

Wilcoxon Signed Ranks test.

KEEL non-parametric statistical module

May 9, 2011

1 Detailed results for 1R

1.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
Ameva	133.0	687.0	≥ 0.2	1
Bayesian	520.5	299.5	≥ 0.2	0.299777
CACC	126.0	694.0	≥ 0.2	1
CADD	752.5	32.5	1.7398E-7	0.000004
CAIM	92.0	728.0	≥ 0.2	1
Chi2	114.0	706.0	≥ 0.2	1
ChiMerge	113.0	707.0	≥ 0.2	1
ClusterAnalysis	381.0	399.0	≥ 0.2	1
DIBD	175.0	605.0	≥ 0.2	1
Distance	102.0	718.0	≥ 0.2	1
EqualFrequency	176.0	644.0	≥ 0.2	1
EqualWidth	201.0	619.0	≥ 0.2	1
Extended Chi2	243.0	577.0	≥ 0.2	1
FFD	298.0	522.0	≥ 0.2	1
FUSINTER	45.0	775.0	≥ 0.2	1
HDD	334.0	486.0	≥ 0.2	1
HellingerBD	163.0	657.0	≥ 0.2	1
Heter-Disc	544.0	276.0	≥ 0.2	0.366336
ID3	453.0	367.0	≥ 0.2	0.558752
IDD	472.0	348.0	≥ 0.2	1
Khiops	117.0	663.0	≥ 0.2	1
MDLP	107.0	713.0	≥ 0.2	1
Modified Chi2	152.0	668.0	≥ 0.2	1
MODL	147.0	633.0	≥ 0.2	1
MVD	358.0	425.0	≥ 0.2	1
PKID	307.0	473.0	≥ 0.2	1
UCPD	97.0	723.0	≥ 0.2	1
USD	380.0	440.0	≥ 0.2	1
Zeta	122.0	698.0	≥ 0.2	1

Table 1: Results obtained by the Wilcoxon test for algorithm 1R

1.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
Ameva	[-0.22545 , -0.073]	0.90276
Bayesian	[-0.0085 , 0.085]	0.90276
CACC	[-0.1859 , -0.05785]	0.90276
CADD	[0.11325 , 0.23585]	0.90276
CAIM	[-0.2261 , -0.07335]	0.90276
Chi2	[-0.2069 , -0.0569]	0.90276
ChiMerge	[-0.2209 , -0.07345]	0.90276
ClusterAnalysis	[-0.0971 , 0.0581]	0.90276
DIBD	[-0.1172 , -0.03265]	0.90276
Distance	[-0.20405 , -0.0722]	0.90276
EqualFrequency	[-0.20635 , -0.04485]	0.90276
EqualWidth	[-0.1803 , -0.0311]	0.90276
Extended Chi2	[-0.17395 , -0.02555]	0.90276
FFD	[-0.1508 , 0.0041]	0.90276
FUSINTER	[-0.2327 , -0.0872]	0.90276
HDD	[-0.13045 , 0.03305]	0.90276
HellingerBD	[-0.1744 , -0.04355]	0.90276
Heter-Disc	[0.0027 , 0.1672]	0.90276
ID3	[-0.0864 , 0.1129]	0.90276
IDD	[-0.0147 , 0.03815]	0.90276
Khiops	[-0.17685 , -0.05635]	0.90276
MDLP	[-0.2038 , -0.07605]	0.90276
Modified Chi2	[-0.1954 , -0.0522]	0.90276
MODL	[-0.18545 , -0.0368]	0.90276
MVD	[-0.07355 , 0.0435]	0.90276
PKID	[-0.1528 , 0.0125]	0.90276
UCPD	[-0.1932 , -0.07375]	0.90276
USD	[-0.1252 , 0.04915]	0.90276
Zeta	[-0.223 , -0.06455]	0.90276

Table 2: Confidence intervals for algorithm 1R ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.2493 , -0.06195]	0.95024
Bayesian	[-0.0196 , 0.09235]	0.95024
CACC	[-0.20115 , -0.0502]	0.95024
CADD	[0.1052 , 0.24595]	0.95024
CAIM	[-0.2431 , -0.0637]	0.95024
Chi2	[-0.21875 , -0.0478]	0.95024
ChiMerge	[-0.2458 , -0.06315]	0.95024
ClusterAnalysis	[-0.1151 , 0.07085]	0.95024
DIBD	[-0.1314 , -0.02625]	0.95024
Distance	[-0.22015 , -0.06205]	0.95024
EqualFrequency	[-0.21935 , -0.0343]	0.95024
EqualWidth	[-0.19315 , -0.02175]	0.95024
Extended Chi2	[-0.20135 , -0.01305]	0.95024
FFD	[-0.1712 , 0.01035]	0.95024
FUSINTER	[-0.252 , -0.08055]	0.95024
HDD	[-0.16025 , 0.05145]	0.95024
HellingerBD	[-0.1874 , -0.03565]	0.95024
Heter-Disc	[-0.0027 , 0.18665]	0.95024
ID3	[-0.10725 , 0.1191]	0.95024
IDD	[-0.02265 , 0.04475]	0.95024
Khiops	[-0.191 , -0.05]	0.95024
MDLP	[-0.21725 , -0.0654]	0.95024
Modified Chi2	[-0.20785 , -0.04215]	0.95024
MODL	[-0.19925 , -0.0284]	0.95024
MVD	[-0.09025 , 0.061]	0.95024
PKID	[-0.1701 , 0.01765]	0.95024
UCPD	[-0.2083 , -0.06665]	0.95024
USD	[-0.1511 , 0.06115]	0.95024
Zeta	[-0.24545 , -0.0559]	0.95024

Table 3: Confidence intervals for algorithm 1R ($\alpha=0.95$)

2 Detailed results for Ameva

2.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	687.0	133.0	9.446E-5	0.000192
Bayesian	752.0	68.0	4.3E-7	0.000004
CACC	538.0	282.0	≥ 0.2	0.783985
CADD	812.0	8.0	4.548E-11	0
CAIM	402.0	381.0	≥ 0.2	1
Chi2	450.0	370.0	≥ 0.2	0.586185
ChiMerge	436.0	347.0	≥ 0.2	0.939871
ClusterAnalysis	701.0	119.0	3.546E-5	0.000089
DIBD	641.0	179.0	0.0014408	0.00186
Distance	417.5	362.5	≥ 0.2	0.695485
EqualFrequency	550.0	230.0	0.02486	0.025105
EqualWidth	609.0	211.0	0.006658	0.007328
Extended Chi2	544.0	276.0	0.0725	0.070157
FFD	676.5	143.5	1.8741E-4	0.000325
FUSINTER	358.0	462.0	≥ 0.2	1
HDD	614.5	165.5	0.0012816	0.001659
HellingerBD	536.0	284.0	0.09182	0.08907
Heter-Disc	793.0	27.0	2.294E-9	0
ID3	721.0	99.0	7.508E-6	0.000028
IDD	757.5	62.5	2.4059999999999997E-7	0.000003
Khiops	536.0	284.0	0.09182	0.08907
MDLP	407.5	372.5	≥ 0.2	0.801328
Modified Chi2	511.0	269.0	0.09288	0.089974
MODL	510.0	310.0	0.18312	0.176743
MVD	711.0	109.0	1.6716E-5	0.000049
PKID	674.0	146.0	2.192E-4	0.000378
UCPD	472.0	308.0	≥ 0.2	0.249614
USD	705.0	115.0	2.64E-5	0.000071
Zeta	449.5	370.5	≥ 0.2	0.994214

Table 4: Results obtained by the Wilcoxon test for algorithm Ameva

2.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.073 , 0.22545]	0.90276
Bayesian	[0.1204 , 0.2228]	0.90276
CACC	[0 , 0.0324]	0.90276
CADD	[0.2899 , 0.44375]	0.90276
CAIM	[-0.012 , 0.0145]	0.90276
Chi2	[-0.00845 , 0.03195]	0.90276
ChiMerge	[-0.01155 , 0.0217]	0.90276
ClusterAnalysis	[0.0896 , 0.18715]	0.90276
DIBD	[0.02735 , 0.0805]	0.90276
Distance	[-0.01 , 0.0208]	0.90276
EqualFrequency	[0.00925 , 0.05865]	0.90276
EqualWidth	[0.01615 , 0.07525]	0.90276
Extended Chi2	[0.00415 , 0.0926]	0.90276
FFD	[0.0352 , 0.11435]	0.90276
FUSINTER	[-0.028 , 0.01155]	0.90276
HDD	[0.02705 , 0.16275]	0.90276
HellingerBD	[0.00105 , 0.06265]	0.90276
Heter-Disc	[0.1851 , 0.3159]	0.90276
ID3	[0.11345 , 0.20955]	0.90276
IDD	[0.089 , 0.18845]	0.90276
Khiops	[0.00105 , 0.05905]	0.90276
MDLP	[-0.0157 , 0.02515]	0.90276
Modified Chi2	[0.00015 , 0.0539]	0.90276
MODL	[-0.00315 , 0.04335]	0.90276
MVD	[0.06135 , 0.1947]	0.90276
PKID	[0.0427 , 0.1234]	0.90276
UCPD	[-0.0058 , 0.0341]	0.90276
USD	[0.0654 , 0.1463]	0.90276
Zeta	[-0.01155 , 0.02065]	0.90276

Table 5: Confidence intervals for algorithm Ameva ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.06195 , 0.2493]	0.95024
Bayesian	[0.11365 , 0.2297]	0.95024
CACC	[-0.00015 , 0.0387]	0.95024
CADD	[0.2763 , 0.4578]	0.95024
CAIM	[-0.0142 , 0.0176]	0.95024
Chi2	[-0.01045 , 0.0362]	0.95024
ChiMerge	[-0.0149 , 0.024]	0.95024
ClusterAnalysis	[0.07735 , 0.19645]	0.95024
DIBD	[0.0227 , 0.0876]	0.95024
Distance	[-0.01295 , 0.0253]	0.95024
EqualFrequency	[0.00375 , 0.0653]	0.95024
EqualWidth	[0.01235 , 0.08535]	0.95024
Extended Chi2	[-0.00175 , 0.101]	0.95024
FFD	[0.02755 , 0.1203]	0.95024
FUSINTER	[-0.03275 , 0.0158]	0.95024
HDD	[0.0213 , 0.17095]	0.95024
HellingerBD	[-0.0045 , 0.0707]	0.95024
Heter-Disc	[0.17785 , 0.32695]	0.95024
ID3	[0.1024 , 0.2177]	0.95024
IDD	[0.08085 , 0.20085]	0.95024
Khiops	[-0.00375 , 0.06495]	0.95024
MDLP	[-0.01925 , 0.03055]	0.95024
Modified Chi2	[-0.00365 , 0.05855]	0.95024
MODL	[-0.0056 , 0.05305]	0.95024
MVD	[0.04385 , 0.2041]	0.95024
PKID	[0.0354 , 0.13085]	0.95024
UCPD	[-0.00985 , 0.03765]	0.95024
USD	[0.05905 , 0.1558]	0.95024
Zeta	[-0.01555 , 0.027]	0.95024

Table 6: Confidence intervals for algorithm Ameva ($\alpha=0.95$)

3 Detailed results for Bayesian

3.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	299.5	520.5	≥ 0.2	1
Ameva	68.0	752.0	≥ 0.2	1
CACC	115.0	705.0	≥ 0.2	1
CADD	726.5	93.5	1.8183E-5	0.000055
CAIM	40.0	780.0	≥ 0.2	1
Chi2	46.0	734.0	≥ 0.2	1
ChiMerge	23.0	797.0	≥ 0.2	1
ClusterAnalysis	348.0	432.0	≥ 0.2	1
DIBD	145.0	635.0	≥ 0.2	1
Distance	91.0	729.0	≥ 0.2	1
EqualFrequency	112.0	708.0	≥ 0.2	1
EqualWidth	143.0	637.0	≥ 0.2	1
Extended Chi2	146.0	674.0	≥ 0.2	1
FFD	189.0	591.0	≥ 0.2	1
FUSINTER	13.0	807.0	≥ 0.2	1
HDD	308.5	511.5	≥ 0.2	1
HellingerBD	117.0	703.0	≥ 0.2	1
Heter-Disc	565.5	254.5	0.0942	0.090535
ID3	437.0	348.0	≥ 0.2	1
IDD	268.5	551.5	≥ 0.2	1
Khiops	101.0	719.0	≥ 0.2	1
MDLP	95.0	725.0	≥ 0.2	1
Modified Chi2	65.0	755.0	≥ 0.2	1
MODL	76.0	744.0	≥ 0.2	1
MVD	311.5	508.5	≥ 0.2	1
PKID	208.0	612.0	≥ 0.2	1
UCPD	78.0	742.0	≥ 0.2	1
USD	203.5	579.5	≥ 0.2	1
Zeta	31.0	789.0	≥ 0.2	1

Table 7: Results obtained by the Wilcoxon test for algorithm Bayesian

3.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.085 , 0.0085]	0.90276
Ameva	[-0.2228 , -0.1204]	0.90276
CACC	[-0.19115 , -0.0845]	0.90276
CADD	[0.11805 , 0.27185]	0.90276
CAIM	[-0.2166 , -0.1159]	0.90276
Chi2	[-0.1988 , -0.102]	0.90276
ChiMerge	[-0.212 , -0.1229]	0.90276
ClusterAnalysis	[-0.07085 , 0.02185]	0.90276
DIBD	[-0.15105 , -0.0678]	0.90276
Distance	[-0.2112 , -0.10145]	0.90276
EqualFrequency	[-0.1877 , -0.0812]	0.90276
EqualWidth	[-0.16895 , -0.06845]	0.90276
Extended Chi2	[-0.1589 , -0.04325]	0.90276
FFD	[-0.1325 , -0.03115]	0.90276
FUSINTER	[-0.23145 , -0.11935]	0.90276
HDD	[-0.10505 , 0.00475]	0.90276
HellingerBD	[-0.18155 , -0.07025]	0.90276
Heter-Disc	[0.02 , 0.16915]	0.90276
ID3	[-0.01355 , 0.03105]	0.90276
IDD	[-0.0716 , -0.0046]	0.90276
Khiops	[-0.1828 , -0.0732]	0.90276
MDLP	[-0.2127 , -0.1001]	0.90276
Modified Chi2	[-0.18915 , -0.0787]	0.90276
MODL	[-0.19155 , -0.08005]	0.90276
MVD	[-0.0698 , 0.0095]	0.90276
PKID	[-0.12695 , -0.029]	0.90276
UCPD	[-0.20405 , -0.1086]	0.90276
USD	[-0.0716 , -0.01035]	0.90276
Zeta	[-0.20975 , -0.10715]	0.90276

Table 8: Confidence intervals for algorithm Bayesian ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.09235 , 0.0196]	0.95024
Ameva	[-0.2297 , -0.11365]	0.95024
CACC	[-0.2003 , -0.0776]	0.95024
CADD	[0.10125 , 0.2889]	0.95024
CAIM	[-0.2229 , -0.1068]	0.95024
Chi2	[-0.20745 , -0.0906]	0.95024
ChiMerge	[-0.2175 , -0.1139]	0.95024
ClusterAnalysis	[-0.08295 , 0.0276]	0.95024
DIBD	[-0.16235 , -0.0569]	0.95024
Distance	[-0.21975 , -0.09235]	0.95024
EqualFrequency	[-0.1978 , -0.07075]	0.95024
EqualWidth	[-0.18 , -0.05875]	0.95024
Extended Chi2	[-0.1679 , -0.03425]	0.95024
FFD	[-0.1423 , -0.02395]	0.95024
FUSINTER	[-0.23725 , -0.10855]	0.95024
HDD	[-0.12295 , 0.0109]	0.95024
HellingerBD	[-0.19025 , -0.0606]	0.95024
Heter-Disc	[0.00455 , 0.18365]	0.95024
ID3	[-0.02055 , 0.03525]	0.95024
IDD	[-0.0769 , 0.00065]	0.95024
Khiops	[-0.1908 , -0.06365]	0.95024
MDLP	[-0.22205 , -0.08935]	0.95024
Modified Chi2	[-0.19905 , -0.0692]	0.95024
MODL	[-0.20015 , -0.07185]	0.95024
MVD	[-0.08015 , 0.01685]	0.95024
PKID	[-0.1364 , -0.021]	0.95024
UCPD	[-0.21255 , -0.0964]	0.95024
USD	[-0.0767 , -0.0059]	0.95024
Zeta	[-0.2163 , -0.09835]	0.95024

Table 9: Confidence intervals for algorithm Bayesian ($\alpha=0.95$)

4 Detailed results for CACC

4.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	694.0	126.0	5.846E-5	0.000131
Ameva	282.0	538.0	≥ 0.2	1
Bayesian	705.0	115.0	2.64E-5	0.000071
CADD	792.0	28.0	2.698E-9	0
CAIM	350.5	469.5	≥ 0.2	1
Chi2	371.0	449.0	≥ 0.2	1
ChiMerge	323.5	496.5	≥ 0.2	1
ClusterAnalysis	650.5	169.5	8.673999999999999E-4	0.001175
DIBD	542.0	278.0	0.077	0.074917
Distance	308.5	511.5	≥ 0.2	1
EqualFrequency	431.0	349.0	≥ 0.2	0.5625
EqualWidth	531.0	289.0	0.10582	0.102444
Extended Chi2	469.5	350.5	≥ 0.2	0.419185
FFD	604.0	216.0	0.008264	0.00894
FUSINTER	222.0	558.0	≥ 0.2	1
HDD	546.5	273.5	0.16346	0.15737
HellingerBD	515.0	305.0	0.16178	0.156174
Heter-Disc	779.5	40.5	6.782999999999999E-8	0.000002
ID3	671.0	149.0	2.64E-4	0.00044
IDD	705.0	115.0	2.64E-5	0.000071
Khiops	472.0	348.0	≥ 0.2	0.400863
MDLP	281.0	499.0	≥ 0.2	1
Modified Chi2	428.5	351.5	≥ 0.2	0.585619
MODL	463.0	357.0	≥ 0.2	0.472074
MVD	606.0	214.0	0.02246	0.022549
PKID	586.0	194.0	0.005436	0.006015
UCPD	398.0	422.0	≥ 0.2	1
USD	624.0	196.0	0.003358	0.003937
Zeta	333.0	447.0	≥ 0.2	1

Table 10: Results obtained by the Wilcoxon test for algorithm CACC

4.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.05785 , 0.1859]	0.90276
Ameva	[-0.0324 , 0]	0.90276
Bayesian	[0.0845 , 0.19115]	0.90276
CADD	[0.25905 , 0.4161]	0.90276
CAIM	[-0.02405 , 0.00695]	0.90276
Chi2	[-0.01725 , 0.0203]	0.90276
ChiMerge	[-0.03605 , 0.0062]	0.90276
ClusterAnalysis	[0.05245 , 0.16]	0.90276
DIBD	[0.0017 , 0.07255]	0.90276
Distance	[-0.02445 , 0.0018]	0.90276
EqualFrequency	[-0.02105 , 0.03785]	0.90276
EqualWidth	[-0.00025 , 0.0548]	0.90276
Extended Chi2	[-0.014 , 0.0642]	0.90276
FFD	[0.02085 , 0.08895]	0.90276
FUSINTER	[-0.0433 , -0.00755]	0.90276
HDD	[0.0025 , 0.14265]	0.90276
HellingerBD	[-0.00455 , 0.0439]	0.90276
Heter-Disc	[0.1473 , 0.2626]	0.90276
ID3	[0.0714 , 0.1791]	0.90276
IDD	[0.07785 , 0.15915]	0.90276
Khiops	[-0.0097 , 0.0351]	0.90276
MDLP	[-0.02505 , 0.00195]	0.90276
Modified Chi2	[-0.0145 , 0.03505]	0.90276
MODL	[-0.01035 , 0.02685]	0.90276
MVD	[0.01835 , 0.1715]	0.90276
PKID	[0.01975 , 0.0937]	0.90276
UCPD	[-0.026 , 0.01765]	0.90276
USD	[0.02875 , 0.12345]	0.90276
Zeta	[-0.02395 , 0.00755]	0.90276

