

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	193.0	627.0	≥ 0.2	1
Bayesian	514.0	269.0	≥ 0.2	0.210511
CACC	173.0	607.0	≥ 0.2	1
CADD	712.5	72.5	2.0563E-5	0.000067
CAIM	142.0	678.0	≥ 0.2	1
Chi2	144.5	675.5	≥ 0.2	1
ChiMerge	163.0	657.0	≥ 0.2	1
ClusterAnalysis	406.5	373.5	≥ 0.2	0.812153
DIBD	235.0	545.0	≥ 0.2	1
Distance	133.0	687.0	≥ 0.2	1
EqualFrequency	223.0	597.0	≥ 0.2	1
EqualWidth	248.0	572.0	≥ 0.2	1
Extended Chi2	267.0	553.0	≥ 0.2	1
FFD	328.5	491.5	≥ 0.2	1
FUSINTER	82.0	738.0	≥ 0.2	1
HDD	343.0	437.0	≥ 0.2	1
HellingerBD	188.0	592.0	≥ 0.2	1
Heter-Disc	492.5	327.5	≥ 0.2	0.924753
ID3	443.0	337.0	≥ 0.2	0.45531
IDD	545.5	274.5	≥ 0.2	0.35302
Khiops	138.0	642.0	≥ 0.2	1
MDLP	134.5	685.5	≥ 0.2	1
Modified Chi2	198.5	621.5	≥ 0.2	1
MODL	211.0	569.0	≥ 0.2	1
MVD	388.0	395.0	≥ 0.2	1
PKID	318.0	462.0	≥ 0.2	1
UCPD	112.0	708.0	≥ 0.2	1
USD	425.0	355.0	≥ 0.2	0.619705
Zeta	163.0	657.0	≥ 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	[-0.0781 , -0.0156]	0.90276
Bayesian	[0.0004 , 0.0434]	0.90276
CACC	[-0.06705 , -0.01705]	0.90276
CADD	[0.04025 , 0.0931]	0.90276
CAIM	[-0.07395 , -0.02135]	0.90276
Chi2	[-0.07285 , -0.01955]	0.90276
ChiMerge	[-0.0798 , -0.0247]	0.90276
ClusterAnalysis	[-0.02555 , 0.0333]	0.90276
DIBD	[-0.04285 , -0.0048]	0.90276
Distance	[-0.08065 , -0.0264]	0.90276
EqualFrequency	[-0.0723 , -0.0098]	0.90276
EqualWidth	[-0.0623 , -0.0045]	0.90276
Extended Chi2	[-0.05655 , -0.0034]	0.90276
FFD	[-0.04295 , 0.0056]	0.90276
FUSINTER	[-0.09305 , -0.0334]	0.90276
HDD	[-0.0406 , 0.0207]	0.90276
HellingerBD	[-0.06145 , -0.01225]	0.90276
Heter-Disc	[-0.0057 , 0.04135]	0.90276
ID3	[-0.0206 , 0.0496]	0.90276
IDD	[0.0006 , 0.02485]	0.90276
Khiops	[-0.0652 , -0.01855]	0.90276
MDLP	[-0.08295 , -0.02625]	0.90276
Modified Chi2	[-0.0741 , -0.0134]	0.90276
MODL	[-0.05895 , -0.00875]	0.90276
MVD	[-0.0236 , 0.025]	0.90276
PKID	[-0.0439 , 0.00715]	0.90276
UCPD	[-0.07745 , -0.0212]	0.90276
USD	[-0.0252 , 0.03755]	0.90276
Zeta	[-0.07615 , -0.0189]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.0886 , -0.01065]	0.95024
Bayesian	[-0.00395 , 0.0504]	0.95024
CACC	[-0.0764 , -0.0133]	0.95024
CADD	[0.03715 , 0.10045]	0.95024
CAIM	[-0.08695 , -0.01845]	0.95024
Chi2	[-0.0859 , -0.01665]	0.95024
ChiMerge	[-0.09 , -0.0204]	0.95024
ClusterAnalysis	[-0.03315 , 0.03965]	0.95024
DIBD	[-0.04685 , -0.00195]	0.95024
Distance	[-0.0925 , -0.02235]	0.95024
EqualFrequency	[-0.08125 , -0.00555]	0.95024
EqualWidth	[-0.06915 , -0.00265]	0.95024
Extended Chi2	[-0.06075 , 0.0013]	0.95024
FFD	[-0.0526 , 0.00805]	0.95024
FUSINTER	[-0.10085 , -0.02945]	0.95024
HDD	[-0.051 , 0.0266]	0.95024
HellingerBD	[-0.0682 , -0.0097]	0.95024
Heter-Disc	[-0.01145 , 0.04805]	0.95024
ID3	[-0.0299 , 0.0572]	0.95024
IDD	[-0.0005 , 0.0273]	0.95024
Khiops	[-0.07625 , -0.0158]	0.95024
MDLP	[-0.09135 , -0.0221]	0.95024
Modified Chi2	[-0.0819 , -0.0098]	0.95024
MODL	[-0.06885 , -0.00635]	0.95024
MVD	[-0.0266 , 0.0318]	0.95024
PKID	[-0.05065 , 0.0095]	0.95024
UCPD	[-0.0887 , -0.0189]	0.95024
USD	[-0.03495 , 0.0443]	0.95024
Zeta	[-0.08745 , -0.0153]	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	627.0	193.0	0.002908	0.003407
Bayesian	701.0	79.0	2.53E-6	0.000014
CACC	500.5	286.5	≥ 0.2	1
CADD	799.0	21.0	8.13E-10	0
CAIM	418.0	402.0	≥ 0.2	1
Chi2	410.0	410.0	≥ 0.2	0.994638
ChiMerge	422.5	362.5	≥ 0.2	1
ClusterAnalysis	679.0	141.0	1.5974E-4	0.000292
DIBD	601.0	219.0	0.009382	0.010053
Distance	389.5	390.5	≥ 0.2	1
EqualFrequency	527.0	253.0	0.05618	0.054585
EqualWidth	578.5	241.5	0.02278	0.022882
Extended Chi2	521.0	299.0	0.13868	0.133297
FFD	619.0	201.0	0.004244	0.004792
FUSINTER	346.5	473.5	≥ 0.2	1
HDD	640.5	179.5	0.004817	0.005483
HellingerBD	484.0	336.0	≥ 0.2	0.315831
Heter-Disc	766.0	54.0	9.226E-8	0.000002
ID3	670.0	110.0	3.506E-5	0.000091
IDD	735.0	85.0	2.232E-6	0.000012
Khiops	488.0	332.0	≥ 0.2	0.29136
MDLP	408.0	412.0	≥ 0.2	1
Modified Chi2	514.0	306.0	≥ 0.2	0.344986
MODL	498.0	322.0	≥ 0.2	0.229492
MVD	689.0	131.0	8.252E-5	0.000168
PKID	648.0	172.0	9.936E-4	0.001347
UCPD	438.5	381.5	≥ 0.2	1
USD	650.0	130.0	1.4732E-4	0.000278
Zeta	443.0	377.0	≥ 0.2	1

