

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	126.0	694.0	≥ 0.2	1
Bayesian	191.5	628.5	≥ 0.2	1
CACC	107.0	713.0	≥ 0.2	1
CADD	677.5	142.5	≥ 0.2	0.394863
CAIM	114.0	706.0	≥ 0.2	1
Chi2	172.5	612.5	≥ 0.2	1
ChiMerge	86.0	694.0	≥ 0.2	1
ClusterAnalysis	268.5	551.5	≥ 0.2	1
DIBD	281.0	539.0	≥ 0.2	1
Distance	252.0	535.0	≥ 0.2	1
EqualFrequency	178.0	605.0	≥ 0.2	1
EqualWidth	277.5	542.5	≥ 0.2	1
Extended Chi2	273.0	547.0	≥ 0.2	1
FFD	333.5	486.5	≥ 0.2	1
FUSINTER	76.0	709.0	≥ 0.2	1
HDD	208.0	612.0	≥ 0.2	1
HellingerBD	180.0	640.0	≥ 0.2	1
Heter-Disc	479.5	313.5	≥ 0.2	1
ID3	269.0	551.0	≥ 0.2	1
IDD	223.0	572.0	≥ 0.2	1
Khiops	169.0	651.0	≥ 0.2	1
MDLP	237.0	550.0	≥ 0.2	1
Modified Chi2	239.0	544.0	≥ 0.2	1
MODL	206.0	577.0	≥ 0.2	1
MVD	312.5	480.5	≥ 0.2	1
PKID	256.0	524.0	≥ 0.2	1
UCPD	100.0	680.0	≥ 0.2	1
USD	151.0	669.0	≥ 0.2	1
Zeta	127.0	693.0	≥ 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	[-0.21335 , -0.0831]	0.90276
Bayesian	[-0.1024 , -0.01115]	0.90276
CACC	[-0.20635 , -0.0851]	0.90276
CADD	[0.00765 , 0.0809]	0.90276
CAIM	[-0.19285 , -0.0776]	0.90276
Chi2	[-0.10035 , -0.024]	0.90276
ChiMerge	[-0.1744 , -0.0806]	0.90276
ClusterAnalysis	[-0.07085 , -0.00465]	0.90276
DIBD	[-0.08535 , 0]	0.90276
Distance	[-0.1452 , -0.00045]	0.90276
EqualFrequency	[-0.1097 , -0.0179]	0.90276
EqualWidth	[-0.08735 , -0.0014]	0.90276
Extended Chi2	[-0.0867 , -0.0027]	0.90276
FFD	[-0.0564 , 0.00835]	0.90276
FUSINTER	[-0.1485 , -0.05485]	0.90276
HDD	[-0.11205 , -0.02365]	0.90276
HellingerBD	[-0.1053 , -0.0362]	0.90276
Heter-Disc	[0 , 0.03865]	0.90276
ID3	[-0.08655 , -0.0036]	0.90276
IDD	[-0.05135 , 0]	0.90276
Khiops	[-0.10125 , -0.0312]	0.90276
MDLP	[-0.1072 , -0.0018]	0.90276
Modified Chi2	[-0.0938 , -0.00865]	0.90276
MODL	[-0.0968 , -0.01545]	0.90276
MVD	[-0.05315 , 0]	0.90276
PKID	[-0.08745 , -0.00555]	0.90276
UCPD	[-0.14685 , -0.0613]	0.90276
USD	[-0.1287 , -0.03905]	0.90276
Zeta	[-0.13195 , -0.04325]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.2277 , -0.07135]	0.95024
Bayesian	[-0.1139 , -0.00685]	0.95024
CACC	[-0.21985 , -0.0767]	0.95024
CADD	[0.0052 , 0.10845]	0.95024
CAIM	[-0.20595 , -0.07005]	0.95024
Chi2	[-0.1068 , -0.0179]	0.95024
ChiMerge	[-0.1832 , -0.07305]	0.95024
ClusterAnalysis	[-0.07825 , 0.00105]	0.95024
DIBD	[-0.0956 , 0]	0.95024
Distance	[-0.169 , 0]	0.95024
EqualFrequency	[-0.1206 , -0.01335]	0.95024
EqualWidth	[-0.09855 , 0.0068]	0.95024
Extended Chi2	[-0.0946 , 0.00045]	0.95024
FFD	[-0.07105 , 0.012]	0.95024
FUSINTER	[-0.1579 , -0.04965]	0.95024
HDD	[-0.12025 , -0.01635]	0.95024
HellingerBD	[-0.1128 , -0.02715]	0.95024
Heter-Disc	[-0.00125 , 0.04485]	0.95024
ID3	[-0.1007 , 0.00145]	0.95024
IDD	[-0.05625 , 0]	0.95024
Khiops	[-0.10905 , -0.02475]	0.95024
MDLP	[-0.12345 , -0.00045]	0.95024
Modified Chi2	[-0.1023 , -0.0031]	0.95024
MODL	[-0.10465 , -0.0108]	0.95024
MVD	[-0.0597 , 0.00455]	0.95024
PKID	[-0.1042 , 0.0032]	0.95024
UCPD	[-0.15715 , -0.0544]	0.95024
USD	[-0.1407 , -0.0344]	0.95024
Zeta	[-0.13915 , -0.03525]	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	694.0	126.0	5.846E-5	0.000131
Bayesian	642.0	178.0	0.0013674	0.001777
CACC	425.5	394.5	≥ 0.2	1
CADD	804.0	16.0	3.074E-10	0
CAIM	456.0	324.0	≥ 0.2	0.353404
Chi2	649.0	171.0	9.412E-4	0.001286
ChiMerge	478.0	342.0	≥ 0.2	0.357192
ClusterAnalysis	680.0	140.0	1.4978E-4	0.000277
DIBD	604.0	216.0	0.008264	0.00894
Distance	615.0	205.0	0.005096	0.00566
EqualFrequency	593.0	227.0	0.013026	0.013645
EqualWidth	653.0	167.0	7.554E-4	0.001064
Extended Chi2	738.0	82.0	1.6944E-6	0.00001
FFD	651.0	169.0	8.436E-4	0.00117
FUSINTER	536.0	284.0	0.09182	0.08907
HDD	603.0	217.0	0.008622	0.009298
HellingerBD	633.0	187.0	0.002166	0.002663
Heter-Disc	768.0	52.0	7.284E-8	0.000001
ID3	644.0	176.0	0.0012308	0.001622
IDD	601.0	179.0	0.002616	0.003163
Khiops	589.0	231.0	0.015266	0.015834
MDLP	632.0	148.0	4.662E-4	0.000714
Modified Chi2	689.0	131.0	8.252E-5	0.000168
MODL	655.0	165.0	6.754E-4	0.000967
MVD	711.0	109.0	1.6716E-5	0.000049
PKID	646.0	174.0	0.0011066	0.001479
UCPD	505.0	315.0	≥ 0.2	0.199267
USD	595.0	225.0	0.012016	0.012654
Zeta	557.0	263.0	0.04816	0.047413

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	[0.0831 , 0.21335]	0.90276
Bayesian	[0.0398 , 0.1122]	0.90276
CACC	[-0.02075 , 0.0189]	0.90276
CADD	[0.17575 , 0.2985]	0.90276
CAIM	[-0.00685 , 0.04155]	0.90276
Chi2	[0.0449 , 0.13815]	0.90276
ChiMerge	[-0.01245 , 0.0525]	0.90276
ClusterAnalysis	[0.0502 , 0.151]	0.90276
DIBD	[0.0305 , 0.1389]	0.90276
Distance	[0.0282 , 0.0951]	0.90276
EqualFrequency	[0.0186 , 0.1017]	0.90276
EqualWidth	[0.04145 , 0.1244]	0.90276
Extended Chi2	[0.06125 , 0.16845]	0.90276
FFD	[0.0544 , 0.1567]	0.90276
FUSINTER	[0.0007 , 0.0518]	0.90276
HDD	[0.02345 , 0.114]	0.90276
HellingerBD	[0.0292 , 0.10775]	0.90276
Heter-Disc	[0.10265 , 0.21655]	0.90276
ID3	[0.0398 , 0.13635]	0.90276
IDD	[0.0404 , 0.16035]	0.90276
Khiops	[0.0186 , 0.0991]	0.90276
MDLP	[0.0439 , 0.11535]	0.90276
Modified Chi2	[0.04285 , 0.1141]	0.90276
MODL	[0.0394 , 0.10965]	0.90276
MVD	[0.06855 , 0.1856]	0.90276
PKID	[0.0439 , 0.12275]	0.90276
UCPD	[-0.00625 , 0.0633]	0.90276
USD	[0.0187 , 0.09105]	0.90276
Zeta	[0.009 , 0.0909]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.07135 , 0.2277]	0.95024
Bayesian	[0.03195 , 0.11885]	0.95024
CACC	[-0.02535 , 0.0218]	0.95024
CADD	[0.1625 , 0.30985]	0.95024
CAIM	[-0.00975 , 0.04625]	0.95024
Chi2	[0.0377 , 0.14865]	0.95024
ChiMerge	[-0.0168 , 0.0569]	0.95024
ClusterAnalysis	[0.04185 , 0.1616]	0.95024
DIBD	[0.0206 , 0.15275]	0.95024
Distance	[0.0213 , 0.10285]	0.95024
EqualFrequency	[0.01205 , 0.11545]	0.95024
EqualWidth	[0.03505 , 0.1396]	0.95024
Extended Chi2	[0.05625 , 0.1962]	0.95024
FFD	[0.04735 , 0.16495]	0.95024
FUSINTER	[-0.00505 , 0.05685]	0.95024
HDD	[0.01585 , 0.12175]	0.95024
HellingerBD	[0.02375 , 0.1153]	0.95024
Heter-Disc	[0.09455 , 0.226]	0.95024
ID3	[0.03275 , 0.14585]	0.95024
IDD	[0.0317 , 0.1728]	0.95024
Khiops	[0.00965 , 0.10825]	0.95024
MDLP	[0.0383 , 0.1234]	0.95024
Modified Chi2	[0.0367 , 0.1259]	0.95024
MODL	[0.03305 , 0.1162]	0.95024
MVD	[0.0609 , 0.20365]	0.95024
PKID	[0.0355 , 0.1327]	0.95024
UCPD	[-0.01055 , 0.076]	0.95024
USD	[0.0135 , 0.09595]	0.95024
Zeta	[0.0002 , 0.09655]	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	628.5	191.5	≥ 0.2	0.393334
Ameva	178.0	642.0	≥ 0.2	1
CACC	189.0	631.0	≥ 0.2	1
CADD	767.5	52.5	1.9131E-5	0.000071
CAIM	200.5	619.5	≥ 0.2	1
Chi2	440.0	380.0	≥ 0.2	1
ChiMerge	160.0	620.0	≥ 0.2	1
ClusterAnalysis	494.0	286.0	0.15012	0.144759
DIBD	450.0	370.0	≥ 0.2	1
Distance	419.0	401.0	≥ 0.2	1
EqualFrequency	362.0	421.0	≥ 0.2	1
EqualWidth	442.0	378.0	≥ 0.2	0.662226
Extended Chi2	517.5	267.5	≥ 0.2	0.431751
FFD	517.5	302.5	≥ 0.2	0.320512
FUSINTER	216.0	567.0	≥ 0.2	1
HDD	408.0	412.0	≥ 0.2	1
HellingerBD	380.0	440.0	≥ 0.2	1
Heter-Disc	615.5	175.5	≥ 0.2	0.356802
ID3	468.0	352.0	≥ 0.2	0.431682
IDD	464.5	355.5	≥ 0.2	1
Khiops	405.5	414.5	≥ 0.2	1
MDLP	435.0	385.0	≥ 0.2	1
Modified Chi2	504.0	316.0	≥ 0.2	0.783366
MODL	440.0	343.0	≥ 0.2	0.891998
MVD	515.0	305.0	≥ 0.2	1
PKID	449.0	331.0	≥ 0.2	0.406357
UCPD	271.0	549.0	≥ 0.2	1
USD	359.0	461.0	≥ 0.2	1
Zeta	332.5	487.5	≥ 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	[0.01115 , 0.1024]	0.90276
Ameva	[-0.1122 , -0.0398]	0.90276
CACC	[-0.1112 , -0.0305]	0.90276
CADD	[0.07075 , 0.2323]	0.90276
CAIM	[-0.09015 , -0.02055]	0.90276
Chi2	[-0.02185 , 0.03665]	0.90276
ChiMerge	[-0.0828 , -0.0323]	0.90276
ClusterAnalysis	[-0.0036 , 0.07475]	0.90276
DIBD	[-0.0146 , 0.0228]	0.90276
Distance	[-0.02755 , 0.0211]	0.90276
EqualFrequency	[-0.02995 , 0.02085]	0.90276
EqualWidth	[-0.0284 , 0.0469]	0.90276
Extended Chi2	[0 , 0.0571]	0.90276
FFD	[-0.0045 , 0.07415]	0.90276
FUSINTER	[-0.05915 , -0.00935]	0.90276
HDD	[-0.0354 , 0.0293]	0.90276
HellingerBD	[-0.04315 , 0.03185]	0.90276
Heter-Disc	[0.0199 , 0.1025]	0.90276
ID3	[-0.0187 , 0.04445]	0.90276
IDD	[-0.0095 , 0.02715]	0.90276
Khiops	[-0.0303 , 0.03025]	0.90276
MDLP	[-0.0069 , 0.0312]	0.90276
Modified Chi2	[-0.00595 , 0.04655]	0.90276
MODL	[-0.011 , 0.03395]	0.90276
MVD	[0 , 0.0651]	0.90276
PKID	[-0.0218 , 0.06255]	0.90276
UCPD	[-0.07245 , -0.00345]	0.90276
USD	[-0.03515 , 0.0121]	0.90276
Zeta	[-0.05195 , 0.0112]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00685 , 0.1139]	0.95024
Ameva	[-0.11885 , -0.03195]	0.95024
CACC	[-0.12445 , -0.02355]	0.95024
CADD	[0.0648 , 0.24175]	0.95024
CAIM	[-0.09565 , -0.01635]	0.95024
Chi2	[-0.02785 , 0.04085]	0.95024
ChiMerge	[-0.08865 , -0.02575]	0.95024
ClusterAnalysis	[-0.01185 , 0.0833]	0.95024
DIBD	[-0.02065 , 0.0333]	0.95024
Distance	[-0.0446 , 0.02985]	0.95024
EqualFrequency	[-0.03615 , 0.0263]	0.95024
EqualWidth	[-0.03535 , 0.05455]	0.95024
Extended Chi2	[-0.00345 , 0.0626]	0.95024
FFD	[-0.01245 , 0.08455]	0.95024
FUSINTER	[-0.063 , -0.0044]	0.95024
HDD	[-0.04205 , 0.03405]	0.95024
HellingerBD	[-0.0496 , 0.03815]	0.95024
Heter-Disc	[0.0183 , 0.1089]	0.95024
ID3	[-0.0289 , 0.05105]	0.95024
IDD	[-0.0112 , 0.0295]	0.95024
Khiops	[-0.03545 , 0.0395]	0.95024
MDLP	[-0.0103 , 0.0366]	0.95024
Modified Chi2	[-0.0146 , 0.0514]	0.95024
MODL	[-0.0166 , 0.03755]	0.95024
MVD	[-0.00075 , 0.07605]	0.95024
PKID	[-0.0297 , 0.07135]	0.95024
UCPD	[-0.0765 , 0.0021]	0.95024
USD	[-0.03975 , 0.0167]	0.95024
Zeta	[-0.06085 , 0.0163]	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	713.0	107.0	1.43E-5	0.000045
Ameva	394.5	425.5	≥ 0.2	1
Bayesian	631.0	189.0	0.002392	0.002908
CADD	768.0	12.0	2.546E-10	0
CAIM	469.0	351.0	≥ 0.2	0.423851
Chi2	615.0	205.0	0.005096	0.005742
ChiMerge	473.0	347.0	≥ 0.2	0.39337
ClusterAnalysis	693.0	127.0	6.268E-5	0.000139
DIBD	630.0	190.0	0.002512	0.003039
Distance	617.0	163.0	0.0011156	0.0015
EqualFrequency	600.0	220.0	0.009782	0.01045
EqualWidth	659.0	161.0	5.382E-4	0.000798
Extended Chi2	694.0	126.0	5.846E-5	0.000131
FFD	690.0	130.0	7.708E-5	0.000163
FUSINTER	523.0	297.0	0.13156	0.127113
HDD	617.0	203.0	0.004654	0.005286
HellingerBD	622.0	198.0	0.00369	0.004286
Heter-Disc	770.5	49.5	2.1510000000000001E-7	0.000003
ID3	658.0	162.0	5.698E-4	0.000837
IDD	632.0	188.0	0.002276	0.002783
Khiops	609.0	211.0	0.006658	0.007328
MDLP	668.0	112.0	4.082E-5	0.000102
Modified Chi2	674.0	146.0	2.192E-4	0.000378
MODL	629.0	191.0	0.002638	0.003123
MVD	711.5	108.5	6.059E-5	0.000141
PKID	655.0	165.0	6.754E-4	0.000967
UCPD	559.0	261.0	0.0451	0.044487
USD	614.0	206.0	0.005332	0.005982
Zeta	560.0	220.0	0.016812	0.017344

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	[0.0851 , 0.20635]	0.90276
Ameva	[-0.0189 , 0.02075]	0.90276
Bayesian	[0.0305 , 0.1112]	0.90276
CADD	[0.1836 , 0.2936]	0.90276
CAIM	[-0.01635 , 0.049]	0.90276
Chi2	[0.03805 , 0.1471]	0.90276
ChiMerge	[-0.01675 , 0.0599]	0.90276
ClusterAnalysis	[0.05985 , 0.1476]	0.90276
DIBD	[0.04655 , 0.1429]	0.90276
Distance	[0.03225 , 0.08295]	0.90276
EqualFrequency	[0.02475 , 0.10355]	0.90276
EqualWidth	[0.0389 , 0.1317]	0.90276
Extended Chi2	[0.0563 , 0.1654]	0.90276
FFD	[0.0622 , 0.15195]	0.90276
FUSINTER	[-0.0026 , 0.06145]	0.90276
HDD	[0.02775 , 0.1023]	0.90276
HellingerBD	[0.03115 , 0.1162]	0.90276
Heter-Disc	[0.09725 , 0.21715]	0.90276
ID3	[0.0358 , 0.1244]	0.90276
IDD	[0.035 , 0.16635]	0.90276
Khiops	[0.024 , 0.10355]	0.90276
MDLP	[0.04385 , 0.10635]	0.90276
Modified Chi2	[0.04245 , 0.12475]	0.90276
MODL	[0.03255 , 0.1088]	0.90276
MVD	[0.0682 , 0.178]	0.90276
PKID	[0.04065 , 0.1304]	0.90276
UCPD	[0.0077 , 0.0753]	0.90276
USD	[0.01895 , 0.07775]	0.90276
Zeta	[0.016 , 0.0842]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0767 , 0.21985]	0.95024
Ameva	[-0.0218 , 0.02535]	0.95024
Bayesian	[0.02355 , 0.12445]	0.95024
