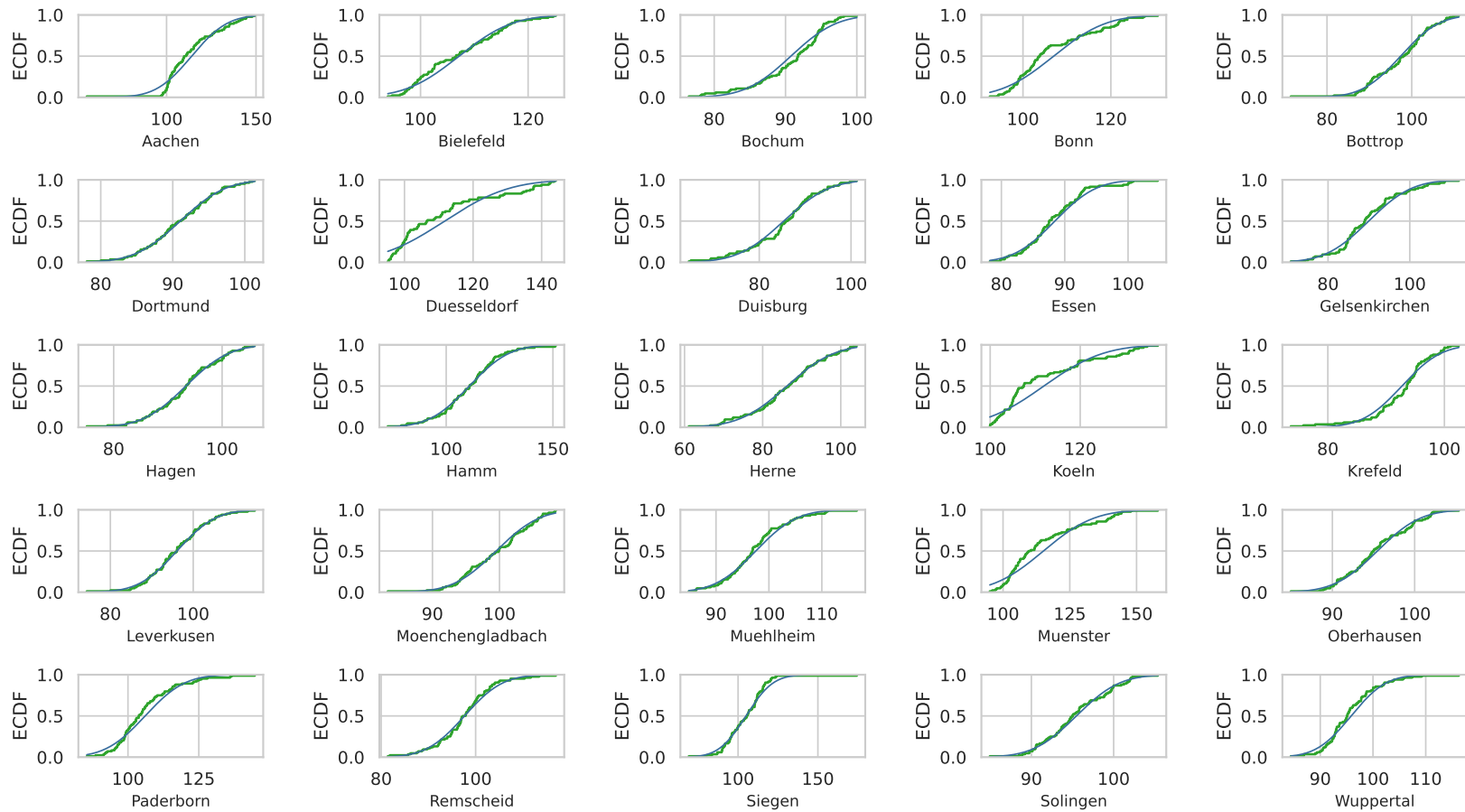






ECDF Plots Summary

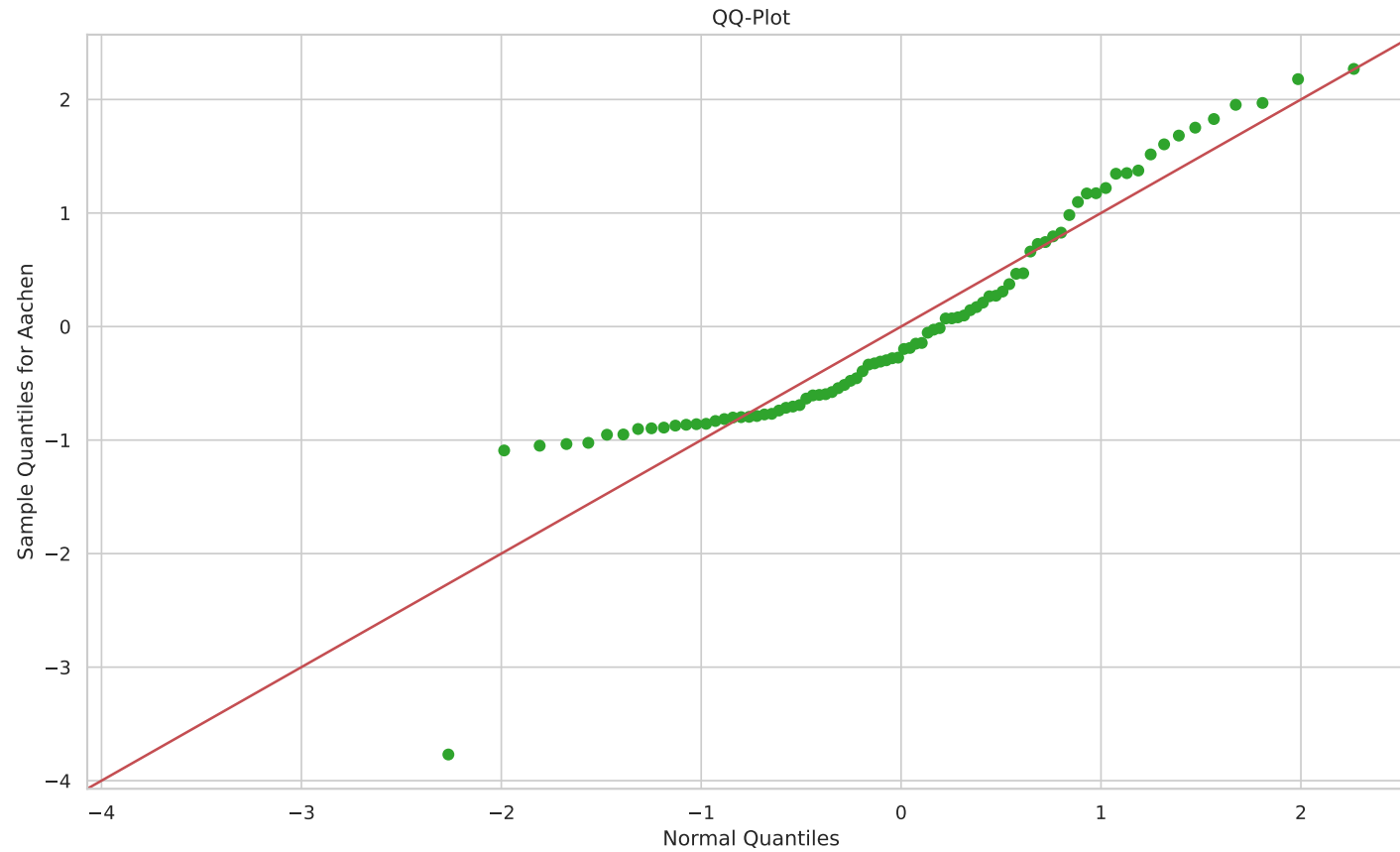
Multiple ECDF Plots of variables in one figure. Variables are sorted alphabetically.