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

2.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0156 , 0.0781]	0.90276
Bayesian	[0.03765 , 0.0915]	0.90276
CACC	[0 , 0.01275]	0.90276
CADD	[0.0945 , 0.187]	0.90276
CAIM	[-0.0053 , 0.00905]	0.90276
Chi2	[-0.0062 , 0.01425]	0.90276
ChiMerge	[-0.0058 , 0.01065]	0.90276
ClusterAnalysis	[0.02785 , 0.07555]	0.90276
DIBD	[0.0073 , 0.0362]	0.90276
Distance	[-0.0071 , 0.0077]	0.90276
EqualFrequency	[0.0014 , 0.02515]	0.90276
EqualWidth	[0.00475 , 0.0273]	0.90276
Extended Chi2	[-0.00105 , 0.03815]	0.90276
FFD	[0.0083 , 0.0452]	0.90276
FUSINTER	[-0.0179 , 0.00445]	0.90276
HDD	[0.0096 , 0.05715]	0.90276
HellingerBD	[-0.004 , 0.0227]	0.90276
Heter-Disc	[0.05035 , 0.11045]	0.90276
ID3	[0.03095 , 0.0893]	0.90276
IDD	[0.031 , 0.0819]	0.90276
Khiops	[-0.00395 , 0.0222]	0.90276
MDLP	[-0.0097 , 0.01165]	0.90276
Modified Chi2	[-0.0017 , 0.0238]	0.90276
MODL	[-0.00275 , 0.0224]	0.90276
MVD	[0.0183 , 0.0757]	0.90276
PKID	[0.0112 , 0.0501]	0.90276
UCPD	[-0.00625 , 0.01045]	0.90276
USD	[0.0241 , 0.0701]	0.90276
Zeta	[-0.007 , 0.0085]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01065 , 0.0886]	0.95024
Bayesian	[0.0344 , 0.09955]	0.95024
CACC	[-0.0016 , 0.01545]	0.95024
CADD	[0.08765 , 0.19455]	0.95024
CAIM	[-0.00655 , 0.01035]	0.95024
Chi2	[-0.00745 , 0.0179]	0.95024
ChiMerge	[-0.0074 , 0.0129]	0.95024
ClusterAnalysis	[0.02405 , 0.0796]	0.95024
DIBD	[0.00535 , 0.04005]	0.95024
Distance	[-0.00905 , 0.00995]	0.95024
EqualFrequency	[-0.00025 , 0.02675]	0.95024
EqualWidth	[0.0029 , 0.03025]	0.95024
Extended Chi2	[-0.0032 , 0.04295]	0.95024
FFD	[0.0068 , 0.0506]	0.95024
FUSINTER	[-0.02065 , 0.00665]	0.95024
HDD	[0.00805 , 0.06695]	0.95024
HellingerBD	[-0.00655 , 0.0258]	0.95024
Heter-Disc	[0.0474 , 0.11855]	0.95024
ID3	[0.025 , 0.0948]	0.95024
IDD	[0.0272 , 0.08645]	0.95024
Khiops	[-0.00655 , 0.0255]	0.95024
MDLP	[-0.01115 , 0.01455]	0.95024
Modified Chi2	[-0.0039 , 0.0265]	0.95024
MODL	[-0.0049 , 0.0242]	0.95024
MVD	[0.01625 , 0.08715]	0.95024
PKID	[0.00875 , 0.05365]	0.95024
UCPD	[-0.0082 , 0.0121]	0.95024
USD	[0.02035 , 0.0783]	0.95024
Zeta	[-0.00975 , 0.0102]	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	269.0	514.0	≥ 0.2	1
Ameva	79.0	701.0	≥ 0.2	1
CACC	156.0	624.0	≥ 0.2	1
CADD	646.5	173.5	0.003562	0.004045
CAIM	56.0	764.0	≥ 0.2	1
Chi2	53.0	727.0	≥ 0.2	1
ChiMerge	27.0	793.0	≥ 0.2	1
ClusterAnalysis	353.0	427.0	≥ 0.2	1
DIBD	176.0	604.0	≥ 0.2	1
Distance	123.0	697.0	≥ 0.2	1
EqualFrequency	134.0	686.0	≥ 0.2	1
EqualWidth	168.0	612.0	≥ 0.2	1
Extended Chi2	117.0	703.0	≥ 0.2	1
FFD	186.0	594.0	≥ 0.2	1
FUSINTER	46.0	774.0	≥ 0.2	1
HDD	279.0	504.0	≥ 0.2	1
HellingerBD	141.0	679.0	≥ 0.2	1
Heter-Disc	481.0	339.0	≥ 0.2	0.641386
ID3	377.5	442.5	≥ 0.2	1
IDD	272.0	511.0	≥ 0.2	1
Khiops	129.0	651.0	≥ 0.2	1
MDLP	122.0	698.0	≥ 0.2	1
Modified Chi2	70.5	749.5	≥ 0.2	1
MODL	116.5	703.5	≥ 0.2	1
MVD	336.5	483.5	≥ 0.2	1
PKID	182.0	598.0	≥ 0.2	1
UCPD	86.0	694.0	≥ 0.2	1
USD	279.0	541.0	≥ 0.2	1
Zeta	41.0	779.0	≥ 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	[-0.0434 , -0.0004]	0.90276
Ameva	[-0.0915 , -0.03765]	0.90276
CACC	[-0.08115 , -0.02605]	0.90276
CADD	[0.0258 , 0.1171]	0.90276
CAIM	[-0.09665 , -0.03975]	0.90276
Chi2	[-0.08775 , -0.03525]	0.90276
ChiMerge	[-0.0992 , -0.04305]	0.90276
ClusterAnalysis	[-0.0253 , 0.01075]	0.90276
DIBD	[-0.06575 , -0.0177]	0.90276
Distance	[-0.09915 , -0.03195]	0.90276
EqualFrequency	[-0.08405 , -0.0247]	0.90276
EqualWidth	[-0.0746 , -0.01985]	0.90276
Extended Chi2	[-0.0599 , -0.02025]	0.90276
FFD	[-0.06515 , -0.01145]	0.90276
FUSINTER	[-0.10145 , -0.04515]	0.90276
HDD	[-0.03615 , 0.0003]	0.90276
HellingerBD	[-0.0766 , -0.0233]	0.90276
Heter-Disc	[-0.0099 , 0.05235]	0.90276
ID3	[-0.0118 , 0.00715]	0.90276
IDD	[-0.02965 , 0]	0.90276
Khiops	[-0.0823 , -0.02235]	0.90276
MDLP	[-0.0945 , -0.0329]	0.90276
Modified Chi2	[-0.0779 , -0.0236]	0.90276
MODL	[-0.07965 , -0.02845]	0.90276
MVD	[-0.0266 , 0.0071]	0.90276
PKID	[-0.0609 , -0.01345]	0.90276
UCPD	[-0.09075 , -0.036]	0.90276
USD	[-0.01605 , -0.0003]	0.90276
Zeta	[-0.09325 , -0.03905]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0504 , 0.00395]	0.95024
Ameva	[-0.09955 , -0.0344]	0.95024
CACC	[-0.0855 , -0.02105]	0.95024
CADD	[0.01965 , 0.1302]	0.95024
CAIM	[-0.1025 , -0.03645]	0.95024
Chi2	[-0.09425 , -0.0312]	0.95024
ChiMerge	[-0.10315 , -0.03825]	0.95024
ClusterAnalysis	[-0.0325 , 0.0135]	0.95024
DIBD	[-0.0702 , -0.01405]	0.95024
Distance	[-0.1082 , -0.02665]	0.95024
EqualFrequency	[-0.0899 , -0.0209]	0.95024
EqualWidth	[-0.08205 , -0.0162]	0.95024
Extended Chi2	[-0.0658 , -0.0183]	0.95024
FFD	[-0.0712 , -0.008]	0.95024
FUSINTER	[-0.1081 , -0.0414]	0.95024
HDD	[-0.0462 , 0.00325]	0.95024
HellingerBD	[-0.08635 , -0.02075]	0.95024
Heter-Disc	[-0.0147 , 0.0618]	0.95024
ID3	[-0.01405 , 0.0093]	0.95024
IDD	[-0.03195 , 0.0017]	0.95024
Khiops	[-0.08785 , -0.0197]	0.95024
MDLP	[-0.1031 , -0.02785]	0.95024
Modified Chi2	[-0.0842 , -0.02165]	0.95024
MODL	[-0.087 , -0.02505]	0.95024
MVD	[-0.0305 , 0.01185]	0.95024
PKID	[-0.06605 , -0.0099]	0.95024
UCPD	[-0.10045 , -0.03365]	0.95024
USD	[-0.01825 , 0.00045]	0.95024
Zeta	[-0.0995 , -0.0356]	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	607.0	173.0	0.0019174	0.002404
Ameva	286.5	500.5	≥ 0.2	1
Bayesian	624.0	156.0	7.494E-4	0.001066
CADD	767.0	53.0	8.202E-8	0.000002
CAIM	351.0	432.0	≥ 0.2	1
Chi2	375.0	445.0	≥ 0.2	1
ChiMerge	356.0	464.0	≥ 0.2	1
ClusterAnalysis	611.5	208.5	0.005964000000000006	0.006534
DIBD	502.0	278.0	0.12056	0.11643
Distance	316.5	503.5	≥ 0.2	1
EqualFrequency	448.5	371.5	≥ 0.2	1
EqualWidth	534.0	286.0	0.09724	0.09424
Extended Chi2	458.5	361.5	≥ 0.2	0.509426
FFD	572.0	248.0	0.0767	0.073934
FUSINTER	246.5	533.5	≥ 0.2	1
HDD	492.5	292.5	≥ 0.2	0.706381
HellingerBD	449.0	331.0	≥ 0.2	0.405537
Heter-Disc	734.5	85.5	9.073E-6	0.000035
ID3	579.0	201.0	0.007492	0.008071
IDD	700.5	119.5	3.68E-5	0.000089
Khiops	425.0	355.0	≥ 0.2	0.619705
MDLP	290.5	529.5	≥ 0.2	1
Modified Chi2	420.0	360.0	≥ 0.2	0.669837
MODL	457.5	362.5	≥ 0.2	0.518106
MVD	573.5	246.5	0.07305	0.070991
PKID	538.0	242.0	0.03858	0.038236
UCPD	340.0	440.0	≥ 0.2	1
USD	561.0	219.0	0.016148	0.016509
Zeta	328.0	452.0	≥ 0.2	1

