

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	196.5	623.5	≥ 0.2	1
Bayesian	312.5	507.5	≥ 0.2	1
CACC	242.0	578.0	≥ 0.2	1
CADD	768.0	52.0	7.284E-8	0.000001
CAIM	144.0	676.0	≥ 0.2	1
Chi2	73.0	707.0	≥ 0.2	1
ChiMerge	168.0	652.0	≥ 0.2	1
ClusterAnalysis	334.0	486.0	≥ 0.2	1
DIBD	457.0	363.0	≥ 0.2	0.523173
Distance	316.0	464.0	≥ 0.2	1
EqualFrequency	172.0	648.0	≥ 0.2	1
EqualWidth	179.0	641.0	≥ 0.2	1
Extended Chi2	326.0	494.0	≥ 0.2	1
FFD	157.0	663.0	≥ 0.2	1
FUSINTER	152.0	668.0	≥ 0.2	1
HDD	241.0	579.0	≥ 0.2	1
HellingerBD	195.0	625.0	≥ 0.2	1
Heter-Disc	387.0	396.0	≥ 0.2	1
ID3	262.0	558.0	≥ 0.2	1
IDD	336.0	447.0	≥ 0.2	1
Khiops	127.0	693.0	≥ 0.2	1
MDLP	332.5	487.5	≥ 0.2	1
Modified Chi2	60.5	759.5	≥ 0.2	1
MODL	94.0	726.0	≥ 0.2	1
MVD	381.0	399.0	≥ 0.2	1
PKID	112.0	708.0	≥ 0.2	1
UCPD	272.0	548.0	≥ 0.2	1
USD	233.0	587.0	≥ 0.2	1
Zeta	206.0	614.0	≥ 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	[-0.0979 , -0.0298]	0.90276
Bayesian	[-0.04975 , 0.0046]	0.90276
CACC	[-0.0819 , -0.01345]	0.90276
CADD	[0.1103 , 0.2396]	0.90276
CAIM	[-0.0927 , -0.0319]	0.90276
Chi2	[-0.122 , -0.0501]	0.90276
ChiMerge	[-0.09095 , -0.03135]	0.90276
ClusterAnalysis	[-0.0702 , 0.00845]	0.90276
DIBD	[-0.0149 , 0.05685]	0.90276
Distance	[-0.05825 , 0.01275]	0.90276
EqualFrequency	[-0.0937 , -0.0275]	0.90276
EqualWidth	[-0.0915 , -0.02615]	0.90276
Extended Chi2	[-0.07385 , 0.016]	0.90276
FFD	[-0.0922 , -0.0277]	0.90276
FUSINTER	[-0.1151 , -0.03925]	0.90276
HDD	[-0.07895 , -0.01395]	0.90276
HellingerBD	[-0.0846 , -0.01805]	0.90276
Heter-Disc	[-0.04755 , 0.03865]	0.90276
ID3	[-0.08065 , -0.0047]	0.90276
IDD	[-0.0218 , 0.01035]	0.90276
Khiops	[-0.1062 , -0.0388]	0.90276
MDLP	[-0.06065 , 0.01505]	0.90276
Modified Chi2	[-0.1259 , -0.05145]	0.90276
MODL	[-0.099 , -0.0424]	0.90276
MVD	[-0.0447 , 0.0742]	0.90276
PKID	[-0.10305 , -0.0386]	0.90276
UCPD	[-0.0715 , -0.0036]	0.90276
USD	[-0.08375 , -0.0113]	0.90276
Zeta	[-0.0878 , -0.0198]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.1041 , -0.02305]	0.95024
Bayesian	[-0.05515 , 0.01035]	0.95024
CACC	[-0.09455 , -0.00705]	0.95024
CADD	[0.10105 , 0.2523]	0.95024
CAIM	[-0.09765 , -0.0275]	0.95024
Chi2	[-0.13 , -0.04595]	0.95024
ChiMerge	[-0.09805 , -0.02535]	0.95024
ClusterAnalysis	[-0.0807 , 0.01875]	0.95024
DIBD	[-0.0191 , 0.06505]	0.95024
Distance	[-0.06635 , 0.022]	0.95024
EqualFrequency	[-0.10295 , -0.0231]	0.95024
EqualWidth	[-0.10065 , -0.02245]	0.95024
Extended Chi2	[-0.08125 , 0.02565]	0.95024
FFD	[-0.1039 , -0.0211]	0.95024
FUSINTER	[-0.125 , -0.0346]	0.95024
HDD	[-0.0835 , -0.00645]	0.95024
HellingerBD	[-0.094 , -0.01525]	0.95024
Heter-Disc	[-0.0592 , 0.0464]	0.95024
ID3	[-0.0913 , -0.00055]	0.95024
IDD	[-0.0266 , 0.01305]	0.95024
Khiops	[-0.1131 , -0.03265]	0.95024
MDLP	[-0.0694 , 0.02315]	0.95024
Modified Chi2	[-0.13415 , -0.048]	0.95024
MODL	[-0.1094 , -0.03655]	0.95024
MVD	[-0.05075 , 0.0854]	0.95024
PKID	[-0.1111 , -0.0328]	0.95024
UCPD	[-0.07845 , 0.0009]	0.95024
USD	[-0.0912 , -0.0063]	0.95024
Zeta	[-0.09485 , -0.01625]	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	623.5	196.5	0.003439	0.003961
Bayesian	551.0	269.0	0.0584	0.056761
CACC	427.0	393.0	≥ 0.2	0.814036
CADD	791.0	29.0	3.164E-9	0
CAIM	469.5	350.5	≥ 0.2	0.76624
Chi2	278.0	542.0	≥ 0.2	1
ChiMerge	444.0	376.0	≥ 0.2	0.642845
ClusterAnalysis	517.5	302.5	0.15184	0.144561
DIBD	661.0	159.0	4.794E-4	0.000724
Distance	603.0	217.0	0.008622	0.009298
EqualFrequency	402.0	378.0	≥ 0.2	0.861522
EqualWidth	412.0	408.0	≥ 0.2	0.973194
Extended Chi2	473.5	346.5	≥ 0.2	0.388858
FFD	405.0	415.0	≥ 0.2	1
FUSINTER	333.0	487.0	≥ 0.2	1
HDD	428.0	352.0	≥ 0.2	0.591083
HellingerBD	455.0	365.0	≥ 0.2	0.540816
Heter-Disc	589.0	231.0	0.015266	0.015834
ID3	469.0	351.0	≥ 0.2	0.423851
IDD	587.0	233.0	0.016506	0.017041
Khiops	351.5	468.5	≥ 0.2	1
MDLP	583.0	237.0	0.019246	0.019287
Modified Chi2	266.0	554.0	≥ 0.2	1
MODL	313.5	506.5	≥ 0.2	1
MVD	599.0	221.0	0.010198	0.010729
PKID	337.5	482.5	≥ 0.2	1
UCPD	591.0	229.0	0.014108	0.014704
USD	450.0	370.0	≥ 0.2	0.585555
Zeta	429.5	350.5	≥ 0.2	0.575374

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
IR	[0.0298 , 0.0979]	0.90276
Bayesian	[0.0057 , 0.0582]	0.90276
CACC	[-0.0104 , 0.0177]	0.90276
CADD	[0.17745 , 0.30465]	0.90276
CAIM	[-0.00525 , 0.01415]	0.90276
Chi2	[-0.0443 , -0.00085]	0.90276
ChiMerge	[-0.0075 , 0.01675]	0.90276
ClusterAnalysis	[-0.0028 , 0.04615]	0.90276
DIBD	[0.03815 , 0.1149]	0.90276
Distance	[0.0141 , 0.0614]	0.90276
EqualFrequency	[-0.0116 , 0.01855]	0.90276
EqualWidth	[-0.0167 , 0.01585]	0.90276
Extended Chi2	[-0.01275 , 0.05545]	0.90276
FFD	[-0.0212 , 0.0161]	0.90276
FUSINTER	[-0.03605 , 0.0041]	0.90276
HDD	[-0.0123 , 0.02655]	0.90276
HellingerBD	[-0.0164 , 0.0278]	0.90276
Heter-Disc	[0.0204 , 0.108]	0.90276
ID3	[-0.0152 , 0.0334]	0.90276
IDD	[0.0127 , 0.0855]	0.90276
Khiops	[-0.03 , 0.00885]	0.90276
MDLP	[0.0087 , 0.0566]	0.90276
Modified Chi2	[-0.0343 , -0.00215]	0.90276
MODL	[-0.03485 , 0.0034]	0.90276
MVD	[0.008 , 0.1012]	0.90276
PKID	[-0.0337 , 0.00835]	0.90276
UCPD	[0.0065 , 0.04515]	0.90276
USD	[-0.01265 , 0.0234]	0.90276
Zeta	[-0.01325 , 0.02725]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.02305 , 0.1041]	0.95024
Bayesian	[-0.00135 , 0.064]	0.95024
CACC	[-0.013 , 0.02065]	0.95024
CADD	[0.16895 , 0.31675]	0.95024
CAIM	[-0.0074 , 0.01645]	0.95024
Chi2	[-0.04945 , 0.0015]	0.95024
ChiMerge	[-0.0093 , 0.0193]	0.95024
ClusterAnalysis	[-0.00705 , 0.0514]	0.95024
DIBD	[0.0346 , 0.1196]	0.95024
Distance	[0.0105 , 0.06645]	0.95024
EqualFrequency	[-0.01415 , 0.0231]	0.95024
EqualWidth	[-0.0211 , 0.01885]	0.95024
Extended Chi2	[-0.0161 , 0.0676]	0.95024
FFD	[-0.0299 , 0.0211]	0.95024
FUSINTER	[-0.04215 , 0.00565]	0.95024
HDD	[-0.0175 , 0.03155]	0.95024
HellingerBD	[-0.02015 , 0.03135]	0.95024
Heter-Disc	[0.01355 , 0.11635]	0.95024
ID3	[-0.0221 , 0.0373]	0.95024
IDD	[0.00825 , 0.09045]	0.95024
Khiops	[-0.03525 , 0.0122]	0.95024
MDLP	[0.00555 , 0.06145]	0.95024
Modified Chi2	[-0.04385 , 0.00045]	0.95024
MODL	[-0.0403 , 0.0068]	0.95024
MVD	[0.0047 , 0.1254]	0.95024
PKID	[-0.03705 , 0.013]	0.95024
UCPD	[0.0045 , 0.0507]	0.95024
USD	[-0.0176 , 0.02595]	0.95024
Zeta	[-0.01605 , 0.03005]	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	507.5	312.5	≥ 0.2	0.396225
Ameva	269.0	551.0	≥ 0.2	1
CACC	309.0	511.0	≥ 0.2	1
CADD	785.0	35.0	7.84E-9	0
CAIM	262.0	558.0	≥ 0.2	1
Chi2	160.0	660.0	≥ 0.2	1
ChiMerge	255.0	565.0	≥ 0.2	1
ClusterAnalysis	369.0	451.0	≥ 0.2	1
DIBD	535.0	245.0	0.04284	0.042311
Distance	439.0	381.0	≥ 0.2	0.691723
EqualFrequency	261.0	559.0	≥ 0.2	1
EqualWidth	264.0	556.0	≥ 0.2	1
Extended Chi2	363.0	457.0	≥ 0.2	1
FFD	205.0	615.0	≥ 0.2	1
FUSINTER	204.0	576.0	≥ 0.2	1
HDD	345.0	475.0	≥ 0.2	1
HellingerBD	298.0	522.0	≥ 0.2	1
Heter-Disc	490.0	290.0	0.16676	0.160773
ID3	308.5	511.5	≥ 0.2	1
IDD	441.0	339.0	≥ 0.2	0.472337
Khiops	225.0	595.0	≥ 0.2	1
MDLP	390.5	389.5	≥ 0.2	0.988846
Modified Chi2	127.0	693.0	≥ 0.2	1
MODL	108.0	712.0	≥ 0.2	1
MVD	514.0	306.0	0.1659	0.160136
PKID	140.0	680.0	≥ 0.2	1
UCPD	350.0	430.0	≥ 0.2	1
USD	229.0	591.0	≥ 0.2	1
Zeta	335.0	485.0	≥ 0.2	1

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

3.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0046 , 0.04975]	0.90276
Ameva	[-0.0582 , -0.0057]	0.90276
CACC	[-0.04775 , 0.00535]	0.90276
CADD	[0.1544 , 0.29255]	0.90276
CAIM	[-0.05965 , -0.00685]	0.90276
Chi2	[-0.07045 , -0.02365]	0.90276
ChiMerge	[-0.0566 , -0.0103]	0.90276
ClusterAnalysis	[-0.0292 , 0.015]	0.90276
DIBD	[0.0079 , 0.09075]	0.90276
Distance	[-0.0276 , 0.05085]	0.90276
EqualFrequency	[-0.05575 , -0.0043]	0.90276
EqualWidth	[-0.0564 , -0.00385]	0.90276
Extended Chi2	[-0.02765 , 0.0138]	0.90276
FFD	[-0.0518 , -0.01205]	0.90276
FUSINTER	[-0.05975 , -0.0148]	0.90276
HDD	[-0.0345 , 0.0081]	0.90276
HellingerBD	[-0.05255 , 0.002]	0.90276
Heter-Disc	[-0.006 , 0.08025]	0.90276
ID3	[-0.0231 , 0.0021]	0.90276
IDD	[-0.0097 , 0.0313]	0.90276
Khiops	[-0.05095 , -0.0121]	0.90276
MDLP	[-0.02705 , 0.04895]	0.90276
Modified Chi2	[-0.0691 , -0.0269]	0.90276
MODL	[-0.06325 , -0.0307]	0.90276
MVD	[-0.006 , 0.0985]	0.90276
PKID	[-0.05865 , -0.0225]	0.90276
UCPD	[-0.04245 , 0.0199]	0.90276
USD	[-0.028 , -0.0047]	0.90276
Zeta	[-0.054 , 0.00945]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01035 , 0.05515]	0.95024
Ameva	[-0.064 , 0.00135]	0.95024
CACC	[-0.0532 , 0.01295]	0.95024
CADD	[0.14585 , 0.3069]	0.95024
CAIM	[-0.06715 , -0.0008]	0.95024
Chi2	[-0.0769 , -0.01935]	0.95024
ChiMerge	[-0.0619 , -0.00345]	0.95024
ClusterAnalysis	[-0.03355 , 0.02035]	0.95024
DIBD	[0.00175 , 0.09985]	0.95024
Distance	[-0.0318 , 0.0577]	0.95024
EqualFrequency	[-0.0623 , -0.0004]	0.95024
EqualWidth	[-0.0614 , -0.00015]	0.95024
Extended Chi2	[-0.032 , 0.0178]	0.95024
FFD	[-0.0571 , -0.00915]	0.95024
FUSINTER	[-0.0636 , -0.0114]	0.95024
HDD	[-0.04045 , 0.01655]	0.95024
HellingerBD	[-0.0558 , 0.0073]	0.95024
Heter-Disc	[-0.01375 , 0.0898]	0.95024
ID3	[-0.02685 , 0.0048]	0.95024
IDD	[-0.01285 , 0.0373]	0.95024
Khiops	[-0.0592 , -0.00705]	0.95024
MDLP	[-0.0316 , 0.05485]	0.95024
Modified Chi2	[-0.07375 , -0.02365]	0.95024
MODL	[-0.06745 , -0.0282]	0.95024
MVD	[-0.01315 , 0.1064]	0.95024
PKID	[-0.0631 , -0.01895]	0.95024
UCPD	[-0.04575 , 0.02385]	0.95024
USD	[-0.03125 , -0.00275]	0.95024
Zeta	[-0.0609 , 0.01455]	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	578.0	242.0	0.0232	0.023521
Ameva	393.0	427.0	≥ 0.2	1
Bayesian	511.0	309.0	0.1787	0.172476
CADD	808.0	12.0	1.2732E-10	0
CAIM	371.0	449.0	≥ 0.2	1
Chi2	248.0	572.0	≥ 0.2	1
ChiMerge	369.0	451.0	≥ 0.2	1
ClusterAnalysis	490.0	290.0	0.16676	0.160773
DIBD	633.0	187.0	0.002166	0.002663
Distance	512.0	268.0	0.09014	0.086809
EqualFrequency	405.0	415.0	≥ 0.2	1
EqualWidth	371.0	449.0	≥ 0.2	1
Extended Chi2	428.0	392.0	≥ 0.2	0.803621
FFD	389.0	431.0	≥ 0.2	1
FUSINTER	280.0	540.0	≥ 0.2	1
HDD	421.5	398.5	≥ 0.2	0.871647
HellingerBD	410.0	410.0	≥ 0.2	0.994629
Heter-Disc	592.5	227.5	0.03776	0.037427
ID3	411.0	409.0	≥ 0.2	0.983887
IDD	541.0	279.0	0.07932	0.077139
Khiops	314.0	506.0	≥ 0.2	1
MDLP	466.5	313.5	≥ 0.2	0.281743
Modified Chi2	219.0	561.0	≥ 0.2	1
MODL	223.0	557.0	≥ 0.2	1
MVD	525.0	258.0	0.1624	0.156158
PKID	318.5	501.5	≥ 0.2	1
UCPD	555.5	264.5	0.05058	0.04933
USD	418.0	402.0	≥ 0.2	0.909039
Zeta	371.5	408.5	≥ 0.2	1