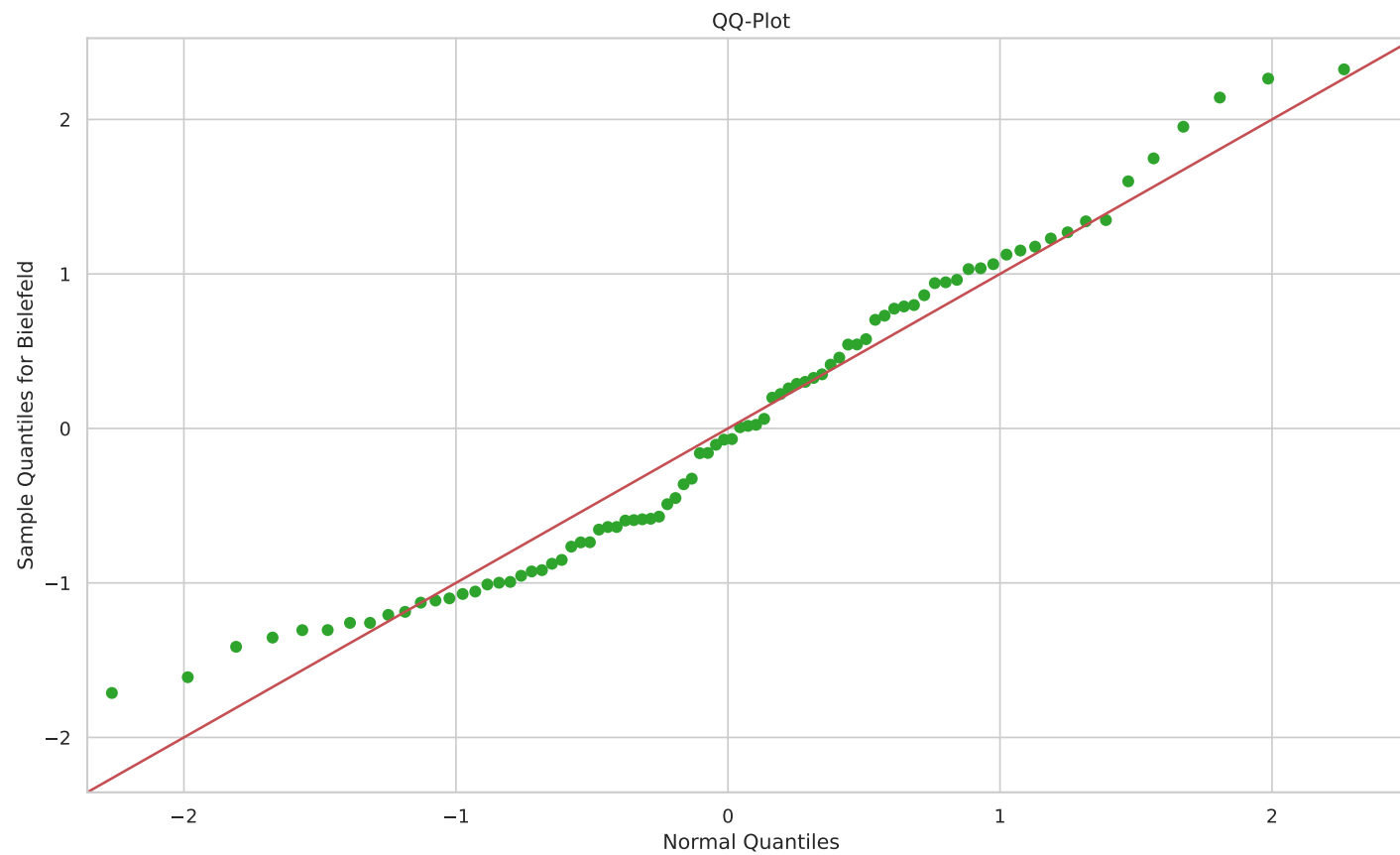


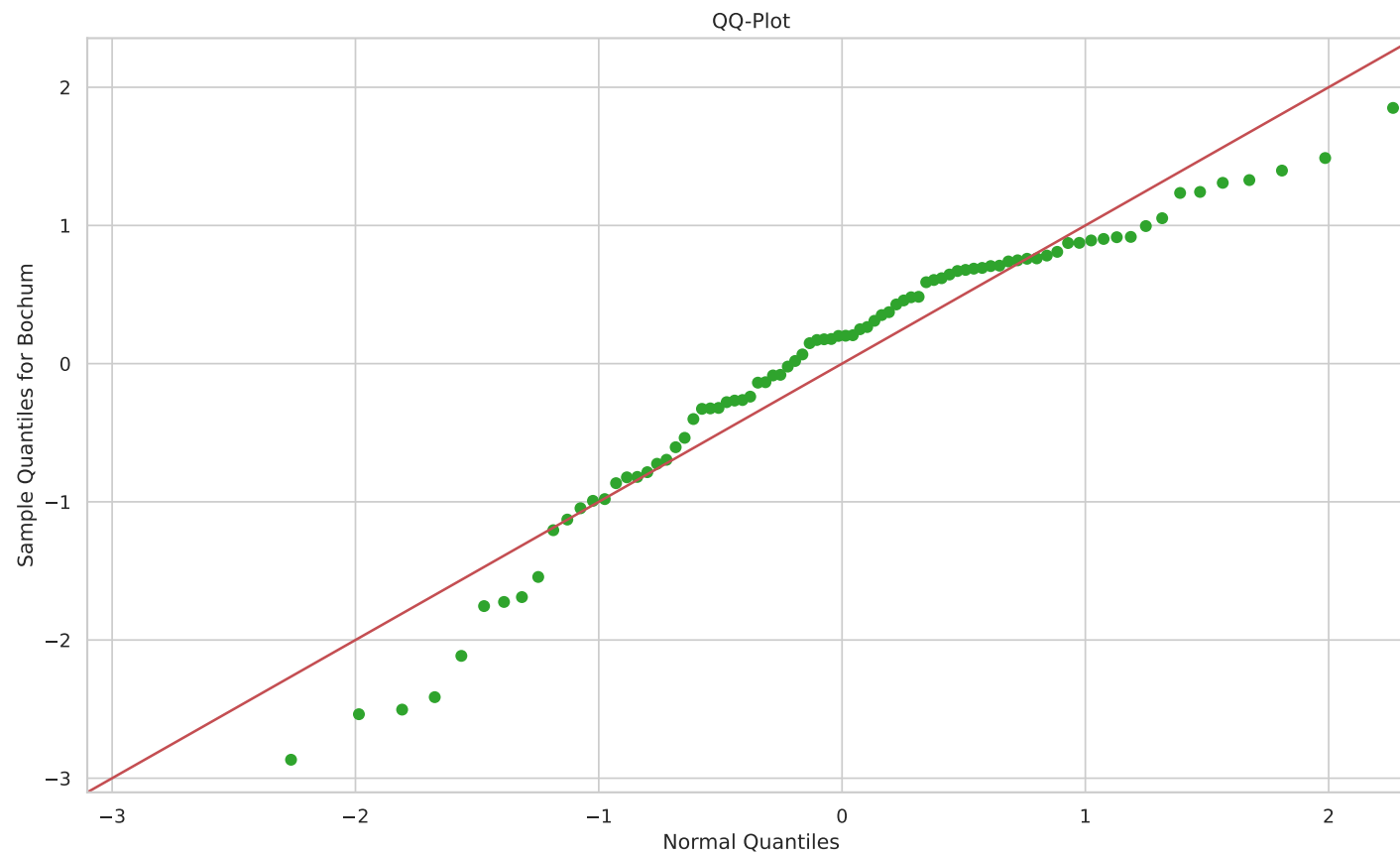
QQ-Plots

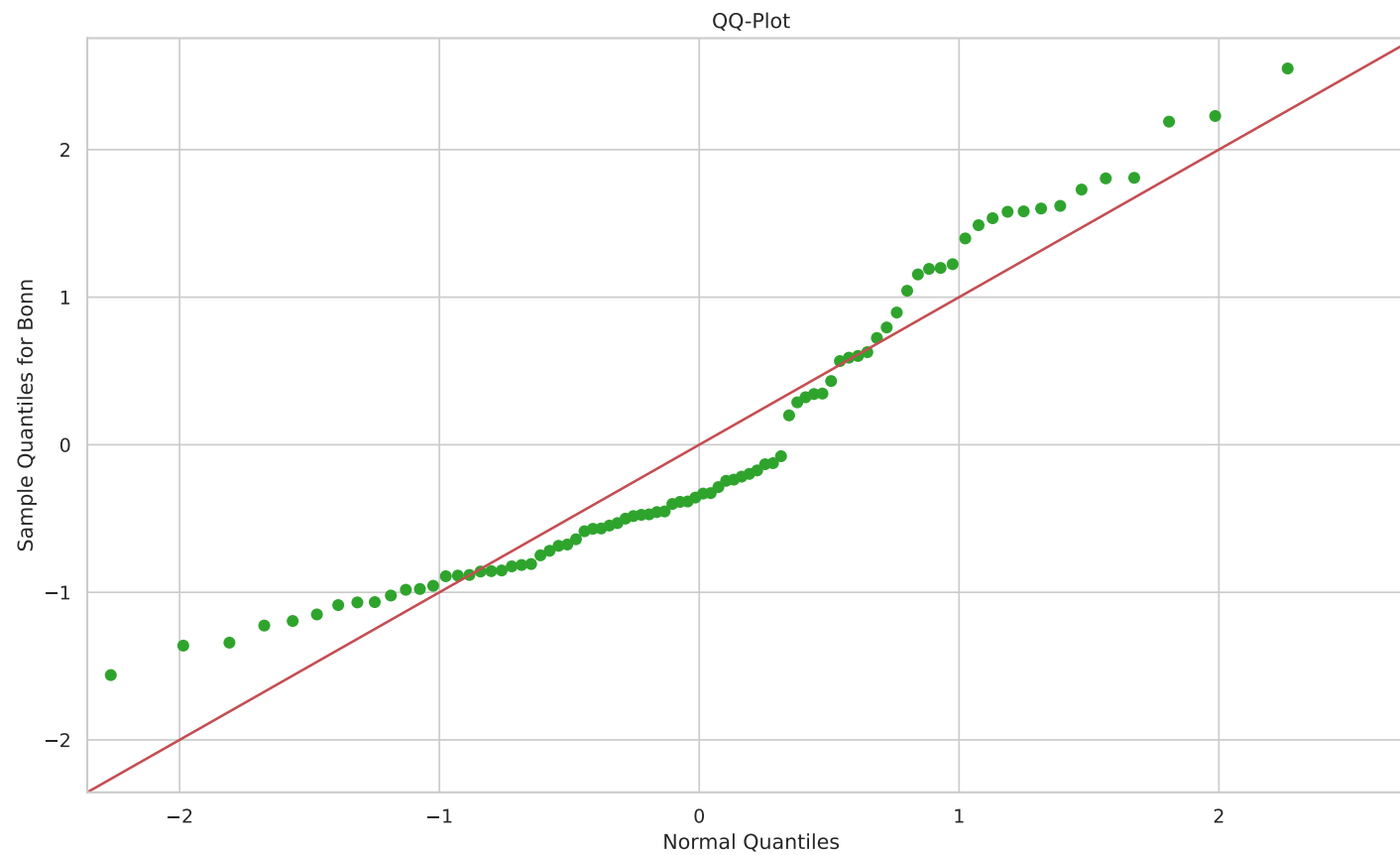
One QQ-Plot per page for each variable. Variables are sorted alphabetically.

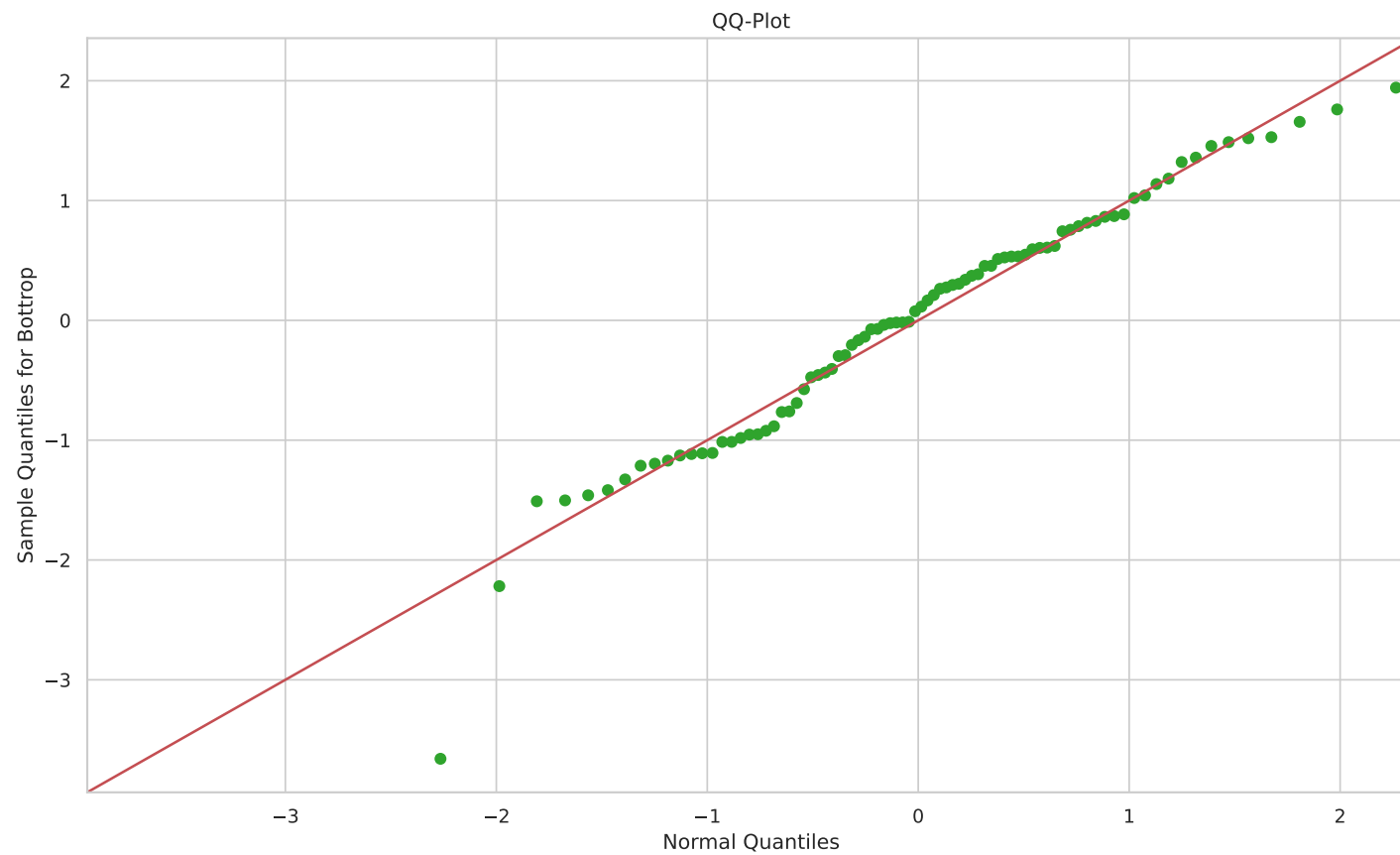
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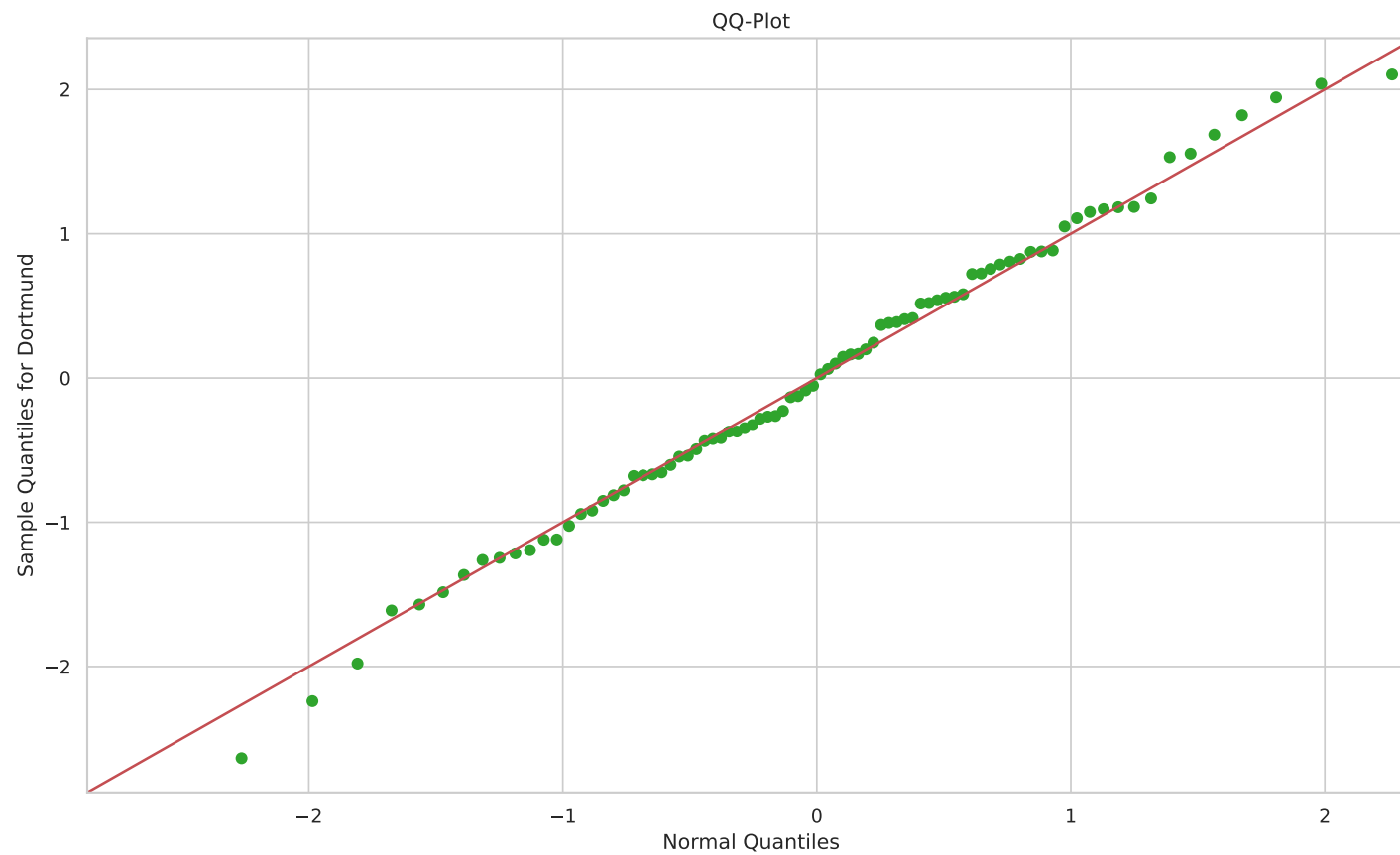