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

4.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.01705 , 0.06705]	0.90276
Ameva	[-0.01275 , 0]	0.90276
Bayesian	[0.02605 , 0.08115]	0.90276
CADD	[0.0873 , 0.1736]	0.90276
CAIM	[-0.00975 , 0.00535]	0.90276
Chi2	[-0.00865 , 0.00615]	0.90276
ChiMerge	[-0.01415 , 0.00515]	0.90276
ClusterAnalysis	[0.01125 , 0.06565]	0.90276
DIBD	[-0.0011 , 0.03405]	0.90276
Distance	[-0.01185 , 0.00115]	0.90276
EqualFrequency	[-0.0082 , 0.01775]	0.90276
EqualWidth	[0 , 0.0217]	0.90276
Extended Chi2	[-0.00905 , 0.0299]	0.90276
FFD	[0.0034 , 0.03445]	0.90276
FUSINTER	[-0.0217 , -0.00205]	0.90276
HDD	[-0.0009 , 0.0443]	0.90276
HellingerBD	[-0.00635 , 0.01605]	0.90276
Heter-Disc	[0.04065 , 0.09555]	0.90276
ID3	[0.0123 , 0.07755]	0.90276
IDD	[0.0311 , 0.0789]	0.90276
Khiops	[-0.0073 , 0.01385]	0.90276
MDLP	[-0.01265 , 0.00015]	0.90276
Modified Chi2	[-0.0074 , 0.0159]	0.90276
MODL	[-0.005 , 0.0147]	0.90276
MVD	[0.00545 , 0.0574]	0.90276
PKID	[0.0033 , 0.0319]	0.90276
UCPD	[-0.0126 , 0.0047]	0.90276
USD	[0.0075 , 0.06945]	0.90276
Zeta	[-0.01205 , 0.00325]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0133 , 0.0764]	0.95024
Ameva	[-0.01545 , 0.0016]	0.95024
Bayesian	[0.02105 , 0.0855]	0.95024
CADD	[0.0802 , 0.1819]	0.95024
CAIM	[-0.01125 , 0.00725]	0.95024
Chi2	[-0.00995 , 0.00805]	0.95024
ChiMerge	[-0.0167 , 0.00695]	0.95024
ClusterAnalysis	[0.0076 , 0.07055]	0.95024
DIBD	[-0.0041 , 0.0401]	0.95024
Distance	[-0.01345 , 0.0021]	0.95024
EqualFrequency	[-0.01165 , 0.02045]	0.95024
EqualWidth	[-0.00225 , 0.02365]	0.95024
Extended Chi2	[-0.0107 , 0.0361]	0.95024
FFD	[0.00145 , 0.03705]	0.95024
FUSINTER	[-0.02465 , -0.00015]	0.95024
HDD	[-0.0031 , 0.05265]	0.95024
HellingerBD	[-0.00875 , 0.0184]	0.95024
Heter-Disc	[0.0373 , 0.1019]	0.95024
ID3	[0.00915 , 0.08665]	0.95024
IDD	[0.02675 , 0.08345]	0.95024
Khiops	[-0.0093 , 0.0159]	0.95024
MDLP	[-0.0135 , 0.0023]	0.95024
Modified Chi2	[-0.01005 , 0.01945]	0.95024
MODL	[-0.00715 , 0.01575]	0.95024
MVD	[0.00225 , 0.0635]	0.95024
PKID	[0.00095 , 0.0377]	0.95024
UCPD	[-0.0147 , 0.0063]	0.95024
USD	[0.0043 , 0.07405]	0.95024
Zeta	[-0.01395 , 0.00465]	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	72.5	712.5	≥ 0.2	1
Ameva	21.0	799.0	≥ 0.2	1
Bayesian	173.5	646.5	≥ 0.2	1
CACC	53.0	767.0	≥ 0.2	1
CAIM	2.0	818.0	≥ 0.2	1
Chi2	13.0	767.0	≥ 0.2	1
ChiMerge	12.0	808.0	≥ 0.2	1
ClusterAnalysis	122.5	697.5	≥ 0.2	1
DIBD	31.0	749.0	≥ 0.2	1
Distance	42.0	778.0	≥ 0.2	1
EqualFrequency	13.0	767.0	≥ 0.2	1
EqualWidth	20.0	800.0	≥ 0.2	1
Extended Chi2	53.0	730.0	≥ 0.2	1
FFD	55.5	764.5	≥ 0.2	1
FUSINTER	10.0	810.0	≥ 0.2	1
HDD	101.5	718.5	≥ 0.2	1
HellingerBD	6.0	814.0	≥ 0.2	1
Heter-Disc	253.0	567.0	≥ 0.2	1
ID3	156.5	628.5	≥ 0.2	1
IDD	109.0	711.0	≥ 0.2	1
Khiops	11.0	809.0	≥ 0.2	1
MDLP	34.0	786.0	≥ 0.2	1
Modified Chi2	23.0	757.0	≥ 0.2	1
MODL	20.0	800.0	≥ 0.2	1
MVD	136.0	684.0	≥ 0.2	1
PKID	37.0	783.0	≥ 0.2	1
UCPD	8.0	812.0	≥ 0.2	1
USD	129.0	651.0	≥ 0.2	1
Zeta	4.0	816.0	≥ 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	[-0.0931 , -0.04025]	0.90276
Ameva	[-0.187 , -0.0945]	0.90276
Bayesian	[-0.1171 , -0.0258]	0.90276
CACC	[-0.1736 , -0.0873]	0.90276
CAIM	[-0.20055 , -0.09795]	0.90276
Chi2	[-0.1992 , -0.1004]	0.90276
ChiMerge	[-0.197 , -0.1019]	0.90276
ClusterAnalysis	[-0.1362 , -0.0522]	0.90276
DIBD	[-0.15805 , -0.06765]	0.90276
Distance	[-0.1987 , -0.10425]	0.90276
EqualFrequency	[-0.1834 , -0.0992]	0.90276
EqualWidth	[-0.18475 , -0.0913]	0.90276
Extended Chi2	[-0.1675 , -0.07765]	0.90276
FFD	[-0.1649 , -0.0785]	0.90276
FUSINTER	[-0.21405 , -0.11325]	0.90276
HDD	[-0.1461 , -0.0566]	0.90276
HellingerBD	[-0.1785 , -0.09115]	0.90276
Heter-Disc	[-0.1037 , 0]	0.90276
ID3	[-0.12965 , -0.0351]	0.90276
IDD	[-0.0897 , -0.03335]	0.90276
Khiops	[-0.18395 , -0.09965]	0.90276
MDLP	[-0.1968 , -0.1044]	0.90276
Modified Chi2	[-0.19185 , -0.09305]	0.90276
MODL	[-0.17905 , -0.0862]	0.90276
MVD	[-0.1003 , -0.0409]	0.90276
PKID	[-0.1567 , -0.0755]	0.90276
UCPD	[-0.1885 , -0.09645]	0.90276
USD	[-0.13665 , -0.04305]	0.90276
Zeta	[-0.2019 , -0.09735]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.10045 , -0.03715]	0.95024
Ameva	[-0.19455 , -0.08765]	0.95024
Bayesian	[-0.1302 , -0.01965]	0.95024
CACC	[-0.1819 , -0.0802]	0.95024
CAIM	[-0.2088 , -0.0923]	0.95024
Chi2	[-0.20905 , -0.0952]	0.95024
ChiMerge	[-0.20485 , -0.0963]	0.95024
ClusterAnalysis	[-0.14455 , -0.04685]	0.95024
DIBD	[-0.16665 , -0.0634]	0.95024
Distance	[-0.2097 , -0.0964]	0.95024
EqualFrequency	[-0.1928 , -0.09175]	0.95024
EqualWidth	[-0.1934 , -0.08365]	0.95024
Extended Chi2	[-0.1778 , -0.06825]	0.95024
FFD	[-0.1725 , -0.0696]	0.95024
FUSINTER	[-0.22555 , -0.1042]	0.95024
HDD	[-0.15485 , -0.05395]	0.95024
HellingerBD	[-0.18715 , -0.08465]	0.95024
Heter-Disc	[-0.1084 , 0]	0.95024
ID3	[-0.14495 , -0.0274]	0.95024
IDD	[-0.1004 , -0.0277]	0.95024
Khiops	[-0.1952 , -0.09105]	0.95024
MDLP	[-0.20875 , -0.09605]	0.95024
Modified Chi2	[-0.203 , -0.0864]	0.95024
MODL	[-0.1855 , -0.0801]	0.95024
MVD	[-0.10665 , -0.03735]	0.95024
PKID	[-0.165 , -0.06815]	0.95024
UCPD	[-0.19545 , -0.0866]	0.95024
USD	[-0.1448 , -0.0375]	0.95024
Zeta	[-0.20905 , -0.09]	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	678.0	142.0	1.703E-4	0.000307
Ameva	402.0	418.0	≥ 0.2	1
Bayesian	764.0	56.0	1.1634E-7	0.000002
CACC	432.0	351.0	≥ 0.2	0.987963
CADD	818.0	2.0	5.456E-12	0
Chi2	441.0	339.0	≥ 0.2	0.471563
ChiMerge	386.0	434.0	≥ 0.2	1
ClusterAnalysis	736.0	84.0	2.038E-6	0.000011
DIBD	588.0	232.0	0.015876	0.016428
Distance	400.5	419.5	≥ 0.2	1
EqualFrequency	554.0	226.0	0.02132	0.021243
EqualWidth	652.0	168.0	7.984E-4	0.001095
Extended Chi2	526.0	294.0	0.1214	0.116138
FFD	689.0	131.0	8.252E-5	0.000172
FUSINTER	313.5	466.5	≥ 0.2	1
HDD	672.5	116.5	0.008869	0.009689
HellingerBD	550.0	230.0	0.02486	0.025105
Heter-Disc	752.0	68.0	4.3E-7	0.000004
ID3	733.0	87.0	2.674E-6	0.000014
IDD	778.0	42.0	2.07E-8	0.000001
Khiops	548.5	271.5	0.06316	0.060842
MDLP	404.0	416.0	≥ 0.2	1
Modified Chi2	516.0	264.0	0.0798	0.076995
MODL	490.0	330.0	≥ 0.2	0.279242
MVD	659.0	121.0	7.892E-5	0.000169
PKID	708.5	111.5	2.027E-5	0.000055
UCPD	392.0	388.0	≥ 0.2	0.972121
USD	682.0	98.0	1.353E-5	0.000045
Zeta	436.0	384.0	≥ 0.2	1

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

6.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.02135 , 0.07395]	0.90276
Ameva	[-0.00905 , 0.0053]	0.90276
Bayesian	[0.03975 , 0.09665]	0.90276
CACC	[-0.00535 , 0.00975]	0.90276
CADD	[0.09795 , 0.20055]	0.90276
Chi2	[-0.00415 , 0.00955]	0.90276
ChiMerge	[-0.005 , 0.0036]	0.90276
ClusterAnalysis	[0.0293 , 0.074]	0.90276
DIBD	[0.0072 , 0.03595]	0.90276
Distance	[-0.0098 , 0.00705]	0.90276
EqualFrequency	[0.0045 , 0.0269]	0.90276
EqualWidth	[0.0097 , 0.02985]	0.90276
Extended Chi2	[-0.0005 , 0.0318]	0.90276
FFD	[0.018 , 0.0436]	0.90276
FUSINTER	[-0.01155 , 0.00285]	0.90276
HDD	[0.0138 , 0.05035]	0.90276
HellingerBD	[0.00335 , 0.0236]	0.90276
Heter-Disc	[0.0495 , 0.11715]	0.90276
ID3	[0.03455 , 0.09165]	0.90276
IDD	[0.0315 , 0.0825]	0.90276
Khiops	[0.00075 , 0.01845]	0.90276
MDLP	[-0.00855 , 0.00675]	0.90276
Modified Chi2	[0.0004 , 0.0197]	0.90276
MODL	[-0.0026 , 0.0123]	0.90276
MVD	[0.02075 , 0.08255]	0.90276
PKID	[0.0167 , 0.05055]	0.90276
UCPD	[-0.0084 , 0.0089]	0.90276
USD	[0.0266 , 0.0724]	0.90276
Zeta	[-0.00355 , 0.0038]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01845 , 0.08695]	0.95024
Ameva	[-0.01035 , 0.00655]	0.95024
Bayesian	[0.03645 , 0.1025]	0.95024
CACC	[-0.00725 , 0.01125]	0.95024
CADD	[0.0923 , 0.2088]	0.95024
Chi2	[-0.0058 , 0.0112]	0.95024
ChiMerge	[-0.0059 , 0.0046]	0.95024
ClusterAnalysis	[0.02665 , 0.0803]	0.95024
DIBD	[0.0044 , 0.0402]	0.95024
Distance	[-0.01115 , 0.00915]	0.95024
EqualFrequency	[0.0025 , 0.0291]	0.95024
EqualWidth	[0.00785 , 0.033]	0.95024
Extended Chi2	[-0.00195 , 0.03785]	0.95024
FFD	[0.0159 , 0.04635]	0.95024
FUSINTER	[-0.01305 , 0.0044]	0.95024
HDD	[0.0113 , 0.05625]	0.95024
HellingerBD	[0.0018 , 0.027]	0.95024
Heter-Disc	[0.0468 , 0.1298]	0.95024
ID3	[0.0311 , 0.099]	0.95024
IDD	[0.0282 , 0.0871]	0.95024
Khiops	[-0.0005 , 0.0203]	0.95024
MDLP	[-0.0105 , 0.0083]	0.95024
Modified Chi2	[-0.00045 , 0.02245]	0.95024
MODL	[-0.00365 , 0.01425]	0.95024
MVD	[0.0159 , 0.09535]	0.95024
PKID	[0.0148 , 0.0549]	0.95024
UCPD	[-0.00995 , 0.0104]	0.95024
USD	[0.02325 , 0.07795]	0.95024
Zeta	[-0.0042 , 0.0044]	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	675.5	144.5	1.9967E-4	0.000342
Ameva	410.0	410.0	≥ 0.2	0.994638
Bayesian	727.0	53.0	1.6374E-7	0.000002
CACC	445.0	375.0	≥ 0.2	0.633244
CADD	767.0	13.0	3.202E-10	0
CAIM	339.0	441.0	≥ 0.2	1
ChiMerge	346.5	473.5	≥ 0.2	1
ClusterAnalysis	677.0	103.0	2.03E-5	0.00006
DIBD	552.0	268.0	0.05658	0.055034
Distance	341.5	438.5	≥ 0.2	1
EqualFrequency	498.0	282.0	0.13472	0.129996
EqualWidth	598.5	184.5	0.010813	0.011043
Extended Chi2	527.5	292.5	≥ 0.2	0.254942
FFD	642.0	138.0	2.496E-4	0.000426
FUSINTER	315.0	505.0	≥ 0.2	1
HDD	574.0	206.0	0.009348	0.009903
HellingerBD	501.0	319.0	≥ 0.2	0.217193
Heter-Disc	711.0	69.0	9.468E-7	0.000007
ID3	744.5	75.5	3.5830000000000003E-6	0.000018
IDD	755.0	65.0	3.14E-7	0.000003
Khiops	462.0	318.0	≥ 0.2	0.310819
MDLP	340.5	479.5	≥ 0.2	1
Modified Chi2	529.5	255.5	≥ 0.2	0.32474
MODL	438.0	342.0	≥ 0.2	0.498522
MVD	604.0	176.0	0.002242	0.002759
PKID	650.0	130.0	1.4732E-4	0.000278
UCPD	395.0	425.0	≥ 0.2	1
USD	678.0	102.0	1.8742E-5	0.000057
Zeta	394.0	426.0	≥ 0.2	1