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

4.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
IR	[0.01345 , 0.0819]	0.90276
Ameva	[-0.0177 , 0.0104]	0.90276
Bayesian	[-0.00535 , 0.04775]	0.90276
CADD	[0.1628 , 0.28595]	0.90276
CAIM	[-0.03405 , 0.011]	0.90276
Chi2	[-0.0698 , -0.0078]	0.90276
ChiMerge	[-0.02695 , 0.0118]	0.90276
ClusterAnalysis	[-0.00375 , 0.0404]	0.90276
DIBD	[0.02515 , 0.09595]	0.90276
Distance	[0.00005 , 0.0472]	0.90276
EqualFrequency	[-0.0273 , 0.01755]	0.90276
EqualWidth	[-0.0374 , 0.01195]	0.90276
Extended Chi2	[-0.0296 , 0.048]	0.90276
FFD	[-0.03475 , 0.0151]	0.90276
FUSINTER	[-0.0433 , -0.00175]	0.90276
HDD	[-0.0322 , 0.0255]	0.90276
HellingerBD	[-0.0226 , 0.0175]	0.90276
Heter-Disc	[0.01795 , 0.09285]	0.90276
ID3	[-0.03155 , 0.02515]	0.90276
IDD	[0.00255 , 0.07165]	0.90276
Khiops	[-0.0417 , 0.0031]	0.90276
MDLP	[-0.00635 , 0.0449]	0.90276
Modified Chi2	[-0.0721 , -0.00825]	0.90276
MODL	[-0.0503 , -0.00545]	0.90276
MVD	[0.00265 , 0.10625]	0.90276
PKID	[-0.05425 , 0.00445]	0.90276
UCPD	[0.00305 , 0.03295]	0.90276
USD	[-0.02815 , 0.0232]	0.90276
Zeta	[-0.02475 , 0.0165]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.00705 , 0.09455]	0.95024
Ameva	[-0.02065 , 0.013]	0.95024
Bayesian	[-0.01295 , 0.0532]	0.95024
CADD	[0.15475 , 0.29625]	0.95024
CAIM	[-0.04155 , 0.0138]	0.95024
Chi2	[-0.0772 , -0.002]	0.95024
ChiMerge	[-0.0342 , 0.0153]	0.95024
ClusterAnalysis	[-0.0087 , 0.045]	0.95024
DIBD	[0.0201 , 0.10145]	0.95024
Distance	[-0.0027 , 0.05135]	0.95024
EqualFrequency	[-0.0342 , 0.0194]	0.95024
EqualWidth	[-0.0452 , 0.01625]	0.95024
Extended Chi2	[-0.03845 , 0.0576]	0.95024
FFD	[-0.04835 , 0.0176]	0.95024
FUSINTER	[-0.0484 , 0.0018]	0.95024
HDD	[-0.0421 , 0.0293]	0.95024
HellingerBD	[-0.0301 , 0.0205]	0.95024
Heter-Disc	[0.0127 , 0.09905]	0.95024
ID3	[-0.0445 , 0.02935]	0.95024
IDD	[-0.0039 , 0.07895]	0.95024
Khiops	[-0.04995 , 0.00575]	0.95024
MDLP	[-0.0094 , 0.04785]	0.95024
Modified Chi2	[-0.0855 , -0.00455]	0.95024
MODL	[-0.05965 , -0.0029]	0.95024
MVD	[-0.0008 , 0.12805]	0.95024
PKID	[-0.0672 , 0.00795]	0.95024
UCPD	[0 , 0.0369]	0.95024
USD	[-0.03555 , 0.026]	0.95024
Zeta	[-0.0331 , 0.0194]	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	52.0	768.0	≥ 0.2	1
Ameva	29.0	791.0	≥ 0.2	1
Bayesian	35.0	785.0	≥ 0.2	1
CACC	12.0	808.0	≥ 0.2	1
CAIM	13.0	807.0	≥ 0.2	1
Chi2	5.0	815.0	≥ 0.2	1
ChiMerge	13.0	807.0	≥ 0.2	1
ClusterAnalysis	55.0	765.0	≥ 0.2	1
DIBD	98.5	721.5	≥ 0.2	1
Distance	29.0	751.0	≥ 0.2	1
EqualFrequency	6.0	774.0	≥ 0.2	1
EqualWidth	14.0	806.0	≥ 0.2	1
Extended Chi2	69.0	751.0	≥ 0.2	1
FFD	2.0	818.0	≥ 0.2	1
FUSINTER	7.0	813.0	≥ 0.2	1
HDD	28.0	792.0	≥ 0.2	1
HellingerBD	12.0	768.0	≥ 0.2	1
Heter-Disc	77.0	743.0	≥ 0.2	1
ID3	29.0	791.0	≥ 0.2	1
IDD	21.0	759.0	≥ 0.2	1
Khiops	1.0	819.0	≥ 0.2	1
MDLP	38.0	742.0	≥ 0.2	1
Modified Chi2	0.0	820.0	≥ 0.2	1
MODL	0.0	820.0	≥ 0.2	1
MVD	112.0	708.0	≥ 0.2	1
PKID	0.0	820.0	≥ 0.2	1
UCPD	37.0	783.0	≥ 0.2	1
USD	28.0	792.0	≥ 0.2	1
Zeta	19.0	801.0	≥ 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	[-0.2396 , -0.1103]	0.90276
Ameva	[-0.30465 , -0.17745]	0.90276
Bayesian	[-0.29255 , -0.1544]	0.90276
CACC	[-0.28595 , -0.1628]	0.90276
CAIM	[-0.3245 , -0.19805]	0.90276
Chi2	[-0.36485 , -0.2364]	0.90276
ChiMerge	[-0.3252 , -0.1842]	0.90276
ClusterAnalysis	[-0.2935 , -0.1584]	0.90276
DIBD	[-0.2358 , -0.09485]	0.90276
Distance	[-0.27915 , -0.12945]	0.90276
EqualFrequency	[-0.3283 , -0.20205]	0.90276
EqualWidth	[-0.3333 , -0.1987]	0.90276
Extended Chi2	[-0.3122 , -0.15425]	0.90276
FFD	[-0.3376 , -0.2089]	0.90276
FUSINTER	[-0.35345 , -0.2086]	0.90276
HDD	[-0.3195 , -0.1798]	0.90276
HellingerBD	[-0.32455 , -0.196]	0.90276
Heter-Disc	[-0.25395 , -0.10275]	0.90276
ID3	[-0.32835 , -0.1918]	0.90276
IDD	[-0.25585 , -0.1229]	0.90276
Khiops	[-0.3393 , -0.21155]	0.90276
MDLP	[-0.28415 , -0.13955]	0.90276
Modified Chi2	[-0.3679 , -0.23435]	0.90276
MODL	[-0.34285 , -0.21805]	0.90276
MVD	[-0.24865 , -0.09855]	0.90276
PKID	[-0.3548 , -0.2172]	0.90276
UCPD	[-0.31035 , -0.16955]	0.90276
USD	[-0.33 , -0.18485]	0.90276
Zeta	[-0.32675 , -0.1864]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.2523 , -0.10105]	0.95024
Ameva	[-0.31675 , -0.16895]	0.95024
Bayesian	[-0.3069 , -0.14585]	0.95024
CACC	[-0.29625 , -0.15475]	0.95024
CAIM	[-0.34155 , -0.18565]	0.95024
Chi2	[-0.37455 , -0.22585]	0.95024
ChiMerge	[-0.3359 , -0.17165]	0.95024
ClusterAnalysis	[-0.3091 , -0.14595]	0.95024
DIBD	[-0.2499 , -0.08705]	0.95024
Distance	[-0.29025 , -0.1222]	0.95024
EqualFrequency	[-0.3409 , -0.1911]	0.95024
EqualWidth	[-0.34705 , -0.1877]	0.95024
Extended Chi2	[-0.3307 , -0.1453]	0.95024
FFD	[-0.3543 , -0.19485]	0.95024
FUSINTER	[-0.364 , -0.1929]	0.95024
HDD	[-0.3359 , -0.1676]	0.95024
HellingerBD	[-0.3361 , -0.1841]	0.95024
Heter-Disc	[-0.27095 , -0.0924]	0.95024
ID3	[-0.34015 , -0.17615]	0.95024
IDD	[-0.27615 , -0.11125]	0.95024
Khiops	[-0.35405 , -0.19785]	0.95024
MDLP	[-0.29705 , -0.12475]	0.95024
Modified Chi2	[-0.3797 , -0.2226]	0.95024
MODL	[-0.35795 , -0.2057]	0.95024
MVD	[-0.2631 , -0.088]	0.95024
PKID	[-0.36545 , -0.2016]	0.95024
UCPD	[-0.3227 , -0.1605]	0.95024
USD	[-0.34175 , -0.17475]	0.95024
Zeta	[-0.3365 , -0.17145]	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	676.0	144.0	1.9334E-4	0.000341
Ameva	350.5	469.5	≥ 0.2	1
Bayesian	558.0	262.0	0.04662	0.04593
CACC	449.0	371.0	≥ 0.2	0.594226
CADD	807.0	13.0	1.6008E-10	0
Chi2	300.5	519.5	≥ 0.2	1
ChiMerge	386.0	394.0	≥ 0.2	1
ClusterAnalysis	575.0	245.0	0.0259	0.026112
DIBD	734.0	86.0	2.444E-6	0.000013
Distance	592.0	188.0	0.004088	0.004643
EqualFrequency	439.0	381.0	≥ 0.2	0.691723
EqualWidth	448.0	372.0	≥ 0.2	0.604814
Extended Chi2	475.0	305.0	≥ 0.2	0.23281
FFD	440.0	380.0	≥ 0.2	0.681836
FUSINTER	358.5	421.5	≥ 0.2	1
HDD	445.5	374.5	≥ 0.2	1
HellingerBD	483.0	337.0	≥ 0.2	0.321556
Heter-Disc	610.0	210.0	0.006372	0.006944
ID3	456.0	364.0	≥ 0.2	0.531958
IDD	624.0	196.0	0.003358	0.003937
Khiops	384.0	396.0	≥ 0.2	1
MDLP	598.0	222.0	0.010628	0.011287
Modified Chi2	252.0	568.0	≥ 0.2	1
MODL	331.0	489.0	≥ 0.2	1
MVD	575.0	205.0	0.008948	0.009635
PKID	355.0	465.0	≥ 0.2	1
UCPD	561.0	259.0	0.0422	0.041715
USD	436.0	344.0	≥ 0.2	0.516398
Zeta	423.5	396.5	≥ 0.2	1

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

6.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
IR	[0.0319 , 0.0927]	0.90276
Ameva	[-0.01415 , 0.00525]	0.90276
Bayesian	[0.00685 , 0.05965]	0.90276
CACC	[-0.011 , 0.03405]	0.90276
CADD	[0.19805 , 0.3245]	0.90276
Chi2	[-0.03865 , 0.00195]	0.90276
ChiMerge	[-0.00655 , 0.0074]	0.90276
ClusterAnalysis	[0.0068 , 0.04915]	0.90276
DIBD	[0.0481 , 0.1106]	0.90276
Distance	[0.01495 , 0.0689]	0.90276
EqualFrequency	[-0.00785 , 0.0188]	0.90276
EqualWidth	[-0.01195 , 0.01965]	0.90276
Extended Chi2	[-0.00655 , 0.051]	0.90276
FFD	[-0.0163 , 0.0239]	0.90276
FUSINTER	[-0.0245 , 0.0098]	0.90276
HDD	[-0.0116 , 0.01455]	0.90276
HellingerBD	[-0.00825 , 0.0323]	0.90276
Heter-Disc	[0.02785 , 0.1248]	0.90276
ID3	[-0.0132 , 0.034]	0.90276
IDD	[0.0221 , 0.0857]	0.90276
Khiops	[-0.02695 , 0.015]	0.90276
MDLP	[0.00825 , 0.06395]	0.90276
Modified Chi2	[-0.0343 , -0.0025]	0.90276
MODL	[-0.0311 , 0.0053]	0.90276
MVD	[0.0157 , 0.1395]	0.90276
PKID	[-0.0299 , 0.01175]	0.90276
UCPD	[0.0042 , 0.0451]	0.90276
USD	[-0.0128 , 0.02655]	0.90276
Zeta	[-0.00685 , 0.0154]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0275 , 0.09765]	0.95024
Ameva	[-0.01645 , 0.0074]	0.95024
Bayesian	[0.0008 , 0.06715]	0.95024
CACC	[-0.0138 , 0.04155]	0.95024
CADD	[0.18565 , 0.34155]	0.95024
Chi2	[-0.04495 , 0.00345]	0.95024
ChiMerge	[-0.0082 , 0.00885]	0.95024
ClusterAnalysis	[0.0027 , 0.05405]	0.95024
DIBD	[0.04205 , 0.11645]	0.95024
Distance	[0.0117 , 0.07165]	0.95024
EqualFrequency	[-0.00995 , 0.02215]	0.95024
EqualWidth	[-0.01545 , 0.0223]	0.95024
Extended Chi2	[-0.0101 , 0.0625]	0.95024
FFD	[-0.0222 , 0.02805]	0.95024
FUSINTER	[-0.0282 , 0.01425]	0.95024
HDD	[-0.015 , 0.01775]	0.95024
HellingerBD	[-0.01275 , 0.03705]	0.95024
Heter-Disc	[0.0187 , 0.1331]	0.95024
ID3	[-0.01695 , 0.03805]	0.95024
IDD	[0.01705 , 0.09175]	0.95024
Khiops	[-0.0313 , 0.01755]	0.95024
MDLP	[0.0054 , 0.0722]	0.95024
Modified Chi2	[-0.03875 , -0.00065]	0.95024
MODL	[-0.03475 , 0.00745]	0.95024
MVD	[0.00995 , 0.14835]	0.95024
PKID	[-0.03455 , 0.0153]	0.95024
UCPD	[0.0005 , 0.051]	0.95024
USD	[-0.01685 , 0.03015]	0.95024
Zeta	[-0.0084 , 0.02045]	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	707.0	73.0	1.4158E-6	0.000009
Ameva	542.0	278.0	0.077	0.074429
Bayesian	660.0	160.0	5.08E-4	0.00076
CACC	572.0	248.0	0.02884	0.028947
CADD	815.0	5.0	1.819E-11	0
CAIM	519.5	300.5	0.14421	0.138598
ChiMerge	535.0	285.0	0.0945	0.091626
ClusterAnalysis	670.5	149.5	2.723E-4	0.000441
DIBD	708.0	72.0	1.2818E-6	0.000009
Distance	637.5	142.5	3.322E-4	0.000527
EqualFrequency	580.0	240.0	0.02154	0.021699
EqualWidth	587.0	233.0	0.016506	0.017041
Extended Chi2	625.0	195.0	0.003202	0.003714
FFD	573.0	247.0	0.02784	0.027974
FUSINTER	485.0	335.0	≥ 0.2	0.310193
HDD	541.0	279.0	0.07932	0.077139
HellingerBD	598.0	222.0	0.010628	0.011287
Heter-Disc	682.0	138.0	1.3154E-4	0.00025
ID3	569.5	250.5	0.0831000000000001	0.080546
IDD	712.0	108.0	1.5466E-5	0.000048
Khiops	553.0	267.0	0.05482	0.053752
MDLP	664.0	156.0	4.022E-4	0.000624
Modified Chi2	420.0	360.0	≥ 0.2	0.669294
MODL	434.0	386.0	≥ 0.2	0.74192
MVD	663.5	156.5	0.0014256	0.001866
PKID	463.5	356.5	≥ 0.2	0.833447
UCPD	664.0	156.0	4.022E-4	0.000624
USD	579.0	201.0	0.007492	0.008071
Zeta	542.0	238.0	0.03344	0.033326

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
IR	[0.0501 , 0.122]	0.90276
Ameva	[0.00085 , 0.0443]	0.90276
Bayesian	[0.02365 , 0.07045]	0.90276
CACC	[0.0078 , 0.0698]	0.90276
CADD	[0.2364 , 0.36485]	0.90276
CAIM	[-0.00195 , 0.03865]	0.90276
ChiMerge	[0.0002 , 0.0461]	0.90276
ClusterAnalysis	[0.0225 , 0.0766]	0.90276
DIBD	[0.076 , 0.15135]	0.90276
Distance	[0.03625 , 0.1051]	0.90276
EqualFrequency	[0.0062 , 0.0423]	0.90276
EqualWidth	[0.0078 , 0.0394]	0.90276
Extended Chi2	[0.0123 , 0.08135]	0.90276
FFD	[0.0052 , 0.03725]	0.90276
FUSINTER	[-0.00515 , 0.0231]	0.90276
HDD	[0.00125 , 0.05215]	0.90276
HellingerBD	[0.0107 , 0.05175]	0.90276
Heter-Disc	[0.0608 , 0.1479]	0.90276
ID3	[0.0058 , 0.04895]	0.90276
IDD	[0.0409 , 0.10695]	0.90276
Khiops	[0.0015 , 0.0226]	0.90276
MDLP	[0.0307 , 0.0998]	0.90276
Modified Chi2	[-0.00765 , 0.0114]	0.90276
MODL	[-0.00795 , 0.0162]	0.90276
MVD	[0.03605 , 0.152]	0.90276
PKID	[-0.00785 , 0.0243]	0.90276
UCPD	[0.02395 , 0.0778]	0.90276
USD	[0.00755 , 0.03585]	0.90276
Zeta	[0.006 , 0.054]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.04595 , 0.13]	0.95024
Ameva	[-0.0015 , 0.04945]	0.95024
Bayesian	[0.01935 , 0.0769]	0.95024
CACC	[0.002 , 0.0772]	0.95024
CADD	[0.22585 , 0.37455]	0.95024
CAIM	[-0.00345 , 0.04495]	0.95024
ChiMerge	[-0.00225 , 0.05145]	0.95024
ClusterAnalysis	[0.01965 , 0.086]	0.95024
DIBD	[0.0685 , 0.1593]	0.95024
Distance	[0.03085 , 0.11245]	0.95024
EqualFrequency	[0.00275 , 0.04595]	0.95024
EqualWidth	[0.00495 , 0.0429]	0.95024
Extended Chi2	[0.0088 , 0.0897]	0.95024
FFD	[0.0027 , 0.04025]	0.95024
FUSINTER	[-0.00835 , 0.0266]	0.95024
HDD	[-0.003 , 0.05675]	0.95024
HellingerBD	[0.0063 , 0.0576]	0.95024
Heter-Disc	[0.05535 , 0.15885]	0.95024
ID3	[0.0012 , 0.0532]	0.95024
IDD	[0.03415 , 0.1144]	0.95024
Khiops	[-0.00035 , 0.02495]	0.95024
MDLP	[0.02605 , 0.10585]	0.95024
Modified Chi2	[-0.0108 , 0.0135]	0.95024
MODL	[-0.0099 , 0.019]	0.95024
MVD	[0.03065 , 0.16165]	0.95024
PKID	[-0.0102 , 0.02715]	0.95024
UCPD	[0.02005 , 0.08255]	0.95024
USD	[0.00545 , 0.03905]	0.95024
Zeta	[0.002 , 0.06085]	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	652.0	168.0	7.984E-4	0.001116
Ameva	376.0	444.0	≥ 0.2	1
Bayesian	565.0	255.0	0.03684	0.036607
CACC	451.0	369.0	≥ 0.2	0.576972
CADD	807.0	13.0	1.6008E-10	0
CAIM	394.0	386.0	≥ 0.2	0.949753
Chi2	285.0	535.0	≥ 0.2	1
ClusterAnalysis	532.5	287.5	0.10147	0.097709
DIBD	702.0	118.0	3.296E-5	0.000084
Distance	636.0	184.0	0.0018628	0.002331
EqualFrequency	435.0	385.0	≥ 0.2	0.731784
EqualWidth	410.0	410.0	≥ 0.2	0.994611
Extended Chi2	490.0	330.0	≥ 0.2	0.279242
FFD	410.0	370.0	≥ 0.2	0.774819
FUSINTER	330.0	490.0	≥ 0.2	1
HDD	380.0	400.0	≥ 0.2	1
HellingerBD	450.0	370.0	≥ 0.2	0.586185
Heter-Disc	603.5	216.5	0.00844299999999999	0.009001
ID3	431.0	349.0	≥ 0.2	0.561817
IDD	617.0	203.0	0.004654	0.005286
Khiops	361.0	419.0	≥ 0.2	1
MDLP	601.0	219.0	0.009382	0.010053
Modified Chi2	215.0	565.0	≥ 0.2	1
MODL	299.0	521.0	≥ 0.2	1
MVD	600.0	180.0	0.002752	0.003254
PKID	359.0	461.0	≥ 0.2	1
UCPD	539.0	281.0	0.08416	0.081745
USD	431.0	389.0	≥ 0.2	0.772591
Zeta	448.5	371.5	≥ 0.2	1