Table 11: Confidence intervals for algorithm CACC ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0502 , 0.20115]	0.95024
Ameva	[-0.0387 , 0.00015]	0.95024
Bayesian	[0.0776 , 0.2003]	0.95024
CADD	[0.24425 , 0.42875]	0.95024
CAIM	[-0.0295 , 0.01065]	0.95024
Chi2	[-0.01995 , 0.02525]	0.95024
ChiMerge	[-0.0419 , 0.00945]	0.95024
ClusterAnalysis	[0.04425 , 0.17005]	0.95024
DIBD	[-0.0037 , 0.0819]	0.95024
Distance	[-0.02915 , 0.00375]	0.95024
EqualFrequency	[-0.0287 , 0.04375]	0.95024
EqualWidth	[-0.0035 , 0.06445]	0.95024
Extended Chi2	[-0.0182 , 0.0754]	0.95024
FFD	[0.01455 , 0.09275]	0.95024
FUSINTER	[-0.0515 , -0.00415]	0.95024
HDD	[-0.00165 , 0.15435]	0.95024
HellingerBD	[-0.0106 , 0.0502]	0.95024
Heter-Disc	[0.13585 , 0.28075]	0.95024
ID3	[0.0589 , 0.18625]	0.95024
IDD	[0.07315 , 0.17005]	0.95024
Khiops	[-0.0142 , 0.03965]	0.95024
MDLP	[-0.02815 , 0.00495]	0.95024
Modified Chi2	[-0.0206 , 0.03895]	0.95024
MODL	[-0.0143 , 0.02945]	0.95024
MVD	[0.0129 , 0.1855]	0.95024
PKID	[0.01345 , 0.1008]	0.95024
UCPD	[-0.0298 , 0.02345]	0.95024
USD	[0.02065 , 0.1325]	0.95024
Zeta	[-0.02755 , 0.01115]	0.95024

Table 12: Confidence intervals for algorithm CACC ($\alpha=0.95$)

5 Detailed results for CADD

5.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	32.5	752.5	≥ 0.2	1
Ameva	8.0	812.0	≥ 0.2	1
Bayesian	93.5	726.5	≥ 0.2	1
CACC	28.0	792.0	≥ 0.2	1
CAIM	0.0	820.0	≥ 0.2	1
Chi2	1.5	818.5	≥ 0.2	1
ChiMerge	0.0	820.0	≥ 0.2	1
ClusterAnalysis	71.5	748.5	≥ 0.2	1
DIBD	6.0	774.0	≥ 0.2	1
Distance	11.0	809.0	≥ 0.2	1
EqualFrequency	0.0	780.0	≥ 0.2	1
EqualWidth	2.0	818.0	≥ 0.2	1
Extended Chi2	30.0	753.0	≥ 0.2	1
FFD	19.5	800.5	≥ 0.2	1
FUSINTER	0.0	820.0	≥ 0.2	1
HDD	76.5	743.5	≥ 0.2	1
HellingerBD	0.0	820.0	≥ 0.2	1
Heter-Disc	282.0	538.0	≥ 0.2	1
ID3	131.5	653.5	≥ 0.2	1
IDD	46.0	774.0	≥ 0.2	1
Khiops	0.0	820.0	≥ 0.2	1
MDLP	7.0	813.0	≥ 0.2	1
Modified Chi2	3.0	777.0	≥ 0.2	1
MODL	5.0	815.0	≥ 0.2	1
MVD	103.0	717.0	≥ 0.2	1
PKID	30.0	790.0	≥ 0.2	1
UCPD	3.0	817.0	≥ 0.2	1
USD	61.0	719.0	≥ 0.2	1
Zeta	0.0	820.0	≥ 0.2	1

Table 13: Results obtained by the Wilcoxon test for algorithm CADD

5.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.23585 , -0.11325]	0.90276
Ameva	[-0.44375 , -0.2899]	0.90276
Bayesian	[-0.27185 , -0.11805]	0.90276
CACC	[-0.4161 , -0.25905]	0.90276
CAIM	[-0.4565 , -0.29995]	0.90276
Chi2	[-0.4428 , -0.2833]	0.90276
ChiMerge	[-0.46335 , -0.29565]	0.90276
ClusterAnalysis	[-0.32135 , -0.15175]	0.90276
DIBD	[-0.3837 , -0.2255]	0.90276
Distance	[-0.45085 , -0.2854]	0.90276
EqualFrequency	[-0.41845 , -0.2764]	0.90276
EqualWidth	[-0.3992 , -0.25545]	0.90276
Extended Chi2	[-0.3985 , -0.2214]	0.90276
FFD	[-0.3717 , -0.2164]	0.90276
FUSINTER	[-0.47515 , -0.30545]	0.90276
HDD	[-0.35315 , -0.17595]	0.90276
HellingerBD	[-0.4017 , -0.26085]	0.90276
Heter-Disc	[-0.2292 , 0]	0.90276
ID3	[-0.31665 , -0.10805]	0.90276
IDD	[-0.2619 , -0.14035]	0.90276
Khiops	[-0.4209 , -0.27045]	0.90276
MDLP	[-0.44945 , -0.28905]	0.90276
Modified Chi2	[-0.4292 , -0.27405]	0.90276
MODL	[-0.43065 , -0.2667]	0.90276
MVD	[-0.28245 , -0.1373]	0.90276
PKID	[-0.3682 , -0.19925]	0.90276
UCPD	[-0.44245 , -0.27975]	0.90276
USD	[-0.3473 , -0.1715]	0.90276
Zeta	[-0.4519 , -0.2923]	0.90276

Table 14: Confidence intervals for algorithm CADD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.24595 , -0.1052]	0.95024
Ameva	[-0.4578 , -0.2763]	0.95024
Bayesian	[-0.2889 , -0.10125]	0.95024
CACC	[-0.42875 , -0.24425]	0.95024
CAIM	[-0.47305 , -0.2871]	0.95024
Chi2	[-0.45755 , -0.27205]	0.95024
ChiMerge	[-0.4776 , -0.2787]	0.95024
ClusterAnalysis	[-0.3354 , -0.13935]	0.95024
DIBD	[-0.40085 , -0.2125]	0.95024
Distance	[-0.4678 , -0.26935]	0.95024
EqualFrequency	[-0.43375 , -0.26145]	0.95024
EqualWidth	[-0.41295 , -0.2405]	0.95024
Extended Chi2	[-0.4267 , -0.21245]	0.95024
FFD	[-0.38845 , -0.2043]	0.95024
FUSINTER	[-0.491 , -0.29435]	0.95024
HDD	[-0.36655 , -0.16035]	0.95024
HellingerBD	[-0.41605 , -0.2461]	0.95024
Heter-Disc	[-0.2417 , 0]	0.95024
ID3	[-0.3296 , -0.0888]	0.95024
IDD	[-0.2813 , -0.13085]	0.95024
Khiops	[-0.4348 , -0.25945]	0.95024
MDLP	[-0.46495 , -0.2754]	0.95024
Modified Chi2	[-0.44465 , -0.2625]	0.95024
MODL	[-0.447 , -0.25475]	0.95024
MVD	[-0.29775 , -0.1216]	0.95024
PKID	[-0.3843 , -0.1885]	0.95024
UCPD	[-0.46 , -0.2635]	0.95024
USD	[-0.3703 , -0.16145]	0.95024
Zeta	[-0.469 , -0.27835]	0.95024

Table 15: Confidence intervals for algorithm CADD ($\alpha=0.95$)

6 Detailed results for CAIM

6.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	728.0	92.0	4.154E-6	0.000019
Ameva	381.0	402.0	≥ 0.2	1
Bayesian	780.0	40.0	1.582E-8	0.000001
CACC	469.5	350.5	≥ 0.2	0.76624
CADD	820.0	0.0	1.819E-12	0
Chi2	443.0	377.0	≥ 0.2	0.652506
ChiMerge	380.0	403.0	≥ 0.2	1
ClusterAnalysis	766.0	54.0	9.226E-8	0.000002
DIBD	612.0	208.0	0.005832	0.006492
Distance	395.0	385.0	≥ 0.2	0.93882
EqualFrequency	547.0	233.0	0.02782	0.027955
EqualWidth	654.0	166.0	7.144E-4	0.001015
Extended Chi2	555.0	265.0	0.0514	0.050499
FFD	730.0	90.0	3.488E-6	0.000016
FUSINTER	361.0	459.0	≥ 0.2	1
HDD	726.0	94.0	9.8E-4	0.001432
HellingerBD	607.0	173.0	0.0019174	0.002362
Heter-Disc	787.0	33.0	5.844E-9	0
ID3	769.0	51.0	6.46E-8	0.000001
IDD	780.0	40.0	1.582E-8	0.000001
Khiops	613.0	207.0	0.005576	0.006232
MDLP	385.0	395.0	≥ 0.2	1
Modified Chi2	521.0	259.0	0.06824	0.066494
MODL	485.0	335.0	≥ 0.2	0.310193
MVD	703.5	116.5	2.953E-5	0.000075
PKID	739.5	80.5	1.4743999999999998E-6	0.000009
UCPD	446.0	374.0	≥ 0.2	0.623704
USD	704.0	76.0	1.8986E-6	0.000011
Zeta	489.0	331.0	≥ 0.2	0.96867

Table 16: Results obtained by the Wilcoxon test for algorithm CAIM

6.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.07335 , 0.2261]	0.90276
Ameva	[-0.0145 , 0.012]	0.90276
Bayesian	[0.1159 , 0.2166]	0.90276
CACC	[-0.00695 , 0.02405]	0.90276
CADD	[0.29995 , 0.4565]	0.90276
Chi2	[-0.0098 , 0.02105]	0.90276
ChiMerge	[-0.0111 , 0.00835]	0.90276
ClusterAnalysis	[0.09 , 0.17085]	0.90276
DIBD	[0.01755 , 0.08095]	0.90276
Distance	[-0.0147 , 0.0178]	0.90276
EqualFrequency	[0.00855 , 0.0547]	0.90276
EqualWidth	[0.02285 , 0.0774]	0.90276
Extended Chi2	[0.0031 , 0.07525]	0.90276
FFD	[0.04695 , 0.11105]	0.90276
FUSINTER	[-0.01555 , 0.00785]	0.90276
HDD	[0.0318 , 0.15285]	0.90276
HellingerBD	[0.0149 , 0.0556]	0.90276
Heter-Disc	[0.1844 , 0.3279]	0.90276
ID3	[0.1167 , 0.2031]	0.90276
IDD	[0.0894 , 0.18435]	0.90276
Khiops	[0.0102 , 0.0405]	0.90276
MDLP	[-0.01515 , 0.01685]	0.90276
Modified Chi2	[0.00095 , 0.04615]	0.90276
MODL	[-0.00495 , 0.0247]	0.90276
MVD	[0.0466 , 0.21655]	0.90276
PKID	[0.0503 , 0.11365]	0.90276
UCPD	[-0.0142 , 0.0283]	0.90276
USD	[0.06675 , 0.14835]	0.90276
Zeta	[-0.00275 , 0.0125]	0.90276

Table 17: Confidence intervals for algorithm CAIM ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0637 , 0.2431]	0.95024
Ameva	[-0.0176 , 0.0142]	0.95024
Bayesian	[0.1068 , 0.2229]	0.95024
CACC	[-0.01065 , 0.0295]	0.95024
CADD	[0.2871 , 0.47305]	0.95024
Chi2	[-0.01185 , 0.02405]	0.95024
ChiMerge	[-0.0137 , 0.01]	0.95024
ClusterAnalysis	[0.0832 , 0.18185]	0.95024
DIBD	[0.0126 , 0.08735]	0.95024
Distance	[-0.01855 , 0.027]	0.95024
EqualFrequency	[0.00395 , 0.0592]	0.95024
EqualWidth	[0.019 , 0.0836]	0.95024
Extended Chi2	[-0.00035 , 0.08795]	0.95024
FFD	[0.0418 , 0.1153]	0.95024
FUSINTER	[-0.0182 , 0.0112]	0.95024
HDD	[0.02975 , 0.1563]	0.95024
HellingerBD	[0.0126 , 0.0616]	0.95024
Heter-Disc	[0.1709 , 0.3424]	0.95024
ID3	[0.1113 , 0.2095]	0.95024
IDD	[0.08385 , 0.196]	0.95024
Khiops	[0.00805 , 0.04585]	0.95024
MDLP	[-0.0175 , 0.02175]	0.95024
Modified Chi2	[-0.0017 , 0.05]	0.95024
MODL	[-0.00695 , 0.02875]	0.95024
MVD	[0.0389 , 0.22385]	0.95024
PKID	[0.0435 , 0.11905]	0.95024
UCPD	[-0.0178 , 0.0326]	0.95024
USD	[0.0595 , 0.15725]	0.95024
Zeta	[-0.00365 , 0.0137]	0.95024

Table 18: Confidence intervals for algorithm CAIM ($\alpha=0.95$)

7 Detailed results for Chi2

7.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	706.0	114.0	2.448E-5	0.000067
Ameva	370.0	450.0	≥ 0.2	1
Bayesian	734.0	46.0	6.956E-8	0.000002
CACC	449.0	371.0	≥ 0.2	0.595466
CADD	818.5	1.5	1.8186E-11	0
CAIM	377.0	443.0	≥ 0.2	1
ChiMerge	348.0	472.0	≥ 0.2	1
ClusterAnalysis	693.0	87.0	5.268E-6	0.000023
DIBD	578.0	242.0	0.0232	0.023521
Distance	326.5	493.5	≥ 0.2	1
EqualFrequency	517.0	263.0	0.07738	0.075197
EqualWidth	648.0	172.0	0.003296	0.003838
Extended Chi2	529.0	251.0	0.05256	0.051568
FFD	722.0	98.0	2.642E-5	0.000073
FUSINTER	300.0	520.0	≥ 0.2	1
HDD	611.0	169.0	0.0015496	0.001995
HellingerBD	528.0	292.0	0.11496	0.110606
Heter-Disc	749.0	31.0	8.64E-9	0.000001
ID3	783.5	36.5	3.898E-8	0.000001
IDD	769.0	51.0	6.46E-8	0.000001
Khiops	528.0	292.0	0.11496	0.110606
MDLP	312.0	508.0	≥ 0.2	1
Modified Chi2	539.0	244.0	0.10706	0.101947
MODL	432.0	388.0	≥ 0.2	0.762325
MVD	633.0	147.0	4.388E-4	0.000679
PKID	681.0	99.0	1.469E-5	0.000047
UCPD	415.5	404.5	≥ 0.2	0.935614
USD	711.0	109.0	1.6716E-5	0.000051
Zeta	415.0	405.0	≥ 0.2	0.941068

Table 19: Results obtained by the Wilcoxon test for algorithm Chi2

7.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0569 , 0.2069]	0.90276
Ameva	[-0.03195 , 0.00845]	0.90276
Bayesian	[0.102 , 0.1988]	0.90276
CACC	[-0.0203 , 0.01725]	0.90276
CADD	[0.2833 , 0.4428]	0.90276
CAIM	[-0.02105 , 0.0098]	0.90276
ChiMerge	[-0.0275 , 0.0077]	0.90276
ClusterAnalysis	[0.0712 , 0.15965]	0.90276
DIBD	[0.0101 , 0.0736]	0.90276
Distance	[-0.0263 , 0.00505]	0.90276
EqualFrequency	[0.00225 , 0.0484]	0.90276
EqualWidth	[0.0154 , 0.0475]	0.90276
Extended Chi2	[0.00245 , 0.0499]	0.90276
FFD	[0.0323 , 0.08525]	0.90276
FUSINTER	[-0.03855 , 0.0021]	0.90276
HDD	[0.02 , 0.15695]	0.90276
HellingerBD	[-0.00125 , 0.0443]	0.90276
Heter-Disc	[0.17945 , 0.31245]	0.90276
ID3	[0.092 , 0.18375]	0.90276
IDD	[0.0757 , 0.17905]	0.90276
Khiops	[-0.0002 , 0.0337]	0.90276
MDLP	[-0.0256 , 0.00295]	0.90276
Modified Chi2	[0.00155 , 0.0282]	0.90276
MODL	[-0.01625 , 0.02305]	0.90276
MVD	[0.0322 , 0.19655]	0.90276
PKID	[0.0401 , 0.09265]	0.90276
UCPD	[-0.0226 , 0.01785]	0.90276
USD	[0.04415 , 0.13]	0.90276
Zeta	[-0.0153 , 0.01635]	0.90276

Table 20: Confidence intervals for algorithm Chi2 ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0478 , 0.21875]	0.95024
Ameva	[-0.0362 , 0.01045]	0.95024
Bayesian	[0.0906 , 0.20745]	0.95024
CACC	[-0.02525 , 0.01995]	0.95024
CADD	[0.27205 , 0.45755]	0.95024
CAIM	[-0.02405 , 0.01185]	0.95024
ChiMerge	[-0.0313 , 0.01035]	0.95024
ClusterAnalysis	[0.06305 , 0.1709]	0.95024
DIBD	[0.00525 , 0.08]	0.95024
Distance	[-0.031 , 0.007]	0.95024
EqualFrequency	[-0.0028 , 0.0515]	0.95024
EqualWidth	[0.0141 , 0.0522]	0.95024
Extended Chi2	[-0.0005 , 0.0595]	0.95024
FFD	[0.02965 , 0.0896]	0.95024
FUSINTER	[-0.0438 , 0.00395]	0.95024
HDD	[0.01565 , 0.1625]	0.95024
HellingerBD	[-0.00455 , 0.04905]	0.95024
Heter-Disc	[0.17105 , 0.3222]	0.95024
ID3	[0.08355 , 0.1905]	0.95024
IDD	[0.0697 , 0.18965]	0.95024
Khiops	[-0.0033 , 0.0384]	0.95024
MDLP	[-0.0309 , 0.0061]	0.95024
Modified Chi2	[0.00045 , 0.0309]	0.95024
MODL	[-0.02025 , 0.02755]	0.95024
MVD	[0.0274 , 0.2122]	0.95024
PKID	[0.03455 , 0.098]	0.95024
UCPD	[-0.02675 , 0.0208]	0.95024
USD	[0.0371 , 0.14415]	0.95024
Zeta	[-0.0204 , 0.0194]	0.95024

Table 21: Confidence intervals for algorithm Chi2 ($\alpha=0.95$)

8 Detailed results for ChiMerge

8.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	707.0	113.0	2.27E-5	0.000064
Ameva	347.0	436.0	≥ 0.2	1
Bayesian	797.0	23.0	1.1642E-9	0
CACC	496.5	323.5	≥ 0.2	0.490913
CADD	820.0	0.0	1.819E-12	0
CAIM	403.0	380.0	≥ 0.2	1
Chi2	472.0	348.0	≥ 0.2	0.400863
ClusterAnalysis	772.0	48.0	4.474E-8	0.000001
DIBD	614.0	206.0	0.005332	0.005982
Distance	411.0	369.0	≥ 0.2	0.764152
EqualFrequency	551.0	229.0	0.02392	0.024213
EqualWidth	643.0	177.0	0.0012976	0.001668
Extended Chi2	621.0	199.0	0.003868	0.004471
FFD	713.0	107.0	1.43E-5	0.000045
FUSINTER	428.0	392.0	≥ 0.2	0.803621
HDD	704.0	76.0	1.8986E-6	0.000011
HellingerBD	594.0	226.0	0.012512	0.013141
Heter-Disc	788.0	32.0	5.03E-9	0
ID3	779.0	41.0	1.811E-8	0.000001
IDD	774.0	46.0	3.48E-8	0.000001
Khiops	589.0	231.0	0.015266	0.015834
MDLP	412.0	368.0	≥ 0.2	0.753114
Modified Chi2	552.0	228.0	0.02302	0.023108
MODL	534.0	286.0	0.09724	0.09424
MVD	740.0	80.0	1.4052E-6	0.000009
PKID	734.5	85.5	2.338E-6	0.000012
UCPD	490.5	329.5	≥ 0.2	0.275459
USD	757.0	63.0	2.536E-7	0.000003
Zeta	492.5	327.5	≥ 0.2	0.528139