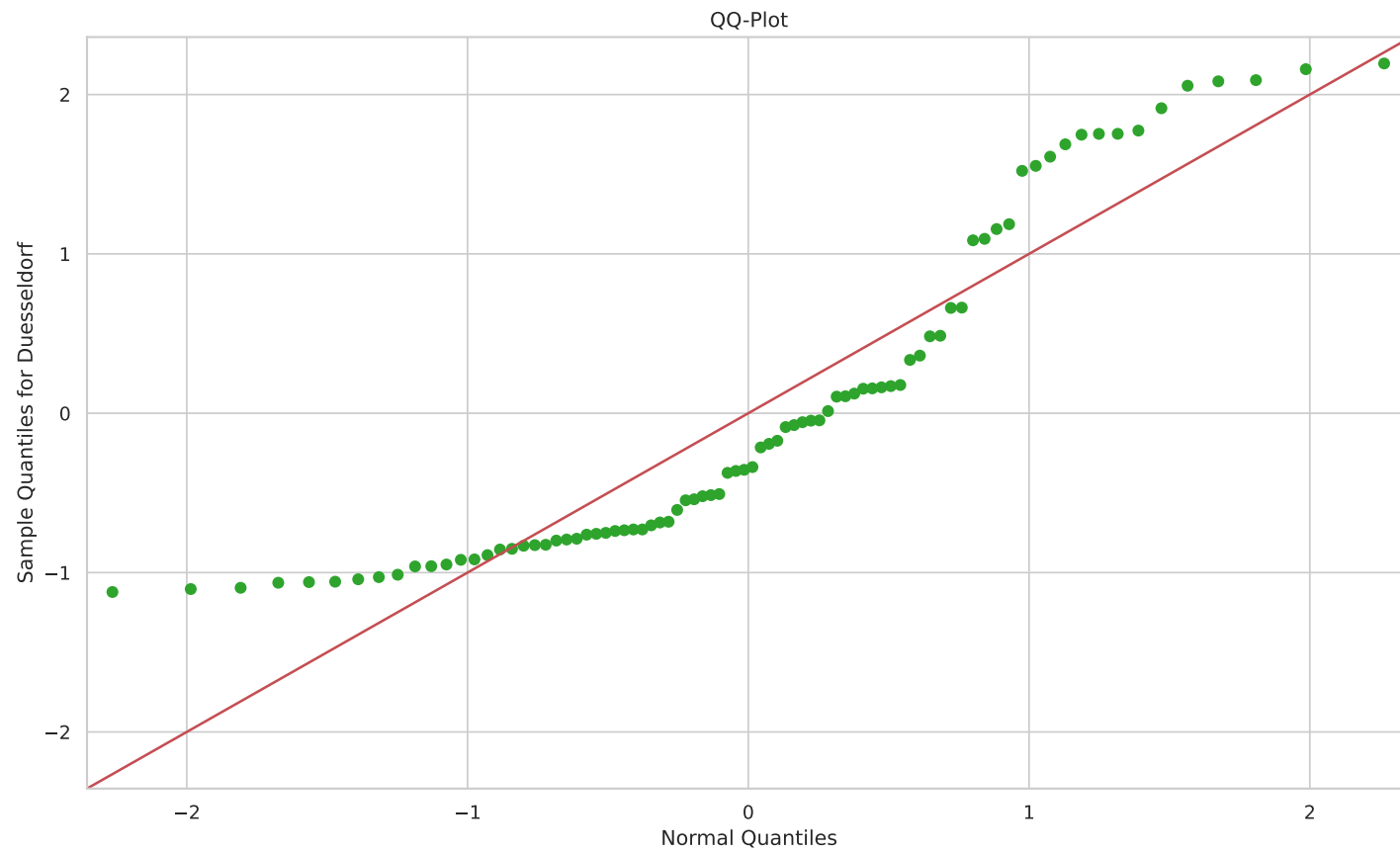


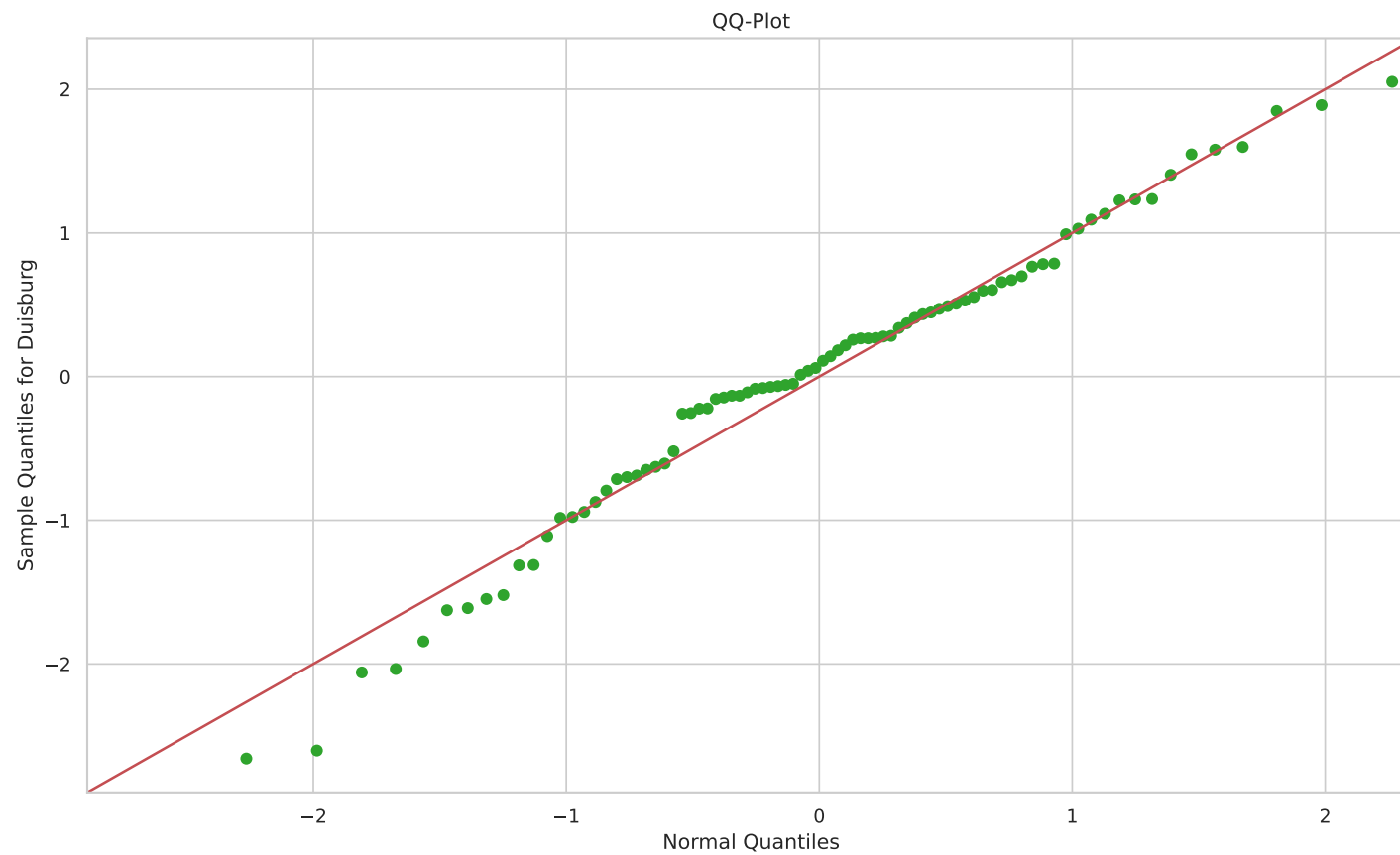


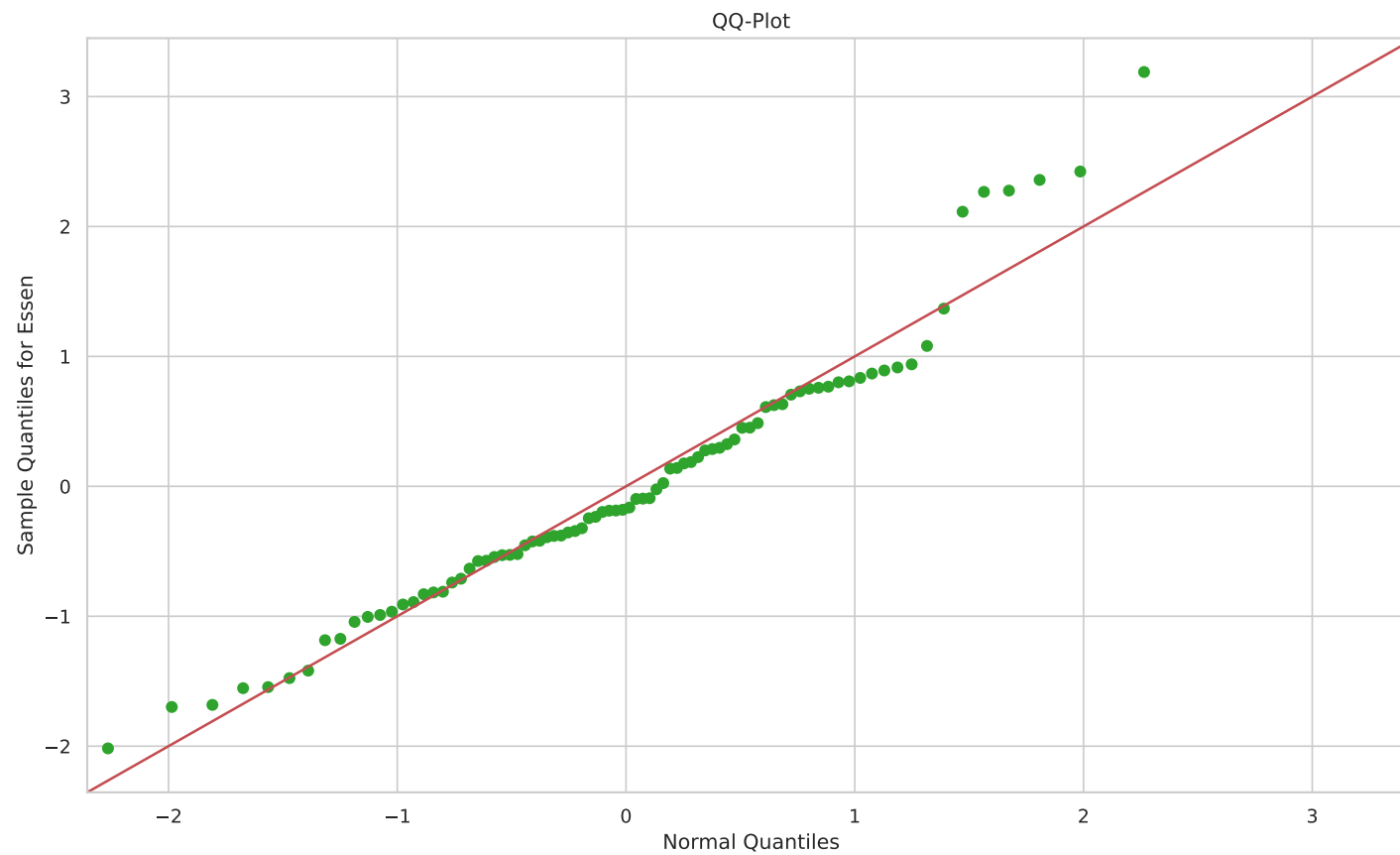


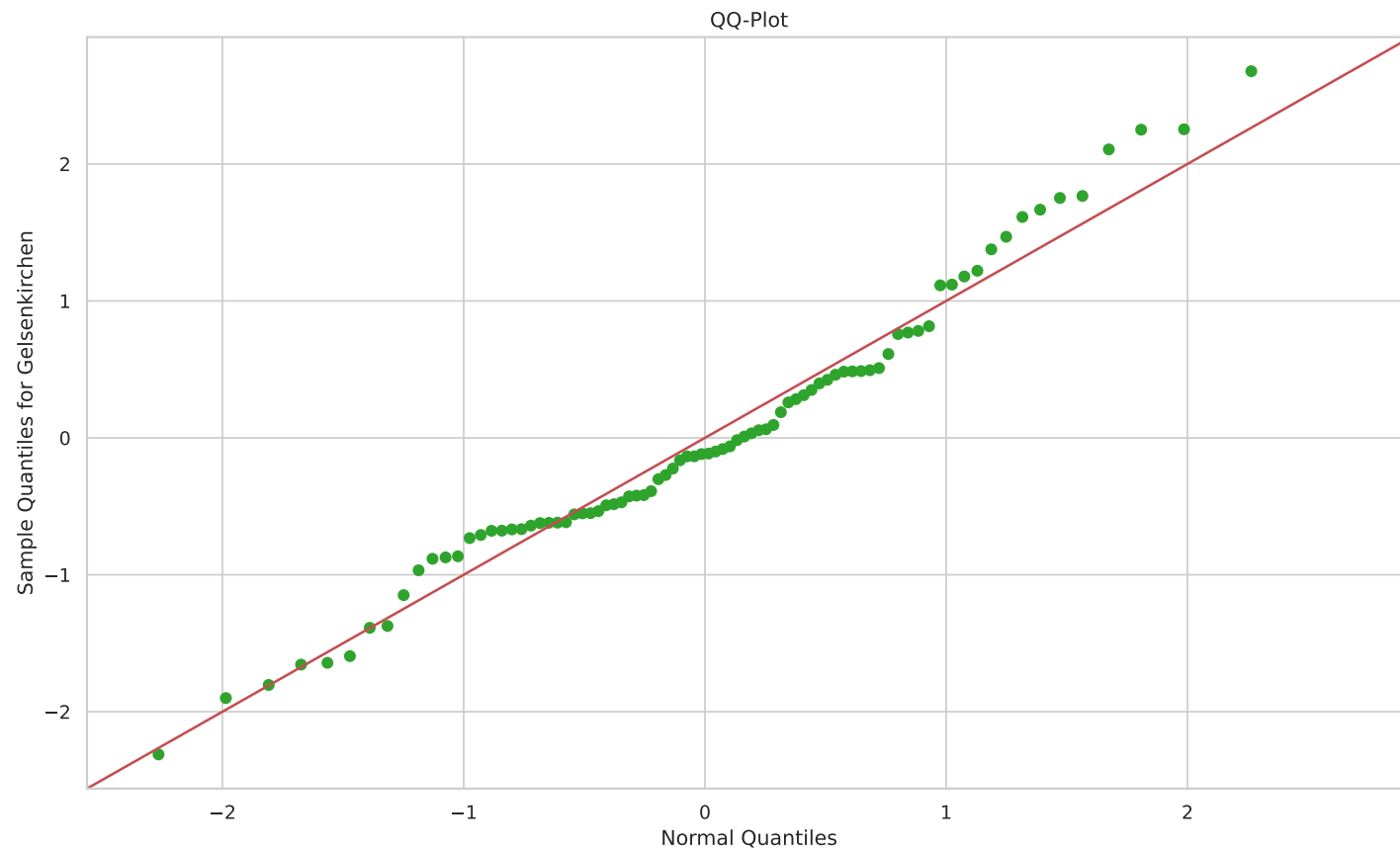