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

8.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
IR	[0.03135 , 0.09095]	0.90276
Ameva	[-0.01675 , 0.0075]	0.90276
Bayesian	[0.0103 , 0.0566]	0.90276
CACC	[-0.0118 , 0.02695]	0.90276
CADD	[0.1842 , 0.3252]	0.90276
CAIM	[-0.0074 , 0.00655]	0.90276
Chi2	[-0.0461 , -0.0002]	0.90276
ClusterAnalysis	[-0.0001 , 0.04725]	0.90276
DIBD	[0.0381 , 0.1017]	0.90276
Distance	[0.0164 , 0.0555]	0.90276
EqualFrequency	[-0.0122 , 0.0174]	0.90276
EqualWidth	[-0.0141 , 0.0142]	0.90276
Extended Chi2	[-0.0068 , 0.0511]	0.90276
FFD	[-0.0204 , 0.02335]	0.90276
FUSINTER	[-0.03635 , 0.0067]	0.90276
HDD	[-0.0168 , 0.0162]	0.90276
HellingerBD	[-0.0122 , 0.02415]	0.90276
Heter-Disc	[0.0353 , 0.1267]	0.90276
ID3	[-0.0167 , 0.03055]	0.90276
IDD	[0.01725 , 0.0833]	0.90276
Khiops	[-0.03005 , 0.01305]	0.90276
MDLP	[0.0066 , 0.05175]	0.90276
Modified Chi2	[-0.0444 , -0.00675]	0.90276
MODL	[-0.0359 , 0.00175]	0.90276
MVD	[0.017 , 0.12825]	0.90276
PKID	[-0.02835 , 0.0104]	0.90276
UCPD	[0.00055 , 0.0416]	0.90276
USD	[-0.01725 , 0.0205]	0.90276
Zeta	[-0.0113 , 0.0196]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.02535 , 0.09805]	0.95024
Ameva	[-0.0193 , 0.0093]	0.95024
Bayesian	[0.00345 , 0.0619]	0.95024
CACC	[-0.0153 , 0.0342]	0.95024
CADD	[0.17165 , 0.3359]	0.95024
CAIM	[-0.00885 , 0.0082]	0.95024
Chi2	[-0.05145 , 0.00225]	0.95024
ClusterAnalysis	[-0.00465 , 0.0517]	0.95024
DIBD	[0.03225 , 0.10935]	0.95024
Distance	[0.0127 , 0.05965]	0.95024
EqualFrequency	[-0.01535 , 0.0206]	0.95024
EqualWidth	[-0.01855 , 0.01625]	0.95024
Extended Chi2	[-0.0111 , 0.05645]	0.95024
FFD	[-0.025 , 0.0266]	0.95024
FUSINTER	[-0.04435 , 0.0092]	0.95024
HDD	[-0.01945 , 0.01935]	0.95024
HellingerBD	[-0.01505 , 0.02855]	0.95024
Heter-Disc	[0.0239 , 0.13395]	0.95024
ID3	[-0.0211 , 0.03625]	0.95024
IDD	[0.0143 , 0.08855]	0.95024
Khiops	[-0.0351 , 0.0172]	0.95024
MDLP	[0.0045 , 0.0556]	0.95024
Modified Chi2	[-0.05015 , -0.0044]	0.95024
MODL	[-0.04405 , 0.0043]	0.95024
MVD	[0.0152 , 0.1398]	0.95024
PKID	[-0.0329 , 0.01395]	0.95024
UCPD	[-0.0016 , 0.0462]	0.95024
USD	[-0.02065 , 0.02335]	0.95024
Zeta	[-0.0132 , 0.02445]	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	486.0	334.0	≥ 0.2	0.303828
Ameva	302.5	517.5	≥ 0.2	1
Bayesian	451.0	369.0	≥ 0.2	0.576972
CACC	290.0	490.0	≥ 0.2	1
CADD	765.0	55.0	1.0366E-7	0.000002
CAIM	245.0	575.0	≥ 0.2	1
Chi2	149.5	670.5	≥ 0.2	1
ChiMerge	287.5	532.5	≥ 0.2	1
DIBD	567.0	253.0	0.0344	0.033958
Distance	458.0	362.0	≥ 0.2	0.514464
EqualFrequency	248.0	572.0	≥ 0.2	1
EqualWidth	286.5	533.5	≥ 0.2	1
Extended Chi2	405.0	415.0	≥ 0.2	1
FFD	235.0	585.0	≥ 0.2	1
FUSINTER	247.0	573.0	≥ 0.2	1
HDD	354.0	466.0	≥ 0.2	1
HellingerBD	297.0	523.0	≥ 0.2	1
Heter-Disc	510.0	310.0	0.18312	0.176743
ID3	343.0	437.0	≥ 0.2	1
IDD	462.0	318.0	≥ 0.2	0.311664
Khiops	202.0	618.0	≥ 0.2	1
MDLP	458.0	362.0	≥ 0.2	0.514464
Modified Chi2	124.0	696.0	≥ 0.2	1
MODL	123.0	657.0	≥ 0.2	1
MVD	494.5	285.5	0.1481299999999998	0.142149
PKID	180.0	640.0	≥ 0.2	1
UCPD	431.0	389.0	≥ 0.2	0.772218
USD	337.0	483.0	≥ 0.2	1
Zeta	314.0	506.0	≥ 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	[-0.00845 , 0.0702]	0.90276
Ameva	[-0.04615 , 0.0028]	0.90276
Bayesian	[-0.015 , 0.0292]	0.90276
CACC	[-0.0404 , 0.00375]	0.90276
CADD	[0.1584 , 0.2935]	0.90276
CAIM	[-0.04915 , -0.0068]	0.90276
Chi2	[-0.0766 , -0.0225]	0.90276
ChiMerge	[-0.04725 , 0.0001]	0.90276
DIBD	[0.0113 , 0.09665]	0.90276
Distance	[-0.02485 , 0.05555]	0.90276
EqualFrequency	[-0.04265 , -0.0053]	0.90276
EqualWidth	[-0.05275 , 0]	0.90276
Extended Chi2	[-0.03195 , 0.0294]	0.90276
FFD	[-0.04505 , -0.00555]	0.90276
FUSINTER	[-0.0626 , -0.0092]	0.90276
HDD	[-0.0348 , 0.01115]	0.90276
HellingerBD	[-0.0404 , 0.0024]	0.90276
Heter-Disc	[-0.0121 , 0.09925]	0.90276
ID3	[-0.02 , 0.0068]	0.90276
IDD	[-0.0166 , 0.0393]	0.90276
Khiops	[-0.0516 , -0.01]	0.90276
MDLP	[-0.02725 , 0.05355]	0.90276
Modified Chi2	[-0.07265 , -0.024]	0.90276
MODL	[-0.0554 , -0.018]	0.90276
MVD	[-0.00235 , 0.098]	0.90276
PKID	[-0.06995 , -0.01325]	0.90276
UCPD	[-0.02345 , 0.02805]	0.90276
USD	[-0.0286 , 0.0059]	0.90276
Zeta	[-0.04805 , 0.0045]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01875 , 0.0807]	0.95024
Ameva	[-0.0514 , 0.00705]	0.95024
Bayesian	[-0.02035 , 0.03355]	0.95024
CACC	[-0.045 , 0.0087]	0.95024
CADD	[0.14595 , 0.3091]	0.95024
CAIM	[-0.05405 , -0.0027]	0.95024
Chi2	[-0.086 , -0.01965]	0.95024
ChiMerge	[-0.0517 , 0.00465]	0.95024
DIBD	[0.0034 , 0.10375]	0.95024
Distance	[-0.0319 , 0.0631]	0.95024
EqualFrequency	[-0.04755 , -0.00155]	0.95024
EqualWidth	[-0.06525 , 0.0025]	0.95024
Extended Chi2	[-0.04095 , 0.0373]	0.95024
FFD	[-0.05585 , -0.0038]	0.95024
FUSINTER	[-0.0705 , -0.00455]	0.95024
HDD	[-0.0426 , 0.0148]	0.95024
HellingerBD	[-0.0462 , 0.0056]	0.95024
Heter-Disc	[-0.0211 , 0.1093]	0.95024
ID3	[-0.02455 , 0.00935]	0.95024
IDD	[-0.02095 , 0.05155]	0.95024
Khiops	[-0.0724 , -0.00755]	0.95024
MDLP	[-0.03315 , 0.05875]	0.95024
Modified Chi2	[-0.0807 , -0.0202]	0.95024
MODL	[-0.06435 , -0.0155]	0.95024
MVD	[-0.00685 , 0.10465]	0.95024
PKID	[-0.0776 , -0.01065]	0.95024
UCPD	[-0.034 , 0.0331]	0.95024
USD	[-0.0324 , 0.00845]	0.95024
Zeta	[-0.05525 , 0.0102]	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	363.0	457.0	≥ 0.2	1
Ameva	159.0	661.0	≥ 0.2	1
Bayesian	245.0	535.0	≥ 0.2	1
CACC	187.0	633.0	≥ 0.2	1
CADD	721.5	98.5	2.754E-5	0.000078
CAIM	86.0	734.0	≥ 0.2	1
Chi2	72.0	708.0	≥ 0.2	1
ChiMerge	118.0	702.0	≥ 0.2	1
ClusterAnalysis	253.0	567.0	≥ 0.2	1
Distance	235.0	585.0	≥ 0.2	1
EqualFrequency	114.0	706.0	≥ 0.2	1
EqualWidth	130.0	690.0	≥ 0.2	1
Extended Chi2	262.0	558.0	≥ 0.2	1
FFD	155.0	665.0	≥ 0.2	1
FUSINTER	97.0	723.0	≥ 0.2	1
HDD	186.0	634.0	≥ 0.2	1
HellingerBD	133.0	687.0	≥ 0.2	1
Heter-Disc	363.0	457.0	≥ 0.2	1
ID3	214.0	606.0	≥ 0.2	1
IDD	299.0	481.0	≥ 0.2	1
Khiops	117.0	703.0	≥ 0.2	1
MDLP	212.0	568.0	≥ 0.2	1
Modified Chi2	47.0	773.0	≥ 0.2	1
MODL	77.0	743.0	≥ 0.2	1
MVD	384.0	436.0	≥ 0.2	1
PKID	114.0	666.0	≥ 0.2	1
UCPD	145.0	635.0	≥ 0.2	1
USD	192.0	628.0	≥ 0.2	1
Zeta	113.0	707.0	≥ 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	[-0.05685 , 0.0149]	0.90276
Ameva	[-0.1149 , -0.03815]	0.90276
Bayesian	[-0.09075 , -0.0079]	0.90276
CACC	[-0.09595 , -0.02515]	0.90276
CADD	[0.09485 , 0.2358]	0.90276
CAIM	[-0.1106 , -0.0481]	0.90276
Chi2	[-0.15135 , -0.076]	0.90276
ChiMerge	[-0.1017 , -0.0381]	0.90276
ClusterAnalysis	[-0.09665 , -0.0113]	0.90276
Distance	[-0.05805 , -0.00785]	0.90276
EqualFrequency	[-0.1234 , -0.0506]	0.90276
EqualWidth	[-0.1219 , -0.04485]	0.90276
Extended Chi2	[-0.10115 , -0.01055]	0.90276
FFD	[-0.1374 , -0.0487]	0.90276
FUSINTER	[-0.13605 , -0.0633]	0.90276
HDD	[-0.1142 , -0.0322]	0.90276
HellingerBD	[-0.11185 , -0.0431]	0.90276
Heter-Disc	[-0.0516 , 0.02185]	0.90276
ID3	[-0.1214 , -0.0279]	0.90276
IDD	[-0.05845 , 0.005]	0.90276
Khiops	[-0.13545 , -0.06065]	0.90276
MDLP	[-0.062 , -0.0093]	0.90276
Modified Chi2	[-0.14735 , -0.07715]	0.90276
MODL	[-0.1337 , -0.0649]	0.90276
MVD	[-0.07045 , 0.0432]	0.90276
PKID	[-0.1434 , -0.05565]	0.90276
UCPD	[-0.08495 , -0.0298]	0.90276
USD	[-0.11845 , -0.0332]	0.90276
Zeta	[-0.10155 , -0.03295]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.06505 , 0.0191]	0.95024
Ameva	[-0.1196 , -0.0346]	0.95024
Bayesian	[-0.09985 , -0.00175]	0.95024
CACC	[-0.10145 , -0.0201]	0.95024
CADD	[0.08705 , 0.2499]	0.95024
CAIM	[-0.11645 , -0.04205]	0.95024
Chi2	[-0.1593 , -0.0685]	0.95024
ChiMerge	[-0.10935 , -0.03225]	0.95024
ClusterAnalysis	[-0.10375 , -0.0034]	0.95024
Distance	[-0.0667 , -0.00455]	0.95024
EqualFrequency	[-0.13005 , -0.04685]	0.95024
EqualWidth	[-0.12865 , -0.0397]	0.95024
Extended Chi2	[-0.1092 , -0.00095]	0.95024
FFD	[-0.1455 , -0.04025]	0.95024
FUSINTER	[-0.1428 , -0.0576]	0.95024
HDD	[-0.1219 , -0.0253]	0.95024
HellingerBD	[-0.12025 , -0.03615]	0.95024
Heter-Disc	[-0.0586 , 0.0275]	0.95024
ID3	[-0.13055 , -0.01965]	0.95024
IDD	[-0.06495 , 0.01015]	0.95024
Khiops	[-0.14165 , -0.0553]	0.95024
MDLP	[-0.06865 , -0.0062]	0.95024
Modified Chi2	[-0.15715 , -0.0717]	0.95024
MODL	[-0.14325 , -0.05935]	0.95024
MVD	[-0.0845 , 0.0635]	0.95024
PKID	[-0.1512 , -0.0491]	0.95024
UCPD	[-0.0913 , -0.0249]	0.95024
USD	[-0.1278 , -0.027]	0.95024
Zeta	[-0.1077 , -0.02785]	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	464.0	316.0	≥ 0.2	0.298504
Ameva	217.0	603.0	≥ 0.2	1
Bayesian	381.0	439.0	≥ 0.2	1
CACC	268.0	512.0	≥ 0.2	1
CADD	751.0	29.0	6.326E-9	0
CAIM	188.0	592.0	≥ 0.2	1
Chi2	142.5	637.5	≥ 0.2	1
ChiMerge	184.0	636.0	≥ 0.2	1
ClusterAnalysis	362.0	458.0	≥ 0.2	1
DIBD	585.0	235.0	0.017832	0.018327
EqualFrequency	213.5	606.5	≥ 0.2	1
EqualWidth	212.0	608.0	≥ 0.2	1
Extended Chi2	336.0	484.0	≥ 0.2	1
FFD	238.0	582.0	≥ 0.2	1
FUSINTER	119.0	701.0	≥ 0.2	1
HDD	258.0	562.0	≥ 0.2	1
HellingerBD	235.0	545.0	≥ 0.2	1
Heter-Disc	543.0	277.0	0.07472	0.072747
ID3	285.0	535.0	≥ 0.2	1
IDD	435.0	385.0	≥ 0.2	0.731784
Khiops	184.0	596.0	≥ 0.2	1
MDLP	359.5	460.5	≥ 0.2	1
Modified Chi2	115.5	664.5	≥ 0.2	1
MODL	160.0	620.0	≥ 0.2	1
MVD	461.0	359.0	≥ 0.2	0.488795
PKID	202.5	617.5	≥ 0.2	1
UCPD	343.0	477.0	≥ 0.2	1
USD	256.0	564.0	≥ 0.2	1
Zeta	239.0	581.0	≥ 0.2	1

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

11.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.01275 , 0.05825]	0.90276
Ameva	[-0.0614 , -0.0141]	0.90276
Bayesian	[-0.05085 , 0.0276]	0.90276
CACC	[-0.0472 , -0.00005]	0.90276
CADD	[0.12945 , 0.27915]	0.90276
CAIM	[-0.0689 , -0.01495]	0.90276
Chi2	[-0.1051 , -0.03625]	0.90276
ChiMerge	[-0.0555 , -0.0164]	0.90276
ClusterAnalysis	[-0.05555 , 0.02485]	0.90276
DIBD	[0.00785 , 0.05805]	0.90276
EqualFrequency	[-0.07205 , -0.016]	0.90276
EqualWidth	[-0.07695 , -0.01965]	0.90276
Extended Chi2	[-0.0602 , 0.0118]	0.90276
FFD	[-0.08305 , -0.01275]	0.90276
FUSINTER	[-0.0806 , -0.03115]	0.90276
HDD	[-0.0736 , -0.0085]	0.90276
HellingerBD	[-0.0693 , -0.0068]	0.90276
Heter-Disc	[0.00245 , 0.06585]	0.90276
ID3	[-0.0786 , -0.0005]	0.90276
IDD	[-0.0352 , 0.04505]	0.90276
Khiops	[-0.082 , -0.02325]	0.90276
MDLP	[-0.01145 , 0.005]	0.90276
Modified Chi2	[-0.1008 , -0.0392]	0.90276
MODL	[-0.0967 , -0.0295]	0.90276
MVD	[-0.0313 , 0.0784]	0.90276
PKID	[-0.09575 , -0.02625]	0.90276
UCPD	[-0.0441 , 0.01285]	0.90276
USD	[-0.07835 , -0.00985]	0.90276
Zeta	[-0.0642 , -0.0075]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.022 , 0.06635]	0.95024
Ameva	[-0.06645 , -0.0105]	0.95024
Bayesian	[-0.0577 , 0.0318]	0.95024
CACC	[-0.05135 , 0.0027]	0.95024
CADD	[0.1222 , 0.29025]	0.95024
CAIM	[-0.07165 , -0.0117]	0.95024
Chi2	[-0.11245 , -0.03085]	0.95024
ChiMerge	[-0.05965 , -0.0127]	0.95024
ClusterAnalysis	[-0.0631 , 0.0319]	0.95024
DIBD	[0.00455 , 0.0667]	0.95024
EqualFrequency	[-0.0776 , -0.01315]	0.95024
EqualWidth	[-0.08435 , -0.01525]	0.95024
Extended Chi2	[-0.0659 , 0.02165]	0.95024
FFD	[-0.0893 , -0.0068]	0.95024
FUSINTER	[-0.0844 , -0.0266]	0.95024
HDD	[-0.0804 , -0.00145]	0.95024
HellingerBD	[-0.0741 , -0.00285]	0.95024
Heter-Disc	[-0.00485 , 0.0709]	0.95024
ID3	[-0.0862 , 0.00655]	0.95024
IDD	[-0.043 , 0.053]	0.95024
Khiops	[-0.08975 , -0.01915]	0.95024
MDLP	[-0.01375 , 0.00605]	0.95024
Modified Chi2	[-0.1064 , -0.0345]	0.95024
MODL	[-0.10085 , -0.02235]	0.95024
MVD	[-0.03855 , 0.09485]	0.95024
PKID	[-0.1018 , -0.02005]	0.95024
UCPD	[-0.049 , 0.0166]	0.95024
USD	[-0.08535 , -0.0033]	0.95024
Zeta	[-0.06925 , -0.0032]	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	648.0	172.0	9.936E-4	0.001347
Ameva	378.0	402.0	≥ 0.2	1
Bayesian	559.0	261.0	0.0451	0.044487
CACC	415.0	405.0	≥ 0.2	0.941068
CADD	774.0	6.0	5.094E-11	0
CAIM	381.0	439.0	≥ 0.2	1
Chi2	240.0	580.0	≥ 0.2	1
ChiMerge	385.0	435.0	≥ 0.2	1
ClusterAnalysis	572.0	248.0	0.02884	0.028947
DIBD	706.0	114.0	2.448E-5	0.000067
Distance	606.5	213.5	0.02201000000000002	0.022365
EqualWidth	397.0	383.0	≥ 0.2	0.916644
Extended Chi2	492.0	328.0	≥ 0.2	0.26747
FFD	404.0	416.0	≥ 0.2	1
FUSINTER	305.0	515.0	≥ 0.2	1
HDD	473.0	347.0	≥ 0.2	0.392574
HellingerBD	427.0	353.0	≥ 0.2	0.598843
Heter-Disc	635.0	185.0	0.0019596	0.002437
ID3	479.5	340.5	≥ 0.2	0.34595
IDD	600.0	220.0	0.009782	0.01045
Khiops	356.0	424.0	≥ 0.2	1
MDLP	534.0	246.0	0.04436	0.043748
Modified Chi2	231.5	588.5	≥ 0.2	1
MODL	277.0	543.0	≥ 0.2	1
MVD	607.5	212.5	0.00711	0.007679
PKID	314.0	506.0	≥ 0.2	1
UCPD	579.5	203.5	0.02483	0.024797
USD	395.0	425.0	≥ 0.2	1
Zeta	451.0	369.0	≥ 0.2	0.576972