Table 22: Results obtained by the Wilcoxon test for algorithm ChiMerge

8.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.07345 , 0.2209]	0.90276
Ameva	[-0.0217 , 0.01155]	0.90276
Bayesian	[0.1229 , 0.212]	0.90276
CACC	[-0.0062 , 0.03605]	0.90276
CADD	[0.29565 , 0.46335]	0.90276
CAIM	[-0.00835 , 0.0111]	0.90276
Chi2	[-0.0077 , 0.0275]	0.90276
ClusterAnalysis	[0.09495 , 0.1755]	0.90276
DIBD	[0.022 , 0.08495]	0.90276
Distance	[-0.0159 , 0.02585]	0.90276
EqualFrequency	[0.0102 , 0.06615]	0.90276
EqualWidth	[0.02415 , 0.08395]	0.90276
Extended Chi2	[0.0149 , 0.0828]	0.90276
FFD	[0.04875 , 0.10925]	0.90276
FUSINTER	[-0.0157 , 0.01855]	0.90276
HDD	[0.0608 , 0.14725]	0.90276
HellingerBD	[0.0088 , 0.06485]	0.90276
Heter-Disc	[0.1843 , 0.3282]	0.90276
ID3	[0.1208 , 0.20005]	0.90276
IDD	[0.0881 , 0.18285]	0.90276
Khiops	[0.00945 , 0.0545]	0.90276
MDLP	[-0.0117 , 0.02045]	0.90276
Modified Chi2	[0.0053 , 0.04585]	0.90276
MODL	[0.0003 , 0.0358]	0.90276
MVD	[0.06675 , 0.2007]	0.90276
PKID	[0.0574 , 0.11895]	0.90276
UCPD	[-0.00515 , 0.0315]	0.90276
USD	[0.07045 , 0.1459]	0.90276
Zeta	[-0.004 , 0.01685]	0.90276

Table 23: Confidence intervals for algorithm ChiMerge ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.06315 , 0.2458]	0.95024
Ameva	[-0.024 , 0.0149]	0.95024
Bayesian	[0.1139 , 0.2175]	0.95024
CACC	[-0.00945 , 0.0419]	0.95024
CADD	[0.2787 , 0.4776]	0.95024
CAIM	[-0.01 , 0.0137]	0.95024
Chi2	[-0.01035 , 0.0313]	0.95024
ClusterAnalysis	[0.08605 , 0.1842]	0.95024
DIBD	[0.0165 , 0.0905]	0.95024
Distance	[-0.0198 , 0.0311]	0.95024
EqualFrequency	[0.0045 , 0.0745]	0.95024
EqualWidth	[0.0192 , 0.0907]	0.95024
Extended Chi2	[0.01055 , 0.0897]	0.95024
FFD	[0.04355 , 0.11555]	0.95024
FUSINTER	[-0.01875 , 0.0215]	0.95024
HDD	[0.04565 , 0.1558]	0.95024
HellingerBD	[0.00505 , 0.0694]	0.95024
Heter-Disc	[0.17565 , 0.3378]	0.95024
ID3	[0.1119 , 0.20815]	0.95024
IDD	[0.08275 , 0.19355]	0.95024
Khiops	[0.00635 , 0.05985]	0.95024
MDLP	[-0.01495 , 0.0258]	0.95024
Modified Chi2	[0.00315 , 0.05125]	0.95024
MODL	[-0.0024 , 0.04125]	0.95024
MVD	[0.06025 , 0.21235]	0.95024
PKID	[0.052 , 0.125]	0.95024
UCPD	[-0.0097 , 0.03525]	0.95024
USD	[0.0658 , 0.1533]	0.95024
Zeta	[-0.0063 , 0.018]	0.95024

Table 24: Confidence intervals for algorithm ChiMerge ($\alpha=0.95$)

9 Detailed results for ClusterAnalysis

9.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	399.0	381.0	≥ 0.2	0.894531
Ameva	119.0	701.0	≥ 0.2	1
Bayesian	432.0	348.0	≥ 0.2	0.553123
CACC	169.5	650.5	≥ 0.2	1
CADD	748.5	71.5	2.419999999999997E-6	0.000014
CAIM	54.0	766.0	≥ 0.2	1
Chi2	87.0	693.0	≥ 0.2	1
ChiMerge	48.0	772.0	≥ 0.2	1
DIBD	226.0	594.0	≥ 0.2	1
Distance	126.0	694.0	≥ 0.2	1
EqualFrequency	54.0	766.0	≥ 0.2	1
EqualWidth	194.0	586.0	≥ 0.2	1
Extended Chi2	168.5	651.5	≥ 0.2	1
FFD	198.0	622.0	≥ 0.2	1
FUSINTER	20.0	800.0	≥ 0.2	1
HDD	313.0	467.0	≥ 0.2	1
HellingerBD	147.0	633.0	≥ 0.2	1
Heter-Disc	617.5	202.5	0.013924	0.01454
ID3	449.0	334.0	≥ 0.2	0.785966
IDD	383.0	397.0	≥ 0.2	1
Khiops	102.0	718.0	≥ 0.2	1
MDLP	109.0	711.0	≥ 0.2	1
Modified Chi2	72.0	708.0	≥ 0.2	1
MODL	125.0	695.0	≥ 0.2	1
MVD	407.5	412.5	≥ 0.2	1
PKID	251.5	568.5	≥ 0.2	1
UCPD	92.0	728.0	≥ 0.2	1
USD	316.0	504.0	≥ 0.2	1
Zeta	59.0	761.0	≥ 0.2	1

Table 25: Results obtained by the Wilcoxon test for algorithm ClusterAnalysis

9.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0581 , 0.0971]	0.90276
Ameva	[-0.18715 , -0.0896]	0.90276
Bayesian	[-0.02185 , 0.07085]	0.90276
CACC	[-0.16 , -0.05245]	0.90276
CADD	[0.15175 , 0.32135]	0.90276
CAIM	[-0.17085 , -0.09]	0.90276
Chi2	[-0.15965 , -0.0712]	0.90276
ChiMerge	[-0.1755 , -0.09495]	0.90276
DIBD	[-0.1314 , -0.0257]	0.90276
Distance	[-0.17575 , -0.0696]	0.90276
EqualFrequency	[-0.13035 , -0.058]	0.90276
EqualWidth	[-0.1191 , -0.0241]	0.90276
Extended Chi2	[-0.1054 , -0.04095]	0.90276
FFD	[-0.07765 , -0.01485]	0.90276
FUSINTER	[-0.18665 , -0.0793]	0.90276
HDD	[-0.0498 , 0.01075]	0.90276
HellingerBD	[-0.13115 , -0.0398]	0.90276
Heter-Disc	[0.0461 , 0.19515]	0.90276
ID3	[-0.00935 , 0.0411]	0.90276
IDD	[-0.05 , 0.06015]	0.90276
Khiops	[-0.14115 , -0.0495]	0.90276
MDLP	[-0.1687 , -0.07155]	0.90276
Modified Chi2	[-0.14705 , -0.0575]	0.90276
MODL	[-0.14965 , -0.06375]	0.90276
MVD	[-0.04705 , 0.0788]	0.90276
PKID	[-0.0725 , -0.0068]	0.90276
UCPD	[-0.16555 , -0.0754]	0.90276
USD	[-0.0667 , 0.0072]	0.90276
Zeta	[-0.16395 , -0.0846]	0.90276

Table 26: Confidence intervals for algorithm ClusterAnalysis ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.07085 , 0.1151]	0.95024
Ameva	[-0.19645 , -0.07735]	0.95024
Bayesian	[-0.0276 , 0.08295]	0.95024
CACC	[-0.17005 , -0.04425]	0.95024
CADD	[0.13935 , 0.3354]	0.95024
CAIM	[-0.18185 , -0.0832]	0.95024
Chi2	[-0.1709 , -0.06305]	0.95024
ChiMerge	[-0.1842 , -0.08605]	0.95024
DIBD	[-0.1398 , -0.01495]	0.95024
Distance	[-0.18315 , -0.06185]	0.95024
EqualFrequency	[-0.1388 , -0.0514]	0.95024
EqualWidth	[-0.12795 , -0.0122]	0.95024
Extended Chi2	[-0.11275 , -0.035]	0.95024
FFD	[-0.0856 , -0.01045]	0.95024
FUSINTER	[-0.19585 , -0.07325]	0.95024
HDD	[-0.0569 , 0.01475]	0.95024
HellingerBD	[-0.14065 , -0.03185]	0.95024
Heter-Disc	[0.03335 , 0.20825]	0.95024
ID3	[-0.01265 , 0.0517]	0.95024
IDD	[-0.05715 , 0.0739]	0.95024
Khiops	[-0.14825 , -0.04385]	0.95024
MDLP	[-0.17685 , -0.06485]	0.95024
Modified Chi2	[-0.15645 , -0.0524]	0.95024
MODL	[-0.15825 , -0.0555]	0.95024
MVD	[-0.05965 , 0.093]	0.95024
PKID	[-0.08445 , -0.00335]	0.95024
UCPD	[-0.1735 , -0.0645]	0.95024
USD	[-0.0726 , 0.0149]	0.95024
Zeta	[-0.1717 , -0.07705]	0.95024

Table 27: Confidence intervals for algorithm ClusterAnalysis ($\alpha=0.95$)

10 Detailed results for DIBD

10.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	605.0	175.0	0.002128	0.002636
Ameva	179.0	641.0	≥ 0.2	1
Bayesian	635.0	145.0	3.88E-4	0.000613
CACC	278.0	542.0	≥ 0.2	1
CADD	774.0	6.0	5.094E-11	0
CAIM	208.0	612.0	≥ 0.2	1
Chi2	242.0	578.0	≥ 0.2	1
ChiMerge	206.0	614.0	≥ 0.2	1
ClusterAnalysis	594.0	226.0	0.012512	0.013141
Distance	169.0	651.0	≥ 0.2	1
EqualFrequency	334.0	486.0	≥ 0.2	1
EqualWidth	407.0	413.0	≥ 0.2	1
Extended Chi2	380.0	440.0	≥ 0.2	1
FFD	486.0	334.0	≥ 0.2	0.303828
FUSINTER	174.0	646.0	≥ 0.2	1
HDD	485.0	335.0	≥ 0.2	0.310193
HellingerBD	384.0	436.0	≥ 0.2	1
Heter-Disc	714.0	66.0	6.94E-7	0.000006
ID3	613.0	207.0	0.005576	0.006232
IDD	648.0	132.0	1.6846E-4	0.000309
Khiops	342.0	478.0	≥ 0.2	1
MDLP	215.0	605.0	≥ 0.2	1
Modified Chi2	309.0	511.0	≥ 0.2	1
MODL	281.0	539.0	≥ 0.2	1
MVD	540.0	240.0	0.03594	0.035709
PKID	504.0	316.0	≥ 0.2	0.204012
UCPD	176.0	644.0	≥ 0.2	1
USD	545.0	275.0	0.07034	0.068562
Zeta	252.0	568.0	≥ 0.2	1

Table 28: Results obtained by the Wilcoxon test for algorithm DIBD

10.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.03265 , 0.1172]	0.90276
Ameva	[-0.0805 , -0.02735]	0.90276
Bayesian	[0.0678 , 0.15105]	0.90276
CACC	[-0.07255 , -0.0017]	0.90276
CADD	[0.2255 , 0.3837]	0.90276
CAIM	[-0.08095 , -0.01755]	0.90276
Chi2	[-0.0736 , -0.0101]	0.90276
ChiMerge	[-0.08495 , -0.022]	0.90276
ClusterAnalysis	[0.0257 , 0.1314]	0.90276
Distance	[-0.07435 , -0.02275]	0.90276
EqualFrequency	[-0.06265 , 0.01185]	0.90276
EqualWidth	[-0.04595 , 0.03595]	0.90276
Extended Chi2	[-0.0566 , 0.0331]	0.90276
FFD	[-0.01765 , 0.0673]	0.90276
FUSINTER	[-0.0987 , -0.0286]	0.90276
HDD	[-0.0132 , 0.11065]	0.90276
HellingerBD	[-0.03955 , 0.0219]	0.90276
Heter-Disc	[0.112 , 0.25095]	0.90276
ID3	[0.03545 , 0.15765]	0.90276
IDD	[0.0441 , 0.11945]	0.90276
Khiops	[-0.05985 , 0.0134]	0.90276
MDLP	[-0.0865 , -0.01515]	0.90276
Modified Chi2	[-0.0612 , 0.0047]	0.90276
MODL	[-0.06655 , -0.00085]	0.90276
MVD	[0.00965 , 0.12095]	0.90276
PKID	[-0.0164 , 0.07355]	0.90276
UCPD	[-0.0717 , -0.02075]	0.90276
USD	[0.0053 , 0.1077]	0.90276
Zeta	[-0.0841 , -0.0099]	0.90276

Table 29: Confidence intervals for algorithm DIBD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02625 , 0.1314]	0.95024
Ameva	[-0.0876 , -0.0227]	0.95024
Bayesian	[0.0569 , 0.16235]	0.95024
CACC	[-0.0819 , 0.0037]	0.95024
CADD	[0.2125 , 0.40085]	0.95024
CAIM	[-0.08735 , -0.0126]	0.95024
Chi2	[-0.08 , -0.00525]	0.95024
ChiMerge	[-0.0905 , -0.0165]	0.95024
ClusterAnalysis	[0.01495 , 0.1398]	0.95024
Distance	[-0.0813 , -0.0195]	0.95024
EqualFrequency	[-0.07105 , 0.0195]	0.95024
EqualWidth	[-0.05625 , 0.04465]	0.95024
Extended Chi2	[-0.06495 , 0.0421]	0.95024
FFD	[-0.02385 , 0.0728]	0.95024
FUSINTER	[-0.10875 , -0.0242]	0.95024
HDD	[-0.01885 , 0.12165]	0.95024
HellingerBD	[-0.0483 , 0.02865]	0.95024
Heter-Disc	[0.0995 , 0.2651]	0.95024
ID3	[0.0278 , 0.16775]	0.95024
IDD	[0.03895 , 0.1237]	0.95024
Khiops	[-0.0698 , 0.01865]	0.95024
MDLP	[-0.0939 , -0.01005]	0.95024
Modified Chi2	[-0.06865 , 0.0098]	0.95024
MODL	[-0.07475 , 0.0044]	0.95024
MVD	[0.00365 , 0.13945]	0.95024
PKID	[-0.02915 , 0.08435]	0.95024
UCPD	[-0.0757 , -0.0173]	0.95024
USD	[-0.00545 , 0.11645]	0.95024
Zeta	[-0.0913 , -0.0041]	0.95024

Table 30: Confidence intervals for algorithm DIBD ($\alpha=0.95$)

11 Detailed results for Distance

11.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	718.0	102.0	9.598E-6	0.000034
Ameva	362.5	417.5	≥ 0.2	1
Bayesian	729.0	91.0	3.808E-6	0.000018
CACC	511.5	308.5	≥ 0.2	0.363858
CADD	809.0	11.0	1.0004E-10	0
CAIM	385.0	395.0	≥ 0.2	1
Chi2	493.5	326.5	≥ 0.2	0.258068
ChiMerge	369.0	411.0	≥ 0.2	1
ClusterAnalysis	694.0	126.0	5.846E-5	0.000131
DIBD	651.0	169.0	8.436E-4	0.00117
EqualFrequency	543.0	277.0	0.1795	0.172036
EqualWidth	547.0	233.0	0.02782	0.027955
Extended Chi2	547.0	273.0	0.06616	0.064128
FFD	642.0	138.0	2.496E-4	0.000426
FUSINTER	317.0	503.0	≥ 0.2	1
HDD	641.5	178.5	0.0045839999999999995	0.005243
HellingerBD	537.0	243.0	0.03996	0.039555
Heter-Disc	781.0	39.0	1.3796E-8	0.000001
ID3	696.0	84.0	4.022E-6	0.000018
IDD	732.0	88.0	2.924E-6	0.000015
Khiops	561.0	219.0	0.016148	0.016698
MDLP	394.0	389.0	≥ 0.2	1
Modified Chi2	527.5	292.5	≥ 0.2	0.254942
MODL	525.0	295.0	0.12472	0.119926
MVD	613.0	207.0	0.005576	0.006232
PKID	637.0	143.0	3.426E-4	0.00054
UCPD	491.0	329.0	≥ 0.2	0.273313
USD	617.0	163.0	0.0011156	0.0015
Zeta	428.0	392.0	≥ 0.2	1

Table 31: Results obtained by the Wilcoxon test for algorithm Distance

11.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0722 , 0.20405]	0.90276
Ameva	[-0.0208 , 0.01]	0.90276
Bayesian	[0.10145 , 0.2112]	0.90276
CACC	[-0.0018 , 0.02445]	0.90276
CADD	[0.2854 , 0.45085]	0.90276
CAIM	[-0.0178 , 0.0147]	0.90276
Chi2	[-0.00505 , 0.0263]	0.90276
ChiMerge	[-0.02585 , 0.0159]	0.90276
ClusterAnalysis	[0.0696 , 0.17575]	0.90276
DIBD	[0.02275 , 0.07435]	0.90276
EqualFrequency	[0.00265 , 0.0528]	0.90276
EqualWidth	[0.0094 , 0.06505]	0.90276
Extended Chi2	[0.0014 , 0.0621]	0.90276
FFD	[0.0346 , 0.09855]	0.90276
FUSINTER	[-0.03325 , 0.0038]	0.90276
HDD	[0.0241 , 0.1488]	0.90276
HellingerBD	[0.00865 , 0.06335]	0.90276
Heter-Disc	[0.16915 , 0.3122]	0.90276
ID3	[0.0923 , 0.1976]	0.90276
IDD	[0.07945 , 0.18625]	0.90276
Khiops	[0.0102 , 0.0477]	0.90276
MDLP	[-0.00835 , 0.00735]	0.90276
Modified Chi2	[-0.00085 , 0.043]	0.90276
MODL	[-0.00175 , 0.0338]	0.90276
MVD	[0.02915 , 0.2168]	0.90276
PKID	[0.03775 , 0.11305]	0.90276
UCPD	[-0.00885 , 0.0274]	0.90276
USD	[0.04895 , 0.14485]	0.90276
Zeta	[-0.0195 , 0.0182]	0.90276

Table 32: Confidence intervals for algorithm Distance ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.06205 , 0.22015]	0.95024
Ameva	[-0.0253 , 0.01295]	0.95024
Bayesian	[0.09235 , 0.21975]	0.95024
CACC	[-0.00375 , 0.02915]	0.95024
CADD	[0.26935 , 0.4678]	0.95024
CAIM	[-0.027 , 0.01855]	0.95024
Chi2	[-0.007 , 0.031]	0.95024
ChiMerge	[-0.0311 , 0.0198]	0.95024
ClusterAnalysis	[0.06185 , 0.18315]	0.95024
DIBD	[0.0195 , 0.0813]	0.95024
EqualFrequency	[-0.00275 , 0.059]	0.95024
EqualWidth	[0.00475 , 0.0712]	0.95024
Extended Chi2	[-0.00095 , 0.07345]	0.95024
FFD	[0.0291 , 0.1032]	0.95024
FUSINTER	[-0.03735 , 0.006]	0.95024
HDD	[0.0196 , 0.1634]	0.95024
HellingerBD	[0.0027 , 0.0694]	0.95024
Heter-Disc	[0.1608 , 0.33035]	0.95024
ID3	[0.07945 , 0.20865]	0.95024
IDD	[0.0703 , 0.19265]	0.95024
Khiops	[0.00745 , 0.05245]	0.95024
MDLP	[-0.0102 , 0.0092]	0.95024
Modified Chi2	[-0.00505 , 0.04655]	0.95024
MODL	[-0.0057 , 0.0376]	0.95024
MVD	[0.0202 , 0.22745]	0.95024
PKID	[0.03305 , 0.11985]	0.95024
UCPD	[-0.0124 , 0.02965]	0.95024
USD	[0.0383 , 0.15825]	0.95024
Zeta	[-0.0255 , 0.02185]	0.95024

Table 33: Confidence intervals for algorithm Distance ($\alpha=0.95$)

12 Detailed results for EqualFrequency

12.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	644.0	176.0	0.0012308	0.001622
Ameva	230.0	550.0	≥ 0.2	1
Bayesian	708.0	112.0	2.104E-5	0.00006
CACC	349.0	431.0	≥ 0.2	1
CADD	780.0	0.0	3.638E-12	0
CAIM	233.0	547.0	≥ 0.2	1
Chi2	263.0	517.0	≥ 0.2	1
ChiMerge	229.0	551.0	≥ 0.2	1
ClusterAnalysis	766.0	54.0	3.672E-7	0.000004
DIBD	486.0	334.0	≥ 0.2	0.303828
Distance	277.0	543.0	≥ 0.2	1
EqualWidth	490.5	329.5	≥ 0.2	0.54655
Extended Chi2	451.0	329.0	≥ 0.2	0.389937
FFD	623.0	160.0	0.003158	0.003773
FUSINTER	228.0	592.0	≥ 0.2	1
HDD	592.0	228.0	0.1011	0.097425
HellingerBD	457.5	362.5	≥ 0.2	0.901894
Heter-Disc	717.0	63.0	5.048E-7	0.000005
ID3	705.0	78.0	8.964E-6	0.000036
IDD	679.0	141.0	1.5974E-4	0.000292
Khiops	412.0	408.0	≥ 0.2	1
MDLP	293.5	526.5	≥ 0.2	1
Modified Chi2	359.5	423.5	≥ 0.2	1
MODL	368.0	452.0	≥ 0.2	1
MVD	548.0	232.0	0.0268	0.026976
PKID	659.0	124.0	3.542E-4	0.000569
UCPD	296.0	524.0	≥ 0.2	1
USD	604.0	176.0	0.002242	0.002759
Zeta	288.5	531.5	≥ 0.2	1