CADD	[0.1715 , 0.3097]	0.95024
CAIM	[-0.02215 , 0.0558]	0.95024
Chi2	[0.02765 , 0.1603]	0.95024
ChiMerge	[-0.0217 , 0.06565]	0.95024
ClusterAnalysis	[0.05325 , 0.15535]	0.95024
DIBD	[0.0376 , 0.15025]	0.95024
Distance	[0.0253 , 0.08895]	0.95024
EqualFrequency	[0.01705 , 0.1112]	0.95024
EqualWidth	[0.03315 , 0.13985]	0.95024
Extended Chi2	[0.0507 , 0.1807]	0.95024
FFD	[0.0548 , 0.1609]	0.95024
FUSINTER	[-0.0076 , 0.07035]	0.95024
HDD	[0.02035 , 0.10955]	0.95024
HellingerBD	[0.0241 , 0.12335]	0.95024
Heter-Disc	[0.0871 , 0.2248]	0.95024
ID3	[0.02935 , 0.1352]	0.95024
IDD	[0.02485 , 0.18]	0.95024
Khiops	[0.0183 , 0.1135]	0.95024
MDLP	[0.0389 , 0.11295]	0.95024
Modified Chi2	[0.0397 , 0.133]	0.95024
MODL	[0.02575 , 0.1161]	0.95024
MVD	[0.0591 , 0.18725]	0.95024
PKID	[0.0319 , 0.13695]	0.95024
UCPD	[0.0016 , 0.08255]	0.95024
USD	[0.01415 , 0.0833]	0.95024
Zeta	[0.0096 , 0.09165]	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	142.5	677.5	≥ 0.2	1
Ameva	16.0	804.0	≥ 0.2	1
Bayesian	52.5	767.5	≥ 0.2	1
CACC	12.0	768.0	≥ 0.2	1
CAIM	30.0	790.0	≥ 0.2	1
Chi2	74.0	746.0	≥ 0.2	1
ChiMerge	33.0	747.0	≥ 0.2	1
ClusterAnalysis	45.5	774.5	≥ 0.2	1
DIBD	94.5	725.5	≥ 0.2	1
Distance	43.5	745.5	≥ 0.2	1
EqualFrequency	78.0	705.0	≥ 0.2	1
EqualWidth	67.0	753.0	≥ 0.2	1
Extended Chi2	106.0	681.0	≥ 0.2	1
FFD	124.5	695.5	≥ 0.2	1
FUSINTER	30.5	754.5	≥ 0.2	1
HDD	46.0	734.0	≥ 0.2	1
HellingerBD	31.0	789.0	≥ 0.2	1
Heter-Disc	208.0	591.0	≥ 0.2	1
ID3	54.0	726.0	≥ 0.2	1
IDD	80.0	740.0	≥ 0.2	1
Khiops	33.0	787.0	≥ 0.2	1
MDLP	62.5	726.5	≥ 0.2	1
Modified Chi2	61.0	722.0	≥ 0.2	1
MODL	50.0	733.0	≥ 0.2	1
MVD	135.5	684.5	≥ 0.2	1
PKID	77.5	742.5	≥ 0.2	1
UCPD	21.0	759.0	≥ 0.2	1
USD	38.0	782.0	≥ 0.2	1
Zeta	33.0	747.0	≥ 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	[-0.0809 , -0.00765]	0.90276
Ameva	[-0.2985 , -0.17575]	0.90276
Bayesian	[-0.2323 , -0.07075]	0.90276
CACC	[-0.2936 , -0.1836]	0.90276
CAIM	[-0.2922 , -0.16945]	0.90276
Chi2	[-0.1952 , -0.0677]	0.90276
ChiMerge	[-0.2735 , -0.1607]	0.90276
ClusterAnalysis	[-0.16115 , -0.077]	0.90276
DIBD	[-0.1964 , -0.0683]	0.90276
Distance	[-0.22045 , -0.1105]	0.90276
EqualFrequency	[-0.2261 , -0.096]	0.90276
EqualWidth	[-0.1909 , -0.0787]	0.90276
Extended Chi2	[-0.16375 , -0.03565]	0.90276
FFD	[-0.17355 , -0.0581]	0.90276
FUSINTER	[-0.2686 , -0.1414]	0.90276
HDD	[-0.2189 , -0.09405]	0.90276
HellingerBD	[-0.2079 , -0.1075]	0.90276
Heter-Disc	[-0.09965 , 0]	0.90276
ID3	[-0.2053 , -0.08005]	0.90276
IDD	[-0.1963 , -0.029]	0.90276
Khiops	[-0.22325 , -0.1054]	0.90276
MDLP	[-0.21195 , -0.0708]	0.90276
Modified Chi2	[-0.19655 , -0.08685]	0.90276
MODL	[-0.20145 , -0.0955]	0.90276
MVD	[-0.1405 , -0.00495]	0.90276
PKID	[-0.2068 , -0.0747]	0.90276
UCPD	[-0.2474 , -0.1576]	0.90276
USD	[-0.23555 , -0.1149]	0.90276
Zeta	[-0.24485 , -0.10925]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.10845 , -0.0052]	0.95024
Ameva	[-0.30985 , -0.1625]	0.95024
Bayesian	[-0.24175 , -0.0648]	0.95024
CACC	[-0.3097 , -0.1715]	0.95024
CAIM	[-0.30485 , -0.1517]	0.95024
Chi2	[-0.20475 , -0.0587]	0.95024
ChiMerge	[-0.2809 , -0.1481]	0.95024
ClusterAnalysis	[-0.1747 , -0.0701]	0.95024
DIBD	[-0.20525 , -0.0622]	0.95024
Distance	[-0.23255 , -0.0997]	0.95024
EqualFrequency	[-0.2369 , -0.08905]	0.95024
EqualWidth	[-0.20215 , -0.07135]	0.95024
Extended Chi2	[-0.1771 , -0.0301]	0.95024
FFD	[-0.18745 , -0.0496]	0.95024
FUSINTER	[-0.2784 , -0.12635]	0.95024
HDD	[-0.23015 , -0.08475]	0.95024
HellingerBD	[-0.21885 , -0.10105]	0.95024
Heter-Disc	[-0.10255 , 0]	0.95024
ID3	[-0.2135 , -0.0719]	0.95024
IDD	[-0.2094 , -0.02115]	0.95024
Khiops	[-0.2369 , -0.09825]	0.95024
MDLP	[-0.2199 , -0.05415]	0.95024
Modified Chi2	[-0.2079 , -0.07365]	0.95024
MODL	[-0.2191 , -0.0789]	0.95024
MVD	[-0.14245 , -0.0046]	0.95024
PKID	[-0.22135 , -0.0672]	0.95024
UCPD	[-0.25315 , -0.14755]	0.95024
USD	[-0.24615 , -0.10555]	0.95024
Zeta	[-0.2559 , -0.0976]	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	706.0	114.0	2.448E-5	0.000067
Ameva	324.0	456.0	≥ 0.2	1
Bayesian	619.5	200.5	0.004148000000000001	0.004623
CACC	351.0	469.0	≥ 0.2	1
CADD	790.0	30.0	3.702E-9	0
Chi2	634.0	186.0	0.00206	0.002548
ChiMerge	426.0	354.0	≥ 0.2	0.610502
ClusterAnalysis	624.0	196.0	0.003358	0.003877
DIBD	626.0	194.0	0.003052	0.003614
Distance	588.0	232.0	0.015876	0.016428
EqualFrequency	572.0	248.0	0.02884	0.028947
EqualWidth	605.0	215.0	0.007918	0.008595
Extended Chi2	716.0	104.0	1.1274E-5	0.000038
FFD	652.0	168.0	7.984E-4	0.001116
FUSINTER	502.0	318.0	≥ 0.2	0.21375
HDD	597.0	190.0	0.1085	0.103956
HellingerBD	571.0	209.0	0.010644	0.011315
Heter-Disc	738.0	82.0	1.6944E-6	0.00001
ID3	624.0	196.0	0.003358	0.003937
IDD	628.0	152.0	5.928E-4	0.000874
Khiops	559.0	261.0	0.0451	0.044487
MDLP	629.0	151.0	5.586E-4	0.000831
Modified Chi2	686.0	134.0	1.01E-4	0.000202
MODL	659.0	161.0	5.382E-4	0.000798
MVD	671.0	149.0	2.64E-4	0.00044
PKID	620.0	200.0	0.004052	0.004664
UCPD	472.0	308.0	≥ 0.2	0.249614
USD	562.0	218.0	0.015504	0.016074
Zeta	489.0	294.0	≥ 0.2	0.381571

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	[0.0776 , 0.19285]	0.90276
Ameva	[-0.04155 , 0.00685]	0.90276
Bayesian	[0.02055 , 0.09015]	0.90276
CACC	[-0.049 , 0.01635]	0.90276
CADD	[0.16945 , 0.2922]	0.90276
Chi2	[0.0351 , 0.1184]	0.90276
ChiMerge	[-0.01 , 0.0197]	0.90276
ClusterAnalysis	[0.03535 , 0.14]	0.90276
DIBD	[0.0225 , 0.1128]	0.90276
Distance	[0.01 , 0.0732]	0.90276
EqualFrequency	[0.00905 , 0.09645]	0.90276
EqualWidth	[0.0156 , 0.12275]	0.90276
Extended Chi2	[0.0537 , 0.1304]	0.90276
FFD	[0.0427 , 0.1386]	0.90276
FUSINTER	[-0.0063 , 0.0405]	0.90276
HDD	[0.01115 , 0.0794]	0.90276
HellingerBD	[0.02155 , 0.1023]	0.90276
Heter-Disc	[0.09335 , 0.21475]	0.90276
ID3	[0.02725 , 0.1171]	0.90276
IDD	[0.0322 , 0.1354]	0.90276
Khiops	[0.0063 , 0.1003]	0.90276
MDLP	[0.03125 , 0.0968]	0.90276
Modified Chi2	[0.03175 , 0.08905]	0.90276
MODL	[0.02665 , 0.0906]	0.90276
MVD	[0.06045 , 0.1779]	0.90276
PKID	[0.0268 , 0.11155]	0.90276
UCPD	[-0.01345 , 0.06065]	0.90276
USD	[0.01225 , 0.0649]	0.90276
Zeta	[-0.00315 , 0.0498]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.07005 , 0.20595]	0.95024
Ameva	[-0.04625 , 0.00975]	0.95024
Bayesian	[0.01635 , 0.09565]	0.95024
CACC	[-0.0558 , 0.02215]	0.95024
CADD	[0.1517 , 0.30485]	0.95024
Chi2	[0.02355 , 0.1301]	0.95024
ChiMerge	[-0.01325 , 0.0229]	0.95024
ClusterAnalysis	[0.0258 , 0.1513]	0.95024
DIBD	[0.0177 , 0.1257]	0.95024
Distance	[0.0058 , 0.07995]	0.95024
EqualFrequency	[0.00555 , 0.10575]	0.95024
EqualWidth	[0.0093 , 0.13165]	0.95024
Extended Chi2	[0.05015 , 0.14395]	0.95024
FFD	[0.03415 , 0.14805]	0.95024
FUSINTER	[-0.0108 , 0.04495]	0.95024
HDD	[0.00855 , 0.0862]	0.95024
HellingerBD	[0.01225 , 0.1063]	0.95024
Heter-Disc	[0.0812 , 0.22195]	0.95024
ID3	[0.0196 , 0.12545]	0.95024
IDD	[0.0267 , 0.1497]	0.95024
Khiops	[0.00085 , 0.10825]	0.95024
MDLP	[0.0261 , 0.10755]	0.95024
Modified Chi2	[0.02735 , 0.09705]	0.95024
MODL	[0.0231 , 0.0978]	0.95024
MVD	[0.05085 , 0.18985]	0.95024
PKID	[0.02 , 0.12235]	0.95024
UCPD	[-0.01835 , 0.06795]	0.95024
USD	[0.0088 , 0.06885]	0.95024
Zeta	[-0.005 , 0.0567]	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	612.5	172.5	0.018685	0.01917
Ameva	171.0	649.0	≥ 0.2	1
Bayesian	380.0	440.0	≥ 0.2	1
CACC	205.0	615.0	≥ 0.2	1
CADD	746.0	74.0	1.2062E-5	0.000044
CAIM	186.0	634.0	≥ 0.2	1
ChiMerge	190.0	590.0	≥ 0.2	1
ClusterAnalysis	471.5	348.5	≥ 0.2	0.744196
DIBD	437.0	383.0	≥ 0.2	1
Distance	379.5	440.5	≥ 0.2	1
EqualFrequency	397.0	423.0	≥ 0.2	1
EqualWidth	413.0	407.0	≥ 0.2	0.962478
Extended Chi2	514.5	305.5	≥ 0.2	1
FFD	508.0	312.0	0.1922	0.185514
FUSINTER	240.5	579.5	≥ 0.2	1
HDD	391.0	429.0	≥ 0.2	1
HellingerBD	353.0	467.0	≥ 0.2	1
Heter-Disc	619.5	200.5	0.09943	0.094824
ID3	430.0	390.0	≥ 0.2	0.782896
IDD	509.0	311.0	≥ 0.2	0.723201
Khiops	386.0	394.0	≥ 0.2	1
MDLP	398.5	421.5	≥ 0.2	1
Modified Chi2	419.0	368.0	≥ 0.2	1
MODL	407.5	412.5	≥ 0.2	1
MVD	576.0	244.0	≥ 0.2	0.701476
PKID	454.0	366.0	≥ 0.2	0.549748
UCPD	255.0	525.0	≥ 0.2	1
USD	338.0	482.0	≥ 0.2	1
Zeta	257.0	563.0	≥ 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	[0.024 , 0.10035]	0.90276
Ameva	[-0.13815 , -0.0449]	0.90276
Bayesian	[-0.03665 , 0.02185]	0.90276
CACC	[-0.1471 , -0.03805]	0.90276
CADD	[0.0677 , 0.1952]	0.90276
CAIM	[-0.1184 , -0.0351]	0.90276
ChiMerge	[-0.1052 , -0.02865]	0.90276
ClusterAnalysis	[-0.03 , 0.0601]	0.90276
DIBD	[-0.031 , 0.02555]	0.90276
Distance	[-0.0823 , 0.01855]	0.90276
EqualFrequency	[-0.0472 , 0.0229]	0.90276
EqualWidth	[-0.0462 , 0.04275]	0.90276
Extended Chi2	[-0.00145 , 0.0377]	0.90276
FFD	[-0.00745 , 0.06765]	0.90276
FUSINTER	[-0.07165 , -0.0117]	0.90276
HDD	[-0.05235 , 0.03175]	0.90276
HellingerBD	[-0.06535 , 0.01945]	0.90276
Heter-Disc	[0.02155 , 0.104]	0.90276
ID3	[-0.04745 , 0.05155]	0.90276
IDD	[-0.0039 , 0.0565]	0.90276
Khiops	[-0.04055 , 0.03395]	0.90276
MDLP	[-0.02385 , 0.0285]	0.90276
Modified Chi2	[-0.0122 , 0.02265]	0.90276
MODL	[-0.0275 , 0.0236]	0.90276
MVD	[0.00765 , 0.0792]	0.90276
PKID	[-0.0484 , 0.0488]	0.90276
UCPD	[-0.08925 , -0.00585]	0.90276
USD	[-0.06995 , 0.0072]	0.90276
Zeta	[-0.0738 , -0.0089]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0179 , 0.1068]	0.95024
Ameva	[-0.14865 , -0.0377]	0.95024
Bayesian	[-0.04085 , 0.02785]	0.95024
CACC	[-0.1603 , -0.02765]	0.95024
CADD	[0.0587 , 0.20475]	0.95024
CAIM	[-0.1301 , -0.02355]	0.95024
ChiMerge	[-0.1123 , -0.02055]	0.95024
ClusterAnalysis	[-0.0379 , 0.06685]	0.95024
DIBD	[-0.03915 , 0.03395]	0.95024
Distance	[-0.0944 , 0.02155]	0.95024
EqualFrequency	[-0.05755 , 0.027]	0.95024
EqualWidth	[-0.0556 , 0.05455]	0.95024
Extended Chi2	[-0.0029 , 0.0427]	0.95024
FFD	[-0.02235 , 0.0741]	0.95024
FUSINTER	[-0.08 , -0.00615]	0.95024
HDD	[-0.06525 , 0.03695]	0.95024
HellingerBD	[-0.0732 , 0.02575]	0.95024
Heter-Disc	[0.0156 , 0.12135]	0.95024
ID3	[-0.0586 , 0.05805]	0.95024
IDD	[-0.00885 , 0.0663]	0.95024
Khiops	[-0.05615 , 0.03815]	0.95024
MDLP	[-0.03165 , 0.03725]	0.95024
Modified Chi2	[-0.0197 , 0.02505]	0.95024
MODL	[-0.0331 , 0.0298]	0.95024
MVD	[0.0009 , 0.09285]	0.95024
PKID	[-0.0652 , 0.05515]	0.95024
UCPD	[-0.09985 , 0.0011]	0.95024
USD	[-0.0742 , 0.01155]	0.95024
Zeta	[-0.0793 , -0.00455]	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	694.0	86.0	4.818E-6	0.000021
Ameva	342.0	478.0	≥ 0.2	1
Bayesian	620.0	160.0	9.426E-4	0.001297
CACC	347.0	473.0	≥ 0.2	1
CADD	747.0	33.0	1.1688E-8	0.000001
CAIM	354.0	426.0	≥ 0.2	1
Chi2	590.0	190.0	0.0045	0.005142
ClusterAnalysis	640.0	180.0	0.0015176	0.001947
DIBD	605.0	175.0	0.002128	0.002636
Distance	526.0	254.0	0.05806	0.056367
EqualFrequency	594.0	226.0	0.012512	0.013141
EqualWidth	606.0	214.0	0.007584	0.008261
Extended Chi2	669.0	111.0	3.784E-5	0.000096
FFD	648.0	172.0	9.936E-4	0.001347
FUSINTER	450.0	330.0	≥ 0.2	0.398514
HDD	538.0	242.0	0.03858	0.038236
HellingerBD	591.0	229.0	0.014108	0.014537
Heter-Disc	704.0	76.0	1.8986E-6	0.000011
ID3	564.0	216.0	0.014286	0.014886
IDD	615.0	165.0	0.0012464	0.00165
Khiops	576.0	244.0	0.02498	0.025223
MDLP	622.0	158.0	8.41E-4	0.001153
Modified Chi2	621.0	159.0	8.906E-4	0.001235
MODL	622.5	197.5	0.011191	0.011865
MVD	660.0	120.0	7.348E-5	0.00016
PKID	602.0	218.0	0.008996	0.009669
UCPD	495.0	325.0	≥ 0.2	0.250461
USD	563.0	257.0	0.03944	0.03909
Zeta	493.0	327.0	≥ 0.2	0.261714

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	[0.0806 , 0.1744]	0.90276
Ameva	[-0.0525 , 0.01245]	0.90276
Bayesian	[0.0323 , 0.0828]	0.90276
CACC	[-0.0599 , 0.01675]	0.90276
CADD	[0.1607 , 0.2735]	0.90276
CAIM	[-0.0197 , 0.01]	0.90276
Chi2	[0.02865 , 0.1052]	0.90276
