

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	297.0	523.0	≥ 0.2	1
Bayesian	372.0	419.0	≥ 0.2	1
CACC	261.0	559.0	≥ 0.2	1
CADD	389.5	403.5	≥ 0.2	1
CAIM	246.0	574.0	≥ 0.2	1
Chi2	304.5	515.5	≥ 0.2	1
ChiMerge	233.0	547.0	≥ 0.2	1
ClusterAnalysis	518.5	301.5	≥ 0.2	0.313499
DIBD	284.0	536.0	≥ 0.2	1
Distance	158.0	629.0	≥ 0.2	1
EqualFrequency	422.0	398.0	≥ 0.2	1
EqualWidth	455.0	365.0	≥ 0.2	0.540816
Extended Chi2	322.0	498.0	≥ 0.2	1
FFD	569.0	214.0	0.0377	0.037351
FUSINTER	306.5	478.5	≥ 0.2	1
HDD	520.0	300.0	0.14234	0.137474
HellingerBD	352.0	468.0	≥ 0.2	1
Heter-Disc	227.5	565.5	≥ 0.2	1
ID3	608.0	212.0	0.006956	0.007628
IDD	439.0	381.0	≥ 0.2	1
Khiops	441.0	342.0	≥ 0.2	0.880084
MDLP	151.0	636.0	≥ 0.2	1
Modified Chi2	418.0	365.0	≥ 0.2	1
MODL	392.0	428.0	≥ 0.2	1
MVD	224.5	568.5	≥ 0.2	1
PKID	539.0	241.0	0.03724	0.036954
UCPD	293.0	487.0	≥ 0.2	1
USD	453.0	367.0	≥ 0.2	0.558752
Zeta	256.0	564.0	≥ 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	[-0.0973 , 0.00275]	0.90276
Bayesian	[-0.06525 , 0.0092]	0.90276
CACC	[-0.0892 , -0.0056]	0.90276
CADD	[-0.017 , 0.00825]	0.90276
CAIM	[-0.1051 , -0.0137]	0.90276
Chi2	[-0.0478 , 0.00505]	0.90276
ChiMerge	[-0.0953 , -0.01525]	0.90276
ClusterAnalysis	[-0.00295 , 0.08925]	0.90276
DIBD	[-0.06225 , 0]	0.90276
Distance	[-0.108 , -0.02095]	0.90276
EqualFrequency	[-0.0263 , 0.0312]	0.90276
EqualWidth	[-0.02155 , 0.06395]	0.90276
Extended Chi2	[-0.04865 , 0.0047]	0.90276
FFD	[0.01765 , 0.12535]	0.90276
FUSINTER	[-0.05285 , 0.0073]	0.90276
HDD	[-0.0039 , 0.0874]	0.90276
HellingerBD	[-0.0443 , 0.02695]	0.90276
Heter-Disc	[-0.0669 , -0.0016]	0.90276
ID3	[0.027 , 0.1283]	0.90276
IDD	[-0.00475 , 0.013]	0.90276
Khiops	[-0.021 , 0.04815]	0.90276
MDLP	[-0.0887 , -0.0165]	0.90276
Modified Chi2	[-0.02045 , 0.03625]	0.90276
MODL	[-0.03745 , 0.02965]	0.90276
MVD	[-0.0269 , -0.0016]	0.90276
PKID	[0.01285 , 0.13495]	0.90276
UCPD	[-0.0647 , 0.00555]	0.90276
USD	[-0.0246 , 0.05065]	0.90276
Zeta	[-0.08995 , -0.00815]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.10455 , 0.0072]	0.95024
Bayesian	[-0.0738 , 0.0212]	0.95024
CACC	[-0.09635 , -0.0005]	0.95024
CADD	[-0.0222 , 0.0167]	0.95024
CAIM	[-0.1157 , -0.00525]	0.95024
Chi2	[-0.0535 , 0.01465]	0.95024
ChiMerge	[-0.1082 , -0.008]	0.95024
ClusterAnalysis	[-0.00815 , 0.0981]	0.95024
DIBD	[-0.06455 , 0]	0.95024
Distance	[-0.11425 , -0.0153]	0.95024
EqualFrequency	[-0.032 , 0.03585]	0.95024
EqualWidth	[-0.0353 , 0.06955]	0.95024
Extended Chi2	[-0.05505 , 0.0098]	0.95024
FFD	[0.0074 , 0.13745]	0.95024
FUSINTER	[-0.06265 , 0.01095]	0.95024
HDD	[-0.0079 , 0.09785]	0.95024
HellingerBD	[-0.0512 , 0.03495]	0.95024
Heter-Disc	[-0.0794 , 0]	0.95024
ID3	[0.0187 , 0.14145]	0.95024
IDD	[-0.01145 , 0.0175]	0.95024
Khiops	[-0.0287 , 0.05885]	0.95024
MDLP	[-0.0934 , -0.0079]	0.95024
Modified Chi2	[-0.02605 , 0.0422]	0.95024
MODL	[-0.0425 , 0.0355]	0.95024
MVD	[-0.0372 , 0]	0.95024
PKID	[0.0048 , 0.1494]	0.95024
UCPD	[-0.07075 , 0.01065]	0.95024
USD	[-0.03465 , 0.0591]	0.95024
Zeta	[-0.0972 , -0.0017]	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	523.0	297.0	0.13156	0.127113
Bayesian	548.0	232.0	0.0268	0.02671
CACC	466.5	353.5	≥ 0.2	0.799658
CADD	564.0	256.0	0.03812	0.037831
CAIM	446.0	334.0	≥ 0.2	0.429624
Chi2	583.0	237.0	0.019246	0.019492
ChiMerge	440.0	380.0	≥ 0.2	0.681836
ClusterAnalysis	737.0	83.0	1.8586E-6	0.00001
DIBD	427.0	393.0	≥ 0.2	0.814036
Distance	332.0	488.0	≥ 0.2	1
EqualFrequency	612.0	208.0	0.005832	0.006492
EqualWidth	636.0	184.0	0.0018628	0.002331
Extended Chi2	582.0	238.0	0.019988	0.020415
FFD	712.0	108.0	1.5466E-5	0.000048
FUSINTER	548.0	272.0	0.06414	0.062657
HDD	669.0	151.0	2.982E-4	0.000487
HellingerBD	592.0	228.0	0.013558	0.014166
Heter-Disc	459.0	361.0	≥ 0.2	0.50583
ID3	729.0	91.0	3.808E-6	0.000018
IDD	564.5	215.5	0.013996	0.014429
Khiops	661.0	159.0	4.794E-4	0.000724
MDLP	417.5	402.5	≥ 0.2	1
Modified Chi2	634.0	186.0	0.00206	0.002548
MODL	606.0	214.0	0.007584	0.008261
MVD	484.0	336.0	≥ 0.2	0.316645
PKID	727.0	93.0	4.528E-6	0.00002
UCPD	537.5	282.5	0.08793000000000001	0.08482
USD	635.0	185.0	0.0019596	0.002437
Zeta	356.0	424.0	≥ 0.2	1

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	[-0.00275 , 0.0973]	0.90276
Bayesian	[0.00755 , 0.0846]	0.90276
CACC	[-0.01045 , 0.0185]	0.90276
CADD	[0.00835 , 0.0969]	0.90276
CAIM	[-0.0054 , 0.0193]	0.90276
Chi2	[0.0109 , 0.0875]	0.90276
ChiMerge	[-0.02125 , 0.023]	0.90276
ClusterAnalysis	[0.0668 , 0.1499]	0.90276
DIBD	[-0.0193 , 0.0311]	0.90276
Distance	[-0.0362 , 0.0071]	0.90276
EqualFrequency	[0.0175 , 0.0879]	0.90276
EqualWidth	[0.0293 , 0.1082]	0.90276
Extended Chi2	[0.01085 , 0.0676]	0.90276
FFD	[0.08735 , 0.20825]	0.90276
FUSINTER	[0.00145 , 0.0574]	0.90276
HDD	[0.0462 , 0.165]	0.90276
HellingerBD	[0.0127 , 0.0843]	0.90276
Heter-Disc	[-0.0135 , 0.03285]	0.90276
ID3	[0.09585 , 0.1989]	0.90276
IDD	[0.01615 , 0.1103]	0.90276
Khiops	[0.035 , 0.1196]	0.90276
MDLP	[-0.0292 , 0.021]	0.90276
Modified Chi2	[0.03125 , 0.11775]	0.90276
MODL	[0.01755 , 0.0846]	0.90276
MVD	[-0.011 , 0.0566]	0.90276
PKID	[0.0925 , 0.195]	0.90276
UCPD	[0.00115 , 0.05285]	0.90276
USD	[0.03905 , 0.1227]	0.90276
Zeta	[-0.02095 , 0.0198]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0072 , 0.10455]	0.95024
Bayesian	[0.004 , 0.0984]	0.95024
CACC	[-0.0141 , 0.0238]	0.95024
CADD	[0.00195 , 0.1025]	0.95024
CAIM	[-0.00785 , 0.02275]	0.95024
Chi2	[0.0073 , 0.0968]	0.95024
ChiMerge	[-0.02545 , 0.028]	0.95024
ClusterAnalysis	[0.0585 , 0.1615]	0.95024
DIBD	[-0.0246 , 0.03985]	0.95024
Distance	[-0.0413 , 0.01175]	0.95024
EqualFrequency	[0.01215 , 0.0976]	0.95024
EqualWidth	[0.0189 , 0.1191]	0.95024
Extended Chi2	[0.0079 , 0.0768]	0.95024
FFD	[0.0775 , 0.2171]	0.95024
FUSINTER	[-0.002 , 0.06075]	0.95024
HDD	[0.04215 , 0.1785]	0.95024
HellingerBD	[0.00745 , 0.0937]	0.95024
Heter-Disc	[-0.0186 , 0.03885]	0.95024
ID3	[0.0857 , 0.21045]	0.95024
IDD	[0.0091 , 0.1204]	0.95024
Khiops	[0.02885 , 0.1303]	0.95024
MDLP	[-0.0353 , 0.02935]	0.95024
Modified Chi2	[0.02595 , 0.1264]	0.95024
MODL	[0.0135 , 0.09075]	0.95024
MVD	[-0.0149 , 0.06655]	0.95024
PKID	[0.0834 , 0.20805]	0.95024
UCPD	[-0.00375 , 0.05675]	0.95024
USD	[0.0298 , 0.1311]	0.95024
Zeta	[-0.0242 , 0.02375]	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	419.0	372.0	≥ 0.2	1
Ameva	232.0	548.0	≥ 0.2	1
CACC	249.0	571.0	≥ 0.2	1
CADD	427.5	361.5	≥ 0.2	1
CAIM	265.0	515.0	≥ 0.2	1
Chi2	445.0	375.0	≥ 0.2	1
ChiMerge	248.0	532.0	≥ 0.2	1
ClusterAnalysis	564.0	216.0	0.014286	0.014886
DIBD	281.5	507.5	≥ 0.2	1
Distance	179.0	608.0	≥ 0.2	1
EqualFrequency	455.0	328.0	≥ 0.2	0.717299
EqualWidth	460.0	320.0	≥ 0.2	0.3252
Extended Chi2	403.0	417.0	≥ 0.2	1
FFD	611.5	208.5	0.017943	0.018442
FUSINTER	339.0	481.0	≥ 0.2	1
HDD	621.5	198.5	0.0037790000000000002	0.004312
HellingerBD	432.0	388.0	≥ 0.2	0.762325
Heter-Disc	255.0	536.0	≥ 0.2	1
ID3	625.0	155.0	7.072E-4	0.001015
IDD	458.0	362.0	≥ 0.2	1
Khiops	516.5	303.5	≥ 0.2	0.327628
MDLP	248.0	572.0	≥ 0.2	1
Modified Chi2	547.0	236.0	0.08274	0.080117
MODL	519.0	301.0	≥ 0.2	0.609636
MVD	313.5	506.5	≥ 0.2	1
PKID	600.0	180.0	0.002752	0.003308
UCPD	364.0	456.0	≥ 0.2	1
USD	541.0	279.0	0.07932	0.077139
Zeta	285.0	535.0	≥ 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	[-0.0092 , 0.06525]	0.90276
Ameva	[-0.0846 , -0.00755]	0.90276
CACC	[-0.0743 , -0.0082]	0.90276
CADD	[-0.0291 , 0.0746]	0.90276
CAIM	[-0.0888 , -0.00125]	0.90276
Chi2	[-0.02185 , 0.0454]	0.90276
ChiMerge	[-0.0726 , -0.00665]	0.90276
ClusterAnalysis	[0.0158 , 0.0972]	0.90276
DIBD	[-0.05505 , 0]	0.90276
Distance	[-0.07305 , -0.01505]	0.90276
EqualFrequency	[-0.02085 , 0.0632]	0.90276
EqualWidth	[-0.0191 , 0.05725]	0.90276
Extended Chi2	[-0.0359 , 0.0299]	0.90276
FFD	[0.02415 , 0.1336]	0.90276
FUSINTER	[-0.04535 , 0.0073]	0.90276
HDD	[0.0296 , 0.10475]	0.90276
HellingerBD	[-0.03105 , 0.0471]	0.90276
Heter-Disc	[-0.0668 , 0]	0.90276
ID3	[0.04005 , 0.13295]	0.90276
IDD	[-0.00795 , 0.0533]	0.90276
Khiops	[-0.00525 , 0.07415]	0.90276
MDLP	[-0.0601 , -0.0016]	0.90276
Modified Chi2	[0.0083 , 0.08075]	0.90276
MODL	[-0.00195 , 0.05565]	0.90276
MVD	[-0.05225 , 0]	0.90276
PKID	[0.0413 , 0.1379]	0.90276
UCPD	[-0.04635 , 0.02565]	0.90276
USD	[0.0016 , 0.05535]	0.90276
Zeta	[-0.0734 , -0.0008]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0212 , 0.0738]	0.95024
Ameva	[-0.0984 , -0.004]	0.95024
CACC	[-0.08485 , -0.00355]	0.95024
CADD	[-0.04735 , 0.08305]	0.95024
CAIM	[-0.0991 , 0.0041]	0.95024
Chi2	[-0.02755 , 0.05065]	0.95024
ChiMerge	[-0.08255 , -0.00055]	0.95024
ClusterAnalysis	[0.00915 , 0.10725]	0.95024
DIBD	[-0.0678 , 0.00465]	0.95024
Distance	[-0.08775 , -0.01]	0.95024
EqualFrequency	[-0.02765 , 0.06815]	0.95024
EqualWidth	[-0.0253 , 0.0658]	0.95024
Extended Chi2	[-0.04345 , 0.0408]	0.95024
FFD	[0.01765 , 0.14495]	0.95024
FUSINTER	[-0.0506 , 0.0156]	0.95024
HDD	[0.0234 , 0.11475]	0.95024
HellingerBD	[-0.0372 , 0.054]	0.95024
Heter-Disc	[-0.07535 , 0]	0.95024
ID3	[0.03235 , 0.1407]	0.95024
IDD	[-0.0152 , 0.06825]	0.95024
Khiops	[-0.01115 , 0.0835]	0.95024
MDLP	[-0.0703 , 0]	0.95024
Modified Chi2	[0.0044 , 0.09265]	0.95024
MODL	[-0.0089 , 0.0623]	0.95024
MVD	[-0.06135 , 0.0197]	0.95024
PKID	[0.03315 , 0.14465]	0.95024
UCPD	[-0.05685 , 0.0316]	0.95024
USD	[-0.00395 , 0.0612]	0.95024
Zeta	[-0.08155 , 0.0035]	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	559.0	261.0	0.0451	0.044487
Ameva	353.5	466.5	≥ 0.2	1
Bayesian	571.0	249.0	0.0299	0.029949
CADD	544.0	236.0	0.03108	0.030787
CAIM	406.5	413.5	≥ 0.2	1
Chi2	548.0	272.0	0.06414	0.062216
ChiMerge	387.0	433.0	≥ 0.2	1
ClusterAnalysis	738.5	81.5	1.619E-6	0.000009
DIBD	463.0	357.0	≥ 0.2	0.472074
Distance	355.0	465.0	≥ 0.2	1
EqualFrequency	602.0	218.0	0.008996	0.009547
EqualWidth	614.0	206.0	0.005332	0.005982
Extended Chi2	548.0	272.0	0.06414	0.062657
FFD	736.0	84.0	2.038E-6	0.000011
FUSINTER	536.0	284.0	0.09182	0.08907
HDD	627.0	153.0	6.288E-4	0.000919
HellingerBD	567.0	253.0	0.0344	0.034259
Heter-Disc	467.5	352.5	≥ 0.2	0.788099
ID3	740.0	80.0	1.4052E-6	0.000009
IDD	605.0	215.0	0.007918	0.008595
Khiops	655.0	165.0	6.754E-4	0.000967
MDLP	375.0	405.0	≥ 0.2	1
Modified Chi2	595.0	185.0	0.003532	0.004134
MODL	585.5	234.5	0.017495	0.017805
MVD	466.0	354.0	≥ 0.2	0.804919
PKID	733.0	87.0	2.674E-6	0.000014
UCPD	527.0	293.0	0.11814	0.114255
USD	651.0	169.0	8.436E-4	0.00117
Zeta	407.5	412.5	≥ 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	[0.0056 , 0.0892]	0.90276
Ameva	[-0.0185 , 0.01045]	0.90276
Bayesian	[0.0082 , 0.0743]	0.90276
CADD	[0.0095 , 0.1054]	0.90276
CAIM	[-0.02775 , 0.0206]	0.90276
Chi2	[0.00315 , 0.08505]	0.90276
ChiMerge	[-0.03055 , 0.0245]	0.90276
ClusterAnalysis	[0.0561 , 0.1292]	0.90276
DIBD	[-0.01825 , 0.03885]	0.90276
Distance	[-0.0348 , 0.0093]	0.90276
EqualFrequency	[0.01425 , 0.07955]	0.90276
EqualWidth	[0.0212 , 0.0962]	0.90276
Extended Chi2	[0.0026 , 0.07595]	0.90276
FFD	[0.0786 , 0.17695]	0.90276
FUSINTER	[0.00085 , 0.0529]	0.90276
HDD	[0.0458 , 0.14465]	0.90276
HellingerBD	[0.007 , 0.0648]	0.90276
Heter-Disc	[-0.01745 , 0.0284]	0.90276
ID3	[0.0771 , 0.18575]	0.90276
IDD	[0.01555 , 0.1014]	0.90276
Khiops	[0.0314 , 0.09825]	0.90276
MDLP	[-0.0204 , 0.0191]	0.90276
Modified Chi2	[0.0241 , 0.11915]	0.90276
MODL	[0.0121 , 0.0737]	0.90276
MVD	[-0.01335 , 0.05585]	0.90276
PKID	[0.0827 , 0.1806]	0.90276
UCPD	[-0.00115 , 0.05085]	0.90276
USD	[0.032 , 0.10835]	0.90276
Zeta	[-0.0265 , 0.02455]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0005 , 0.09635]	0.95024
Ameva	[-0.0238 , 0.0141]	0.95024
Bayesian	[0.00355 , 0.08485]	0.95024
CADD	[0.0063 , 0.11595]	0.95024