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

7.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.01955 , 0.07285]	0.90276
Ameva	[-0.01425 , 0.0062]	0.90276
Bayesian	[0.03525 , 0.08775]	0.90276
CACC	[-0.00615 , 0.00865]	0.90276
CADD	[0.1004 , 0.1992]	0.90276
CAIM	[-0.00955 , 0.00415]	0.90276
ChiMerge	[-0.01165 , 0.0045]	0.90276
ClusterAnalysis	[0.02615 , 0.06365]	0.90276
DIBD	[0.0028 , 0.0353]	0.90276
Distance	[-0.01495 , 0.0042]	0.90276
EqualFrequency	[-0.0013 , 0.0237]	0.90276
EqualWidth	[0.00645 , 0.021]	0.90276
Extended Chi2	[-0.00035 , 0.0227]	0.90276
FFD	[0.0115 , 0.0328]	0.90276
FUSINTER	[-0.01785 , 0.00175]	0.90276
HDD	[0.0067 , 0.0496]	0.90276
HellingerBD	[-0.00275 , 0.01985]	0.90276
Heter-Disc	[0.0525 , 0.1122]	0.90276
ID3	[0.0249 , 0.0785]	0.90276
IDD	[0.0329 , 0.08355]	0.90276
Khiops	[-0.0034 , 0.01415]	0.90276
MDLP	[-0.01535 , 0.00325]	0.90276
Modified Chi2	[0.0005 , 0.015]	0.90276
MODL	[-0.00585 , 0.01325]	0.90276
MVD	[0.013 , 0.0729]	0.90276
PKID	[0.0121 , 0.037]	0.90276
UCPD	[-0.0099 , 0.00685]	0.90276
USD	[0.0157 , 0.06245]	0.90276
Zeta	[-0.01025 , 0.00655]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01665 , 0.0859]	0.95024
Ameva	[-0.0179 , 0.00745]	0.95024
Bayesian	[0.0312 , 0.09425]	0.95024
CACC	[-0.00805 , 0.00995]	0.95024
CADD	[0.0952 , 0.20905]	0.95024
CAIM	[-0.0112 , 0.0058]	0.95024
ChiMerge	[-0.0139 , 0.00555]	0.95024
ClusterAnalysis	[0.02315 , 0.0676]	0.95024
DIBD	[-0.00055 , 0.0395]	0.95024
Distance	[-0.01875 , 0.0055]	0.95024
EqualFrequency	[-0.00455 , 0.0263]	0.95024
EqualWidth	[0.00505 , 0.0225]	0.95024
Extended Chi2	[-0.0023 , 0.0266]	0.95024
FFD	[0.0101 , 0.03645]	0.95024
FUSINTER	[-0.02035 , 0.0029]	0.95024
HDD	[0.00445 , 0.0544]	0.95024
HellingerBD	[-0.0046 , 0.0224]	0.95024
Heter-Disc	[0.0488 , 0.12025]	0.95024
ID3	[0.02145 , 0.08545]	0.95024
IDD	[0.02945 , 0.08795]	0.95024
Khiops	[-0.00515 , 0.0161]	0.95024
MDLP	[-0.0176 , 0.00495]	0.95024
Modified Chi2	[0 , 0.0161]	0.95024
MODL	[-0.00785 , 0.01585]	0.95024
MVD	[0.0102 , 0.08715]	0.95024
PKID	[0.0102 , 0.04085]	0.95024
UCPD	[-0.0117 , 0.0084]	0.95024
USD	[0.0132 , 0.06815]	0.95024
Zeta	[-0.01185 , 0.00795]	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	657.0	163.0	6.032E-4	0.000861
Ameva	362.5	422.5	≥ 0.2	1
Bayesian	793.0	27.0	2.294E-9	0
CACC	464.0	356.0	≥ 0.2	1
CADD	808.0	12.0	1.2732E-10	0
CAIM	434.0	386.0	≥ 0.2	1
Chi2	473.5	346.5	≥ 0.2	0.388858
ClusterAnalysis	761.0	59.0	1.6344E-7	0.000002
DIBD	580.5	239.5	0.021150000000000002	0.021317
Distance	394.0	386.0	≥ 0.2	0.949928
EqualFrequency	519.0	261.0	0.0727	0.070245
EqualWidth	625.0	195.0	0.003202	0.003714
Extended Chi2	567.5	212.5	0.012351	0.012834
FFD	679.5	140.5	1.5476E-4	0.000278
FUSINTER	416.0	404.0	≥ 0.2	0.930379
HDD	739.5	80.5	5.752E-6	0.000025
HellingerBD	539.0	281.0	0.08416	0.079701
Heter-Disc	748.0	72.0	6.46E-7	0.000005
ID3	752.0	68.0	4.3E-7	0.000004
IDD	763.0	57.0	1.3044E-7	0.000002
Khiops	556.0	264.0	0.04976	0.048557
MDLP	405.5	377.5	≥ 0.2	1
Modified Chi2	544.0	236.0	0.03108	0.03108
MODL	542.5	277.5	0.07586	0.073341
MVD	688.0	92.0	8.162E-6	0.000031
PKID	710.0	110.0	1.806E-5	0.000054
UCPD	443.0	337.0	≥ 0.2	0.454522
USD	726.0	94.0	4.932E-6	0.000021
Zeta	436.0	347.0	≥ 0.2	0.939758