ClusterAnalysis	[0.0427 , 0.127]	0.90276
DIBD	[0.02395 , 0.10065]	0.90276
Distance	[0.0039 , 0.0736]	0.90276
EqualFrequency	[0.01105 , 0.09775]	0.90276
EqualWidth	[0.01875 , 0.0978]	0.90276
Extended Chi2	[0.05805 , 0.1267]	0.90276
FFD	[0.03935 , 0.13195]	0.90276
FUSINTER	[-0.01305 , 0.03965]	0.90276
HDD	[0.0109 , 0.07575]	0.90276
HellingerBD	[0.0136 , 0.0917]	0.90276
Heter-Disc	[0.08925 , 0.1862]	0.90276
ID3	[0.01995 , 0.108]	0.90276
IDD	[0.03375 , 0.1289]	0.90276
Khiops	[0.0128 , 0.095]	0.90276
MDLP	[0.0249 , 0.0966]	0.90276
Modified Chi2	[0.0294 , 0.09015]	0.90276
MODL	[0.01765 , 0.09475]	0.90276
MVD	[0.0475 , 0.14655]	0.90276
PKID	[0.02565 , 0.1129]	0.90276
UCPD	[-0.0107 , 0.0542]	0.90276
USD	[0.00685 , 0.0606]	0.90276
Zeta	[-0.00825 , 0.0513]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.07305 , 0.1832]	0.95024
Ameva	[-0.0569 , 0.0168]	0.95024
Bayesian	[0.02575 , 0.08865]	0.95024
CACC	[-0.06565 , 0.0217]	0.95024
CADD	[0.1481 , 0.2809]	0.95024
CAIM	[-0.0229 , 0.01325]	0.95024
Chi2	[0.02055 , 0.1123]	0.95024
ClusterAnalysis	[0.0371 , 0.1335]	0.95024
DIBD	[0.01945 , 0.10755]	0.95024
Distance	[-0.0009 , 0.0827]	0.95024
EqualFrequency	[0.00785 , 0.1046]	0.95024
EqualWidth	[0.01295 , 0.1113]	0.95024
Extended Chi2	[0.0494 , 0.1355]	0.95024
FFD	[0.0329 , 0.14015]	0.95024
FUSINTER	[-0.0196 , 0.04495]	0.95024
HDD	[0.00435 , 0.08425]	0.95024
HellingerBD	[0.0079 , 0.09925]	0.95024
Heter-Disc	[0.0807 , 0.1963]	0.95024
ID3	[0.01255 , 0.11465]	0.95024
IDD	[0.0274 , 0.13605]	0.95024
Khiops	[0.00665 , 0.10055]	0.95024
MDLP	[0.0207 , 0.10355]	0.95024
Modified Chi2	[0.02275 , 0.0967]	0.95024
MODL	[0.01185 , 0.09825]	0.95024
MVD	[0.04225 , 0.1583]	0.95024
PKID	[0.0167 , 0.12225]	0.95024
UCPD	[-0.0194 , 0.0601]	0.95024
USD	[0.00165 , 0.0643]	0.95024
Zeta	[-0.012 , 0.0567]	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	551.5	268.5	0.14238	0.137151
Ameva	140.0	680.0	≥ 0.2	1
Bayesian	286.0	494.0	≥ 0.2	1
CACC	127.0	693.0	≥ 0.2	1
CADD	774.5	45.5	1.3065999999999998E-7	0.000002
CAIM	196.0	624.0	≥ 0.2	1
Chi2	348.5	471.5	≥ 0.2	1
ChiMerge	180.0	640.0	≥ 0.2	1
DIBD	371.5	448.5	≥ 0.2	1
Distance	324.5	495.5	≥ 0.2	1
EqualFrequency	288.0	532.0	≥ 0.2	1
EqualWidth	360.0	420.0	≥ 0.2	1
Extended Chi2	443.5	376.5	≥ 0.2	0.647115
FFD	440.5	379.5	≥ 0.2	1
FUSINTER	180.0	600.0	≥ 0.2	1
HDD	328.0	492.0	≥ 0.2	1
HellingerBD	289.5	490.5	≥ 0.2	1
Heter-Disc	596.5	223.5	0.03252	0.032429
ID3	367.0	416.0	≥ 0.2	1
IDD	383.0	397.0	≥ 0.2	1
Khiops	240.0	540.0	≥ 0.2	1
MDLP	363.5	456.5	≥ 0.2	1
Modified Chi2	368.0	452.0	≥ 0.2	1
MODL	334.0	486.0	≥ 0.2	1
MVD	470.5	349.5	≥ 0.2	0.755193
PKID	352.5	467.5	≥ 0.2	1
UCPD	185.0	595.0	≥ 0.2	1
USD	226.0	594.0	≥ 0.2	1
Zeta	295.0	525.0	≥ 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	[0.00465 , 0.07085]	0.90276
Ameva	[-0.151 , -0.0502]	0.90276
Bayesian	[-0.07475 , 0.0036]	0.90276
CACC	[-0.1476 , -0.05985]	0.90276
CADD	[0.077 , 0.16115]	0.90276
CAIM	[-0.14 , -0.03535]	0.90276
Chi2	[-0.0601 , 0.03]	0.90276
ChiMerge	[-0.127 , -0.0427]	0.90276
DIBD	[-0.06085 , 0.0292]	0.90276
Distance	[-0.1068 , 0.01455]	0.90276
EqualFrequency	[-0.07075 , 0.00045]	0.90276
EqualWidth	[-0.03715 , 0.0183]	0.90276
Extended Chi2	[-0.0272 , 0.05565]	0.90276
FFD	[-0.01715 , 0.0303]	0.90276
FUSINTER	[-0.10815 , -0.02655]	0.90276
HDD	[-0.06655 , 0.00655]	0.90276
HellingerBD	[-0.05405 , 0.0024]	0.90276
Heter-Disc	[0.0197 , 0.08645]	0.90276
ID3	[-0.02955 , 0.01105]	0.90276
IDD	[-0.06035 , 0.0406]	0.90276
Khiops	[-0.0504 , -0.0052]	0.90276
MDLP	[-0.0783 , 0.02995]	0.90276
Modified Chi2	[-0.0421 , 0.0206]	0.90276
MODL	[-0.0636 , 0.0149]	0.90276
MVD	[-0.02035 , 0.06355]	0.90276
PKID	[-0.0395 , 0.01265]	0.90276
UCPD	[-0.1023 , -0.03165]	0.90276
USD	[-0.08195 , -0.0094]	0.90276
Zeta	[-0.0923 , 0.00295]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00105 , 0.07825]	0.95024
Ameva	[-0.1616 , -0.04185]	0.95024
Bayesian	[-0.0833 , 0.01185]	0.95024
CACC	[-0.15535 , -0.05325]	0.95024
CADD	[0.0701 , 0.1747]	0.95024
CAIM	[-0.1513 , -0.0258]	0.95024
Chi2	[-0.06685 , 0.0379]	0.95024
ChiMerge	[-0.1335 , -0.0371]	0.95024
DIBD	[-0.0739 , 0.03855]	0.95024
Distance	[-0.119 , 0.0243]	0.95024
EqualFrequency	[-0.07575 , 0.00615]	0.95024
EqualWidth	[-0.0428 , 0.02325]	0.95024
Extended Chi2	[-0.0389 , 0.0633]	0.95024
FFD	[-0.02195 , 0.0366]	0.95024
FUSINTER	[-0.1149 , -0.01945]	0.95024
HDD	[-0.07705 , 0.01015]	0.95024
HellingerBD	[-0.0606 , 0.00785]	0.95024
Heter-Disc	[0.0129 , 0.0935]	0.95024
ID3	[-0.0416 , 0.0136]	0.95024
IDD	[-0.06855 , 0.0511]	0.95024
Khiops	[-0.057 , -0.00195]	0.95024
MDLP	[-0.08815 , 0.03985]	0.95024
Modified Chi2	[-0.04935 , 0.02905]	0.95024
MODL	[-0.07315 , 0.02275]	0.95024
MVD	[-0.02855 , 0.0734]	0.95024
PKID	[-0.047 , 0.01835]	0.95024
UCPD	[-0.10905 , -0.02305]	0.95024
USD	[-0.0919 , -0.00595]	0.95024
Zeta	[-0.10495 , 0.0106]	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	539.0	281.0	≥ 0.2	1
Ameva	216.0	604.0	≥ 0.2	1
Bayesian	370.0	450.0	≥ 0.2	1
CACC	190.0	630.0	≥ 0.2	1
CADD	725.5	94.5	0.00361	0.00439
CAIM	194.0	626.0	≥ 0.2	1
Chi2	383.0	437.0	≥ 0.2	1
ChiMerge	175.0	605.0	≥ 0.2	1
ClusterAnalysis	448.5	371.5	≥ 0.2	1
Distance	340.0	447.0	≥ 0.2	1
EqualFrequency	332.0	451.0	≥ 0.2	1
EqualWidth	383.5	436.5	≥ 0.2	1
Extended Chi2	463.0	320.0	≥ 0.2	0.629265
FFD	438.5	381.5	≥ 0.2	1
FUSINTER	240.5	544.5	≥ 0.2	1
HDD	365.0	455.0	≥ 0.2	1
HellingerBD	326.0	494.0	≥ 0.2	1
Heter-Disc	534.5	285.5	≥ 0.2	1
ID3	387.0	433.0	≥ 0.2	1
IDD	439.5	351.5	≥ 0.2	1
Khiops	341.0	479.0	≥ 0.2	1
MDLP	403.0	384.0	≥ 0.2	1
Modified Chi2	373.5	446.5	≥ 0.2	1
MODL	349.5	435.5	≥ 0.2	1
MVD	460.0	360.0	≥ 0.2	1
PKID	401.0	379.0	≥ 0.2	0.872501
UCPD	205.0	575.0	≥ 0.2	1
USD	328.0	492.0	≥ 0.2	1
Zeta	275.0	545.0	≥ 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 , 0.08535]	0.90276
Ameva	[-0.1389 , -0.0305]	0.90276
Bayesian	[-0.0228 , 0.0146]	0.90276
CACC	[-0.1429 , -0.04655]	0.90276
CADD	[0.0683 , 0.1964]	0.90276
CAIM	[-0.1128 , -0.0225]	0.90276
Chi2	[-0.02555 , 0.031]	0.90276
ChiMerge	[-0.10065 , -0.02395]	0.90276
ClusterAnalysis	[-0.0292 , 0.06085]	0.90276
Distance	[-0.0526 , 0.0072]	0.90276
EqualFrequency	[-0.0484 , 0.01805]	0.90276
EqualWidth	[-0.05315 , 0.0313]	0.90276
Extended Chi2	[-0.01255 , 0.0545]	0.90276
FFD	[-0.0254 , 0.0523]	0.90276
FUSINTER	[-0.0858 , -0.0047]	0.90276
HDD	[-0.05415 , 0.02195]	0.90276
HellingerBD	[-0.05955 , 0.01115]	0.90276
Heter-Disc	[0 , 0.1032]	0.90276
ID3	[-0.05275 , 0.039]	0.90276
IDD	[-0.0055 , 0.03545]	0.90276
Khiops	[-0.0541 , 0.01735]	0.90276
MDLP	[-0.02025 , 0.0176]	0.90276
Modified Chi2	[-0.0409 , 0.02665]	0.90276
MODL	[-0.0359 , 0.02805]	0.90276
MVD	[-0.00925 , 0.0856]	0.90276
PKID	[-0.03915 , 0.04135]	0.90276
UCPD	[-0.0887 , -0.01735]	0.90276
USD	[-0.078 , 0.0125]	0.90276
Zeta	[-0.06965 , -0.0023]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.0956]	0.95024
Ameva	[-0.15275 , -0.0206]	0.95024
Bayesian	[-0.0333 , 0.02065]	0.95024
CACC	[-0.15025 , -0.0376]	0.95024
CADD	[0.0622 , 0.20525]	0.95024
CAIM	[-0.1257 , -0.0177]	0.95024
Chi2	[-0.03395 , 0.03915]	0.95024
ChiMerge	[-0.10755 , -0.01945]	0.95024
ClusterAnalysis	[-0.03855 , 0.0739]	0.95024
Distance	[-0.0614 , 0.0091]	0.95024
EqualFrequency	[-0.05365 , 0.03025]	0.95024
EqualWidth	[-0.0602 , 0.0423]	0.95024
Extended Chi2	[-0.01885 , 0.06]	0.95024
FFD	[-0.0332 , 0.0659]	0.95024
FUSINTER	[-0.0987 , -0.0008]	0.95024
HDD	[-0.06425 , 0.03125]	0.95024
HellingerBD	[-0.0651 , 0.02085]	0.95024
Heter-Disc	[0 , 0.11685]	0.95024
ID3	[-0.064 , 0.04955]	0.95024
IDD	[-0.01025 , 0.0586]	0.95024
Khiops	[-0.06285 , 0.0244]	0.95024
MDLP	[-0.03165 , 0.028]	0.95024
Modified Chi2	[-0.0475 , 0.0355]	0.95024
MODL	[-0.0436 , 0.0347]	0.95024
MVD	[-0.0153 , 0.1024]	0.95024
PKID	[-0.0481 , 0.05975]	0.95024
UCPD	[-0.09805 , -0.01185]	0.95024
USD	[-0.0875 , 0.0209]	0.95024
Zeta	[-0.0768 , 0.00455]	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	535.0	252.0	≥ 0.2	0.604342
Ameva	205.0	615.0	≥ 0.2	1
Bayesian	401.0	419.0	≥ 0.2	1
CACC	163.0	617.0	≥ 0.2	1
CADD	745.5	43.5	1.2711E-5	0.000059
CAIM	232.0	588.0	≥ 0.2	1
Chi2	440.5	379.5	≥ 0.2	1
ChiMerge	254.0	526.0	≥ 0.2	1
ClusterAnalysis	495.5	324.5	≥ 0.2	0.246906
DIBD	447.0	340.0	≥ 0.2	1
EqualFrequency	410.5	409.5	≥ 0.2	1
EqualWidth	430.0	390.0	≥ 0.2	0.782896
Extended Chi2	541.0	246.0	≥ 0.2	0.531726
FFD	501.0	279.0	0.124	0.119712
FUSINTER	289.5	530.5	≥ 0.2	1
HDD	386.0	434.0	≥ 0.2	1
HellingerBD	420.0	400.0	≥ 0.2	0.887764
Heter-Disc	630.5	162.5	≥ 0.2	0.516548
ID3	442.0	378.0	≥ 0.2	0.661693
IDD	453.0	334.0	≥ 0.2	1
Khiops	412.0	368.0	≥ 0.2	0.753531
MDLP	474.5	322.5	≥ 0.2	1
Modified Chi2	438.5	346.5	≥ 0.2	1
MODL	459.0	361.0	≥ 0.2	1
MVD	542.5	277.5	≥ 0.2	1
PKID	474.0	346.0	≥ 0.2	0.385962
UCPD	352.0	468.0	≥ 0.2	1
USD	358.0	462.0	≥ 0.2	1
Zeta	337.5	482.5	≥ 0.2	1

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

11.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.00045 , 0.1452]	0.90276
Ameva	[-0.0951 , -0.0282]	0.90276
Bayesian	[-0.0211 , 0.02755]	0.90276
CACC	[-0.08295 , -0.03225]	0.90276
CADD	[0.1105 , 0.22045]	0.90276
CAIM	[-0.0732 , -0.01]	0.90276
Chi2	[-0.01855 , 0.0823]	0.90276
ChiMerge	[-0.0736 , -0.0039]	0.90276
ClusterAnalysis	[-0.01455 , 0.1068]	0.90276
DIBD	[-0.0072 , 0.0526]	0.90276
EqualFrequency	[-0.03945 , 0.0581]	0.90276
EqualWidth	[-0.03435 , 0.0913]	0.90276
Extended Chi2	[0.00385 , 0.09115]	0.90276
FFD	[-0.00245 , 0.11775]	0.90276
FUSINTER	[-0.06545 , 0.00045]	0.90276
HDD	[-0.04675 , 0.03165]	0.90276
HellingerBD	[-0.0454 , 0.06315]	0.90276
Heter-Disc	[0.01265 , 0.16505]	0.90276
ID3	[-0.0356 , 0.0917]	0.90276
IDD	[-0.01175 , 0.0719]	0.90276
Khiops	[-0.0504 , 0.0705]	0.90276
MDLP	[0 , 0.02475]	0.90276
Modified Chi2	[-0.0179 , 0.0532]	0.90276
MODL	[-0.01405 , 0.04565]	0.90276
MVD	[0 , 0.12805]	0.90276
PKID	[-0.0257 , 0.10235]	0.90276
UCPD	[-0.0722 , 0.02935]	0.90276
USD	[-0.04665 , 0.0241]	0.90276
Zeta	[-0.04675 , 0.0181]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.169]	0.95024
Ameva	[-0.10285 , -0.0213]	0.95024
Bayesian	[-0.02985 , 0.0446]	0.95024
CACC	[-0.08895 , -0.0253]	0.95024
CADD	[0.0997 , 0.23255]	0.95024
CAIM	[-0.07995 , -0.0058]	0.95024
Chi2	[-0.02155 , 0.0944]	0.95024
ChiMerge	[-0.0827 , 0.0009]	0.95024
ClusterAnalysis	[-0.0243 , 0.119]	0.95024
DIBD	[-0.0091 , 0.0614]	0.95024
EqualFrequency	[-0.0521 , 0.07015]	0.95024
EqualWidth	[-0.0405 , 0.1034]	0.95024
Extended Chi2	[0 , 0.10275]	0.95024
FFD	[-0.01435 , 0.13085]	0.95024
FUSINTER	[-0.0749 , 0.01225]	0.95024
HDD	[-0.0551 , 0.0409]	0.95024
HellingerBD	[-0.0546 , 0.0751]	0.95024
Heter-Disc	[0.01025 , 0.18255]	0.95024
ID3	[-0.0436 , 0.1057]	0.95024
IDD	[-0.01655 , 0.09635]	0.95024
Khiops	[-0.05625 , 0.08145]	0.95024
MDLP	[0 , 0.02825]	0.95024
Modified Chi2	[-0.02155 , 0.0667]	0.95024
MODL	[-0.01735 , 0.0521]	0.95024
MVD	[0 , 0.1355]	0.95024
PKID	[-0.03795 , 0.1159]	0.95024
UCPD	[-0.07995 , 0.0399]	0.95024
USD	[-0.0545 , 0.03095]	0.95024
Zeta	[-0.05135 , 0.0238]	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	605.0	178.0	0.007942	0.008665
Ameva	227.0	593.0	≥ 0.2	1
Bayesian	421.0	362.0	≥ 0.2	1
CACC	220.0	600.0	≥ 0.2	1
CADD	705.0	78.0	8.964E-6	0.000036
CAIM	248.0	572.0	≥ 0.2	1
Chi2	423.0	397.0	≥ 0.2	0.856008
ChiMerge	226.0	594.0	≥ 0.2	1
ClusterAnalysis	532.0	288.0	0.1029	0.099649
DIBD	451.0	332.0	≥ 0.2	0.762861
Distance	409.5	410.5	≥ 0.2	1
EqualWidth	453.0	327.0	≥ 0.2	0.375541
Extended Chi2	516.5	303.5	≥ 0.2	0.327628
FFD	581.5	238.5	≥ 0.2	0.309038
FUSINTER	269.0	511.0	≥ 0.2	1
HDD	390.0	393.0	≥ 0.2	1
HellingerBD	360.0	460.0	≥ 0.2	1
Heter-Disc	681.0	139.0	0.0017372	0.002245
ID3	496.5	323.5	≥ 0.2	0.490913
IDD	473.0	310.0	≥ 0.2	0.526326