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	[0.0275 , 0.0937]	0.90276
Ameva	[-0.01855 , 0.0116]	0.90276
Bayesian	[0.0043 , 0.05575]	0.90276
CACC	[-0.01755 , 0.0273]	0.90276
CADD	[0.20205 , 0.3283]	0.90276
CAIM	[-0.0188 , 0.00785]	0.90276
Chi2	[-0.0423 , -0.0062]	0.90276
ChiMerge	[-0.0174 , 0.0122]	0.90276
ClusterAnalysis	[0.0053 , 0.04265]	0.90276
DIBD	[0.0506 , 0.1234]	0.90276
Distance	[0.016 , 0.07205]	0.90276
EqualWidth	[-0.01035 , 0.0124]	0.90276
Extended Chi2	[-0.00715 , 0.0516]	0.90276
FFD	[-0.01245 , 0.0115]	0.90276
FUSINTER	[-0.0346 , 0.00175]	0.90276
HDD	[-0.00865 , 0.0277]	0.90276
HellingerBD	[-0.00755 , 0.0169]	0.90276
Heter-Disc	[0.0391 , 0.12275]	0.90276
ID3	[-0.0072 , 0.03205]	0.90276
IDD	[0.0133 , 0.0773]	0.90276
Khiops	[-0.01415 , 0.0053]	0.90276
MDLP	[0.0041 , 0.06655]	0.90276
Modified Chi2	[-0.03765 , -0.0063]	0.90276
MODL	[-0.03495 , -0.00145]	0.90276
MVD	[0.0188 , 0.14195]	0.90276
PKID	[-0.023 , 0.0025]	0.90276
UCPD	[0.00905 , 0.037]	0.90276
USD	[-0.01745 , 0.0171]	0.90276
Zeta	[-0.01075 , 0.02395]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0231 , 0.10295]	0.95024
Ameva	[-0.0231 , 0.01415]	0.95024
Bayesian	[0.0004 , 0.0623]	0.95024
CACC	[-0.0194 , 0.0342]	0.95024
CADD	[0.1911 , 0.3409]	0.95024
CAIM	[-0.02215 , 0.00995]	0.95024
Chi2	[-0.04595 , -0.00275]	0.95024
ChiMerge	[-0.0206 , 0.01535]	0.95024
ClusterAnalysis	[0.00155 , 0.04755]	0.95024
DIBD	[0.04685 , 0.13005]	0.95024
Distance	[0.01315 , 0.0776]	0.95024
EqualWidth	[-0.0123 , 0.01495]	0.95024
Extended Chi2	[-0.01265 , 0.0592]	0.95024
FFD	[-0.0149 , 0.01435]	0.95024
FUSINTER	[-0.03935 , 0.0061]	0.95024
HDD	[-0.01135 , 0.03195]	0.95024
HellingerBD	[-0.0094 , 0.01955]	0.95024
Heter-Disc	[0.0309 , 0.13065]	0.95024
ID3	[-0.0112 , 0.0349]	0.95024
IDD	[0.00955 , 0.08455]	0.95024
Khiops	[-0.01675 , 0.0074]	0.95024
MDLP	[0 , 0.0725]	0.95024
Modified Chi2	[-0.0425 , -0.00315]	0.95024
MODL	[-0.0385 , 0.0019]	0.95024
MVD	[0.01235 , 0.1496]	0.95024
PKID	[-0.0259 , 0.00565]	0.95024
UCPD	[0.0064 , 0.0419]	0.95024
USD	[-0.02025 , 0.0214]	0.95024
Zeta	[-0.0143 , 0.02745]	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	641.0	179.0	0.0014408	0.00186
Ameva	408.0	412.0	≥ 0.2	1
Bayesian	556.0	264.0	0.04976	0.048936
CACC	449.0	371.0	≥ 0.2	0.595466
CADD	806.0	14.0	2.0E-10	0
CAIM	372.0	448.0	≥ 0.2	1
Chi2	233.0	587.0	≥ 0.2	1
ChiMerge	410.0	410.0	≥ 0.2	0.994611
ClusterAnalysis	533.5	286.5	0.09864	0.095013
DIBD	690.0	130.0	7.708E-5	0.000163
Distance	608.0	212.0	0.006956	0.007628
EqualFrequency	383.0	397.0	≥ 0.2	1
Extended Chi2	510.0	310.0	0.18312	0.176743
FFD	429.0	391.0	≥ 0.2	0.79324
FUSINTER	304.0	476.0	≥ 0.2	1
HDD	435.0	385.0	≥ 0.2	0.731784
HellingerBD	497.5	322.5	≥ 0.2	0.235298
Heter-Disc	626.0	194.0	0.003052	0.003614
ID3	466.0	314.0	≥ 0.2	0.284879
IDD	594.5	225.5	0.012264	0.012745
Khiops	336.0	444.0	≥ 0.2	1
MDLP	580.0	240.0	0.02154	0.021921
Modified Chi2	215.0	565.0	≥ 0.2	1
MODL	299.0	521.0	≥ 0.2	1
MVD	604.0	216.0	0.008264	0.00894
PKID	371.0	449.0	≥ 0.2	1
UCPD	516.0	304.0	0.15776	0.152287
USD	442.0	378.0	≥ 0.2	0.661158
Zeta	470.0	350.0	≥ 0.2	0.416104

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
IR	[0.02615 , 0.0915]	0.90276
Ameva	[-0.01585 , 0.0167]	0.90276
Bayesian	[0.00385 , 0.0564]	0.90276
CACC	[-0.01195 , 0.0374]	0.90276
CADD	[0.1987 , 0.3333]	0.90276
CAIM	[-0.01965 , 0.01195]	0.90276
Chi2	[-0.0394 , -0.0078]	0.90276
ChiMerge	[-0.0142 , 0.0141]	0.90276
ClusterAnalysis	[0 , 0.05275]	0.90276
DIBD	[0.04485 , 0.1219]	0.90276
Distance	[0.01965 , 0.07695]	0.90276
EqualFrequency	[-0.0124 , 0.01035]	0.90276
Extended Chi2	[-0.00425 , 0.05865]	0.90276
FFD	[-0.01245 , 0.01805]	0.90276
FUSINTER	[-0.0293 , 0.00505]	0.90276
HDD	[-0.0114 , 0.03145]	0.90276
HellingerBD	[-0.00415 , 0.01645]	0.90276
Heter-Disc	[0.03765 , 0.1314]	0.90276
ID3	[-0.00625 , 0.0285]	0.90276
IDD	[0.0155 , 0.0825]	0.90276
Khiops	[-0.02185 , 0.008]	0.90276
MDLP	[0.0118 , 0.07025]	0.90276
Modified Chi2	[-0.0337 , -0.0063]	0.90276
MODL	[-0.03445 , 0.00195]	0.90276
MVD	[0.01775 , 0.13445]	0.90276
PKID	[-0.02045 , 0.00835]	0.90276
UCPD	[-0.00155 , 0.04125]	0.90276
USD	[-0.01165 , 0.0162]	0.90276
Zeta	[-0.01095 , 0.0284]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.02245 , 0.10065]	0.95024
Ameva	[-0.01885 , 0.0211]	0.95024
Bayesian	[0.00015 , 0.0614]	0.95024
CACC	[-0.01625 , 0.0452]	0.95024
CADD	[0.1877 , 0.34705]	0.95024
CAIM	[-0.0223 , 0.01545]	0.95024
Chi2	[-0.0429 , -0.00495]	0.95024
ChiMerge	[-0.01625 , 0.01855]	0.95024
ClusterAnalysis	[-0.0025 , 0.06525]	0.95024
DIBD	[0.0397 , 0.12865]	0.95024
Distance	[0.01525 , 0.08435]	0.95024
EqualFrequency	[-0.01495 , 0.0123]	0.95024
Extended Chi2	[-0.009 , 0.06475]	0.95024
FFD	[-0.0156 , 0.02105]	0.95024
FUSINTER	[-0.03265 , 0.00915]	0.95024
HDD	[-0.0134 , 0.03485]	0.95024
HellingerBD	[-0.00605 , 0.0187]	0.95024
Heter-Disc	[0.0282 , 0.1415]	0.95024
ID3	[-0.0082 , 0.0326]	0.95024
IDD	[0.00965 , 0.09015]	0.95024
Khiops	[-0.0271 , 0.0106]	0.95024
MDLP	[0.0059 , 0.0753]	0.95024
Modified Chi2	[-0.0367 , -0.00435]	0.95024
MODL	[-0.03805 , 0.00535]	0.95024
MVD	[0.01125 , 0.15025]	0.95024
PKID	[-0.0233 , 0.0108]	0.95024
UCPD	[-0.0038 , 0.04785]	0.95024
USD	[-0.0148 , 0.01975]	0.95024
Zeta	[-0.01395 , 0.0324]	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	494.0	326.0	≥ 0.2	0.256045
Ameva	346.5	473.5	≥ 0.2	1
Bayesian	457.0	363.0	≥ 0.2	0.523173
CACC	392.0	428.0	≥ 0.2	1
CADD	751.0	69.0	4.766E-7	0.000004
CAIM	305.0	475.0	≥ 0.2	1
Chi2	195.0	625.0	≥ 0.2	1
ChiMerge	330.0	490.0	≥ 0.2	1
ClusterAnalysis	415.0	405.0	≥ 0.2	0.941068
DIBD	558.0	262.0	0.04662	0.04593
Distance	484.0	336.0	≥ 0.2	0.316645
EqualFrequency	328.0	492.0	≥ 0.2	1
EqualWidth	310.0	510.0	≥ 0.2	1
FFD	311.0	509.0	≥ 0.2	1
FUSINTER	280.0	500.0	≥ 0.2	1
HDD	379.0	441.0	≥ 0.2	1
HellingerBD	320.0	460.0	≥ 0.2	1
Heter-Disc	494.0	286.0	0.15012	0.144759
ID3	354.0	466.0	≥ 0.2	1
IDD	457.0	323.0	≥ 0.2	0.346212
Khiops	320.0	500.0	≥ 0.2	1
MDLP	479.0	341.0	≥ 0.2	0.350216
Modified Chi2	223.5	596.5	≥ 0.2	1
MODL	249.0	571.0	≥ 0.2	1
MVD	532.0	288.0	0.1029	0.099649
PKID	227.0	593.0	≥ 0.2	1
UCPD	431.0	389.0	≥ 0.2	0.772591
USD	342.0	478.0	≥ 0.2	1
Zeta	386.0	434.0	≥ 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
IR	[-0.016 , 0.07385]	0.90276
Ameva	[-0.05545 , 0.01275]	0.90276
Bayesian	[-0.0138 , 0.02765]	0.90276
CACC	[-0.048 , 0.0296]	0.90276
CADD	[0.15425 , 0.3122]	0.90276
CAIM	[-0.051 , 0.00655]	0.90276
Chi2	[-0.08135 , -0.0123]	0.90276
ChiMerge	[-0.0511 , 0.0068]	0.90276
ClusterAnalysis	[-0.0294 , 0.03195]	0.90276
DIBD	[0.01055 , 0.10115]	0.90276
Distance	[-0.0118 , 0.0602]	0.90276
EqualFrequency	[-0.0516 , 0.00715]	0.90276
EqualWidth	[-0.05865 , 0.00425]	0.90276
FFD	[-0.04985 , 0.00445]	0.90276
FUSINTER	[-0.0633 , 0.00265]	0.90276
HDD	[-0.03035 , 0.0167]	0.90276
HellingerBD	[-0.05575 , 0.0123]	0.90276
Heter-Disc	[-0.00485 , 0.0991]	0.90276
ID3	[-0.0318 , 0.01355]	0.90276
IDD	[-0.01615 , 0.066]	0.90276
Khiops	[-0.05855 , 0.00575]	0.90276
MDLP	[-0.01895 , 0.057]	0.90276
Modified Chi2	[-0.0725 , -0.008]	0.90276
MODL	[-0.0702 , -0.00625]	0.90276
MVD	[-0.0002 , 0.10165]	0.90276
PKID	[-0.06185 , -0.0102]	0.90276
UCPD	[-0.03625 , 0.0342]	0.90276
USD	[-0.02635 , 0.0061]	0.90276
Zeta	[-0.04625 , 0.02295]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.02565 , 0.08125]	0.95024
Ameva	[-0.0676 , 0.0161]	0.95024
Bayesian	[-0.0178 , 0.032]	0.95024
CACC	[-0.0576 , 0.03845]	0.95024
CADD	[0.1453 , 0.3307]	0.95024
CAIM	[-0.0625 , 0.0101]	0.95024
Chi2	[-0.0897 , -0.0088]	0.95024
ChiMerge	[-0.05645 , 0.0111]	0.95024
ClusterAnalysis	[-0.0373 , 0.04095]	0.95024
DIBD	[0.00095 , 0.1092]	0.95024
Distance	[-0.02165 , 0.0659]	0.95024
EqualFrequency	[-0.0592 , 0.01265]	0.95024
EqualWidth	[-0.06475 , 0.009]	0.95024
FFD	[-0.0581 , 0.0087]	0.95024
FUSINTER	[-0.06815 , 0.00575]	0.95024
HDD	[-0.0348 , 0.02]	0.95024
HellingerBD	[-0.06345 , 0.019]	0.95024
Heter-Disc	[-0.0168 , 0.10875]	0.95024
ID3	[-0.0373 , 0.0161]	0.95024
IDD	[-0.02315 , 0.0742]	0.95024
Khiops	[-0.06995 , 0.0089]	0.95024
MDLP	[-0.026 , 0.06135]	0.95024
Modified Chi2	[-0.0807 , -0.00595]	0.95024
MODL	[-0.07645 , -0.00235]	0.95024
MVD	[-0.0077 , 0.11795]	0.95024
PKID	[-0.06865 , -0.00605]	0.95024
UCPD	[-0.04635 , 0.0398]	0.95024
USD	[-0.03075 , 0.00825]	0.95024
Zeta	[-0.0566 , 0.029]	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	663.0	157.0	4.266E-4	0.000656
Ameva	415.0	405.0	≥ 0.2	0.940969
Bayesian	615.0	205.0	0.005096	0.005742
CACC	431.0	389.0	≥ 0.2	0.772591
CADD	818.0	2.0	5.456E-12	0
CAIM	380.0	440.0	≥ 0.2	1
Chi2	247.0	573.0	≥ 0.2	1
ChiMerge	370.0	410.0	≥ 0.2	1
ClusterAnalysis	585.0	235.0	0.017832	0.018327
DIBD	665.0	155.0	3.79E-4	0.000594
Distance	582.0	238.0	0.019988	0.020415
EqualFrequency	416.0	404.0	≥ 0.2	0.930379
EqualWidth	391.0	429.0	≥ 0.2	1
Extended Chi2	509.0	311.0	0.18762	0.181089
FUSINTER	319.0	501.0	≥ 0.2	1
HDD	459.0	321.0	≥ 0.2	0.331266
HellingerBD	406.0	414.0	≥ 0.2	1
Heter-Disc	645.0	175.0	0.0011672	0.001549
ID3	510.0	270.0	0.09568	0.092651
IDD	617.0	203.0	0.004654	0.005286
Khiops	367.5	452.5	≥ 0.2	1
MDLP	549.0	271.0	0.06218	0.060784
Modified Chi2	193.0	627.0	≥ 0.2	1
MODL	252.0	528.0	≥ 0.2	1
MVD	622.0	198.0	0.00369	0.004286
PKID	275.5	544.5	≥ 0.2	1
UCPD	531.0	249.0	0.04914	0.04831
USD	461.0	359.0	≥ 0.2	0.488795
Zeta	448.0	372.0	≥ 0.2	0.604814

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
IR	[0.0277 , 0.0922]	0.90276
Ameva	[-0.0161 , 0.0212]	0.90276
Bayesian	[0.01205 , 0.0518]	0.90276
CACC	[-0.0151 , 0.03475]	0.90276
CADD	[0.2089 , 0.3376]	0.90276
CAIM	[-0.0239 , 0.0163]	0.90276
Chi2	[-0.03725 , -0.0052]	0.90276
ChiMerge	[-0.02335 , 0.0204]	0.90276
ClusterAnalysis	[0.00555 , 0.04505]	0.90276
DIBD	[0.0487 , 0.1374]	0.90276
Distance	[0.01275 , 0.08305]	0.90276
EqualFrequency	[-0.0115 , 0.01245]	0.90276
EqualWidth	[-0.01805 , 0.01245]	0.90276
Extended Chi2	[-0.00445 , 0.04985]	0.90276
FUSINTER	[-0.0301 , 0.00535]	0.90276
HDD	[-0.00565 , 0.0318]	0.90276
HellingerBD	[-0.01315 , 0.0167]	0.90276
Heter-Disc	[0.03455 , 0.11635]	0.90276
ID3	[0 , 0.0264]	0.90276
IDD	[0.01985 , 0.08665]	0.90276
Khiops	[-0.0146 , 0.00765]	0.90276
MDLP	[0.0031 , 0.07525]	0.90276
Modified Chi2	[-0.0361 , -0.00995]	0.90276
MODL	[-0.0278 , -0.0031]	0.90276
MVD	[0.02125 , 0.136]	0.90276
PKID	[-0.0193 , -0.001]	0.90276
UCPD	[0.0036 , 0.04895]	0.90276
USD	[-0.00825 , 0.02025]	0.90276
Zeta	[-0.0157 , 0.0303]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.0211 , 0.1039]	0.95024
Ameva	[-0.0211 , 0.0299]	0.95024
Bayesian	[0.00915 , 0.0571]	0.95024
CACC	[-0.0176 , 0.04835]	0.95024
CADD	[0.19485 , 0.3543]	0.95024
CAIM	[-0.02805 , 0.0222]	0.95024
Chi2	[-0.04025 , -0.0027]	0.95024
ChiMerge	[-0.0266 , 0.025]	0.95024
ClusterAnalysis	[0.0038 , 0.05585]	0.95024
DIBD	[0.04025 , 0.1455]	0.95024
Distance	[0.0068 , 0.0893]	0.95024
EqualFrequency	[-0.01435 , 0.0149]	0.95024
EqualWidth	[-0.02105 , 0.0156]	0.95024
Extended Chi2	[-0.0087 , 0.0581]	0.95024
FUSINTER	[-0.03335 , 0.00795]	0.95024
HDD	[-0.00915 , 0.03585]	0.95024
HellingerBD	[-0.0155 , 0.0218]	0.95024
Heter-Disc	[0.02865 , 0.1232]	0.95024
ID3	[-0.00175 , 0.02955]	0.95024
IDD	[0.01275 , 0.0914]	0.95024
Khiops	[-0.01675 , 0.0104]	0.95024
MDLP	[-0.0024 , 0.0822]	0.95024
Modified Chi2	[-0.0396 , -0.0076]	0.95024
MODL	[-0.03145 , 0]	0.95024
MVD	[0.01555 , 0.1459]	0.95024
PKID	[-0.02105 , 0.00065]	0.95024
UCPD	[0.0001 , 0.0537]	0.95024
USD	[-0.01095 , 0.02295]	0.95024
Zeta	[-0.01995 , 0.0348]	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	668.0	152.0	3.168E-4	0.000512
Ameva	487.0	333.0	≥ 0.2	0.297551
Bayesian	576.0	204.0	0.008562	0.009252
CACC	540.0	280.0	0.08172	0.079415
CADD	813.0	7.0	3.456E-11	0
CAIM	421.5	358.5	≥ 0.2	0.654629
Chi2	335.0	485.0	≥ 0.2	1
ChiMerge	490.0	330.0	≥ 0.2	0.277624
ClusterAnalysis	573.0	247.0	0.02784	0.027974
DIBD	723.0	97.0	6.358E-6	0.000025
Distance	701.0	119.0	3.546E-5	0.000089
EqualFrequency	515.0	305.0	0.16178	0.156174
EqualWidth	476.0	304.0	≥ 0.2	0.227391
Extended Chi2	500.0	280.0	0.1275	0.123067
FFD	501.0	319.0	≥ 0.2	0.218743
HDD	496.5	323.5	≥ 0.2	0.241454
HellingerBD	525.0	255.0	0.06	0.058637
Heter-Disc	689.0	131.0	8.252E-5	0.000168
ID3	495.0	285.0	0.14614	0.140953
IDD	638.0	182.0	0.0016824	0.002131
Khiops	475.0	345.0	≥ 0.2	0.37864
MDLP	685.5	134.5	1.0448E-4	0.000202
Modified Chi2	283.5	536.5	≥ 0.2	1
MODL	323.0	457.0	≥ 0.2	1
MVD	613.0	207.0	0.005576	0.006232
PKID	405.5	414.5	≥ 0.2	1
UCPD	632.0	188.0	0.002276	0.002783
USD	522.0	298.0	0.13508	0.130497
Zeta	472.0	348.0	≥ 0.2	0.400863