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

8.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0247 , 0.0798]	0.90276
Ameva	[-0.01065 , 0.0058]	0.90276
Bayesian	[0.04305 , 0.0992]	0.90276
CACC	[-0.00515 , 0.01415]	0.90276
CADD	[0.1019 , 0.197]	0.90276
CAIM	[-0.0036 , 0.005]	0.90276
Chi2	[-0.0045 , 0.01165]	0.90276
ClusterAnalysis	[0.03435 , 0.07415]	0.90276
DIBD	[0.0056 , 0.04215]	0.90276
Distance	[-0.01035 , 0.01]	0.90276
EqualFrequency	[0.0009 , 0.0285]	0.90276
EqualWidth	[0.00915 , 0.0335]	0.90276
Extended Chi2	[0.00435 , 0.03405]	0.90276
FFD	[0.0182 , 0.0468]	0.90276
FUSINTER	[-0.00955 , 0.00965]	0.90276
HDD	[0.01965 , 0.05415]	0.90276
HellingerBD	[0.00045 , 0.02695]	0.90276
Heter-Disc	[0.0524 , 0.12035]	0.90276
ID3	[0.03735 , 0.0943]	0.90276
IDD	[0.03575 , 0.0832]	0.90276
Khiops	[0.00205 , 0.0226]	0.90276
MDLP	[-0.00825 , 0.00845]	0.90276
Modified Chi2	[0.0023 , 0.0233]	0.90276
MODL	[0.0005 , 0.01815]	0.90276
MVD	[0.02275 , 0.08425]	0.90276
PKID	[0.01875 , 0.05415]	0.90276
UCPD	[-0.0056 , 0.01265]	0.90276
USD	[0.02975 , 0.0751]	0.90276
Zeta	[-0.00385 , 0.00685]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0204 , 0.09]	0.95024
Ameva	[-0.0129 , 0.0074]	0.95024
Bayesian	[0.03825 , 0.10315]	0.95024
CACC	[-0.00695 , 0.0167]	0.95024
CADD	[0.0963 , 0.20485]	0.95024
CAIM	[-0.0046 , 0.0059]	0.95024
Chi2	[-0.00555 , 0.0139]	0.95024
ClusterAnalysis	[0.03175 , 0.0765]	0.95024
DIBD	[0.00295 , 0.0466]	0.95024
Distance	[-0.01275 , 0.0118]	0.95024
EqualFrequency	[-0.001 , 0.0306]	0.95024
EqualWidth	[0.0074 , 0.036]	0.95024
Extended Chi2	[0.00275 , 0.0368]	0.95024
FFD	[0.0145 , 0.0504]	0.95024
FUSINTER	[-0.0119 , 0.01105]	0.95024
HDD	[0.0173 , 0.0581]	0.95024
HellingerBD	[-0.0011 , 0.0297]	0.95024
Heter-Disc	[0.04755 , 0.13005]	0.95024
ID3	[0.03295 , 0.10095]	0.95024
IDD	[0.0327 , 0.0892]	0.95024
Khiops	[0.00025 , 0.02535]	0.95024
MDLP	[-0.01005 , 0.01055]	0.95024
Modified Chi2	[0.0011 , 0.02535]	0.95024
MODL	[-0.0006 , 0.02025]	0.95024
MVD	[0.02015 , 0.0971]	0.95024
PKID	[0.01595 , 0.0567]	0.95024
UCPD	[-0.007 , 0.01445]	0.95024
USD	[0.0267 , 0.0812]	0.95024
Zeta	[-0.00505 , 0.00775]	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	373.5	406.5	≥ 0.2	1
Ameva	141.0	679.0	≥ 0.2	1
Bayesian	427.0	353.0	≥ 0.2	0.600757
CACC	208.5	611.5	≥ 0.2	1
CADD	697.5	122.5	1.6809E-4	0.000314
CAIM	84.0	736.0	≥ 0.2	1
Chi2	103.0	677.0	≥ 0.2	1
ChiMerge	59.0	761.0	≥ 0.2	1
DIBD	271.0	549.0	≥ 0.2	1
Distance	178.0	642.0	≥ 0.2	1
EqualFrequency	79.5	740.5	≥ 0.2	1
EqualWidth	221.0	559.0	≥ 0.2	1
Extended Chi2	150.5	669.5	≥ 0.2	1
FFD	192.5	627.5	≥ 0.2	1
FUSINTER	41.5	778.5	≥ 0.2	1
HDD	316.5	503.5	≥ 0.2	1
HellingerBD	172.0	608.0	≥ 0.2	1
Heter-Disc	534.5	285.5	≥ 0.2	0.214996
ID3	416.5	403.5	≥ 0.2	1
IDD	399.0	381.0	≥ 0.2	0.894531
Khiops	118.0	662.0	≥ 0.2	1
MDLP	148.5	631.5	≥ 0.2	1
Modified Chi2	93.5	726.5	≥ 0.2	1
MODL	162.0	658.0	≥ 0.2	1
MVD	391.0	392.0	≥ 0.2	1
PKID	211.5	608.5	≥ 0.2	1
UCPD	105.0	675.0	≥ 0.2	1
USD	331.0	489.0	≥ 0.2	1
Zeta	80.0	740.0	≥ 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	[-0.0333 , 0.02555]	0.90276
Ameva	[-0.07555 , -0.02785]	0.90276
Bayesian	[-0.01075 , 0.0253]	0.90276
CACC	[-0.06565 , -0.01125]	0.90276
CADD	[0.0522 , 0.1362]	0.90276
CAIM	[-0.074 , -0.0293]	0.90276
Chi2	[-0.06365 , -0.02615]	0.90276
ChiMerge	[-0.07415 , -0.03435]	0.90276
DIBD	[-0.0558 , -0.00475]	0.90276
Distance	[-0.07615 , -0.02195]	0.90276
EqualFrequency	[-0.04995 , -0.0223]	0.90276
EqualWidth	[-0.04695 , -0.0052]	0.90276
Extended Chi2	[-0.0446 , -0.0187]	0.90276
FFD	[-0.03345 , -0.0075]	0.90276
FUSINTER	[-0.0795 , -0.02995]	0.90276
HDD	[-0.02025 , 0.00295]	0.90276
HellingerBD	[-0.0535 , -0.0135]	0.90276
Heter-Disc	[0 , 0.06645]	0.90276
ID3	[-0.00875 , 0.0128]	0.90276
IDD	[-0.01785 , 0.03025]	0.90276
Khiops	[-0.0535 , -0.0212]	0.90276
MDLP	[-0.0729 , -0.02305]	0.90276
Modified Chi2	[-0.04965 , -0.0191]	0.90276
MODL	[-0.06175 , -0.0206]	0.90276
MVD	[-0.01725 , 0.0368]	0.90276
PKID	[-0.03395 , -0.0069]	0.90276
UCPD	[-0.06705 , -0.0253]	0.90276
USD	[-0.0201 , 0.0043]	0.90276
Zeta	[-0.07395 , -0.02825]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03965 , 0.03315]	0.95024
Ameva	[-0.0796 , -0.02405]	0.95024
Bayesian	[-0.0135 , 0.0325]	0.95024
CACC	[-0.07055 , -0.0076]	0.95024
CADD	[0.04685 , 0.14455]	0.95024
CAIM	[-0.0803 , -0.02665]	0.95024
Chi2	[-0.0676 , -0.02315]	0.95024
ChiMerge	[-0.0765 , -0.03175]	0.95024
DIBD	[-0.06355 , 0.00085]	0.95024
Distance	[-0.083 , -0.01705]	0.95024
EqualFrequency	[-0.0549 , -0.0192]	0.95024
EqualWidth	[-0.05125 , -0.00325]	0.95024
Extended Chi2	[-0.0465 , -0.01695]	0.95024
FFD	[-0.0363 , -0.00545]	0.95024
FUSINTER	[-0.09 , -0.0269]	0.95024
HDD	[-0.0223 , 0.0051]	0.95024
HellingerBD	[-0.05975 , -0.01155]	0.95024
Heter-Disc	[-0.0059 , 0.074]	0.95024
ID3	[-0.01075 , 0.01595]	0.95024
IDD	[-0.0203 , 0.0371]	0.95024
Khiops	[-0.0592 , -0.01975]	0.95024
MDLP	[-0.08065 , -0.01955]	0.95024
Modified Chi2	[-0.05415 , -0.01745]	0.95024
MODL	[-0.06695 , -0.0167]	0.95024
MVD	[-0.0208 , 0.04105]	0.95024
PKID	[-0.03665 , -0.0051]	0.95024
UCPD	[-0.07115 , -0.02185]	0.95024
USD	[-0.02295 , 0.00835]	0.95024
Zeta	[-0.07915 , -0.0266]	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	545.0	235.0	0.02996	0.029721
Ameva	219.0	601.0	≥ 0.2	1
Bayesian	604.0	176.0	0.002242	0.002759
CACC	278.0	502.0	≥ 0.2	1
CADD	749.0	31.0	8.64E-9	0.000001
CAIM	232.0	588.0	≥ 0.2	1
Chi2	268.0	552.0	≥ 0.2	1
ChiMerge	239.5	580.5	≥ 0.2	1
ClusterAnalysis	549.0	271.0	0.06218	0.060784
Distance	196.0	624.0	≥ 0.2	1
EqualFrequency	313.5	506.5	≥ 0.2	1
EqualWidth	387.0	433.0	≥ 0.2	1
Extended Chi2	372.0	448.0	≥ 0.2	1
FFD	433.5	346.5	≥ 0.2	0.538493
FUSINTER	192.5	627.5	≥ 0.2	1
HDD	474.0	346.0	≥ 0.2	0.385962
HellingerBD	328.0	452.0	≥ 0.2	1
Heter-Disc	669.0	151.0	0.0010382	0.001392
ID3	567.0	253.0	0.0344	0.034259
IDD	610.5	169.5	0.0015924	0.002005
Khiops	310.0	470.0	≥ 0.2	1
MDLP	218.0	602.0	≥ 0.2	1
Modified Chi2	301.5	518.5	≥ 0.2	1
MODL	313.0	507.0	≥ 0.2	1
MVD	511.0	269.0	0.09288	0.089974
PKID	457.0	363.0	≥ 0.2	0.523173
UCPD	174.5	645.5	≥ 0.2	1
USD	536.0	284.0	0.09182	0.08907
Zeta	245.5	574.5	≥ 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	[0.0048 , 0.04285]	0.90276
Ameva	[-0.0362 , -0.0073]	0.90276
Bayesian	[0.0177 , 0.06575]	0.90276
CACC	[-0.03405 , 0.0011]	0.90276
CADD	[0.06765 , 0.15805]	0.90276
CAIM	[-0.03595 , -0.0072]	0.90276
Chi2	[-0.0353 , -0.0028]	0.90276
ChiMerge	[-0.04215 , -0.0056]	0.90276
ClusterAnalysis	[0.00475 , 0.0558]	0.90276
Distance	[-0.0424 , -0.0111]	0.90276
EqualFrequency	[-0.03325 , 0.0054]	0.90276
EqualWidth	[-0.0258 , 0.0172]	0.90276
Extended Chi2	[-0.02995 , 0.018]	0.90276
FFD	[-0.0132 , 0.0289]	0.90276
FUSINTER	[-0.05025 , -0.0123]	0.90276
HDD	[-0.01165 , 0.0417]	0.90276
HellingerBD	[-0.0243 , 0.0071]	0.90276
Heter-Disc	[0.02055 , 0.0715]	0.90276
ID3	[0.0073 , 0.076]	0.90276
IDD	[0.0188 , 0.05935]	0.90276
Khiops	[-0.03335 , 0.00495]	0.90276
MDLP	[-0.04365 , -0.0079]	0.90276
Modified Chi2	[-0.0329 , 0.0024]	0.90276
MODL	[-0.0293 , 0.00395]	0.90276
MVD	[0 , 0.04915]	0.90276
PKID	[-0.01335 , 0.0291]	0.90276
UCPD	[-0.03995 , -0.01245]	0.90276
USD	[0.0009 , 0.0618]	0.90276
Zeta	[-0.0385 , -0.0045]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00195 , 0.04685]	0.95024
Ameva	[-0.04005 , -0.00535]	0.95024
Bayesian	[0.01405 , 0.0702]	0.95024
CACC	[-0.0401 , 0.0041]	0.95024
CADD	[0.0634 , 0.16665]	0.95024
CAIM	[-0.0402 , -0.0044]	0.95024
Chi2	[-0.0395 , 0.00055]	0.95024
ChiMerge	[-0.0466 , -0.00295]	0.95024
ClusterAnalysis	[-0.00085 , 0.06355]	0.95024
Distance	[-0.0468 , -0.008]	0.95024
EqualFrequency	[-0.0383 , 0.0086]	0.95024
EqualWidth	[-0.0312 , 0.02045]	0.95024
Extended Chi2	[-0.0334 , 0.02225]	0.95024
FFD	[-0.0165 , 0.03335]	0.95024
FUSINTER	[-0.055 , -0.01005]	0.95024
HDD	[-0.01735 , 0.049]	0.95024
HellingerBD	[-0.0278 , 0.0098]	0.95024
Heter-Disc	[0.01695 , 0.08305]	0.95024
ID3	[0.0018 , 0.08245]	0.95024
IDD	[0.0147 , 0.06345]	0.95024
Khiops	[-0.0396 , 0.0074]	0.95024
MDLP	[-0.0475 , -0.0057]	0.95024
Modified Chi2	[-0.036 , 0.0053]	0.95024
MODL	[-0.033 , 0.0063]	0.95024
MVD	[-0.0038 , 0.0596]	0.95024
PKID	[-0.01735 , 0.03305]	0.95024
UCPD	[-0.04305 , -0.01]	0.95024
USD	[-0.0046 , 0.07025]	0.95024
Zeta	[-0.0427 , -0.00165]	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	687.0	133.0	9.446E-5	0.000192
Ameva	390.5	389.5	≥ 0.2	0.988846
Bayesian	697.0	123.0	4.73E-5	0.000111
CACC	503.5	316.5	≥ 0.2	0.428472
CADD	778.0	42.0	2.07E-8	0.000001
CAIM	419.5	400.5	≥ 0.2	1
Chi2	438.5	341.5	≥ 0.2	0.492594
ChiMerge	386.0	394.0	≥ 0.2	1
ClusterAnalysis	642.0	178.0	0.0013674	0.001777
DIBD	624.0	196.0	0.003358	0.003937
EqualFrequency	507.5	312.5	≥ 0.2	0.396225
EqualWidth	540.0	240.0	0.03594	0.035709
Extended Chi2	524.0	296.0	0.1281	0.123797
FFD	589.0	191.0	0.00472	0.005369
FUSINTER	316.0	464.0	≥ 0.2	1
HDD	576.5	243.5	0.06618	0.063969
HellingerBD	510.0	270.0	0.09568	0.092651
Heter-Disc	732.0	88.0	2.924E-6	0.000015
ID3	618.5	161.5	0.0010262000000000001	0.001368
IDD	683.0	97.0	1.2454E-5	0.000042
Khiops	517.0	263.0	0.07738	0.074689
MDLP	368.5	416.5	≥ 0.2	1
Modified Chi2	477.0	306.0	≥ 0.2	0.487702
MODL	513.0	267.0	0.08746	0.084266
MVD	557.0	223.0	0.01895	0.019415
PKID	580.0	200.0	0.007162	0.007851
UCPD	432.5	387.5	≥ 0.2	0.756812
USD	588.0	192.0	0.004948	0.005522
Zeta	413.5	406.5	≥ 0.2	1