Khiops	439.5	380.5	≥ 0.2	1
MDLP	425.5	394.5	≥ 0.2	1
Modified Chi2	453.0	327.0	≥ 0.2	0.375541
MODL	373.0	447.0	≥ 0.2	1
MVD	543.5	241.5	≥ 0.2	0.225491
PKID	478.5	341.5	≥ 0.2	1
UCPD	306.0	514.0	≥ 0.2	1
USD	358.0	462.0	≥ 0.2	1
Zeta	334.0	486.0	≥ 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	[0.0179 , 0.1097]	0.90276
Ameva	[-0.1017 , -0.0186]	0.90276
Bayesian	[-0.02085 , 0.02995]	0.90276
CACC	[-0.10355 , -0.02475]	0.90276
CADD	[0.096 , 0.2261]	0.90276
CAIM	[-0.09645 , -0.00905]	0.90276
Chi2	[-0.0229 , 0.0472]	0.90276
ChiMerge	[-0.09775 , -0.01105]	0.90276
ClusterAnalysis	[-0.00045 , 0.07075]	0.90276
DIBD	[-0.01805 , 0.0484]	0.90276
Distance	[-0.0581 , 0.03945]	0.90276
EqualWidth	[-0.01285 , 0.0472]	0.90276
Extended Chi2	[-0.004 , 0.08235]	0.90276
FFD	[0.00745 , 0.065]	0.90276
FUSINTER	[-0.0571 , -0.00115]	0.90276
HDD	[-0.0391 , 0.03]	0.90276
HellingerBD	[-0.0353 , 0.01825]	0.90276
Heter-Disc	[0.035 , 0.1231]	0.90276
ID3	[-0.0077 , 0.0552]	0.90276
IDD	[-0.00395 , 0.05525]	0.90276
Khiops	[-0.0199 , 0.02835]	0.90276
MDLP	[-0.03395 , 0.0498]	0.90276
Modified Chi2	[-0.01245 , 0.04615]	0.90276
MODL	[-0.0277 , 0.0236]	0.90276
MVD	[0.01095 , 0.09265]	0.90276
PKID	[-0.0048 , 0.03725]	0.90276
UCPD	[-0.0544 , 0.00535]	0.90276
USD	[-0.04295 , 0.015]	0.90276
Zeta	[-0.0606 , 0.01395]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01335 , 0.1206]	0.95024
Ameva	[-0.11545 , -0.01205]	0.95024
Bayesian	[-0.0263 , 0.03615]	0.95024
CACC	[-0.1112 , -0.01705]	0.95024
CADD	[0.08905 , 0.2369]	0.95024
CAIM	[-0.10575 , -0.00555]	0.95024
Chi2	[-0.027 , 0.05755]	0.95024
ChiMerge	[-0.1046 , -0.00785]	0.95024
ClusterAnalysis	[-0.00615 , 0.07575]	0.95024
DIBD	[-0.03025 , 0.05365]	0.95024
Distance	[-0.07015 , 0.0521]	0.95024
EqualWidth	[-0.02045 , 0.05435]	0.95024
Extended Chi2	[-0.01075 , 0.0891]	0.95024
FFD	[0.0028 , 0.0713]	0.95024
FUSINTER	[-0.0631 , 0.00385]	0.95024
HDD	[-0.0472 , 0.0377]	0.95024
HellingerBD	[-0.04545 , 0.02755]	0.95024
Heter-Disc	[0.03035 , 0.13495]	0.95024
ID3	[-0.01325 , 0.0608]	0.95024
IDD	[-0.0067 , 0.06295]	0.95024
Khiops	[-0.02545 , 0.0345]	0.95024
MDLP	[-0.0438 , 0.0582]	0.95024
Modified Chi2	[-0.01735 , 0.05215]	0.95024
MODL	[-0.0341 , 0.0374]	0.95024
MVD	[0.00145 , 0.1056]	0.95024
PKID	[-0.0075 , 0.0452]	0.95024
UCPD	[-0.06125 , 0.01025]	0.95024
USD	[-0.0507 , 0.0212]	0.95024
Zeta	[-0.06605 , 0.0228]	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	542.5	277.5	0.07586	0.073341
Ameva	167.0	653.0	≥ 0.2	1
Bayesian	378.0	442.0	≥ 0.2	1
CACC	161.0	659.0	≥ 0.2	1
CADD	753.0	67.0	3.876E-7	0.000004
CAIM	215.0	605.0	≥ 0.2	1
Chi2	407.0	413.0	≥ 0.2	1
ChiMerge	214.0	606.0	≥ 0.2	1
ClusterAnalysis	420.0	360.0	≥ 0.2	0.670379
DIBD	436.5	383.5	≥ 0.2	0.716212
Distance	390.0	430.0	≥ 0.2	1
EqualFrequency	327.0	453.0	≥ 0.2	1
Extended Chi2	484.0	336.0	≥ 0.2	0.316645
FFD	486.0	294.0	0.18474	0.178091
FUSINTER	213.0	607.0	≥ 0.2	1
HDD	384.0	436.0	≥ 0.2	1
HellingerBD	324.0	456.0	≥ 0.2	1
Heter-Disc	672.0	148.0	2.482E-4	0.000418
ID3	389.0	391.0	≥ 0.2	1
IDD	447.0	373.0	≥ 0.2	0.614227
Khiops	314.5	505.5	≥ 0.2	1
MDLP	408.0	412.0	≥ 0.2	1
Modified Chi2	401.0	379.0	≥ 0.2	0.87228
MODL	367.0	453.0	≥ 0.2	1
MVD	519.5	300.5	0.14421	0.138598
PKID	381.5	438.5	≥ 0.2	1
UCPD	210.0	610.0	≥ 0.2	1
USD	312.0	508.0	≥ 0.2	1
Zeta	326.0	494.0	≥ 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	[0.0014 , 0.08735]	0.90276
Ameva	[-0.1244 , -0.04145]	0.90276
Bayesian	[-0.0469 , 0.0284]	0.90276
CACC	[-0.1317 , -0.0389]	0.90276
CADD	[0.0787 , 0.1909]	0.90276
CAIM	[-0.12275 , -0.0156]	0.90276
Chi2	[-0.04275 , 0.0462]	0.90276
ChiMerge	[-0.0978 , -0.01875]	0.90276
ClusterAnalysis	[-0.0183 , 0.03715]	0.90276
DIBD	[-0.0313 , 0.05315]	0.90276
Distance	[-0.0913 , 0.03435]	0.90276
EqualFrequency	[-0.0472 , 0.01285]	0.90276
Extended Chi2	[-0.01655 , 0.07135]	0.90276
FFD	[-0.0045 , 0.04665]	0.90276
FUSINTER	[-0.09155 , -0.02535]	0.90276
HDD	[-0.0369 , 0.0204]	0.90276
HellingerBD	[-0.0456 , 0.0142]	0.90276
Heter-Disc	[0.0394 , 0.10405]	0.90276
ID3	[-0.0226 , 0.02005]	0.90276
IDD	[-0.03375 , 0.04975]	0.90276
Khiops	[-0.05525 , 0.00535]	0.90276
MDLP	[-0.04405 , 0.0385]	0.90276
Modified Chi2	[-0.0253 , 0.02855]	0.90276
MODL	[-0.04685 , 0.02275]	0.90276
MVD	[-0.0056 , 0.0775]	0.90276
PKID	[-0.0256 , 0.01825]	0.90276
UCPD	[-0.08125 , -0.01705]	0.90276
USD	[-0.05825 , 0.00555]	0.90276
Zeta	[-0.06345 , 0.0114]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0068 , 0.09855]	0.95024
Ameva	[-0.1396 , -0.03505]	0.95024
Bayesian	[-0.05455 , 0.03535]	0.95024
CACC	[-0.13985 , -0.03315]	0.95024
CADD	[0.07135 , 0.20215]	0.95024
CAIM	[-0.13165 , -0.0093]	0.95024
Chi2	[-0.05455 , 0.0556]	0.95024
ChiMerge	[-0.1113 , -0.01295]	0.95024
ClusterAnalysis	[-0.02325 , 0.0428]	0.95024
DIBD	[-0.0423 , 0.0602]	0.95024
Distance	[-0.1034 , 0.0405]	0.95024
EqualFrequency	[-0.05435 , 0.02045]	0.95024
Extended Chi2	[-0.02275 , 0.0837]	0.95024
FFD	[-0.0115 , 0.05055]	0.95024
FUSINTER	[-0.0972 , -0.02055]	0.95024
HDD	[-0.0494 , 0.02345]	0.95024
HellingerBD	[-0.05165 , 0.0215]	0.95024
Heter-Disc	[0.0358 , 0.1137]	0.95024
ID3	[-0.0254 , 0.024]	0.95024
IDD	[-0.0456 , 0.06045]	0.95024
Khiops	[-0.06355 , 0.01235]	0.95024
MDLP	[-0.0544 , 0.04735]	0.95024
Modified Chi2	[-0.0296 , 0.03425]	0.95024
MODL	[-0.05415 , 0.03105]	0.95024
MVD	[-0.01525 , 0.08455]	0.95024
PKID	[-0.0307 , 0.0209]	0.95024
UCPD	[-0.08885 , -0.0123]	0.95024
USD	[-0.06655 , 0.0114]	0.95024
Zeta	[-0.07405 , 0.01665]	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	547.0	273.0	≥ 0.2	0.341863
Ameva	82.0	738.0	≥ 0.2	1
Bayesian	267.5	517.5	≥ 0.2	1
CACC	126.0	694.0	≥ 0.2	1
CADD	681.0	106.0	0.0012762	0.001767
CAIM	104.0	716.0	≥ 0.2	1
Chi2	305.5	514.5	≥ 0.2	1
ChiMerge	111.0	669.0	≥ 0.2	1
ClusterAnalysis	376.5	443.5	≥ 0.2	1
DIBD	320.0	463.0	≥ 0.2	1
Distance	246.0	541.0	≥ 0.2	1
EqualFrequency	303.5	516.5	≥ 0.2	1
EqualWidth	336.0	484.0	≥ 0.2	1
FFD	383.0	397.0	≥ 0.2	1
FUSINTER	130.0	650.0	≥ 0.2	1
HDD	247.0	533.0	≥ 0.2	1
HellingerBD	298.0	522.0	≥ 0.2	1
Heter-Disc	520.0	271.0	≥ 0.2	1
ID3	319.0	461.0	≥ 0.2	1
IDD	404.0	416.0	≥ 0.2	1
Khiops	315.0	505.0	≥ 0.2	1
MDLP	358.0	462.0	≥ 0.2	1
Modified Chi2	320.5	499.5	≥ 0.2	1
MODL	306.5	513.5	≥ 0.2	1
MVD	453.0	334.0	≥ 0.2	1
PKID	336.0	444.0	≥ 0.2	1
UCPD	199.0	581.0	≥ 0.2	1
USD	236.5	583.5	≥ 0.2	1
Zeta	230.0	590.0	≥ 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	[0.0027 , 0.0867]	0.90276
Ameva	[-0.16845 , -0.06125]	0.90276
Bayesian	[-0.0571 , 0]	0.90276
CACC	[-0.1654 , -0.0563]	0.90276
CADD	[0.03565 , 0.16375]	0.90276
CAIM	[-0.1304 , -0.0537]	0.90276
Chi2	[-0.0377 , 0.00145]	0.90276
ChiMerge	[-0.1267 , -0.05805]	0.90276
ClusterAnalysis	[-0.05565 , 0.0272]	0.90276
DIBD	[-0.0545 , 0.01255]	0.90276
Distance	[-0.09115 , -0.00385]	0.90276
EqualFrequency	[-0.08235 , 0.004]	0.90276
EqualWidth	[-0.07135 , 0.01655]	0.90276
FFD	[-0.05115 , 0.0379]	0.90276
FUSINTER	[-0.08555 , -0.02765]	0.90276
HDD	[-0.07335 , -0.00545]	0.90276
HellingerBD	[-0.0816 , 0.00315]	0.90276
Heter-Disc	[0 , 0.0867]	0.90276
ID3	[-0.06525 , 0.0162]	0.90276
IDD	[-0.0327 , 0.0268]	0.90276
Khiops	[-0.072 , 0.01095]	0.90276
MDLP	[-0.0428 , 0.0119]	0.90276
Modified Chi2	[-0.03845 , 0.0014]	0.90276
MODL	[-0.051 , 0.0038]	0.90276
MVD	[-0.0268 , 0.03945]	0.90276
PKID	[-0.07355 , 0.01935]	0.90276
UCPD	[-0.10965 , -0.0286]	0.90276
USD	[-0.08095 , -0.0134]	0.90276
Zeta	[-0.09145 , -0.01595]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00045 , 0.0946]	0.95024
Ameva	[-0.1962 , -0.05625]	0.95024
Bayesian	[-0.0626 , 0.00345]	0.95024
CACC	[-0.1807 , -0.0507]	0.95024
CADD	[0.0301 , 0.1771]	0.95024
CAIM	[-0.14395 , -0.05015]	0.95024
Chi2	[-0.0427 , 0.0029]	0.95024
ChiMerge	[-0.1355 , -0.0494]	0.95024
ClusterAnalysis	[-0.0633 , 0.0389]	0.95024
DIBD	[-0.06 , 0.01885]	0.95024
Distance	[-0.10275 , 0]	0.95024
EqualFrequency	[-0.0891 , 0.01075]	0.95024
EqualWidth	[-0.0837 , 0.02275]	0.95024
FFD	[-0.05995 , 0.0445]	0.95024
FUSINTER	[-0.097 , -0.0232]	0.95024
HDD	[-0.08515 , -0.00155]	0.95024
HellingerBD	[-0.09465 , 0.0096]	0.95024
Heter-Disc	[0 , 0.0879]	0.95024
ID3	[-0.0769 , 0.02165]	0.95024
IDD	[-0.0412 , 0.03135]	0.95024
Khiops	[-0.08365 , 0.01485]	0.95024
MDLP	[-0.0582 , 0.01755]	0.95024
Modified Chi2	[-0.0482 , 0.0042]	0.95024
MODL	[-0.0609 , 0.0095]	0.95024
MVD	[-0.0379 , 0.04595]	0.95024
PKID	[-0.0829 , 0.02485]	0.95024
UCPD	[-0.1262 , -0.01915]	0.95024
USD	[-0.0903 , -0.0065]	0.95024
Zeta	[-0.10075 , -0.00855]	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	486.5	333.5	≥ 0.2	0.586555
Ameva	169.0	651.0	≥ 0.2	1
Bayesian	302.5	517.5	≥ 0.2	1
CACC	130.0	690.0	≥ 0.2	1
CADD	695.5	124.5	1.9306E-4	0.00035
CAIM	168.0	652.0	≥ 0.2	1
Chi2	312.0	508.0	≥ 0.2	1
ChiMerge	172.0	648.0	≥ 0.2	1
ClusterAnalysis	379.5	440.5	≥ 0.2	1
DIBD	381.5	438.5	≥ 0.2	1
Distance	279.0	501.0	≥ 0.2	1
EqualFrequency	238.5	581.5	≥ 0.2	1
EqualWidth	294.0	486.0	≥ 0.2	1
Extended Chi2	397.0	383.0	≥ 0.2	0.916644
FUSINTER	154.0	626.0	≥ 0.2	1
HDD	313.0	507.0	≥ 0.2	1
HellingerBD	283.0	497.0	≥ 0.2	1
Heter-Disc	539.0	244.0	0.10706	0.103246
ID3	331.5	453.5	≥ 0.2	1
IDD	352.5	467.5	≥ 0.2	1
Khiops	216.5	603.5	≥ 0.2	1
MDLP	303.0	477.0	≥ 0.2	1
Modified Chi2	287.0	493.0	≥ 0.2	1
MODL	259.0	561.0	≥ 0.2	1
MVD	430.0	390.0	≥ 0.2	1
PKID	229.0	562.0	≥ 0.2	1
UCPD	169.0	651.0	≥ 0.2	1
USD	206.0	614.0	≥ 0.2	1
Zeta	211.0	609.0	≥ 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	[-0.00835 , 0.0564]	0.90276
Ameva	[-0.1567 , -0.0544]	0.90276
Bayesian	[-0.07415 , 0.0045]	0.90276
CACC	[-0.15195 , -0.0622]	0.90276
CADD	[0.0581 , 0.17355]	0.90276
CAIM	[-0.1386 , -0.0427]	0.90276
Chi2	[-0.06765 , 0.00745]	0.90276
ChiMerge	[-0.13195 , -0.03935]	0.90276
ClusterAnalysis	[-0.0303 , 0.01715]	0.90276
DIBD	[-0.0523 , 0.0254]	0.90276
Distance	[-0.11775 , 0.00245]	0.90276
EqualFrequency	[-0.065 , -0.00745]	0.90276
EqualWidth	[-0.04665 , 0.0045]	0.90276
Extended Chi2	[-0.0379 , 0.05115]	0.90276
FUSINTER	[-0.1014 , -0.0344]	0.90276
HDD	[-0.0758 , 0.00295]	0.90276
HellingerBD	[-0.0739 , 0.0021]	0.90276
Heter-Disc	[0.00425 , 0.07365]	0.90276
ID3	[-0.0369 , 0.0076]	0.90276
IDD	[-0.0531 , 0.01645]	0.90276
Khiops	[-0.0551 , -0.0102]	0.90276
MDLP	[-0.08065 , 0.0114]	0.90276
Modified Chi2	[-0.05095 , 0.0027]	0.90276
MODL	[-0.06775 , -0.0068]	0.90276
MVD	[-0.02595 , 0.06135]	0.90276
PKID	[-0.0275 , -0.00025]	0.90276
UCPD	[-0.10015 , -0.0362]	0.90276
USD	[-0.0842 , -0.01845]	0.90276
Zeta	[-0.0877 , -0.0207]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.012 , 0.07105]	0.95024
Ameva	[-0.16495 , -0.04735]	0.95024
Bayesian	[-0.08455 , 0.01245]	0.95024
CACC	[-0.1609 , -0.0548]	0.95024
CADD	[0.0496 , 0.18745]	0.95024
CAIM	[-0.14805 , -0.03415]	0.95024
Chi2	[-0.0741 , 0.02235]	0.95024
ChiMerge	[-0.14015 , -0.0329]	0.95024
ClusterAnalysis	[-0.0366 , 0.02195]	0.95024
DIBD	[-0.0659 , 0.0332]	0.95024
Distance	[-0.13085 , 0.01435]	0.95024
EqualFrequency	[-0.0713 , -0.0028]	0.95024
EqualWidth	[-0.05055 , 0.0115]	0.95024
Extended Chi2	[-0.0445 , 0.05995]	0.95024
FUSINTER	[-0.11185 , -0.0284]	0.95024
HDD	[-0.08365 , 0.0059]	0.95024
HellingerBD	[-0.08215 , 0.0088]	0.95024
Heter-Disc	[0.0007 , 0.0839]	0.95024
ID3	[-0.04165 , 0.0128]	0.95024
IDD	[-0.0645 , 0.02755]	0.95024
Khiops	[-0.0611 , -0.00715]	0.95024
MDLP	[-0.09255 , 0.0241]	0.95024
Modified Chi2	[-0.05915 , 0.008]	0.95024
MODL	[-0.077 , -0.0011]	0.95024
MVD	[-0.0335 , 0.08285]	0.95024
PKID	[-0.02935 , 0]	0.95024
UCPD	[-0.1054 , -0.02895]	0.95024
USD	[-0.09095 , -0.0129]	0.95024
Zeta	[-0.0993 , -0.01575]	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	709.0	76.0	2.872E-5	0.000085
Ameva	284.0	536.0	≥ 0.2	1