CAIM	[-0.03245 , 0.0251]	0.95024
Chi2	[-0.00095 , 0.09395]	0.95024
ChiMerge	[-0.03555 , 0.02955]	0.95024
ClusterAnalysis	[0.0525 , 0.13445]	0.95024
DIBD	[-0.02255 , 0.0466]	0.95024
Distance	[-0.04305 , 0.0132]	0.95024
EqualFrequency	[0.0103 , 0.08605]	0.95024
EqualWidth	[0.0151 , 0.1046]	0.95024
Extended Chi2	[-0.00245 , 0.0893]	0.95024
FFD	[0.0711 , 0.1941]	0.95024
FUSINTER	[-0.00495 , 0.05675]	0.95024
HDD	[0.04035 , 0.16065]	0.95024
HellingerBD	[0.00295 , 0.0732]	0.95024
Heter-Disc	[-0.02375 , 0.0353]	0.95024
ID3	[0.0697 , 0.1975]	0.95024
IDD	[0.01095 , 0.10765]	0.95024
Khiops	[0.02625 , 0.1054]	0.95024
MDLP	[-0.0255 , 0.0278]	0.95024
Modified Chi2	[0.0188 , 0.12775]	0.95024
MODL	[0.0075 , 0.0838]	0.95024
MVD	[-0.0209 , 0.0656]	0.95024
PKID	[0.07505 , 0.1953]	0.95024
UCPD	[-0.0051 , 0.0558]	0.95024
USD	[0.0282 , 0.1157]	0.95024
Zeta	[-0.03405 , 0.0311]	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	403.5	389.5	≥ 0.2	1
Ameva	256.0	564.0	≥ 0.2	1
Bayesian	361.5	427.5	≥ 0.2	1
CACC	236.0	544.0	≥ 0.2	1
CAIM	224.0	596.0	≥ 0.2	1
Chi2	350.5	469.5	≥ 0.2	1
ChiMerge	224.0	556.0	≥ 0.2	1
ClusterAnalysis	494.5	325.5	≥ 0.2	0.509348
DIBD	238.5	581.5	≥ 0.2	1
Distance	115.5	704.5	≥ 0.2	1
EqualFrequency	408.5	411.5	≥ 0.2	1
EqualWidth	439.0	381.0	≥ 0.2	0.691723
Extended Chi2	338.5	481.5	≥ 0.2	1
FFD	529.0	251.0	0.05256	0.051568
FUSINTER	340.5	444.5	≥ 0.2	1
HDD	483.0	337.0	≥ 0.2	0.323184
HellingerBD	345.0	475.0	≥ 0.2	1
Heter-Disc	146.0	653.0	≥ 0.2	1
ID3	564.0	256.0	0.03812	0.037831
IDD	374.0	417.0	≥ 0.2	1
Khiops	438.0	345.0	≥ 0.2	0.915897
MDLP	148.0	639.0	≥ 0.2	1
Modified Chi2	422.5	397.5	≥ 0.2	1
MODL	364.0	419.0	≥ 0.2	1
MVD	307.5	512.5	≥ 0.2	1
PKID	523.0	257.0	0.064	0.062463
UCPD	281.0	499.0	≥ 0.2	1
USD	432.0	388.0	≥ 0.2	0.762325
Zeta	236.0	584.0	≥ 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	[-0.00825 , 0.017]	0.90276
Ameva	[-0.0969 , -0.00835]	0.90276
Bayesian	[-0.0746 , 0.0291]	0.90276
CACC	[-0.1054 , -0.0095]	0.90276
CAIM	[-0.1141 , -0.02015]	0.90276
Chi2	[-0.05645 , 0.02865]	0.90276
ChiMerge	[-0.10735 , -0.012]	0.90276
ClusterAnalysis	[-0.00825 , 0.0971]	0.90276
DIBD	[-0.07235 , -0.00315]	0.90276
Distance	[-0.108 , -0.0246]	0.90276
EqualFrequency	[-0.04935 , 0.04695]	0.90276
EqualWidth	[-0.04115 , 0.07105]	0.90276
Extended Chi2	[-0.04265 , 0.0071]	0.90276
FFD	[0.0092 , 0.1575]	0.90276
FUSINTER	[-0.0827 , 0.0177]	0.90276
HDD	[-0.0213 , 0.1075]	0.90276
HellingerBD	[-0.05905 , 0.02695]	0.90276
Heter-Disc	[-0.0682 , -0.0033]	0.90276
ID3	[0.02175 , 0.15]	0.90276
IDD	[-0.02365 , 0.0344]	0.90276
Khiops	[-0.03105 , 0.05865]	0.90276
MDLP	[-0.094 , -0.0101]	0.90276
Modified Chi2	[-0.03885 , 0.05935]	0.90276
MODL	[-0.05895 , 0.0375]	0.90276
MVD	[-0.02555 , 0]	0.90276
PKID	[0.008 , 0.1416]	0.90276
UCPD	[-0.0753 , 0.0027]	0.90276
USD	[-0.0477 , 0.06685]	0.90276
Zeta	[-0.0969 , -0.0101]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0167 , 0.0222]	0.95024
Ameva	[-0.1025 , -0.00195]	0.95024
Bayesian	[-0.08305 , 0.04735]	0.95024
CACC	[-0.11595 , -0.0063]	0.95024
CAIM	[-0.12495 , -0.01385]	0.95024
Chi2	[-0.06015 , 0.03345]	0.95024
ChiMerge	[-0.11525 , -0.00645]	0.95024
ClusterAnalysis	[-0.0172 , 0.1076]	0.95024
DIBD	[-0.08475 , 0]	0.95024
Distance	[-0.11475 , -0.02145]	0.95024
EqualFrequency	[-0.0559 , 0.05315]	0.95024
EqualWidth	[-0.05265 , 0.0808]	0.95024
Extended Chi2	[-0.0494 , 0.01085]	0.95024
FFD	[-0.0003 , 0.1717]	0.95024
FUSINTER	[-0.09305 , 0.02515]	0.95024
HDD	[-0.03315 , 0.12435]	0.95024
HellingerBD	[-0.06675 , 0.03645]	0.95024
Heter-Disc	[-0.07915 , -0.00315]	0.95024
ID3	[0.0073 , 0.16285]	0.95024
IDD	[-0.0366 , 0.0409]	0.95024
Khiops	[-0.0397 , 0.0655]	0.95024
MDLP	[-0.0984 , -0.00615]	0.95024
Modified Chi2	[-0.04855 , 0.0709]	0.95024
MODL	[-0.06935 , 0.05215]	0.95024
MVD	[-0.03005 , 0]	0.95024
PKID	[-0.0023 , 0.15925]	0.95024
UCPD	[-0.08145 , 0.0092]	0.95024
USD	[-0.0565 , 0.07725]	0.95024
Zeta	[-0.10155 , -0.0057]	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	574.0	246.0	0.02686	0.027029
Ameva	334.0	446.0	≥ 0.2	1
Bayesian	515.0	265.0	0.0823	0.079885
CACC	413.5	406.5	≥ 0.2	0.95705
CADD	596.0	224.0	0.011536	0.012183
Chi2	544.0	236.0	0.03108	0.03108
ChiMerge	407.0	373.0	≥ 0.2	0.807066
ClusterAnalysis	681.0	99.0	1.469E-5	0.000047
DIBD	470.0	350.0	≥ 0.2	0.416104
Distance	291.0	489.0	≥ 0.2	1
EqualFrequency	626.0	194.0	0.003052	0.003614
EqualWidth	589.0	231.0	0.015266	0.015834
Extended Chi2	522.0	258.0	0.0661	0.064452
FFD	698.0	122.0	4.404E-5	0.000105
FUSINTER	549.0	271.0	0.06218	0.060784
HDD	642.5	144.5	0.014066	0.014509
HellingerBD	545.0	235.0	0.02996	0.030007
Heter-Disc	447.0	373.0	≥ 0.2	0.614227
ID3	709.0	111.0	1.95E-5	0.000057
IDD	587.0	193.0	0.005188	0.005849
Khiops	631.0	149.0	4.954E-4	0.000751
MDLP	409.0	371.0	≥ 0.2	0.785528
Modified Chi2	612.0	168.0	0.0014682	0.001903
MODL	605.0	215.0	0.007918	0.008595
MVD	510.0	310.0	0.18312	0.176743
PKID	712.0	108.0	1.5466E-5	0.000048
UCPD	555.5	264.5	0.12705	0.122469
USD	666.5	153.5	0.0012009999999999998	0.001609
Zeta	392.0	428.0	≥ 0.2	1

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	[0.0137 , 0.1051]	0.90276
Ameva	[-0.0193 , 0.0054]	0.90276
Bayesian	[0.00125 , 0.0888]	0.90276
CACC	[-0.0206 , 0.02775]	0.90276
CADD	[0.02015 , 0.1141]	0.90276
Chi2	[0.0089 , 0.0882]	0.90276
ChiMerge	[-0.01035 , 0.01455]	0.90276
ClusterAnalysis	[0.06795 , 0.16075]	0.90276
DIBD	[-0.01445 , 0.03795]	0.90276
Distance	[-0.03565 , 0.00415]	0.90276
EqualFrequency	[0.01855 , 0.09225]	0.90276
EqualWidth	[0.0216 , 0.12885]	0.90276
Extended Chi2	[0.003 , 0.08225]	0.90276
FFD	[0.073 , 0.22585]	0.90276
FUSINTER	[0.0045 , 0.0616]	0.90276
HDD	[0.0477 , 0.15675]	0.90276
HellingerBD	[0.0085 , 0.0912]	0.90276
Heter-Disc	[-0.0171 , 0.0424]	0.90276
ID3	[0.0923 , 0.21535]	0.90276
IDD	[0.02655 , 0.1213]	0.90276
Khiops	[0.04445 , 0.13735]	0.90276
MDLP	[-0.01965 , 0.0276]	0.90276
Modified Chi2	[0.03 , 0.1232]	0.90276
MODL	[0.0189 , 0.09635]	0.90276
MVD	[-0.0059 , 0.0691]	0.90276
PKID	[0.07665 , 0.20655]	0.90276
UCPD	[0.00535 , 0.05665]	0.90276
USD	[0.03895 , 0.11025]	0.90276
Zeta	[-0.01285 , 0.011]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00525 , 0.1157]	0.95024
Ameva	[-0.02275 , 0.00785]	0.95024
Bayesian	[-0.0041 , 0.0991]	0.95024
CACC	[-0.0251 , 0.03245]	0.95024
CADD	[0.01385 , 0.12495]	0.95024
Chi2	[0.00445 , 0.09505]	0.95024
ChiMerge	[-0.01305 , 0.0171]	0.95024
ClusterAnalysis	[0.0604 , 0.17005]	0.95024
DIBD	[-0.0182 , 0.0447]	0.95024
Distance	[-0.03905 , 0.0086]	0.95024
EqualFrequency	[0.01425 , 0.10315]	0.95024
EqualWidth	[0.01065 , 0.13775]	0.95024
Extended Chi2	[-0.0011 , 0.09015]	0.95024
FFD	[0.0614 , 0.2393]	0.95024
FUSINTER	[-0.00095 , 0.0704]	0.95024
HDD	[0.0369 , 0.177]	0.95024
HellingerBD	[0.00295 , 0.09975]	0.95024
Heter-Disc	[-0.021 , 0.05075]	0.95024
ID3	[0.08205 , 0.22945]	0.95024
IDD	[0.0203 , 0.1309]	0.95024
Khiops	[0.0349 , 0.1436]	0.95024
MDLP	[-0.02615 , 0.0334]	0.95024
Modified Chi2	[0.025 , 0.13475]	0.95024
MODL	[0.012 , 0.1031]	0.95024
MVD	[-0.01345 , 0.0782]	0.95024
PKID	[0.06955 , 0.21865]	0.95024
UCPD	[0 , 0.0631]	0.95024
USD	[0.03585 , 0.1203]	0.95024
Zeta	[-0.0149 , 0.0192]	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	515.5	304.5	≥ 0.2	1
Ameva	237.0	583.0	≥ 0.2	1
Bayesian	375.0	445.0	≥ 0.2	1
CACC	272.0	548.0	≥ 0.2	1
CADD	469.5	350.5	≥ 0.2	1
CAIM	236.0	544.0	≥ 0.2	1
ChiMerge	243.5	539.5	≥ 0.2	1
ClusterAnalysis	575.5	244.5	0.06841	0.066574
DIBD	299.5	485.5	≥ 0.2	1
Distance	217.5	567.5	≥ 0.2	1
EqualFrequency	465.0	315.0	≥ 0.2	0.292065
EqualWidth	477.0	343.0	≥ 0.2	0.364255
Extended Chi2	421.5	398.5	≥ 0.2	1
FFD	647.0	173.0	0.0010488	0.001411
FUSINTER	339.5	480.5	≥ 0.2	1
HDD	577.0	243.0	0.02408	0.024359
HellingerBD	411.0	409.0	≥ 0.2	0.983914
Heter-Disc	309.0	478.0	≥ 0.2	1
ID3	602.0	178.0	0.002486	0.003023
IDD	512.5	307.5	≥ 0.2	1
Khiops	503.0	277.0	0.1172	0.113218
MDLP	230.5	589.5	≥ 0.2	1
Modified Chi2	556.0	264.0	≥ 0.2	0.99254
MODL	463.0	357.0	≥ 0.2	1
MVD	362.0	425.0	≥ 0.2	1
PKID	640.0	180.0	0.0015176	0.001947
UCPD	336.0	444.0	≥ 0.2	1
USD	479.0	301.0	≥ 0.2	0.211675
Zeta	235.0	585.0	≥ 0.2	1

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	[-0.00505 , 0.0478]	0.90276
Ameva	[-0.0875 , -0.0109]	0.90276
Bayesian	[-0.0454 , 0.02185]	0.90276
CACC	[-0.08505 , -0.00315]	0.90276
CADD	[-0.02865 , 0.05645]	0.90276
CAIM	[-0.0882 , -0.0089]	0.90276
ChiMerge	[-0.0869 , -0.00655]	0.90276
ClusterAnalysis	[0.0202 , 0.09055]	0.90276
DIBD	[-0.05935 , 0.00445]	0.90276
Distance	[-0.10095 , -0.00635]	0.90276
EqualFrequency	[-0.012 , 0.0504]	0.90276
EqualWidth	[-0.018 , 0.05635]	0.90276
Extended Chi2	[-0.00975 , 0.0146]	0.90276
FFD	[0.0413 , 0.1262]	0.90276
FUSINTER	[-0.0476 , 0.01055]	0.90276
HDD	[0.0177 , 0.1034]	0.90276
HellingerBD	[-0.02915 , 0.0262]	0.90276
Heter-Disc	[-0.06995 , 0.00275]	0.90276
ID3	[0.04335 , 0.14155]	0.90276
IDD	[-0.0011 , 0.0561]	0.90276
Khiops	[-0.0016 , 0.06385]	0.90276
MDLP	[-0.07175 , -0.00465]	0.90276
Modified Chi2	[0.001 , 0.0488]	0.90276
MODL	[-0.01495 , 0.0401]	0.90276
MVD	[-0.0324 , 0.0094]	0.90276
PKID	[0.0378 , 0.1263]	0.90276
UCPD	[-0.05185 , 0.01435]	0.90276
USD	[-0.00825 , 0.05425]	0.90276
Zeta	[-0.0789 , -0.00975]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01465 , 0.0535]	0.95024
Ameva	[-0.0968 , -0.0073]	0.95024
Bayesian	[-0.05065 , 0.02755]	0.95024
CACC	[-0.09395 , 0.00095]	0.95024
CADD	[-0.03345 , 0.06015]	0.95024
CAIM	[-0.09505 , -0.00445]	0.95024
ChiMerge	[-0.09585 , -0.00055]	0.95024
ClusterAnalysis	[0.01085 , 0.10155]	0.95024
DIBD	[-0.06595 , 0.00725]	0.95024
Distance	[-0.11125 , -0.0029]	0.95024
EqualFrequency	[-0.0208 , 0.0566]	0.95024
EqualWidth	[-0.0279 , 0.06585]	0.95024
Extended Chi2	[-0.01505 , 0.0171]	0.95024
FFD	[0.0301 , 0.13805]	0.95024
FUSINTER	[-0.0541 , 0.0162]	0.95024
HDD	[0.0067 , 0.1098]	0.95024
HellingerBD	[-0.03375 , 0.03315]	0.95024
Heter-Disc	[-0.0788 , 0.00525]	0.95024
ID3	[0.03385 , 0.14915]	0.95024
IDD	[-0.00765 , 0.0588]	0.95024
Khiops	[-0.0064 , 0.06825]	0.95024
MDLP	[-0.0803 , -0.00335]	0.95024
Modified Chi2	[0 , 0.05255]	0.95024
MODL	[-0.0227 , 0.04435]	0.95024
MVD	[-0.045 , 0.01585]	0.95024
PKID	[0.0291 , 0.135]	0.95024
UCPD	[-0.05945 , 0.01855]	0.95024
USD	[-0.01495 , 0.05905]	0.95024
Zeta	[-0.08745 , -0.00545]	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	547.0	233.0	0.02782	0.027955
Ameva	380.0	440.0	≥ 0.2	1
Bayesian	532.0	248.0	0.0475	0.046747
CACC	433.0	387.0	≥ 0.2	0.752101
CADD	556.0	224.0	0.019712	0.020152
CAIM	373.0	407.0	≥ 0.2	1
Chi2	539.5	243.5	0.1054	0.101015
ClusterAnalysis	713.0	107.0	1.43E-5	0.000045
DIBD	423.0	357.0	≥ 0.2	0.640148
Distance	269.5	510.5	≥ 0.2	1
EqualFrequency	655.0	165.0	6.754E-4	0.000967
EqualWidth	611.0	209.0	0.006096	0.00676
Extended Chi2	554.0	226.0	0.02132	0.021699
FFD	713.0	107.0	1.43E-5	0.000045
FUSINTER	502.5	277.5	0.11888	0.114182
HDD	620.0	160.0	9.426E-4	0.001297
HellingerBD	573.0	247.0	0.02784	0.027974
Heter-Disc	409.0	371.0	≥ 0.2	0.785528
ID3	724.5	95.5	2.15E-5	0.000065
IDD	589.0	191.0	0.00472	0.005369
Khiops	680.0	140.0	1.4978E-4	0.000277
MDLP	408.0	372.0	≥ 0.2	0.796278
Modified Chi2	607.5	172.5	0.0018681000000000001	0.002307
MODL	622.5	197.5	0.011191	0.011865
MVD	466.0	314.0	≥ 0.2	0.28572
PKID	711.0	109.0	1.6716E-5	0.000051
UCPD	579.0	241.0	0.02236	0.022709
USD	633.0	147.0	4.388E-4	0.000679
Zeta	363.0	457.0	≥ 0.2	1

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	[0.01525 , 0.0953]	0.90276
Ameva	[-0.023 , 0.02125]	0.90276
Bayesian	[0.00665 , 0.0726]	0.90276
CACC	[-0.0245 , 0.03055]	0.90276
CADD	[0.012 , 0.10735]	0.90276
CAIM	[-0.01455 , 0.01035]	0.90276