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

11.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0264 , 0.08065]	0.90276
Ameva	[-0.0077 , 0.0071]	0.90276
Bayesian	[0.03195 , 0.09915]	0.90276
CACC	[-0.00115 , 0.01185]	0.90276
CADD	[0.10425 , 0.1987]	0.90276
CAIM	[-0.00705 , 0.0098]	0.90276
Chi2	[-0.0042 , 0.01495]	0.90276
ChiMerge	[-0.01 , 0.01035]	0.90276
ClusterAnalysis	[0.02195 , 0.07615]	0.90276
DIBD	[0.0111 , 0.0424]	0.90276
EqualFrequency	[-0.0037 , 0.02515]	0.90276
EqualWidth	[0.0028 , 0.02805]	0.90276
Extended Chi2	[-0.00075 , 0.0318]	0.90276
FFD	[0.0089 , 0.0426]	0.90276
FUSINTER	[-0.01635 , 0.00235]	0.90276
HDD	[0.00485 , 0.0528]	0.90276
HellingerBD	[0.00015 , 0.0316]	0.90276
Heter-Disc	[0.0473 , 0.11965]	0.90276
ID3	[0.01925 , 0.0989]	0.90276
IDD	[0.03535 , 0.09295]	0.90276
Khiops	[0.00045 , 0.02415]	0.90276
MDLP	[-0.0048 , 0.0032]	0.90276
Modified Chi2	[-0.0029 , 0.0232]	0.90276
MODL	[0.0005 , 0.0196]	0.90276
MVD	[0.00895 , 0.09055]	0.90276
PKID	[0.0093 , 0.04795]	0.90276
UCPD	[-0.00735 , 0.0115]	0.90276
USD	[0.0133 , 0.08455]	0.90276
Zeta	[-0.009 , 0.00845]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02235 , 0.0925]	0.95024
Ameva	[-0.00995 , 0.00905]	0.95024
Bayesian	[0.02665 , 0.1082]	0.95024
CACC	[-0.0021 , 0.01345]	0.95024
CADD	[0.0964 , 0.2097]	0.95024
CAIM	[-0.00915 , 0.01115]	0.95024
Chi2	[-0.0055 , 0.01875]	0.95024
ChiMerge	[-0.0118 , 0.01275]	0.95024
ClusterAnalysis	[0.01705 , 0.083]	0.95024
DIBD	[0.008 , 0.0468]	0.95024
EqualFrequency	[-0.0072 , 0.028]	0.95024
EqualWidth	[0.0007 , 0.03245]	0.95024
Extended Chi2	[-0.00235 , 0.03575]	0.95024
FFD	[0.00725 , 0.0488]	0.95024
FUSINTER	[-0.0193 , 0.00335]	0.95024
HDD	[0.0022 , 0.06595]	0.95024
HellingerBD	[-0.00315 , 0.03455]	0.95024
Heter-Disc	[0.04265 , 0.1279]	0.95024
ID3	[0.01615 , 0.10395]	0.95024
IDD	[0.02985 , 0.09935]	0.95024
Khiops	[-0.0013 , 0.02645]	0.95024
MDLP	[-0.00575 , 0.00385]	0.95024
Modified Chi2	[-0.0056 , 0.02545]	0.95024
MODL	[-0.0014 , 0.02125]	0.95024
MVD	[0.00365 , 0.09925]	0.95024
PKID	[0.00645 , 0.0524]	0.95024
UCPD	[-0.00905 , 0.0132]	0.95024
USD	[0.0083 , 0.0894]	0.95024
Zeta	[-0.0109 , 0.0114]	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	597.0	223.0	0.011074	0.011727
Ameva	253.0	527.0	≥ 0.2	1
Bayesian	686.0	134.0	1.01E-4	0.000202
CACC	371.5	448.5	≥ 0.2	1
CADD	767.0	13.0	3.202E-10	0
CAIM	226.0	554.0	≥ 0.2	1
Chi2	282.0	498.0	≥ 0.2	1
ChiMerge	261.0	519.0	≥ 0.2	1
ClusterAnalysis	740.5	79.5	5.24E-6	0.000024
DIBD	506.5	313.5	0.59843	0.191553
Distance	312.5	507.5	≥ 0.2	1
EqualWidth	448.0	335.0	≥ 0.2	0.79759
Extended Chi2	396.0	384.0	≥ 0.2	0.927725
FFD	596.0	187.0	0.01213	0.012802
FUSINTER	223.0	597.0	≥ 0.2	1
HDD	591.0	229.0	0.10448	0.099973
HellingerBD	423.0	360.0	≥ 0.2	1
Heter-Disc	671.0	109.0	3.248E-5	0.000086
ID3	669.0	114.0	1.754E-4	0.00033
IDD	665.0	155.0	3.79E-4	0.000594
Khiops	406.5	413.5	≥ 0.2	1
MDLP	320.5	499.5	≥ 0.2	1
Modified Chi2	380.0	403.0	≥ 0.2	1
MODL	383.0	437.0	≥ 0.2	1
MVD	574.5	245.5	0.0707	0.068754
PKID	614.5	168.5	0.004947	0.005545
UCPD	304.0	476.0	≥ 0.2	1
USD	596.0	184.0	0.003362	0.003955
Zeta	282.5	537.5	≥ 0.2	1

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

12.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0098 , 0.0723]	0.90276
Ameva	[-0.02515 , -0.0014]	0.90276
Bayesian	[0.0247 , 0.08405]	0.90276
CACC	[-0.01775 , 0.0082]	0.90276
CADD	[0.0992 , 0.1834]	0.90276
CAIM	[-0.0269 , -0.0045]	0.90276
Chi2	[-0.0237 , 0.0013]	0.90276
ChiMerge	[-0.0285 , -0.0009]	0.90276
ClusterAnalysis	[0.0223 , 0.04995]	0.90276
DIBD	[-0.0054 , 0.03325]	0.90276
Distance	[-0.02515 , 0.0037]	0.90276
EqualWidth	[-0.00445 , 0.01455]	0.90276
Extended Chi2	[-0.0086 , 0.0146]	0.90276
FFD	[0.00515 , 0.02695]	0.90276
FUSINTER	[-0.03275 , -0.0077]	0.90276
HDD	[0.00585 , 0.04315]	0.90276
HellingerBD	[-0.00765 , 0.01385]	0.90276
Heter-Disc	[0.0458 , 0.11355]	0.90276
ID3	[0.0242 , 0.06735]	0.90276
IDD	[0.0213 , 0.07545]	0.90276
Khiops	[-0.0113 , 0.00785]	0.90276
MDLP	[-0.02565 , 0.00365]	0.90276
Modified Chi2	[-0.01225 , 0.00945]	0.90276
MODL	[-0.01685 , 0.0114]	0.90276
MVD	[0.0074 , 0.0813]	0.90276
PKID	[0.0084 , 0.0264]	0.90276
UCPD	[-0.01855 , 0.0032]	0.90276
USD	[0.0126 , 0.0568]	0.90276
Zeta	[-0.029 , -0.0004]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00555 , 0.08125]	0.95024
Ameva	[-0.02675 , 0.00025]	0.95024
Bayesian	[0.0209 , 0.0899]	0.95024
CACC	[-0.02045 , 0.01165]	0.95024
CADD	[0.09175 , 0.1928]	0.95024
CAIM	[-0.0291 , -0.0025]	0.95024
Chi2	[-0.0263 , 0.00455]	0.95024
ChiMerge	[-0.0306 , 0.001]	0.95024
ClusterAnalysis	[0.0192 , 0.0549]	0.95024
DIBD	[-0.0086 , 0.0383]	0.95024
Distance	[-0.028 , 0.0072]	0.95024
EqualWidth	[-0.0067 , 0.0167]	0.95024
Extended Chi2	[-0.01045 , 0.0195]	0.95024
FFD	[0.0039 , 0.02895]	0.95024
FUSINTER	[-0.03475 , -0.005]	0.95024
HDD	[0.0024 , 0.0471]	0.95024
HellingerBD	[-0.0094 , 0.01695]	0.95024
Heter-Disc	[0.0399 , 0.1197]	0.95024
ID3	[0.0209 , 0.07405]	0.95024
IDD	[0.0167 , 0.08045]	0.95024
Khiops	[-0.0137 , 0.0102]	0.95024
MDLP	[-0.02815 , 0.0061]	0.95024
Modified Chi2	[-0.01415 , 0.01125]	0.95024
MODL	[-0.0202 , 0.01425]	0.95024
MVD	[0.0033 , 0.0895]	0.95024
PKID	[0.0059 , 0.028]	0.95024
UCPD	[-0.0211 , 0.0048]	0.95024
USD	[0.0096 , 0.06245]	0.95024
Zeta	[-0.0311 , 0.0019]	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	572.0	248.0	0.02884	0.028947
Ameva	241.5	578.5	≥ 0.2	1
Bayesian	612.0	168.0	0.0014682	0.001868
CACC	286.0	534.0	≥ 0.2	1
CADD	800.0	20.0	6.748E-10	0
CAIM	168.0	652.0	≥ 0.2	1
Chi2	184.5	598.5	≥ 0.2	1
ChiMerge	195.0	625.0	≥ 0.2	1
ClusterAnalysis	559.0	221.0	0.0175	0.018012
DIBD	433.0	387.0	≥ 0.2	0.751697
Distance	240.0	540.0	≥ 0.2	1
EqualFrequency	335.0	448.0	≥ 0.2	1
Extended Chi2	374.0	446.0	≥ 0.2	1
FFD	505.0	278.0	≥ 0.2	0.264257
FUSINTER	119.0	701.0	≥ 0.2	1
HDD	473.5	346.5	≥ 0.2	0.721877
HellingerBD	306.5	476.5	≥ 0.2	1
Heter-Disc	681.0	139.0	1.404E-4	0.000263
ID3	598.5	186.5	0.03487999999999994	0.034609
IDD	633.0	187.0	0.002166	0.002663
Khiops	326.0	494.0	≥ 0.2	1
MDLP	232.0	548.0	≥ 0.2	1
Modified Chi2	294.0	486.0	≥ 0.2	1
MODL	328.0	492.0	≥ 0.2	1
MVD	543.0	277.0	0.07472	0.072747
PKID	519.0	301.0	≥ 0.2	0.609636
UCPD	252.0	568.0	≥ 0.2	1
USD	523.0	257.0	0.064	0.062463
Zeta	165.0	615.0	≥ 0.2	1