Table 34: Results obtained by the Wilcoxon test for algorithm EqualFrequency

12.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.04485 , 0.20635]	0.90276
Ameva	[-0.05865 , -0.00925]	0.90276
Bayesian	[0.0812 , 0.1877]	0.90276
CACC	[-0.03785 , 0.02105]	0.90276
CADD	[0.2764 , 0.41845]	0.90276
CAIM	[-0.0547 , -0.00855]	0.90276
Chi2	[-0.0484 , -0.00225]	0.90276
ChiMerge	[-0.06615 , -0.0102]	0.90276
ClusterAnalysis	[0.058 , 0.13035]	0.90276
DIBD	[-0.01185 , 0.06265]	0.90276
Distance	[-0.0528 , -0.00265]	0.90276
EqualWidth	[-0.0051 , 0.0314]	0.90276
Extended Chi2	[-0.0106 , 0.0556]	0.90276
FFD	[0.01675 , 0.058]	0.90276
FUSINTER	[-0.06475 , -0.0137]	0.90276
HDD	[0.01705 , 0.1238]	0.90276
HellingerBD	[-0.0136 , 0.0317]	0.90276
Heter-Disc	[0.17115 , 0.30855]	0.90276
ID3	[0.07035 , 0.17245]	0.90276
IDD	[0.051 , 0.1743]	0.90276
Khiops	[-0.0181 , 0.0184]	0.90276
MDLP	[-0.053 , 0.0007]	0.90276
Modified Chi2	[-0.02665 , 0.01315]	0.90276
MODL	[-0.0394 , 0.0197]	0.90276
MVD	[0.0144 , 0.199]	0.90276
PKID	[0.02275 , 0.06965]	0.90276
UCPD	[-0.04145 , 0.00205]	0.90276
USD	[0.02925 , 0.11945]	0.90276
Zeta	[-0.05505 , 0.00005]	0.90276

Table 35: Confidence intervals for algorithm EqualFrequency ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0343 , 0.21935]	0.95024
Ameva	[-0.0653 , -0.00375]	0.95024
Bayesian	[0.07075 , 0.1978]	0.95024
CACC	[-0.04375 , 0.0287]	0.95024
CADD	[0.26145 , 0.43375]	0.95024
CAIM	[-0.0592 , -0.00395]	0.95024
Chi2	[-0.0515 , 0.0028]	0.95024
ChiMerge	[-0.0745 , -0.0045]	0.95024
ClusterAnalysis	[0.0514 , 0.1388]	0.95024
DIBD	[-0.0195 , 0.07105]	0.95024
Distance	[-0.059 , 0.00275]	0.95024
EqualWidth	[-0.0084 , 0.03525]	0.95024
Extended Chi2	[-0.01375 , 0.0682]	0.95024
FFD	[0.01235 , 0.065]	0.95024
FUSINTER	[-0.0699 , -0.00905]	0.95024
HDD	[0.0109 , 0.13775]	0.95024
HellingerBD	[-0.0189 , 0.0373]	0.95024
Heter-Disc	[0.15355 , 0.3188]	0.95024
ID3	[0.05925 , 0.1839]	0.95024
IDD	[0.04295 , 0.184]	0.95024
Khiops	[-0.022 , 0.02395]	0.95024
MDLP	[-0.05855 , 0.00515]	0.95024
Modified Chi2	[-0.0327 , 0.01915]	0.95024
MODL	[-0.04435 , 0.0251]	0.95024
MVD	[0.0059 , 0.2137]	0.95024
PKID	[0.0209 , 0.0813]	0.95024
UCPD	[-0.04625 , 0.00605]	0.95024
USD	[0.0235 , 0.1317]	0.95024
Zeta	[-0.06095 , 0.00595]	0.95024

Table 36: Confidence intervals for algorithm EqualFrequency ($\alpha=0.95$)

13 Detailed results for EqualWidth

13.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	619.0	201.0	0.004244	0.004792
Ameva	211.0	609.0	≥ 0.2	1
Bayesian	637.0	143.0	3.426E-4	0.000553
CACC	289.0	531.0	≥ 0.2	1
CADD	818.0	2.0	5.456E-12	0
CAIM	166.0	654.0	≥ 0.2	1
Chi2	172.0	648.0	≥ 0.2	1
ChiMerge	177.0	643.0	≥ 0.2	1
ClusterAnalysis	586.0	194.0	0.005436	0.006104
DIBD	413.0	407.0	≥ 0.2	0.962478
Distance	233.0	547.0	≥ 0.2	1
EqualFrequency	329.5	490.5	≥ 0.2	1
Extended Chi2	377.0	443.0	≥ 0.2	1
FFD	515.0	268.0	≥ 0.2	0.205067
FUSINTER	117.0	703.0	≥ 0.2	1
HDD	497.5	322.5	≥ 0.2	0.481831
HellingerBD	300.0	483.0	≥ 0.2	1
Heter-Disc	737.0	83.0	1.8586E-6	0.000011
ID3	632.5	152.5	0.006838	0.00759
IDD	641.0	179.0	0.0014408	0.00186
Khiops	330.0	490.0	≥ 0.2	1
MDLP	199.0	581.0	≥ 0.2	1
Modified Chi2	250.0	530.0	≥ 0.2	1
MODL	275.0	545.0	≥ 0.2	1
MVD	540.0	280.0	0.08172	0.079415
PKID	580.0	240.0	0.1477	0.141849
UCPD	229.0	591.0	≥ 0.2	1
USD	524.0	256.0	0.06198	0.060525
Zeta	181.0	599.0	≥ 0.2	1

Table 37: Results obtained by the Wilcoxon test for algorithm EqualWidth

13.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0311 , 0.1803]	0.90276
Ameva	[-0.07525 , -0.01615]	0.90276
Bayesian	[0.06845 , 0.16895]	0.90276
CACC	[-0.0548 , 0.00025]	0.90276
CADD	[0.25545 , 0.3992]	0.90276
CAIM	[-0.0774 , -0.02285]	0.90276
Chi2	[-0.0475 , -0.0154]	0.90276
ChiMerge	[-0.08395 , -0.02415]	0.90276
ClusterAnalysis	[0.0241 , 0.1191]	0.90276
DIBD	[-0.03595 , 0.04595]	0.90276
Distance	[-0.06505 , -0.0094]	0.90276
EqualFrequency	[-0.0314 , 0.0051]	0.90276
Extended Chi2	[-0.03005 , 0.02295]	0.90276
FFD	[0.00015 , 0.03135]	0.90276
FUSINTER	[-0.0784 , -0.03755]	0.90276
HDD	[-0.00795 , 0.1031]	0.90276
HellingerBD	[-0.0296 , 0.00385]	0.90276
Heter-Disc	[0.1492 , 0.28875]	0.90276
ID3	[0.0383 , 0.1463]	0.90276
IDD	[0.03485 , 0.14745]	0.90276
Khiops	[-0.0418 , 0.00745]	0.90276
MDLP	[-0.06375 , -0.0133]	0.90276
Modified Chi2	[-0.041 , -0.00375]	0.90276
MODL	[-0.05505 , -0.0028]	0.90276
MVD	[0.0029 , 0.1754]	0.90276
PKID	[0.00685 , 0.0518]	0.90276
UCPD	[-0.0616 , -0.01265]	0.90276
USD	[0.00545 , 0.09685]	0.90276
Zeta	[-0.07295 , -0.01815]	0.90276

Table 38: Confidence intervals for algorithm EqualWidth ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02175 , 0.19315]	0.95024
Ameva	[-0.08535 , -0.01235]	0.95024
Bayesian	[0.05875 , 0.18]	0.95024
CACC	[-0.06445 , 0.0035]	0.95024
CADD	[0.2405 , 0.41295]	0.95024
CAIM	[-0.0836 , -0.019]	0.95024
Chi2	[-0.0522 , -0.0141]	0.95024
ChiMerge	[-0.0907 , -0.0192]	0.95024
ClusterAnalysis	[0.0122 , 0.12795]	0.95024
DIBD	[-0.04465 , 0.05625]	0.95024
Distance	[-0.0712 , -0.00475]	0.95024
EqualFrequency	[-0.03525 , 0.0084]	0.95024
Extended Chi2	[-0.03305 , 0.02995]	0.95024
FFD	[-0.0016 , 0.03995]	0.95024
FUSINTER	[-0.08405 , -0.0343]	0.95024
HDD	[-0.01215 , 0.11235]	0.95024
HellingerBD	[-0.0336 , 0.00695]	0.95024
Heter-Disc	[0.1387 , 0.3025]	0.95024
ID3	[0.0289 , 0.1534]	0.95024
IDD	[0.0281 , 0.16135]	0.95024
Khiops	[-0.04765 , 0.01005]	0.95024
MDLP	[-0.07155 , -0.00925]	0.95024
Modified Chi2	[-0.04585 , 0.0002]	0.95024
MODL	[-0.06285 , 0.0024]	0.95024
MVD	[-0.00415 , 0.186]	0.95024
PKID	[0.0033 , 0.0589]	0.95024
UCPD	[-0.0653 , -0.00905]	0.95024
USD	[-0.00315 , 0.1058]	0.95024
Zeta	[-0.08025 , -0.01495]	0.95024

Table 39: Confidence intervals for algorithm EqualWidth ($\alpha=0.95$)

14 Detailed results for Extended Chi2

14.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	577.0	243.0	0.02408	0.024359
Ameva	276.0	544.0	≥ 0.2	1
Bayesian	674.0	146.0	2.192E-4	0.000378
CACC	350.5	469.5	≥ 0.2	1
CADD	753.0	30.0	2.962E-8	0.000001
CAIM	265.0	555.0	≥ 0.2	1
Chi2	251.0	529.0	≥ 0.2	1
ChiMerge	199.0	621.0	≥ 0.2	1
ClusterAnalysis	651.5	168.5	0.0027470000000000003	0.003317
DIBD	440.0	380.0	≥ 0.2	0.681836
Distance	273.0	547.0	≥ 0.2	1
EqualFrequency	329.0	451.0	≥ 0.2	1
EqualWidth	443.0	377.0	≥ 0.2	0.652506
FFD	486.0	294.0	0.18474	0.178091
FUSINTER	209.0	611.0	≥ 0.2	1
HDD	565.0	215.0	0.013706	0.014321
HellingerBD	397.0	423.0	≥ 0.2	1
Heter-Disc	693.5	126.5	2.213E-4	0.000391
ID3	660.5	159.5	0.0016871	0.002161
IDD	617.0	203.0	0.004654	0.005286
Khiops	403.0	417.0	≥ 0.2	1
MDLP	308.0	512.0	≥ 0.2	1
Modified Chi2	417.0	363.0	≥ 0.2	0.701155
MODL	361.0	459.0	≥ 0.2	1
MVD	532.0	248.0	0.0475	0.046747
PKID	554.5	265.5	0.13076	0.126019
UCPD	289.0	531.0	≥ 0.2	1
USD	571.5	248.5	0.02937	0.029172
Zeta	308.0	512.0	≥ 0.2	1

Table 40: Results obtained by the Wilcoxon test for algorithm Extended Chi2

14.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.02555 , 0.17395]	0.90276
Ameva	[-0.0926 , -0.00415]	0.90276
Bayesian	[0.04325 , 0.1589]	0.90276
CACC	[-0.0642 , 0.014]	0.90276
CADD	[0.2214 , 0.3985]	0.90276
CAIM	[-0.07525 , -0.0031]	0.90276
Chi2	[-0.0499 , -0.00245]	0.90276
ChiMerge	[-0.0828 , -0.0149]	0.90276
ClusterAnalysis	[0.04095 , 0.1054]	0.90276
DIBD	[-0.0331 , 0.0566]	0.90276
Distance	[-0.0621 , -0.0014]	0.90276
EqualFrequency	[-0.0556 , 0.0106]	0.90276
EqualWidth	[-0.02295 , 0.03005]	0.90276
FFD	[-0.00625 , 0.051]	0.90276
FUSINTER	[-0.0839 , -0.0139]	0.90276
HDD	[0.0123 , 0.07945]	0.90276
HellingerBD	[-0.0425 , 0.0248]	0.90276
Heter-Disc	[0.13705 , 0.2868]	0.90276
ID3	[0.041 , 0.14555]	0.90276
IDD	[0.0315 , 0.13655]	0.90276
Khiops	[-0.04975 , 0.02305]	0.90276
MDLP	[-0.06875 , 0.00365]	0.90276
Modified Chi2	[-0.0487 , 0.02115]	0.90276
MODL	[-0.0455 , 0.01285]	0.90276
MVD	[0.0092 , 0.1646]	0.90276
PKID	[0.0057 , 0.0544]	0.90276
UCPD	[-0.0665 , 0.00105]	0.90276
USD	[0.00975 , 0.08565]	0.90276
Zeta	[-0.06925 , 0.00425]	0.90276

Table 41: Confidence intervals for algorithm Extended Chi2 ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01305 , 0.20135]	0.95024
Ameva	[-0.101 , 0.00175]	0.95024
Bayesian	[0.03425 , 0.1679]	0.95024
CACC	[-0.0754 , 0.0182]	0.95024
CADD	[0.21245 , 0.4267]	0.95024
CAIM	[-0.08795 , 0.00035]	0.95024
Chi2	[-0.0595 , 0.0005]	0.95024
ChiMerge	[-0.0897 , -0.01055]	0.95024
ClusterAnalysis	[0.035 , 0.11275]	0.95024
DIBD	[-0.0421 , 0.06495]	0.95024
Distance	[-0.07345 , 0.00095]	0.95024
EqualFrequency	[-0.0682 , 0.01375]	0.95024
EqualWidth	[-0.02995 , 0.03305]	0.95024
FFD	[-0.01275 , 0.0562]	0.95024
FUSINTER	[-0.0959 , -0.0088]	0.95024
HDD	[0.00775 , 0.08865]	0.95024
HellingerBD	[-0.0556 , 0.0343]	0.95024
Heter-Disc	[0.12415 , 0.2989]	0.95024
ID3	[0.03315 , 0.15455]	0.95024
IDD	[0.0236 , 0.15205]	0.95024
Khiops	[-0.06125 , 0.02615]	0.95024
MDLP	[-0.07945 , 0.00675]	0.95024
Modified Chi2	[-0.06095 , 0.0232]	0.95024
MODL	[-0.05495 , 0.0155]	0.95024
MVD	[0.0019 , 0.17505]	0.95024
PKID	[0 , 0.0574]	0.95024
UCPD	[-0.07395 , 0.0053]	0.95024
USD	[0.0027 , 0.0942]	0.95024
Zeta	[-0.0796 , 0.00805]	0.95024

Table 42: Confidence intervals for algorithm Extended Chi2 ($\alpha=0.95$)

15 Detailed results for FFD

15.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	522.0	298.0	0.13508	0.130497
Ameva	143.5	676.5	≥ 0.2	1
Bayesian	591.0	189.0	0.00429	0.004924
CACC	216.0	604.0	≥ 0.2	1
CADD	800.5	19.5	2.467E-9	0
CAIM	90.0	730.0	≥ 0.2	1
Chi2	98.0	722.0	≥ 0.2	1
ChiMerge	107.0	713.0	≥ 0.2	1
ClusterAnalysis	622.0	198.0	0.01144	0.011956
DIBD	334.0	486.0	≥ 0.2	1
Distance	138.0	642.0	≥ 0.2	1
EqualFrequency	160.0	623.0	≥ 0.2	1
EqualWidth	268.0	515.0	≥ 0.2	1
Extended Chi2	294.0	486.0	≥ 0.2	1
FUSINTER	32.0	748.0	≥ 0.2	1
HDD	445.0	338.0	≥ 0.2	0.832725
HellingerBD	203.0	580.0	≥ 0.2	1
Heter-Disc	699.5	120.5	1.461E-4	0.00028
ID3	653.5	131.5	0.0020251	0.00258
IDD	562.0	258.0	0.0408	0.040384
Khiops	109.5	710.5	≥ 0.2	1
MDLP	123.0	657.0	≥ 0.2	1
Modified Chi2	130.5	689.5	≥ 0.2	1
MODL	170.0	610.0	≥ 0.2	1
MVD	470.0	310.0	≥ 0.2	0.261277
PKID	433.5	351.5	≥ 0.2	1
UCPD	135.0	685.0	≥ 0.2	1
USD	505.5	314.5	≥ 0.2	0.41257
Zeta	94.0	686.0	≥ 0.2	1

Table 43: Results obtained by the Wilcoxon test for algorithm FFD

15.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0041 , 0.1508]	0.90276
Ameva	[-0.11435 , -0.0352]	0.90276
Bayesian	[0.03115 , 0.1325]	0.90276
CACC	[-0.08895 , -0.02085]	0.90276
CADD	[0.2164 , 0.3717]	0.90276
CAIM	[-0.11105 , -0.04695]	0.90276
Chi2	[-0.08525 , -0.0323]	0.90276
ChiMerge	[-0.10925 , -0.04875]	0.90276
ClusterAnalysis	[0.01485 , 0.07765]	0.90276
DIBD	[-0.0673 , 0.01765]	0.90276
Distance	[-0.09855 , -0.0346]	0.90276
EqualFrequency	[-0.058 , -0.01675]	0.90276
EqualWidth	[-0.03135 , -0.00015]	0.90276
Extended Chi2	[-0.051 , 0.00625]	0.90276
FUSINTER	[-0.11335 , -0.05795]	0.90276
HDD	[-0.01925 , 0.04425]	0.90276
HellingerBD	[-0.06785 , -0.0143]	0.90276
Heter-Disc	[0.10735 , 0.245]	0.90276
ID3	[0.026 , 0.11045]	0.90276
IDD	[0.0078 , 0.11185]	0.90276
Khiops	[-0.0703 , -0.0228]	0.90276
MDLP	[-0.1 , -0.0386]	0.90276
Modified Chi2	[-0.0645 , -0.0214]	0.90276
MODL	[-0.072 , -0.021]	0.90276
MVD	[-0.01935 , 0.1539]	0.90276
PKID	[-0.00645 , 0.016]	0.90276
UCPD	[-0.0929 , -0.0412]	0.90276
USD	[-0.0051 , 0.0535]	0.90276
Zeta	[-0.10615 , -0.0375]	0.90276

Table 44: Confidence intervals for algorithm FFD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01035 , 0.1712]	0.95024
Ameva	[-0.1203 , -0.02755]	0.95024
Bayesian	[0.02395 , 0.1423]	0.95024
CACC	[-0.09275 , -0.01455]	0.95024
CADD	[0.2043 , 0.38845]	0.95024
CAIM	[-0.1153 , -0.0418]	0.95024
Chi2	[-0.0896 , -0.02965]	0.95024
ChiMerge	[-0.11555 , -0.04355]	0.95024
ClusterAnalysis	[0.01045 , 0.0856]	0.95024
DIBD	[-0.0728 , 0.02385]	0.95024
Distance	[-0.1032 , -0.0291]	0.95024
EqualFrequency	[-0.065 , -0.01235]	0.95024
EqualWidth	[-0.03995 , 0.0016]	0.95024
Extended Chi2	[-0.0562 , 0.01275]	0.95024
FUSINTER	[-0.12085 , -0.0537]	0.95024
HDD	[-0.027 , 0.06]	0.95024
HellingerBD	[-0.07285 , -0.0107]	0.95024
Heter-Disc	[0.09075 , 0.2643]	0.95024
ID3	[0.02055 , 0.11965]	0.95024
IDD	[0.0026 , 0.12445]	0.95024
Khiops	[-0.07425 , -0.0201]	0.95024
MDLP	[-0.1068 , -0.03185]	0.95024
Modified Chi2	[-0.07145 , -0.01875]	0.95024
MODL	[-0.0788 , -0.0154]	0.95024
MVD	[-0.026 , 0.1668]	0.95024
PKID	[-0.0082 , 0.0194]	0.95024
UCPD	[-0.09675 , -0.0361]	0.95024
USD	[-0.01065 , 0.0674]	0.95024
Zeta	[-0.1114 , -0.03445]	0.95024