Chi2	[0.00655 , 0.0869]	0.90276
ClusterAnalysis	[0.06385 , 0.151]	0.90276
DIBD	[-0.02025 , 0.0288]	0.90276
Distance	[-0.04425 , -0.00025]	0.90276
EqualFrequency	[0.01835 , 0.07785]	0.90276
EqualWidth	[0.0208 , 0.1166]	0.90276
Extended Chi2	[0.0051 , 0.06635]	0.90276
FFD	[0.07175 , 0.2069]	0.90276
FUSINTER	[-0.0009 , 0.05015]	0.90276
HDD	[0.0436 , 0.15]	0.90276
HellingerBD	[0.0105 , 0.0876]	0.90276
Heter-Disc	[-0.0237 , 0.0296]	0.90276
ID3	[0.0873 , 0.20145]	0.90276
IDD	[0.01835 , 0.104]	0.90276
Khiops	[0.04475 , 0.12185]	0.90276
MDLP	[-0.02695 , 0.0196]	0.90276
Modified Chi2	[0.02575 , 0.1215]	0.90276
MODL	[0.0158 , 0.08065]	0.90276
MVD	[-0.01045 , 0.0537]	0.90276
PKID	[0.0767 , 0.1962]	0.90276
UCPD	[0.00765 , 0.04945]	0.90276
USD	[0.02935 , 0.10165]	0.90276
Zeta	[-0.02335 , 0.01135]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.008 , 0.1082]	0.95024
Ameva	[-0.028 , 0.02545]	0.95024
Bayesian	[0.00055 , 0.08255]	0.95024
CACC	[-0.02955 , 0.03555]	0.95024
CADD	[0.00645 , 0.11525]	0.95024
CAIM	[-0.0171 , 0.01305]	0.95024
Chi2	[0.00055 , 0.09585]	0.95024
ClusterAnalysis	[0.05915 , 0.15685]	0.95024
DIBD	[-0.0254 , 0.0349]	0.95024
Distance	[-0.04815 , 0.0045]	0.95024
EqualFrequency	[0.016 , 0.0882]	0.95024
EqualWidth	[0.01355 , 0.1254]	0.95024
Extended Chi2	[0.0027 , 0.08555]	0.95024
FFD	[0.06365 , 0.2157]	0.95024
FUSINTER	[-0.00475 , 0.0609]	0.95024
HDD	[0.0346 , 0.16005]	0.95024
HellingerBD	[0.00525 , 0.09265]	0.95024
Heter-Disc	[-0.0297 , 0.03395]	0.95024
ID3	[0.0795 , 0.21575]	0.95024
IDD	[0.0136 , 0.124]	0.95024
Khiops	[0.0375 , 0.12785]	0.95024
MDLP	[-0.0334 , 0.0235]	0.95024
Modified Chi2	[0.02095 , 0.13205]	0.95024
MODL	[0.0131 , 0.08795]	0.95024
MVD	[-0.01575 , 0.0644]	0.95024
PKID	[0.07095 , 0.2097]	0.95024
UCPD	[0.004 , 0.0525]	0.95024
USD	[0.025 , 0.10905]	0.95024
Zeta	[-0.0276 , 0.019]	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	301.5	518.5	≥ 0.2	1
Ameva	83.0	737.0	≥ 0.2	1
Bayesian	216.0	564.0	≥ 0.2	1
CACC	81.5	738.5	≥ 0.2	1
CADD	325.5	494.5	≥ 0.2	1
CAIM	99.0	681.0	≥ 0.2	1
Chi2	244.5	575.5	≥ 0.2	1
ChiMerge	107.0	713.0	≥ 0.2	1
DIBD	167.5	652.5	≥ 0.2	1
Distance	106.0	714.0	≥ 0.2	1
EqualFrequency	223.0	597.0	≥ 0.2	1
EqualWidth	263.0	517.0	≥ 0.2	1
Extended Chi2	230.0	550.0	≥ 0.2	1
FFD	516.5	303.5	≥ 0.2	0.327628
FUSINTER	131.0	649.0	≥ 0.2	1
HDD	361.0	422.0	≥ 0.2	1
HellingerBD	184.0	596.0	≥ 0.2	1
Heter-Disc	153.5	666.5	≥ 0.2	1
ID3	552.0	231.0	0.06992	0.067935
IDD	275.0	505.0	≥ 0.2	1
Khiops	244.5	575.5	≥ 0.2	1
MDLP	132.0	688.0	≥ 0.2	1
Modified Chi2	317.0	463.0	≥ 0.2	1
MODL	229.0	591.0	≥ 0.2	1
MVD	189.5	630.5	≥ 0.2	1
PKID	507.5	312.5	≥ 0.2	0.396225
UCPD	172.5	647.5	≥ 0.2	1
USD	268.5	551.5	≥ 0.2	1
Zeta	134.0	686.0	≥ 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	[-0.08925 , 0.00295]	0.90276
Ameva	[-0.1499 , -0.0668]	0.90276
Bayesian	[-0.0972 , -0.0158]	0.90276
CACC	[-0.1292 , -0.0561]	0.90276
CADD	[-0.0971 , 0.00825]	0.90276
CAIM	[-0.16075 , -0.06795]	0.90276
Chi2	[-0.09055 , -0.0202]	0.90276
ChiMerge	[-0.151 , -0.06385]	0.90276
DIBD	[-0.1539 , -0.0431]	0.90276
Distance	[-0.18125 , -0.0745]	0.90276
EqualFrequency	[-0.0682 , -0.013]	0.90276
EqualWidth	[-0.07215 , -0.0027]	0.90276
Extended Chi2	[-0.1022 , -0.0146]	0.90276
FFD	[-0.0029 , 0.0633]	0.90276
FUSINTER	[-0.11835 , -0.0411]	0.90276
HDD	[-0.0333 , 0.0347]	0.90276
HellingerBD	[-0.0873 , -0.0232]	0.90276
Heter-Disc	[-0.15035 , -0.05365]	0.90276
ID3	[0.0036 , 0.0518]	0.90276
IDD	[-0.08285 , 0.0018]	0.90276
Khiops	[-0.05425 , -0.01005]	0.90276
MDLP	[-0.16035 , -0.0611]	0.90276
Modified Chi2	[-0.0573 , 0.01405]	0.90276
MODL	[-0.08605 , -0.0182]	0.90276
MVD	[-0.12415 , -0.0363]	0.90276
PKID	[-0.0071 , 0.06665]	0.90276
UCPD	[-0.1213 , -0.04015]	0.90276
USD	[-0.0625 , -0.005]	0.90276
Zeta	[-0.15945 , -0.06845]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0981 , 0.00815]	0.95024
Ameva	[-0.1615 , -0.0585]	0.95024
Bayesian	[-0.10725 , -0.00915]	0.95024
CACC	[-0.13445 , -0.0525]	0.95024
CADD	[-0.1076 , 0.0172]	0.95024
CAIM	[-0.17005 , -0.0604]	0.95024
Chi2	[-0.10155 , -0.01085]	0.95024
ChiMerge	[-0.15685 , -0.05915]	0.95024
DIBD	[-0.16355 , -0.0353]	0.95024
Distance	[-0.19275 , -0.06615]	0.95024
EqualFrequency	[-0.0759 , -0.00825]	0.95024
EqualWidth	[-0.08035 , 0.0027]	0.95024
Extended Chi2	[-0.1086 , -0.0073]	0.95024
FFD	[-0.0071 , 0.0687]	0.95024
FUSINTER	[-0.1243 , -0.0365]	0.95024
HDD	[-0.04795 , 0.04945]	0.95024
HellingerBD	[-0.09805 , -0.01745]	0.95024
Heter-Disc	[-0.16115 , -0.0468]	0.95024
ID3	[0.0012 , 0.0651]	0.95024
IDD	[-0.0916 , 0.0069]	0.95024
Khiops	[-0.0568 , -0.00465]	0.95024
MDLP	[-0.16915 , -0.0536]	0.95024
Modified Chi2	[-0.06365 , 0.01825]	0.95024
MODL	[-0.09295 , -0.01375]	0.95024
MVD	[-0.13535 , -0.0291]	0.95024
PKID	[-0.01485 , 0.07495]	0.95024
UCPD	[-0.1287 , -0.03315]	0.95024
USD	[-0.06965 , 0.0006]	0.95024
Zeta	[-0.1674 , -0.0579]	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	536.0	284.0	≥ 0.2	1
Ameva	393.0	427.0	≥ 0.2	1
Bayesian	507.5	281.5	≥ 0.2	1
CACC	357.0	463.0	≥ 0.2	1
CADD	581.5	238.5	≥ 0.2	1
CAIM	350.0	470.0	≥ 0.2	1
Chi2	485.5	299.5	≥ 0.2	0.79327
ChiMerge	357.0	423.0	≥ 0.2	1
ClusterAnalysis	652.5	167.5	0.002605	0.003165
Distance	200.0	620.0	≥ 0.2	1
EqualFrequency	554.5	228.5	0.06414	0.061947
EqualWidth	579.0	241.0	0.02236	0.022709
Extended Chi2	476.0	344.0	≥ 0.2	1
FFD	644.5	175.5	0.003944	0.00458
FUSINTER	505.0	315.0	≥ 0.2	0.771322
HDD	638.0	182.0	0.0016824	0.002131
HellingerBD	508.0	312.0	0.1922	0.184775
Heter-Disc	317.5	502.5	≥ 0.2	1
ID3	656.0	164.0	6.384E-4	0.000922
IDD	565.0	226.0	≥ 0.2	1
Khiops	634.5	185.5	0.006444	0.007142
MDLP	305.0	515.0	≥ 0.2	1
Modified Chi2	530.0	253.0	0.14064	0.135295
MODL	551.0	269.0	≥ 0.2	0.310902
MVD	383.0	437.0	≥ 0.2	1
PKID	627.0	153.0	6.288E-4	0.000919
UCPD	458.0	322.0	≥ 0.2	0.339114
USD	590.0	230.0	0.014678	0.01526
Zeta	368.0	452.0	≥ 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 , 0.06225]	0.90276
Ameva	[-0.0311 , 0.0193]	0.90276
Bayesian	[0 , 0.05505]	0.90276
CACC	[-0.03885 , 0.01825]	0.90276
CADD	[0.00315 , 0.07235]	0.90276
CAIM	[-0.03795 , 0.01445]	0.90276
Chi2	[-0.00445 , 0.05935]	0.90276
ChiMerge	[-0.0288 , 0.02025]	0.90276
ClusterAnalysis	[0.0431 , 0.1539]	0.90276
Distance	[-0.03945 , -0.00605]	0.90276
EqualFrequency	[0.0122 , 0.0826]	0.90276
EqualWidth	[0.0136 , 0.10385]	0.90276
Extended Chi2	[-0.0059 , 0.0419]	0.90276
FFD	[0.06025 , 0.2154]	0.90276
FUSINTER	[-0.00775 , 0.0526]	0.90276
HDD	[0.0427 , 0.14295]	0.90276
HellingerBD	[-0.00405 , 0.0561]	0.90276
Heter-Disc	[-0.01715 , 0.0004]	0.90276
ID3	[0.0644 , 0.1986]	0.90276
IDD	[0.00595 , 0.08495]	0.90276
Khiops	[0.0246 , 0.1028]	0.90276
MDLP	[-0.0216 , 0.0007]	0.90276
Modified Chi2	[0.0024 , 0.1154]	0.90276
MODL	[0.00315 , 0.08]	0.90276
MVD	[-0.01285 , 0.02235]	0.90276
PKID	[0.06755 , 0.19585]	0.90276
UCPD	[-0.009 , 0.0401]	0.90276
USD	[0.01955 , 0.1056]	0.90276
Zeta	[-0.03 , 0.015]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.06455]	0.95024
Ameva	[-0.03985 , 0.0246]	0.95024
Bayesian	[-0.00465 , 0.0678]	0.95024
CACC	[-0.0466 , 0.02255]	0.95024
CADD	[0 , 0.08475]	0.95024
CAIM	[-0.0447 , 0.0182]	0.95024
Chi2	[-0.00725 , 0.06595]	0.95024
ChiMerge	[-0.0349 , 0.0254]	0.95024
ClusterAnalysis	[0.0353 , 0.16355]	0.95024
Distance	[-0.04495 , -0.0049]	0.95024
EqualFrequency	[0.00585 , 0.0904]	0.95024
EqualWidth	[0.00875 , 0.1092]	0.95024
Extended Chi2	[-0.0075 , 0.05575]	0.95024
FFD	[0.0542 , 0.23045]	0.95024
FUSINTER	[-0.01295 , 0.05795]	0.95024
HDD	[0.03615 , 0.1551]	0.95024
HellingerBD	[-0.0076 , 0.0623]	0.95024
Heter-Disc	[-0.01895 , 0.00335]	0.95024
ID3	[0.05325 , 0.21555]	0.95024
IDD	[0 , 0.09215]	0.95024
Khiops	[0.01915 , 0.11215]	0.95024
MDLP	[-0.0244 , 0.0058]	0.95024
Modified Chi2	[0 , 0.1245]	0.95024
MODL	[0 , 0.08695]	0.95024
MVD	[-0.0157 , 0.0312]	0.95024
PKID	[0.0555 , 0.2126]	0.95024
UCPD	[-0.0128 , 0.0461]	0.95024
USD	[0.0122 , 0.1184]	0.95024
Zeta	[-0.03405 , 0.01885]	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	629.0	158.0	0.02792	0.027967
Ameva	488.0	332.0	≥ 0.2	0.29136
Bayesian	608.0	179.0	0.07078	0.068376
CACC	465.0	355.0	≥ 0.2	0.455672
CADD	704.5	115.5	0.0013261	0.001808
CAIM	489.0	291.0	0.17114	0.164978
Chi2	567.5	217.5	0.11288	0.108459
ChiMerge	510.5	269.5	0.09428	0.09074
ClusterAnalysis	714.0	106.0	1.3218E-5	0.000043
DIBD	620.0	200.0	≥ 0.2	0.227786
EqualFrequency	657.5	162.5	0.0019901	0.002497
EqualWidth	646.0	174.0	0.0011066	0.001479
Extended Chi2	632.5	187.5	0.06061	0.05887
FFD	667.0	113.0	4.4E-5	0.000108
FUSINTER	592.0	228.0	0.1011	0.096768
HDD	674.0	106.0	2.574E-5	0.000072
HellingerBD	589.5	230.5	0.014972	0.015372
Heter-Disc	536.0	255.0	≥ 0.2	1
ID3	719.0	101.0	8.848E-6	0.000032
IDD	632.0	155.0	0.02412	0.024364
Khiops	643.5	136.5	2.2659999999999998E-4	0.000384
MDLP	517.0	303.0	≥ 0.2	1
Modified Chi2	650.5	134.5	0.002436	0.003031
MODL	654.0	166.0	0.007762	0.0085
MVD	541.0	250.0	≥ 0.2	1
PKID	704.0	116.0	2.844E-5	0.000075
UCPD	610.0	210.0	0.006372	0.007039
USD	655.0	125.0	1.046E-4	0.000211
Zeta	534.0	286.0	0.09724	0.09424

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	[0.02095 , 0.108]	0.90276
Ameva	[-0.0071 , 0.0362]	0.90276
Bayesian	[0.01505 , 0.07305]	0.90276
CACC	[-0.0093 , 0.0348]	0.90276
CADD	[0.0246 , 0.108]	0.90276
CAIM	[-0.00415 , 0.03565]	0.90276
Chi2	[0.00635 , 0.10095]	0.90276
ChiMerge	[0.00025 , 0.04425]	0.90276
ClusterAnalysis	[0.0745 , 0.18125]	0.90276
DIBD	[0.00605 , 0.03945]	0.90276
EqualFrequency	[0.0384 , 0.1188]	0.90276
EqualWidth	[0.0436 , 0.14]	0.90276
Extended Chi2	[0.0131 , 0.07425]	0.90276
FFD	[0.08785 , 0.2471]	0.90276
FUSINTER	[0.01465 , 0.08415]	0.90276
HDD	[0.0621 , 0.17845]	0.90276
HellingerBD	[0.02255 , 0.1058]	0.90276
Heter-Disc	[0 , 0.03565]	0.90276
ID3	[0.0972 , 0.2312]	0.90276
IDD	[0.02885 , 0.1186]	0.90276
Khiops	[0.0575 , 0.1508]	0.90276
MDLP	[0 , 0.01925]	0.90276
Modified Chi2	[0.03755 , 0.12995]	0.90276
MODL	[0.03325 , 0.10565]	0.90276
MVD	[0 , 0.0492]	0.90276
PKID	[0.10005 , 0.22615]	0.90276
UCPD	[0.02045 , 0.0795]	0.90276
USD	[0.04285 , 0.13025]	0.90276
Zeta	[0.0004 , 0.04245]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0153 , 0.11425]	0.95024
Ameva	[-0.01175 , 0.0413]	0.95024
Bayesian	[0.01 , 0.08775]	0.95024
CACC	[-0.0132 , 0.04305]	0.95024
CADD	[0.02145 , 0.11475]	0.95024
CAIM	[-0.0086 , 0.03905]	0.95024
Chi2	[0.0029 , 0.11125]	0.95024
ChiMerge	[-0.0045 , 0.04815]	0.95024
ClusterAnalysis	[0.06615 , 0.19275]	0.95024
DIBD	[0.0049 , 0.04495]	0.95024
EqualFrequency	[0.0314 , 0.1267]	0.95024
EqualWidth	[0.033 , 0.15005]	0.95024
Extended Chi2	[0.00985 , 0.0854]	0.95024
FFD	[0.07765 , 0.2611]	0.95024
FUSINTER	[0.00825 , 0.0923]	0.95024
HDD	[0.05365 , 0.18915]	0.95024
HellingerBD	[0.0116 , 0.118]	0.95024
Heter-Disc	[0 , 0.04495]	0.95024
ID3	[0.08415 , 0.2471]	0.95024
IDD	[0.02315 , 0.12625]	0.95024
Khiops	[0.04605 , 0.1598]	0.95024
MDLP	[0 , 0.0243]	0.95024
Modified Chi2	[0.03075 , 0.14835]	0.95024
MODL	[0.02925 , 0.1129]	0.95024
MVD	[0 , 0.05605]	0.95024
PKID	[0.08765 , 0.2407]	0.95024
UCPD	[0.01465 , 0.086]	0.95024
USD	[0.0375 , 0.1438]	0.95024
Zeta	[-0.00325 , 0.04685]	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	398.0	422.0	≥ 0.2	1
Ameva	208.0	612.0	≥ 0.2	1
Bayesian	328.0	455.0	≥ 0.2	1
CACC	218.0	602.0	≥ 0.2	1
CADD	411.5	408.5	≥ 0.2	1
CAIM	194.0	626.0	≥ 0.2	1
Chi2	315.0	465.0	≥ 0.2	1
ChiMerge	165.0	655.0	≥ 0.2	1
ClusterAnalysis	597.0	223.0	0.011074	0.011727
DIBD	228.5	554.5	≥ 0.2	1
Distance	162.5	657.5	≥ 0.2	1
EqualWidth	413.0	367.0	≥ 0.2	0.742955
Extended Chi2	347.5	472.5	≥ 0.2	1
FFD	646.5	173.5	0.03351999999999994	0.033294