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

13.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0045 , 0.0623]	0.90276
Ameva	[-0.0273 , -0.00475]	0.90276
Bayesian	[0.01985 , 0.0746]	0.90276
CACC	[-0.0217 , -0]	0.90276
CADD	[0.0913 , 0.18475]	0.90276
CAIM	[-0.02985 , -0.0097]	0.90276
Chi2	[-0.021 , -0.00645]	0.90276
ChiMerge	[-0.0335 , -0.00915]	0.90276
ClusterAnalysis	[0.0052 , 0.04695]	0.90276
DIBD	[-0.0172 , 0.0258]	0.90276
Distance	[-0.02805 , -0.0028]	0.90276
EqualFrequency	[-0.01455 , 0.00445]	0.90276
Extended Chi2	[-0.01785 , 0.01385]	0.90276
FFD	[-0.00025 , 0.01395]	0.90276
FUSINTER	[-0.03525 , -0.0173]	0.90276
HDD	[-0.007 , 0.03005]	0.90276
HellingerBD	[-0.01445 , 0.0015]	0.90276
Heter-Disc	[0.03715 , 0.1114]	0.90276
ID3	[0.01 , 0.06345]	0.90276
IDD	[0.0161 , 0.06775]	0.90276
Khiops	[-0.0196 , 0.0036]	0.90276
MDLP	[-0.03 , -0.0044]	0.90276
Modified Chi2	[-0.01605 , 0.00175]	0.90276
MODL	[-0.02175 , 0.00345]	0.90276
MVD	[0.00195 , 0.07495]	0.90276
PKID	[-0.00125 , 0.0204]	0.90276
UCPD	[-0.0262 , -0.0036]	0.90276
USD	[0.0018 , 0.0498]	0.90276
Zeta	[-0.029 , -0.00865]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00265 , 0.06915]	0.95024
Ameva	[-0.03025 , -0.0029]	0.95024
Bayesian	[0.0162 , 0.08205]	0.95024
CACC	[-0.02365 , 0.00225]	0.95024
CADD	[0.08365 , 0.1934]	0.95024
CAIM	[-0.033 , -0.00785]	0.95024
Chi2	[-0.0225 , -0.00505]	0.95024
ChiMerge	[-0.036 , -0.0074]	0.95024
ClusterAnalysis	[0.00325 , 0.05125]	0.95024
DIBD	[-0.02045 , 0.0312]	0.95024
Distance	[-0.03245 , -0.0007]	0.95024
EqualFrequency	[-0.0167 , 0.0067]	0.95024
Extended Chi2	[-0.0192 , 0.0164]	0.95024
FFD	[-0.0015 , 0.01605]	0.95024
FUSINTER	[-0.03665 , -0.01535]	0.95024
HDD	[-0.00885 , 0.0352]	0.95024
HellingerBD	[-0.01625 , 0.00315]	0.95024
Heter-Disc	[0.0326 , 0.11905]	0.95024
ID3	[0.00655 , 0.0746]	0.95024
IDD	[0.0133 , 0.07155]	0.95024
Khiops	[-0.02215 , 0.00525]	0.95024
MDLP	[-0.03285 , -0.00185]	0.95024
Modified Chi2	[-0.01935 , 0.0029]	0.95024
MODL	[-0.02425 , 0.00605]	0.95024
MVD	[-0.0027 , 0.084]	0.95024
PKID	[-0.0024 , 0.024]	0.95024
UCPD	[-0.02845 , -0.00145]	0.95024
USD	[-0.00125 , 0.05705]	0.95024
Zeta	[-0.0313 , -0.0071]	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	553.0	267.0	0.05482	0.053752
Ameva	299.0	521.0	≥ 0.2	1
Bayesian	703.0	117.0	3.062E-5	0.00008
CACC	361.5	458.5	≥ 0.2	1
CADD	730.0	53.0	6.514E-7	0.000006
CAIM	294.0	526.0	≥ 0.2	1
Chi2	292.5	527.5	≥ 0.2	1
ChiMerge	212.5	567.5	≥ 0.2	1
ClusterAnalysis	669.5	150.5	0.0010086000000000001	0.001357
DIBD	448.0	372.0	≥ 0.2	0.604814
Distance	296.0	524.0	≥ 0.2	1
EqualFrequency	384.0	396.0	≥ 0.2	1
EqualWidth	446.0	374.0	≥ 0.2	0.623704
FFD	487.0	293.0	0.18012	0.172886
FUSINTER	229.0	591.0	≥ 0.2	1
HDD	540.0	240.0	0.03594	0.035709
HellingerBD	407.5	412.5	≥ 0.2	1
Heter-Disc	648.5	171.5	0.0032129999999999997	0.003813
ID3	606.0	174.0	0.00202	0.002474
IDD	629.5	190.5	0.008150000000000001	0.008853
Khiops	398.0	422.0	≥ 0.2	1
MDLP	317.5	462.5	≥ 0.2	1
Modified Chi2	466.5	353.5	≥ 0.2	0.799658
MODL	391.0	429.0	≥ 0.2	1
MVD	540.0	240.0	0.03594	0.035709
PKID	518.5	301.5	≥ 0.2	0.312621
UCPD	318.0	502.0	≥ 0.2	1
USD	565.0	215.0	0.013706	0.014321
Zeta	308.5	511.5	≥ 0.2	1

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

14.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0034 , 0.05655]	0.90276
Ameva	[-0.03815 , 0.00105]	0.90276
Bayesian	[0.02025 , 0.0599]	0.90276
CACC	[-0.0299 , 0.00905]	0.90276
CADD	[0.07765 , 0.1675]	0.90276
CAIM	[-0.0318 , 0.0005]	0.90276
Chi2	[-0.0227 , 0.00035]	0.90276
ChiMerge	[-0.03405 , -0.00435]	0.90276
ClusterAnalysis	[0.0187 , 0.0446]	0.90276
DIBD	[-0.018 , 0.02995]	0.90276
Distance	[-0.0318 , 0.00075]	0.90276
EqualFrequency	[-0.0146 , 0.0086]	0.90276
EqualWidth	[-0.01385 , 0.01785]	0.90276
FFD	[-0.00305 , 0.023]	0.90276
FUSINTER	[-0.0358 , -0.0044]	0.90276
HDD	[0.00395 , 0.0312]	0.90276
HellingerBD	[-0.0227 , 0.01235]	0.90276
Heter-Disc	[0.0373 , 0.09625]	0.90276
ID3	[0.0123 , 0.0508]	0.90276
IDD	[0.0158 , 0.0664]	0.90276
Khiops	[-0.01775 , 0.0116]	0.90276
MDLP	[-0.0319 , 0.00475]	0.90276
Modified Chi2	[-0.01095 , 0.01335]	0.90276
MODL	[-0.0183 , 0.01225]	0.90276
MVD	[0.0052 , 0.06535]	0.90276
PKID	[-0.0024 , 0.0242]	0.90276
UCPD	[-0.0274 , 0.00285]	0.90276
USD	[0.00665 , 0.0427]	0.90276
Zeta	[-0.03575 , 0.00225]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0013 , 0.06075]	0.95024
Ameva	[-0.04295 , 0.0032]	0.95024
Bayesian	[0.0183 , 0.0658]	0.95024
CACC	[-0.0361 , 0.0107]	0.95024
CADD	[0.06825 , 0.1778]	0.95024
CAIM	[-0.03785 , 0.00195]	0.95024
Chi2	[-0.0266 , 0.0023]	0.95024
ChiMerge	[-0.0368 , -0.00275]	0.95024
ClusterAnalysis	[0.01695 , 0.0465]	0.95024
DIBD	[-0.02225 , 0.0334]	0.95024
Distance	[-0.03575 , 0.00235]	0.95024
EqualFrequency	[-0.0195 , 0.01045]	0.95024
EqualWidth	[-0.0164 , 0.0192]	0.95024
FFD	[-0.00605 , 0.02485]	0.95024
FUSINTER	[-0.045 , -0.00295]	0.95024
HDD	[0.00175 , 0.0348]	0.95024
HellingerBD	[-0.0328 , 0.0158]	0.95024
Heter-Disc	[0.0319 , 0.1086]	0.95024
ID3	[0.00955 , 0.056]	0.95024
IDD	[0.01285 , 0.0717]	0.95024
Khiops	[-0.02385 , 0.01315]	0.95024
MDLP	[-0.03865 , 0.0066]	0.95024
Modified Chi2	[-0.0188 , 0.0149]	0.95024
MODL	[-0.02165 , 0.0139]	0.95024
MVD	[0.00135 , 0.07585]	0.95024
PKID	[-0.0059 , 0.02705]	0.95024
UCPD	[-0.032 , 0.00485]	0.95024
USD	[0.00455 , 0.0477]	0.95024
Zeta	[-0.03785 , 0.0034]	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	491.5	328.5	≥ 0.2	0.269575
Ameva	201.0	619.0	≥ 0.2	1
Bayesian	594.0	186.0	0.003708	0.00432
CACC	248.0	572.0	≥ 0.2	1
CADD	764.5	55.5	4.3750000000000005E-7	0.000005
CAIM	131.0	689.0	≥ 0.2	1
Chi2	138.0	642.0	≥ 0.2	1
ChiMerge	140.5	679.5	≥ 0.2	1
ClusterAnalysis	627.5	192.5	0.008935	0.009504
DIBD	346.5	433.5	≥ 0.2	1
Distance	191.0	589.0	≥ 0.2	1
EqualFrequency	187.0	596.0	≥ 0.2	1
EqualWidth	278.0	505.0	≥ 0.2	1
Extended Chi2	293.0	487.0	≥ 0.2	1
FUSINTER	85.0	695.0	≥ 0.2	1
HDD	457.0	363.0	≥ 0.2	1
HellingerBD	208.0	575.0	≥ 0.2	1
Heter-Disc	621.5	198.5	0.011698	0.011738
ID3	601.5	183.5	0.03067	0.030274
IDD	584.0	236.0	0.05124	0.049837
Khiops	142.0	641.0	≥ 0.2	1
MDLP	171.0	609.0	≥ 0.2	1
Modified Chi2	195.0	625.0	≥ 0.2	1
MODL	234.0	546.0	≥ 0.2	1
MVD	470.0	310.0	≥ 0.2	0.261277
PKID	373.0	412.0	≥ 0.2	1
UCPD	157.5	662.5	≥ 0.2	1
USD	542.5	277.5	0.1819	0.174329
Zeta	141.0	639.0	≥ 0.2	1