Bayesian	567.0	216.0	0.0407	0.040195
CACC	297.0	523.0	≥ 0.2	1
CADD	754.5	30.5	1.2835E-7	0.000003
CAIM	318.0	502.0	≥ 0.2	1
Chi2	579.5	240.5	0.059829999999999994	0.058418
ChiMerge	330.0	450.0	≥ 0.2	1
ClusterAnalysis	600.0	180.0	0.002752	0.003308
DIBD	544.5	240.5	≥ 0.2	0.219283
Distance	530.5	289.5	≥ 0.2	0.237231
EqualFrequency	511.0	269.0	0.09288	0.089974
EqualWidth	607.0	213.0	0.007264	0.007939
Extended Chi2	650.0	130.0	1.4732E-4	0.000278
FFD	626.0	154.0	6.67E-4	0.000966
HDD	574.0	246.0	0.02686	0.027029
HellingerBD	561.0	259.0	0.0422	0.041715
Heter-Disc	702.5	82.5	5.219E-5	0.000135
ID3	596.0	224.0	0.011536	0.012183
IDD	609.0	211.0	0.0556	0.054286
Khiops	539.0	281.0	≥ 0.2	0.409482
MDLP	623.5	196.5	0.010704	0.011385
Modified Chi2	660.5	159.5	0.0016871	0.002161
MODL	601.0	182.0	0.009616	0.010327
MVD	625.5	159.5	0.009878999999999999	0.010614
PKID	572.0	208.0	0.010196	0.010872
UCPD	366.0	414.0	≥ 0.2	1
USD	510.0	310.0	0.18312	0.176743
Zeta	488.0	332.0	≥ 0.2	0.29136

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	[0.05485 , 0.1485]	0.90276
Ameva	[-0.0518 , -0.0007]	0.90276
Bayesian	[0.00935 , 0.05915]	0.90276
CACC	[-0.06145 , 0.0026]	0.90276
CADD	[0.1414 , 0.2686]	0.90276
CAIM	[-0.0405 , 0.0063]	0.90276
Chi2	[0.0117 , 0.07165]	0.90276
ChiMerge	[-0.03965 , 0.01305]	0.90276
ClusterAnalysis	[0.02655 , 0.10815]	0.90276
DIBD	[0.0047 , 0.0858]	0.90276
Distance	[-0.00045 , 0.06545]	0.90276
EqualFrequency	[0.00115 , 0.0571]	0.90276
EqualWidth	[0.02535 , 0.09155]	0.90276
Extended Chi2	[0.02765 , 0.08555]	0.90276
FFD	[0.0344 , 0.1014]	0.90276
HDD	[0.0107 , 0.06525]	0.90276
HellingerBD	[0.00635 , 0.07175]	0.90276
Heter-Disc	[0.06595 , 0.1833]	0.90276
ID3	[0.0217 , 0.09455]	0.90276
IDD	[0.02035 , 0.09135]	0.90276
Khiops	[0.00045 , 0.0598]	0.90276
MDLP	[0.024 , 0.07725]	0.90276
Modified Chi2	[0.02705 , 0.074]	0.90276
MODL	[0.015 , 0.0648]	0.90276
MVD	[0.03795 , 0.1446]	0.90276
PKID	[0.01745 , 0.08935]	0.90276
UCPD	[-0.0294 , 0.02245]	0.90276
USD	[-0.0038 , 0.03965]	0.90276
Zeta	[-0.01095 , 0.04715]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.04965 , 0.1579]	0.95024
Ameva	[-0.05685 , 0.00505]	0.95024
Bayesian	[0.0044 , 0.063]	0.95024
CACC	[-0.07035 , 0.0076]	0.95024
CADD	[0.12635 , 0.2784]	0.95024
CAIM	[-0.04495 , 0.0108]	0.95024
Chi2	[0.00615 , 0.08]	0.95024
ChiMerge	[-0.04495 , 0.0196]	0.95024
ClusterAnalysis	[0.01945 , 0.1149]	0.95024
DIBD	[0.0008 , 0.0987]	0.95024
Distance	[-0.01225 , 0.0749]	0.95024
EqualFrequency	[-0.00385 , 0.0631]	0.95024
EqualWidth	[0.02055 , 0.0972]	0.95024
Extended Chi2	[0.0232 , 0.097]	0.95024
FFD	[0.0284 , 0.11185]	0.95024
HDD	[0.0056 , 0.07345]	0.95024
HellingerBD	[0.00125 , 0.0787]	0.95024
Heter-Disc	[0.06025 , 0.19935]	0.95024
ID3	[0.01375 , 0.10115]	0.95024
IDD	[0.01545 , 0.10325]	0.95024
Khiops	[-0.00135 , 0.06535]	0.95024
MDLP	[0.0169 , 0.0865]	0.95024
Modified Chi2	[0.0223 , 0.07865]	0.95024
MODL	[0.01215 , 0.07115]	0.95024
MVD	[0.03195 , 0.1646]	0.95024
PKID	[0.0112 , 0.09795]	0.95024
UCPD	[-0.0349 , 0.0291]	0.95024
USD	[-0.00775 , 0.04415]	0.95024
Zeta	[-0.01575 , 0.05395]	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	612.0	208.0	0.005832	0.006492
Ameva	217.0	603.0	≥ 0.2	1
Bayesian	412.0	408.0	≥ 0.2	0.973194
CACC	203.0	617.0	≥ 0.2	1
CADD	734.0	46.0	6.956E-8	0.000002
CAIM	190.0	597.0	≥ 0.2	1
Chi2	429.0	391.0	≥ 0.2	0.79324
ChiMerge	242.0	538.0	≥ 0.2	1
ClusterAnalysis	492.0	328.0	≥ 0.2	0.532148
DIBD	455.0	365.0	≥ 0.2	0.540816
Distance	434.0	386.0	≥ 0.2	0.74192
EqualFrequency	393.0	390.0	≥ 0.2	1
EqualWidth	436.0	384.0	≥ 0.2	0.721695
Extended Chi2	533.0	247.0	0.0459	0.045226
FFD	507.0	313.0	≥ 0.2	0.747402
FUSINTER	246.0	574.0	≥ 0.2	1
HellingerBD	383.0	397.0	≥ 0.2	1
Heter-Disc	596.0	184.0	0.003362	0.003955
ID3	434.5	385.5	≥ 0.2	1
IDD	464.0	356.0	≥ 0.2	0.463833
Khiops	356.0	424.0	≥ 0.2	1
MDLP	478.0	342.0	≥ 0.2	0.357192
Modified Chi2	435.0	345.0	≥ 0.2	0.525459
MODL	456.0	364.0	≥ 0.2	0.531958
MVD	553.0	227.0	0.02216	0.02251
PKID	448.0	372.0	≥ 0.2	1
UCPD	324.0	496.0	≥ 0.2	1
USD	299.0	481.0	≥ 0.2	1
Zeta	304.0	476.0	≥ 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	[0.02365 , 0.11205]	0.90276
Ameva	[-0.114 , -0.02345]	0.90276
Bayesian	[-0.0293 , 0.0354]	0.90276
CACC	[-0.1023 , -0.02775]	0.90276
CADD	[0.09405 , 0.2189]	0.90276
CAIM	[-0.0794 , -0.01115]	0.90276
Chi2	[-0.03175 , 0.05235]	0.90276
ChiMerge	[-0.07575 , -0.0109]	0.90276
ClusterAnalysis	[-0.00655 , 0.06655]	0.90276
DIBD	[-0.02195 , 0.05415]	0.90276
Distance	[-0.03165 , 0.04675]	0.90276
EqualFrequency	[-0.03 , 0.0391]	0.90276
EqualWidth	[-0.0204 , 0.0369]	0.90276
Extended Chi2	[0.00545 , 0.07335]	0.90276
FFD	[-0.00295 , 0.0758]	0.90276
FUSINTER	[-0.06525 , -0.0107]	0.90276
HellingerBD	[-0.0323 , 0.02565]	0.90276
Heter-Disc	[0.0292 , 0.1344]	0.90276
ID3	[-0.0115 , 0.0243]	0.90276
IDD	[-0.01755 , 0.06405]	0.90276
Khiops	[-0.04135 , 0.03345]	0.90276
MDLP	[-0.01955 , 0.05615]	0.90276
Modified Chi2	[-0.0143 , 0.04595]	0.90276
MODL	[-0.01705 , 0.0378]	0.90276
MVD	[0.01725 , 0.1061]	0.90276
PKID	[-0.0186 , 0.04455]	0.90276
UCPD	[-0.07535 , 0.01205]	0.90276
USD	[-0.02925 , 0.00295]	0.90276
Zeta	[-0.04095 , 0.0141]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01635 , 0.12025]	0.95024
Ameva	[-0.12175 , -0.01585]	0.95024
Bayesian	[-0.03405 , 0.04205]	0.95024
CACC	[-0.10955 , -0.02035]	0.95024
CADD	[0.08475 , 0.23015]	0.95024
CAIM	[-0.0862 , -0.00855]	0.95024
Chi2	[-0.03695 , 0.06525]	0.95024
ChiMerge	[-0.08425 , -0.00435]	0.95024
ClusterAnalysis	[-0.01015 , 0.07705]	0.95024
DIBD	[-0.03125 , 0.06425]	0.95024
Distance	[-0.0409 , 0.0551]	0.95024
EqualFrequency	[-0.0377 , 0.0472]	0.95024
EqualWidth	[-0.02345 , 0.0494]	0.95024
Extended Chi2	[0.00155 , 0.08515]	0.95024
FFD	[-0.0059 , 0.08365]	0.95024
FUSINTER	[-0.07345 , -0.0056]	0.95024
HellingerBD	[-0.03665 , 0.0368]	0.95024
Heter-Disc	[0.0223 , 0.14815]	0.95024
ID3	[-0.01535 , 0.0271]	0.95024
IDD	[-0.0226 , 0.07515]	0.95024
Khiops	[-0.04715 , 0.0421]	0.95024
MDLP	[-0.0275 , 0.0634]	0.95024
Modified Chi2	[-0.01835 , 0.0492]	0.95024
MODL	[-0.0237 , 0.0435]	0.95024
MVD	[0.00825 , 0.1154]	0.95024
PKID	[-0.02195 , 0.05875]	0.95024
UCPD	[-0.0852 , 0.0204]	0.95024
USD	[-0.03215 , 0.0102]	0.95024
Zeta	[-0.04515 , 0.0223]	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	640.0	180.0	0.0015176	0.001947
Ameva	187.0	633.0	≥ 0.2	1
Bayesian	440.0	380.0	≥ 0.2	0.681836
CACC	198.0	622.0	≥ 0.2	1
CADD	789.0	31.0	4.32E-9	0
CAIM	209.0	571.0	≥ 0.2	1
Chi2	467.0	353.0	≥ 0.2	0.439597
ChiMerge	229.0	591.0	≥ 0.2	1
ClusterAnalysis	490.5	289.5	0.16462	0.157974
DIBD	494.0	326.0	≥ 0.2	0.256045
Distance	400.0	420.0	≥ 0.2	1
EqualFrequency	460.0	360.0	≥ 0.2	0.497274
EqualWidth	456.0	324.0	≥ 0.2	0.353404
Extended Chi2	522.0	298.0	0.13508	0.130497
FFD	497.0	283.0	0.13846	0.133572
FUSINTER	259.0	561.0	≥ 0.2	1
HDD	397.0	383.0	≥ 0.2	0.916644
Heter-Disc	686.0	134.0	1.01E-4	0.000202
ID3	460.0	320.0	≥ 0.2	0.3252
IDD	508.0	312.0	0.1922	0.185514
Khiops	411.0	409.0	≥ 0.2	0.983914
MDLP	453.0	367.0	≥ 0.2	0.558752
Modified Chi2	462.0	358.0	≥ 0.2	0.480395
MODL	410.0	410.0	≥ 0.2	0.994638
MVD	566.0	254.0	0.0356	0.035417
PKID	450.0	330.0	≥ 0.2	0.398514
UCPD	263.0	557.0	≥ 0.2	1
USD	341.0	479.0	≥ 0.2	1
Zeta	354.0	466.0	≥ 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	[0.0362 , 0.1053]	0.90276
Ameva	[-0.10775 , -0.0292]	0.90276
Bayesian	[-0.03185 , 0.04315]	0.90276
CACC	[-0.1162 , -0.03115]	0.90276
CADD	[0.1075 , 0.2079]	0.90276
CAIM	[-0.1023 , -0.02155]	0.90276
Chi2	[-0.01945 , 0.06535]	0.90276
ChiMerge	[-0.0917 , -0.0136]	0.90276
ClusterAnalysis	[-0.0024 , 0.05405]	0.90276
DIBD	[-0.01115 , 0.05955]	0.90276
Distance	[-0.06315 , 0.0454]	0.90276
EqualFrequency	[-0.01825 , 0.0353]	0.90276
EqualWidth	[-0.0142 , 0.0456]	0.90276
Extended Chi2	[-0.00315 , 0.0816]	0.90276
FFD	[-0.0021 , 0.0739]	0.90276
FUSINTER	[-0.07175 , -0.00635]	0.90276
HDD	[-0.02565 , 0.0323]	0.90276
Heter-Disc	[0.0481 , 0.1113]	0.90276
ID3	[-0.00885 , 0.04695]	0.90276
IDD	[-0.01215 , 0.07645]	0.90276
Khiops	[-0.0204 , 0.01845]	0.90276
MDLP	[-0.0351 , 0.0563]	0.90276
Modified Chi2	[-0.01565 , 0.04835]	0.90276
MODL	[-0.0291 , 0.0306]	0.90276
MVD	[0.0134 , 0.108]	0.90276
PKID	[-0.01285 , 0.04935]	0.90276
UCPD	[-0.07385 , -0.0086]	0.90276
USD	[-0.0496 , 0.0124]	0.90276
Zeta	[-0.05875 , 0.01655]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02715 , 0.1128]	0.95024
Ameva	[-0.1153 , -0.02375]	0.95024
Bayesian	[-0.03815 , 0.0496]	0.95024
CACC	[-0.12335 , -0.0241]	0.95024
CADD	[0.10105 , 0.21885]	0.95024
CAIM	[-0.1063 , -0.01225]	0.95024
Chi2	[-0.02575 , 0.0732]	0.95024
ChiMerge	[-0.09925 , -0.0079]	0.95024
ClusterAnalysis	[-0.00785 , 0.0606]	0.95024
DIBD	[-0.02085 , 0.0651]	0.95024
Distance	[-0.0751 , 0.0546]	0.95024
EqualFrequency	[-0.02755 , 0.04545]	0.95024
EqualWidth	[-0.0215 , 0.05165]	0.95024
Extended Chi2	[-0.0096 , 0.09465]	0.95024
FFD	[-0.0088 , 0.08215]	0.95024
FUSINTER	[-0.0787 , -0.00125]	0.95024
HDD	[-0.0368 , 0.03665]	0.95024
Heter-Disc	[0.04155 , 0.1201]	0.95024
ID3	[-0.01415 , 0.0576]	0.95024
IDD	[-0.0262 , 0.0844]	0.95024
Khiops	[-0.0279 , 0.02105]	0.95024
MDLP	[-0.0444 , 0.0633]	0.95024
Modified Chi2	[-0.0204 , 0.0549]	0.95024
MODL	[-0.0373 , 0.03405]	0.95024
MVD	[0.00245 , 0.1155]	0.95024
PKID	[-0.018 , 0.0586]	0.95024
UCPD	[-0.0798 , -0.0008]	0.95024
USD	[-0.0551 , 0.0195]	0.95024
Zeta	[-0.0672 , 0.02465]	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	313.5	479.5	≥ 0.2	1
Ameva	52.0	768.0	≥ 0.2	1
Bayesian	175.5	615.5	≥ 0.2	1
CACC	49.5	770.5	≥ 0.2	1
CADD	591.0	208.0	≥ 0.2	1
CAIM	82.0	738.0	≥ 0.2	1
Chi2	200.5	619.5	≥ 0.2	1
ChiMerge	76.0	704.0	≥ 0.2	1
ClusterAnalysis	223.5	596.5	≥ 0.2	1
DIBD	285.5	534.5	≥ 0.2	1
Distance	162.5	630.5	≥ 0.2	1
EqualFrequency	139.0	681.0	≥ 0.2	1
EqualWidth	148.0	672.0	≥ 0.2	1
Extended Chi2	271.0	520.0	≥ 0.2	1
FFD	244.0	539.0	≥ 0.2	1
FUSINTER	82.5	702.5	≥ 0.2	1
HDD	184.0	596.0	≥ 0.2	1
HellingerBD	134.0	686.0	≥ 0.2	1
ID3	171.0	609.0	≥ 0.2	1
IDD	234.0	586.0	≥ 0.2	1
Khiops	167.0	653.0	≥ 0.2	1
MDLP	204.5	615.5	≥ 0.2	1
Modified Chi2	191.5	628.5	≥ 0.2	1
MODL	139.0	644.0	≥ 0.2	1
MVD	307.0	492.0	≥ 0.2	1
PKID	201.5	618.5	≥ 0.2	1
UCPD	69.0	711.0	≥ 0.2	1
USD	121.0	699.0	≥ 0.2	1
Zeta	132.0	688.0	≥ 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	[-0.03865 , 0]	0.90276
Ameva	[-0.21655 , -0.10265]	0.90276
Bayesian	[-0.1025 , -0.0199]	0.90276
CACC	[-0.21715 , -0.09725]	0.90276
CADD	[0 , 0.09965]	0.90276
CAIM	[-0.21475 , -0.09335]	0.90276
Chi2	[-0.104 , -0.02155]	0.90276
ChiMerge	[-0.1862 , -0.08925]	0.90276
ClusterAnalysis	[-0.08645 , -0.0197]	0.90276
DIBD	[-0.1032 , 0]	0.90276
Distance	[-0.16505 , -0.01265]	0.90276
EqualFrequency	[-0.1231 , -0.035]	0.90276
EqualWidth	[-0.10405 , -0.0394]	0.90276
Extended Chi2	[-0.0867 , 0]	0.90276
FFD	[-0.07365 , -0.00425]	0.90276
FUSINTER	[-0.1833 , -0.06595]	0.90276
HDD	[-0.1344 , -0.0292]	0.90276
HellingerBD	[-0.1113 , -0.0481]	0.90276
ID3	[-0.09955 , -0.02985]	0.90276
IDD	[-0.09625 , -0.002]	0.90276
Khiops	[-0.12605 , -0.04085]	0.90276
MDLP	[-0.1383 , -0.0018]	0.90276
Modified Chi2	[-0.10435 , -0.0223]	0.90276
MODL	[-0.113 , -0.0312]	0.90276
MVD	[-0.0691 , 0]	0.90276
PKID	[-0.11625 , -0.02395]	0.90276
UCPD	[-0.16285 , -0.08435]	0.90276
USD	[-0.1502 , -0.05685]	0.90276
Zeta	[-0.1586 , -0.05155]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.04485 , 0.00125]	0.95024
Ameva	[-0.226 , -0.09455]	0.95024
Bayesian	[-0.1089 , -0.0183]	0.95024
CACC	[-0.2248 , -0.0871]	0.95024
CADD	[0 , 0.10255]	0.95024
CAIM	[-0.22195 , -0.0812]	0.95024
Chi2	[-0.12135 , -0.0156]	0.95024
ChiMerge	[-0.1963 , -0.0807]	0.95024
ClusterAnalysis	[-0.0935 , -0.0129]	0.95024