FUSINTER	280.0	500.0	≥ 0.2	1
HDD	492.0	291.0	≥ 0.2	0.357435
HellingerBD	315.5	504.5	≥ 0.2	1
Heter-Disc	218.0	565.0	≥ 0.2	1
ID3	618.5	201.5	0.013335	0.013966
IDD	418.0	365.0	≥ 0.2	1
Khiops	474.0	306.0	≥ 0.2	0.23832
MDLP	173.5	646.5	≥ 0.2	1
Modified Chi2	449.0	331.0	≥ 0.2	0.406357
MODL	375.0	445.0	≥ 0.2	1
MVD	294.0	526.0	≥ 0.2	1
PKID	591.5	228.5	≥ 0.2	0.234752
UCPD	289.5	530.5	≥ 0.2	1
USD	440.0	380.0	≥ 0.2	0.681836
Zeta	197.0	623.0	≥ 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	[-0.0312 , 0.0263]	0.90276
Ameva	[-0.0879 , -0.0175]	0.90276
Bayesian	[-0.0632 , 0.02085]	0.90276
CACC	[-0.07955 , -0.01425]	0.90276
CADD	[-0.04695 , 0.04935]	0.90276
CAIM	[-0.09225 , -0.01855]	0.90276
Chi2	[-0.0504 , 0.012]	0.90276
ChiMerge	[-0.07785 , -0.01835]	0.90276
ClusterAnalysis	[0.013 , 0.0682]	0.90276
DIBD	[-0.0826 , -0.0122]	0.90276
Distance	[-0.1188 , -0.0384]	0.90276
EqualWidth	[-0.0159 , 0.0305]	0.90276
Extended Chi2	[-0.05085 , 0.01805]	0.90276
FFD	[0.0166 , 0.0962]	0.90276
FUSINTER	[-0.0516 , 0.0014]	0.90276
HDD	[-0.00255 , 0.07085]	0.90276
HellingerBD	[-0.04645 , 0.0059]	0.90276
Heter-Disc	[-0.08295 , -0.016]	0.90276
ID3	[0.0219 , 0.12565]	0.90276
IDD	[-0.0181 , 0.03525]	0.90276
Khiops	[-0.00725 , 0.03955]	0.90276
MDLP	[-0.097 , -0.03785]	0.90276
Modified Chi2	[-0.0154 , 0.052]	0.90276
MODL	[-0.03845 , 0.02095]	0.90276
MVD	[-0.06705 , 0.0014]	0.90276
PKID	[0.01695 , 0.09925]	0.90276
UCPD	[-0.046 , 0.0007]	0.90276
USD	[-0.025 , 0.04435]	0.90276
Zeta	[-0.0876 , -0.02355]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03585 , 0.032]	0.95024
Ameva	[-0.0976 , -0.01215]	0.95024
Bayesian	[-0.06815 , 0.02765]	0.95024
CACC	[-0.08605 , -0.0103]	0.95024
CADD	[-0.05315 , 0.0559]	0.95024
CAIM	[-0.10315 , -0.01425]	0.95024
Chi2	[-0.0566 , 0.0208]	0.95024
ChiMerge	[-0.0882 , -0.016]	0.95024
ClusterAnalysis	[0.00825 , 0.0759]	0.95024
DIBD	[-0.0904 , -0.00585]	0.95024
Distance	[-0.1267 , -0.0314]	0.95024
EqualWidth	[-0.0216 , 0.0353]	0.95024
Extended Chi2	[-0.0589 , 0.0234]	0.95024
FFD	[0.0117 , 0.1048]	0.95024
FUSINTER	[-0.05895 , 0.0057]	0.95024
HDD	[-0.0118 , 0.0915]	0.95024
HellingerBD	[-0.0524 , 0.01195]	0.95024
Heter-Disc	[-0.0913 , -0.012]	0.95024
ID3	[0.0167 , 0.13125]	0.95024
IDD	[-0.031 , 0.0448]	0.95024
Khiops	[-0.01085 , 0.0434]	0.95024
MDLP	[-0.1047 , -0.03]	0.95024
Modified Chi2	[-0.0204 , 0.0573]	0.95024
MODL	[-0.0453 , 0.02645]	0.95024
MVD	[-0.07625 , 0.00875]	0.95024
PKID	[0.00685 , 0.1086]	0.95024
UCPD	[-0.05215 , 0.0039]	0.95024
USD	[-0.0306 , 0.05]	0.95024
Zeta	[-0.09545 , -0.0185]	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	365.0	455.0	≥ 0.2	1
Ameva	184.0	636.0	≥ 0.2	1
Bayesian	320.0	460.0	≥ 0.2	1
CACC	206.0	614.0	≥ 0.2	1
CADD	381.0	439.0	≥ 0.2	1
CAIM	231.0	589.0	≥ 0.2	1
Chi2	343.0	477.0	≥ 0.2	1
ChiMerge	209.0	611.0	≥ 0.2	1
ClusterAnalysis	517.0	263.0	0.07738	0.075197
DIBD	241.0	579.0	≥ 0.2	1
Distance	174.0	646.0	≥ 0.2	1
EqualFrequency	367.0	413.0	≥ 0.2	1
Extended Chi2	353.0	467.0	≥ 0.2	1
FFD	590.0	190.0	0.0045	0.005142
FUSINTER	253.0	567.0	≥ 0.2	1
HDD	522.0	298.0	0.13508	0.130497
HellingerBD	305.5	514.5	≥ 0.2	1
Heter-Disc	236.0	584.0	≥ 0.2	1
ID3	604.0	216.0	0.0668	0.064893
IDD	420.0	400.0	≥ 0.2	0.887764
Khiops	428.0	392.0	≥ 0.2	0.803621
MDLP	206.0	614.0	≥ 0.2	1
Modified Chi2	434.0	346.0	≥ 0.2	0.534601
MODL	370.0	450.0	≥ 0.2	1
MVD	266.0	554.0	≥ 0.2	1
PKID	615.5	204.5	0.015168000000000001	0.015751
UCPD	239.0	581.0	≥ 0.2	1
USD	432.0	348.0	≥ 0.2	0.553123
Zeta	210.0	610.0	≥ 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	[-0.06395 , 0.02155]	0.90276
Ameva	[-0.1082 , -0.0293]	0.90276
Bayesian	[-0.05725 , 0.0191]	0.90276
CACC	[-0.0962 , -0.0212]	0.90276
CADD	[-0.07105 , 0.04115]	0.90276
CAIM	[-0.12885 , -0.0216]	0.90276
Chi2	[-0.05635 , 0.018]	0.90276
ChiMerge	[-0.1166 , -0.0208]	0.90276
ClusterAnalysis	[0.0027 , 0.07215]	0.90276
DIBD	[-0.10385 , -0.0136]	0.90276
Distance	[-0.14 , -0.0436]	0.90276
EqualFrequency	[-0.0305 , 0.0159]	0.90276
Extended Chi2	[-0.06835 , 0.0247]	0.90276
FFD	[0.02075 , 0.09405]	0.90276
FUSINTER	[-0.0645 , -0.00805]	0.90276
HDD	[-0.0023 , 0.0858]	0.90276
HellingerBD	[-0.0427 , 0.0034]	0.90276
Heter-Disc	[-0.11505 , -0.0256]	0.90276
ID3	[0.02015 , 0.10335]	0.90276
IDD	[-0.04095 , 0.04095]	0.90276
Khiops	[-0.0222 , 0.03095]	0.90276
MDLP	[-0.1201 , -0.03225]	0.90276
Modified Chi2	[-0.0192 , 0.04365]	0.90276
MODL	[-0.04285 , 0.0222]	0.90276
MVD	[-0.08835 , -0.00775]	0.90276
PKID	[0.0253 , 0.0981]	0.90276
UCPD	[-0.0727 , -0.00765]	0.90276
USD	[-0.0226 , 0.0455]	0.90276
Zeta	[-0.11715 , -0.0231]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.06955 , 0.0353]	0.95024
Ameva	[-0.1191 , -0.0189]	0.95024
Bayesian	[-0.0658 , 0.0253]	0.95024
CACC	[-0.1046 , -0.0151]	0.95024
CADD	[-0.0808 , 0.05265]	0.95024
CAIM	[-0.13775 , -0.01065]	0.95024
Chi2	[-0.06585 , 0.0279]	0.95024
ChiMerge	[-0.1254 , -0.01355]	0.95024
ClusterAnalysis	[-0.0027 , 0.08035]	0.95024
DIBD	[-0.1092 , -0.00875]	0.95024
Distance	[-0.15005 , -0.033]	0.95024
EqualFrequency	[-0.0353 , 0.0216]	0.95024
Extended Chi2	[-0.074 , 0.0366]	0.95024
FFD	[0.01505 , 0.10215]	0.95024
FUSINTER	[-0.07175 , -0.0027]	0.95024
HDD	[-0.0103 , 0.09645]	0.95024
HellingerBD	[-0.0479 , 0.00775]	0.95024
Heter-Disc	[-0.12265 , -0.00935]	0.95024
ID3	[0.0149 , 0.1127]	0.95024
IDD	[-0.04945 , 0.0473]	0.95024
Khiops	[-0.0262 , 0.0367]	0.95024
MDLP	[-0.1291 , -0.02305]	0.95024
Modified Chi2	[-0.0301 , 0.05115]	0.95024
MODL	[-0.04725 , 0.02865]	0.95024
MVD	[-0.09545 , 0.0005]	0.95024
PKID	[0.01625 , 0.1082]	0.95024
UCPD	[-0.07955 , -0.0034]	0.95024
USD	[-0.02885 , 0.0518]	0.95024
Zeta	[-0.12535 , -0.0151]	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	498.0	322.0	≥ 0.2	0.856625
Ameva	238.0	582.0	≥ 0.2	1
Bayesian	417.0	403.0	≥ 0.2	1
CACC	272.0	548.0	≥ 0.2	1
CADD	481.5	338.5	≥ 0.2	1
CAIM	258.0	522.0	≥ 0.2	1
Chi2	398.5	421.5	≥ 0.2	1
ChiMerge	226.0	554.0	≥ 0.2	1
ClusterAnalysis	550.0	230.0	0.02486	0.025105
DIBD	344.0	476.0	≥ 0.2	1
Distance	187.5	632.5	≥ 0.2	1
EqualFrequency	472.5	347.5	≥ 0.2	0.733252
EqualWidth	467.0	353.0	≥ 0.2	0.439597
FFD	634.5	185.5	0.006444	0.007142
FUSINTER	338.0	442.0	≥ 0.2	1
HDD	550.0	270.0	0.14846	0.14227
HellingerBD	423.0	397.0	≥ 0.2	0.855769
Heter-Disc	283.5	505.5	≥ 0.2	1
ID3	604.0	176.0	0.002242	0.002759
IDD	469.0	351.0	≥ 0.2	1
Khiops	501.0	319.0	≥ 0.2	0.218743
MDLP	283.5	503.5	≥ 0.2	1
Modified Chi2	547.5	272.5	≥ 0.2	0.662865
MODL	404.0	379.0	≥ 0.2	1
MVD	379.5	440.5	≥ 0.2	1
PKID	616.5	163.5	0.0011475	0.001507
UCPD	365.0	415.0	≥ 0.2	1
USD	458.0	322.0	≥ 0.2	0.338271
Zeta	257.0	563.0	≥ 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	[-0.0047 , 0.04865]	0.90276
Ameva	[-0.0676 , -0.01085]	0.90276
Bayesian	[-0.0299 , 0.0359]	0.90276
CACC	[-0.07595 , -0.0026]	0.90276
CADD	[-0.0071 , 0.04265]	0.90276
CAIM	[-0.08225 , -0.003]	0.90276
Chi2	[-0.0146 , 0.00975]	0.90276
ChiMerge	[-0.06635 , -0.0051]	0.90276
ClusterAnalysis	[0.0146 , 0.1022]	0.90276
DIBD	[-0.0419 , 0.0059]	0.90276
Distance	[-0.07425 , -0.0131]	0.90276
EqualFrequency	[-0.01805 , 0.05085]	0.90276
EqualWidth	[-0.0247 , 0.06835]	0.90276
FFD	[0.0318 , 0.13125]	0.90276
FUSINTER	[-0.0468 , 0.0177]	0.90276
HDD	[0.00715 , 0.10855]	0.90276
HellingerBD	[-0.0312 , 0.0417]	0.90276
Heter-Disc	[-0.05015 , 0]	0.90276
ID3	[0.0353 , 0.1565]	0.90276
IDD	[-0.01085 , 0.04265]	0.90276
Khiops	[-0.0074 , 0.0726]	0.90276
MDLP	[-0.0489 , 0]	0.90276
Modified Chi2	[0.0008 , 0.03995]	0.90276
MODL	[-0.02565 , 0.0329]	0.90276
MVD	[-0.02315 , 0.01165]	0.90276
PKID	[0.03495 , 0.13235]	0.90276
UCPD	[-0.04005 , 0.0218]	0.90276
USD	[-0.01695 , 0.06015]	0.90276
Zeta	[-0.0608 , -0.0044]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0098 , 0.05505]	0.95024
Ameva	[-0.0768 , -0.0079]	0.95024
Bayesian	[-0.0408 , 0.04345]	0.95024
CACC	[-0.0893 , 0.00245]	0.95024
CADD	[-0.01085 , 0.0494]	0.95024
CAIM	[-0.09015 , 0.0011]	0.95024
Chi2	[-0.0171 , 0.01505]	0.95024
ChiMerge	[-0.08555 , -0.0027]	0.95024
ClusterAnalysis	[0.0073 , 0.1086]	0.95024
DIBD	[-0.05575 , 0.0075]	0.95024
Distance	[-0.0854 , -0.00985]	0.95024
EqualFrequency	[-0.0234 , 0.0589]	0.95024
EqualWidth	[-0.0366 , 0.074]	0.95024
FFD	[0.02425 , 0.14475]	0.95024
FUSINTER	[-0.05815 , 0.0236]	0.95024
HDD	[-0.0009 , 0.1196]	0.95024
HellingerBD	[-0.03665 , 0.0504]	0.95024
Heter-Disc	[-0.05725 , 0.0008]	0.95024
ID3	[0.02645 , 0.1748]	0.95024
IDD	[-0.0179 , 0.0475]	0.95024
Khiops	[-0.0155 , 0.0781]	0.95024
MDLP	[-0.05485 , 0.0027]	0.95024
Modified Chi2	[0 , 0.04425]	0.95024
MODL	[-0.0306 , 0.036]	0.95024
MVD	[-0.0279 , 0.0174]	0.95024
PKID	[0.02805 , 0.13715]	0.95024
UCPD	[-0.04425 , 0.02725]	0.95024
USD	[-0.0257 , 0.07045]	0.95024
Zeta	[-0.06745 , -0.00065]	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	214.0	569.0	≥ 0.2	1
Ameva	108.0	712.0	≥ 0.2	1
Bayesian	208.5	611.5	≥ 0.2	1
CACC	84.0	736.0	≥ 0.2	1
CADD	251.0	529.0	≥ 0.2	1
CAIM	122.0	698.0	≥ 0.2	1
Chi2	173.0	647.0	≥ 0.2	1
ChiMerge	107.0	713.0	≥ 0.2	1
ClusterAnalysis	303.5	516.5	≥ 0.2	1
DIBD	175.5	644.5	≥ 0.2	1
Distance	113.0	667.0	≥ 0.2	1
EqualFrequency	173.5	646.5	≥ 0.2	1
EqualWidth	190.0	590.0	≥ 0.2	1
Extended Chi2	185.5	634.5	≥ 0.2	1
FUSINTER	91.0	689.0	≥ 0.2	1
HDD	370.0	450.0	≥ 0.2	1
HellingerBD	176.0	644.0	≥ 0.2	1
Heter-Disc	150.5	669.5	≥ 0.2	1
ID3	390.5	394.5	≥ 0.2	1
IDD	209.5	610.5	≥ 0.2	1
Khiops	175.0	605.0	≥ 0.2	1
MDLP	116.0	664.0	≥ 0.2	1
Modified Chi2	179.0	601.0	≥ 0.2	1
MODL	154.0	666.0	≥ 0.2	1
MVD	164.0	619.0	≥ 0.2	1
PKID	392.0	428.0	≥ 0.2	1
UCPD	167.0	653.0	≥ 0.2	1
USD	244.0	576.0	≥ 0.2	1
Zeta	121.0	699.0	≥ 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	[-0.12535 , -0.01765]	0.90276
Ameva	[-0.20825 , -0.08735]	0.90276
Bayesian	[-0.1336 , -0.02415]	0.90276
CACC	[-0.17695 , -0.0786]	0.90276
CADD	[-0.1575 , -0.0092]	0.90276
CAIM	[-0.22585 , -0.073]	0.90276
Chi2	[-0.1262 , -0.0413]	0.90276
ChiMerge	[-0.2069 , -0.07175]	0.90276
ClusterAnalysis	[-0.0633 , 0.0029]	0.90276
DIBD	[-0.2154 , -0.06025]	0.90276
Distance	[-0.2471 , -0.08785]	0.90276
EqualFrequency	[-0.0962 , -0.0166]	0.90276
EqualWidth	[-0.09405 , -0.02075]	0.90276
Extended Chi2	[-0.13125 , -0.0318]	0.90276
FUSINTER	[-0.14945 , -0.0643]	0.90276
HDD	[-0.0666 , 0.0116]	0.90276
HellingerBD	[-0.1266 , -0.03585]	0.90276
Heter-Disc	[-0.19505 , -0.07015]	0.90276
ID3	[-0.02495 , 0.01735]	0.90276
IDD	[-0.1193 , -0.0234]	0.90276
Khiops	[-0.08985 , -0.0245]	0.90276
MDLP	[-0.2245 , -0.07735]	0.90276
Modified Chi2	[-0.0867 , -0.0195]	0.90276
MODL	[-0.1259 , -0.04665]	0.90276
MVD	[-0.16395 , -0.05]	0.90276
PKID	[-0.01315 , 0.0097]	0.90276
UCPD	[-0.17 , -0.05115]	0.90276
USD	[-0.1042 , -0.0109]	0.90276
Zeta	[-0.2135 , -0.069]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.13745 , -0.0074]	0.95024
Ameva	[-0.2171 , -0.0775]	0.95024
Bayesian	[-0.14495 , -0.01765]	0.95024
CACC	[-0.1941 , -0.0711]	0.95024
CADD	[-0.1717 , 0.0003]	0.95024
CAIM	[-0.2393 , -0.0614]	0.95024
Chi2	[-0.13805 , -0.0301]	0.95024
ChiMerge	[-0.2157 , -0.06365]	0.95024
ClusterAnalysis	[-0.0687 , 0.0071]	0.95024
DIBD	[-0.23045 , -0.0542]	0.95024
Distance	[-0.2611 , -0.07765]	0.95024
EqualFrequency	[-0.1048 , -0.0117]	0.95024
EqualWidth	[-0.10215 , -0.01505]	0.95024
Extended Chi2	[-0.14475 , -0.02425]	0.95024
FUSINTER	[-0.1609 , -0.05685]	0.95024
HDD	[-0.07705 , 0.0199]	0.95024
HellingerBD	[-0.1342 , -0.0271]	0.95024
Heter-Disc	[-0.2204 , -0.05695]	0.95024
ID3	[-0.02875 , 0.0202]	0.95024
IDD	[-0.1299 , -0.013]	0.95024
Khiops	[-0.09965 , -0.01965]	0.95024
MDLP	[-0.24305 , -0.0673]	0.95024
Modified Chi2	[-0.09535 , -0.01495]	0.95024
MODL	[-0.1357 , -0.0384]	0.95024
MVD	[-0.1812 , -0.03735]	0.95024