Table 45: Confidence intervals for algorithm FFD ($\alpha=0.95$)

16 Detailed results for FUSINTER

16.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	775.0	45.0	3.062E-8	0.000001
Ameva	462.0	358.0	≥ 0.2	0.480395
Bayesian	807.0	13.0	1.6008E-10	0
CACC	558.0	222.0	0.018214	0.018702
CADD	820.0	0.0	1.819E-12	0
CAIM	459.0	361.0	≥ 0.2	0.50583
Chi2	520.0	300.0	0.14234	0.137474
ChiMerge	392.0	428.0	≥ 0.2	1
ClusterAnalysis	800.0	20.0	6.748E-10	0
DIBD	646.0	174.0	0.0011066	0.001479
Distance	503.0	317.0	≥ 0.2	0.20884
EqualFrequency	592.0	228.0	0.013558	0.014166
EqualWidth	703.0	117.0	3.062E-5	0.00008
Extended Chi2	611.0	209.0	0.006096	0.00676
FFD	748.0	32.0	1.006E-8	0.000001
HDD	724.0	96.0	5.846E-6	0.000023
HellingerBD	654.0	166.0	7.144E-4	0.001015
Heter-Disc	800.0	20.0	6.748E-10	0
ID3	801.0	19.0	5.584E-10	0
IDD	777.0	43.0	2.362E-8	0.000001
Khiops	640.0	180.0	0.0015176	0.001947
MDLP	535.5	284.5	0.0931599999999999	0.0898
Modified Chi2	588.0	192.0	0.004948	0.005522
MODL	575.0	208.0	0.0298	0.029824
MVD	710.5	109.5	1.7388E-5	0.000051
PKID	786.0	34.0	6.776E-9	0
UCPD	550.0	270.0	0.06026	0.058959
USD	711.0	69.0	9.468E-7	0.000007
Zeta	476.5	343.5	≥ 0.2	0.367013

Table 46: Results obtained by the Wilcoxon test for algorithm FUSINTER

16.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0872 , 0.2327]	0.90276
Ameva	[-0.01155 , 0.028]	0.90276
Bayesian	[0.11935 , 0.23145]	0.90276
CACC	[0.00755 , 0.0433]	0.90276
CADD	[0.30545 , 0.47515]	0.90276
CAIM	[-0.00785 , 0.01555]	0.90276
Chi2	[-0.0021 , 0.03855]	0.90276
ChiMerge	[-0.01855 , 0.0157]	0.90276
ClusterAnalysis	[0.0793 , 0.18665]	0.90276
DIBD	[0.0286 , 0.0987]	0.90276
Distance	[-0.0038 , 0.03325]	0.90276
EqualFrequency	[0.0137 , 0.06475]	0.90276
EqualWidth	[0.03755 , 0.0784]	0.90276
Extended Chi2	[0.0139 , 0.0839]	0.90276
FFD	[0.05795 , 0.11335]	0.90276
HDD	[0.0354 , 0.1577]	0.90276
HellingerBD	[0.0221 , 0.06785]	0.90276
Heter-Disc	[0.1971 , 0.34195]	0.90276
ID3	[0.1144 , 0.21295]	0.90276
IDD	[0.10105 , 0.20705]	0.90276
Khiops	[0.0129 , 0.0556]	0.90276
MDLP	[0.0006 , 0.0268]	0.90276
Modified Chi2	[0.0096 , 0.0535]	0.90276
MODL	[0.0087 , 0.0433]	0.90276
MVD	[0.0411 , 0.22535]	0.90276
PKID	[0.05885 , 0.1239]	0.90276
UCPD	[0.0026 , 0.0415]	0.90276
USD	[0.0715 , 0.1562]	0.90276
Zeta	[-0.0074 , 0.02145]	0.90276

Table 47: Confidence intervals for algorithm FUSINTER ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.08055 , 0.252]	0.95024
Ameva	[-0.0158 , 0.03275]	0.95024
Bayesian	[0.10855 , 0.23725]	0.95024
CACC	[0.00415 , 0.0515]	0.95024
CADD	[0.29435 , 0.491]	0.95024
CAIM	[-0.0112 , 0.0182]	0.95024
Chi2	[-0.00395 , 0.0438]	0.95024
ChiMerge	[-0.0215 , 0.01875]	0.95024
ClusterAnalysis	[0.07325 , 0.19585]	0.95024
DIBD	[0.0242 , 0.10875]	0.95024
Distance	[-0.006 , 0.03735]	0.95024
EqualFrequency	[0.00905 , 0.0699]	0.95024
EqualWidth	[0.0343 , 0.08405]	0.95024
Extended Chi2	[0.0088 , 0.0959]	0.95024
FFD	[0.0537 , 0.12085]	0.95024
HDD	[0.03015 , 0.16865]	0.95024
HellingerBD	[0.01755 , 0.0723]	0.95024
Heter-Disc	[0.182 , 0.3591]	0.95024
ID3	[0.1066 , 0.223]	0.95024
IDD	[0.09165 , 0.2207]	0.95024
Khiops	[0.0105 , 0.06105]	0.95024
MDLP	[-0.00175 , 0.0308]	0.95024
Modified Chi2	[0.00725 , 0.0578]	0.95024
MODL	[0.00605 , 0.04955]	0.95024
MVD	[0.03475 , 0.24555]	0.95024
PKID	[0.0524 , 0.13195]	0.95024
UCPD	[-0.0004 , 0.0454]	0.95024
USD	[0.0658 , 0.1714]	0.95024
Zeta	[-0.01155 , 0.02445]	0.95024

Table 48: Confidence intervals for algorithm FUSINTER ($\alpha=0.95$)

17 Detailed results for HDD

17.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	486.0	334.0	≥ 0.2	0.303828
Ameva	165.5	614.5	≥ 0.2	1
Bayesian	511.5	308.5	≥ 0.2	0.363858
CACC	273.5	546.5	≥ 0.2	1
CADD	743.5	76.5	5.902E-5	0.000153
CAIM	94.0	726.0	≥ 0.2	1
Chi2	169.0	611.0	≥ 0.2	1
ChiMerge	76.0	704.0	≥ 0.2	1
ClusterAnalysis	467.0	313.0	≥ 0.2	0.279469
DIBD	335.0	485.0	≥ 0.2	1
Distance	178.5	641.5	≥ 0.2	1
EqualFrequency	228.0	592.0	≥ 0.2	1
EqualWidth	322.5	497.5	≥ 0.2	1
Extended Chi2	215.0	565.0	≥ 0.2	1
FFD	338.0	445.0	≥ 0.2	1
FUSINTER	96.0	724.0	≥ 0.2	1
HellingerBD	293.5	526.5	≥ 0.2	1
Heter-Disc	621.0	199.0	0.03484	0.034595
ID3	503.0	288.0	≥ 0.2	1
IDD	477.0	343.0	≥ 0.2	0.364255
Khiops	243.5	576.5	≥ 0.2	1
MDLP	154.5	665.5	≥ 0.2	1
Modified Chi2	209.0	574.0	≥ 0.2	1
MODL	188.5	631.5	≥ 0.2	1
MVD	489.0	331.0	≥ 0.2	0.561143
PKID	358.5	426.5	≥ 0.2	1
UCPD	197.0	623.0	≥ 0.2	1
USD	369.0	414.0	≥ 0.2	1
Zeta	141.5	678.5	≥ 0.2	1

Table 49: Results obtained by the Wilcoxon test for algorithm HDD

17.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.03305 , 0.13045]	0.90276
Ameva	[-0.16275 , -0.02705]	0.90276
Bayesian	[-0.00475 , 0.10505]	0.90276
CACC	[-0.14265 , -0.0025]	0.90276
CADD	[0.17595 , 0.35315]	0.90276
CAIM	[-0.15285 , -0.0318]	0.90276
Chi2	[-0.15695 , -0.02]	0.90276
ChiMerge	[-0.14725 , -0.0608]	0.90276
ClusterAnalysis	[-0.01075 , 0.0498]	0.90276
DIBD	[-0.11065 , 0.0132]	0.90276
Distance	[-0.1488 , -0.0241]	0.90276
EqualFrequency	[-0.1238 , -0.01705]	0.90276
EqualWidth	[-0.1031 , 0.00795]	0.90276
Extended Chi2	[-0.07945 , -0.0123]	0.90276
FFD	[-0.04425 , 0.01925]	0.90276
FUSINTER	[-0.1577 , -0.0354]	0.90276
HellingerBD	[-0.1233 , 0.00175]	0.90276
Heter-Disc	[0.0542 , 0.23385]	0.90276
ID3	[0 , 0.0609]	0.90276
IDD	[-0.0278 , 0.1016]	0.90276
Khiops	[-0.1122 , -0.0098]	0.90276
MDLP	[-0.1455 , -0.021]	0.90276
Modified Chi2	[-0.14365 , -0.01215]	0.90276
MODL	[-0.1254 , -0.02435]	0.90276
MVD	[-0.0137 , 0.10595]	0.90276
PKID	[-0.04265 , 0.02015]	0.90276
UCPD	[-0.1475 , -0.0262]	0.90276
USD	[-0.0257 , 0.0239]	0.90276
Zeta	[-0.14125 , -0.0392]	0.90276

Table 50: Confidence intervals for algorithm HDD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.05145 , 0.16025]	0.95024
Ameva	[-0.17095 , -0.0213]	0.95024
Bayesian	[-0.0109 , 0.12295]	0.95024
CACC	[-0.15435 , 0.00165]	0.95024
CADD	[0.16035 , 0.36655]	0.95024
CAIM	[-0.1563 , -0.02975]	0.95024
Chi2	[-0.1625 , -0.01565]	0.95024
ChiMerge	[-0.1558 , -0.04565]	0.95024
ClusterAnalysis	[-0.01475 , 0.0569]	0.95024
DIBD	[-0.12165 , 0.01885]	0.95024
Distance	[-0.1634 , -0.0196]	0.95024
EqualFrequency	[-0.13775 , -0.0109]	0.95024
EqualWidth	[-0.11235 , 0.01215]	0.95024
Extended Chi2	[-0.08865 , -0.00775]	0.95024
FFD	[-0.06 , 0.027]	0.95024
FUSINTER	[-0.16865 , -0.03015]	0.95024
HellingerBD	[-0.13165 , 0.00665]	0.95024
Heter-Disc	[0.0376 , 0.24995]	0.95024
ID3	[-0.00195 , 0.0799]	0.95024
IDD	[-0.0418 , 0.1148]	0.95024
Khiops	[-0.1252 , -0.00515]	0.95024
MDLP	[-0.15555 , -0.0177]	0.95024
Modified Chi2	[-0.15005 , -0.009]	0.95024
MODL	[-0.1341 , -0.01695]	0.95024
MVD	[-0.02315 , 0.11895]	0.95024
PKID	[-0.0573 , 0.02915]	0.95024
UCPD	[-0.1629 , -0.01855]	0.95024
USD	[-0.0368 , 0.02995]	0.95024
Zeta	[-0.1522 , -0.0329]	0.95024

Table 51: Confidence intervals for algorithm HDD ($\alpha=0.95$)

18 Detailed results for HellingerBD

18.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	657.0	163.0	6.032E-4	0.000879
Ameva	284.0	536.0	≥ 0.2	1
Bayesian	703.0	117.0	3.062E-5	0.00008
CACC	305.0	515.0	≥ 0.2	1
CADD	820.0	0.0	1.819E-12	0
CAIM	173.0	607.0	≥ 0.2	1
Chi2	292.0	528.0	≥ 0.2	1
ChiMerge	226.0	594.0	≥ 0.2	1
ClusterAnalysis	633.0	147.0	4.388E-4	0.000679
DIBD	436.0	384.0	≥ 0.2	0.721695
Distance	243.0	537.0	≥ 0.2	1
EqualFrequency	362.5	457.5	≥ 0.2	1
EqualWidth	483.0	300.0	≥ 0.2	0.431886
Extended Chi2	423.0	397.0	≥ 0.2	0.856008
FFD	580.0	203.0	0.02432	0.024585
FUSINTER	166.0	654.0	≥ 0.2	1
HDD	526.5	293.5	≥ 0.2	0.261044
Heter-Disc	744.0	76.0	9.584E-7	0.000007
ID3	686.0	97.0	4.736E-5	0.000113
IDD	703.0	117.0	3.062E-5	0.00008
Khiops	348.5	471.5	≥ 0.2	1
MDLP	227.0	553.0	≥ 0.2	1
Modified Chi2	318.0	462.0	≥ 0.2	1
MODL	303.0	517.0	≥ 0.2	1
MVD	591.0	229.0	0.014108	0.014704
PKID	572.0	211.0	0.03356	0.033406
UCPD	270.0	510.0	≥ 0.2	1
USD	581.0	199.0	0.006844	0.007531
Zeta	237.0	543.0	≥ 0.2	1

Table 52: Results obtained by the Wilcoxon test for algorithm HellingerBD

18.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.04355 , 0.1744]	0.90276
Ameva	[-0.06265 , -0.00105]	0.90276
Bayesian	[0.07025 , 0.18155]	0.90276
CACC	[-0.0439 , 0.00455]	0.90276
CADD	[0.26085 , 0.4017]	0.90276
CAIM	[-0.0556 , -0.0149]	0.90276
Chi2	[-0.0443 , 0.00125]	0.90276
ChiMerge	[-0.06485 , -0.0088]	0.90276
ClusterAnalysis	[0.0398 , 0.13115]	0.90276
DIBD	[-0.0219 , 0.03955]	0.90276
Distance	[-0.06335 , -0.00865]	0.90276
EqualFrequency	[-0.0317 , 0.0136]	0.90276
EqualWidth	[-0.00385 , 0.0296]	0.90276
Extended Chi2	[-0.0248 , 0.0425]	0.90276
FFD	[0.0143 , 0.06785]	0.90276
FUSINTER	[-0.06785 , -0.0221]	0.90276
HDD	[-0.00175 , 0.1233]	0.90276
Heter-Disc	[0.15065 , 0.28985]	0.90276
ID3	[0.0662 , 0.1647]	0.90276
IDD	[0.05695 , 0.1472]	0.90276
Khiops	[-0.02645 , 0.0072]	0.90276
MDLP	[-0.05895 , -0.0106]	0.90276
Modified Chi2	[-0.03035 , 0.00645]	0.90276
MODL	[-0.04675 , 0.0035]	0.90276
MVD	[0.0181 , 0.1906]	0.90276
PKID	[0.0145 , 0.0756]	0.90276
UCPD	[-0.0532 , 0]	0.90276
USD	[0.0181 , 0.1244]	0.90276
Zeta	[-0.0504 , -0.00605]	0.90276

Table 53: Confidence intervals for algorithm HellingerBD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.03565 , 0.1874]	0.95024
Ameva	[-0.0707 , 0.0045]	0.95024
Bayesian	[0.0606 , 0.19025]	0.95024
CACC	[-0.0502 , 0.0106]	0.95024
CADD	[0.2461 , 0.41605]	0.95024
CAIM	[-0.0616 , -0.0126]	0.95024
Chi2	[-0.04905 , 0.00455]	0.95024
ChiMerge	[-0.0694 , -0.00505]	0.95024
ClusterAnalysis	[0.03185 , 0.14065]	0.95024
DIBD	[-0.02865 , 0.0483]	0.95024
Distance	[-0.0694 , -0.0027]	0.95024
EqualFrequency	[-0.0373 , 0.0189]	0.95024
EqualWidth	[-0.00695 , 0.0336]	0.95024
Extended Chi2	[-0.0343 , 0.0556]	0.95024
FFD	[0.0107 , 0.07285]	0.95024
FUSINTER	[-0.0723 , -0.01755]	0.95024
HDD	[-0.00665 , 0.13165]	0.95024
Heter-Disc	[0.1395 , 0.3047]	0.95024
ID3	[0.05325 , 0.1713]	0.95024
IDD	[0.0514 , 0.1575]	0.95024
Khiops	[-0.0308 , 0.00965]	0.95024
MDLP	[-0.06305 , -0.00535]	0.95024
Modified Chi2	[-0.03415 , 0.01]	0.95024
MODL	[-0.0551 , 0.008]	0.95024
MVD	[0.01215 , 0.20315]	0.95024
PKID	[0.01045 , 0.08335]	0.95024
UCPD	[-0.0582 , 0.0044]	0.95024
USD	[0.01365 , 0.135]	0.95024
Zeta	[-0.0551 , -0.00305]	0.95024

Table 54: Confidence intervals for algorithm HellingerBD ($\alpha=0.95$)

19 Detailed results for Heter-Disc

19.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	276.0	544.0	≥ 0.2	1
Ameva	27.0	793.0	≥ 0.2	1
Bayesian	254.5	565.5	≥ 0.2	1
CACC	40.5	779.5	≥ 0.2	1
CADD	538.0	282.0	≥ 0.2	1
CAIM	33.0	787.0	≥ 0.2	1
Chi2	31.0	749.0	≥ 0.2	1
ChiMerge	32.0	788.0	≥ 0.2	1
ClusterAnalysis	202.5	617.5	≥ 0.2	1
DIBD	66.0	714.0	≥ 0.2	1
Distance	39.0	781.0	≥ 0.2	1
EqualFrequency	63.0	717.0	≥ 0.2	1
EqualWidth	83.0	737.0	≥ 0.2	1
Extended Chi2	126.5	693.5	≥ 0.2	1
FFD	120.5	699.5	≥ 0.2	1
FUSINTER	20.0	800.0	≥ 0.2	1
HDD	199.0	621.0	≥ 0.2	1
HellingerBD	76.0	744.0	≥ 0.2	1
ID3	232.5	552.5	≥ 0.2	1
IDD	246.0	537.0	≥ 0.2	1
Khiops	54.0	766.0	≥ 0.2	1
MDLP	44.0	776.0	≥ 0.2	1
Modified Chi2	26.0	754.0	≥ 0.2	1
MODL	68.0	752.0	≥ 0.2	1
MVD	238.0	549.0	≥ 0.2	1
PKID	127.0	656.0	≥ 0.2	1
UCPD	8.0	812.0	≥ 0.2	1
USD	176.0	604.0	≥ 0.2	1
Zeta	32.0	788.0	≥ 0.2	1

Table 55: Results obtained by the Wilcoxon test for algorithm Heter-Disc

19.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.1672 , -0.0027]	0.90276
Ameva	[-0.3159 , -0.1851]	0.90276
Bayesian	[-0.16915 , -0.02]	0.90276
CACC	[-0.2626 , -0.1473]	0.90276
CADD	[0 , 0.2292]	0.90276
CAIM	[-0.3279 , -0.1844]	0.90276
Chi2	[-0.31245 , -0.17945]	0.90276
ChiMerge	[-0.3282 , -0.1843]	0.90276
ClusterAnalysis	[-0.19515 , -0.0461]	0.90276
DIBD	[-0.25095 , -0.112]	0.90276
Distance	[-0.3122 , -0.16915]	0.90276
EqualFrequency	[-0.30855 , -0.17115]	0.90276
EqualWidth	[-0.28875 , -0.1492]	0.90276
Extended Chi2	[-0.2868 , -0.13705]	0.90276
FFD	[-0.245 , -0.10735]	0.90276
FUSINTER	[-0.34195 , -0.1971]	0.90276
HDD	[-0.23385 , -0.0542]	0.90276
HellingerBD	[-0.28985 , -0.15065]	0.90276
ID3	[-0.17885 , -0.0155]	0.90276
IDD	[-0.17075 , -0.01625]	0.90276
Khiops	[-0.2915 , -0.15425]	0.90276
MDLP	[-0.3178 , -0.16795]	0.90276
Modified Chi2	[-0.2942 , -0.16725]	0.90276
MODL	[-0.3056 , -0.1604]	0.90276
MVD	[-0.201 , -0.0345]	0.90276
PKID	[-0.2345 , -0.0933]	0.90276
UCPD	[-0.3113 , -0.17625]	0.90276
USD	[-0.2331 , -0.083]	0.90276
Zeta	[-0.3211 , -0.1821]	0.90276