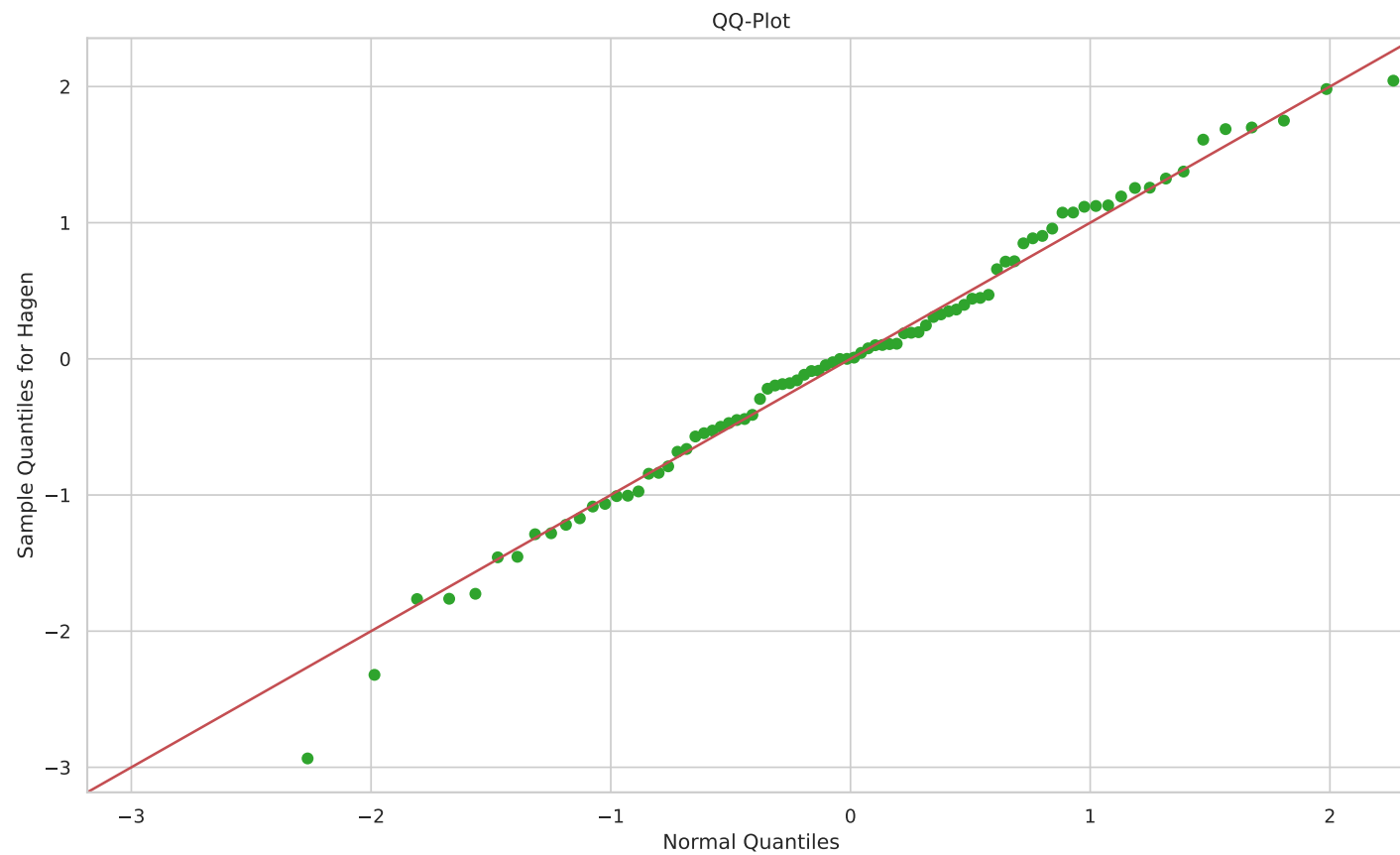


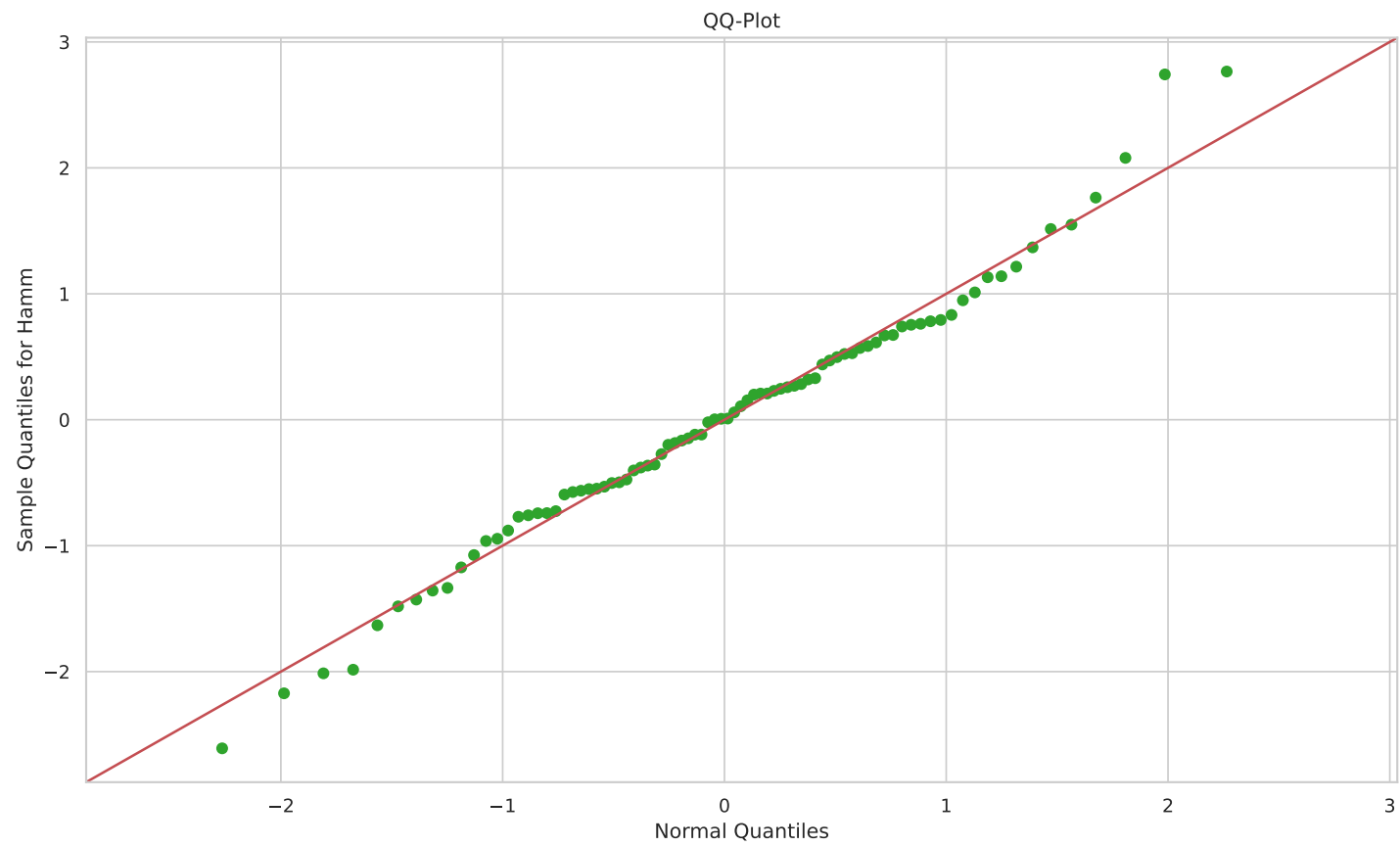


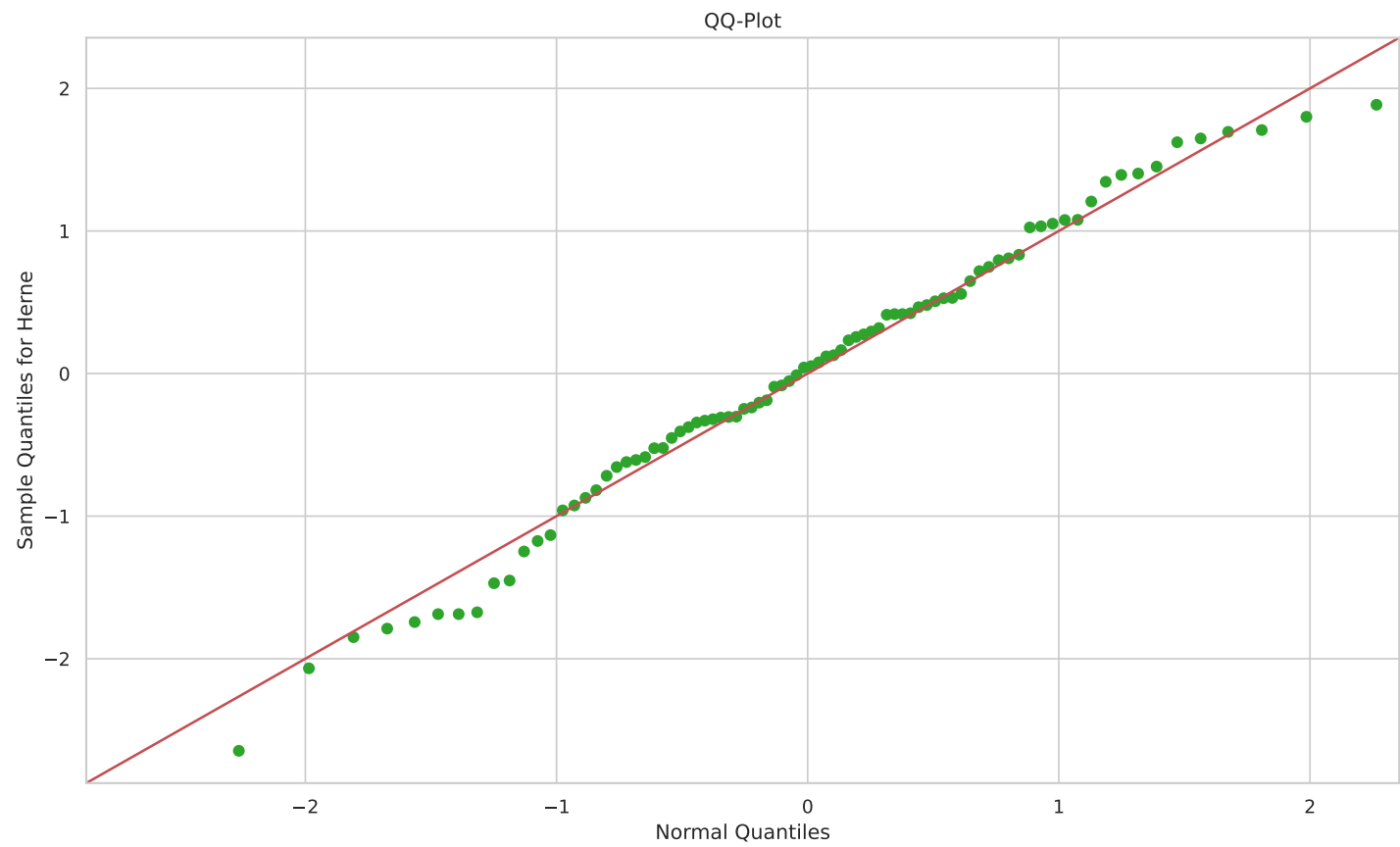