DIBD	[-0.11685 , 0]	0.95024
Distance	[-0.18255 , -0.01025]	0.95024
EqualFrequency	[-0.13495 , -0.03035]	0.95024
EqualWidth	[-0.1137 , -0.0358]	0.95024
Extended Chi2	[-0.0879 , 0]	0.95024
FFD	[-0.0839 , -0.0007]	0.95024
FUSINTER	[-0.19935 , -0.06025]	0.95024
HDD	[-0.14815 , -0.0223]	0.95024
HellingerBD	[-0.1201 , -0.04155]	0.95024
ID3	[-0.1093 , -0.02315]	0.95024
IDD	[-0.1191 , 0]	0.95024
Khiops	[-0.13705 , -0.0333]	0.95024
MDLP	[-0.14465 , -0.00045]	0.95024
Modified Chi2	[-0.11725 , -0.01875]	0.95024
MODL	[-0.12715 , -0.0264]	0.95024
MVD	[-0.0753 , 0]	0.95024
PKID	[-0.13325 , -0.0194]	0.95024
UCPD	[-0.1711 , -0.077]	0.95024
USD	[-0.1606 , -0.0486]	0.95024
Zeta	[-0.1673 , -0.0449]	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	551.0	269.0	0.0584	0.057179
Ameva	176.0	644.0	≥ 0.2	1
Bayesian	352.0	468.0	≥ 0.2	1
CACC	162.0	658.0	≥ 0.2	1
CADD	726.0	54.0	1.8414E-7	0.000003
CAIM	196.0	624.0	≥ 0.2	1
Chi2	390.0	430.0	≥ 0.2	1
ChiMerge	216.0	564.0	≥ 0.2	1
ClusterAnalysis	416.0	367.0	≥ 0.2	1
DIBD	433.0	387.0	≥ 0.2	0.752101
Distance	378.0	442.0	≥ 0.2	1
EqualFrequency	323.5	496.5	≥ 0.2	1
EqualWidth	391.0	389.0	≥ 0.2	0.98327
Extended Chi2	461.0	319.0	≥ 0.2	0.318385
FFD	453.5	331.5	≥ 0.2	1
FUSINTER	224.0	596.0	≥ 0.2	1
HDD	385.5	434.5	≥ 0.2	1
HellingerBD	320.0	460.0	≥ 0.2	1
Heter-Disc	609.0	171.0	0.0017248	0.00219
IDD	410.0	410.0	≥ 0.2	0.994638
Khiops	294.0	526.0	≥ 0.2	1
MDLP	402.0	418.0	≥ 0.2	1
Modified Chi2	343.0	437.0	≥ 0.2	1
MODL	365.0	455.0	≥ 0.2	1
MVD	489.0	291.0	0.17114	0.164978
PKID	365.5	421.5	≥ 0.2	1
UCPD	255.0	565.0	≥ 0.2	1
USD	260.0	560.0	≥ 0.2	1
Zeta	328.0	492.0	≥ 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	[0.0036 , 0.08655]	0.90276
Ameva	[-0.13635 , -0.0398]	0.90276
Bayesian	[-0.04445 , 0.0187]	0.90276
CACC	[-0.1244 , -0.0358]	0.90276
CADD	[0.08005 , 0.2053]	0.90276
CAIM	[-0.1171 , -0.02725]	0.90276
Chi2	[-0.05155 , 0.04745]	0.90276
ChiMerge	[-0.108 , -0.01995]	0.90276
ClusterAnalysis	[-0.01105 , 0.02955]	0.90276
DIBD	[-0.039 , 0.05275]	0.90276
Distance	[-0.0917 , 0.0356]	0.90276
EqualFrequency	[-0.0552 , 0.0077]	0.90276
EqualWidth	[-0.02005 , 0.0226]	0.90276
Extended Chi2	[-0.0162 , 0.06525]	0.90276
FFD	[-0.0076 , 0.0369]	0.90276
FUSINTER	[-0.09455 , -0.0217]	0.90276
HDD	[-0.0243 , 0.0115]	0.90276
HellingerBD	[-0.04695 , 0.00885]	0.90276
Heter-Disc	[0.02985 , 0.09955]	0.90276
IDD	[-0.033 , 0.0418]	0.90276
Khiops	[-0.0465 , 0.0009]	0.90276
MDLP	[-0.0609 , 0.0478]	0.90276
Modified Chi2	[-0.0302 , 0.022]	0.90276
MODL	[-0.0481 , 0.02285]	0.90276
MVD	[-0.00905 , 0.08995]	0.90276
PKID	[-0.02235 , 0.0126]	0.90276
UCPD	[-0.08405 , -0.01135]	0.90276
USD	[-0.04085 , -0.0033]	0.90276
Zeta	[-0.07125 , 0.01205]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00145 , 0.1007]	0.95024
Ameva	[-0.14585 , -0.03275]	0.95024
Bayesian	[-0.05105 , 0.0289]	0.95024
CACC	[-0.1352 , -0.02935]	0.95024
CADD	[0.0719 , 0.2135]	0.95024
CAIM	[-0.12545 , -0.0196]	0.95024
Chi2	[-0.05805 , 0.0586]	0.95024
ChiMerge	[-0.11465 , -0.01255]	0.95024
ClusterAnalysis	[-0.0136 , 0.0416]	0.95024
DIBD	[-0.04955 , 0.064]	0.95024
Distance	[-0.1057 , 0.0436]	0.95024
EqualFrequency	[-0.0608 , 0.01325]	0.95024
EqualWidth	[-0.024 , 0.0254]	0.95024
Extended Chi2	[-0.02165 , 0.0769]	0.95024
FFD	[-0.0128 , 0.04165]	0.95024
FUSINTER	[-0.10115 , -0.01375]	0.95024
HDD	[-0.0271 , 0.01535]	0.95024
HellingerBD	[-0.0576 , 0.01415]	0.95024
Heter-Disc	[0.02315 , 0.1093]	0.95024
IDD	[-0.03745 , 0.0545]	0.95024
Khiops	[-0.0498 , 0.0049]	0.95024
MDLP	[-0.0696 , 0.05705]	0.95024
Modified Chi2	[-0.03485 , 0.0266]	0.95024
MODL	[-0.05655 , 0.0308]	0.95024
MVD	[-0.0176 , 0.10195]	0.95024
PKID	[-0.02725 , 0.01795]	0.95024
UCPD	[-0.0928 , -0.0027]	0.95024
USD	[-0.04495 , -0.001]	0.95024
Zeta	[-0.083 , 0.0169]	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	572.0	223.0	≥ 0.2	1
Ameva	179.0	601.0	≥ 0.2	1
Bayesian	355.5	464.5	≥ 0.2	1
CACC	188.0	632.0	≥ 0.2	1
CADD	740.0	80.0	0.00406	0.004919
CAIM	152.0	628.0	≥ 0.2	1
Chi2	311.0	509.0	≥ 0.2	1
ChiMerge	165.0	615.0	≥ 0.2	1
ClusterAnalysis	397.0	383.0	≥ 0.2	0.916644
DIBD	351.5	439.5	≥ 0.2	1
Distance	334.0	453.0	≥ 0.2	1
EqualFrequency	310.0	473.0	≥ 0.2	1
EqualWidth	373.0	447.0	≥ 0.2	1
Extended Chi2	416.0	404.0	≥ 0.2	1
FFD	467.5	352.5	≥ 0.2	0.788474
FUSINTER	211.0	609.0	≥ 0.2	1
HDD	356.0	464.0	≥ 0.2	1
HellingerBD	312.0	508.0	≥ 0.2	1
Heter-Disc	586.0	234.0	≥ 0.2	1
ID3	410.0	410.0	≥ 0.2	0.994638
Khiops	300.0	483.0	≥ 0.2	1
MDLP	375.0	445.0	≥ 0.2	1
Modified Chi2	386.0	397.0	≥ 0.2	1
MODL	351.0	469.0	≥ 0.2	1
MVD	471.5	319.5	≥ 0.2	1
PKID	396.0	384.0	≥ 0.2	0.927599
UCPD	236.0	584.0	≥ 0.2	1
USD	312.0	508.0	≥ 0.2	1
Zeta	250.0	570.0	≥ 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 , 0.05135]	0.90276
Ameva	[-0.16035 , -0.0404]	0.90276
Bayesian	[-0.02715 , 0.0095]	0.90276
CACC	[-0.16635 , -0.035]	0.90276
CADD	[0.029 , 0.1963]	0.90276
CAIM	[-0.1354 , -0.0322]	0.90276
Chi2	[-0.0565 , 0.0039]	0.90276
ChiMerge	[-0.1289 , -0.03375]	0.90276
ClusterAnalysis	[-0.0406 , 0.06035]	0.90276
DIBD	[-0.03545 , 0.0055]	0.90276
Distance	[-0.0719 , 0.01175]	0.90276
EqualFrequency	[-0.05525 , 0.00395]	0.90276
EqualWidth	[-0.04975 , 0.03375]	0.90276
Extended Chi2	[-0.0268 , 0.0327]	0.90276
FFD	[-0.01645 , 0.0531]	0.90276
FUSINTER	[-0.09135 , -0.02035]	0.90276
HDD	[-0.06405 , 0.01755]	0.90276
HellingerBD	[-0.07645 , 0.01215]	0.90276
Heter-Disc	[0.002 , 0.09625]	0.90276
ID3	[-0.0418 , 0.033]	0.90276
Khiops	[-0.06255 , 0.0055]	0.90276
MDLP	[-0.03165 , 0.01705]	0.90276
Modified Chi2	[-0.041 , 0.01975]	0.90276
MODL	[-0.0359 , 0.01065]	0.90276
MVD	[-0.002 , 0.03735]	0.90276
PKID	[-0.0344 , 0.03635]	0.90276
UCPD	[-0.10805 , -0.0179]	0.90276
USD	[-0.0721 , 0.00555]	0.90276
Zeta	[-0.0798 , -0.0089]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0 , 0.05625]	0.95024
Ameva	[-0.1728 , -0.0317]	0.95024
Bayesian	[-0.0295 , 0.0112]	0.95024
CACC	[-0.18 , -0.02485]	0.95024
CADD	[0.02115 , 0.2094]	0.95024
CAIM	[-0.1497 , -0.0267]	0.95024
Chi2	[-0.0663 , 0.00885]	0.95024
ChiMerge	[-0.13605 , -0.0274]	0.95024
ClusterAnalysis	[-0.0511 , 0.06855]	0.95024
DIBD	[-0.0586 , 0.01025]	0.95024
Distance	[-0.09635 , 0.01655]	0.95024
EqualFrequency	[-0.06295 , 0.0067]	0.95024
EqualWidth	[-0.06045 , 0.0456]	0.95024
Extended Chi2	[-0.03135 , 0.0412]	0.95024
FFD	[-0.02755 , 0.0645]	0.95024
FUSINTER	[-0.10325 , -0.01545]	0.95024
HDD	[-0.07515 , 0.0226]	0.95024
HellingerBD	[-0.0844 , 0.0262]	0.95024
Heter-Disc	[0 , 0.1191]	0.95024
ID3	[-0.0545 , 0.03745]	0.95024
Khiops	[-0.0754 , 0.0128]	0.95024
MDLP	[-0.0418 , 0.02405]	0.95024
Modified Chi2	[-0.0481 , 0.0263]	0.95024
MODL	[-0.04665 , 0.0136]	0.95024
MVD	[-0.00815 , 0.04085]	0.95024
PKID	[-0.046 , 0.0465]	0.95024
UCPD	[-0.1166 , -0.00955]	0.95024
USD	[-0.08695 , 0.0118]	0.95024
Zeta	[-0.09045 , -0.00395]	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	651.0	169.0	0.009022	0.009755
Ameva	231.0	589.0	≥ 0.2	1
Bayesian	414.5	405.5	≥ 0.2	1
CACC	211.0	609.0	≥ 0.2	1
CADD	787.0	33.0	9.352E-8	0.000002
CAIM	261.0	559.0	≥ 0.2	1
Chi2	394.0	386.0	≥ 0.2	0.949928
ChiMerge	244.0	576.0	≥ 0.2	1
ClusterAnalysis	540.0	240.0	0.03594	0.035709
DIBD	479.0	341.0	≥ 0.2	1
Distance	368.0	412.0	≥ 0.2	1
EqualFrequency	380.5	439.5	≥ 0.2	1
EqualWidth	505.5	314.5	≥ 0.2	0.196172
Extended Chi2	505.0	315.0	≥ 0.2	0.199267
FFD	603.5	216.5	0.02481	0.025052
FUSINTER	281.0	539.0	≥ 0.2	1
HDD	424.0	356.0	≥ 0.2	0.630199
HellingerBD	409.0	411.0	≥ 0.2	1
Heter-Disc	653.0	167.0	0.008164	0.008902
ID3	526.0	294.0	≥ 0.2	0.263267
IDD	483.0	300.0	≥ 0.2	0.432754
MDLP	401.0	379.0	≥ 0.2	0.872501
Modified Chi2	476.0	344.0	≥ 0.2	0.371404
MODL	378.0	402.0	≥ 0.2	1
MVD	540.0	280.0	≥ 0.2	0.400619
PKID	514.0	269.0	≥ 0.2	0.210511
UCPD	236.0	544.0	≥ 0.2	1
USD	352.0	468.0	≥ 0.2	1
Zeta	358.0	462.0	≥ 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	[0.0312 , 0.10125]	0.90276
Ameva	[-0.0991 , -0.0186]	0.90276
Bayesian	[-0.03025 , 0.0303]	0.90276
CACC	[-0.10355 , -0.024]	0.90276
CADD	[0.1054 , 0.22325]	0.90276
CAIM	[-0.1003 , -0.0063]	0.90276
Chi2	[-0.03395 , 0.04055]	0.90276
ChiMerge	[-0.095 , -0.0128]	0.90276
ClusterAnalysis	[0.0052 , 0.0504]	0.90276
DIBD	[-0.01735 , 0.0541]	0.90276
Distance	[-0.0705 , 0.0504]	0.90276
EqualFrequency	[-0.02835 , 0.0199]	0.90276
EqualWidth	[-0.00535 , 0.05525]	0.90276
Extended Chi2	[-0.01095 , 0.072]	0.90276
FFD	[0.0102 , 0.0551]	0.90276
FUSINTER	[-0.0598 , -0.00045]	0.90276
HDD	[-0.03345 , 0.04135]	0.90276
HellingerBD	[-0.01845 , 0.0204]	0.90276
Heter-Disc	[0.04085 , 0.12605]	0.90276
ID3	[-0.0009 , 0.0465]	0.90276
IDD	[-0.0055 , 0.06255]	0.90276
MDLP	[-0.0412 , 0.0535]	0.90276
Modified Chi2	[-0.013 , 0.04265]	0.90276
MODL	[-0.0322 , 0.0331]	0.90276
MVD	[0.00085 , 0.10625]	0.90276
PKID	[0.00055 , 0.04095]	0.90276
UCPD	[-0.0531 , -0.00615]	0.90276
USD	[-0.04255 , 0.01515]	0.90276
Zeta	[-0.0518 , 0.01525]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02475 , 0.10905]	0.95024
Ameva	[-0.10825 , -0.00965]	0.95024
Bayesian	[-0.0395 , 0.03545]	0.95024
CACC	[-0.1135 , -0.0183]	0.95024
CADD	[0.09825 , 0.2369]	0.95024
CAIM	[-0.10825 , -0.00085]	0.95024
Chi2	[-0.03815 , 0.05615]	0.95024
ChiMerge	[-0.10055 , -0.00665]	0.95024
ClusterAnalysis	[0.00195 , 0.057]	0.95024
DIBD	[-0.0244 , 0.06285]	0.95024
Distance	[-0.08145 , 0.05625]	0.95024
EqualFrequency	[-0.0345 , 0.02545]	0.95024
EqualWidth	[-0.01235 , 0.06355]	0.95024
Extended Chi2	[-0.01485 , 0.08365]	0.95024
FFD	[0.00715 , 0.0611]	0.95024
FUSINTER	[-0.06535 , 0.00135]	0.95024
HDD	[-0.0421 , 0.04715]	0.95024
HellingerBD	[-0.02105 , 0.0279]	0.95024
Heter-Disc	[0.0333 , 0.13705]	0.95024
ID3	[-0.0049 , 0.0498]	0.95024
IDD	[-0.0128 , 0.0754]	0.95024
MDLP	[-0.0478 , 0.06605]	0.95024
Modified Chi2	[-0.0171 , 0.0498]	0.95024
MODL	[-0.03845 , 0.04115]	0.95024
MVD	[-0.00485 , 0.12315]	0.95024
PKID	[-0.0022 , 0.04615]	0.95024
UCPD	[-0.0586 , -0.0025]	0.95024
USD	[-0.0493 , 0.02005]	0.95024
Zeta	[-0.0595 , 0.0226]	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	550.0	237.0	≥ 0.2	0.431759
Ameva	148.0	632.0	≥ 0.2	1
Bayesian	385.0	435.0	≥ 0.2	1
CACC	112.0	668.0	≥ 0.2	1
CADD	726.5	62.5	1.1259E-4	0.000267
CAIM	151.0	629.0	≥ 0.2	1
Chi2	421.5	398.5	≥ 0.2	1
ChiMerge	158.0	622.0	≥ 0.2	1
ClusterAnalysis	456.5	363.5	≥ 0.2	0.526862
DIBD	384.0	403.0	≥ 0.2	1
Distance	322.5	474.5	≥ 0.2	1
EqualFrequency	394.5	425.5	≥ 0.2	1
EqualWidth	412.0	408.0	≥ 0.2	0.973194
Extended Chi2	462.0	358.0	≥ 0.2	1
FFD	477.0	303.0	≥ 0.2	0.222062
FUSINTER	196.5	623.5	≥ 0.2	1
HDD	342.0	478.0	≥ 0.2	1
HellingerBD	367.0	453.0	≥ 0.2	1
Heter-Disc	615.5	204.5	≥ 0.2	1
ID3	418.0	402.0	≥ 0.2	0.909039
IDD	445.0	375.0	≥ 0.2	1
Khiops	379.0	401.0	≥ 0.2	1
Modified Chi2	396.5	388.5	≥ 0.2	1
MODL	382.0	438.0	≥ 0.2	1
MVD	529.5	263.5	≥ 0.2	1
PKID	456.0	364.0	≥ 0.2	0.531958
UCPD	296.0	524.0	≥ 0.2	1
USD	307.0	513.0	≥ 0.2	1
Zeta	275.0	545.0	≥ 0.2	1

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

23.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0018 , 0.1072]	0.90276
Ameva	[-0.11535 , -0.0439]	0.90276
Bayesian	[-0.0312 , 0.0069]	0.90276
CACC	[-0.10635 , -0.04385]	0.90276
CADD	[0.0708 , 0.21195]	0.90276
CAIM	[-0.0968 , -0.03125]	0.90276
Chi2	[-0.0285 , 0.02385]	0.90276
ChiMerge	[-0.0966 , -0.0249]	0.90276
ClusterAnalysis	[-0.02995 , 0.0783]	0.90276
DIBD	[-0.0176 , 0.02025]	0.90276
Distance	[-0.02475 , 0]	0.90276
EqualFrequency	[-0.0498 , 0.03395]	0.90276
EqualWidth	[-0.0385 , 0.04405]	0.90276
Extended Chi2	[-0.0119 , 0.0428]	0.90276
FFD	[-0.0114 , 0.08065]	0.90276
FUSINTER	[-0.07725 , -0.024]	0.90276
HDD	[-0.05615 , 0.01955]	0.90276
HellingerBD	[-0.0563 , 0.0351]	0.90276
Heter-Disc	[0.0018 , 0.1383]	0.90276