PKID	[-0.01475 , 0.01065]	0.95024
UCPD	[-0.1872 , -0.039]	0.95024
USD	[-0.11365 , -0.00525]	0.95024
Zeta	[-0.2247 , -0.0576]	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	478.5	306.5	≥ 0.2	0.882807
Ameva	272.0	548.0	≥ 0.2	1
Bayesian	481.0	339.0	≥ 0.2	1
CACC	284.0	536.0	≥ 0.2	1
CADD	444.5	340.5	≥ 0.2	1
CAIM	271.0	549.0	≥ 0.2	1
Chi2	480.5	339.5	≥ 0.2	0.647799
ChiMerge	277.5	502.5	≥ 0.2	1
ClusterAnalysis	649.0	131.0	1.5756E-4	0.000293
DIBD	315.0	505.0	≥ 0.2	1
Distance	228.0	592.0	≥ 0.2	1
EqualFrequency	500.0	280.0	0.1275	0.123067
EqualWidth	567.0	253.0	0.0344	0.034259
Extended Chi2	442.0	338.0	≥ 0.2	0.46378
FFD	689.0	91.0	7.486E-6	0.000029
HDD	617.0	163.0	0.0011156	0.0015
HellingerBD	502.0	318.0	≥ 0.2	0.21375
Heter-Disc	304.5	480.5	≥ 0.2	1
ID3	721.0	99.0	7.508E-6	0.000027
IDD	584.0	236.0	0.13066	0.125576
Khiops	587.0	196.0	0.018098	0.0186
MDLP	292.0	528.0	≥ 0.2	1
Modified Chi2	623.5	196.5	0.010704	0.011385
MODL	552.0	231.0	0.06992	0.067935
MVD	372.5	412.5	≥ 0.2	1
PKID	697.0	83.0	3.67E-6	0.000018
UCPD	387.0	393.0	≥ 0.2	1
USD	609.0	171.0	0.0017248	0.00219
Zeta	284.5	535.5	≥ 0.2	1

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	[-0.0073 , 0.05285]	0.90276
Ameva	[-0.0574 , -0.00145]	0.90276
Bayesian	[-0.0073 , 0.04535]	0.90276
CACC	[-0.0529 , -0.00085]	0.90276
CADD	[-0.0177 , 0.0827]	0.90276
CAIM	[-0.0616 , -0.0045]	0.90276
Chi2	[-0.01055 , 0.0476]	0.90276
ChiMerge	[-0.05015 , 0.0009]	0.90276
ClusterAnalysis	[0.0411 , 0.11835]	0.90276
DIBD	[-0.0526 , 0.00775]	0.90276
Distance	[-0.08415 , -0.01465]	0.90276
EqualFrequency	[-0.0014 , 0.0516]	0.90276
EqualWidth	[0.00805 , 0.0645]	0.90276
Extended Chi2	[-0.0177 , 0.0468]	0.90276
FFD	[0.0643 , 0.14945]	0.90276
HDD	[0.03535 , 0.1108]	0.90276
HellingerBD	[-0.00665 , 0.05175]	0.90276
Heter-Disc	[-0.06075 , 0.0066]	0.90276
ID3	[0.0702 , 0.1532]	0.90276
IDD	[0.0103 , 0.06]	0.90276
Khiops	[0.01265 , 0.0689]	0.90276
MDLP	[-0.06345 , 0.00075]	0.90276
Modified Chi2	[0.0176 , 0.0755]	0.90276
MODL	[0.0066 , 0.0497]	0.90276
MVD	[-0.0445 , 0.02865]	0.90276
PKID	[0.06285 , 0.14625]	0.90276
UCPD	[-0.02725 , 0.02405]	0.90276
USD	[0.02115 , 0.07]	0.90276
Zeta	[-0.0625 , -0.0002]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01095 , 0.06265]	0.95024
Ameva	[-0.06075 , 0.002]	0.95024
Bayesian	[-0.0156 , 0.0506]	0.95024
CACC	[-0.05675 , 0.00495]	0.95024
CADD	[-0.02515 , 0.09305]	0.95024
CAIM	[-0.0704 , 0.00095]	0.95024
Chi2	[-0.0162 , 0.0541]	0.95024
ChiMerge	[-0.0609 , 0.00475]	0.95024
ClusterAnalysis	[0.0365 , 0.1243]	0.95024
DIBD	[-0.05795 , 0.01295]	0.95024
Distance	[-0.0923 , -0.00825]	0.95024
EqualFrequency	[-0.0057 , 0.05895]	0.95024
EqualWidth	[0.0027 , 0.07175]	0.95024
Extended Chi2	[-0.0236 , 0.05815]	0.95024
FFD	[0.05685 , 0.1609]	0.95024
HDD	[0.0279 , 0.12075]	0.95024
HellingerBD	[-0.01055 , 0.0571]	0.95024
Heter-Disc	[-0.0714 , 0.01305]	0.95024
ID3	[0.06245 , 0.16465]	0.95024
IDD	[0.00425 , 0.0662]	0.95024
Khiops	[0.0091 , 0.08165]	0.95024
MDLP	[-0.0723 , 0.00665]	0.95024
Modified Chi2	[0.01325 , 0.08205]	0.95024
MODL	[0.00305 , 0.05375]	0.95024
MVD	[-0.05655 , 0.03695]	0.95024
PKID	[0.0591 , 0.1555]	0.95024
UCPD	[-0.03185 , 0.0287]	0.95024
USD	[0.0169 , 0.0767]	0.95024
Zeta	[-0.06775 , 0.00315]	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	300.0	520.0	≥ 0.2	1
Ameva	151.0	669.0	≥ 0.2	1
Bayesian	198.5	621.5	≥ 0.2	1
CACC	153.0	627.0	≥ 0.2	1
CADD	337.0	483.0	≥ 0.2	1
CAIM	144.5	642.5	≥ 0.2	1
Chi2	243.0	577.0	≥ 0.2	1
ChiMerge	160.0	620.0	≥ 0.2	1
ClusterAnalysis	422.0	361.0	≥ 0.2	1
DIBD	182.0	638.0	≥ 0.2	1
Distance	106.0	674.0	≥ 0.2	1
EqualFrequency	291.0	492.0	≥ 0.2	1
EqualWidth	298.0	522.0	≥ 0.2	1
Extended Chi2	270.0	550.0	≥ 0.2	1
FFD	450.0	370.0	≥ 0.2	1
FUSINTER	163.0	617.0	≥ 0.2	1
HellingerBD	267.5	552.5	≥ 0.2	1
Heter-Disc	200.0	620.0	≥ 0.2	1
ID3	474.0	346.0	≥ 0.2	1
IDD	265.0	555.0	≥ 0.2	1
Khiops	319.0	461.0	≥ 0.2	1
MDLP	157.0	663.0	≥ 0.2	1
Modified Chi2	306.5	513.5	≥ 0.2	1
MODL	245.0	575.0	≥ 0.2	1
MVD	240.0	580.0	≥ 0.2	1
PKID	475.0	345.0	≥ 0.2	1
UCPD	237.0	543.0	≥ 0.2	1
USD	317.5	502.5	≥ 0.2	1
Zeta	166.0	614.0	≥ 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	[-0.0874 , 0.0039]	0.90276
Ameva	[-0.165 , -0.0462]	0.90276
Bayesian	[-0.10475 , -0.0296]	0.90276
CACC	[-0.14465 , -0.0458]	0.90276
CADD	[-0.1075 , 0.0213]	0.90276
CAIM	[-0.15675 , -0.0477]	0.90276
Chi2	[-0.1034 , -0.0177]	0.90276
ChiMerge	[-0.15 , -0.0436]	0.90276
ClusterAnalysis	[-0.0347 , 0.0333]	0.90276
DIBD	[-0.14295 , -0.0427]	0.90276
Distance	[-0.17845 , -0.0621]	0.90276
EqualFrequency	[-0.07085 , 0.00255]	0.90276
EqualWidth	[-0.0858 , 0.0023]	0.90276
Extended Chi2	[-0.10855 , -0.00715]	0.90276
FFD	[-0.0116 , 0.0666]	0.90276
FUSINTER	[-0.1108 , -0.03535]	0.90276
HellingerBD	[-0.08645 , -0.00515]	0.90276
Heter-Disc	[-0.1536 , -0.04685]	0.90276
ID3	[-0.0107 , 0.03725]	0.90276
IDD	[-0.08045 , -0.00675]	0.90276
Khiops	[-0.07285 , 0.02035]	0.90276
MDLP	[-0.16455 , -0.0511]	0.90276
Modified Chi2	[-0.06655 , 0.009]	0.90276
MODL	[-0.08715 , -0.01185]	0.90276
MVD	[-0.13455 , -0.02185]	0.90276
PKID	[-0.01465 , 0.0685]	0.90276
UCPD	[-0.1328 , -0.01545]	0.90276
USD	[-0.05355 , 0.0057]	0.90276
Zeta	[-0.1579 , -0.04335]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.09785 , 0.0079]	0.95024
Ameva	[-0.1785 , -0.04215]	0.95024
Bayesian	[-0.11475 , -0.0234]	0.95024
CACC	[-0.16065 , -0.04035]	0.95024
CADD	[-0.12435 , 0.03315]	0.95024
CAIM	[-0.177 , -0.0369]	0.95024
Chi2	[-0.1098 , -0.0067]	0.95024
ChiMerge	[-0.16005 , -0.0346]	0.95024
ClusterAnalysis	[-0.04945 , 0.04795]	0.95024
DIBD	[-0.1551 , -0.03615]	0.95024
Distance	[-0.18915 , -0.05365]	0.95024
EqualFrequency	[-0.0915 , 0.0118]	0.95024
EqualWidth	[-0.09645 , 0.0103]	0.95024
Extended Chi2	[-0.1196 , 0.0009]	0.95024
FFD	[-0.0199 , 0.07705]	0.95024
FUSINTER	[-0.12075 , -0.0279]	0.95024
HellingerBD	[-0.09435 , 0.0003]	0.95024
Heter-Disc	[-0.1705 , -0.0332]	0.95024
ID3	[-0.01995 , 0.04105]	0.95024
IDD	[-0.087 , -0.0008]	0.95024
Khiops	[-0.08 , 0.0272]	0.95024
MDLP	[-0.1801 , -0.04495]	0.95024
Modified Chi2	[-0.0739 , 0.0146]	0.95024
MODL	[-0.09255 , -0.007]	0.95024
MVD	[-0.1442 , -0.01045]	0.95024
PKID	[-0.02025 , 0.07615]	0.95024
UCPD	[-0.1468 , -0.00515]	0.95024
USD	[-0.0614 , 0.01115]	0.95024
Zeta	[-0.1692 , -0.03545]	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	468.0	352.0	≥ 0.2	0.431682
Ameva	228.0	592.0	≥ 0.2	1
Bayesian	388.0	432.0	≥ 0.2	1
CACC	253.0	567.0	≥ 0.2	1
CADD	475.0	345.0	≥ 0.2	0.37864
CAIM	235.0	545.0	≥ 0.2	1
Chi2	409.0	411.0	≥ 0.2	1
ChiMerge	247.0	573.0	≥ 0.2	1
ClusterAnalysis	596.0	184.0	0.003362	0.003955
DIBD	312.0	508.0	≥ 0.2	1
Distance	230.5	589.5	≥ 0.2	1
EqualFrequency	504.5	315.5	≥ 0.2	0.420891
EqualWidth	514.5	305.5	≥ 0.2	0.342164
Extended Chi2	397.0	423.0	≥ 0.2	1
FFD	644.0	176.0	0.004044	0.00461
FUSINTER	318.0	502.0	≥ 0.2	1
HDD	552.5	267.5	0.13842	0.132656
Heter-Disc	277.5	542.5	≥ 0.2	1
ID3	651.5	168.5	0.002747000000000003	0.003317
IDD	495.0	325.0	≥ 0.2	0.250461
Khiops	512.0	268.0	0.09014	0.086809
MDLP	252.5	567.5	≥ 0.2	1
Modified Chi2	486.0	334.0	≥ 0.2	0.303828
MODL	436.0	384.0	≥ 0.2	0.721695
MVD	320.5	499.5	≥ 0.2	1
PKID	651.5	168.5	0.002747000000000003	0.003317
UCPD	299.0	521.0	≥ 0.2	1
USD	502.0	318.0	≥ 0.2	0.21375
Zeta	245.0	575.0	≥ 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	[-0.02695 , 0.0443]	0.90276
Ameva	[-0.0843 , -0.0127]	0.90276
Bayesian	[-0.0471 , 0.03105]	0.90276
CACC	[-0.0648 , -0.007]	0.90276
CADD	[-0.02695 , 0.05905]	0.90276
CAIM	[-0.0912 , -0.0085]	0.90276
Chi2	[-0.0262 , 0.02915]	0.90276
ChiMerge	[-0.0876 , -0.0105]	0.90276
ClusterAnalysis	[0.0232 , 0.0873]	0.90276
DIBD	[-0.0561 , 0.00405]	0.90276
Distance	[-0.1058 , -0.02255]	0.90276
EqualFrequency	[-0.0059 , 0.04645]	0.90276
EqualWidth	[-0.0034 , 0.0427]	0.90276
Extended Chi2	[-0.0417 , 0.0312]	0.90276
FFD	[0.03585 , 0.1266]	0.90276
FUSINTER	[-0.05175 , 0.00665]	0.90276
HDD	[0.00515 , 0.08645]	0.90276
Heter-Disc	[-0.0753 , -0.0019]	0.90276
ID3	[0.0368 , 0.1303]	0.90276
IDD	[-0.0197 , 0.0653]	0.90276
Khiops	[0.0007 , 0.0479]	0.90276
MDLP	[-0.08575 , -0.0073]	0.90276
Modified Chi2	[-0.01205 , 0.06335]	0.90276
MODL	[-0.02575 , 0.0342]	0.90276
MVD	[-0.0569 , 0.00785]	0.90276
PKID	[0.03885 , 0.1223]	0.90276
UCPD	[-0.04635 , 0.0031]	0.90276
USD	[-0.00615 , 0.056]	0.90276
Zeta	[-0.08515 , -0.00755]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03495 , 0.0512]	0.95024
Ameva	[-0.0937 , -0.00745]	0.95024
Bayesian	[-0.054 , 0.0372]	0.95024
CACC	[-0.0732 , -0.00295]	0.95024
CADD	[-0.03645 , 0.06675]	0.95024
CAIM	[-0.09975 , -0.00295]	0.95024
Chi2	[-0.03315 , 0.03375]	0.95024
ChiMerge	[-0.09265 , -0.00525]	0.95024
ClusterAnalysis	[0.01745 , 0.09805]	0.95024
DIBD	[-0.0623 , 0.0076]	0.95024
Distance	[-0.118 , -0.0116]	0.95024
EqualFrequency	[-0.01195 , 0.0524]	0.95024
EqualWidth	[-0.00775 , 0.0479]	0.95024
Extended Chi2	[-0.0504 , 0.03665]	0.95024
FFD	[0.0271 , 0.1342]	0.95024
FUSINTER	[-0.0571 , 0.01055]	0.95024
HDD	[-0.0003 , 0.09435]	0.95024
Heter-Disc	[-0.0829 , 0.0017]	0.95024
ID3	[0.0294 , 0.1399]	0.95024
IDD	[-0.028 , 0.07235]	0.95024
Khiops	[-0.00355 , 0.05425]	0.95024
MDLP	[-0.09135 , -0.00315]	0.95024
Modified Chi2	[-0.0168 , 0.07045]	0.95024
MODL	[-0.03255 , 0.0409]	0.95024
MVD	[-0.0645 , 0.015]	0.95024
PKID	[0.03265 , 0.132]	0.95024
UCPD	[-0.05475 , 0.0078]	0.95024
USD	[-0.01195 , 0.06195]	0.95024
Zeta	[-0.092 , -0.00485]	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	565.5	227.5	≥ 0.2	1
Ameva	361.0	459.0	≥ 0.2	1
Bayesian	536.0	255.0	≥ 0.2	1
CACC	352.5	467.5	≥ 0.2	1
CADD	653.0	146.0	≥ 0.2	1
CAIM	373.0	447.0	≥ 0.2	1
Chi2	478.0	309.0	≥ 0.2	1
ChiMerge	371.0	409.0	≥ 0.2	1
ClusterAnalysis	666.5	153.5	0.0012009999999999998	0.001609
DIBD	502.5	317.5	≥ 0.2	1
Distance	255.0	536.0	≥ 0.2	1
EqualFrequency	565.0	218.0	0.04388	0.043222
EqualWidth	584.0	236.0	0.018526	0.019001
Extended Chi2	505.5	283.5	≥ 0.2	1
FFD	669.5	150.5	0.0010086000000000001	0.001385
FUSINTER	480.5	304.5	≥ 0.2	0.857019
HDD	620.0	200.0	0.004052	0.004664
HellingerBD	542.5	277.5	0.07586	0.073341
ID3	684.0	136.0	1.1536E-4	0.000225
IDD	569.0	251.0	≥ 0.2	1
Khiops	609.0	174.0	0.00653	0.007245
MDLP	323.0	497.0	≥ 0.2	1
Modified Chi2	555.5	229.5	0.16584	0.158952
MODL	551.0	269.0	≥ 0.2	0.310902
MVD	463.0	357.0	≥ 0.2	1
PKID	640.0	140.0	2.836E-4	0.000473
UCPD	475.0	305.0	≥ 0.2	0.23281
USD	594.0	226.0	0.012512	0.012988
Zeta	373.0	447.0	≥ 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	[0.0016 , 0.0669]	0.90276
Ameva	[-0.03285 , 0.0135]	0.90276
Bayesian	[0 , 0.0668]	0.90276
CACC	[-0.0284 , 0.01745]	0.90276
CADD	[0.0033 , 0.0682]	0.90276
CAIM	[-0.0424 , 0.0171]	0.90276
Chi2	[-0.00275 , 0.06995]	0.90276
ChiMerge	[-0.0296 , 0.0237]	0.90276
ClusterAnalysis	[0.05365 , 0.15035]	0.90276
DIBD	[-0.0004 , 0.01715]	0.90276
Distance	[-0.03565 , 0]	0.90276
EqualFrequency	[0.016 , 0.08295]	0.90276
EqualWidth	[0.0256 , 0.11505]	0.90276
Extended Chi2	[0 , 0.05015]	0.90276
FFD	[0.07015 , 0.19505]	0.90276
FUSINTER	[-0.0066 , 0.06075]	0.90276
HDD	[0.04685 , 0.1536]	0.90276
HellingerBD	[0.0019 , 0.0753]	0.90276
ID3	[0.078 , 0.1945]	0.90276
IDD	[0 , 0.1048]	0.90276
Khiops	[0.03045 , 0.11885]	0.90276
MDLP	[-0.0143 , 0]	0.90276
Modified Chi2	[0.0082 , 0.1192]	0.90276
MODL	[0.00285 , 0.09025]	0.90276
MVD	[0 , 0.0232]	0.90276
PKID	[0.0687 , 0.19705]	0.90276
UCPD	[-0.00785 , 0.043]	0.90276
USD	[0.0201 , 0.1107]	0.90276
Zeta	[-0.03225 , 0.0191]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.0794]	0.95024
Ameva	[-0.03885 , 0.0186]	0.95024
Bayesian	[0 , 0.07535]	0.95024
CACC	[-0.0353 , 0.02375]	0.95024