Table 56: Confidence intervals for algorithm Heter-Disc ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.18665 , 0.0027]	0.95024
Ameva	[-0.32695 , -0.17785]	0.95024
Bayesian	[-0.18365 , -0.00455]	0.95024
CACC	[-0.28075 , -0.13585]	0.95024
CADD	[0 , 0.2417]	0.95024
CAIM	[-0.3424 , -0.1709]	0.95024
Chi2	[-0.3222 , -0.17105]	0.95024
ChiMerge	[-0.3378 , -0.17565]	0.95024
ClusterAnalysis	[-0.20825 , -0.03335]	0.95024
DIBD	[-0.2651 , -0.0995]	0.95024
Distance	[-0.33035 , -0.1608]	0.95024
EqualFrequency	[-0.3188 , -0.15355]	0.95024
EqualWidth	[-0.3025 , -0.1387]	0.95024
Extended Chi2	[-0.2989 , -0.12415]	0.95024
FFD	[-0.2643 , -0.09075]	0.95024
FUSINTER	[-0.3591 , -0.182]	0.95024
HDD	[-0.24995 , -0.0376]	0.95024
HellingerBD	[-0.3047 , -0.1395]	0.95024
ID3	[-0.1954 , -0.0077]	0.95024
IDD	[-0.18165 , -0.0022]	0.95024
Khiops	[-0.30835 , -0.1433]	0.95024
MDLP	[-0.3358 , -0.16185]	0.95024
Modified Chi2	[-0.3045 , -0.15625]	0.95024
MODL	[-0.32 , -0.14685]	0.95024
MVD	[-0.21055 , -0.0082]	0.95024
PKID	[-0.25235 , -0.07935]	0.95024
UCPD	[-0.32035 , -0.168]	0.95024
USD	[-0.24675 , -0.0681]	0.95024
Zeta	[-0.33875 , -0.1706]	0.95024

Table 57: Confidence intervals for algorithm Heter-Disc ($\alpha=0.95$)

20 Detailed results for ID3

20.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	367.0	453.0	≥ 0.2	1
Ameva	99.0	721.0	≥ 0.2	1
Bayesian	348.0	437.0	≥ 0.2	1
CACC	149.0	671.0	≥ 0.2	1
CADD	653.5	131.5	0.0020251	0.00258
CAIM	51.0	769.0	≥ 0.2	1
Chi2	36.5	783.5	≥ 0.2	1
ChiMerge	41.0	779.0	≥ 0.2	1
ClusterAnalysis	334.0	449.0	≥ 0.2	1
DIBD	207.0	613.0	≥ 0.2	1
Distance	84.0	696.0	≥ 0.2	1
EqualFrequency	78.0	705.0	≥ 0.2	1
EqualWidth	152.5	632.5	≥ 0.2	1
Extended Chi2	159.5	660.5	≥ 0.2	1
FFD	131.5	653.5	≥ 0.2	1
FUSINTER	19.0	801.0	≥ 0.2	1
HDD	288.0	503.0	≥ 0.2	1
HellingerBD	97.0	686.0	≥ 0.2	1
Heter-Disc	552.5	232.5	0.18155	0.173998
IDD	336.0	484.0	≥ 0.2	1
Khiops	69.5	750.5	≥ 0.2	1
MDLP	82.0	698.0	≥ 0.2	1
Modified Chi2	46.5	773.5	≥ 0.2	1
MODL	98.0	722.0	≥ 0.2	1
MVD	371.0	409.0	≥ 0.2	1
PKID	160.0	627.0	≥ 0.2	1
UCPD	98.0	722.0	≥ 0.2	1
USD	133.5	651.5	≥ 0.2	1
Zeta	39.0	741.0	≥ 0.2	1

Table 58: Results obtained by the Wilcoxon test for algorithm ID3

20.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.1129 , 0.0864]	0.90276
Ameva	[-0.20955 , -0.11345]	0.90276
Bayesian	[-0.03105 , 0.01355]	0.90276
CACC	[-0.1791 , -0.0714]	0.90276
CADD	[0.10805 , 0.31665]	0.90276
CAIM	[-0.2031 , -0.1167]	0.90276
Chi2	[-0.18375 , -0.092]	0.90276
ChiMerge	[-0.20005 , -0.1208]	0.90276
ClusterAnalysis	[-0.0411 , 0.00935]	0.90276
DIBD	[-0.15765 , -0.03545]	0.90276
Distance	[-0.1976 , -0.0923]	0.90276
EqualFrequency	[-0.17245 , -0.07035]	0.90276
EqualWidth	[-0.1463 , -0.0383]	0.90276
Extended Chi2	[-0.14555 , -0.041]	0.90276
FFD	[-0.11045 , -0.026]	0.90276
FUSINTER	[-0.21295 , -0.1144]	0.90276
HDD	[-0.0609 , 0]	0.90276
HellingerBD	[-0.1647 , -0.0662]	0.90276
Heter-Disc	[0.0155 , 0.17885]	0.90276
IDD	[-0.0879 , 0.03235]	0.90276
Khiops	[-0.1677 , -0.0795]	0.90276
MDLP	[-0.193 , -0.1017]	0.90276
Modified Chi2	[-0.1702 , -0.07465]	0.90276
MODL	[-0.176 , -0.0891]	0.90276
MVD	[-0.08145 , 0.06245]	0.90276
PKID	[-0.10235 , -0.02535]	0.90276
UCPD	[-0.19765 , -0.0978]	0.90276
USD	[-0.0574 , -0.01395]	0.90276
Zeta	[-0.1936 , -0.1105]	0.90276

Table 59: Confidence intervals for algorithm ID3 ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.1191 , 0.10725]	0.95024
Ameva	[-0.2177 , -0.1024]	0.95024
Bayesian	[-0.03525 , 0.02055]	0.95024
CACC	[-0.18625 , -0.0589]	0.95024
CADD	[0.0888 , 0.3296]	0.95024
CAIM	[-0.2095 , -0.1113]	0.95024
Chi2	[-0.1905 , -0.08355]	0.95024
ChiMerge	[-0.20815 , -0.1119]	0.95024
ClusterAnalysis	[-0.0517 , 0.01265]	0.95024
DIBD	[-0.16775 , -0.0278]	0.95024
Distance	[-0.20865 , -0.07945]	0.95024
EqualFrequency	[-0.1839 , -0.05925]	0.95024
EqualWidth	[-0.1534 , -0.0289]	0.95024
Extended Chi2	[-0.15455 , -0.03315]	0.95024
FFD	[-0.11965 , -0.02055]	0.95024
FUSINTER	[-0.223 , -0.1066]	0.95024
HDD	[-0.0799 , 0.00195]	0.95024
HellingerBD	[-0.1713 , -0.05325]	0.95024
Heter-Disc	[0.0077 , 0.1954]	0.95024
IDD	[-0.0989 , 0.05275]	0.95024
Khiops	[-0.17485 , -0.06895]	0.95024
MDLP	[-0.20495 , -0.0799]	0.95024
Modified Chi2	[-0.177 , -0.05865]	0.95024
MODL	[-0.1847 , -0.078]	0.95024
MVD	[-0.0943 , 0.0764]	0.95024
PKID	[-0.1065 , -0.0212]	0.95024
UCPD	[-0.2066 , -0.0888]	0.95024
USD	[-0.0633 , -0.01195]	0.95024
Zeta	[-0.2023 , -0.1032]	0.95024

Table 60: Confidence intervals for algorithm ID3 ($\alpha=0.95$)

21 Detailed results for IDD

21.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	348.0	472.0	≥ 0.2	1
Ameva	62.5	757.5	≥ 0.2	1
Bayesian	551.5	268.5	0.14238	0.136439
CACC	115.0	705.0	≥ 0.2	1
CADD	774.0	46.0	5.542E-7	0.000006
CAIM	40.0	780.0	≥ 0.2	1
Chi2	51.0	769.0	≥ 0.2	1
ChiMerge	46.0	774.0	≥ 0.2	1
ClusterAnalysis	397.0	383.0	≥ 0.2	0.916644
DIBD	132.0	648.0	≥ 0.2	1
Distance	88.0	732.0	≥ 0.2	1
EqualFrequency	141.0	679.0	≥ 0.2	1
EqualWidth	179.0	641.0	≥ 0.2	1
Extended Chi2	203.0	617.0	≥ 0.2	1
FFD	258.0	562.0	≥ 0.2	1
FUSINTER	43.0	777.0	≥ 0.2	1
HDD	343.0	477.0	≥ 0.2	1
HellingerBD	117.0	703.0	≥ 0.2	1
Heter-Disc	537.0	246.0	0.11392	0.109788
ID3	484.0	336.0	≥ 0.2	0.316645
Khiops	110.0	710.0	≥ 0.2	1
MDLP	76.0	744.0	≥ 0.2	1
Modified Chi2	99.0	721.0	≥ 0.2	1
MODL	86.0	734.0	≥ 0.2	1
MVD	358.5	461.5	≥ 0.2	1
PKID	261.0	559.0	≥ 0.2	1
UCPD	70.0	750.0	≥ 0.2	1
USD	386.0	434.0	≥ 0.2	1
Zeta	63.0	757.0	≥ 0.2	1

Table 61: Results obtained by the Wilcoxon test for algorithm IDD

21.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.03815 , 0.0147]	0.90276
Ameva	[-0.18845 , -0.089]	0.90276
Bayesian	[0.0046 , 0.0716]	0.90276
CACC	[-0.15915 , -0.07785]	0.90276
CADD	[0.14035 , 0.2619]	0.90276
CAIM	[-0.18435 , -0.0894]	0.90276
Chi2	[-0.17905 , -0.0757]	0.90276
ChiMerge	[-0.18285 , -0.0881]	0.90276
ClusterAnalysis	[-0.06015 , 0.05]	0.90276
DIBD	[-0.11945 , -0.0441]	0.90276
Distance	[-0.18625 , -0.07945]	0.90276
EqualFrequency	[-0.1743 , -0.051]	0.90276
EqualWidth	[-0.14745 , -0.03485]	0.90276
Extended Chi2	[-0.13655 , -0.0315]	0.90276
FFD	[-0.11185 , -0.0078]	0.90276
FUSINTER	[-0.20705 , -0.10105]	0.90276
HDD	[-0.1016 , 0.0278]	0.90276
HellingerBD	[-0.1472 , -0.05695]	0.90276
Heter-Disc	[0.01625 , 0.17075]	0.90276
ID3	[-0.03235 , 0.0879]	0.90276
Khiops	[-0.15545 , -0.06765]	0.90276
MDLP	[-0.18255 , -0.0853]	0.90276
Modified Chi2	[-0.1701 , -0.05485]	0.90276
MODL	[-0.15855 , -0.0656]	0.90276
MVD	[-0.0619 , 0.0298]	0.90276
PKID	[-0.10495 , -0.0067]	0.90276
UCPD	[-0.1786 , -0.07775]	0.90276
USD	[-0.07345 , 0.03265]	0.90276
Zeta	[-0.17885 , -0.07945]	0.90276

Table 62: Confidence intervals for algorithm IDD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.04475 , 0.02265]	0.95024
Ameva	[-0.20085 , -0.08085]	0.95024
Bayesian	[-0.00065 , 0.0769]	0.95024
CACC	[-0.17005 , -0.07315]	0.95024
CADD	[0.13085 , 0.2813]	0.95024
CAIM	[-0.196 , -0.08385]	0.95024
Chi2	[-0.18965 , -0.0697]	0.95024
ChiMerge	[-0.19355 , -0.08275]	0.95024
ClusterAnalysis	[-0.0739 , 0.05715]	0.95024
DIBD	[-0.1237 , -0.03895]	0.95024
Distance	[-0.19265 , -0.0703]	0.95024
EqualFrequency	[-0.184 , -0.04295]	0.95024
EqualWidth	[-0.16135 , -0.0281]	0.95024
Extended Chi2	[-0.15205 , -0.0236]	0.95024
FFD	[-0.12445 , -0.0026]	0.95024
FUSINTER	[-0.2207 , -0.09165]	0.95024
HDD	[-0.1148 , 0.0418]	0.95024
HellingerBD	[-0.1575 , -0.0514]	0.95024
Heter-Disc	[0.0022 , 0.18165]	0.95024
ID3	[-0.05275 , 0.0989]	0.95024
Khiops	[-0.1668 , -0.0608]	0.95024
MDLP	[-0.1916 , -0.0806]	0.95024
Modified Chi2	[-0.17925 , -0.04815]	0.95024
MODL	[-0.16855 , -0.0587]	0.95024
MVD	[-0.07265 , 0.05255]	0.95024
PKID	[-0.11705 , -0.00135]	0.95024
UCPD	[-0.1853 , -0.0708]	0.95024
USD	[-0.0944 , 0.03735]	0.95024
Zeta	[-0.19145 , -0.073]	0.95024

Table 63: Confidence intervals for algorithm IDD ($\alpha=0.95$)

22 Detailed results for Khiops

22.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	663.0	117.0	5.914E-5	0.000135
Ameva	284.0	536.0	≥ 0.2	1
Bayesian	719.0	101.0	8.848E-6	0.000032
CACC	348.0	472.0	≥ 0.2	1
CADD	820.0	0.0	1.819E-12	0
CAIM	207.0	613.0	≥ 0.2	1
Chi2	292.0	528.0	≥ 0.2	1
ChiMerge	231.0	589.0	≥ 0.2	1
ClusterAnalysis	718.0	102.0	9.598E-6	0.000034
DIBD	478.0	342.0	≥ 0.2	0.357192
Distance	219.0	561.0	≥ 0.2	1
EqualFrequency	408.0	412.0	≥ 0.2	1
EqualWidth	490.0	330.0	≥ 0.2	0.55067
Extended Chi2	417.0	403.0	≥ 0.2	0.919702
FFD	710.5	109.5	6.537E-5	0.000149
FUSINTER	180.0	640.0	≥ 0.2	1
HDD	576.5	243.5	0.06618	0.064452
HellingerBD	471.5	348.5	≥ 0.2	0.744196
Heter-Disc	766.0	54.0	9.226E-8	0.000002
ID3	750.5	69.5	1.9794E-6	0.000012
IDD	710.0	110.0	1.806E-5	0.000054
MDLP	215.0	565.0	≥ 0.2	1
Modified Chi2	339.0	441.0	≥ 0.2	1
MODL	340.0	480.0	≥ 0.2	1
MVD	533.0	247.0	0.0459	0.045226
PKID	677.0	106.0	9.654E-5	0.000206
UCPD	308.0	512.0	≥ 0.2	1
USD	615.0	165.0	0.0012464	0.00165
Zeta	273.0	507.0	≥ 0.2	1

Table 64: Results obtained by the Wilcoxon test for algorithm Khiops

22.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.05635 , 0.17685]	0.90276
Ameva	[-0.05905 , -0.00105]	0.90276
Bayesian	[0.0732 , 0.1828]	0.90276
CACC	[-0.0351 , 0.0097]	0.90276
CADD	[0.27045 , 0.4209]	0.90276
CAIM	[-0.0405 , -0.0102]	0.90276
Chi2	[-0.0337 , 0.0002]	0.90276
ChiMerge	[-0.0545 , -0.00945]	0.90276
ClusterAnalysis	[0.0495 , 0.14115]	0.90276
DIBD	[-0.0134 , 0.05985]	0.90276
Distance	[-0.0477 , -0.0102]	0.90276
EqualFrequency	[-0.0184 , 0.0181]	0.90276
EqualWidth	[-0.00745 , 0.0418]	0.90276
Extended Chi2	[-0.02305 , 0.04975]	0.90276
FFD	[0.0228 , 0.0703]	0.90276
FUSINTER	[-0.0556 , -0.0129]	0.90276
HDD	[0.0098 , 0.1122]	0.90276
HellingerBD	[-0.0072 , 0.02645]	0.90276
Heter-Disc	[0.15425 , 0.2915]	0.90276
ID3	[0.0795 , 0.1677]	0.90276
IDD	[0.06765 , 0.15545]	0.90276
MDLP	[-0.04745 , -0.01105]	0.90276
Modified Chi2	[-0.023 , 0.0088]	0.90276
MODL	[-0.03395 , 0.00895]	0.90276
MVD	[0.0074 , 0.20595]	0.90276
PKID	[0.025 , 0.0729]	0.90276
UCPD	[-0.043 , 0.005]	0.90276
USD	[0.02875 , 0.1189]	0.90276
Zeta	[-0.0426 , 0.00005]	0.90276

Table 65: Confidence intervals for algorithm Khiops ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.05 , 0.191]	0.95024
Ameva	[-0.06495 , 0.00375]	0.95024
Bayesian	[0.06365 , 0.1908]	0.95024
CACC	[-0.03965 , 0.0142]	0.95024
CADD	[0.25945 , 0.4348]	0.95024
CAIM	[-0.04585 , -0.00805]	0.95024
Chi2	[-0.0384 , 0.0033]	0.95024
ChiMerge	[-0.05985 , -0.00635]	0.95024
ClusterAnalysis	[0.04385 , 0.14825]	0.95024
DIBD	[-0.01865 , 0.0698]	0.95024
Distance	[-0.05245 , -0.00745]	0.95024
EqualFrequency	[-0.02395 , 0.022]	0.95024
EqualWidth	[-0.01005 , 0.04765]	0.95024
Extended Chi2	[-0.02615 , 0.06125]	0.95024
FFD	[0.0201 , 0.07425]	0.95024
FUSINTER	[-0.06105 , -0.0105]	0.95024
HDD	[0.00515 , 0.1252]	0.95024
HellingerBD	[-0.00965 , 0.0308]	0.95024
Heter-Disc	[0.1433 , 0.30835]	0.95024
ID3	[0.06895 , 0.17485]	0.95024
IDD	[0.0608 , 0.1668]	0.95024
MDLP	[-0.05085 , -0.00685]	0.95024
Modified Chi2	[-0.0261 , 0.01325]	0.95024
MODL	[-0.03735 , 0.0139]	0.95024
MVD	[0 , 0.2155]	0.95024
PKID	[0.02205 , 0.07865]	0.95024
UCPD	[-0.0463 , 0.00745]	0.95024
USD	[0.02295 , 0.12735]	0.95024
Zeta	[-0.0466 , 0.0044]	0.95024

Table 66: Confidence intervals for algorithm Khiops ($\alpha=0.95$)

23 Detailed results for MDLP

23.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	713.0	107.0	1.43E-5	0.000044
Ameva	372.5	407.5	≥ 0.2	1
Bayesian	725.0	95.0	5.372E-6	0.000022
CACC	499.0	281.0	0.13108	0.126495
CADD	813.0	7.0	3.456E-11	0
CAIM	395.0	385.0	≥ 0.2	0.93882
Chi2	508.0	312.0	0.1922	0.185514
ChiMerge	368.0	412.0	≥ 0.2	1
ClusterAnalysis	711.0	109.0	1.6716E-5	0.000051
DIBD	605.0	215.0	0.007918	0.008595
Distance	389.0	394.0	≥ 0.2	1
EqualFrequency	526.5	293.5	≥ 0.2	0.261044
EqualWidth	581.0	199.0	0.006844	0.007531
Extended Chi2	512.0	308.0	0.17436	0.168286
FFD	657.0	123.0	9.094E-5	0.000189
FUSINTER	284.5	535.5	≥ 0.2	1
HDD	665.5	154.5	0.001272	0.001691
HellingerBD	553.0	227.0	0.02216	0.022276
Heter-Disc	776.0	44.0	2.692E-8	0.000001
ID3	698.0	82.0	3.348E-6	0.000017
IDD	744.0	76.0	9.584E-7	0.000007
Khiops	565.0	215.0	0.013706	0.014321
Modified Chi2	506.0	277.0	≥ 0.2	0.257857
MODL	505.5	314.5	≥ 0.2	0.196172
MVD	611.0	209.0	0.006096	0.00676
PKID	680.0	100.0	1.5942E-5	0.00005
UCPD	470.5	349.5	≥ 0.2	0.411476
USD	651.5	168.5	0.0027470000000000003	0.003317
Zeta	425.5	394.5	≥ 0.2	1

Table 67: Results obtained by the Wilcoxon test for algorithm MDLP

23.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.07605 , 0.2038]	0.90276
Ameva	[-0.02515 , 0.0157]	0.90276
Bayesian	[0.1001 , 0.2127]	0.90276
CACC	[-0.00195 , 0.02505]	0.90276
CADD	[0.28905 , 0.44945]	0.90276
CAIM	[-0.01685 , 0.01515]	0.90276
Chi2	[-0.00295 , 0.0256]	0.90276
ChiMerge	[-0.02045 , 0.0117]	0.90276
ClusterAnalysis	[0.07155 , 0.1687]	0.90276
DIBD	[0.01515 , 0.0865]	0.90276
Distance	[-0.00735 , 0.00835]	0.90276
EqualFrequency	[-0.0007 , 0.053]	0.90276
EqualWidth	[0.0133 , 0.06375]	0.90276
Extended Chi2	[-0.00365 , 0.06875]	0.90276
FFD	[0.0386 , 0.1]	0.90276
FUSINTER	[-0.0268 , -0.0006]	0.90276
HDD	[0.021 , 0.1455]	0.90276
HellingerBD	[0.0106 , 0.05895]	0.90276
Heter-Disc	[0.16795 , 0.3178]	0.90276
ID3	[0.1017 , 0.193]	0.90276
IDD	[0.0853 , 0.18255]	0.90276
Khiops	[0.01105 , 0.04745]	0.90276
Modified Chi2	[-0.00055 , 0.03805]	0.90276
MODL	[-0.00385 , 0.0315]	0.90276
MVD	[0.0257 , 0.21195]	0.90276
PKID	[0.0353 , 0.11705]	0.90276
UCPD	[-0.01165 , 0.02875]	0.90276
USD	[0.0468 , 0.14865]	0.90276
Zeta	[-0.01295 , 0.0187]	0.90276