ID3	[-0.0478 , 0.0609]	0.90276
IDD	[-0.01705 , 0.03165]	0.90276
Khiops	[-0.0535 , 0.0412]	0.90276
Modified Chi2	[-0.0262 , 0.0292]	0.90276
MODL	[-0.02635 , 0.01315]	0.90276
MVD	[0 , 0.05375]	0.90276
PKID	[-0.03535 , 0.06795]	0.90276
UCPD	[-0.0802 , 0.00405]	0.90276
USD	[-0.0647 , 0.00765]	0.90276
Zeta	[-0.05175 , -0.003]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00045 , 0.12345]	0.95024
Ameva	[-0.1234 , -0.0383]	0.95024
Bayesian	[-0.0366 , 0.0103]	0.95024
CACC	[-0.11295 , -0.0389]	0.95024
CADD	[0.05415 , 0.2199]	0.95024
CAIM	[-0.10755 , -0.0261]	0.95024
Chi2	[-0.03725 , 0.03165]	0.95024
ChiMerge	[-0.10355 , -0.0207]	0.95024
ClusterAnalysis	[-0.03985 , 0.08815]	0.95024
DIBD	[-0.028 , 0.03165]	0.95024
Distance	[-0.02825 , 0]	0.95024
EqualFrequency	[-0.0582 , 0.0438]	0.95024
EqualWidth	[-0.04735 , 0.0544]	0.95024
Extended Chi2	[-0.01755 , 0.0582]	0.95024
FFD	[-0.0241 , 0.09255]	0.95024
FUSINTER	[-0.0865 , -0.0169]	0.95024
HDD	[-0.0634 , 0.0275]	0.95024
HellingerBD	[-0.0633 , 0.0444]	0.95024
Heter-Disc	[0.00045 , 0.14465]	0.95024
ID3	[-0.05705 , 0.0696]	0.95024
IDD	[-0.02405 , 0.0418]	0.95024
Khiops	[-0.06605 , 0.0478]	0.95024
Modified Chi2	[-0.03175 , 0.03735]	0.95024
MODL	[-0.03135 , 0.0218]	0.95024
MVD	[0 , 0.08735]	0.95024
PKID	[-0.04545 , 0.07965]	0.95024
UCPD	[-0.09375 , 0.0118]	0.95024
USD	[-0.0697 , 0.01425]	0.95024
Zeta	[-0.05925 , 0.00235]	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	544.0	239.0	0.0913	0.088241
Ameva	131.0	689.0	≥ 0.2	1
Bayesian	316.0	504.0	≥ 0.2	1
CACC	146.0	674.0	≥ 0.2	1
CADD	722.0	61.0	1.608E-6	0.000011
CAIM	134.0	686.0	≥ 0.2	1
Chi2	368.0	419.0	≥ 0.2	1
ChiMerge	159.0	621.0	≥ 0.2	1
ClusterAnalysis	452.0	368.0	≥ 0.2	0.567827
DIBD	446.5	373.5	≥ 0.2	1
Distance	346.5	438.5	≥ 0.2	1
EqualFrequency	327.0	453.0	≥ 0.2	1
EqualWidth	379.0	401.0	≥ 0.2	1
Extended Chi2	499.5	320.5	≥ 0.2	1
FFD	493.0	287.0	0.15416	0.148643
FUSINTER	159.5	660.5	≥ 0.2	1
HDD	345.0	435.0	≥ 0.2	1
HellingerBD	358.0	462.0	≥ 0.2	1
Heter-Disc	628.5	191.5	0.07096	0.06864
ID3	437.0	343.0	≥ 0.2	0.507419
IDD	397.0	386.0	≥ 0.2	1
Khiops	344.0	476.0	≥ 0.2	1
MDLP	388.5	396.5	≥ 0.2	1
MODL	347.0	436.0	≥ 0.2	1
MVD	519.5	300.5	≥ 0.2	1
PKID	437.0	343.0	≥ 0.2	0.507419
UCPD	249.0	571.0	≥ 0.2	1
USD	221.0	559.0	≥ 0.2	1
Zeta	239.0	581.0	≥ 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	[0.00865 , 0.0938]	0.90276
Ameva	[-0.1141 , -0.04285]	0.90276
Bayesian	[-0.04655 , 0.00595]	0.90276
CACC	[-0.12475 , -0.04245]	0.90276
CADD	[0.08685 , 0.19655]	0.90276
CAIM	[-0.08905 , -0.03175]	0.90276
Chi2	[-0.02265 , 0.0122]	0.90276
ChiMerge	[-0.09015 , -0.0294]	0.90276
ClusterAnalysis	[-0.0206 , 0.0421]	0.90276
DIBD	[-0.02665 , 0.0409]	0.90276
Distance	[-0.0532 , 0.0179]	0.90276
EqualFrequency	[-0.04615 , 0.01245]	0.90276
EqualWidth	[-0.02855 , 0.0253]	0.90276
Extended Chi2	[-0.0014 , 0.03845]	0.90276
FFD	[-0.0027 , 0.05095]	0.90276
FUSINTER	[-0.074 , -0.02705]	0.90276
HDD	[-0.04595 , 0.0143]	0.90276
HellingerBD	[-0.04835 , 0.01565]	0.90276
Heter-Disc	[0.0223 , 0.10435]	0.90276
ID3	[-0.022 , 0.0302]	0.90276
IDD	[-0.01975 , 0.041]	0.90276
Khiops	[-0.04265 , 0.013]	0.90276
MDLP	[-0.0292 , 0.0262]	0.90276
MODL	[-0.02425 , 0.00995]	0.90276
MVD	[-0.0025 , 0.0751]	0.90276
PKID	[-0.01875 , 0.037]	0.90276
UCPD	[-0.07665 , -0.00985]	0.90276
USD	[-0.0541 , -0.00745]	0.90276
Zeta	[-0.06295 , -0.00955]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0031 , 0.1023]	0.95024
Ameva	[-0.1259 , -0.0367]	0.95024
Bayesian	[-0.0514 , 0.0146]	0.95024
CACC	[-0.133 , -0.0397]	0.95024
CADD	[0.07365 , 0.2079]	0.95024
CAIM	[-0.09705 , -0.02735]	0.95024
Chi2	[-0.02505 , 0.0197]	0.95024
ChiMerge	[-0.0967 , -0.02275]	0.95024
ClusterAnalysis	[-0.02905 , 0.04935]	0.95024
DIBD	[-0.0355 , 0.0475]	0.95024
Distance	[-0.0667 , 0.02155]	0.95024
EqualFrequency	[-0.05215 , 0.01735]	0.95024
EqualWidth	[-0.03425 , 0.0296]	0.95024
Extended Chi2	[-0.0042 , 0.0482]	0.95024
FFD	[-0.008 , 0.05915]	0.95024
FUSINTER	[-0.07865 , -0.0223]	0.95024
HDD	[-0.0492 , 0.01835]	0.95024
HellingerBD	[-0.0549 , 0.0204]	0.95024
Heter-Disc	[0.01875 , 0.11725]	0.95024
ID3	[-0.0266 , 0.03485]	0.95024
IDD	[-0.0263 , 0.0481]	0.95024
Khiops	[-0.0498 , 0.0171]	0.95024
MDLP	[-0.03735 , 0.03175]	0.95024
MODL	[-0.03155 , 0.0122]	0.95024
MVD	[-0.01295 , 0.08645]	0.95024
PKID	[-0.0227 , 0.04095]	0.95024
UCPD	[-0.08265 , -0.0037]	0.95024
USD	[-0.05915 , -0.00405]	0.95024
Zeta	[-0.068 , -0.0067]	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	577.0	206.0	0.0275	0.027623
Ameva	165.0	655.0	≥ 0.2	1
Bayesian	343.0	440.0	≥ 0.2	1
CACC	191.0	629.0	≥ 0.2	1
CADD	733.0	50.0	4.554E-7	0.000005
CAIM	161.0	659.0	≥ 0.2	1
Chi2	412.5	407.5	≥ 0.2	1
ChiMerge	197.5	622.5	≥ 0.2	1
ClusterAnalysis	486.0	334.0	≥ 0.2	0.303828
DIBD	435.5	349.5	≥ 0.2	1
Distance	361.0	459.0	≥ 0.2	1
EqualFrequency	447.0	373.0	≥ 0.2	0.614227
EqualWidth	453.0	367.0	≥ 0.2	0.558752
Extended Chi2	513.5	306.5	≥ 0.2	0.349584
FFD	561.0	259.0	0.0422	0.041715
FUSINTER	182.0	601.0	≥ 0.2	1
HDD	364.0	456.0	≥ 0.2	1
HellingerBD	410.0	410.0	≥ 0.2	0.994638
Heter-Disc	644.0	139.0	9.368E-4	0.001312
ID3	455.0	365.0	≥ 0.2	0.540816
IDD	469.0	351.0	≥ 0.2	1
Khiops	402.0	378.0	≥ 0.2	0.861522
MDLP	438.0	382.0	≥ 0.2	1
Modified Chi2	436.0	347.0	≥ 0.2	0.939871
MVD	548.0	272.0	≥ 0.2	0.333944
PKID	524.0	296.0	0.1281	0.123797
UCPD	292.0	528.0	≥ 0.2	1
USD	290.0	530.0	≥ 0.2	1
Zeta	294.0	526.0	≥ 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	[0.01545 , 0.0968]	0.90276
Ameva	[-0.10965 , -0.0394]	0.90276
Bayesian	[-0.03395 , 0.011]	0.90276
CACC	[-0.1088 , -0.03255]	0.90276
CADD	[0.0955 , 0.20145]	0.90276
CAIM	[-0.0906 , -0.02665]	0.90276
Chi2	[-0.0236 , 0.0275]	0.90276
ChiMerge	[-0.09475 , -0.01765]	0.90276
ClusterAnalysis	[-0.0149 , 0.0636]	0.90276
DIBD	[-0.02805 , 0.0359]	0.90276
Distance	[-0.04565 , 0.01405]	0.90276
EqualFrequency	[-0.0236 , 0.0277]	0.90276
EqualWidth	[-0.02275 , 0.04685]	0.90276
Extended Chi2	[-0.0038 , 0.051]	0.90276
FFD	[0.0068 , 0.06775]	0.90276
FUSINTER	[-0.0648 , -0.015]	0.90276
HDD	[-0.0378 , 0.01705]	0.90276
HellingerBD	[-0.0306 , 0.0291]	0.90276
Heter-Disc	[0.0312 , 0.113]	0.90276
ID3	[-0.02285 , 0.0481]	0.90276
IDD	[-0.01065 , 0.0359]	0.90276
Khiops	[-0.0331 , 0.0322]	0.90276
MDLP	[-0.01315 , 0.02635]	0.90276
Modified Chi2	[-0.00995 , 0.02425]	0.90276
MVD	[0.00155 , 0.08345]	0.90276
PKID	[-0.0031 , 0.06115]	0.90276
UCPD	[-0.0784 , 0.0028]	0.90276
USD	[-0.0469 , 0.00075]	0.90276
Zeta	[-0.05515 , 0.0032]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0108 , 0.10465]	0.95024
Ameva	[-0.1162 , -0.03305]	0.95024
Bayesian	[-0.03755 , 0.0166]	0.95024
CACC	[-0.1161 , -0.02575]	0.95024
CADD	[0.0789 , 0.2191]	0.95024
CAIM	[-0.0978 , -0.0231]	0.95024
Chi2	[-0.0298 , 0.0331]	0.95024
ChiMerge	[-0.09825 , -0.01185]	0.95024
ClusterAnalysis	[-0.02275 , 0.07315]	0.95024
DIBD	[-0.0347 , 0.0436]	0.95024
Distance	[-0.0521 , 0.01735]	0.95024
EqualFrequency	[-0.0374 , 0.0341]	0.95024
EqualWidth	[-0.03105 , 0.05415]	0.95024
Extended Chi2	[-0.0095 , 0.0609]	0.95024
FFD	[0.0011 , 0.077]	0.95024
FUSINTER	[-0.07115 , -0.01215]	0.95024
HDD	[-0.0435 , 0.0237]	0.95024
HellingerBD	[-0.03405 , 0.0373]	0.95024
Heter-Disc	[0.0264 , 0.12715]	0.95024
ID3	[-0.0308 , 0.05655]	0.95024
IDD	[-0.0136 , 0.04665]	0.95024
Khiops	[-0.04115 , 0.03845]	0.95024
MDLP	[-0.0218 , 0.03135]	0.95024
Modified Chi2	[-0.0122 , 0.03155]	0.95024
MVD	[-0.00075 , 0.0978]	0.95024
PKID	[-0.0103 , 0.06535]	0.95024
UCPD	[-0.08525 , 0.01385]	0.95024
USD	[-0.0515 , 0.00475]	0.95024
Zeta	[-0.06055 , 0.0109]	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	480.5	312.5	≥ 0.2	1
Ameva	109.0	711.0	≥ 0.2	1
Bayesian	305.0	515.0	≥ 0.2	1
CACC	108.5	711.5	≥ 0.2	1
CADD	684.5	135.5	≥ 0.2	1
CAIM	149.0	671.0	≥ 0.2	1
Chi2	244.0	576.0	≥ 0.2	1
ChiMerge	120.0	660.0	≥ 0.2	1
ClusterAnalysis	349.5	470.5	≥ 0.2	1
DIBD	360.0	460.0	≥ 0.2	1
Distance	277.5	542.5	≥ 0.2	1
EqualFrequency	241.5	543.5	≥ 0.2	1
EqualWidth	300.5	519.5	≥ 0.2	1
Extended Chi2	334.0	453.0	≥ 0.2	1
FFD	390.0	430.0	≥ 0.2	1
FUSINTER	159.5	625.5	≥ 0.2	1
HDD	227.0	553.0	≥ 0.2	1
HellingerBD	254.0	566.0	≥ 0.2	1
Heter-Disc	492.0	307.0	≥ 0.2	1
ID3	291.0	489.0	≥ 0.2	1
IDD	319.5	471.5	≥ 0.2	1
Khiops	280.0	540.0	≥ 0.2	1
MDLP	263.5	529.5	≥ 0.2	1
Modified Chi2	300.5	519.5	≥ 0.2	1
MODL	272.0	548.0	≥ 0.2	1
PKID	294.0	489.0	≥ 0.2	1
UCPD	169.0	611.0	≥ 0.2	1
USD	240.0	580.0	≥ 0.2	1
Zeta	227.0	593.0	≥ 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 , 0.05315]	0.90276
Ameva	[-0.1856 , -0.06855]	0.90276
Bayesian	[-0.0651 , 0]	0.90276
CACC	[-0.178 , -0.0682]	0.90276
CADD	[0.00495 , 0.1405]	0.90276
CAIM	[-0.1779 , -0.06045]	0.90276
Chi2	[-0.0792 , -0.00765]	0.90276
ChiMerge	[-0.14655 , -0.0475]	0.90276
ClusterAnalysis	[-0.06355 , 0.02035]	0.90276
DIBD	[-0.0856 , 0.00925]	0.90276
Distance	[-0.12805 , 0]	0.90276
EqualFrequency	[-0.09265 , -0.01095]	0.90276
EqualWidth	[-0.0775 , 0.0056]	0.90276
Extended Chi2	[-0.03945 , 0.0268]	0.90276
FFD	[-0.06135 , 0.02595]	0.90276
FUSINTER	[-0.1446 , -0.03795]	0.90276
HDD	[-0.1061 , -0.01725]	0.90276
HellingerBD	[-0.108 , -0.0134]	0.90276
Heter-Disc	[0 , 0.0691]	0.90276
ID3	[-0.08995 , 0.00905]	0.90276
IDD	[-0.03735 , 0.002]	0.90276
Khiops	[-0.10625 , -0.00085]	0.90276
MDLP	[-0.05375 , 0]	0.90276
Modified Chi2	[-0.0751 , 0.0025]	0.90276
MODL	[-0.08345 , -0.00155]	0.90276
PKID	[-0.102 , 0.0074]	0.90276
UCPD	[-0.13345 , -0.04215]	0.90276
USD	[-0.12005 , -0.016]	0.90276
Zeta	[-0.1199 , -0.0262]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00455 , 0.0597]	0.95024
Ameva	[-0.20365 , -0.0609]	0.95024
Bayesian	[-0.07605 , 0.00075]	0.95024
CACC	[-0.18725 , -0.0591]	0.95024
CADD	[0.0046 , 0.14245]	0.95024
CAIM	[-0.18985 , -0.05085]	0.95024
Chi2	[-0.09285 , -0.0009]	0.95024
ChiMerge	[-0.1583 , -0.04225]	0.95024
ClusterAnalysis	[-0.0734 , 0.02855]	0.95024
DIBD	[-0.1024 , 0.0153]	0.95024
Distance	[-0.1355 , 0]	0.95024
EqualFrequency	[-0.1056 , -0.00145]	0.95024
EqualWidth	[-0.08455 , 0.01525]	0.95024
Extended Chi2	[-0.04595 , 0.0379]	0.95024
FFD	[-0.08285 , 0.0335]	0.95024
FUSINTER	[-0.1646 , -0.03195]	0.95024
HDD	[-0.1154 , -0.00825]	0.95024
HellingerBD	[-0.1155 , -0.00245]	0.95024
Heter-Disc	[0 , 0.0753]	0.95024
ID3	[-0.10195 , 0.0176]	0.95024
IDD	[-0.04085 , 0.00815]	0.95024
Khiops	[-0.12315 , 0.00485]	0.95024
MDLP	[-0.08735 , 0]	0.95024
Modified Chi2	[-0.08645 , 0.01295]	0.95024
MODL	[-0.0978 , 0.00075]	0.95024
PKID	[-0.11305 , 0.01615]	0.95024
UCPD	[-0.14755 , -0.03505]	0.95024
USD	[-0.13825 , -0.00775]	0.95024
Zeta	[-0.1372 , -0.01705]	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	524.0	256.0	0.06198	0.060525
Ameva	174.0	646.0	≥ 0.2	1
Bayesian	331.0	449.0	≥ 0.2	1
CACC	165.0	655.0	≥ 0.2	1
CADD	742.5	77.5	4.34E-6	0.000021
CAIM	200.0	620.0	≥ 0.2	1
Chi2	366.0	454.0	≥ 0.2	1
ChiMerge	218.0	602.0	≥ 0.2	1
ClusterAnalysis	467.5	352.5	≥ 0.2	0.788474
DIBD	379.0	401.0	≥ 0.2	1
Distance	346.0	474.0	≥ 0.2	1
EqualFrequency	341.5	478.5	≥ 0.2	1
EqualWidth	438.5	381.5	≥ 0.2	1
Extended Chi2	444.0	336.0	≥ 0.2	0.446927
FFD	562.0	229.0	≥ 0.2	1
FUSINTER	208.0	572.0	≥ 0.2	1
HDD	372.0	448.0	≥ 0.2	1
HellingerBD	330.0	450.0	≥ 0.2	1
Heter-Disc	618.5	201.5	0.013335	0.013966
ID3	421.5	365.5	≥ 0.2	1
IDD	384.0	396.0	≥ 0.2	1
Khiops	269.0	514.0	≥ 0.2	1
MDLP	364.0	456.0	≥ 0.2	1
Modified Chi2	343.0	437.0	≥ 0.2	1
MODL	296.0	524.0	≥ 0.2	1
MVD	489.0	294.0	≥ 0.2	0.381571
UCPD	227.0	593.0	≥ 0.2	1
USD	286.0	534.0	≥ 0.2	1
Zeta	291.0	529.0	≥ 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	[0.00555 , 0.08745]	0.90276
Ameva	[-0.12275 , -0.0439]	0.90276
Bayesian	[-0.06255 , 0.0218]	0.90276