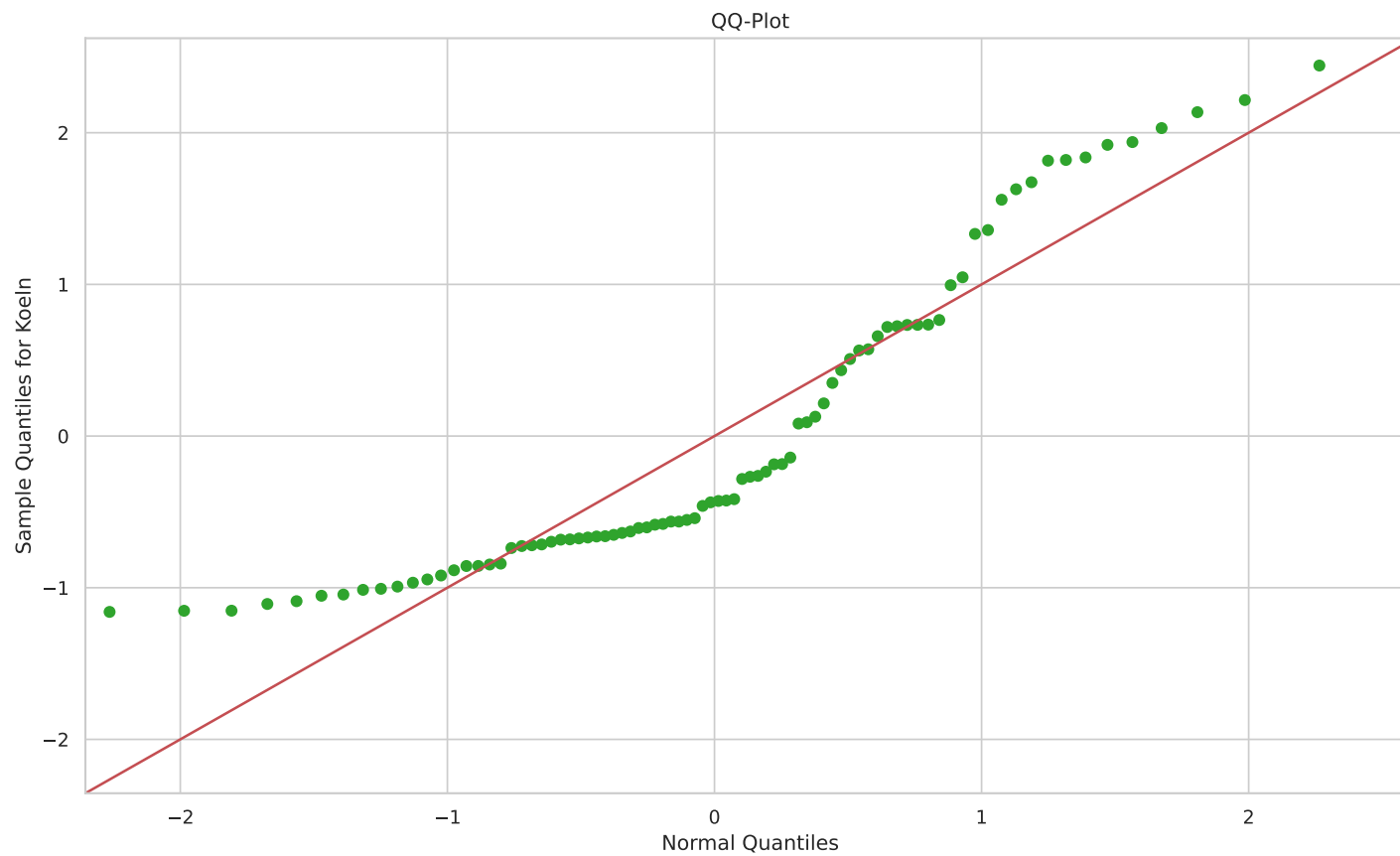


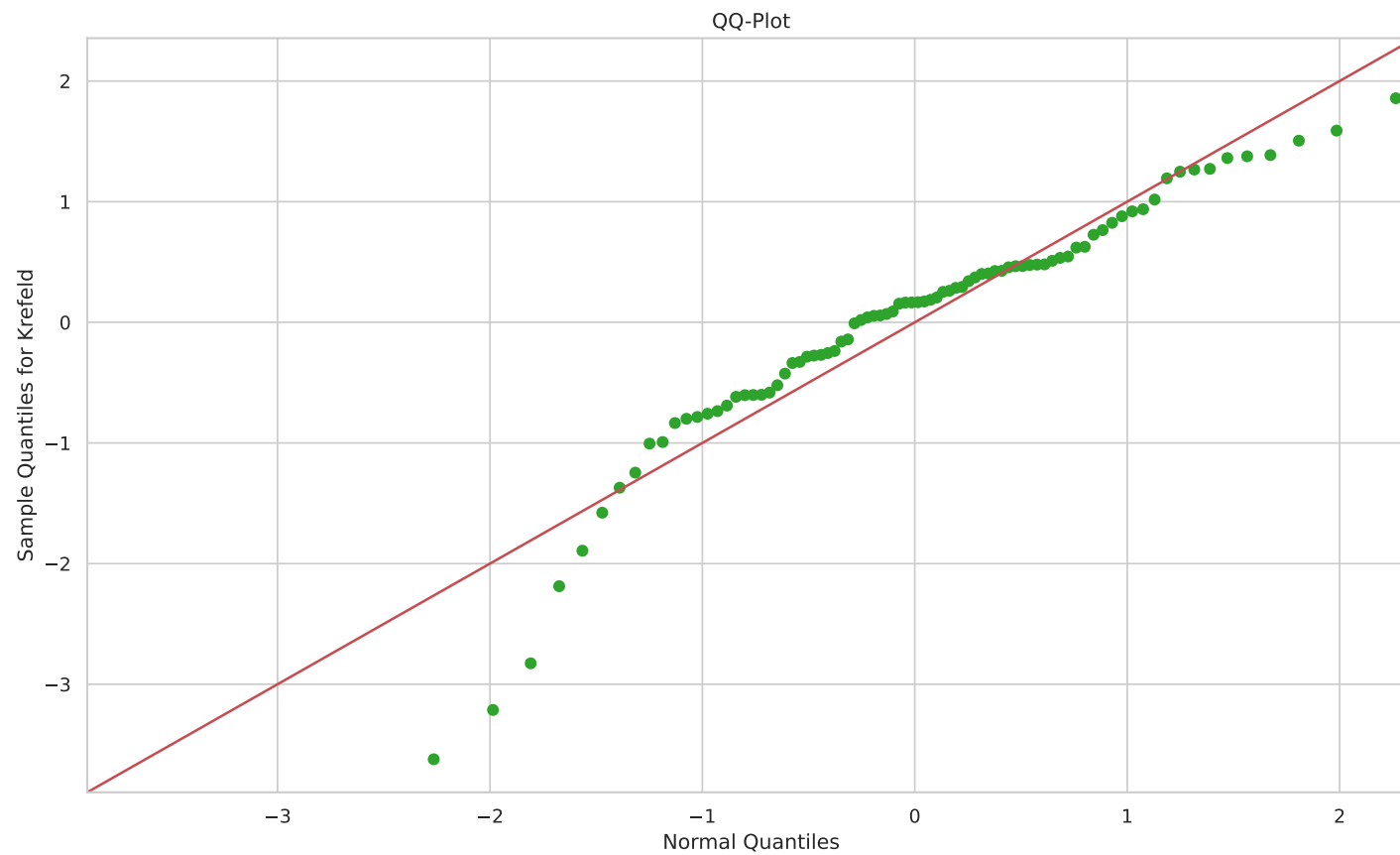


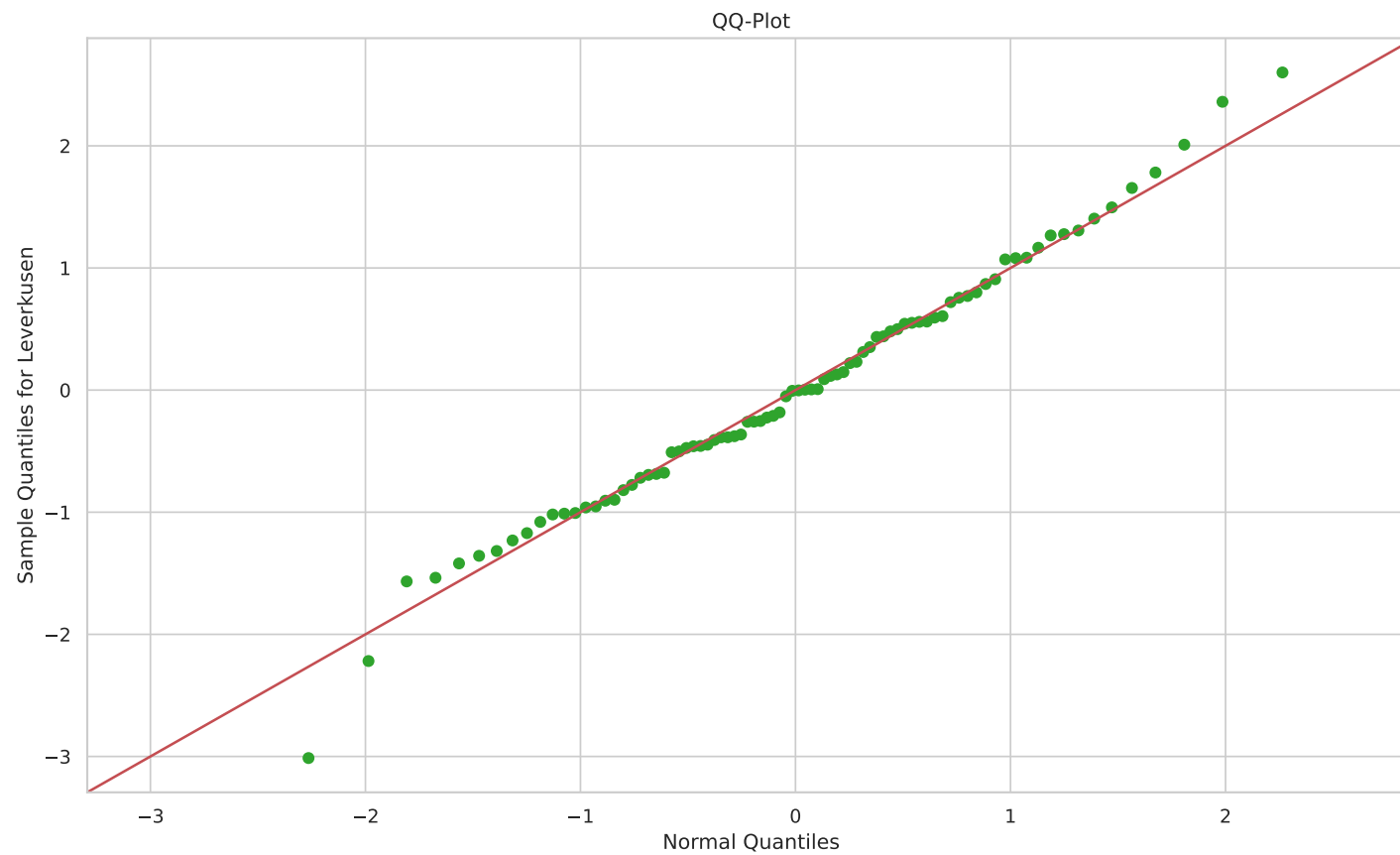


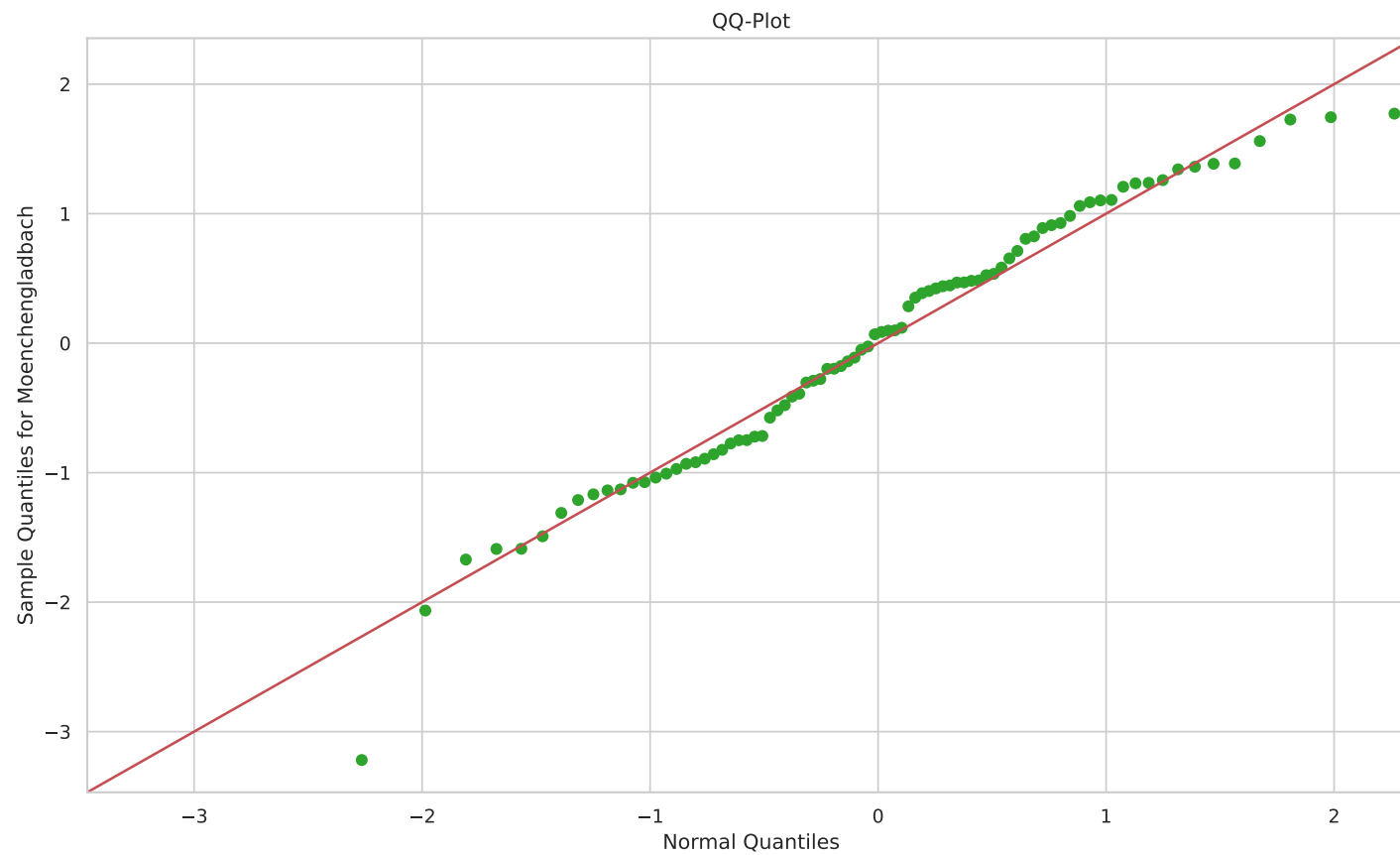