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	[0.03925 , 0.1151]	0.90276
Ameva	[-0.0041 , 0.03605]	0.90276
Bayesian	[0.0148 , 0.05975]	0.90276
CACC	[0.00175 , 0.0433]	0.90276
CADD	[0.2086 , 0.35345]	0.90276
CAIM	[-0.0098 , 0.0245]	0.90276
Chi2	[-0.0231 , 0.00515]	0.90276
ChiMerge	[-0.0067 , 0.03635]	0.90276
ClusterAnalysis	[0.0092 , 0.0626]	0.90276
DIBD	[0.0633 , 0.13605]	0.90276
Distance	[0.03115 , 0.0806]	0.90276
EqualFrequency	[-0.00175 , 0.0346]	0.90276
EqualWidth	[-0.00505 , 0.0293]	0.90276
Extended Chi2	[-0.00265 , 0.0633]	0.90276
FFD	[-0.00535 , 0.0301]	0.90276
HDD	[-0.0081 , 0.045]	0.90276
HellingerBD	[0.0015 , 0.04105]	0.90276
Heter-Disc	[0.05495 , 0.12795]	0.90276
ID3	[-0.0035 , 0.03785]	0.90276
IDD	[0.0272 , 0.1009]	0.90276
Khiops	[-0.00675 , 0.0203]	0.90276
MDLP	[0.02215 , 0.07155]	0.90276
Modified Chi2	[-0.02535 , -0.00045]	0.90276
MODL	[-0.01785 , 0.005]	0.90276
MVD	[0.0213 , 0.14265]	0.90276
PKID	[-0.01845 , 0.0214]	0.90276
UCPD	[0.01395 , 0.0625]	0.90276
USD	[-0.00155 , 0.03235]	0.90276
Zeta	[-0.0113 , 0.0441]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.0346 , 0.125]	0.95024
Ameva	[-0.00565 , 0.04215]	0.95024
Bayesian	[0.0114 , 0.0636]	0.95024
CACC	[-0.0018 , 0.0484]	0.95024
CADD	[0.1929 , 0.364]	0.95024
CAIM	[-0.01425 , 0.0282]	0.95024
Chi2	[-0.0266 , 0.00835]	0.95024
ChiMerge	[-0.0092 , 0.04435]	0.95024
ClusterAnalysis	[0.00455 , 0.0705]	0.95024
DIBD	[0.0576 , 0.1428]	0.95024
Distance	[0.0266 , 0.0844]	0.95024
EqualFrequency	[-0.0061 , 0.03935]	0.95024
EqualWidth	[-0.00915 , 0.03265]	0.95024
Extended Chi2	[-0.00575 , 0.06815]	0.95024
FFD	[-0.00795 , 0.03335]	0.95024
HDD	[-0.01085 , 0.05]	0.95024
HellingerBD	[-0.00105 , 0.0459]	0.95024
Heter-Disc	[0.04995 , 0.13565]	0.95024
ID3	[-0.0074 , 0.0425]	0.95024
IDD	[0.02195 , 0.1093]	0.95024
Khiops	[-0.0095 , 0.0227]	0.95024
MDLP	[0.0183 , 0.0763]	0.95024
Modified Chi2	[-0.0287 , 0.00175]	0.95024
MODL	[-0.02045 , 0.0074]	0.95024
MVD	[0.0134 , 0.14945]	0.95024
PKID	[-0.02255 , 0.02425]	0.95024
UCPD	[0.01005 , 0.06655]	0.95024
USD	[-0.00445 , 0.0359]	0.95024
Zeta	[-0.0145 , 0.04965]	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	579.0	241.0	0.02236	0.022709
Ameva	352.0	428.0	≥ 0.2	1
Bayesian	475.0	345.0	≥ 0.2	0.37864
CACC	398.5	421.5	≥ 0.2	1
CADD	792.0	28.0	2.698E-9	0
CAIM	374.5	445.5	≥ 0.2	1
Chi2	279.0	541.0	≥ 0.2	1
ChiMerge	400.0	380.0	≥ 0.2	0.883505
ClusterAnalysis	466.0	354.0	≥ 0.2	0.447593
DIBD	634.0	186.0	0.00206	0.002548
Distance	562.0	258.0	0.0408	0.040384
EqualFrequency	347.0	473.0	≥ 0.2	1
EqualWidth	385.0	435.0	≥ 0.2	1
Extended Chi2	441.0	379.0	≥ 0.2	0.672003
FFD	321.0	459.0	≥ 0.2	1
FUSINTER	323.5	496.5	≥ 0.2	1
HellingerBD	381.5	438.5	≥ 0.2	1
Heter-Disc	534.0	246.0	0.04436	0.043748
ID3	364.0	456.0	≥ 0.2	1
IDD	491.0	329.0	≥ 0.2	0.273313
Khiops	332.0	488.0	≥ 0.2	1
MDLP	565.0	255.0	0.03684	0.036607
Modified Chi2	223.0	597.0	≥ 0.2	1
MODL	253.0	567.0	≥ 0.2	1
MVD	589.0	231.0	0.015266	0.015834
PKID	225.0	595.0	≥ 0.2	1
UCPD	504.0	316.0	≥ 0.2	0.204012
USD	312.0	468.0	≥ 0.2	1
Zeta	451.0	369.0	≥ 0.2	0.576972

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	[0.01395 , 0.07895]	0.90276
Ameva	[-0.02655 , 0.0123]	0.90276
Bayesian	[-0.0081 , 0.0345]	0.90276
CACC	[-0.0255 , 0.0322]	0.90276
CADD	[0.1798 , 0.3195]	0.90276
CAIM	[-0.01455 , 0.0116]	0.90276
Chi2	[-0.05215 , -0.00125]	0.90276
ChiMerge	[-0.0162 , 0.0168]	0.90276
ClusterAnalysis	[-0.01115 , 0.0348]	0.90276
DIBD	[0.0322 , 0.1142]	0.90276
Distance	[0.0085 , 0.0736]	0.90276
EqualFrequency	[-0.0277 , 0.00865]	0.90276
EqualWidth	[-0.03145 , 0.0114]	0.90276
Extended Chi2	[-0.0167 , 0.03035]	0.90276
FFD	[-0.0318 , 0.00565]	0.90276
FUSINTER	[-0.045 , 0.0081]	0.90276
HellingerBD	[-0.0246 , 0.01655]	0.90276
Heter-Disc	[0.01055 , 0.11475]	0.90276
ID3	[-0.01485 , 0.00595]	0.90276
IDD	[-0.0095 , 0.0716]	0.90276
Khiops	[-0.0357 , 0.0078]	0.90276
MDLP	[0.00755 , 0.06895]	0.90276
Modified Chi2	[-0.04245 , -0.00905]	0.90276
MODL	[-0.0452 , -0.0052]	0.90276
MVD	[0.01405 , 0.1043]	0.90276
PKID	[-0.0376 , -0.0083]	0.90276
UCPD	[-0.00555 , 0.0401]	0.90276
USD	[-0.0261 , 0.00525]	0.90276
Zeta	[-0.0126 , 0.0259]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00645 , 0.0835]	0.95024
Ameva	[-0.03155 , 0.0175]	0.95024
Bayesian	[-0.01655 , 0.04045]	0.95024
CACC	[-0.0293 , 0.0421]	0.95024
CADD	[0.1676 , 0.3359]	0.95024
CAIM	[-0.01775 , 0.015]	0.95024
Chi2	[-0.05675 , 0.003]	0.95024
ChiMerge	[-0.01935 , 0.01945]	0.95024
ClusterAnalysis	[-0.0148 , 0.0426]	0.95024
DIBD	[0.0253 , 0.1219]	0.95024
Distance	[0.00145 , 0.0804]	0.95024
EqualFrequency	[-0.03195 , 0.01135]	0.95024
EqualWidth	[-0.03485 , 0.0134]	0.95024
Extended Chi2	[-0.02 , 0.0348]	0.95024
FFD	[-0.03585 , 0.00915]	0.95024
FUSINTER	[-0.05 , 0.01085]	0.95024
HellingerBD	[-0.02995 , 0.0208]	0.95024
Heter-Disc	[0.00125 , 0.1244]	0.95024
ID3	[-0.01755 , 0.0077]	0.95024
IDD	[-0.01445 , 0.07895]	0.95024
Khiops	[-0.04105 , 0.01045]	0.95024
MDLP	[0.0012 , 0.07435]	0.95024
Modified Chi2	[-0.04625 , -0.00515]	0.95024
MODL	[-0.0511 , -0.00135]	0.95024
MVD	[0.00835 , 0.11475]	0.95024
PKID	[-0.0418 , -0.0058]	0.95024
UCPD	[-0.00865 , 0.0455]	0.95024
USD	[-0.0304 , 0.00865]	0.95024
Zeta	[-0.01705 , 0.0292]	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	625.0	195.0	0.003202	0.003714
Ameva	365.0	455.0	≥ 0.2	1
Bayesian	522.0	298.0	0.13508	0.130497
CACC	410.0	410.0	≥ 0.2	0.994629
CADD	768.0	12.0	2.546E-10	0
CAIM	337.0	483.0	≥ 0.2	1
Chi2	222.0	598.0	≥ 0.2	1
ChiMerge	370.0	450.0	≥ 0.2	1
ClusterAnalysis	523.0	297.0	0.13156	0.127113
DIBD	687.0	133.0	9.446E-5	0.000192
Distance	545.0	235.0	0.02996	0.030007
EqualFrequency	353.0	427.0	≥ 0.2	1
EqualWidth	322.5	497.5	≥ 0.2	1
Extended Chi2	460.0	320.0	≥ 0.2	0.3252
FFD	414.0	406.0	≥ 0.2	0.951769
FUSINTER	255.0	525.0	≥ 0.2	1
HDD	438.5	381.5	≥ 0.2	0.696201
Heter-Disc	612.0	208.0	0.005832	0.006492
ID3	468.0	352.0	≥ 0.2	0.431682
IDD	553.5	266.5	0.05395	0.052525
Khiops	351.0	469.0	≥ 0.2	1
MDLP	540.0	280.0	0.08172	0.079415
Modified Chi2	192.0	628.0	≥ 0.2	1
MODL	228.0	592.0	≥ 0.2	1
MVD	581.0	239.0	0.02076	0.021156
PKID	320.0	500.0	≥ 0.2	1
UCPD	503.0	317.0	≥ 0.2	0.20884
USD	387.0	433.0	≥ 0.2	1
Zeta	385.5	434.5	≥ 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
IR	[0.01805 , 0.0846]	0.90276
Ameva	[-0.0278 , 0.0164]	0.90276
Bayesian	[-0.002 , 0.05255]	0.90276
CACC	[-0.0175 , 0.0226]	0.90276
CADD	[0.196 , 0.32455]	0.90276
CAIM	[-0.0323 , 0.00825]	0.90276
Chi2	[-0.05175 , -0.0107]	0.90276
ChiMerge	[-0.02415 , 0.0122]	0.90276
ClusterAnalysis	[-0.0024 , 0.0404]	0.90276
DIBD	[0.0431 , 0.11185]	0.90276
Distance	[0.0068 , 0.0693]	0.90276
EqualFrequency	[-0.0169 , 0.00755]	0.90276
EqualWidth	[-0.01645 , 0.00415]	0.90276
Extended Chi2	[-0.0123 , 0.05575]	0.90276
FFD	[-0.0167 , 0.01315]	0.90276
FUSINTER	[-0.04105 , -0.0015]	0.90276
HDD	[-0.01655 , 0.0246]	0.90276
Heter-Disc	[0.03085 , 0.11215]	0.90276
ID3	[-0.01415 , 0.02255]	0.90276
IDD	[0.0055 , 0.0742]	0.90276
Khiops	[-0.02885 , 0.0055]	0.90276
MDLP	[0.0017 , 0.06035]	0.90276
Modified Chi2	[-0.0519 , -0.01295]	0.90276
MODL	[-0.0402 , -0.00805]	0.90276
MVD	[0.01515 , 0.1276]	0.90276
PKID	[-0.0289 , 0.00315]	0.90276
UCPD	[-0.00645 , 0.0352]	0.90276
USD	[-0.0214 , 0.014]	0.90276
Zeta	[-0.02145 , 0.0177]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01525 , 0.094]	0.95024
Ameva	[-0.03135 , 0.02015]	0.95024
Bayesian	[-0.0073 , 0.0558]	0.95024
CACC	[-0.0205 , 0.0301]	0.95024
CADD	[0.1841 , 0.3361]	0.95024
CAIM	[-0.03705 , 0.01275]	0.95024
Chi2	[-0.0576 , -0.0063]	0.95024
ChiMerge	[-0.02855 , 0.01505]	0.95024
ClusterAnalysis	[-0.0056 , 0.0462]	0.95024
DIBD	[0.03615 , 0.12025]	0.95024
Distance	[0.00285 , 0.0741]	0.95024
EqualFrequency	[-0.01955 , 0.0094]	0.95024
EqualWidth	[-0.0187 , 0.00605]	0.95024
Extended Chi2	[-0.019 , 0.06345]	0.95024
FFD	[-0.0218 , 0.0155]	0.95024
FUSINTER	[-0.0459 , 0.00105]	0.95024
HDD	[-0.0208 , 0.02995]	0.95024
Heter-Disc	[0.02355 , 0.1214]	0.95024
ID3	[-0.0211 , 0.026]	0.95024
IDD	[-0.0009 , 0.08275]	0.95024
Khiops	[-0.0342 , 0.0077]	0.95024
MDLP	[-0.0047 , 0.0668]	0.95024
Modified Chi2	[-0.05655 , -0.01035]	0.95024
MODL	[-0.0454 , -0.0048]	0.95024
MVD	[0.0062 , 0.14105]	0.95024
PKID	[-0.03475 , 0.0058]	0.95024
UCPD	[-0.0112 , 0.03895]	0.95024
USD	[-0.0246 , 0.0194]	0.95024
Zeta	[-0.0245 , 0.02195]	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	396.0	387.0	≥ 0.2	1
Ameva	231.0	589.0	≥ 0.2	1
Bayesian	290.0	490.0	≥ 0.2	1
CACC	227.5	592.5	≥ 0.2	1
CADD	743.0	77.0	1.0558E-6	0.000007
CAIM	210.0	610.0	≥ 0.2	1
Chi2	138.0	682.0	≥ 0.2	1
ChiMerge	216.5	603.5	≥ 0.2	1
ClusterAnalysis	310.0	510.0	≥ 0.2	1
DIBD	457.0	363.0	≥ 0.2	0.523173
Distance	277.0	543.0	≥ 0.2	1
EqualFrequency	185.0	635.0	≥ 0.2	1
EqualWidth	194.0	626.0	≥ 0.2	1
Extended Chi2	286.0	494.0	≥ 0.2	1
FFD	175.0	645.0	≥ 0.2	1
FUSINTER	131.0	689.0	≥ 0.2	1
HDD	246.0	534.0	≥ 0.2	1
HellingerBD	208.0	612.0	≥ 0.2	1
ID3	251.0	569.0	≥ 0.2	1
IDD	395.5	424.5	≥ 0.2	1
Khiops	146.5	673.5	≥ 0.2	1
MDLP	259.0	521.0	≥ 0.2	1
Modified Chi2	113.0	707.0	≥ 0.2	1
MODL	154.0	666.0	≥ 0.2	1
MVD	382.5	402.5	≥ 0.2	1
PKID	143.0	677.0	≥ 0.2	1
UCPD	216.0	604.0	≥ 0.2	1
USD	224.0	556.0	≥ 0.2	1
Zeta	213.0	567.0	≥ 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 , 0.04755]	0.90276
Ameva	[-0.108 , -0.0204]	0.90276
Bayesian	[-0.08025 , 0.006]	0.90276
CACC	[-0.09285 , -0.01795]	0.90276
CADD	[0.10275 , 0.25395]	0.90276
CAIM	[-0.1248 , -0.02785]	0.90276
Chi2	[-0.1479 , -0.0608]	0.90276
ChiMerge	[-0.1267 , -0.0353]	0.90276
ClusterAnalysis	[-0.09925 , 0.0121]	0.90276
DIBD	[-0.02185 , 0.0516]	0.90276
Distance	[-0.06585 , -0.00245]	0.90276
EqualFrequency	[-0.12275 , -0.0391]	0.90276
EqualWidth	[-0.1314 , -0.03765]	0.90276
Extended Chi2	[-0.0991 , 0.00485]	0.90276
FFD	[-0.11635 , -0.03455]	0.90276
FUSINTER	[-0.12795 , -0.05495]	0.90276
HDD	[-0.11475 , -0.01055]	0.90276
HellingerBD	[-0.11215 , -0.03085]	0.90276
ID3	[-0.11275 , -0.01625]	0.90276
IDD	[-0.0522 , 0.0389]	0.90276
Khiops	[-0.11655 , -0.0442]	0.90276
MDLP	[-0.07195 , -0.0042]	0.90276
Modified Chi2	[-0.1474 , -0.06135]	0.90276
MODL	[-0.13495 , -0.05525]	0.90276
MVD	[-0.0485 , 0.0408]	0.90276
PKID	[-0.13315 , -0.0439]	0.90276
UCPD	[-0.0762 , -0.0135]	0.90276
USD	[-0.12395 , -0.0226]	0.90276
Zeta	[-0.11105 , -0.0229]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0464 , 0.0592]	0.95024
Ameva	[-0.11635 , -0.01355]	0.95024
Bayesian	[-0.0898 , 0.01375]	0.95024
CACC	[-0.09905 , -0.0127]	0.95024
CADD	[0.0924 , 0.27095]	0.95024
CAIM	[-0.1331 , -0.0187]	0.95024
Chi2	[-0.15885 , -0.05535]	0.95024
ChiMerge	[-0.13395 , -0.0239]	0.95024
ClusterAnalysis	[-0.1093 , 0.0211]	0.95024
DIBD	[-0.0275 , 0.0586]	0.95024
Distance	[-0.0709 , 0.00485]	0.95024
EqualFrequency	[-0.13065 , -0.0309]	0.95024
EqualWidth	[-0.1415 , -0.0282]	0.95024
Extended Chi2	[-0.10875 , 0.0168]	0.95024
FFD	[-0.1232 , -0.02865]	0.95024
FUSINTER	[-0.13565 , -0.04995]	0.95024
HDD	[-0.1244 , -0.00125]	0.95024
HellingerBD	[-0.1214 , -0.02355]	0.95024
ID3	[-0.1233 , -0.00595]	0.95024
IDD	[-0.061 , 0.04795]	0.95024
Khiops	[-0.12285 , -0.03695]	0.95024
MDLP	[-0.0775 , 0.00365]	0.95024
Modified Chi2	[-0.1553 , -0.05345]	0.95024
MODL	[-0.1415 , -0.0491]	0.95024
MVD	[-0.0589 , 0.04805]	0.95024
PKID	[-0.14395 , -0.03455]	0.95024
UCPD	[-0.08165 , -0.0102]	0.95024
USD	[-0.1321 , -0.01365]	0.95024
Zeta	[-0.11755 , -0.01345]	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	558.0	262.0	0.04662	0.04593
Ameva	351.0	469.0	≥ 0.2	1
Bayesian	511.5	308.5	≥ 0.2	0.364728
CACC	409.0	411.0	≥ 0.2	1
CADD	791.0	29.0	3.164E-9	0
CAIM	364.0	456.0	≥ 0.2	1
Chi2	250.5	569.5	≥ 0.2	1
ChiMerge	349.0	431.0	≥ 0.2	1
ClusterAnalysis	437.0	343.0	≥ 0.2	0.507419
DIBD	606.0	214.0	0.007584	0.008261
Distance	535.0	285.0	0.0945	0.091626
EqualFrequency	340.5	479.5	≥ 0.2	1
EqualWidth	314.0	466.0	≥ 0.2	1
Extended Chi2	466.0	354.0	≥ 0.2	0.447593
FFD	270.0	510.0	≥ 0.2	1
FUSINTER	285.0	495.0	≥ 0.2	1
HDD	456.0	364.0	≥ 0.2	0.530576
HellingerBD	352.0	468.0	≥ 0.2	1
Heter-Disc	569.0	251.0	0.03208	0.032042
IDD	490.0	330.0	≥ 0.2	0.279242
Khiops	317.0	503.0	≥ 0.2	1
MDLP	525.0	295.0	0.12472	0.119926
Modified Chi2	163.0	657.0	≥ 0.2	1
MODL	198.0	622.0	≥ 0.2	1
MVD	593.0	227.0	0.013026	0.013645
PKID	155.0	625.0	≥ 0.2	1
UCPD	477.0	343.0	≥ 0.2	0.364255
USD	292.0	488.0	≥ 0.2	1
Zeta	419.0	401.0	≥ 0.2	0.898392