CADD	[0.00315 , 0.07915]	0.95024
CAIM	[-0.05075 , 0.021]	0.95024
Chi2	[-0.00525 , 0.0788]	0.95024
ChiMerge	[-0.03395 , 0.0297]	0.95024
ClusterAnalysis	[0.0468 , 0.16115]	0.95024
DIBD	[-0.00335 , 0.01895]	0.95024
Distance	[-0.04495 , 0]	0.95024
EqualFrequency	[0.012 , 0.0913]	0.95024
EqualWidth	[0.00935 , 0.12265]	0.95024
Extended Chi2	[-0.0008 , 0.05725]	0.95024
FFD	[0.05695 , 0.2204]	0.95024
FUSINTER	[-0.01305 , 0.0714]	0.95024
HDD	[0.0332 , 0.1705]	0.95024
HellingerBD	[-0.0017 , 0.0829]	0.95024
ID3	[0.0658 , 0.20695]	0.95024
IDD	[0 , 0.11915]	0.95024
Khiops	[0.0264 , 0.1252]	0.95024
MDLP	[-0.0232 , 0.00195]	0.95024
Modified Chi2	[0.0036 , 0.1393]	0.95024
MODL	[0 , 0.1022]	0.95024
MVD	[0 , 0.03455]	0.95024
PKID	[0.0609 , 0.21005]	0.95024
UCPD	[-0.0123 , 0.048]	0.95024
USD	[0.01245 , 0.12235]	0.95024
Zeta	[-0.04305 , 0.02655]	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	212.0	608.0	≥ 0.2	1
Ameva	91.0	729.0	≥ 0.2	1
Bayesian	155.0	625.0	≥ 0.2	1
CACC	80.0	740.0	≥ 0.2	1
CADD	256.0	564.0	≥ 0.2	1
CAIM	111.0	709.0	≥ 0.2	1
Chi2	178.0	602.0	≥ 0.2	1
ChiMerge	95.5	724.5	≥ 0.2	1
ClusterAnalysis	231.0	552.0	≥ 0.2	1
DIBD	164.0	656.0	≥ 0.2	1
Distance	101.0	719.0	≥ 0.2	1
EqualFrequency	201.5	618.5	≥ 0.2	1
EqualWidth	216.0	604.0	≥ 0.2	1
Extended Chi2	176.0	604.0	≥ 0.2	1
FFD	394.5	390.5	≥ 0.2	1
FUSINTER	99.0	721.0	≥ 0.2	1
HDD	346.0	474.0	≥ 0.2	1
HellingerBD	168.5	651.5	≥ 0.2	1
Heter-Disc	136.0	684.0	≥ 0.2	1
IDD	197.0	623.0	≥ 0.2	1
Khiops	189.5	630.5	≥ 0.2	1
MDLP	120.0	700.0	≥ 0.2	1
Modified Chi2	207.5	612.5	≥ 0.2	1
MODL	153.0	627.0	≥ 0.2	1
MVD	166.0	654.0	≥ 0.2	1
PKID	393.0	394.0	≥ 0.2	1
UCPD	144.0	676.0	≥ 0.2	1
USD	176.0	604.0	≥ 0.2	1
Zeta	128.0	692.0	≥ 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	[-0.1283 , -0.027]	0.90276
Ameva	[-0.1989 , -0.09585]	0.90276
Bayesian	[-0.13295 , -0.04005]	0.90276
CACC	[-0.18575 , -0.0771]	0.90276
CADD	[-0.15 , -0.02175]	0.90276
CAIM	[-0.21535 , -0.0923]	0.90276
Chi2	[-0.14155 , -0.04335]	0.90276
ChiMerge	[-0.20145 , -0.0873]	0.90276
ClusterAnalysis	[-0.0518 , -0.0036]	0.90276
DIBD	[-0.1986 , -0.0644]	0.90276
Distance	[-0.2312 , -0.0972]	0.90276
EqualFrequency	[-0.12565 , -0.0219]	0.90276
EqualWidth	[-0.10335 , -0.02015]	0.90276
Extended Chi2	[-0.1565 , -0.0353]	0.90276
FFD	[-0.01735 , 0.02495]	0.90276
FUSINTER	[-0.1532 , -0.0702]	0.90276
HDD	[-0.03725 , 0.0107]	0.90276
HellingerBD	[-0.1303 , -0.0368]	0.90276
Heter-Disc	[-0.1945 , -0.078]	0.90276
IDD	[-0.1179 , -0.02315]	0.90276
Khiops	[-0.10305 , -0.0255]	0.90276
MDLP	[-0.2181 , -0.0884]	0.90276
Modified Chi2	[-0.0872 , -0.01765]	0.90276
MODL	[-0.1229 , -0.0412]	0.90276
MVD	[-0.17215 , -0.0562]	0.90276
PKID	[-0.01965 , 0.02535]	0.90276
UCPD	[-0.17635 , -0.04725]	0.90276
USD	[-0.0839 , -0.0155]	0.90276
Zeta	[-0.20895 , -0.0847]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.14145 , -0.0187]	0.95024
Ameva	[-0.21045 , -0.0857]	0.95024
Bayesian	[-0.1407 , -0.03235]	0.95024
CACC	[-0.1975 , -0.0697]	0.95024
CADD	[-0.16285 , -0.0073]	0.95024
CAIM	[-0.22945 , -0.08205]	0.95024
Chi2	[-0.14915 , -0.03385]	0.95024
ChiMerge	[-0.21575 , -0.0795]	0.95024
ClusterAnalysis	[-0.0651 , -0.0012]	0.95024
DIBD	[-0.21555 , -0.05325]	0.95024
Distance	[-0.2471 , -0.08415]	0.95024
EqualFrequency	[-0.13125 , -0.0167]	0.95024
EqualWidth	[-0.1127 , -0.0149]	0.95024
Extended Chi2	[-0.1748 , -0.02645]	0.95024
FFD	[-0.0202 , 0.02875]	0.95024
FUSINTER	[-0.16465 , -0.06245]	0.95024
HDD	[-0.04105 , 0.01995]	0.95024
HellingerBD	[-0.1399 , -0.0294]	0.95024
Heter-Disc	[-0.20695 , -0.0658]	0.95024
IDD	[-0.12685 , -0.01775]	0.95024
Khiops	[-0.1085 , -0.0217]	0.95024
MDLP	[-0.23 , -0.07785]	0.95024
Modified Chi2	[-0.0953 , -0.014]	0.95024
MODL	[-0.12995 , -0.0343]	0.95024
MVD	[-0.1849 , -0.0489]	0.95024
PKID	[-0.0241 , 0.0315]	0.95024
UCPD	[-0.1848 , -0.03845]	0.95024
USD	[-0.0973 , -0.01065]	0.95024
Zeta	[-0.2186 , -0.07195]	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	381.0	439.0	≥ 0.2	1
Ameva	215.5	564.5	≥ 0.2	1
Bayesian	362.0	458.0	≥ 0.2	1
CACC	215.0	605.0	≥ 0.2	1
CADD	417.0	374.0	≥ 0.2	1
CAIM	193.0	587.0	≥ 0.2	1
Chi2	307.5	512.5	≥ 0.2	1
ChiMerge	191.0	589.0	≥ 0.2	1
ClusterAnalysis	505.0	275.0	0.11072	0.107005
DIBD	226.0	565.0	≥ 0.2	1
Distance	155.0	632.0	≥ 0.2	1
EqualFrequency	365.0	418.0	≥ 0.2	1
EqualWidth	400.0	420.0	≥ 0.2	1
Extended Chi2	351.0	469.0	≥ 0.2	1
FFD	610.5	209.5	0.018701	0.019175
FUSINTER	236.0	584.0	≥ 0.2	1
HDD	555.0	265.0	0.0514	0.050499
HellingerBD	325.0	495.0	≥ 0.2	1
Heter-Disc	251.0	569.0	≥ 0.2	1
ID3	623.0	197.0	0.00352	0.004108
Khiops	436.5	383.5	≥ 0.2	1
MDLP	208.0	612.0	≥ 0.2	1
Modified Chi2	470.0	313.0	≥ 0.2	0.556287
MODL	417.0	403.0	≥ 0.2	1
MVD	283.0	508.0	≥ 0.2	1
PKID	603.0	177.0	0.002362	0.002888
UCPD	307.0	513.0	≥ 0.2	1
USD	452.0	328.0	≥ 0.2	0.383106
Zeta	182.0	598.0	≥ 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	[-0.013 , 0.00475]	0.90276
Ameva	[-0.1103 , -0.01615]	0.90276
Bayesian	[-0.0533 , 0.00795]	0.90276
CACC	[-0.1014 , -0.01555]	0.90276
CADD	[-0.0344 , 0.02365]	0.90276
CAIM	[-0.1213 , -0.02655]	0.90276
Chi2	[-0.0561 , 0.0011]	0.90276
ChiMerge	[-0.104 , -0.01835]	0.90276
ClusterAnalysis	[-0.0018 , 0.08285]	0.90276
DIBD	[-0.08495 , -0.00595]	0.90276
Distance	[-0.1186 , -0.02885]	0.90276
EqualFrequency	[-0.03525 , 0.0181]	0.90276
EqualWidth	[-0.04095 , 0.04095]	0.90276
Extended Chi2	[-0.04265 , 0.01085]	0.90276
FFD	[0.0234 , 0.1193]	0.90276
FUSINTER	[-0.06 , -0.0103]	0.90276
HDD	[0.00675 , 0.08045]	0.90276
HellingerBD	[-0.0653 , 0.0197]	0.90276
Heter-Disc	[-0.1048 , 0]	0.90276
ID3	[0.02315 , 0.1179]	0.90276
Khiops	[-0.0264 , 0.0433]	0.90276
MDLP	[-0.1048 , -0.01175]	0.90276
Modified Chi2	[-0.00885 , 0.0463]	0.90276
MODL	[-0.0237 , 0.01815]	0.90276
MVD	[-0.09095 , 0]	0.90276
PKID	[0.0306 , 0.11575]	0.90276
UCPD	[-0.0722 , 0.00585]	0.90276
USD	[-0.01365 , 0.0335]	0.90276
Zeta	[-0.1025 , -0.01985]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0175 , 0.01145]	0.95024
Ameva	[-0.1204 , -0.0091]	0.95024
Bayesian	[-0.06825 , 0.0152]	0.95024
CACC	[-0.10765 , -0.01095]	0.95024
CADD	[-0.0409 , 0.0366]	0.95024
CAIM	[-0.1309 , -0.0203]	0.95024
Chi2	[-0.0588 , 0.00765]	0.95024
ChiMerge	[-0.124 , -0.0136]	0.95024
ClusterAnalysis	[-0.0069 , 0.0916]	0.95024
DIBD	[-0.09215 , 0]	0.95024
Distance	[-0.12625 , -0.02315]	0.95024
EqualFrequency	[-0.0448 , 0.031]	0.95024
EqualWidth	[-0.0473 , 0.04945]	0.95024
Extended Chi2	[-0.0475 , 0.0179]	0.95024
FFD	[0.013 , 0.1299]	0.95024
FUSINTER	[-0.0662 , -0.00425]	0.95024
HDD	[0.0008 , 0.087]	0.95024
HellingerBD	[-0.07235 , 0.028]	0.95024
Heter-Disc	[-0.11915 , 0]	0.95024
ID3	[0.01775 , 0.12685]	0.95024
Khiops	[-0.03395 , 0.05335]	0.95024
MDLP	[-0.11195 , -0.0056]	0.95024
Modified Chi2	[-0.0163 , 0.0508]	0.95024
MODL	[-0.0309 , 0.0221]	0.95024
MVD	[-0.10315 , 0]	0.95024
PKID	[0.02575 , 0.1264]	0.95024
UCPD	[-0.08165 , 0.01225]	0.95024
USD	[-0.0182 , 0.03905]	0.95024
Zeta	[-0.11215 , -0.0163]	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	342.0	441.0	≥ 0.2	1
Ameva	159.0	661.0	≥ 0.2	1
Bayesian	303.5	516.5	≥ 0.2	1
CACC	165.0	655.0	≥ 0.2	1
CADD	345.0	438.0	≥ 0.2	1
CAIM	149.0	631.0	≥ 0.2	1
Chi2	277.0	503.0	≥ 0.2	1
ChiMerge	140.0	680.0	≥ 0.2	1
ClusterAnalysis	575.5	244.5	0.06841	0.066082
DIBD	185.5	634.5	≥ 0.2	1
Distance	136.5	643.5	≥ 0.2	1
EqualFrequency	306.0	474.0	≥ 0.2	1
EqualWidth	392.0	428.0	≥ 0.2	1
Extended Chi2	319.0	501.0	≥ 0.2	1
FFD	605.0	175.0	0.002128	0.002636
FUSINTER	196.0	587.0	≥ 0.2	1
HDD	461.0	319.0	≥ 0.2	0.318385
HellingerBD	268.0	512.0	≥ 0.2	1
Heter-Disc	174.0	609.0	≥ 0.2	1
ID3	630.5	189.5	0.007781	0.008484
IDD	383.5	436.5	≥ 0.2	1
MDLP	145.0	635.0	≥ 0.2	1
Modified Chi2	435.0	385.0	≥ 0.2	0.731784
MODL	305.0	475.0	≥ 0.2	1
MVD	228.0	555.0	≥ 0.2	1
PKID	618.5	201.5	0.013335	0.013966
UCPD	182.0	598.0	≥ 0.2	1
USD	387.0	433.0	≥ 0.2	1
Zeta	150.0	670.0	≥ 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	[-0.04815 , 0.021]	0.90276
Ameva	[-0.1196 , -0.035]	0.90276
Bayesian	[-0.07415 , 0.00525]	0.90276
CACC	[-0.09825 , -0.0314]	0.90276
CADD	[-0.05865 , 0.03105]	0.90276
CAIM	[-0.13735 , -0.04445]	0.90276
Chi2	[-0.06385 , 0.0016]	0.90276
ChiMerge	[-0.12185 , -0.04475]	0.90276
ClusterAnalysis	[0.01005 , 0.05425]	0.90276
DIBD	[-0.1028 , -0.0246]	0.90276
Distance	[-0.1508 , -0.0575]	0.90276
EqualFrequency	[-0.03955 , 0.00725]	0.90276
EqualWidth	[-0.03095 , 0.0222]	0.90276
Extended Chi2	[-0.0726 , 0.0074]	0.90276
FFD	[0.0245 , 0.08985]	0.90276
FUSINTER	[-0.0689 , -0.01265]	0.90276
HDD	[-0.02035 , 0.07285]	0.90276
HellingerBD	[-0.0479 , -0.0007]	0.90276
Heter-Disc	[-0.11885 , -0.03045]	0.90276
ID3	[0.0255 , 0.10305]	0.90276
IDD	[-0.0433 , 0.0264]	0.90276
MDLP	[-0.12515 , -0.05075]	0.90276
Modified Chi2	[-0.0253 , 0.03575]	0.90276
MODL	[-0.04805 , 0.0078]	0.90276
MVD	[-0.089 , -0.0177]	0.90276
PKID	[0.02145 , 0.0925]	0.90276
UCPD	[-0.07785 , -0.0214]	0.90276
USD	[-0.0436 , 0.03065]	0.90276
Zeta	[-0.1186 , -0.0432]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.05885 , 0.0287]	0.95024
Ameva	[-0.1303 , -0.02885]	0.95024
Bayesian	[-0.0835 , 0.01115]	0.95024
CACC	[-0.1054 , -0.02625]	0.95024
CADD	[-0.0655 , 0.0397]	0.95024
CAIM	[-0.1436 , -0.0349]	0.95024
Chi2	[-0.06825 , 0.0064]	0.95024
ChiMerge	[-0.12785 , -0.0375]	0.95024
ClusterAnalysis	[0.00465 , 0.0568]	0.95024
DIBD	[-0.11215 , -0.01915]	0.95024
Distance	[-0.1598 , -0.04605]	0.95024
EqualFrequency	[-0.0434 , 0.01085]	0.95024
EqualWidth	[-0.0367 , 0.0262]	0.95024
Extended Chi2	[-0.0781 , 0.0155]	0.95024
FFD	[0.01965 , 0.09965]	0.95024
FUSINTER	[-0.08165 , -0.0091]	0.95024
HDD	[-0.0272 , 0.08]	0.95024
HellingerBD	[-0.05425 , 0.00355]	0.95024
Heter-Disc	[-0.1252 , -0.0264]	0.95024
ID3	[0.0217 , 0.1085]	0.95024
IDD	[-0.05335 , 0.03395]	0.95024
MDLP	[-0.13355 , -0.03845]	0.95024
Modified Chi2	[-0.0321 , 0.04215]	0.95024
MODL	[-0.05475 , 0.0112]	0.95024
MVD	[-0.0975 , -0.0069]	0.95024
PKID	[0.0167 , 0.09945]	0.95024
UCPD	[-0.0869 , -0.0156]	0.95024
USD	[-0.05045 , 0.0367]	0.95024
Zeta	[-0.12705 , -0.03665]	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	636.0	151.0	0.01974	0.020189
Ameva	402.5	417.5	≥ 0.2	1
Bayesian	572.0	248.0	≥ 0.2	0.757127
CACC	405.0	375.0	≥ 0.2	0.828752
CADD	639.0	148.0	0.016916	0.017481
CAIM	371.0	409.0	≥ 0.2	1
Chi2	589.5	230.5	≥ 0.2	0.248494
ChiMerge	372.0	408.0	≥ 0.2	1
ClusterAnalysis	688.0	132.0	8.832E-5	0.000182
DIBD	515.0	305.0	≥ 0.2	1
Distance	303.0	517.0	≥ 0.2	1
EqualFrequency	646.5	173.5	0.003562	0.004181
EqualWidth	614.0	206.0	0.005332	0.005982
Extended Chi2	503.5	283.5	≥ 0.2	1
FFD	664.0	116.0	5.496E-5	0.000128
FUSINTER	528.0	292.0	≥ 0.2	0.251067
HDD	663.0	157.0	4.266E-4	0.000656
HellingerBD	567.5	252.5	0.03381	0.033395
Heter-Disc	497.0	323.0	≥ 0.2	1
ID3	700.0	120.0	3.814E-5	0.000094
IDD	612.0	208.0	≥ 0.2	0.289616
Khiops	635.0	145.0	3.88E-4	0.000613
Modified Chi2	598.5	186.5	0.03487999999999994	0.034609
MODL	584.5	235.5	0.12865	0.122912
MVD	485.0	306.0	≥ 0.2	1
PKID	693.0	127.0	6.268E-5	0.000139
UCPD	533.5	246.5	0.04513	0.044111
USD	625.5	194.5	0.003127	0.003635
Zeta	402.0	378.0	≥ 0.2	0.861522

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	[0.0165 , 0.0887]	0.90276
Ameva	[-0.021 , 0.0292]	0.90276
Bayesian	[0.0016 , 0.0601]	0.90276
CACC	[-0.0191 , 0.0204]	0.90276
CADD	[0.0101 , 0.094]	0.90276
CAIM	[-0.0276 , 0.01965]	0.90276
Chi2	[0.00465 , 0.07175]	0.90276
ChiMerge	[-0.0196 , 0.02695]	0.90276
ClusterAnalysis	[0.0611 , 0.16035]	0.90276
DIBD	[-0.0007 , 0.0216]	0.90276
Distance	[-0.01925 , 0]	0.90276
EqualFrequency	[0.03785 , 0.097]	0.90276
EqualWidth	[0.03225 , 0.1201]	0.90276
Extended Chi2	[0 , 0.0489]	0.90276
FFD	[0.07735 , 0.2245]	0.90276