Table 68: Confidence intervals for algorithm MDLP ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0654 , 0.21725]	0.95024
Ameva	[-0.03055 , 0.01925]	0.95024
Bayesian	[0.08935 , 0.22205]	0.95024
CACC	[-0.00495 , 0.02815]	0.95024
CADD	[0.2754 , 0.46495]	0.95024
CAIM	[-0.02175 , 0.0175]	0.95024
Chi2	[-0.0061 , 0.0309]	0.95024
ChiMerge	[-0.0258 , 0.01495]	0.95024
ClusterAnalysis	[0.06485 , 0.17685]	0.95024
DIBD	[0.01005 , 0.0939]	0.95024
Distance	[-0.0092 , 0.0102]	0.95024
EqualFrequency	[-0.00515 , 0.05855]	0.95024
EqualWidth	[0.00925 , 0.07155]	0.95024
Extended Chi2	[-0.00675 , 0.07945]	0.95024
FFD	[0.03185 , 0.1068]	0.95024
FUSINTER	[-0.0308 , 0.00175]	0.95024
HDD	[0.0177 , 0.15555]	0.95024
HellingerBD	[0.00535 , 0.06305]	0.95024
Heter-Disc	[0.16185 , 0.3358]	0.95024
ID3	[0.0799 , 0.20495]	0.95024
IDD	[0.0806 , 0.1916]	0.95024
Khiops	[0.00685 , 0.05085]	0.95024
Modified Chi2	[-0.0031 , 0.04255]	0.95024
MODL	[-0.0076 , 0.03665]	0.95024
MVD	[0.0161 , 0.2252]	0.95024
PKID	[0.0307 , 0.12525]	0.95024
UCPD	[-0.01545 , 0.03295]	0.95024
USD	[0.03905 , 0.16315]	0.95024
Zeta	[-0.0163 , 0.0219]	0.95024

Table 69: Confidence intervals for algorithm MDLP ($\alpha=0.95$)

24 Detailed results for Modified Chi2

24.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	668.0	152.0	3.168E-4	0.000512
Ameva	269.0	511.0	≥ 0.2	1
Bayesian	755.0	65.0	3.14E-7	0.000003
CACC	351.5	428.5	≥ 0.2	1
CADD	777.0	3.0	1.819E-11	0
CAIM	259.0	521.0	≥ 0.2	1
Chi2	244.0	539.0	≥ 0.2	1
ChiMerge	228.0	552.0	≥ 0.2	1
ClusterAnalysis	708.0	72.0	1.2818E-6	0.000009
DIBD	511.0	309.0	0.1787	0.172476
Distance	292.5	527.5	≥ 0.2	1
EqualFrequency	423.5	359.5	≥ 0.2	1
EqualWidth	530.0	250.0	0.05084	0.049121
Extended Chi2	363.0	417.0	≥ 0.2	1
FFD	689.5	130.5	2.896E-4	0.000487
FUSINTER	192.0	588.0	≥ 0.2	1
HDD	574.0	209.0	0.03102	0.030979
HellingerBD	462.0	318.0	≥ 0.2	0.311664
Heter-Disc	754.0	26.0	3.888E-9	0
ID3	773.5	46.5	1.4830999999999998E-7	0.000002
IDD	721.0	99.0	7.508E-6	0.000028
Khiops	441.0	339.0	≥ 0.2	0.471563
MDLP	277.0	506.0	≥ 0.2	1
MODL	331.0	449.0	≥ 0.2	1
MVD	587.0	193.0	0.005188	0.005849
PKID	675.5	144.5	7.046E-4	0.001021
UCPD	314.5	505.5	≥ 0.2	1
USD	644.0	139.0	9.368E-4	0.001312
Zeta	279.0	541.0	≥ 0.2	1

Table 70: Results obtained by the Wilcoxon test for algorithm Modified Chi2

24.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0522 , 0.1954]	0.90276
Ameva	[-0.0539 , -0.00015]	0.90276
Bayesian	[0.0787 , 0.18915]	0.90276
CACC	[-0.03505 , 0.0145]	0.90276
CADD	[0.27405 , 0.4292]	0.90276
CAIM	[-0.04615 , -0.00095]	0.90276
Chi2	[-0.0282 , -0.00155]	0.90276
ChiMerge	[-0.04585 , -0.0053]	0.90276
ClusterAnalysis	[0.0575 , 0.14705]	0.90276
DIBD	[-0.0047 , 0.0612]	0.90276
Distance	[-0.043 , 0.00085]	0.90276
EqualFrequency	[-0.01315 , 0.02665]	0.90276
EqualWidth	[0.00375 , 0.041]	0.90276
Extended Chi2	[-0.02115 , 0.0487]	0.90276
FFD	[0.0214 , 0.0645]	0.90276
FUSINTER	[-0.0535 , -0.0096]	0.90276
HDD	[0.01215 , 0.14365]	0.90276
HellingerBD	[-0.00645 , 0.03035]	0.90276
Heter-Disc	[0.16725 , 0.2942]	0.90276
ID3	[0.07465 , 0.1702]	0.90276
IDD	[0.05485 , 0.1701]	0.90276
Khiops	[-0.0088 , 0.023]	0.90276
MDLP	[-0.03805 , 0.00055]	0.90276
MODL	[-0.0292 , 0.00895]	0.90276
MVD	[0.02675 , 0.17995]	0.90276
PKID	[0.02355 , 0.0731]	0.90276
UCPD	[-0.0358 , 0.0049]	0.90276
USD	[0.0279 , 0.10685]	0.90276
Zeta	[-0.03595 , -0.0011]	0.90276

Table 71: Confidence intervals for algorithm Modified Chi2 ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.04215 , 0.20785]	0.95024
Ameva	[-0.05855 , 0.00365]	0.95024
Bayesian	[0.0692 , 0.19905]	0.95024
CACC	[-0.03895 , 0.0206]	0.95024
CADD	[0.2625 , 0.44465]	0.95024
CAIM	[-0.05 , 0.0017]	0.95024
Chi2	[-0.0309 , -0.00045]	0.95024
ChiMerge	[-0.05125 , -0.00315]	0.95024
ClusterAnalysis	[0.0524 , 0.15645]	0.95024
DIBD	[-0.0098 , 0.06865]	0.95024
Distance	[-0.04655 , 0.00505]	0.95024
EqualFrequency	[-0.01915 , 0.0327]	0.95024
EqualWidth	[-0.0002 , 0.04585]	0.95024
Extended Chi2	[-0.0232 , 0.06095]	0.95024
FFD	[0.01875 , 0.07145]	0.95024
FUSINTER	[-0.0578 , -0.00725]	0.95024
HDD	[0.009 , 0.15005]	0.95024
HellingerBD	[-0.01 , 0.03415]	0.95024
Heter-Disc	[0.15625 , 0.3045]	0.95024
ID3	[0.05865 , 0.177]	0.95024
IDD	[0.04815 , 0.17925]	0.95024
Khiops	[-0.01325 , 0.0261]	0.95024
MDLP	[-0.04255 , 0.0031]	0.95024
MODL	[-0.0328 , 0.01245]	0.95024
MVD	[0.02085 , 0.19335]	0.95024
PKID	[0.0207 , 0.0853]	0.95024
UCPD	[-0.04015 , 0.00765]	0.95024
USD	[0.02325 , 0.1255]	0.95024
Zeta	[-0.03995 , 0.0015]	0.95024

Table 72: Confidence intervals for algorithm Modified Chi2 ($\alpha=0.95$)

25 Detailed results for MODL

25.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	633.0	147.0	4.388E-4	0.000679
Ameva	310.0	510.0	≥ 0.2	1
Bayesian	744.0	76.0	9.584E-7	0.000007
CACC	357.0	463.0	≥ 0.2	1
CADD	815.0	5.0	1.819E-11	0
CAIM	335.0	485.0	≥ 0.2	1
Chi2	388.0	432.0	≥ 0.2	1
ChiMerge	286.0	534.0	≥ 0.2	1
ClusterAnalysis	695.0	125.0	5.45E-5	0.000124
DIBD	539.0	281.0	0.08416	0.081745
Distance	295.0	525.0	≥ 0.2	1
EqualFrequency	452.0	368.0	≥ 0.2	0.567827
EqualWidth	545.0	275.0	0.07034	0.068562
Extended Chi2	459.0	361.0	≥ 0.2	0.50583
FFD	610.0	170.0	0.0016352	0.002053
FUSINTER	208.0	575.0	≥ 0.2	1
HDD	631.5	188.5	0.002334	0.002799
HellingerBD	517.0	303.0	0.15378	0.147793
Heter-Disc	752.0	68.0	4.3E-7	0.000004
ID3	722.0	98.0	6.91E-6	0.000026
IDD	734.0	86.0	2.444E-6	0.000013
Khiops	480.0	340.0	≥ 0.2	0.343327
MDLP	314.5	505.5	≥ 0.2	1
Modified Chi2	449.0	331.0	≥ 0.2	0.406357
MVD	623.0	197.0	0.00352	0.004046
PKID	635.0	185.0	0.0019596	0.002437
UCPD	329.0	491.0	≥ 0.2	1
USD	651.0	129.0	1.3768E-4	0.000263
Zeta	371.0	449.0	≥ 0.2	1

Table 73: Results obtained by the Wilcoxon test for algorithm MODL

25.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0368 , 0.18545]	0.90276
Ameva	[-0.04335 , 0.00315]	0.90276
Bayesian	[0.08005 , 0.19155]	0.90276
CACC	[-0.02685 , 0.01035]	0.90276
CADD	[0.2667 , 0.43065]	0.90276
CAIM	[-0.0247 , 0.00495]	0.90276
Chi2	[-0.02305 , 0.01625]	0.90276
ChiMerge	[-0.0358 , -0.0003]	0.90276
ClusterAnalysis	[0.06375 , 0.14965]	0.90276
DIBD	[0.00085 , 0.06655]	0.90276
Distance	[-0.0338 , 0.00175]	0.90276
EqualFrequency	[-0.0197 , 0.0394]	0.90276
EqualWidth	[0.0028 , 0.05505]	0.90276
Extended Chi2	[-0.01285 , 0.0455]	0.90276
FFD	[0.021 , 0.072]	0.90276
FUSINTER	[-0.0433 , -0.0087]	0.90276
HDD	[0.02435 , 0.1254]	0.90276
HellingerBD	[-0.0035 , 0.04675]	0.90276
Heter-Disc	[0.1604 , 0.3056]	0.90276
ID3	[0.0891 , 0.176]	0.90276
IDD	[0.0656 , 0.15855]	0.90276
Khiops	[-0.00895 , 0.03395]	0.90276
MDLP	[-0.0315 , 0.00385]	0.90276
Modified Chi2	[-0.00895 , 0.0292]	0.90276
MVD	[0.0354 , 0.19155]	0.90276
PKID	[0.0218 , 0.0848]	0.90276
UCPD	[-0.03035 , 0.00525]	0.90276
USD	[0.0391 , 0.119]	0.90276
Zeta	[-0.0227 , 0.01125]	0.90276

Table 74: Confidence intervals for algorithm MODL ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0284 , 0.19925]	0.95024
Ameva	[-0.05305 , 0.0056]	0.95024
Bayesian	[0.07185 , 0.20015]	0.95024
CACC	[-0.02945 , 0.0143]	0.95024
CADD	[0.25475 , 0.447]	0.95024
CAIM	[-0.02875 , 0.00695]	0.95024
Chi2	[-0.02755 , 0.02025]	0.95024
ChiMerge	[-0.04125 , 0.0024]	0.95024
ClusterAnalysis	[0.0555 , 0.15825]	0.95024
DIBD	[-0.0044 , 0.07475]	0.95024
Distance	[-0.0376 , 0.0057]	0.95024
EqualFrequency	[-0.0251 , 0.04435]	0.95024
EqualWidth	[-0.0024 , 0.06285]	0.95024
Extended Chi2	[-0.0155 , 0.05495]	0.95024
FFD	[0.0154 , 0.0788]	0.95024
FUSINTER	[-0.04955 , -0.00605]	0.95024
HDD	[0.01695 , 0.1341]	0.95024
HellingerBD	[-0.008 , 0.0551]	0.95024
Heter-Disc	[0.14685 , 0.32]	0.95024
ID3	[0.078 , 0.1847]	0.95024
IDD	[0.0587 , 0.16855]	0.95024
Khiops	[-0.0139 , 0.03735]	0.95024
MDLP	[-0.03665 , 0.0076]	0.95024
Modified Chi2	[-0.01245 , 0.0328]	0.95024
MVD	[0.02655 , 0.2013]	0.95024
PKID	[0.0147 , 0.09175]	0.95024
UCPD	[-0.0333 , 0.00785]	0.95024
USD	[0.03395 , 0.1295]	0.95024
Zeta	[-0.02665 , 0.01385]	0.95024

Table 75: Confidence intervals for algorithm MODL ($\alpha=0.95$)

26 Detailed results for MVD

26.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	425.0	358.0	≥ 0.2	1
Ameva	109.0	711.0	≥ 0.2	1
Bayesian	508.5	311.5	≥ 0.2	0.3882
CACC	214.0	606.0	≥ 0.2	1
CADD	717.0	103.0	1.4762E-4	0.000293
CAIM	116.5	703.5	≥ 0.2	1
Chi2	147.0	633.0	≥ 0.2	1
ChiMerge	80.0	740.0	≥ 0.2	1
ClusterAnalysis	412.5	407.5	≥ 0.2	1
DIBD	240.0	540.0	≥ 0.2	1
Distance	207.0	613.0	≥ 0.2	1
EqualFrequency	232.0	548.0	≥ 0.2	1
EqualWidth	280.0	540.0	≥ 0.2	1
Extended Chi2	248.0	532.0	≥ 0.2	1
FFD	310.0	470.0	≥ 0.2	1
FUSINTER	109.5	710.5	≥ 0.2	1
HDD	331.0	489.0	≥ 0.2	1
HellingerBD	229.0	591.0	≥ 0.2	1
Heter-Disc	549.0	238.0	≥ 0.2	0.442299
ID3	409.0	371.0	≥ 0.2	0.785528
IDD	461.5	358.5	≥ 0.2	0.856149
Khiops	247.0	533.0	≥ 0.2	1
MDLP	209.0	611.0	≥ 0.2	1
Modified Chi2	193.0	587.0	≥ 0.2	1
MODL	197.0	623.0	≥ 0.2	1
PKID	346.5	473.5	≥ 0.2	1
UCPD	193.0	627.0	≥ 0.2	1
USD	350.0	470.0	≥ 0.2	1
Zeta	149.0	671.0	≥ 0.2	1

Table 76: Results obtained by the Wilcoxon test for algorithm MVD

26.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0435 , 0.07355]	0.90276
Ameva	[-0.1947 , -0.06135]	0.90276
Bayesian	[-0.0095 , 0.0698]	0.90276
CACC	[-0.1715 , -0.01835]	0.90276
CADD	[0.1373 , 0.28245]	0.90276
CAIM	[-0.21655 , -0.0466]	0.90276
Chi2	[-0.19655 , -0.0322]	0.90276
ChiMerge	[-0.2007 , -0.06675]	0.90276
ClusterAnalysis	[-0.0788 , 0.04705]	0.90276
DIBD	[-0.12095 , -0.00965]	0.90276
Distance	[-0.2168 , -0.02915]	0.90276
EqualFrequency	[-0.199 , -0.0144]	0.90276
EqualWidth	[-0.1754 , -0.0029]	0.90276
Extended Chi2	[-0.1646 , -0.0092]	0.90276
FFD	[-0.1539 , 0.01935]	0.90276
FUSINTER	[-0.22535 , -0.0411]	0.90276
HDD	[-0.10595 , 0.0137]	0.90276
HellingerBD	[-0.1906 , -0.0181]	0.90276
Heter-Disc	[0.0345 , 0.201]	0.90276
ID3	[-0.06245 , 0.08145]	0.90276
IDD	[-0.0298 , 0.0619]	0.90276
Khiops	[-0.20595 , -0.0074]	0.90276
MDLP	[-0.21195 , -0.0257]	0.90276
Modified Chi2	[-0.17995 , -0.02675]	0.90276
MODL	[-0.19155 , -0.0354]	0.90276
PKID	[-0.1494 , 0.0227]	0.90276
UCPD	[-0.2009 , -0.0369]	0.90276
USD	[-0.09815 , 0.0288]	0.90276
Zeta	[-0.20615 , -0.0469]	0.90276

Table 77: Confidence intervals for algorithm MVD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.061 , 0.09025]	0.95024
Ameva	[-0.2041 , -0.04385]	0.95024
Bayesian	[-0.01685 , 0.08015]	0.95024
CACC	[-0.1855 , -0.0129]	0.95024
CADD	[0.1216 , 0.29775]	0.95024
CAIM	[-0.22385 , -0.0389]	0.95024
Chi2	[-0.2122 , -0.0274]	0.95024
ChiMerge	[-0.21235 , -0.06025]	0.95024
ClusterAnalysis	[-0.093 , 0.05965]	0.95024
DIBD	[-0.13945 , -0.00365]	0.95024
Distance	[-0.22745 , -0.0202]	0.95024
EqualFrequency	[-0.2137 , -0.0059]	0.95024
EqualWidth	[-0.186 , 0.00415]	0.95024
Extended Chi2	[-0.17505 , -0.0019]	0.95024
FFD	[-0.1668 , 0.026]	0.95024
FUSINTER	[-0.24555 , -0.03475]	0.95024
HDD	[-0.11895 , 0.02315]	0.95024
HellingerBD	[-0.20315 , -0.01215]	0.95024
Heter-Disc	[0.0082 , 0.21055]	0.95024
ID3	[-0.0764 , 0.0943]	0.95024
IDD	[-0.05255 , 0.07265]	0.95024
Khiops	[-0.2155 , 0]	0.95024
MDLP	[-0.2252 , -0.0161]	0.95024
Modified Chi2	[-0.19335 , -0.02085]	0.95024
MODL	[-0.2013 , -0.02655]	0.95024
PKID	[-0.164 , 0.0329]	0.95024
UCPD	[-0.2166 , -0.0288]	0.95024
USD	[-0.11445 , 0.0392]	0.95024
Zeta	[-0.2146 , -0.03745]	0.95024

Table 78: Confidence intervals for algorithm MVD ($\alpha=0.95$)

27 Detailed results for PKID

27.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	473.0	307.0	≥ 0.2	0.243098
Ameva	146.0	674.0	≥ 0.2	1
Bayesian	612.0	208.0	0.005832	0.006492
CACC	194.0	586.0	≥ 0.2	1
CADD	790.0	30.0	5.922E-8	0.000002
CAIM	80.5	739.5	≥ 0.2	1
Chi2	99.0	681.0	≥ 0.2	1
ChiMerge	85.5	734.5	≥ 0.2	1
ClusterAnalysis	568.5	251.5	0.08577	0.083092
DIBD	316.0	504.0	≥ 0.2	1
Distance	143.0	637.0	≥ 0.2	1
EqualFrequency	124.0	659.0	≥ 0.2	1
EqualWidth	240.0	580.0	≥ 0.2	1
Extended Chi2	265.5	554.5	≥ 0.2	1
FFD	351.5	433.5	≥ 0.2	1
FUSINTER	34.0	786.0	≥ 0.2	1
HDD	426.5	358.5	≥ 0.2	1
HellingerBD	211.0	572.0	≥ 0.2	1
Heter-Disc	656.0	127.0	4.336E-4	0.000688
ID3	627.0	160.0	0.03072	0.030618
IDD	559.0	261.0	0.0451	0.044487
Khiops	106.0	677.0	≥ 0.2	1
MDLP	100.0	680.0	≥ 0.2	1
Modified Chi2	144.5	675.5	≥ 0.2	1
MODL	185.0	635.0	≥ 0.2	1
MVD	473.5	346.5	≥ 0.2	0.722361
UCPD	142.0	678.0	≥ 0.2	1
USD	470.0	310.0	≥ 0.2	0.261277
Zeta	75.0	705.0	≥ 0.2	1