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
IR	[0.0047 , 0.08065]	0.90276
Ameva	[-0.0334 , 0.0152]	0.90276
Bayesian	[-0.0021 , 0.0231]	0.90276
CACC	[-0.02515 , 0.03155]	0.90276
CADD	[0.1918 , 0.32835]	0.90276
CAIM	[-0.034 , 0.0132]	0.90276
Chi2	[-0.04895 , -0.0058]	0.90276
ChiMerge	[-0.03055 , 0.0167]	0.90276
ClusterAnalysis	[-0.0068 , 0.02]	0.90276
DIBD	[0.0279 , 0.1214]	0.90276
Distance	[0.0005 , 0.0786]	0.90276
EqualFrequency	[-0.03205 , 0.0072]	0.90276
EqualWidth	[-0.0285 , 0.00625]	0.90276
Extended Chi2	[-0.01355 , 0.0318]	0.90276
FFD	[-0.0264 , 0]	0.90276
FUSINTER	[-0.03785 , 0.0035]	0.90276
HDD	[-0.00595 , 0.01485]	0.90276
HellingerBD	[-0.02255 , 0.01415]	0.90276
Heter-Disc	[0.01625 , 0.11275]	0.90276
IDD	[-0.0086 , 0.065]	0.90276
Khiops	[-0.03105 , 0.00355]	0.90276
MDLP	[-0.00355 , 0.07]	0.90276
Modified Chi2	[-0.0428 , -0.01465]	0.90276
MODL	[-0.041 , -0.01295]	0.90276
MVD	[0.022 , 0.11295]	0.90276
PKID	[-0.0356 , -0.0103]	0.90276
UCPD	[-0.0101 , 0.0407]	0.90276
USD	[-0.0171 , 0.0013]	0.90276
Zeta	[-0.0235 , 0.0252]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00055 , 0.0913]	0.95024
Ameva	[-0.0373 , 0.0221]	0.95024
Bayesian	[-0.0048 , 0.02685]	0.95024
CACC	[-0.02935 , 0.0445]	0.95024
CADD	[0.17615 , 0.34015]	0.95024
CAIM	[-0.03805 , 0.01695]	0.95024
Chi2	[-0.0532 , -0.0012]	0.95024
ChiMerge	[-0.03625 , 0.0211]	0.95024
ClusterAnalysis	[-0.00935 , 0.02455]	0.95024
DIBD	[0.01965 , 0.13055]	0.95024
Distance	[-0.00655 , 0.0862]	0.95024
EqualFrequency	[-0.0349 , 0.0112]	0.95024
EqualWidth	[-0.0326 , 0.0082]	0.95024
Extended Chi2	[-0.0161 , 0.0373]	0.95024
FFD	[-0.02955 , 0.00175]	0.95024
FUSINTER	[-0.0425 , 0.0074]	0.95024
HDD	[-0.0077 , 0.01755]	0.95024
HellingerBD	[-0.026 , 0.0211]	0.95024
Heter-Disc	[0.00595 , 0.1233]	0.95024
IDD	[-0.0122 , 0.07345]	0.95024
Khiops	[-0.03505 , 0.00635]	0.95024
MDLP	[-0.0102 , 0.0772]	0.95024
Modified Chi2	[-0.04715 , -0.0121]	0.95024
MODL	[-0.04455 , -0.00935]	0.95024
MVD	[0.01495 , 0.12035]	0.95024
PKID	[-0.03755 , -0.0091]	0.95024
UCPD	[-0.01515 , 0.04755]	0.95024
USD	[-0.0187 , 0.0028]	0.95024
Zeta	[-0.0287 , 0.0309]	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	447.0	336.0	≥ 0.2	0.80926
Ameva	233.0	587.0	≥ 0.2	1
Bayesian	339.0	441.0	≥ 0.2	1
CACC	279.0	541.0	≥ 0.2	1
CADD	759.0	21.0	1.6262E-9	0
CAIM	196.0	624.0	≥ 0.2	1
Chi2	108.0	712.0	≥ 0.2	1
ChiMerge	203.0	617.0	≥ 0.2	1
ClusterAnalysis	318.0	462.0	≥ 0.2	1
DIBD	481.0	299.0	≥ 0.2	0.200857
Distance	385.0	435.0	≥ 0.2	1
EqualFrequency	220.0	600.0	≥ 0.2	1
EqualWidth	225.5	594.5	≥ 0.2	1
Extended Chi2	323.0	457.0	≥ 0.2	1
FFD	203.0	617.0	≥ 0.2	1
FUSINTER	182.0	638.0	≥ 0.2	1
HDD	329.0	491.0	≥ 0.2	1
HellingerBD	266.5	553.5	≥ 0.2	1
Heter-Disc	424.5	395.5	≥ 0.2	1
ID3	330.0	490.0	≥ 0.2	1
Khiops	176.0	644.0	≥ 0.2	1
MDLP	391.0	429.0	≥ 0.2	1
Modified Chi2	91.0	729.0	≥ 0.2	1
MODL	81.5	738.5	≥ 0.2	1
MVD	451.0	369.0	≥ 0.2	0.576972
PKID	122.0	698.0	≥ 0.2	1
UCPD	326.0	494.0	≥ 0.2	1
USD	282.0	538.0	≥ 0.2	1
Zeta	260.0	560.0	≥ 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	[-0.01035 , 0.0218]	0.90276
Ameva	[-0.0855 , -0.0127]	0.90276
Bayesian	[-0.0313 , 0.0097]	0.90276
CACC	[-0.07165 , -0.00255]	0.90276
CADD	[0.1229 , 0.25585]	0.90276
CAIM	[-0.0857 , -0.0221]	0.90276
Chi2	[-0.10695 , -0.0409]	0.90276
ChiMerge	[-0.0833 , -0.01725]	0.90276
ClusterAnalysis	[-0.0393 , 0.0166]	0.90276
DIBD	[-0.005 , 0.05845]	0.90276
Distance	[-0.04505 , 0.0352]	0.90276
EqualFrequency	[-0.0773 , -0.0133]	0.90276
EqualWidth	[-0.0825 , -0.0155]	0.90276
Extended Chi2	[-0.066 , 0.01615]	0.90276
FFD	[-0.08665 , -0.01985]	0.90276
FUSINTER	[-0.1009 , -0.0272]	0.90276
HDD	[-0.0716 , 0.0095]	0.90276
HellingerBD	[-0.0742 , -0.0055]	0.90276
Heter-Disc	[-0.0389 , 0.0522]	0.90276
ID3	[-0.065 , 0.0086]	0.90276
Khiops	[-0.09605 , -0.027]	0.90276
MDLP	[-0.05065 , 0.0337]	0.90276
Modified Chi2	[-0.1101 , -0.0372]	0.90276
MODL	[-0.0902 , -0.03465]	0.90276
MVD	[-0.03095 , 0.0829]	0.90276
PKID	[-0.0933 , -0.0275]	0.90276
UCPD	[-0.06305 , 0.00885]	0.90276
USD	[-0.0619 , -0.0004]	0.90276
Zeta	[-0.0776 , -0.00675]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01305 , 0.0266]	0.95024
Ameva	[-0.09045 , -0.00825]	0.95024
Bayesian	[-0.0373 , 0.01285]	0.95024
CACC	[-0.07895 , 0.0039]	0.95024
CADD	[0.11125 , 0.27615]	0.95024
CAIM	[-0.09175 , -0.01705]	0.95024
Chi2	[-0.1144 , -0.03415]	0.95024
ChiMerge	[-0.08855 , -0.0143]	0.95024
ClusterAnalysis	[-0.05155 , 0.02095]	0.95024
DIBD	[-0.01015 , 0.06495]	0.95024
Distance	[-0.053 , 0.043]	0.95024
EqualFrequency	[-0.08455 , -0.00955]	0.95024
EqualWidth	[-0.09015 , -0.00965]	0.95024
Extended Chi2	[-0.0742 , 0.02315]	0.95024
FFD	[-0.0914 , -0.01275]	0.95024
FUSINTER	[-0.1093 , -0.02195]	0.95024
HDD	[-0.07895 , 0.01445]	0.95024
HellingerBD	[-0.08275 , 0.0009]	0.95024
Heter-Disc	[-0.04795 , 0.061]	0.95024
ID3	[-0.07345 , 0.0122]	0.95024
Khiops	[-0.10295 , -0.021]	0.95024
MDLP	[-0.0611 , 0.042]	0.95024
Modified Chi2	[-0.11945 , -0.0343]	0.95024
MODL	[-0.0963 , -0.0302]	0.95024
MVD	[-0.04055 , 0.09435]	0.95024
PKID	[-0.10045 , -0.0241]	0.95024
UCPD	[-0.0705 , 0.0134]	0.95024
USD	[-0.0686 , 0.00195]	0.95024
Zeta	[-0.08465 , -0.0017]	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	693.0	127.0	6.268E-5	0.000139
Ameva	468.5	351.5	≥ 0.2	0.426979
Bayesian	595.0	225.0	0.012016	0.012654
CACC	506.0	314.0	≥ 0.2	0.194602
CADD	819.0	1.0	3.638E-12	0
CAIM	396.0	384.0	≥ 0.2	0.927725
Chi2	267.0	553.0	≥ 0.2	1
ChiMerge	419.0	361.0	≥ 0.2	0.68058
ClusterAnalysis	618.0	202.0	0.004444	0.005071
DIBD	703.0	117.0	3.062E-5	0.00008
Distance	596.0	184.0	0.003362	0.003955
EqualFrequency	424.0	356.0	≥ 0.2	0.630199
EqualWidth	444.0	336.0	≥ 0.2	0.446927
Extended Chi2	500.0	320.0	≥ 0.2	0.223818
FFD	452.5	367.5	≥ 0.2	0.561966
FUSINTER	345.0	475.0	≥ 0.2	1
HDD	488.0	332.0	≥ 0.2	0.29136
HellingerBD	469.0	351.0	≥ 0.2	0.423072
Heter-Disc	673.5	146.5	2.262E-4	0.000379
ID3	503.0	317.0	≥ 0.2	0.20884
IDD	644.0	176.0	0.0012308	0.001622
MDLP	591.0	229.0	0.014108	0.014704
Modified Chi2	270.0	550.0	≥ 0.2	1
MODL	300.0	520.0	≥ 0.2	1
MVD	615.0	205.0	0.005096	0.005742
PKID	367.0	453.0	≥ 0.2	1
UCPD	572.0	208.0	0.010196	0.010872
USD	476.0	344.0	≥ 0.2	0.371404
Zeta	455.0	365.0	≥ 0.2	0.540135

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
IR	[0.0388 , 0.1062]	0.90276
Ameva	[-0.00885 , 0.03]	0.90276
Bayesian	[0.0121 , 0.05095]	0.90276
CACC	[-0.0031 , 0.0417]	0.90276
CADD	[0.21155 , 0.3393]	0.90276
CAIM	[-0.015 , 0.02695]	0.90276
Chi2	[-0.0226 , -0.0015]	0.90276
ChiMerge	[-0.01305 , 0.03005]	0.90276
ClusterAnalysis	[0.01 , 0.0516]	0.90276
DIBD	[0.06065 , 0.13545]	0.90276
Distance	[0.02325 , 0.082]	0.90276
EqualFrequency	[-0.0053 , 0.01415]	0.90276
EqualWidth	[-0.008 , 0.02185]	0.90276
Extended Chi2	[-0.00575 , 0.05855]	0.90276
FFD	[-0.00765 , 0.0146]	0.90276
FUSINTER	[-0.0203 , 0.00675]	0.90276
HDD	[-0.0078 , 0.0357]	0.90276
HellingerBD	[-0.0055 , 0.02885]	0.90276
Heter-Disc	[0.0442 , 0.11655]	0.90276
ID3	[-0.00355 , 0.03105]	0.90276
IDD	[0.027 , 0.09605]	0.90276
MDLP	[0.012 , 0.07385]	0.90276
Modified Chi2	[-0.0331 , -0.0024]	0.90276
MODL	[-0.02035 , 0.00095]	0.90276
MVD	[0.01705 , 0.14035]	0.90276
PKID	[-0.01655 , 0.00735]	0.90276
UCPD	[0.0091 , 0.0491]	0.90276
USD	[-0.0076 , 0.0269]	0.90276
Zeta	[-0.01055 , 0.0383]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.03265 , 0.1131]	0.95024
Ameva	[-0.0122 , 0.03525]	0.95024
Bayesian	[0.00705 , 0.0592]	0.95024
CACC	[-0.00575 , 0.04995]	0.95024
CADD	[0.19785 , 0.35405]	0.95024
CAIM	[-0.01755 , 0.0313]	0.95024
Chi2	[-0.02495 , 0.00035]	0.95024
ChiMerge	[-0.0172 , 0.0351]	0.95024
ClusterAnalysis	[0.00755 , 0.0724]	0.95024
DIBD	[0.0553 , 0.14165]	0.95024
Distance	[0.01915 , 0.08975]	0.95024
EqualFrequency	[-0.0074 , 0.01675]	0.95024
EqualWidth	[-0.0106 , 0.0271]	0.95024
Extended Chi2	[-0.0089 , 0.06995]	0.95024
FFD	[-0.0104 , 0.01675]	0.95024
FUSINTER	[-0.0227 , 0.0095]	0.95024
HDD	[-0.01045 , 0.04105]	0.95024
HellingerBD	[-0.0077 , 0.0342]	0.95024
Heter-Disc	[0.03695 , 0.12285]	0.95024
ID3	[-0.00635 , 0.03505]	0.95024
IDD	[0.021 , 0.10295]	0.95024
MDLP	[0.0071 , 0.0806]	0.95024
Modified Chi2	[-0.03605 , 0.00055]	0.95024
MODL	[-0.0228 , 0.003]	0.95024
MVD	[0.0117 , 0.15065]	0.95024
PKID	[-0.01995 , 0.0095]	0.95024
UCPD	[0.00545 , 0.0565]	0.95024
USD	[-0.0103 , 0.0302]	0.95024
Zeta	[-0.01315 , 0.0424]	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	487.5	332.5	≥ 0.2	0.293633
Ameva	237.0	583.0	≥ 0.2	1
Bayesian	389.5	390.5	≥ 0.2	1
CACC	313.5	466.5	≥ 0.2	1
CADD	742.0	38.0	2.402E-8	0.000001
CAIM	222.0	598.0	≥ 0.2	1
Chi2	156.0	664.0	≥ 0.2	1
ChiMerge	219.0	601.0	≥ 0.2	1
ClusterAnalysis	362.0	458.0	≥ 0.2	1
DIBD	568.0	212.0	0.012092	0.01274
Distance	460.5	359.5	≥ 0.2	1
EqualFrequency	246.0	534.0	≥ 0.2	1
EqualWidth	240.0	580.0	≥ 0.2	1
Extended Chi2	341.0	479.0	≥ 0.2	1
FFD	271.0	549.0	≥ 0.2	1
FUSINTER	134.5	685.5	≥ 0.2	1
HDD	255.0	565.0	≥ 0.2	1
HellingerBD	280.0	540.0	≥ 0.2	1
Heter-Disc	521.0	259.0	0.06824	0.066494
ID3	295.0	525.0	≥ 0.2	1
IDD	429.0	391.0	≥ 0.2	0.79324
Khiops	229.0	591.0	≥ 0.2	1
Modified Chi2	103.5	676.5	≥ 0.2	1
MODL	147.0	633.0	≥ 0.2	1
MVD	497.0	323.0	≥ 0.2	0.23955
PKID	220.0	600.0	≥ 0.2	1
UCPD	343.0	477.0	≥ 0.2	1
USD	255.0	525.0	≥ 0.2	1
Zeta	254.0	566.0	≥ 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	[-0.01505 , 0.06065]	0.90276
Ameva	[-0.0566 , -0.0087]	0.90276
Bayesian	[-0.04895 , 0.02705]	0.90276
CACC	[-0.0449 , 0.00635]	0.90276
CADD	[0.13955 , 0.28415]	0.90276
CAIM	[-0.06395 , -0.00825]	0.90276
Chi2	[-0.0998 , -0.0307]	0.90276
ChiMerge	[-0.05175 , -0.0066]	0.90276
ClusterAnalysis	[-0.05355 , 0.02725]	0.90276
DIBD	[0.0093 , 0.062]	0.90276
Distance	[-0.005 , 0.01145]	0.90276
EqualFrequency	[-0.06655 , -0.0041]	0.90276
EqualWidth	[-0.07025 , -0.0118]	0.90276
Extended Chi2	[-0.057 , 0.01895]	0.90276
FFD	[-0.07525 , -0.0031]	0.90276
FUSINTER	[-0.07155 , -0.02215]	0.90276
HDD	[-0.06895 , -0.00755]	0.90276
HellingerBD	[-0.06035 , -0.0017]	0.90276
Heter-Disc	[0.0042 , 0.07195]	0.90276
ID3	[-0.07 , 0.00355]	0.90276
IDD	[-0.0337 , 0.05065]	0.90276
Khiops	[-0.07385 , -0.012]	0.90276
Modified Chi2	[-0.09215 , -0.03115]	0.90276
MODL	[-0.0942 , -0.0263]	0.90276
MVD	[-0.0239 , 0.0789]	0.90276
PKID	[-0.0902 , -0.0179]	0.90276
UCPD	[-0.0399 , 0.0121]	0.90276
USD	[-0.07145 , -0.00685]	0.90276
Zeta	[-0.05355 , -0.0061]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.02315 , 0.0694]	0.95024
Ameva	[-0.06145 , -0.00555]	0.95024
Bayesian	[-0.05485 , 0.0316]	0.95024
CACC	[-0.04785 , 0.0094]	0.95024
CADD	[0.12475 , 0.29705]	0.95024
CAIM	[-0.0722 , -0.0054]	0.95024
Chi2	[-0.10585 , -0.02605]	0.95024
ChiMerge	[-0.0556 , -0.0045]	0.95024
ClusterAnalysis	[-0.05875 , 0.03315]	0.95024
DIBD	[0.0062 , 0.06865]	0.95024
Distance	[-0.00605 , 0.01375]	0.95024
EqualFrequency	[-0.0725 , 0]	0.95024
EqualWidth	[-0.0753 , -0.0059]	0.95024
Extended Chi2	[-0.06135 , 0.026]	0.95024
FFD	[-0.0822 , 0.0024]	0.95024
FUSINTER	[-0.0763 , -0.0183]	0.95024
HDD	[-0.07435 , -0.0012]	0.95024
HellingerBD	[-0.0668 , 0.0047]	0.95024
Heter-Disc	[-0.00365 , 0.0775]	0.95024
ID3	[-0.0772 , 0.0102]	0.95024
IDD	[-0.042 , 0.0611]	0.95024
Khiops	[-0.0806 , -0.0071]	0.95024
Modified Chi2	[-0.09775 , -0.0276]	0.95024
MODL	[-0.0978 , -0.01665]	0.95024
MVD	[-0.0342 , 0.09115]	0.95024
PKID	[-0.09885 , -0.01285]	0.95024
UCPD	[-0.044 , 0.01635]	0.95024
USD	[-0.07795 , 0.00225]	0.95024
Zeta	[-0.05905 , -0.00135]	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	759.5	60.5	1.9334E-7	0.000002
Ameva	554.0	266.0	0.05308	0.052105
Bayesian	693.0	127.0	6.268E-5	0.000139
CACC	561.0	219.0	0.016148	0.016698
CADD	820.0	0.0	1.819E-12	0
CAIM	568.0	252.0	0.03322	0.03284
Chi2	360.0	420.0	≥ 0.2	1
ChiMerge	565.0	215.0	0.013706	0.014321
ClusterAnalysis	696.0	124.0	5.078E-5	0.000118
DIBD	773.0	47.0	3.948E-8	0.000001
Distance	664.5	115.5	5.301E-5	0.000121
EqualFrequency	588.5	231.5	0.04368	0.043066
EqualWidth	565.0	215.0	0.013706	0.014152
Extended Chi2	596.5	223.5	0.01130499999999999	0.011811
FFD	627.0	193.0	0.002908	0.003461
FUSINTER	536.5	283.5	0.09051000000000001	0.087281
HDD	597.0	223.0	0.011074	0.011727
HellingerBD	628.0	192.0	0.00277	0.003315
Heter-Disc	707.0	113.0	2.27E-5	0.000064
ID3	657.0	163.0	6.032E-4	0.000879
IDD	729.0	91.0	3.808E-6	0.000018
Khiops	550.0	270.0	0.06026	0.05811
MDLP	676.5	103.5	2.113999999999997E-5	0.00006
MODL	454.0	326.0	≥ 0.2	0.368068
MVD	705.5	114.5	9.488E-5	0.000199
PKID	469.0	311.0	≥ 0.2	0.267248
UCPD	723.0	97.0	6.358E-6	0.000025
USD	628.0	152.0	5.928E-4	0.000874
Zeta	596.0	184.0	0.003362	0.003955