FUSINTER	[-0.00075 , 0.06345]	0.90276
HDD	[0.0511 , 0.16455]	0.90276
HellingerBD	[0.0073 , 0.08575]	0.90276
Heter-Disc	[0 , 0.0143]	0.90276
ID3	[0.0884 , 0.2181]	0.90276
IDD	[0.01175 , 0.1048]	0.90276
Khiops	[0.05075 , 0.12515]	0.90276
Modified Chi2	[0.01755 , 0.1242]	0.90276
MODL	[0.0114 , 0.0972]	0.90276
MVD	[0 , 0.02915]	0.90276
PKID	[0.081 , 0.2109]	0.90276
UCPD	[0.00575 , 0.05645]	0.90276
USD	[0.02805 , 0.11565]	0.90276
Zeta	[-0.01735 , 0.02135]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0079 , 0.0934]	0.95024
Ameva	[-0.02935 , 0.0353]	0.95024
Bayesian	[0 , 0.0703]	0.95024
CACC	[-0.0278 , 0.0255]	0.95024
CADD	[0.00615 , 0.0984]	0.95024
CAIM	[-0.0334 , 0.02615]	0.95024
Chi2	[0.00335 , 0.0803]	0.95024
ChiMerge	[-0.0235 , 0.0334]	0.95024
ClusterAnalysis	[0.0536 , 0.16915]	0.95024
DIBD	[-0.0058 , 0.0244]	0.95024
Distance	[-0.0243 , 0]	0.95024
EqualFrequency	[0.03 , 0.1047]	0.95024
EqualWidth	[0.02305 , 0.1291]	0.95024
Extended Chi2	[-0.0027 , 0.05485]	0.95024
FFD	[0.0673 , 0.24305]	0.95024
FUSINTER	[-0.00665 , 0.0723]	0.95024
HDD	[0.04495 , 0.1801]	0.95024
HellingerBD	[0.00315 , 0.09135]	0.95024
Heter-Disc	[-0.00195 , 0.0232]	0.95024
ID3	[0.07785 , 0.23]	0.95024
IDD	[0.0056 , 0.11195]	0.95024
Khiops	[0.03845 , 0.13355]	0.95024
Modified Chi2	[0.01375 , 0.139]	0.95024
MODL	[0.00505 , 0.1061]	0.95024
MVD	[-0.00195 , 0.03455]	0.95024
PKID	[0.0703 , 0.2218]	0.95024
UCPD	[0.0006 , 0.06225]	0.95024
USD	[0.0202 , 0.124]	0.95024
Zeta	[-0.02005 , 0.0263]	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	365.0	418.0	≥ 0.2	1
Ameva	186.0	634.0	≥ 0.2	1
Bayesian	236.0	547.0	≥ 0.2	1
CACC	185.0	595.0	≥ 0.2	1
CADD	397.5	422.5	≥ 0.2	1
CAIM	168.0	612.0	≥ 0.2	1
Chi2	264.0	556.0	≥ 0.2	1
ChiMerge	172.5	607.5	≥ 0.2	1
ClusterAnalysis	463.0	317.0	≥ 0.2	0.305037
DIBD	253.0	530.0	≥ 0.2	1
Distance	134.5	650.5	≥ 0.2	1
EqualFrequency	331.0	449.0	≥ 0.2	1
EqualWidth	346.0	434.0	≥ 0.2	1
Extended Chi2	272.5	547.5	≥ 0.2	1
FFD	601.0	179.0	0.002616	0.003163
FUSINTER	196.5	623.5	≥ 0.2	1
HDD	513.5	306.5	≥ 0.2	0.349584
HellingerBD	334.0	486.0	≥ 0.2	1
Heter-Disc	229.5	555.5	≥ 0.2	1
ID3	612.5	207.5	0.01721099999999997	0.017734
IDD	313.0	470.0	≥ 0.2	1
Khiops	385.0	435.0	≥ 0.2	1
MDLP	186.5	598.5	≥ 0.2	1
MODL	280.0	540.0	≥ 0.2	1
MVD	282.5	502.5	≥ 0.2	1
PKID	541.0	239.0	0.03466	0.0345
UCPD	254.0	526.0	≥ 0.2	1
USD	367.5	452.5	≥ 0.2	1
Zeta	201.0	619.0	≥ 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	[-0.03625 , 0.02045]	0.90276
Ameva	[-0.11775 , -0.03125]	0.90276
Bayesian	[-0.08075 , -0.0083]	0.90276
CACC	[-0.11915 , -0.0241]	0.90276
CADD	[-0.05935 , 0.03885]	0.90276
CAIM	[-0.1232 , -0.03]	0.90276
Chi2	[-0.0488 , -0.001]	0.90276
ChiMerge	[-0.1215 , -0.02575]	0.90276
ClusterAnalysis	[-0.01405 , 0.0573]	0.90276
DIBD	[-0.1154 , -0.0024]	0.90276
Distance	[-0.12995 , -0.03755]	0.90276
EqualFrequency	[-0.052 , 0.0154]	0.90276
EqualWidth	[-0.04365 , 0.0192]	0.90276
Extended Chi2	[-0.03995 , -0.0008]	0.90276
FFD	[0.0195 , 0.0867]	0.90276
FUSINTER	[-0.0755 , -0.0176]	0.90276
HDD	[-0.009 , 0.06655]	0.90276
HellingerBD	[-0.06335 , 0.01205]	0.90276
Heter-Disc	[-0.1192 , -0.0082]	0.90276
ID3	[0.01765 , 0.0872]	0.90276
IDD	[-0.0463 , 0.00885]	0.90276
Khiops	[-0.03575 , 0.0253]	0.90276
MDLP	[-0.1242 , -0.01755]	0.90276
MODL	[-0.04375 , -0.00035]	0.90276
MVD	[-0.0791 , 0.0011]	0.90276
PKID	[0.01115 , 0.0837]	0.90276
UCPD	[-0.0917 , -0.00545]	0.90276
USD	[-0.0333 , 0.01235]	0.90276
Zeta	[-0.12155 , -0.0208]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0422 , 0.02605]	0.95024
Ameva	[-0.1264 , -0.02595]	0.95024
Bayesian	[-0.09265 , -0.0044]	0.95024
CACC	[-0.12775 , -0.0188]	0.95024
CADD	[-0.0709 , 0.04855]	0.95024
CAIM	[-0.13475 , -0.025]	0.95024
Chi2	[-0.05255 , 0]	0.95024
ChiMerge	[-0.13205 , -0.02095]	0.95024
ClusterAnalysis	[-0.01825 , 0.06365]	0.95024
DIBD	[-0.1245 , 0]	0.95024
Distance	[-0.14835 , -0.03075]	0.95024
EqualFrequency	[-0.0573 , 0.0204]	0.95024
EqualWidth	[-0.05115 , 0.0301]	0.95024
Extended Chi2	[-0.04425 , 0]	0.95024
FFD	[0.01495 , 0.09535]	0.95024
FUSINTER	[-0.08205 , -0.01325]	0.95024
HDD	[-0.0146 , 0.0739]	0.95024
HellingerBD	[-0.07045 , 0.0168]	0.95024
Heter-Disc	[-0.1393 , -0.0036]	0.95024
ID3	[0.014 , 0.0953]	0.95024
IDD	[-0.0508 , 0.0163]	0.95024
Khiops	[-0.04215 , 0.0321]	0.95024
MDLP	[-0.139 , -0.01375]	0.95024
MODL	[-0.04875 , 0.0017]	0.95024
MVD	[-0.09125 , 0.0059]	0.95024
PKID	[0.0045 , 0.09205]	0.95024
UCPD	[-0.09925 , 0.0007]	0.95024
USD	[-0.0396 , 0.0191]	0.95024
Zeta	[-0.1319 , -0.01665]	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	428.0	392.0	≥ 0.2	1
Ameva	214.0	606.0	≥ 0.2	1
Bayesian	301.0	519.0	≥ 0.2	1
CACC	234.5	585.5	≥ 0.2	1
CADD	419.0	364.0	≥ 0.2	1
CAIM	215.0	605.0	≥ 0.2	1
Chi2	357.0	463.0	≥ 0.2	1
ChiMerge	197.5	622.5	≥ 0.2	1
ClusterAnalysis	591.0	229.0	0.014108	0.014704
DIBD	269.0	551.0	≥ 0.2	1
Distance	166.0	654.0	≥ 0.2	1
EqualFrequency	445.0	375.0	≥ 0.2	0.633244
EqualWidth	450.0	370.0	≥ 0.2	0.586185
Extended Chi2	379.0	404.0	≥ 0.2	1
FFD	666.0	154.0	3.572E-4	0.000565
FUSINTER	231.0	552.0	≥ 0.2	1
HDD	575.0	245.0	0.0259	0.026112
HellingerBD	384.0	436.0	≥ 0.2	1
Heter-Disc	269.0	551.0	≥ 0.2	1
ID3	627.0	153.0	6.288E-4	0.000919
IDD	403.0	417.0	≥ 0.2	1
Khiops	475.0	305.0	≥ 0.2	0.23281
MDLP	235.5	584.5	≥ 0.2	1
Modified Chi2	540.0	280.0	≥ 0.2	0.399693
MVD	340.0	480.0	≥ 0.2	1
PKID	692.0	128.0	6.718E-5	0.000146
UCPD	316.0	504.0	≥ 0.2	1
USD	452.0	368.0	≥ 0.2	0.567827
Zeta	225.0	595.0	≥ 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	[-0.02965 , 0.03745]	0.90276
Ameva	[-0.0846 , -0.01755]	0.90276
Bayesian	[-0.05565 , 0.00195]	0.90276
CACC	[-0.0737 , -0.0121]	0.90276
CADD	[-0.0375 , 0.05895]	0.90276
CAIM	[-0.09635 , -0.0189]	0.90276
Chi2	[-0.0401 , 0.01495]	0.90276
ChiMerge	[-0.08065 , -0.0158]	0.90276
ClusterAnalysis	[0.0182 , 0.08605]	0.90276
DIBD	[-0.08 , -0.00315]	0.90276
Distance	[-0.10565 , -0.03325]	0.90276
EqualFrequency	[-0.02095 , 0.03845]	0.90276
EqualWidth	[-0.0222 , 0.04285]	0.90276
Extended Chi2	[-0.0329 , 0.02565]	0.90276
FFD	[0.04665 , 0.1259]	0.90276
FUSINTER	[-0.0497 , -0.0066]	0.90276
HDD	[0.01185 , 0.08715]	0.90276
HellingerBD	[-0.0342 , 0.02575]	0.90276
Heter-Disc	[-0.09025 , -0.00285]	0.90276
ID3	[0.0412 , 0.1229]	0.90276
IDD	[-0.01815 , 0.0237]	0.90276
Khiops	[-0.0078 , 0.04805]	0.90276
MDLP	[-0.0972 , -0.0114]	0.90276
Modified Chi2	[0.00035 , 0.04375]	0.90276
MVD	[-0.0745 , 0.01095]	0.90276
PKID	[0.05 , 0.1188]	0.90276
UCPD	[-0.05715 , 0.00735]	0.90276
USD	[-0.0169 , 0.03955]	0.90276
Zeta	[-0.08645 , -0.01685]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0355 , 0.0425]	0.95024
Ameva	[-0.09075 , -0.0135]	0.95024
Bayesian	[-0.0623 , 0.0089]	0.95024
CACC	[-0.0838 , -0.0075]	0.95024
CADD	[-0.05215 , 0.06935]	0.95024
CAIM	[-0.1031 , -0.012]	0.95024
Chi2	[-0.04435 , 0.0227]	0.95024
ChiMerge	[-0.08795 , -0.0131]	0.95024
ClusterAnalysis	[0.01375 , 0.09295]	0.95024
DIBD	[-0.08695 , 0]	0.95024
Distance	[-0.1129 , -0.02925]	0.95024
EqualFrequency	[-0.02645 , 0.0453]	0.95024
EqualWidth	[-0.02865 , 0.04725]	0.95024
Extended Chi2	[-0.036 , 0.0306]	0.95024
FFD	[0.0384 , 0.1357]	0.95024
FUSINTER	[-0.05375 , -0.00305]	0.95024
HDD	[0.007 , 0.09255]	0.95024
HellingerBD	[-0.0409 , 0.03255]	0.95024
Heter-Disc	[-0.1022 , 0]	0.95024
ID3	[0.0343 , 0.12995]	0.95024
IDD	[-0.0221 , 0.0309]	0.95024
Khiops	[-0.0112 , 0.05475]	0.95024
MDLP	[-0.1061 , -0.00505]	0.95024
Modified Chi2	[-0.0017 , 0.04875]	0.95024
MVD	[-0.0833 , 0.0181]	0.95024
PKID	[0.04255 , 0.125]	0.95024
UCPD	[-0.0632 , 0.01395]	0.95024
USD	[-0.0217 , 0.0464]	0.95024
Zeta	[-0.09475 , -0.01115]	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	568.5	224.5	≥ 0.2	1
Ameva	336.0	484.0	≥ 0.2	1
Bayesian	506.5	313.5	≥ 0.2	1
CACC	354.0	466.0	≥ 0.2	1
CADD	512.5	307.5	≥ 0.2	1
CAIM	310.0	510.0	≥ 0.2	1
Chi2	425.0	362.0	≥ 0.2	1
ChiMerge	314.0	466.0	≥ 0.2	1
ClusterAnalysis	630.5	189.5	0.007781	0.008484
DIBD	437.0	383.0	≥ 0.2	1
Distance	250.0	541.0	≥ 0.2	1
EqualFrequency	526.0	294.0	≥ 0.2	0.534884
EqualWidth	554.0	266.0	0.05308	0.052105
Extended Chi2	440.5	379.5	≥ 0.2	1
FFD	619.0	164.0	0.003912	0.004565
FUSINTER	412.5	372.5	≥ 0.2	1
HDD	580.0	240.0	0.02154	0.021921
HellingerBD	499.5	320.5	≥ 0.2	0.225607
Heter-Disc	357.0	463.0	≥ 0.2	1
ID3	654.0	166.0	7.144E-4	0.001015
IDD	508.0	283.0	≥ 0.2	1
Khiops	555.0	228.0	0.06302	0.061387
MDLP	306.0	485.0	≥ 0.2	1
Modified Chi2	502.5	282.5	≥ 0.2	0.588844
MODL	480.0	340.0	≥ 0.2	1
PKID	632.0	188.0	0.007252	0.007843
UCPD	413.0	367.0	≥ 0.2	0.742955
USD	529.0	291.0	0.11186	0.108222
Zeta	314.0	506.0	≥ 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	[0.0016 , 0.0269]	0.90276
Ameva	[-0.0566 , 0.011]	0.90276
Bayesian	[0 , 0.05225]	0.90276
CACC	[-0.05585 , 0.01335]	0.90276
CADD	[0 , 0.02555]	0.90276
CAIM	[-0.0691 , 0.0059]	0.90276
Chi2	[-0.0094 , 0.0324]	0.90276
ChiMerge	[-0.0537 , 0.01045]	0.90276
ClusterAnalysis	[0.0363 , 0.12415]	0.90276
DIBD	[-0.02235 , 0.01285]	0.90276
Distance	[-0.0492 , 0]	0.90276
EqualFrequency	[-0.0014 , 0.06705]	0.90276
EqualWidth	[0.00775 , 0.08835]	0.90276
Extended Chi2	[-0.01165 , 0.02315]	0.90276
FFD	[0.05 , 0.16395]	0.90276
FUSINTER	[-0.02865 , 0.0445]	0.90276
HDD	[0.02185 , 0.13455]	0.90276
HellingerBD	[-0.00785 , 0.0569]	0.90276
Heter-Disc	[-0.0232 , 0]	0.90276
ID3	[0.0562 , 0.17215]	0.90276
IDD	[0 , 0.09095]	0.90276
Khiops	[0.0177 , 0.089]	0.90276
MDLP	[-0.02915 , 0]	0.90276
Modified Chi2	[-0.0011 , 0.0791]	0.90276
MODL	[-0.01095 , 0.0745]	0.90276
PKID	[0.0478 , 0.1742]	0.90276
UCPD	[-0.02795 , 0.03415]	0.90276
USD	[-0.0018 , 0.09155]	0.90276
Zeta	[-0.045 , 0.00525]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.0372]	0.95024
Ameva	[-0.06655 , 0.0149]	0.95024
Bayesian	[-0.0197 , 0.06135]	0.95024
CACC	[-0.0656 , 0.0209]	0.95024
CADD	[0 , 0.03005]	0.95024
CAIM	[-0.0782 , 0.01345]	0.95024
Chi2	[-0.01585 , 0.045]	0.95024
ChiMerge	[-0.0644 , 0.01575]	0.95024
ClusterAnalysis	[0.0291 , 0.13535]	0.95024
DIBD	[-0.0312 , 0.0157]	0.95024
Distance	[-0.05605 , 0]	0.95024
EqualFrequency	[-0.00875 , 0.07625]	0.95024
EqualWidth	[-0.0005 , 0.09545]	0.95024
Extended Chi2	[-0.0174 , 0.0279]	0.95024
FFD	[0.03735 , 0.1812]	0.95024
FUSINTER	[-0.03695 , 0.05655]	0.95024
HDD	[0.01045 , 0.1442]	0.95024
HellingerBD	[-0.015 , 0.0645]	0.95024
Heter-Disc	[-0.03455 , 0]	0.95024
ID3	[0.0489 , 0.1849]	0.95024
IDD	[0 , 0.10315]	0.95024
Khiops	[0.0069 , 0.0975]	0.95024
MDLP	[-0.03455 , 0.00195]	0.95024
Modified Chi2	[-0.0059 , 0.09125]	0.95024
MODL	[-0.0181 , 0.0833]	0.95024
PKID	[0.0391 , 0.18555]	0.95024
UCPD	[-0.0349 , 0.03835]	0.95024
USD	[-0.00935 , 0.0996]	0.95024
Zeta	[-0.05255 , 0.00975]	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	241.0	539.0	≥ 0.2	1
Ameva	93.0	727.0	≥ 0.2	1
Bayesian	180.0	600.0	≥ 0.2	1
CACC	87.0	733.0	≥ 0.2	1
CADD	257.0	523.0	≥ 0.2	1
CAIM	108.0	712.0	≥ 0.2	1
Chi2	180.0	640.0	≥ 0.2	1
ChiMerge	109.0	711.0	≥ 0.2	1
ClusterAnalysis	312.5	507.5	≥ 0.2	1
DIBD	153.0	627.0	≥ 0.2	1
Distance	116.0	704.0	≥ 0.2	1
EqualFrequency	228.5	591.5	≥ 0.2	1
EqualWidth	204.5	615.5	≥ 0.2	1
Extended Chi2	163.5	616.5	≥ 0.2	1
FFD	428.0	392.0	≥ 0.2	1
FUSINTER	83.0	697.0	≥ 0.2	1
HDD	345.0	475.0	≥ 0.2	1
HellingerBD	168.5	651.5	≥ 0.2	1
Heter-Disc	140.0	640.0	≥ 0.2	1
ID3	394.0	393.0	≥ 0.2	1
IDD	177.0	603.0	≥ 0.2	1
Khiops	201.5	618.5	≥ 0.2	1
MDLP	127.0	693.0	≥ 0.2	1
Modified Chi2	239.0	541.0	≥ 0.2	1
MODL	128.0	692.0	≥ 0.2	1
MVD	188.0	632.0	≥ 0.2	1
UCPD	136.0	684.0	≥ 0.2	1
USD	234.0	586.0	≥ 0.2	1
Zeta	128.0	692.0	≥ 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	[-0.13495 , -0.01285]	0.90276
Ameva	[-0.195 , -0.0925]	0.90276