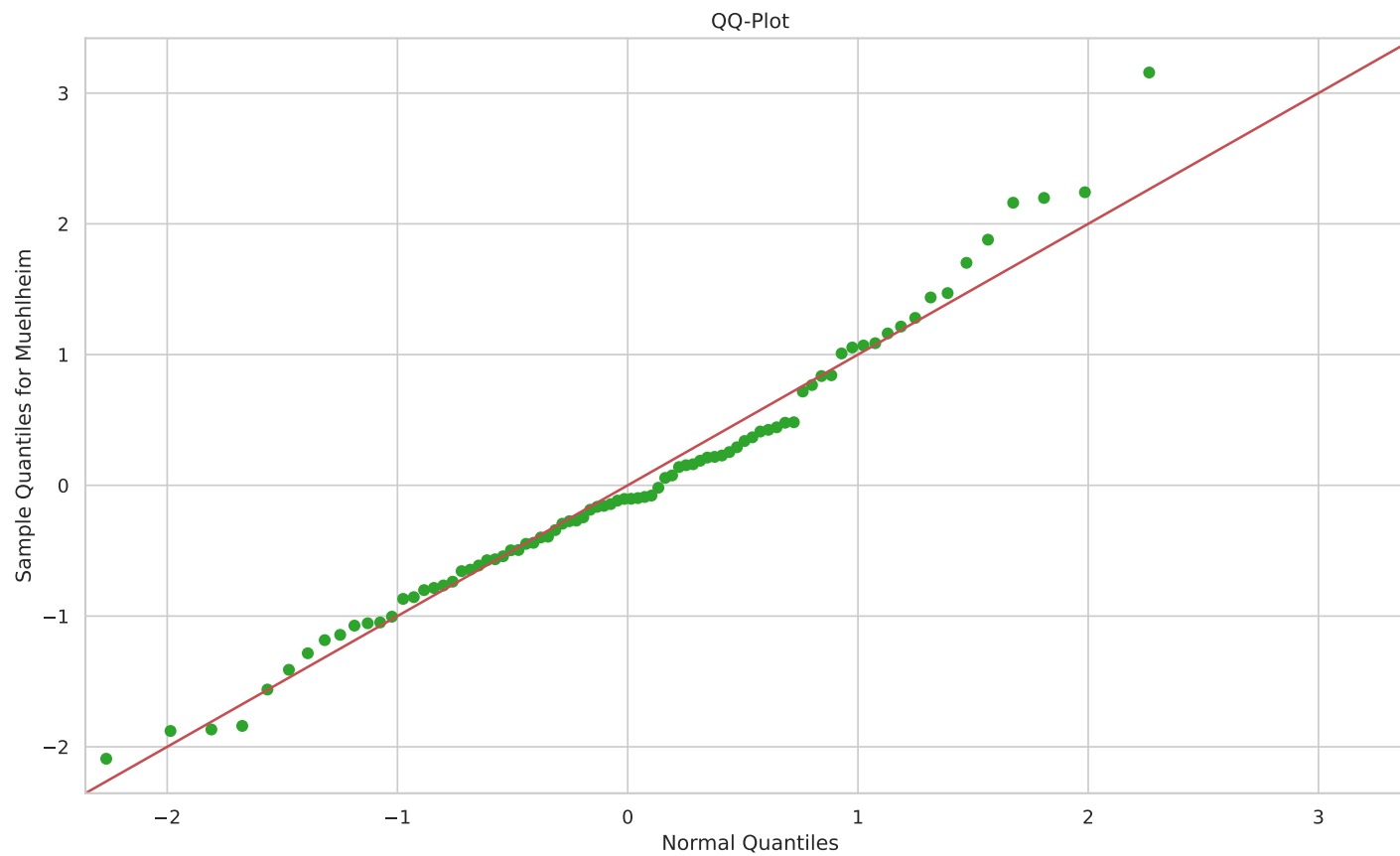


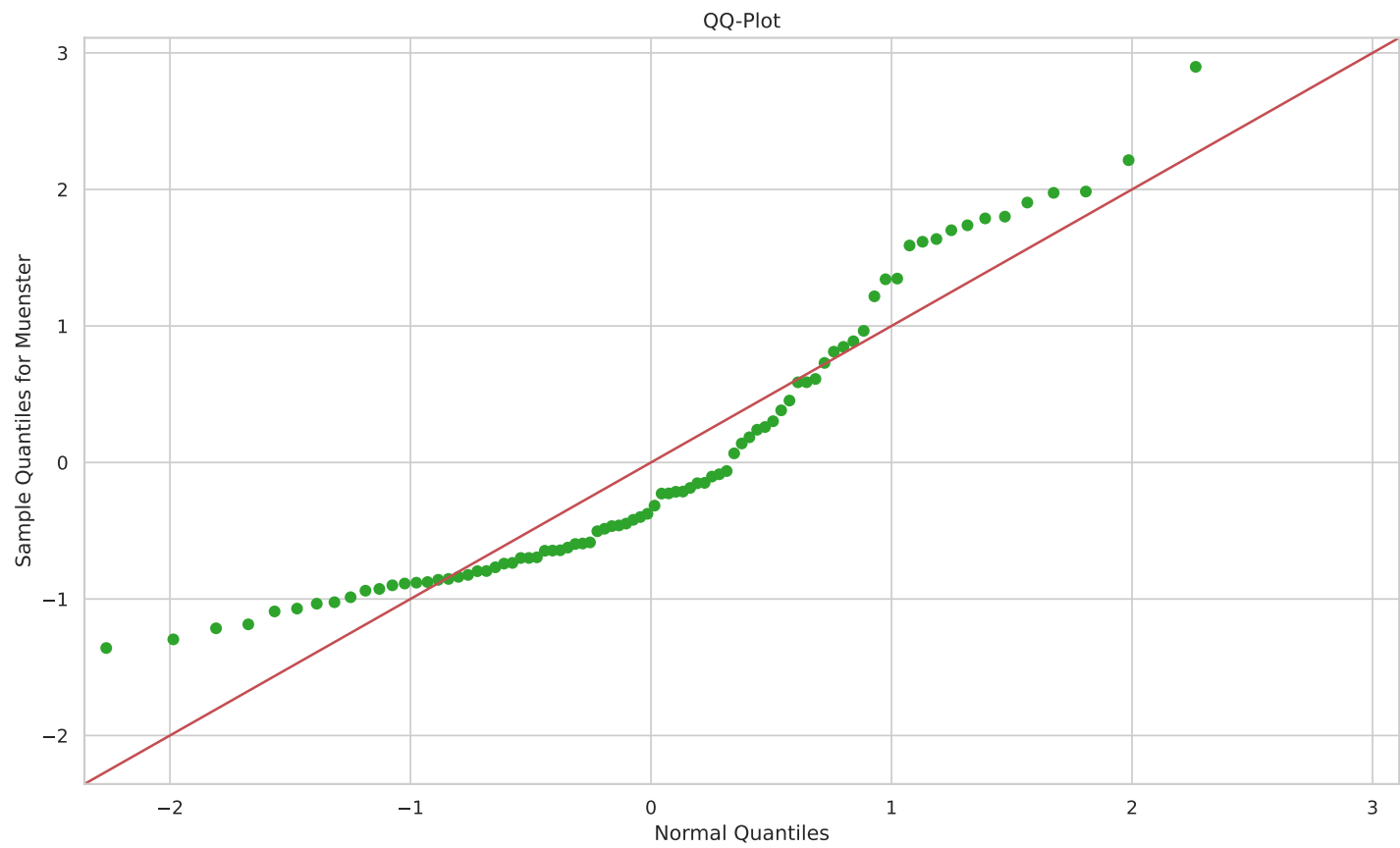


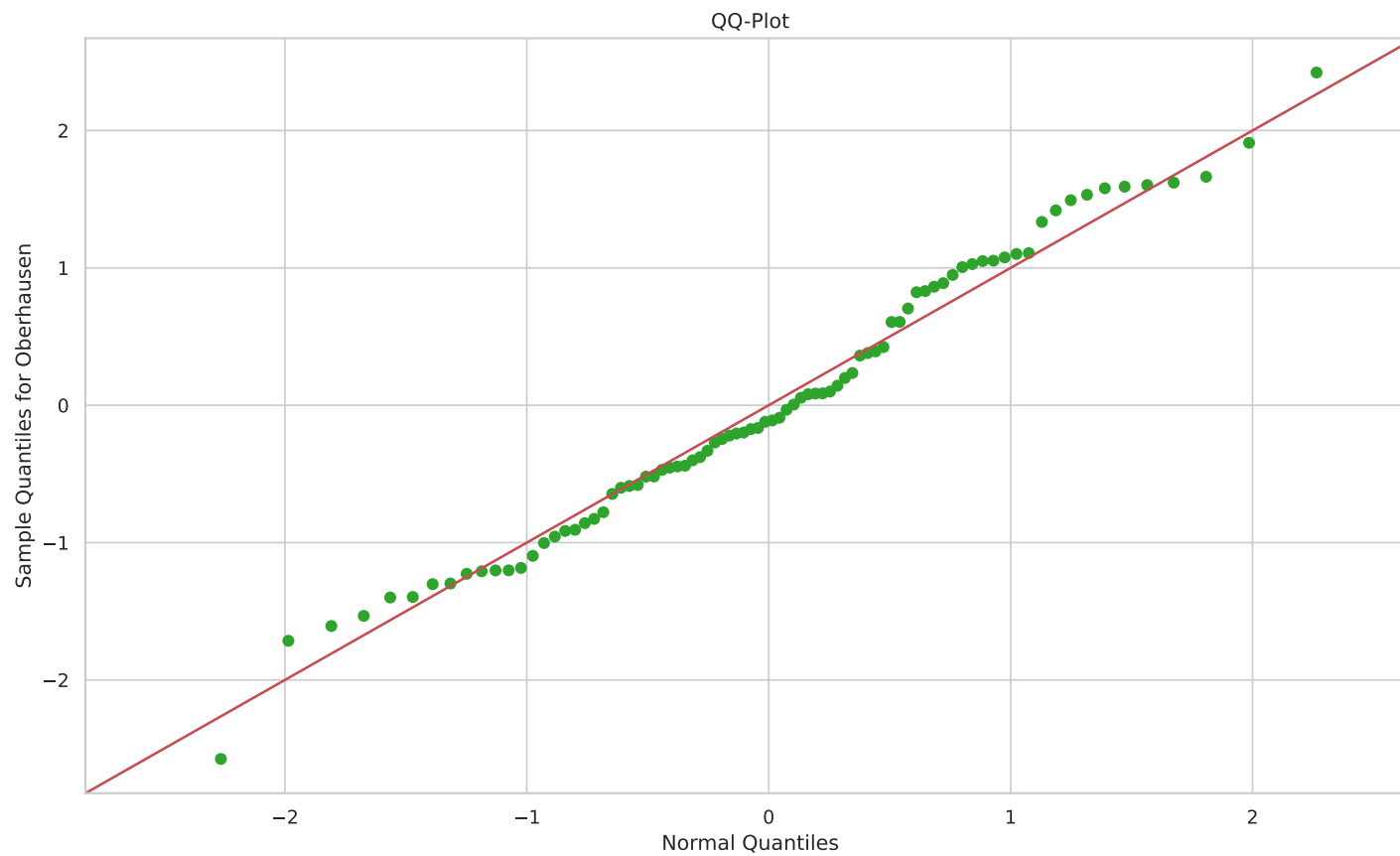