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
IR	[0.05145 , 0.1259]	0.90276
Ameva	[0.00215 , 0.0343]	0.90276
Bayesian	[0.0269 , 0.0691]	0.90276
CACC	[0.00825 , 0.0721]	0.90276
CADD	[0.23435 , 0.3679]	0.90276
CAIM	[0.0025 , 0.0343]	0.90276
Chi2	[-0.0114 , 0.00765]	0.90276
ChiMerge	[0.00675 , 0.0444]	0.90276
ClusterAnalysis	[0.024 , 0.07265]	0.90276
DIBD	[0.07715 , 0.14735]	0.90276
Distance	[0.0392 , 0.1008]	0.90276
EqualFrequency	[0.0063 , 0.03765]	0.90276
EqualWidth	[0.0063 , 0.0337]	0.90276
Extended Chi2	[0.008 , 0.0725]	0.90276
FFD	[0.00995 , 0.0361]	0.90276
FUSINTER	[0.00045 , 0.02535]	0.90276
HDD	[0.00905 , 0.04245]	0.90276
HellingerBD	[0.01295 , 0.0519]	0.90276
Heter-Disc	[0.06135 , 0.1474]	0.90276
ID3	[0.01465 , 0.0428]	0.90276
IDD	[0.0372 , 0.1101]	0.90276
Khiops	[0.0024 , 0.0331]	0.90276
MDLP	[0.03115 , 0.09215]	0.90276
MODL	[-0.0041 , 0.01855]	0.90276
MVD	[0.0388 , 0.1481]	0.90276
PKID	[-0.0046 , 0.0245]	0.90276
UCPD	[0.0286 , 0.0758]	0.90276
USD	[0.0114 , 0.0317]	0.90276
Zeta	[0.0125 , 0.0545]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.048 , 0.13415]	0.95024
Ameva	[-0.00045 , 0.04385]	0.95024
Bayesian	[0.02365 , 0.07375]	0.95024
CACC	[0.00455 , 0.0855]	0.95024
CADD	[0.2226 , 0.3797]	0.95024
CAIM	[0.00065 , 0.03875]	0.95024
Chi2	[-0.0135 , 0.0108]	0.95024
ChiMerge	[0.0044 , 0.05015]	0.95024
ClusterAnalysis	[0.0202 , 0.0807]	0.95024
DIBD	[0.0717 , 0.15715]	0.95024
Distance	[0.0345 , 0.1064]	0.95024
EqualFrequency	[0.00315 , 0.0425]	0.95024
EqualWidth	[0.00435 , 0.0367]	0.95024
Extended Chi2	[0.00595 , 0.0807]	0.95024
FFD	[0.0076 , 0.0396]	0.95024
FUSINTER	[-0.00175 , 0.0287]	0.95024
HDD	[0.00515 , 0.04625]	0.95024
HellingerBD	[0.01035 , 0.05655]	0.95024
Heter-Disc	[0.05345 , 0.1553]	0.95024
ID3	[0.0121 , 0.04715]	0.95024
IDD	[0.0343 , 0.11945]	0.95024
Khiops	[-0.00055 , 0.03605]	0.95024
MDLP	[0.0276 , 0.09775]	0.95024
MODL	[-0.0058 , 0.0233]	0.95024
MVD	[0.0329 , 0.15775]	0.95024
PKID	[-0.0059 , 0.0275]	0.95024
UCPD	[0.02525 , 0.08055]	0.95024
USD	[0.00825 , 0.0361]	0.95024
Zeta	[0.0096 , 0.0569]	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	726.0	94.0	4.932E-6	0.000021
Ameva	506.5	313.5	0.59843	0.191553
Bayesian	712.0	108.0	1.5466E-5	0.000048
CACC	557.0	223.0	0.01895	0.019415
CADD	820.0	0.0	1.819E-12	0
CAIM	489.0	331.0	≥ 0.2	0.285258
Chi2	386.0	434.0	≥ 0.2	1
ChiMerge	521.0	299.0	0.13868	0.13395
ClusterAnalysis	657.0	123.0	9.094E-5	0.00018
DIBD	743.0	77.0	1.0558E-6	0.000007
Distance	620.0	160.0	9.426E-4	0.001297
EqualFrequency	543.0	277.0	0.07472	0.072267
EqualWidth	521.0	299.0	0.13868	0.13395
Extended Chi2	571.0	249.0	0.0299	0.029673
FFD	528.0	252.0	0.05434	0.053265
FUSINTER	457.0	323.0	≥ 0.2	0.346212
HDD	567.0	253.0	0.0344	0.034259
HellingerBD	592.0	228.0	0.013558	0.014166
Heter-Disc	666.0	154.0	3.572E-4	0.000565
ID3	622.0	198.0	0.00369	0.004286
IDD	738.5	81.5	1.619E-6	0.000009
Khiops	520.0	300.0	0.14234	0.137474
MDLP	633.0	147.0	4.388E-4	0.00065
Modified Chi2	326.0	454.0	≥ 0.2	1
MVD	658.0	162.0	5.698E-4	0.000821
PKID	453.0	367.0	≥ 0.2	0.558752
UCPD	691.0	129.0	7.198E-5	0.000154
USD	610.0	170.0	0.0016352	0.00209
Zeta	525.0	295.0	0.12472	0.12055

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
IR	[0.0424 , 0.099]	0.90276
Ameva	[-0.0034 , 0.03485]	0.90276
Bayesian	[0.0307 , 0.06325]	0.90276
CACC	[0.00545 , 0.0503]	0.90276
CADD	[0.21805 , 0.34285]	0.90276
CAIM	[-0.0053 , 0.0311]	0.90276
Chi2	[-0.0162 , 0.00795]	0.90276
ChiMerge	[-0.00175 , 0.0359]	0.90276
ClusterAnalysis	[0.018 , 0.0554]	0.90276
DIBD	[0.0649 , 0.1337]	0.90276
Distance	[0.0295 , 0.0967]	0.90276
EqualFrequency	[0.00145 , 0.03495]	0.90276
EqualWidth	[-0.00195 , 0.03445]	0.90276
Extended Chi2	[0.00625 , 0.0702]	0.90276
FFD	[0.0031 , 0.0278]	0.90276
FUSINTER	[-0.005 , 0.01785]	0.90276
HDD	[0.0052 , 0.0452]	0.90276
HellingerBD	[0.00805 , 0.0402]	0.90276
Heter-Disc	[0.05525 , 0.13495]	0.90276
ID3	[0.01295 , 0.041]	0.90276
IDD	[0.03465 , 0.0902]	0.90276
Khiops	[-0.00095 , 0.02035]	0.90276
MDLP	[0.0263 , 0.0942]	0.90276
Modified Chi2	[-0.01855 , 0.0041]	0.90276
MVD	[0.03175 , 0.15065]	0.90276
PKID	[-0.0117 , 0.01875]	0.90276
UCPD	[0.0209 , 0.06315]	0.90276
USD	[0.0133 , 0.0329]	0.90276
Zeta	[-0.00125 , 0.04255]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.03655 , 0.1094]	0.95024
Ameva	[-0.0068 , 0.0403]	0.95024
Bayesian	[0.0282 , 0.06745]	0.95024
CACC	[0.0029 , 0.05965]	0.95024
CADD	[0.2057 , 0.35795]	0.95024
CAIM	[-0.00745 , 0.03475]	0.95024
Chi2	[-0.019 , 0.0099]	0.95024
ChiMerge	[-0.0043 , 0.04405]	0.95024
ClusterAnalysis	[0.0155 , 0.06435]	0.95024
DIBD	[0.05935 , 0.14325]	0.95024
Distance	[0.02235 , 0.10085]	0.95024
EqualFrequency	[-0.0019 , 0.0385]	0.95024
EqualWidth	[-0.00535 , 0.03805]	0.95024
Extended Chi2	[0.00235 , 0.07645]	0.95024
FFD	[0 , 0.03145]	0.95024
FUSINTER	[-0.0074 , 0.02045]	0.95024
HDD	[0.00135 , 0.0511]	0.95024
HellingerBD	[0.0048 , 0.0454]	0.95024
Heter-Disc	[0.0491 , 0.1415]	0.95024
ID3	[0.00935 , 0.04455]	0.95024
IDD	[0.0302 , 0.0963]	0.95024
Khiops	[-0.003 , 0.0228]	0.95024
MDLP	[0.01665 , 0.0978]	0.95024
Modified Chi2	[-0.0233 , 0.0058]	0.95024
MVD	[0.0246 , 0.16075]	0.95024
PKID	[-0.0152 , 0.02085]	0.95024
UCPD	[0.0183 , 0.06895]	0.95024
USD	[0.0108 , 0.0349]	0.95024
Zeta	[-0.00455 , 0.0473]	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	399.0	381.0	≥ 0.2	0.894531
Ameva	221.0	599.0	≥ 0.2	1
Bayesian	306.0	514.0	≥ 0.2	1
CACC	258.0	525.0	≥ 0.2	1
CADD	708.0	112.0	2.104E-5	0.00006
CAIM	205.0	575.0	≥ 0.2	1
Chi2	156.5	663.5	≥ 0.2	1
ChiMerge	180.0	600.0	≥ 0.2	1
ClusterAnalysis	285.5	494.5	≥ 0.2	1
DIBD	436.0	384.0	≥ 0.2	0.721246
Distance	359.0	461.0	≥ 0.2	1
EqualFrequency	212.5	607.5	≥ 0.2	1
EqualWidth	216.0	604.0	≥ 0.2	1
Extended Chi2	288.0	532.0	≥ 0.2	1
FFD	198.0	622.0	≥ 0.2	1
FUSINTER	207.0	613.0	≥ 0.2	1
HDD	231.0	589.0	≥ 0.2	1
HellingerBD	239.0	581.0	≥ 0.2	1
Heter-Disc	402.5	382.5	≥ 0.2	1
ID3	227.0	593.0	≥ 0.2	1
IDD	369.0	451.0	≥ 0.2	1
Khiops	205.0	615.0	≥ 0.2	1
MDLP	323.0	497.0	≥ 0.2	1
Modified Chi2	114.5	705.5	≥ 0.2	1
MODL	162.0	658.0	≥ 0.2	1
PKID	174.0	646.0	≥ 0.2	1
UCPD	319.0	501.0	≥ 0.2	1
USD	222.0	598.0	≥ 0.2	1
Zeta	271.0	509.0	≥ 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	[-0.0742 , 0.0447]	0.90276
Ameva	[-0.1012 , -0.008]	0.90276
Bayesian	[-0.0985 , 0.006]	0.90276
CACC	[-0.10625 , -0.00265]	0.90276
CADD	[0.09855 , 0.24865]	0.90276
CAIM	[-0.1395 , -0.0157]	0.90276
Chi2	[-0.152 , -0.03605]	0.90276
ChiMerge	[-0.12825 , -0.017]	0.90276
ClusterAnalysis	[-0.098 , 0.00235]	0.90276
DIBD	[-0.0432 , 0.07045]	0.90276
Distance	[-0.0784 , 0.0313]	0.90276
EqualFrequency	[-0.14195 , -0.0188]	0.90276
EqualWidth	[-0.13445 , -0.01775]	0.90276
Extended Chi2	[-0.10165 , 0.0002]	0.90276
FFD	[-0.136 , -0.02125]	0.90276
FUSINTER	[-0.14265 , -0.0213]	0.90276
HDD	[-0.1043 , -0.01405]	0.90276
HellingerBD	[-0.1276 , -0.01515]	0.90276
Heter-Disc	[-0.0408 , 0.0485]	0.90276
ID3	[-0.11295 , -0.022]	0.90276
IDD	[-0.0829 , 0.03095]	0.90276
Khiops	[-0.14035 , -0.01705]	0.90276
MDLP	[-0.0789 , 0.0239]	0.90276
Modified Chi2	[-0.1481 , -0.0388]	0.90276
MODL	[-0.15065 , -0.03175]	0.90276
PKID	[-0.1486 , -0.0405]	0.90276
UCPD	[-0.1038 , 0.00585]	0.90276
USD	[-0.12305 , -0.02045]	0.90276
Zeta	[-0.12115 , -0.0006]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0854 , 0.05075]	0.95024
Ameva	[-0.1254 , -0.0047]	0.95024
Bayesian	[-0.1064 , 0.01315]	0.95024
CACC	[-0.12805 , 0.0008]	0.95024
CADD	[0.088 , 0.2631]	0.95024
CAIM	[-0.14835 , -0.00995]	0.95024
Chi2	[-0.16165 , -0.03065]	0.95024
ChiMerge	[-0.1398 , -0.0152]	0.95024
ClusterAnalysis	[-0.10465 , 0.00685]	0.95024
DIBD	[-0.0635 , 0.0845]	0.95024
Distance	[-0.09485 , 0.03855]	0.95024
EqualFrequency	[-0.1496 , -0.01235]	0.95024
EqualWidth	[-0.15025 , -0.01125]	0.95024
Extended Chi2	[-0.11795 , 0.0077]	0.95024
FFD	[-0.1459 , -0.01555]	0.95024
FUSINTER	[-0.14945 , -0.0134]	0.95024
HDD	[-0.11475 , -0.00835]	0.95024
HellingerBD	[-0.14105 , -0.0062]	0.95024
Heter-Disc	[-0.04805 , 0.0589]	0.95024
ID3	[-0.12035 , -0.01495]	0.95024
IDD	[-0.09435 , 0.04055]	0.95024
Khiops	[-0.15065 , -0.0117]	0.95024
MDLP	[-0.09115 , 0.0342]	0.95024
Modified Chi2	[-0.15775 , -0.0329]	0.95024
MODL	[-0.16075 , -0.0246]	0.95024
PKID	[-0.15855 , -0.0288]	0.95024
UCPD	[-0.1209 , 0.0109]	0.95024
USD	[-0.1343 , -0.012]	0.95024
Zeta	[-0.1403 , 0.00885]	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	708.0	112.0	2.104E-5	0.00006
Ameva	482.5	337.5	≥ 0.2	0.324858
Bayesian	680.0	140.0	1.4978E-4	0.000277
CACC	501.5	318.5	≥ 0.2	0.446436
CADD	820.0	0.0	1.819E-12	0
CAIM	465.0	355.0	≥ 0.2	0.455672
Chi2	356.5	463.5	≥ 0.2	1
ChiMerge	461.0	359.0	≥ 0.2	0.488795
ClusterAnalysis	640.0	180.0	0.0015176	0.001947
DIBD	666.0	114.0	4.74E-5	0.000114
Distance	617.5	202.5	0.004549	0.005102
EqualFrequency	506.0	314.0	≥ 0.2	0.193852
EqualWidth	449.0	371.0	≥ 0.2	0.595466
Extended Chi2	593.0	227.0	0.013026	0.013645
FFD	544.5	275.5	0.07142	0.069121
FUSINTER	414.5	405.5	≥ 0.2	0.946327
HDD	595.0	225.0	0.012016	0.012654
HellingerBD	500.0	320.0	≥ 0.2	0.22304
Heter-Disc	677.0	143.0	1.8148E-4	0.000324
ID3	625.0	155.0	7.072E-4	0.000994
IDD	698.0	122.0	4.404E-5	0.000105
Khiops	453.0	367.0	≥ 0.2	0.558752
MDLP	600.0	220.0	0.009782	0.01045
Modified Chi2	311.0	469.0	≥ 0.2	1
MODL	367.0	453.0	≥ 0.2	1
MVD	646.0	174.0	0.0011066	0.001479
UCPD	605.0	215.0	0.007918	0.008595
USD	536.5	243.5	0.04067	0.039882
Zeta	518.0	302.0	0.1499	0.144736