Bayesian	[-0.1379 , -0.0413]	0.90276
CACC	[-0.1806 , -0.0827]	0.90276
CADD	[-0.1416 , -0.008]	0.90276
CAIM	[-0.20655 , -0.07665]	0.90276
Chi2	[-0.1263 , -0.0378]	0.90276
ChiMerge	[-0.1962 , -0.0767]	0.90276
ClusterAnalysis	[-0.06665 , 0.0071]	0.90276
DIBD	[-0.19585 , -0.06755]	0.90276
Distance	[-0.22615 , -0.10005]	0.90276
EqualFrequency	[-0.09925 , -0.01695]	0.90276
EqualWidth	[-0.0981 , -0.0253]	0.90276
Extended Chi2	[-0.13235 , -0.03495]	0.90276
FFD	[-0.0097 , 0.01315]	0.90276
FUSINTER	[-0.14625 , -0.06285]	0.90276
HDD	[-0.0685 , 0.01465]	0.90276
HellingerBD	[-0.1223 , -0.03885]	0.90276
Heter-Disc	[-0.19705 , -0.0687]	0.90276
ID3	[-0.02535 , 0.01965]	0.90276
IDD	[-0.11575 , -0.0306]	0.90276
Khiops	[-0.0925 , -0.02145]	0.90276
MDLP	[-0.2109 , -0.081]	0.90276
Modified Chi2	[-0.0837 , -0.01115]	0.90276
MODL	[-0.1188 , -0.05]	0.90276
MVD	[-0.1742 , -0.0478]	0.90276
UCPD	[-0.1728 , -0.0527]	0.90276
USD	[-0.0968 , -0.01485]	0.90276
Zeta	[-0.2057 , -0.07975]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.1494 , -0.0048]	0.95024
Ameva	[-0.20805 , -0.0834]	0.95024
Bayesian	[-0.14465 , -0.03315]	0.95024
CACC	[-0.1953 , -0.07505]	0.95024
CADD	[-0.15925 , 0.0023]	0.95024
CAIM	[-0.21865 , -0.06955]	0.95024
Chi2	[-0.135 , -0.0291]	0.95024
ChiMerge	[-0.2097 , -0.07095]	0.95024
ClusterAnalysis	[-0.07495 , 0.01485]	0.95024
DIBD	[-0.2126 , -0.0555]	0.95024
Distance	[-0.2407 , -0.08765]	0.95024
EqualFrequency	[-0.1086 , -0.00685]	0.95024
EqualWidth	[-0.1082 , -0.01625]	0.95024
Extended Chi2	[-0.13715 , -0.02805]	0.95024
FFD	[-0.01065 , 0.01475]	0.95024
FUSINTER	[-0.1555 , -0.0591]	0.95024
HDD	[-0.07615 , 0.02025]	0.95024
HellingerBD	[-0.132 , -0.03265]	0.95024
Heter-Disc	[-0.21005 , -0.0609]	0.95024
ID3	[-0.0315 , 0.0241]	0.95024
IDD	[-0.1264 , -0.02575]	0.95024
Khiops	[-0.09945 , -0.0167]	0.95024
MDLP	[-0.2218 , -0.0703]	0.95024
Modified Chi2	[-0.09205 , -0.0045]	0.95024
MODL	[-0.125 , -0.04255]	0.95024
MVD	[-0.18555 , -0.0391]	0.95024
UCPD	[-0.18695 , -0.0446]	0.95024
USD	[-0.1061 , -0.00815]	0.95024
Zeta	[-0.2176 , -0.06725]	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	487.0	293.0	0.18012	0.173636
Ameva	282.5	537.5	≥ 0.2	1
Bayesian	456.0	364.0	≥ 0.2	0.531958
CACC	293.0	527.0	≥ 0.2	1
CADD	499.0	281.0	0.13108	0.126495
CAIM	264.5	555.5	≥ 0.2	1
Chi2	444.0	336.0	≥ 0.2	0.446927
ChiMerge	241.0	579.0	≥ 0.2	1
ClusterAnalysis	647.5	172.5	0.0033829999999999997	0.003993
DIBD	322.0	458.0	≥ 0.2	1
Distance	210.0	610.0	≥ 0.2	1
EqualFrequency	530.5	289.5	0.10730999999999999	0.103285
EqualWidth	581.0	239.0	0.02076	0.021156
Extended Chi2	415.0	365.0	≥ 0.2	0.721951
FFD	653.0	167.0	7.554E-4	0.001064
FUSINTER	393.0	387.0	≥ 0.2	0.961045
HDD	543.0	237.0	0.03224	0.032186
HellingerBD	521.0	299.0	0.13868	0.133297
Heter-Disc	305.0	475.0	≥ 0.2	1
ID3	676.0	144.0	1.9334E-4	0.000341
IDD	513.0	307.0	0.17008	0.164173
Khiops	598.0	182.0	0.003042	0.003619
MDLP	246.5	533.5	≥ 0.2	1
Modified Chi2	526.0	254.0	0.05806	0.056799
MODL	504.0	316.0	≥ 0.2	0.204012
MVD	367.0	413.0	≥ 0.2	1
PKID	684.0	136.0	1.1536E-4	0.000225
USD	511.0	269.0	0.09288	0.089974
Zeta	248.5	571.5	≥ 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	[-0.00555 , 0.0647]	0.90276
Ameva	[-0.05285 , -0.00115]	0.90276
Bayesian	[-0.02565 , 0.04635]	0.90276
CACC	[-0.05085 , 0.00115]	0.90276
CADD	[-0.0027 , 0.0753]	0.90276
CAIM	[-0.05665 , -0.00535]	0.90276
Chi2	[-0.01435 , 0.05185]	0.90276
ChiMerge	[-0.04945 , -0.00765]	0.90276
ClusterAnalysis	[0.04015 , 0.1213]	0.90276
DIBD	[-0.0401 , 0.009]	0.90276
Distance	[-0.0795 , -0.02045]	0.90276
EqualFrequency	[-0.0007 , 0.046]	0.90276
EqualWidth	[0.00765 , 0.0727]	0.90276
Extended Chi2	[-0.0218 , 0.04005]	0.90276
FFD	[0.05115 , 0.17]	0.90276
FUSINTER	[-0.02405 , 0.02725]	0.90276
HDD	[0.01545 , 0.1328]	0.90276
HellingerBD	[-0.0031 , 0.04635]	0.90276
Heter-Disc	[-0.043 , 0.00785]	0.90276
ID3	[0.04725 , 0.17635]	0.90276
IDD	[-0.00585 , 0.0722]	0.90276
Khiops	[0.0214 , 0.07785]	0.90276
MDLP	[-0.05645 , -0.00575]	0.90276
Modified Chi2	[0.00545 , 0.0917]	0.90276
MODL	[-0.00735 , 0.05715]	0.90276
MVD	[-0.03415 , 0.02795]	0.90276
PKID	[0.0527 , 0.1728]	0.90276
USD	[0.00015 , 0.08675]	0.90276
Zeta	[-0.0574 , -0.0086]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01065 , 0.07075]	0.95024
Ameva	[-0.05675 , 0.00375]	0.95024
Bayesian	[-0.0316 , 0.05685]	0.95024
CACC	[-0.0558 , 0.0051]	0.95024
CADD	[-0.0092 , 0.08145]	0.95024
CAIM	[-0.0631 , 0]	0.95024
Chi2	[-0.01855 , 0.05945]	0.95024
ChiMerge	[-0.0525 , -0.004]	0.95024
ClusterAnalysis	[0.03315 , 0.1287]	0.95024
DIBD	[-0.0461 , 0.0128]	0.95024
Distance	[-0.086 , -0.01465]	0.95024
EqualFrequency	[-0.0039 , 0.05215]	0.95024
EqualWidth	[0.0034 , 0.07955]	0.95024
Extended Chi2	[-0.02725 , 0.04425]	0.95024
FFD	[0.039 , 0.1872]	0.95024
FUSINTER	[-0.0287 , 0.03185]	0.95024
HDD	[0.00515 , 0.1468]	0.95024
HellingerBD	[-0.0078 , 0.05475]	0.95024
Heter-Disc	[-0.048 , 0.0123]	0.95024
ID3	[0.03845 , 0.1848]	0.95024
IDD	[-0.01225 , 0.08165]	0.95024
Khiops	[0.0156 , 0.0869]	0.95024
MDLP	[-0.06225 , -0.0006]	0.95024
Modified Chi2	[-0.0007 , 0.09925]	0.95024
MODL	[-0.01395 , 0.0632]	0.95024
MVD	[-0.03835 , 0.0349]	0.95024
PKID	[0.0446 , 0.18695]	0.95024
USD	[-0.0039 , 0.0943]	0.95024
Zeta	[-0.06165 , -0.0038]	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	367.0	453.0	≥ 0.2	1
Ameva	185.0	635.0	≥ 0.2	1
Bayesian	279.0	541.0	≥ 0.2	1
CACC	169.0	651.0	≥ 0.2	1
CADD	388.0	432.0	≥ 0.2	1
CAIM	153.5	666.5	≥ 0.2	1
Chi2	301.0	479.0	≥ 0.2	1
ChiMerge	147.0	633.0	≥ 0.2	1
ClusterAnalysis	551.5	268.5	0.14238	0.137151
DIBD	230.0	590.0	≥ 0.2	1
Distance	125.0	655.0	≥ 0.2	1
EqualFrequency	380.0	440.0	≥ 0.2	1
EqualWidth	348.0	432.0	≥ 0.2	1
Extended Chi2	322.0	458.0	≥ 0.2	1
FFD	576.0	244.0	0.02498	0.025223
FUSINTER	171.0	609.0	≥ 0.2	1
HDD	502.5	317.5	≥ 0.2	0.437825
HellingerBD	318.0	502.0	≥ 0.2	1
Heter-Disc	226.0	594.0	≥ 0.2	1
ID3	604.0	176.0	0.002242	0.002759
IDD	328.0	452.0	≥ 0.2	1
Khiops	433.0	387.0	≥ 0.2	0.752101
MDLP	194.5	625.5	≥ 0.2	1
Modified Chi2	452.5	367.5	≥ 0.2	0.959518
MODL	368.0	452.0	≥ 0.2	1
MVD	291.0	529.0	≥ 0.2	1
PKID	586.0	234.0	0.017158	0.017673
UCPD	269.0	511.0	≥ 0.2	1
Zeta	187.0	593.0	≥ 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	[-0.05065 , 0.0246]	0.90276
Ameva	[-0.1227 , -0.03905]	0.90276
Bayesian	[-0.05535 , -0.0016]	0.90276
CACC	[-0.10835 , -0.032]	0.90276
CADD	[-0.06685 , 0.0477]	0.90276
CAIM	[-0.11025 , -0.03895]	0.90276
Chi2	[-0.05425 , 0.00825]	0.90276
ChiMerge	[-0.10165 , -0.02935]	0.90276
ClusterAnalysis	[0.005 , 0.0625]	0.90276
DIBD	[-0.1056 , -0.01955]	0.90276
Distance	[-0.13025 , -0.04285]	0.90276
EqualFrequency	[-0.04435 , 0.025]	0.90276
EqualWidth	[-0.0455 , 0.0226]	0.90276
Extended Chi2	[-0.06015 , 0.01695]	0.90276
FFD	[0.0109 , 0.1042]	0.90276
FUSINTER	[-0.07 , -0.02115]	0.90276
HDD	[-0.0057 , 0.05355]	0.90276
HellingerBD	[-0.056 , 0.00615]	0.90276
Heter-Disc	[-0.1107 , -0.0201]	0.90276
ID3	[0.0155 , 0.0839]	0.90276
IDD	[-0.0335 , 0.01365]	0.90276
Khiops	[-0.03065 , 0.0436]	0.90276
MDLP	[-0.11565 , -0.02805]	0.90276
Modified Chi2	[-0.01235 , 0.0333]	0.90276
MODL	[-0.03955 , 0.0169]	0.90276
MVD	[-0.09155 , 0.0018]	0.90276
PKID	[0.01485 , 0.0968]	0.90276
UCPD	[-0.08675 , -0.00015]	0.90276
Zeta	[-0.1121 , -0.02615]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0591 , 0.03465]	0.95024
Ameva	[-0.1311 , -0.0298]	0.95024
Bayesian	[-0.0612 , 0.00395]	0.95024
CACC	[-0.1157 , -0.0282]	0.95024
CADD	[-0.07725 , 0.0565]	0.95024
CAIM	[-0.1203 , -0.03585]	0.95024
Chi2	[-0.05905 , 0.01495]	0.95024
ChiMerge	[-0.10905 , -0.025]	0.95024
ClusterAnalysis	[-0.0006 , 0.06965]	0.95024
DIBD	[-0.1184 , -0.0122]	0.95024
Distance	[-0.1438 , -0.0375]	0.95024
EqualFrequency	[-0.05 , 0.0306]	0.95024
EqualWidth	[-0.0518 , 0.02885]	0.95024
Extended Chi2	[-0.07045 , 0.0257]	0.95024
FFD	[0.00525 , 0.11365]	0.95024
FUSINTER	[-0.0767 , -0.0169]	0.95024
HDD	[-0.01115 , 0.0614]	0.95024
HellingerBD	[-0.06195 , 0.01195]	0.95024
Heter-Disc	[-0.12235 , -0.01245]	0.95024
ID3	[0.01065 , 0.0973]	0.95024
IDD	[-0.03905 , 0.0182]	0.95024
Khiops	[-0.0367 , 0.05045]	0.95024
MDLP	[-0.124 , -0.0202]	0.95024
Modified Chi2	[-0.0191 , 0.0396]	0.95024
MODL	[-0.0464 , 0.0217]	0.95024
MVD	[-0.0996 , 0.00935]	0.95024
PKID	[0.00815 , 0.1061]	0.95024
UCPD	[-0.0943 , 0.0039]	0.95024
Zeta	[-0.12005 , -0.0205]	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	564.0	256.0	0.03812	0.037831
Ameva	424.0	356.0	≥ 0.2	0.630199
Bayesian	535.0	285.0	0.0945	0.091626
CACC	412.5	407.5	≥ 0.2	1
CADD	584.0	236.0	0.018526	0.019001
CAIM	428.0	392.0	≥ 0.2	1
Chi2	585.0	235.0	0.017832	0.018327
ChiMerge	457.0	363.0	≥ 0.2	0.523173
ClusterAnalysis	686.0	134.0	1.01E-4	0.000202
DIBD	452.0	368.0	≥ 0.2	0.567827
Distance	286.0	534.0	≥ 0.2	1
EqualFrequency	623.0	197.0	0.00352	0.004046
EqualWidth	610.0	210.0	0.006372	0.007039
Extended Chi2	563.0	257.0	0.03944	0.038761
FFD	699.0	121.0	4.098E-5	0.0001
FUSINTER	535.5	284.5	≥ 0.2	0.208853
HDD	614.0	166.0	0.0013168	0.001731
HellingerBD	575.0	245.0	0.0259	0.026112
Heter-Disc	447.0	373.0	≥ 0.2	0.614227
ID3	692.0	128.0	6.718E-5	0.000146
IDD	598.0	182.0	0.003042	0.003619
Khiops	670.0	150.0	2.806E-4	0.000463
MDLP	378.0	402.0	≥ 0.2	1
Modified Chi2	619.0	201.0	0.004244	0.004863
MODL	595.0	225.0	0.012016	0.012654
MVD	506.0	314.0	≥ 0.2	0.194602
PKID	692.0	128.0	6.718E-5	0.000146
UCPD	571.5	248.5	0.07795	0.075646
USD	593.0	187.0	0.003894	0.004514

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	[0.00815 , 0.08995]	0.90276
Ameva	[-0.0198 , 0.02095]	0.90276
Bayesian	[0.0008 , 0.0734]	0.90276
CACC	[-0.02455 , 0.0265]	0.90276
CADD	[0.0101 , 0.0969]	0.90276
CAIM	[-0.011 , 0.01285]	0.90276
Chi2	[0.00975 , 0.0789]	0.90276
ChiMerge	[-0.01135 , 0.02335]	0.90276
ClusterAnalysis	[0.06845 , 0.15945]	0.90276
DIBD	[-0.015 , 0.03]	0.90276
Distance	[-0.04245 , -0.0004]	0.90276
EqualFrequency	[0.02355 , 0.0876]	0.90276
EqualWidth	[0.0231 , 0.11715]	0.90276
Extended Chi2	[0.0044 , 0.0608]	0.90276
FFD	[0.069 , 0.2135]	0.90276
FUSINTER	[0.0002 , 0.0625]	0.90276
HDD	[0.04335 , 0.1579]	0.90276
HellingerBD	[0.00755 , 0.08515]	0.90276
Heter-Disc	[-0.0191 , 0.03225]	0.90276
ID3	[0.0847 , 0.20895]	0.90276
IDD	[0.01985 , 0.1025]	0.90276
Khiops	[0.0432 , 0.1186]	0.90276
MDLP	[-0.02135 , 0.01735]	0.90276
Modified Chi2	[0.0208 , 0.12155]	0.90276
MODL	[0.01685 , 0.08645]	0.90276
MVD	[-0.00525 , 0.045]	0.90276
PKID	[0.07975 , 0.2057]	0.90276
UCPD	[0.0086 , 0.0574]	0.90276
USD	[0.02615 , 0.1121]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0017 , 0.0972]	0.95024
Ameva	[-0.02375 , 0.0242]	0.95024
Bayesian	[-0.0035 , 0.08155]	0.95024
CACC	[-0.0311 , 0.03405]	0.95024
CADD	[0.0057 , 0.10155]	0.95024
CAIM	[-0.0192 , 0.0149]	0.95024
Chi2	[0.00545 , 0.08745]	0.95024
ChiMerge	[-0.019 , 0.0276]	0.95024
ClusterAnalysis	[0.0579 , 0.1674]	0.95024
DIBD	[-0.01885 , 0.03405]	0.95024
Distance	[-0.04685 , 0.00325]	0.95024
EqualFrequency	[0.0185 , 0.09545]	0.95024
EqualWidth	[0.0151 , 0.12535]	0.95024
Extended Chi2	[0.00065 , 0.06745]	0.95024
FFD	[0.0576 , 0.2247]	0.95024
FUSINTER	[-0.00315 , 0.06775]	0.95024
HDD	[0.03545 , 0.1692]	0.95024
HellingerBD	[0.00485 , 0.092]	0.95024
Heter-Disc	[-0.02655 , 0.04305]	0.95024
ID3	[0.07195 , 0.2186]	0.95024
IDD	[0.0163 , 0.11215]	0.95024
Khiops	[0.03665 , 0.12705]	0.95024
MDLP	[-0.0263 , 0.02005]	0.95024
Modified Chi2	[0.01665 , 0.1319]	0.95024
MODL	[0.01115 , 0.09475]	0.95024
MVD	[-0.00975 , 0.05255]	0.95024
PKID	[0.06725 , 0.2176]	0.95024
UCPD	[0.0038 , 0.06165]	0.95024
USD	[0.0205 , 0.12005]	0.95024

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