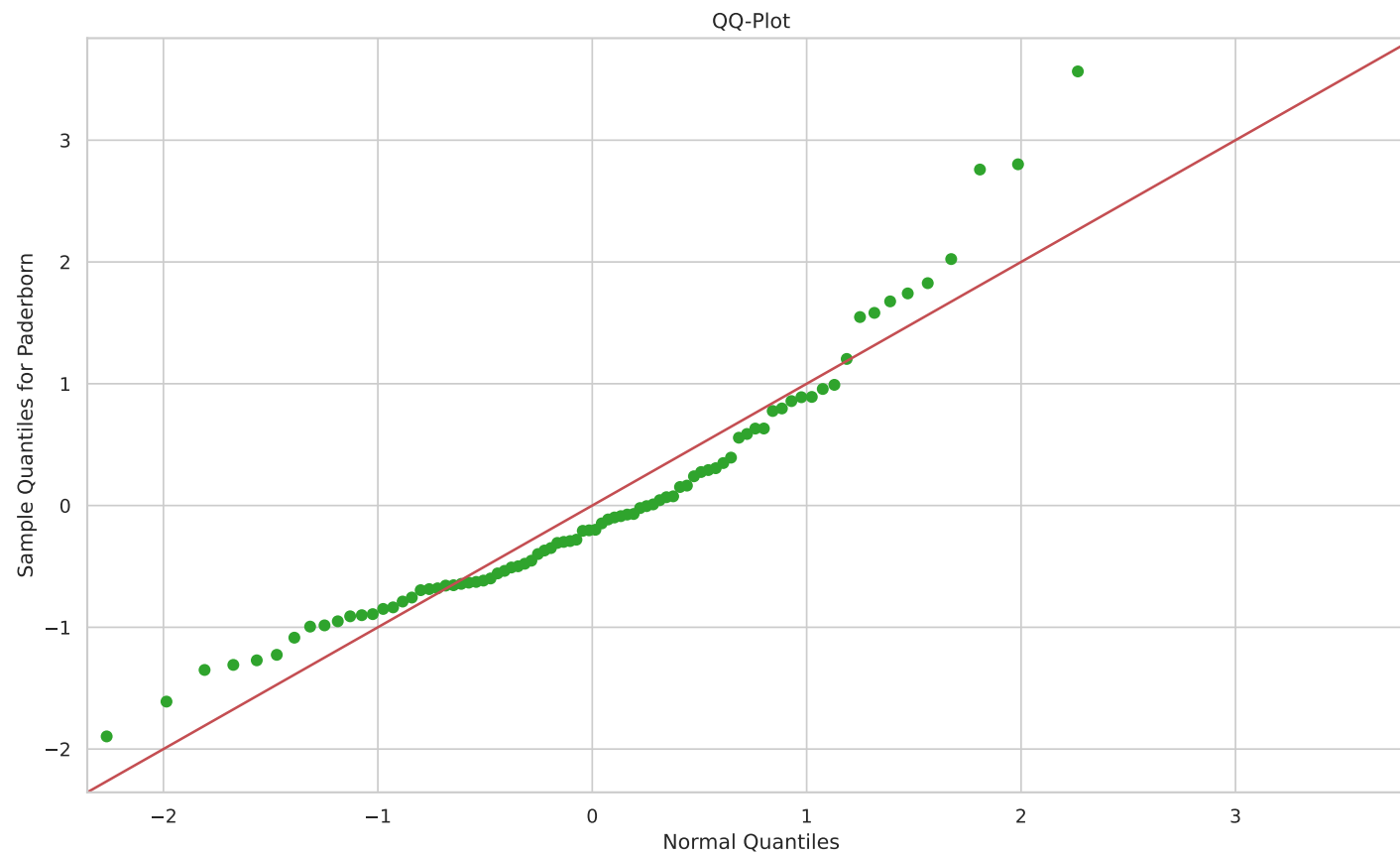


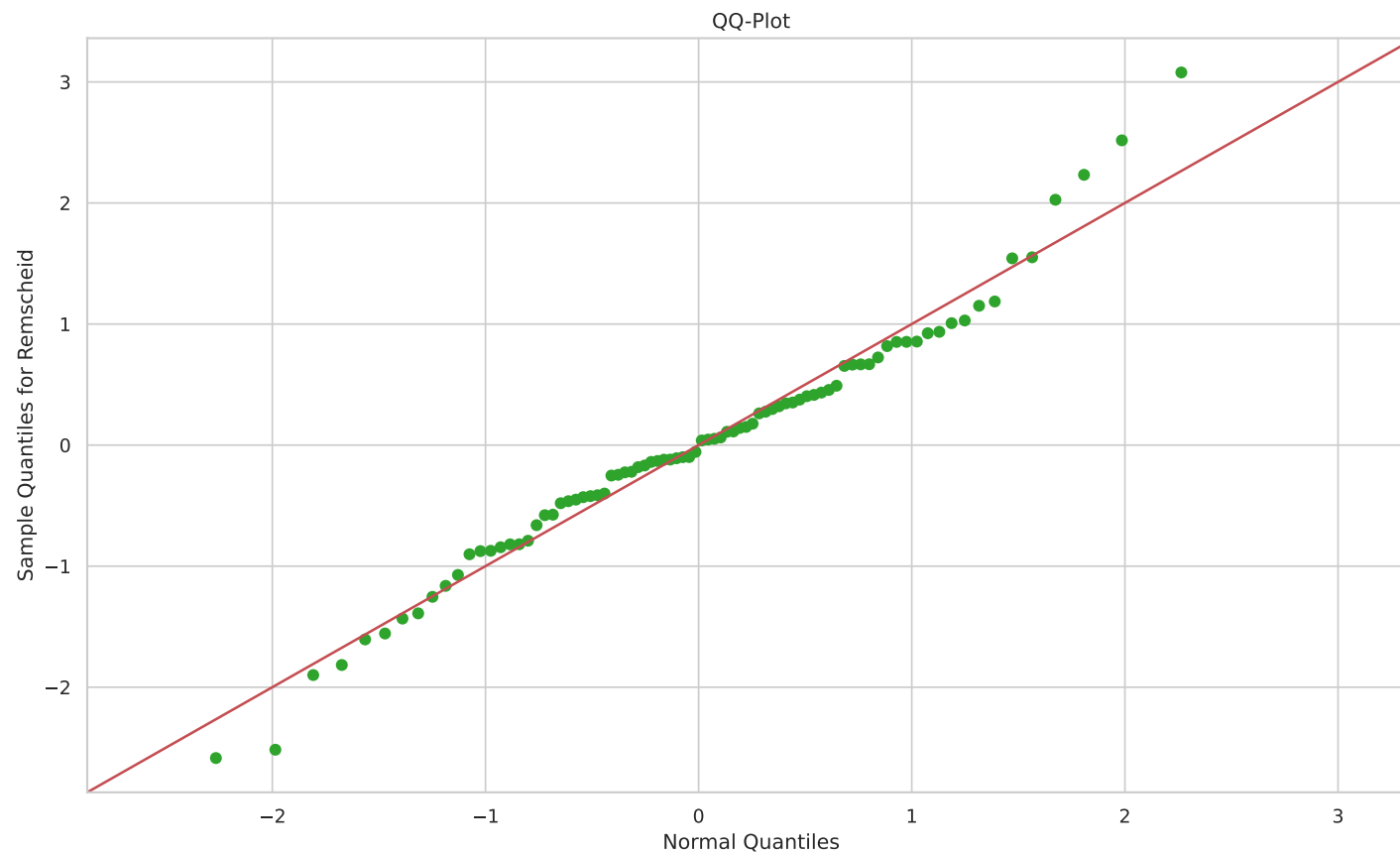


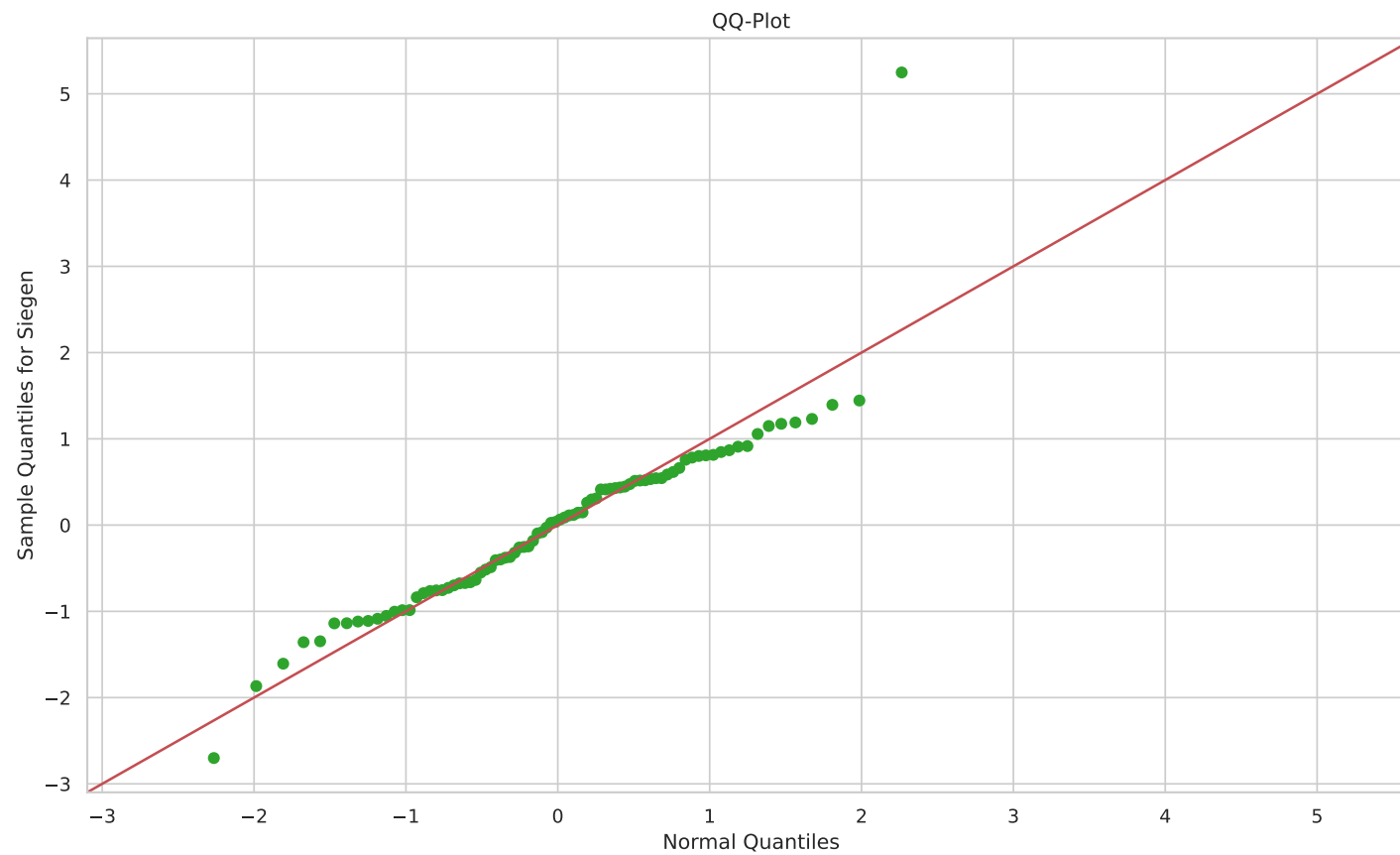


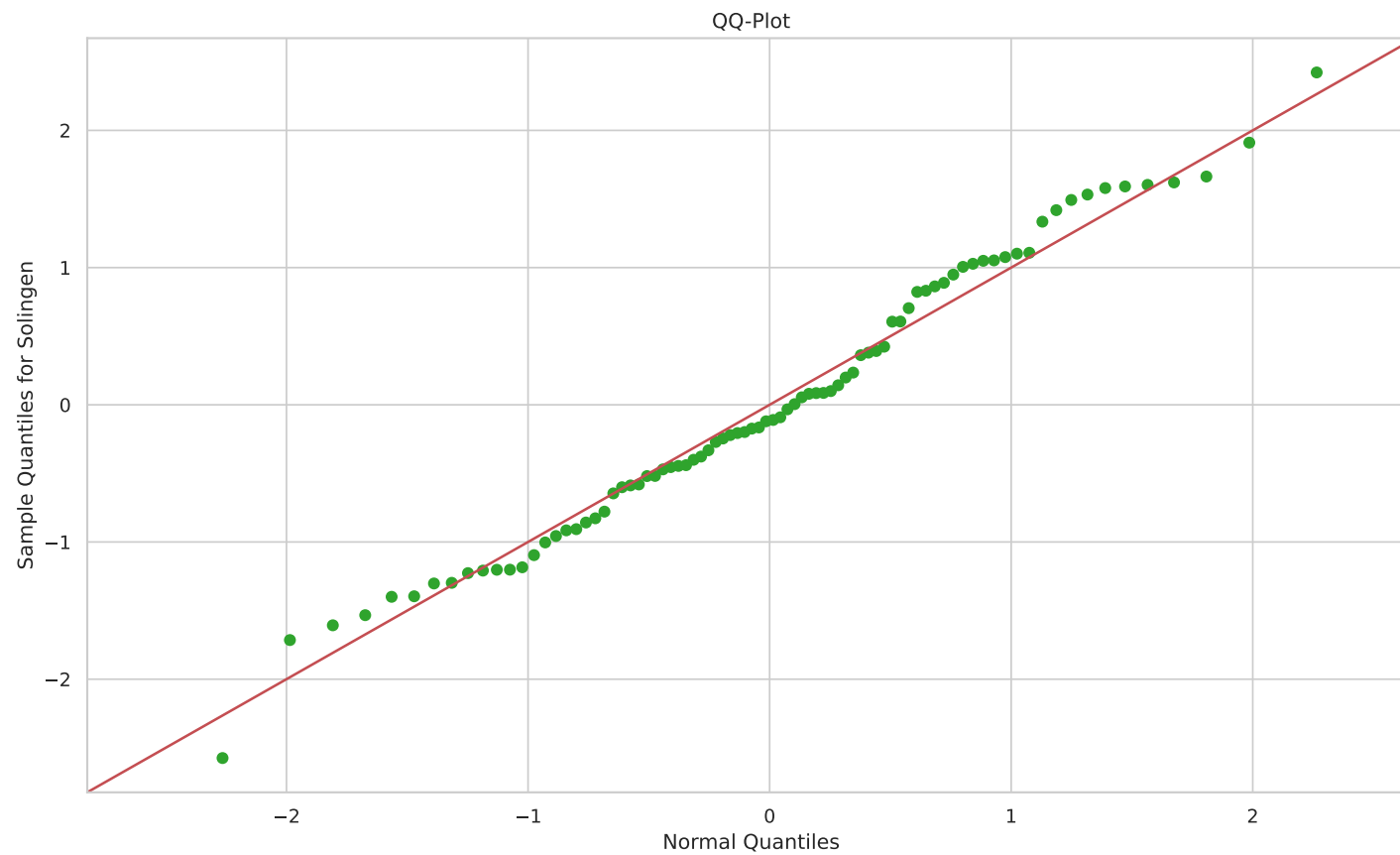