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
IR	[0.0386 , 0.10305]	0.90276
Ameva	[-0.00835 , 0.0337]	0.90276
Bayesian	[0.0225 , 0.05865]	0.90276
CACC	[-0.00445 , 0.05425]	0.90276
CADD	[0.2172 , 0.3548]	0.90276
CAIM	[-0.01175 , 0.0299]	0.90276
Chi2	[-0.0243 , 0.00785]	0.90276
ChiMerge	[-0.0104 , 0.02835]	0.90276
ClusterAnalysis	[0.01325 , 0.06995]	0.90276
DIBD	[0.05565 , 0.1434]	0.90276
Distance	[0.02625 , 0.09575]	0.90276
EqualFrequency	[-0.0025 , 0.023]	0.90276
EqualWidth	[-0.00835 , 0.02045]	0.90276
Extended Chi2	[0.0102 , 0.06185]	0.90276
FFD	[0.001 , 0.0193]	0.90276
FUSINTER	[-0.0214 , 0.01845]	0.90276
HDD	[0.0083 , 0.0376]	0.90276
HellingerBD	[-0.00315 , 0.0289]	0.90276
Heter-Disc	[0.0439 , 0.13315]	0.90276
ID3	[0.0103 , 0.0356]	0.90276
IDD	[0.0275 , 0.0933]	0.90276
Khiops	[-0.00735 , 0.01655]	0.90276
MDLP	[0.0179 , 0.0902]	0.90276
Modified Chi2	[-0.0245 , 0.0046]	0.90276
MODL	[-0.01875 , 0.0117]	0.90276
MVD	[0.0405 , 0.1486]	0.90276
UCPD	[0.0139 , 0.0635]	0.90276
USD	[0.00225 , 0.0284]	0.90276
Zeta	[-0.00305 , 0.04315]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.0328 , 0.1111]	0.95024
Ameva	[-0.013 , 0.03705]	0.95024
Bayesian	[0.01895 , 0.0631]	0.95024
CACC	[-0.00795 , 0.0672]	0.95024
CADD	[0.2016 , 0.36545]	0.95024
CAIM	[-0.0153 , 0.03455]	0.95024
Chi2	[-0.02715 , 0.0102]	0.95024
ChiMerge	[-0.01395 , 0.0329]	0.95024
ClusterAnalysis	[0.01065 , 0.0776]	0.95024
DIBD	[0.0491 , 0.1512]	0.95024
Distance	[0.02005 , 0.1018]	0.95024
EqualFrequency	[-0.00565 , 0.0259]	0.95024
EqualWidth	[-0.0108 , 0.0233]	0.95024
Extended Chi2	[0.00605 , 0.06865]	0.95024
FFD	[-0.00065 , 0.02105]	0.95024
FUSINTER	[-0.02425 , 0.02255]	0.95024
HDD	[0.0058 , 0.0418]	0.95024
HellingerBD	[-0.0058 , 0.03475]	0.95024
Heter-Disc	[0.03455 , 0.14395]	0.95024
ID3	[0.0091 , 0.03755]	0.95024
IDD	[0.0241 , 0.10045]	0.95024
Khiops	[-0.0095 , 0.01995]	0.95024
MDLP	[0.01285 , 0.09885]	0.95024
Modified Chi2	[-0.0275 , 0.0059]	0.95024
MODL	[-0.02085 , 0.0152]	0.95024
MVD	[0.0288 , 0.15855]	0.95024
UCPD	[0.00965 , 0.0696]	0.95024
USD	[0.0003 , 0.0307]	0.95024
Zeta	[-0.00785 , 0.04715]	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	548.0	272.0	0.06414	0.062657
Ameva	229.0	591.0	≥ 0.2	1
Bayesian	430.0	350.0	≥ 0.2	0.571953
CACC	264.5	555.5	≥ 0.2	1
CADD	783.0	37.0	1.0438E-8	0.000001
CAIM	259.0	561.0	≥ 0.2	1
Chi2	156.0	664.0	≥ 0.2	1
ChiMerge	281.0	539.0	≥ 0.2	1
ClusterAnalysis	389.0	431.0	≥ 0.2	1
DIBD	635.0	145.0	3.88E-4	0.000613
Distance	477.0	343.0	≥ 0.2	0.364255
EqualFrequency	203.5	579.5	≥ 0.2	1
EqualWidth	304.0	516.0	≥ 0.2	1
Extended Chi2	389.0	431.0	≥ 0.2	1
FFD	249.0	531.0	≥ 0.2	1
FUSINTER	188.0	632.0	≥ 0.2	1
HDD	316.0	504.0	≥ 0.2	1
HellingerBD	317.0	503.0	≥ 0.2	1
Heter-Disc	604.0	216.0	0.008264	0.00894
ID3	343.0	477.0	≥ 0.2	1
IDD	494.0	326.0	≥ 0.2	0.256045
Khiops	208.0	572.0	≥ 0.2	1
MDLP	477.0	343.0	≥ 0.2	0.364255
Modified Chi2	97.0	723.0	≥ 0.2	1
MODL	129.0	691.0	≥ 0.2	1
MVD	501.0	319.0	≥ 0.2	0.218743
PKID	215.0	605.0	≥ 0.2	1
USD	302.0	518.0	≥ 0.2	1
Zeta	291.5	528.5	≥ 0.2	1

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

28.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0036 , 0.0715]	0.90276
Ameva	[-0.04515 , -0.0065]	0.90276
Bayesian	[-0.0199 , 0.04245]	0.90276
CACC	[-0.03295 , -0.00305]	0.90276
CADD	[0.16955 , 0.31035]	0.90276
CAIM	[-0.0451 , -0.0042]	0.90276
Chi2	[-0.0778 , -0.02395]	0.90276
ChiMerge	[-0.0416 , -0.00055]	0.90276
ClusterAnalysis	[-0.02805 , 0.02345]	0.90276
DIBD	[0.0298 , 0.08495]	0.90276
Distance	[-0.01285 , 0.0441]	0.90276
EqualFrequency	[-0.037 , -0.00905]	0.90276
EqualWidth	[-0.04125 , 0.00155]	0.90276
Extended Chi2	[-0.0342 , 0.03625]	0.90276
FFD	[-0.04895 , -0.0036]	0.90276
FUSINTER	[-0.0625 , -0.01395]	0.90276
HDD	[-0.0401 , 0.00555]	0.90276
HellingerBD	[-0.0352 , 0.00645]	0.90276
Heter-Disc	[0.0135 , 0.0762]	0.90276
ID3	[-0.0407 , 0.0101]	0.90276
IDD	[-0.00885 , 0.06305]	0.90276
Khiops	[-0.0491 , -0.0091]	0.90276
MDLP	[-0.0121 , 0.0399]	0.90276
Modified Chi2	[-0.0758 , -0.0286]	0.90276
MODL	[-0.06315 , -0.0209]	0.90276
MVD	[-0.00585 , 0.1038]	0.90276
PKID	[-0.0635 , -0.0139]	0.90276
USD	[-0.04715 , 0.0028]	0.90276
Zeta	[-0.03275 , 0.00025]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0009 , 0.07845]	0.95024
Ameva	[-0.0507 , -0.0045]	0.95024
Bayesian	[-0.02385 , 0.04575]	0.95024
CACC	[-0.0369 , 0]	0.95024
CADD	[0.1605 , 0.3227]	0.95024
CAIM	[-0.051 , -0.0005]	0.95024
Chi2	[-0.08255 , -0.02005]	0.95024
ChiMerge	[-0.0462 , 0.0016]	0.95024
ClusterAnalysis	[-0.0331 , 0.034]	0.95024
DIBD	[0.0249 , 0.0913]	0.95024
Distance	[-0.0166 , 0.049]	0.95024
EqualFrequency	[-0.0419 , -0.0064]	0.95024
EqualWidth	[-0.04785 , 0.0038]	0.95024
Extended Chi2	[-0.0398 , 0.04635]	0.95024
FFD	[-0.0537 , -0.0001]	0.95024
FUSINTER	[-0.06655 , -0.01005]	0.95024
HDD	[-0.0455 , 0.00865]	0.95024
HellingerBD	[-0.03895 , 0.0112]	0.95024
Heter-Disc	[0.0102 , 0.08165]	0.95024
ID3	[-0.04755 , 0.01515]	0.95024
IDD	[-0.0134 , 0.0705]	0.95024
Khiops	[-0.0565 , -0.00545]	0.95024
MDLP	[-0.01635 , 0.044]	0.95024
Modified Chi2	[-0.08055 , -0.02525]	0.95024
MODL	[-0.06895 , -0.0183]	0.95024
MVD	[-0.0109 , 0.1209]	0.95024
PKID	[-0.0696 , -0.00965]	0.95024
USD	[-0.05375 , 0.00775]	0.95024
Zeta	[-0.03715 , 0.00315]	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	587.0	233.0	0.016506	0.017041
Ameva	370.0	450.0	≥ 0.2	1
Bayesian	591.0	229.0	0.014108	0.014704
CACC	402.0	418.0	≥ 0.2	1
CADD	792.0	28.0	2.698E-9	0
CAIM	344.0	436.0	≥ 0.2	1
Chi2	201.0	579.0	≥ 0.2	1
ChiMerge	389.0	431.0	≥ 0.2	1
ClusterAnalysis	483.0	337.0	≥ 0.2	0.323184
DIBD	628.0	192.0	0.00277	0.003315
Distance	564.0	256.0	0.03812	0.037831
EqualFrequency	425.0	395.0	≥ 0.2	0.834963
EqualWidth	378.0	442.0	≥ 0.2	1
Extended Chi2	478.0	342.0	≥ 0.2	0.357192
FFD	359.0	461.0	≥ 0.2	1
FUSINTER	298.0	522.0	≥ 0.2	1
HDD	468.0	312.0	≥ 0.2	0.271636
HellingerBD	433.0	387.0	≥ 0.2	0.752101
Heter-Disc	556.0	224.0	0.019712	0.020152
ID3	488.0	292.0	0.17558	0.165545
IDD	538.0	282.0	0.08666	0.084131
Khiops	344.0	476.0	≥ 0.2	1
MDLP	525.0	255.0	0.06	0.058637
Modified Chi2	152.0	628.0	≥ 0.2	1
MODL	170.0	610.0	≥ 0.2	1
MVD	598.0	222.0	0.010628	0.011287
PKID	243.5	536.5	≥ 0.2	1
UCPD	518.0	302.0	0.1499	0.144736
Zeta	414.0	366.0	≥ 0.2	0.732428

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	[0.0113 , 0.08375]	0.90276
Ameva	[-0.0234 , 0.01265]	0.90276
Bayesian	[0.0047 , 0.028]	0.90276
CACC	[-0.0232 , 0.02815]	0.90276
CADD	[0.18485 , 0.33]	0.90276
CAIM	[-0.02655 , 0.0128]	0.90276
Chi2	[-0.03585 , -0.00755]	0.90276
ChiMerge	[-0.0205 , 0.01725]	0.90276
ClusterAnalysis	[-0.0059 , 0.0286]	0.90276
DIBD	[0.0332 , 0.11845]	0.90276
Distance	[0.00985 , 0.07835]	0.90276
EqualFrequency	[-0.0171 , 0.01745]	0.90276
EqualWidth	[-0.0162 , 0.01165]	0.90276
Extended Chi2	[-0.0061 , 0.02635]	0.90276
FFD	[-0.02025 , 0.00825]	0.90276
FUSINTER	[-0.03235 , 0.00155]	0.90276
HDD	[-0.00525 , 0.0261]	0.90276
HellingerBD	[-0.014 , 0.0214]	0.90276
Heter-Disc	[0.0226 , 0.12395]	0.90276
ID3	[-0.0013 , 0.0171]	0.90276
IDD	[0.0004 , 0.0619]	0.90276
Khiops	[-0.0269 , 0.0076]	0.90276
MDLP	[0.00685 , 0.07145]	0.90276
Modified Chi2	[-0.0317 , -0.0114]	0.90276
MODL	[-0.0329 , -0.0133]	0.90276
MVD	[0.02045 , 0.12305]	0.90276
PKID	[-0.0284 , -0.00225]	0.90276
UCPD	[-0.0028 , 0.04715]	0.90276
Zeta	[-0.0185 , 0.0303]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0063 , 0.0912]	0.95024
Ameva	[-0.02595 , 0.0176]	0.95024
Bayesian	[0.00275 , 0.03125]	0.95024
CACC	[-0.026 , 0.03555]	0.95024
CADD	[0.17475 , 0.34175]	0.95024
CAIM	[-0.03015 , 0.01685]	0.95024
Chi2	[-0.03905 , -0.00545]	0.95024
ChiMerge	[-0.02335 , 0.02065]	0.95024
ClusterAnalysis	[-0.00845 , 0.0324]	0.95024
DIBD	[0.027 , 0.1278]	0.95024
Distance	[0.0033 , 0.08535]	0.95024
EqualFrequency	[-0.0214 , 0.02025]	0.95024
EqualWidth	[-0.01975 , 0.0148]	0.95024
Extended Chi2	[-0.00825 , 0.03075]	0.95024
FFD	[-0.02295 , 0.01095]	0.95024
FUSINTER	[-0.0359 , 0.00445]	0.95024
HDD	[-0.00865 , 0.0304]	0.95024
HellingerBD	[-0.0194 , 0.0246]	0.95024
Heter-Disc	[0.01365 , 0.1321]	0.95024
ID3	[-0.0028 , 0.0187]	0.95024
IDD	[-0.00195 , 0.0686]	0.95024
Khiops	[-0.0302 , 0.0103]	0.95024
MDLP	[-0.00225 , 0.07795]	0.95024
Modified Chi2	[-0.0361 , -0.00825]	0.95024
MODL	[-0.0349 , -0.0108]	0.95024
MVD	[0.012 , 0.1343]	0.95024
PKID	[-0.0307 , -0.0003]	0.95024
UCPD	[-0.00775 , 0.05375]	0.95024
Zeta	[-0.02325 , 0.0345]	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	614.0	206.0	0.005332	0.005982
Ameva	350.5	429.5	≥ 0.2	1
Bayesian	485.0	335.0	≥ 0.2	0.310193
CACC	408.5	371.5	≥ 0.2	0.790541
CADD	801.0	19.0	5.584E-10	0
CAIM	396.5	423.5	≥ 0.2	1
Chi2	238.0	542.0	≥ 0.2	1
ChiMerge	371.5	448.5	≥ 0.2	1
ClusterAnalysis	506.0	314.0	≥ 0.2	0.194602
DIBD	707.0	113.0	2.27E-5	0.000064
Distance	581.0	239.0	0.02076	0.021156
EqualFrequency	369.0	451.0	≥ 0.2	1
EqualWidth	350.0	470.0	≥ 0.2	1
Extended Chi2	434.0	386.0	≥ 0.2	0.74192
FFD	372.0	448.0	≥ 0.2	1
FUSINTER	348.0	472.0	≥ 0.2	1
HDD	369.0	451.0	≥ 0.2	1
HellingerBD	434.5	385.5	≥ 0.2	0.73642
Heter-Disc	567.0	213.0	0.01261	0.013249
ID3	401.0	419.0	≥ 0.2	1
IDD	560.0	260.0	0.04362	0.043082
Khiops	365.0	455.0	≥ 0.2	1
MDLP	566.0	254.0	0.0356	0.035417
Modified Chi2	184.0	596.0	≥ 0.2	1
MODL	295.0	525.0	≥ 0.2	1
MVD	509.0	271.0	0.09856	0.095391
PKID	302.0	518.0	≥ 0.2	1
UCPD	528.5	291.5	0.1134100000000001	0.10911
USD	366.0	414.0	≥ 0.2	1

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
IR	[0.0198 , 0.0878]	0.90276
Ameva	[-0.02725 , 0.01325]	0.90276
Bayesian	[-0.00945 , 0.054]	0.90276
CACC	[-0.0165 , 0.02475]	0.90276
CADD	[0.1864 , 0.32675]	0.90276
CAIM	[-0.0154 , 0.00685]	0.90276
Chi2	[-0.054 , -0.006]	0.90276
ChiMerge	[-0.0196 , 0.0113]	0.90276
ClusterAnalysis	[-0.0045 , 0.04805]	0.90276
DIBD	[0.03295 , 0.10155]	0.90276
Distance	[0.0075 , 0.0642]	0.90276
EqualFrequency	[-0.02395 , 0.01075]	0.90276
EqualWidth	[-0.0284 , 0.01095]	0.90276
Extended Chi2	[-0.02295 , 0.04625]	0.90276
FFD	[-0.0303 , 0.0157]	0.90276
FUSINTER	[-0.0441 , 0.0113]	0.90276
HDD	[-0.0259 , 0.0126]	0.90276
HellingerBD	[-0.0177 , 0.02145]	0.90276
Heter-Disc	[0.0229 , 0.11105]	0.90276
ID3	[-0.0252 , 0.0235]	0.90276
IDD	[0.00675 , 0.0776]	0.90276
Khiops	[-0.0383 , 0.01055]	0.90276
MDLP	[0.0061 , 0.05355]	0.90276
Modified Chi2	[-0.0545 , -0.0125]	0.90276
MODL	[-0.04255 , 0.00125]	0.90276
MVD	[0.0006 , 0.12115]	0.90276
PKID	[-0.04315 , 0.00305]	0.90276
UCPD	[-0.00025 , 0.03275]	0.90276
USD	[-0.0303 , 0.0185]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
IR	[0.01625 , 0.09485]	0.95024
Ameva	[-0.03005 , 0.01605]	0.95024
Bayesian	[-0.01455 , 0.0609]	0.95024
CACC	[-0.0194 , 0.0331]	0.95024
CADD	[0.17145 , 0.3365]	0.95024
CAIM	[-0.02045 , 0.0084]	0.95024
Chi2	[-0.06085 , -0.002]	0.95024
ChiMerge	[-0.02445 , 0.0132]	0.95024
ClusterAnalysis	[-0.0102 , 0.05525]	0.95024
DIBD	[0.02785 , 0.1077]	0.95024
Distance	[0.0032 , 0.06925]	0.95024
EqualFrequency	[-0.02745 , 0.0143]	0.95024
EqualWidth	[-0.0324 , 0.01395]	0.95024
Extended Chi2	[-0.029 , 0.0566]	0.95024
FFD	[-0.0348 , 0.01995]	0.95024
FUSINTER	[-0.04965 , 0.0145]	0.95024
HDD	[-0.0292 , 0.01705]	0.95024
HellingerBD	[-0.02195 , 0.0245]	0.95024
Heter-Disc	[0.01345 , 0.11755]	0.95024
ID3	[-0.0309 , 0.0287]	0.95024
IDD	[0.0017 , 0.08465]	0.95024
Khiops	[-0.0424 , 0.01315]	0.95024
MDLP	[0.00135 , 0.05905]	0.95024
Modified Chi2	[-0.0569 , -0.0096]	0.95024
MODL	[-0.0473 , 0.00455]	0.95024
MVD	[-0.00885 , 0.1403]	0.95024
PKID	[-0.04715 , 0.00785]	0.95024
UCPD	[-0.00315 , 0.03715]	0.95024
USD	[-0.0345 , 0.02325]	0.95024

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