CACC	[-0.1304 , -0.04065]	0.90276
CADD	[0.0747 , 0.2068]	0.90276
CAIM	[-0.11155 , -0.0268]	0.90276
Chi2	[-0.0488 , 0.0484]	0.90276
ChiMerge	[-0.1129 , -0.02565]	0.90276
ClusterAnalysis	[-0.01265 , 0.0395]	0.90276
DIBD	[-0.04135 , 0.03915]	0.90276
Distance	[-0.10235 , 0.0257]	0.90276
EqualFrequency	[-0.03725 , 0.0048]	0.90276
EqualWidth	[-0.01825 , 0.0256]	0.90276
Extended Chi2	[-0.01935 , 0.07355]	0.90276
FFD	[0.00025 , 0.0275]	0.90276
FUSINTER	[-0.08935 , -0.01745]	0.90276
HDD	[-0.04455 , 0.0186]	0.90276
HellingerBD	[-0.04935 , 0.01285]	0.90276
Heter-Disc	[0.02395 , 0.11625]	0.90276
ID3	[-0.0126 , 0.02235]	0.90276
IDD	[-0.03635 , 0.0344]	0.90276
Khiops	[-0.04095 , -0.00055]	0.90276
MDLP	[-0.06795 , 0.03535]	0.90276
Modified Chi2	[-0.037 , 0.01875]	0.90276
MODL	[-0.06115 , 0.0031]	0.90276
MVD	[-0.0074 , 0.102]	0.90276
UCPD	[-0.0828 , -0.01445]	0.90276
USD	[-0.06125 , -0.00025]	0.90276
Zeta	[-0.07715 , 0.00245]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0032 , 0.1042]	0.95024
Ameva	[-0.1327 , -0.0355]	0.95024
Bayesian	[-0.07135 , 0.0297]	0.95024
CACC	[-0.13695 , -0.0319]	0.95024
CADD	[0.0672 , 0.22135]	0.95024
CAIM	[-0.12235 , -0.02]	0.95024
Chi2	[-0.05515 , 0.0652]	0.95024
ChiMerge	[-0.12225 , -0.0167]	0.95024
ClusterAnalysis	[-0.01835 , 0.047]	0.95024
DIBD	[-0.05975 , 0.0481]	0.95024
Distance	[-0.1159 , 0.03795]	0.95024
EqualFrequency	[-0.0452 , 0.0075]	0.95024
EqualWidth	[-0.0209 , 0.0307]	0.95024
Extended Chi2	[-0.02485 , 0.0829]	0.95024
FFD	[0 , 0.02935]	0.95024
FUSINTER	[-0.09795 , -0.0112]	0.95024
HDD	[-0.05875 , 0.02195]	0.95024
HellingerBD	[-0.0586 , 0.018]	0.95024
Heter-Disc	[0.0194 , 0.13325]	0.95024
ID3	[-0.01795 , 0.02725]	0.95024
IDD	[-0.0465 , 0.046]	0.95024
Khiops	[-0.04615 , 0.0022]	0.95024
MDLP	[-0.07965 , 0.04545]	0.95024
Modified Chi2	[-0.04095 , 0.0227]	0.95024
MODL	[-0.06535 , 0.0103]	0.95024
MVD	[-0.01615 , 0.11305]	0.95024
UCPD	[-0.08945 , -0.0098]	0.95024
USD	[-0.06535 , 0.00365]	0.95024
Zeta	[-0.086 , 0.01025]	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	680.0	100.0	1.5942E-5	0.00005
Ameva	315.0	505.0	≥ 0.2	1
Bayesian	549.0	271.0	0.06218	0.060784
CACC	261.0	559.0	≥ 0.2	1
CADD	759.0	21.0	1.6262E-9	0
CAIM	308.0	472.0	≥ 0.2	1
Chi2	525.0	255.0	0.06	0.058637
ChiMerge	325.0	495.0	≥ 0.2	1
ClusterAnalysis	595.0	185.0	0.003532	0.004134
DIBD	575.0	205.0	0.008948	0.009635
Distance	468.0	352.0	≥ 0.2	0.431682
EqualFrequency	514.0	306.0	0.1659	0.160136
EqualWidth	610.0	210.0	0.006372	0.007039
Extended Chi2	581.0	199.0	0.006844	0.007531
FFD	651.0	169.0	8.436E-4	0.00117
FUSINTER	414.0	366.0	≥ 0.2	0.732428
HDD	496.0	324.0	≥ 0.2	0.244963
HellingerBD	557.0	263.0	0.04816	0.047413
Heter-Disc	711.0	69.0	9.468E-7	0.000007
ID3	565.0	255.0	0.03684	0.036607
IDD	584.0	236.0	0.018526	0.019001
Khiops	544.0	236.0	0.03108	0.03108
MDLP	524.0	296.0	0.1281	0.123166
Modified Chi2	571.0	249.0	0.0299	0.029949
MODL	528.0	292.0	0.11496	0.111206
MVD	611.0	169.0	0.0015496	0.001995
PKID	593.0	227.0	0.013026	0.013645
USD	455.0	365.0	≥ 0.2	0.540816
Zeta	449.0	371.0	≥ 0.2	0.595466

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	[0.0613 , 0.14685]	0.90276
Ameva	[-0.0633 , 0.00625]	0.90276
Bayesian	[0.00345 , 0.07245]	0.90276
CACC	[-0.0753 , -0.0077]	0.90276
CADD	[0.1576 , 0.2474]	0.90276
CAIM	[-0.06065 , 0.01345]	0.90276
Chi2	[0.00585 , 0.08925]	0.90276
ChiMerge	[-0.0542 , 0.0107]	0.90276
ClusterAnalysis	[0.03165 , 0.1023]	0.90276
DIBD	[0.01735 , 0.0887]	0.90276
Distance	[-0.02935 , 0.0722]	0.90276
EqualFrequency	[-0.00535 , 0.0544]	0.90276
EqualWidth	[0.01705 , 0.08125]	0.90276
Extended Chi2	[0.0286 , 0.10965]	0.90276
FFD	[0.0362 , 0.10015]	0.90276
FUSINTER	[-0.02245 , 0.0294]	0.90276
HDD	[-0.01205 , 0.07535]	0.90276
HellingerBD	[0.0086 , 0.07385]	0.90276
Heter-Disc	[0.08435 , 0.16285]	0.90276
ID3	[0.01135 , 0.08405]	0.90276
IDD	[0.0179 , 0.10805]	0.90276
Khiops	[0.00615 , 0.0531]	0.90276
MDLP	[-0.00405 , 0.0802]	0.90276
Modified Chi2	[0.00985 , 0.07665]	0.90276
MODL	[-0.0028 , 0.0784]	0.90276
MVD	[0.04215 , 0.13345]	0.90276
PKID	[0.01445 , 0.0828]	0.90276
USD	[-0.02025 , 0.04905]	0.90276
Zeta	[-0.02245 , 0.04585]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0544 , 0.15715]	0.95024
Ameva	[-0.076 , 0.01055]	0.95024
Bayesian	[-0.0021 , 0.0765]	0.95024
CACC	[-0.08255 , -0.0016]	0.95024
CADD	[0.14755 , 0.25315]	0.95024
CAIM	[-0.06795 , 0.01835]	0.95024
Chi2	[-0.0011 , 0.09985]	0.95024
ChiMerge	[-0.0601 , 0.0194]	0.95024
ClusterAnalysis	[0.02305 , 0.10905]	0.95024
DIBD	[0.01185 , 0.09805]	0.95024
Distance	[-0.0399 , 0.07995]	0.95024
EqualFrequency	[-0.01025 , 0.06125]	0.95024
EqualWidth	[0.0123 , 0.08885]	0.95024
Extended Chi2	[0.01915 , 0.1262]	0.95024
FFD	[0.02895 , 0.1054]	0.95024
FUSINTER	[-0.0291 , 0.0349]	0.95024
HDD	[-0.0204 , 0.0852]	0.95024
HellingerBD	[0.0008 , 0.0798]	0.95024
Heter-Disc	[0.077 , 0.1711]	0.95024
ID3	[0.0027 , 0.0928]	0.95024
IDD	[0.00955 , 0.1166]	0.95024
Khiops	[0.0025 , 0.0586]	0.95024
MDLP	[-0.0118 , 0.09375]	0.95024
Modified Chi2	[0.0037 , 0.08265]	0.95024
MODL	[-0.01385 , 0.08525]	0.95024
MVD	[0.03505 , 0.14755]	0.95024
PKID	[0.0098 , 0.08945]	0.95024
USD	[-0.02775 , 0.05445]	0.95024
Zeta	[-0.0284 , 0.0524]	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	669.0	151.0	2.982E-4	0.000487
Ameva	225.0	595.0	≥ 0.2	1
Bayesian	461.0	359.0	≥ 0.2	0.488795
CACC	206.0	614.0	≥ 0.2	1
CADD	782.0	38.0	1.2008E-8	0.000001
CAIM	218.0	562.0	≥ 0.2	1
Chi2	482.0	338.0	≥ 0.2	0.329811
ChiMerge	257.0	563.0	≥ 0.2	1
ClusterAnalysis	594.0	226.0	0.012512	0.013141
DIBD	492.0	328.0	≥ 0.2	0.26747
Distance	462.0	358.0	≥ 0.2	0.480395
EqualFrequency	462.0	358.0	≥ 0.2	0.480395
EqualWidth	508.0	312.0	0.1922	0.185514
Extended Chi2	583.5	236.5	0.018886	0.019144
FFD	614.0	206.0	0.005332	0.005982
FUSINTER	310.0	510.0	≥ 0.2	1
HDD	481.0	299.0	≥ 0.2	0.201644
HellingerBD	479.0	341.0	≥ 0.2	0.350216
Heter-Disc	699.0	121.0	4.098E-5	0.0001
ID3	560.0	260.0	0.04362	0.043082
IDD	508.0	312.0	0.1922	0.185514
Khiops	468.0	352.0	≥ 0.2	0.431682
MDLP	513.0	307.0	0.17008	0.164173
Modified Chi2	559.0	221.0	0.0175	0.018012
MODL	530.0	290.0	0.1088	0.105302
MVD	580.0	240.0	0.02154	0.021921
PKID	534.0	286.0	0.09724	0.09424
UCPD	365.0	455.0	≥ 0.2	1
Zeta	385.0	395.0	≥ 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	[0.03905 , 0.1287]	0.90276
Ameva	[-0.09105 , -0.0187]	0.90276
Bayesian	[-0.0121 , 0.03515]	0.90276
CACC	[-0.07775 , -0.01895]	0.90276
CADD	[0.1149 , 0.23555]	0.90276
CAIM	[-0.0649 , -0.01225]	0.90276
Chi2	[-0.0072 , 0.06995]	0.90276
ChiMerge	[-0.0606 , -0.00685]	0.90276
ClusterAnalysis	[0.0094 , 0.08195]	0.90276
DIBD	[-0.0125 , 0.078]	0.90276
Distance	[-0.0241 , 0.04665]	0.90276
EqualFrequency	[-0.015 , 0.04295]	0.90276
EqualWidth	[-0.00555 , 0.05825]	0.90276
Extended Chi2	[0.0134 , 0.08095]	0.90276
FFD	[0.01845 , 0.0842]	0.90276
FUSINTER	[-0.03965 , 0.0038]	0.90276
HDD	[-0.00295 , 0.02925]	0.90276
HellingerBD	[-0.0124 , 0.0496]	0.90276
Heter-Disc	[0.05685 , 0.1502]	0.90276
ID3	[0.0033 , 0.04085]	0.90276
IDD	[-0.00555 , 0.0721]	0.90276
Khiops	[-0.01515 , 0.04255]	0.90276
MDLP	[-0.00765 , 0.0647]	0.90276
Modified Chi2	[0.00745 , 0.0541]	0.90276
MODL	[-0.00075 , 0.0469]	0.90276
MVD	[0.016 , 0.12005]	0.90276
PKID	[0.00025 , 0.06125]	0.90276
UCPD	[-0.04905 , 0.02025]	0.90276
Zeta	[-0.0272 , 0.029]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0344 , 0.1407]	0.95024
Ameva	[-0.09595 , -0.0135]	0.95024
Bayesian	[-0.0167 , 0.03975]	0.95024
CACC	[-0.0833 , -0.01415]	0.95024
CADD	[0.10555 , 0.24615]	0.95024
CAIM	[-0.06885 , -0.0088]	0.95024
Chi2	[-0.01155 , 0.0742]	0.95024
ChiMerge	[-0.0643 , -0.00165]	0.95024
ClusterAnalysis	[0.00595 , 0.0919]	0.95024
DIBD	[-0.0209 , 0.0875]	0.95024
Distance	[-0.03095 , 0.0545]	0.95024
EqualFrequency	[-0.0212 , 0.0507]	0.95024
EqualWidth	[-0.0114 , 0.06655]	0.95024
Extended Chi2	[0.0065 , 0.0903]	0.95024
FFD	[0.0129 , 0.09095]	0.95024
FUSINTER	[-0.04415 , 0.00775]	0.95024
HDD	[-0.0102 , 0.03215]	0.95024
HellingerBD	[-0.0195 , 0.0551]	0.95024
Heter-Disc	[0.0486 , 0.1606]	0.95024
ID3	[0.001 , 0.04495]	0.95024
IDD	[-0.0118 , 0.08695]	0.95024
Khiops	[-0.02005 , 0.0493]	0.95024
MDLP	[-0.01425 , 0.0697]	0.95024
Modified Chi2	[0.00405 , 0.05915]	0.95024
MODL	[-0.00475 , 0.0515]	0.95024
MVD	[0.00775 , 0.13825]	0.95024
PKID	[-0.00365 , 0.06535]	0.95024
UCPD	[-0.05445 , 0.02775]	0.95024
Zeta	[-0.03195 , 0.03485]	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	693.0	127.0	6.268E-5	0.000139
Ameva	263.0	557.0	≥ 0.2	1
Bayesian	487.5	332.5	≥ 0.2	0.293633
CACC	220.0	560.0	≥ 0.2	1
CADD	747.0	33.0	1.1688E-8	0.000001
CAIM	294.0	489.0	≥ 0.2	1
Chi2	563.0	257.0	0.03944	0.03909
ChiMerge	327.0	493.0	≥ 0.2	1
ClusterAnalysis	525.0	295.0	0.12472	0.12055
DIBD	545.0	275.0	0.07034	0.068562
Distance	482.5	337.5	≥ 0.2	0.325673
EqualFrequency	486.0	334.0	≥ 0.2	0.303828
EqualWidth	494.0	326.0	≥ 0.2	0.256045
Extended Chi2	590.0	230.0	0.014678	0.01526
FFD	609.0	211.0	0.006658	0.007328
FUSINTER	332.0	488.0	≥ 0.2	1
HDD	476.0	304.0	≥ 0.2	0.227391
HellingerBD	466.0	354.0	≥ 0.2	0.447593
Heter-Disc	688.0	132.0	8.832E-5	0.000182
ID3	492.0	328.0	≥ 0.2	0.266666
IDD	570.0	250.0	0.03098	0.03098
Khiops	462.0	358.0	≥ 0.2	0.480395
MDLP	545.0	275.0	0.07034	0.068562
Modified Chi2	581.0	239.0	0.02076	0.021156
MODL	526.0	294.0	0.1214	0.116754
MVD	593.0	227.0	0.013026	0.013645
PKID	529.0	291.0	0.11186	0.108222
UCPD	371.0	449.0	≥ 0.2	1
USD	395.0	385.0	≥ 0.2	0.93882

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	[0.04325 , 0.13195]	0.90276
Ameva	[-0.0909 , -0.009]	0.90276
Bayesian	[-0.0112 , 0.05195]	0.90276
CACC	[-0.0842 , -0.016]	0.90276
CADD	[0.10925 , 0.24485]	0.90276
CAIM	[-0.0498 , 0.00315]	0.90276
Chi2	[0.0089 , 0.0738]	0.90276
ChiMerge	[-0.0513 , 0.00825]	0.90276
ClusterAnalysis	[-0.00295 , 0.0923]	0.90276
DIBD	[0.0023 , 0.06965]	0.90276
Distance	[-0.0181 , 0.04675]	0.90276
EqualFrequency	[-0.01395 , 0.0606]	0.90276
EqualWidth	[-0.0114 , 0.06345]	0.90276
Extended Chi2	[0.01595 , 0.09145]	0.90276
FFD	[0.0207 , 0.0877]	0.90276
FUSINTER	[-0.04715 , 0.01095]	0.90276
HDD	[-0.0141 , 0.04095]	0.90276
HellingerBD	[-0.01655 , 0.05875]	0.90276
Heter-Disc	[0.05155 , 0.1586]	0.90276
ID3	[-0.01205 , 0.07125]	0.90276
IDD	[0.0089 , 0.0798]	0.90276
Khiops	[-0.01525 , 0.0518]	0.90276
MDLP	[0.003 , 0.05175]	0.90276
Modified Chi2	[0.00955 , 0.06295]	0.90276
MODL	[-0.0032 , 0.05515]	0.90276
MVD	[0.0262 , 0.1199]	0.90276
PKID	[-0.00245 , 0.07715]	0.90276
UCPD	[-0.04585 , 0.02245]	0.90276
USD	[-0.029 , 0.0272]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.03525 , 0.13915]	0.95024
Ameva	[-0.09655 , -0.0002]	0.95024
Bayesian	[-0.0163 , 0.06085]	0.95024
CACC	[-0.09165 , -0.0096]	0.95024
CADD	[0.0976 , 0.2559]	0.95024
CAIM	[-0.0567 , 0.005]	0.95024
Chi2	[0.00455 , 0.0793]	0.95024
ChiMerge	[-0.0567 , 0.012]	0.95024
ClusterAnalysis	[-0.0106 , 0.10495]	0.95024
DIBD	[-0.00455 , 0.0768]	0.95024
Distance	[-0.0238 , 0.05135]	0.95024
EqualFrequency	[-0.0228 , 0.06605]	0.95024
EqualWidth	[-0.01665 , 0.07405]	0.95024
Extended Chi2	[0.00855 , 0.10075]	0.95024
FFD	[0.01575 , 0.0993]	0.95024
FUSINTER	[-0.05395 , 0.01575]	0.95024
HDD	[-0.0223 , 0.04515]	0.95024
HellingerBD	[-0.02465 , 0.0672]	0.95024
Heter-Disc	[0.0449 , 0.1673]	0.95024
ID3	[-0.0169 , 0.083]	0.95024
IDD	[0.00395 , 0.09045]	0.95024
Khiops	[-0.0226 , 0.0595]	0.95024
MDLP	[-0.00235 , 0.05925]	0.95024
Modified Chi2	[0.0067 , 0.068]	0.95024
MODL	[-0.0109 , 0.06055]	0.95024
MVD	[0.01705 , 0.1372]	0.95024
PKID	[-0.01025 , 0.086]	0.95024
UCPD	[-0.0524 , 0.0284]	0.95024
USD	[-0.03485 , 0.03195]	0.95024

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