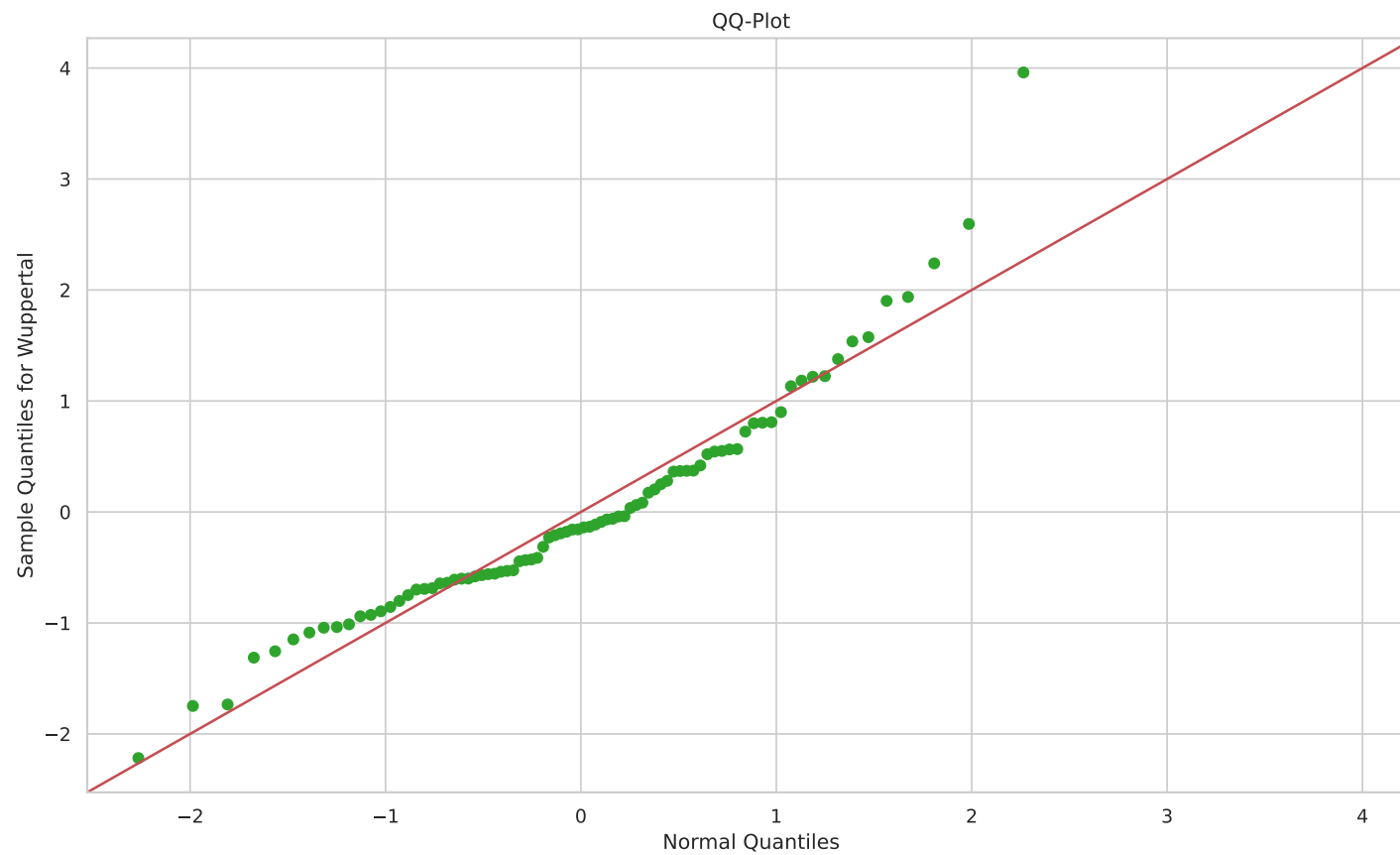












QQ-Plots Summary

Multiple QQ-Plots of variables in one figure. Variables are sorted alphabetically.