Table 79: Results obtained by the Wilcoxon test for algorithm PKID

27.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0125 , 0.1528]	0.90276
Ameva	[-0.1234 , -0.0427]	0.90276
Bayesian	[0.029 , 0.12695]	0.90276
CACC	[-0.0937 , -0.01975]	0.90276
CADD	[0.19925 , 0.3682]	0.90276
CAIM	[-0.11365 , -0.0503]	0.90276
Chi2	[-0.09265 , -0.0401]	0.90276
ChiMerge	[-0.11895 , -0.0574]	0.90276
ClusterAnalysis	[0.0068 , 0.0725]	0.90276
DIBD	[-0.07355 , 0.0164]	0.90276
Distance	[-0.11305 , -0.03775]	0.90276
EqualFrequency	[-0.06965 , -0.02275]	0.90276
EqualWidth	[-0.0518 , -0.00685]	0.90276
Extended Chi2	[-0.0544 , -0.0057]	0.90276
FFD	[-0.016 , 0.00645]	0.90276
FUSINTER	[-0.1239 , -0.05885]	0.90276
HDD	[-0.02015 , 0.04265]	0.90276
HellingerBD	[-0.0756 , -0.0145]	0.90276
Heter-Disc	[0.0933 , 0.2345]	0.90276
ID3	[0.02535 , 0.10235]	0.90276
IDD	[0.0067 , 0.10495]	0.90276
Khiops	[-0.0729 , -0.025]	0.90276
MDLP	[-0.11705 , -0.0353]	0.90276
Modified Chi2	[-0.0731 , -0.02355]	0.90276
MODL	[-0.0848 , -0.0218]	0.90276
MVD	[-0.0227 , 0.1494]	0.90276
UCPD	[-0.1089 , -0.03905]	0.90276
USD	[-0.00935 , 0.05345]	0.90276
Zeta	[-0.11185 , -0.04135]	0.90276

Table 80: Confidence intervals for algorithm PKID ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01765 , 0.1701]	0.95024
Ameva	[-0.13085 , -0.0354]	0.95024
Bayesian	[0.021 , 0.1364]	0.95024
CACC	[-0.1008 , -0.01345]	0.95024
CADD	[0.1885 , 0.3843]	0.95024
CAIM	[-0.11905 , -0.0435]	0.95024
Chi2	[-0.098 , -0.03455]	0.95024
ChiMerge	[-0.125 , -0.052]	0.95024
ClusterAnalysis	[0.00335 , 0.08445]	0.95024
DIBD	[-0.08435 , 0.02915]	0.95024
Distance	[-0.11985 , -0.03305]	0.95024
EqualFrequency	[-0.0813 , -0.0209]	0.95024
EqualWidth	[-0.0589 , -0.0033]	0.95024
Extended Chi2	[-0.0574 , 0]	0.95024
FFD	[-0.0194 , 0.0082]	0.95024
FUSINTER	[-0.13195 , -0.0524]	0.95024
HDD	[-0.02915 , 0.0573]	0.95024
HellingerBD	[-0.08335 , -0.01045]	0.95024
Heter-Disc	[0.07935 , 0.25235]	0.95024
ID3	[0.0212 , 0.1065]	0.95024
IDD	[0.00135 , 0.11705]	0.95024
Khiops	[-0.07865 , -0.02205]	0.95024
MDLP	[-0.12525 , -0.0307]	0.95024
Modified Chi2	[-0.0853 , -0.0207]	0.95024
MODL	[-0.09175 , -0.0147]	0.95024
MVD	[-0.0329 , 0.164]	0.95024
UCPD	[-0.11575 , -0.03435]	0.95024
USD	[-0.01475 , 0.06105]	0.95024
Zeta	[-0.11815 , -0.0383]	0.95024

Table 81: Confidence intervals for algorithm PKID ($\alpha=0.95$)

28 Detailed results for UCPD

28.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	723.0	97.0	6.358E-6	0.000025
Ameva	308.0	472.0	≥ 0.2	1
Bayesian	742.0	78.0	1.1622E-6	0.000008
CACC	422.0	398.0	≥ 0.2	0.866571
CADD	817.0	3.0	9.094E-12	0
CAIM	374.0	446.0	≥ 0.2	1
Chi2	404.5	415.5	≥ 0.2	1
ChiMerge	329.5	490.5	≥ 0.2	1
ClusterAnalysis	728.0	92.0	4.154E-6	0.000019
DIBD	644.0	176.0	0.0012308	0.001622
Distance	329.0	491.0	≥ 0.2	1
EqualFrequency	524.0	296.0	0.1281	0.123797
EqualWidth	591.0	229.0	0.014108	0.014704
Extended Chi2	531.0	289.0	0.10582	0.102444
FFD	685.0	135.0	1.0796E-4	0.000213
FUSINTER	270.0	550.0	≥ 0.2	1
HDD	623.0	197.0	0.00352	0.004108
HellingerBD	510.0	270.0	0.09568	0.092651
Heter-Disc	812.0	8.0	4.548E-11	0
ID3	722.0	98.0	6.91E-6	0.000027
IDD	750.0	70.0	5.278E-7	0.000005
Khiops	512.0	308.0	0.17436	0.168286
MDLP	349.5	470.5	≥ 0.2	1
Modified Chi2	505.5	314.5	≥ 0.2	0.196172
MODL	491.0	329.0	≥ 0.2	0.27008
MVD	627.0	193.0	0.002908	0.003461
PKID	678.0	142.0	1.703E-4	0.000307
USD	669.0	151.0	2.982E-4	0.000487
Zeta	382.0	438.0	≥ 0.2	1

Table 82: Results obtained by the Wilcoxon test for algorithm UCPD

28.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.07375 , 0.1932]	0.90276
Ameva	[-0.0341 , 0.0058]	0.90276
Bayesian	[0.1086 , 0.20405]	0.90276
CACC	[-0.01765 , 0.026]	0.90276
CADD	[0.27975 , 0.44245]	0.90276
CAIM	[-0.0283 , 0.0142]	0.90276
Chi2	[-0.01785 , 0.0226]	0.90276
ChiMerge	[-0.0315 , 0.00515]	0.90276
ClusterAnalysis	[0.0754 , 0.16555]	0.90276
DIBD	[0.02075 , 0.0717]	0.90276
Distance	[-0.0274 , 0.00885]	0.90276
EqualFrequency	[-0.00205 , 0.04145]	0.90276
EqualWidth	[0.01265 , 0.0616]	0.90276
Extended Chi2	[-0.00105 , 0.0665]	0.90276
FFD	[0.0412 , 0.0929]	0.90276
FUSINTER	[-0.0415 , -0.0026]	0.90276
HDD	[0.0262 , 0.1475]	0.90276
HellingerBD	[0 , 0.0532]	0.90276
Heter-Disc	[0.17625 , 0.3113]	0.90276
ID3	[0.0978 , 0.19765]	0.90276
IDD	[0.07775 , 0.1786]	0.90276
Khiops	[-0.005 , 0.043]	0.90276
MDLP	[-0.02875 , 0.01165]	0.90276
Modified Chi2	[-0.0049 , 0.0358]	0.90276
MODL	[-0.00525 , 0.03035]	0.90276
MVD	[0.0369 , 0.2009]	0.90276
PKID	[0.03905 , 0.1089]	0.90276
USD	[0.05185 , 0.1406]	0.90276
Zeta	[-0.02655 , 0.0186]	0.90276

Table 83: Confidence intervals for algorithm UCPD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.06665 , 0.2083]	0.95024
Ameva	[-0.03765 , 0.00985]	0.95024
Bayesian	[0.0964 , 0.21255]	0.95024
CACC	[-0.02345 , 0.0298]	0.95024
CADD	[0.2635 , 0.46]	0.95024
CAIM	[-0.0326 , 0.0178]	0.95024
Chi2	[-0.0208 , 0.02675]	0.95024
ChiMerge	[-0.03525 , 0.0097]	0.95024
ClusterAnalysis	[0.0645 , 0.1735]	0.95024
DIBD	[0.0173 , 0.0757]	0.95024
Distance	[-0.02965 , 0.0124]	0.95024
EqualFrequency	[-0.00605 , 0.04625]	0.95024
EqualWidth	[0.00905 , 0.0653]	0.95024
Extended Chi2	[-0.0053 , 0.07395]	0.95024
FFD	[0.0361 , 0.09675]	0.95024
FUSINTER	[-0.0454 , 0.0004]	0.95024
HDD	[0.01855 , 0.1629]	0.95024
HellingerBD	[-0.0044 , 0.0582]	0.95024
Heter-Disc	[0.168 , 0.32035]	0.95024
ID3	[0.0888 , 0.2066]	0.95024
IDD	[0.0708 , 0.1853]	0.95024
Khiops	[-0.00745 , 0.0463]	0.95024
MDLP	[-0.03295 , 0.01545]	0.95024
Modified Chi2	[-0.00765 , 0.04015]	0.95024
MODL	[-0.00785 , 0.0333]	0.95024
MVD	[0.0288 , 0.2166]	0.95024
PKID	[0.03435 , 0.11575]	0.95024
USD	[0.04305 , 0.15155]	0.95024
Zeta	[-0.0299 , 0.0224]	0.95024

Table 84: Confidence intervals for algorithm UCPD ($\alpha=0.95$)

29 Detailed results for USD

29.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	440.0	380.0	≥ 0.2	0.681836
Ameva	115.0	705.0	≥ 0.2	1
Bayesian	579.5	203.5	0.02483	0.024797
CACC	196.0	624.0	≥ 0.2	1
CADD	719.0	61.0	4.064E-7	0.000004
CAIM	76.0	704.0	≥ 0.2	1
Chi2	109.0	711.0	≥ 0.2	1
ChiMerge	63.0	757.0	≥ 0.2	1
ClusterAnalysis	504.0	316.0	≥ 0.2	0.204012
DIBD	275.0	545.0	≥ 0.2	1
Distance	163.0	617.0	≥ 0.2	1
EqualFrequency	176.0	604.0	≥ 0.2	1
EqualWidth	256.0	524.0	≥ 0.2	1
Extended Chi2	248.5	571.5	≥ 0.2	1
FFD	314.5	505.5	≥ 0.2	1
FUSINTER	69.0	711.0	≥ 0.2	1
HDD	414.0	369.0	≥ 0.2	1
HellingerBD	199.0	581.0	≥ 0.2	1
Heter-Disc	604.0	176.0	0.002242	0.002759
ID3	651.5	133.5	0.002291999999999998	0.002873
IDD	434.0	386.0	≥ 0.2	0.74192
Khiops	165.0	615.0	≥ 0.2	1
MDLP	168.5	651.5	≥ 0.2	1
Modified Chi2	139.0	644.0	≥ 0.2	1
MODL	129.0	651.0	≥ 0.2	1
MVD	470.0	350.0	≥ 0.2	0.416104
PKID	310.0	470.0	≥ 0.2	1
UCPD	151.0	669.0	≥ 0.2	1
Zeta	103.5	716.5	≥ 0.2	1

Table 85: Results obtained by the Wilcoxon test for algorithm USD

29.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.04915 , 0.1252]	0.90276
Ameva	[-0.1463 , -0.0654]	0.90276
Bayesian	[0.01035 , 0.0716]	0.90276
CACC	[-0.12345 , -0.02875]	0.90276
CADD	[0.1715 , 0.3473]	0.90276
CAIM	[-0.14835 , -0.06675]	0.90276
Chi2	[-0.13 , -0.04415]	0.90276
ChiMerge	[-0.1459 , -0.07045]	0.90276
ClusterAnalysis	[-0.0072 , 0.0667]	0.90276
DIBD	[-0.1077 , -0.0053]	0.90276
Distance	[-0.14485 , -0.04895]	0.90276
EqualFrequency	[-0.11945 , -0.02925]	0.90276
EqualWidth	[-0.09685 , -0.00545]	0.90276
Extended Chi2	[-0.08565 , -0.00975]	0.90276
FFD	[-0.0535 , 0.0051]	0.90276
FUSINTER	[-0.1562 , -0.0715]	0.90276
HDD	[-0.0239 , 0.0257]	0.90276
HellingerBD	[-0.1244 , -0.0181]	0.90276
Heter-Disc	[0.083 , 0.2331]	0.90276
ID3	[0.01395 , 0.0574]	0.90276
IDD	[-0.03265 , 0.07345]	0.90276
Khiops	[-0.1189 , -0.02875]	0.90276
MDLP	[-0.14865 , -0.0468]	0.90276
Modified Chi2	[-0.10685 , -0.0279]	0.90276
MODL	[-0.119 , -0.0391]	0.90276
MVD	[-0.0288 , 0.09815]	0.90276
PKID	[-0.05345 , 0.00935]	0.90276
UCPD	[-0.1406 , -0.05185]	0.90276
Zeta	[-0.1473 , -0.05525]	0.90276

Table 86: Confidence intervals for algorithm USD ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.06115 , 0.1511]	0.95024
Ameva	[-0.1558 , -0.05905]	0.95024
Bayesian	[0.0059 , 0.0767]	0.95024
CACC	[-0.1325 , -0.02065]	0.95024
CADD	[0.16145 , 0.3703]	0.95024
CAIM	[-0.15725 , -0.0595]	0.95024
Chi2	[-0.14415 , -0.0371]	0.95024
ChiMerge	[-0.1533 , -0.0658]	0.95024
ClusterAnalysis	[-0.0149 , 0.0726]	0.95024
DIBD	[-0.11645 , 0.00545]	0.95024
Distance	[-0.15825 , -0.0383]	0.95024
EqualFrequency	[-0.1317 , -0.0235]	0.95024
EqualWidth	[-0.1058 , 0.00315]	0.95024
Extended Chi2	[-0.0942 , -0.0027]	0.95024
FFD	[-0.0674 , 0.01065]	0.95024
FUSINTER	[-0.1714 , -0.0658]	0.95024
HDD	[-0.02995 , 0.0368]	0.95024
HellingerBD	[-0.135 , -0.01365]	0.95024
Heter-Disc	[0.0681 , 0.24675]	0.95024
ID3	[0.01195 , 0.0633]	0.95024
IDD	[-0.03735 , 0.0944]	0.95024
Khiops	[-0.12735 , -0.02295]	0.95024
MDLP	[-0.16315 , -0.03905]	0.95024
Modified Chi2	[-0.1255 , -0.02325]	0.95024
MODL	[-0.1295 , -0.03395]	0.95024
MVD	[-0.0392 , 0.11445]	0.95024
PKID	[-0.06105 , 0.01475]	0.95024
UCPD	[-0.15155 , -0.04305]	0.95024
Zeta	[-0.1512 , -0.04985]	0.95024

Table 87: Confidence intervals for algorithm USD ($\alpha=0.95$)

30 Detailed results for Zeta

30.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	698.0	122.0	4.404E-5	0.000105
Ameva	370.5	449.5	≥ 0.2	1
Bayesian	789.0	31.0	4.32E-9	0
CACC	447.0	333.0	≥ 0.2	0.422314
CADD	820.0	0.0	1.819E-12	0
CAIM	331.0	489.0	≥ 0.2	1
Chi2	405.0	415.0	≥ 0.2	1
ChiMerge	327.5	492.5	≥ 0.2	1
ClusterAnalysis	761.0	59.0	1.6344E-7	0.000002
DIBD	568.0	252.0	0.03322	0.03284
Distance	392.0	428.0	≥ 0.2	1
EqualFrequency	531.5	288.5	≥ 0.2	0.231526
EqualWidth	599.0	181.0	0.002894	0.00346
Extended Chi2	512.0	308.0	0.17436	0.166856
FFD	686.0	94.0	9.682E-6	0.000035
FUSINTER	343.5	476.5	≥ 0.2	1
HDD	678.5	141.5	5.861E-4	0.000874
HellingerBD	543.0	237.0	0.03224	0.032186
Heter-Disc	788.0	32.0	5.03E-9	0
ID3	741.0	39.0	2.76E-8	0.000001
IDD	757.0	63.0	2.536E-7	0.000003
Khiops	507.0	273.0	0.1045	0.101065
MDLP	394.5	425.5	≥ 0.2	1
Modified Chi2	541.0	279.0	0.18918	0.181343
MODL	449.0	371.0	≥ 0.2	0.595466
MVD	671.0	149.0	2.64E-4	0.00044
PKID	705.0	75.0	1.723E-6	0.000011
UCPD	438.0	382.0	≥ 0.2	0.701185
USD	716.5	103.5	4.112E-5	0.000105

Table 88: Results obtained by the Wilcoxon test for algorithm Zeta

30.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.06455 , 0.223]	0.90276
Ameva	[-0.02065 , 0.01155]	0.90276
Bayesian	[0.10715 , 0.20975]	0.90276
CACC	[-0.00755 , 0.02395]	0.90276
CADD	[0.2923 , 0.4519]	0.90276
CAIM	[-0.0125 , 0.00275]	0.90276
Chi2	[-0.01635 , 0.0153]	0.90276
ChiMerge	[-0.01685 , 0.004]	0.90276
ClusterAnalysis	[0.0846 , 0.16395]	0.90276
DIBD	[0.0099 , 0.0841]	0.90276
Distance	[-0.0182 , 0.0195]	0.90276
EqualFrequency	[-0.00005 , 0.05505]	0.90276
EqualWidth	[0.01815 , 0.07295]	0.90276
Extended Chi2	[-0.00425 , 0.06925]	0.90276
FFD	[0.0375 , 0.10615]	0.90276
FUSINTER	[-0.02145 , 0.0074]	0.90276
HDD	[0.0392 , 0.14125]	0.90276
HellingerBD	[0.00605 , 0.0504]	0.90276
Heter-Disc	[0.1821 , 0.3211]	0.90276
ID3	[0.1105 , 0.1936]	0.90276
IDD	[0.07945 , 0.17885]	0.90276
Khiops	[-0.00005 , 0.0426]	0.90276
MDLP	[-0.0187 , 0.01295]	0.90276
Modified Chi2	[0.0011 , 0.03595]	0.90276
MODL	[-0.01125 , 0.0227]	0.90276
MVD	[0.0469 , 0.20615]	0.90276
PKID	[0.04135 , 0.11185]	0.90276
UCPD	[-0.0186 , 0.02655]	0.90276
USD	[0.05525 , 0.1473]	0.90276

Table 89: Confidence intervals for algorithm Zeta ($\alpha=0.90$)

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0559 , 0.24545]	0.95024
Ameva	[-0.027 , 0.01555]	0.95024
Bayesian	[0.09835 , 0.2163]	0.95024
CACC	[-0.01115 , 0.02755]	0.95024
CADD	[0.27835 , 0.469]	0.95024
CAIM	[-0.0137 , 0.00365]	0.95024
Chi2	[-0.0194 , 0.0204]	0.95024
ChiMerge	[-0.018 , 0.0063]	0.95024
ClusterAnalysis	[0.07705 , 0.1717]	0.95024
DIBD	[0.0041 , 0.0913]	0.95024
Distance	[-0.02185 , 0.0255]	0.95024
EqualFrequency	[-0.00595 , 0.06095]	0.95024
EqualWidth	[0.01495 , 0.08025]	0.95024
Extended Chi2	[-0.00805 , 0.0796]	0.95024
FFD	[0.03445 , 0.1114]	0.95024
FUSINTER	[-0.02445 , 0.01155]	0.95024
HDD	[0.0329 , 0.1522]	0.95024
HellingerBD	[0.00305 , 0.0551]	0.95024
Heter-Disc	[0.1706 , 0.33875]	0.95024
ID3	[0.1032 , 0.2023]	0.95024
IDD	[0.073 , 0.19145]	0.95024
Khiops	[-0.0044 , 0.0466]	0.95024
MDLP	[-0.0219 , 0.0163]	0.95024
Modified Chi2	[-0.0015 , 0.03995]	0.95024
MODL	[-0.01385 , 0.02665]	0.95024
MVD	[0.03745 , 0.2146]	0.95024
PKID	[0.0383 , 0.11815]	0.95024
UCPD	[-0.0224 , 0.0299]	0.95024
USD	[0.04985 , 0.1512]	0.95024

Table 90: Confidence intervals for algorithm Zeta ($\alpha=0.95$)