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

15.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0056 , 0.04295]	0.90276
Ameva	[-0.0452 , -0.0083]	0.90276
Bayesian	[0.01145 , 0.06515]	0.90276
CACC	[-0.03445 , -0.0034]	0.90276
CADD	[0.0785 , 0.1649]	0.90276
CAIM	[-0.0436 , -0.018]	0.90276
Chi2	[-0.0328 , -0.0115]	0.90276
ChiMerge	[-0.0468 , -0.0182]	0.90276
ClusterAnalysis	[0.0075 , 0.03345]	0.90276
DIBD	[-0.0289 , 0.0132]	0.90276
Distance	[-0.0426 , -0.0089]	0.90276
EqualFrequency	[-0.02695 , -0.00515]	0.90276
EqualWidth	[-0.01395 , 0.00025]	0.90276
Extended Chi2	[-0.023 , 0.00305]	0.90276
FUSINTER	[-0.0494 , -0.0215]	0.90276
HDD	[-0.00815 , 0.0156]	0.90276
HellingerBD	[-0.02685 , -0.005]	0.90276
Heter-Disc	[0.01855 , 0.0912]	0.90276
ID3	[0.00515 , 0.0452]	0.90276
IDD	[0.00645 , 0.05635]	0.90276
Khiops	[-0.03055 , -0.0087]	0.90276
MDLP	[-0.04145 , -0.0126]	0.90276
Modified Chi2	[-0.02775 , -0.00655]	0.90276
MODL	[-0.0319 , -0.0035]	0.90276
MVD	[-0.00635 , 0.06305]	0.90276
PKID	[-0.00555 , 0.00545]	0.90276
UCPD	[-0.04295 , -0.0152]	0.90276
USD	[0.0004 , 0.0325]	0.90276
Zeta	[-0.0426 , -0.0137]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00805 , 0.0526]	0.95024
Ameva	[-0.0506 , -0.0068]	0.95024
Bayesian	[0.008 , 0.0712]	0.95024
CACC	[-0.03705 , -0.00145]	0.95024
CADD	[0.0696 , 0.1725]	0.95024
CAIM	[-0.04635 , -0.0159]	0.95024
Chi2	[-0.03645 , -0.0101]	0.95024
ChiMerge	[-0.0504 , -0.0145]	0.95024
ClusterAnalysis	[0.00545 , 0.0363]	0.95024
DIBD	[-0.03335 , 0.0165]	0.95024
Distance	[-0.0488 , -0.00725]	0.95024
EqualFrequency	[-0.02895 , -0.0039]	0.95024
EqualWidth	[-0.01605 , 0.0015]	0.95024
Extended Chi2	[-0.02485 , 0.00605]	0.95024
FUSINTER	[-0.05465 , -0.01945]	0.95024
HDD	[-0.0109 , 0.0189]	0.95024
HellingerBD	[-0.03145 , -0.00335]	0.95024
Heter-Disc	[0.0143 , 0.1008]	0.95024
ID3	[0.0031 , 0.0553]	0.95024
IDD	[0.0032 , 0.06145]	0.95024
Khiops	[-0.03335 , -0.00755]	0.95024
MDLP	[-0.04665 , -0.0106]	0.95024
Modified Chi2	[-0.0296 , -0.0043]	0.95024
MODL	[-0.0348 , -0.00145]	0.95024
MVD	[-0.0099 , 0.0719]	0.95024
PKID	[-0.0062 , 0.00665]	0.95024
UCPD	[-0.04625 , -0.01235]	0.95024
USD	[-0.00095 , 0.0404]	0.95024
Zeta	[-0.0489 , -0.0111]	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	738.0	82.0	1.6944E-6	0.00001
Ameva	473.5	346.5	≥ 0.2	0.388858
Bayesian	774.0	46.0	3.48E-8	0.000001
CACC	533.5	246.5	0.04513	0.044111
CADD	810.0	10.0	7.822E-11	0
CAIM	466.5	313.5	≥ 0.2	0.281743
Chi2	505.0	315.0	≥ 0.2	0.198511
ChiMerge	404.0	416.0	≥ 0.2	1
ClusterAnalysis	778.5	41.5	1.9405E-8	0.000001
DIBD	627.5	192.5	0.002839	0.003281
Distance	464.0	316.0	≥ 0.2	0.295969
EqualFrequency	597.0	223.0	0.011074	0.011727
EqualWidth	701.0	119.0	3.546E-5	0.000087
Extended Chi2	591.0	229.0	0.014108	0.014208
FFD	695.0	85.0	4.404E-6	0.00002
HDD	661.5	118.5	6.599000000000001E-5	0.000143
HellingerBD	615.5	204.5	0.004983	0.005545
Heter-Disc	739.0	41.0	3.622E-8	0.000001
ID3	750.0	70.0	5.278E-7	0.000005
IDD	782.0	38.0	1.2008E-8	0.000001
Khiops	577.0	203.0	0.008192	0.008764
MDLP	513.0	267.0	0.08746	0.082643
Modified Chi2	574.0	206.0	0.009348	0.010033
MODL	575.0	208.0	0.0298	0.029824
MVD	676.5	143.5	1.8741E-4	0.000325
PKID	732.0	88.0	2.924E-6	0.000015
UCPD	511.0	309.0	0.1787	0.172476
USD	677.5	102.5	1.952099999999998E-5	0.000057
Zeta	457.5	362.5	≥ 0.2	0.901894

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	[0.0334 , 0.09305]	0.90276
Ameva	[-0.00445 , 0.0179]	0.90276
Bayesian	[0.04515 , 0.10145]	0.90276
CACC	[0.00205 , 0.0217]	0.90276
CADD	[0.11325 , 0.21405]	0.90276
CAIM	[-0.00285 , 0.01155]	0.90276
Chi2	[-0.00175 , 0.01785]	0.90276
ChiMerge	[-0.00965 , 0.00955]	0.90276
ClusterAnalysis	[0.02995 , 0.0795]	0.90276
DIBD	[0.0123 , 0.05025]	0.90276
Distance	[-0.00235 , 0.01635]	0.90276
EqualFrequency	[0.0077 , 0.03275]	0.90276
EqualWidth	[0.0173 , 0.03525]	0.90276
Extended Chi2	[0.0044 , 0.0358]	0.90276
FFD	[0.0215 , 0.0494]	0.90276
HDD	[0.01305 , 0.0596]	0.90276
HellingerBD	[0.00835 , 0.0344]	0.90276
Heter-Disc	[0.05855 , 0.1386]	0.90276
ID3	[0.034 , 0.1032]	0.90276
IDD	[0.0406 , 0.09865]	0.90276
Khiops	[0.0047 , 0.03035]	0.90276
MDLP	[0.00035 , 0.01355]	0.90276
Modified Chi2	[0.00475 , 0.0246]	0.90276
MODL	[0.00395 , 0.02365]	0.90276
MVD	[0.02155 , 0.0952]	0.90276
PKID	[0.0203 , 0.05545]	0.90276
UCPD	[-0.0015 , 0.0179]	0.90276
USD	[0.0293 , 0.08275]	0.90276
Zeta	[-0.0047 , 0.01175]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02945 , 0.10085]	0.95024
Ameva	[-0.00665 , 0.02065]	0.95024
Bayesian	[0.0414 , 0.1081]	0.95024
CACC	[0.00015 , 0.02465]	0.95024
CADD	[0.1042 , 0.22555]	0.95024
CAIM	[-0.0044 , 0.01305]	0.95024
Chi2	[-0.0029 , 0.02035]	0.95024
ChiMerge	[-0.01105 , 0.0119]	0.95024
ClusterAnalysis	[0.0269 , 0.09]	0.95024
DIBD	[0.01005 , 0.055]	0.95024
Distance	[-0.00335 , 0.0193]	0.95024
EqualFrequency	[0.005 , 0.03475]	0.95024
EqualWidth	[0.01535 , 0.03665]	0.95024
Extended Chi2	[0.00295 , 0.045]	0.95024
FFD	[0.01945 , 0.05465]	0.95024
HDD	[0.01145 , 0.0716]	0.95024
HellingerBD	[0.00585 , 0.037]	0.95024
Heter-Disc	[0.0548 , 0.1475]	0.95024
ID3	[0.03035 , 0.114]	0.95024
IDD	[0.03785 , 0.10635]	0.95024
Khiops	[0.0032 , 0.0327]	0.95024
MDLP	[-0.0007 , 0.0154]	0.95024
Modified Chi2	[0.00315 , 0.0267]	0.95024
MODL	[0.0026 , 0.02705]	0.95024
MVD	[0.0173 , 0.10325]	0.95024
PKID	[0.0182 , 0.05975]	0.95024
UCPD	[-0.00325 , 0.01935]	0.95024
USD	[0.0255 , 0.09005]	0.95024
Zeta	[-0.00625 , 0.01375]	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	437.0	343.0	≥ 0.2	0.507419
Ameva	179.5	640.5	≥ 0.2	1
Bayesian	504.0	279.0	≥ 0.2	0.270767
CACC	292.5	492.5	≥ 0.2	1
CADD	718.5	101.5	4.8310000000000003E-4	0.000781
CAIM	116.5	672.5	≥ 0.2	1
Chi2	206.0	574.0	≥ 0.2	1
ChiMerge	80.5	739.5	≥ 0.2	1
ClusterAnalysis	503.5	316.5	≥ 0.2	0.429309
DIBD	346.0	474.0	≥ 0.2	1
Distance	243.5	576.5	≥ 0.2	1
EqualFrequency	229.0	591.0	≥ 0.2	1
EqualWidth	346.5	473.5	≥ 0.2	1
Extended Chi2	240.0	540.0	≥ 0.2	1
FFD	363.0	457.0	≥ 0.2	1
FUSINTER	118.5	661.5	≥ 0.2	1
HellingerBD	282.5	537.5	≥ 0.2	1
Heter-Disc	581.0	239.0	0.1433	0.137637
ID3	477.0	343.0	≥ 0.2	1
IDD	491.0	329.0	≥ 0.2	0.27008
Khiops	231.5	588.5	≥ 0.2	1
MDLP	208.0	575.0	≥ 0.2	1
Modified Chi2	248.0	535.0	≥ 0.2	1
MODL	240.0	580.0	≥ 0.2	1
MVD	512.5	307.5	≥ 0.2	0.357106
PKID	340.5	444.5	≥ 0.2	1
UCPD	197.5	622.5	≥ 0.2	1
USD	404.0	379.0	≥ 0.2	1
Zeta	131.0	652.0	≥ 0.2	1

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

17.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0207 , 0.0406]	0.90276
Ameva	[-0.05715 , -0.0096]	0.90276
Bayesian	[-0.0003 , 0.03615]	0.90276
CACC	[-0.0443 , 0.0009]	0.90276
CADD	[0.0566 , 0.1461]	0.90276
CAIM	[-0.05035 , -0.0138]	0.90276
Chi2	[-0.0496 , -0.0067]	0.90276
ChiMerge	[-0.05415 , -0.01965]	0.90276
ClusterAnalysis	[-0.00295 , 0.02025]	0.90276
DIBD	[-0.0417 , 0.01165]	0.90276
Distance	[-0.0528 , -0.00485]	0.90276
EqualFrequency	[-0.04315 , -0.00585]	0.90276
EqualWidth	[-0.03005 , 0.007]	0.90276
Extended Chi2	[-0.0312 , -0.00395]	0.90276
FFD	[-0.0156 , 0.00815]	0.90276
FUSINTER	[-0.0596 , -0.01305]	0.90276
HellingerBD	[-0.0349 , -0.00035]	0.90276
Heter-Disc	[0.0098 , 0.0781]	0.90276
ID3	[-0.00145 , 0.0153]	0.90276
IDD	[-0.0073 , 0.05435]	0.90276
Khiops	[-0.04035 , -0.00535]	0.90276
MDLP	[-0.05555 , -0.0066]	0.90276
Modified Chi2	[-0.03295 , -0.00235]	0.90276
MODL	[-0.04185 , -0.00425]	0.90276
MVD	[-0.00365 , 0.0535]	0.90276
PKID	[-0.0218 , 0.00395]	0.90276
UCPD	[-0.05135 , -0.0098]	0.90276
USD	[-0.0067 , 0.01095]	0.90276
Zeta	[-0.05095 , -0.01825]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0266 , 0.051]	0.95024
Ameva	[-0.06695 , -0.00805]	0.95024
Bayesian	[-0.00325 , 0.0462]	0.95024
CACC	[-0.05265 , 0.0031]	0.95024
CADD	[0.05395 , 0.15485]	0.95024
CAIM	[-0.05625 , -0.0113]	0.95024
Chi2	[-0.0544 , -0.00445]	0.95024
ChiMerge	[-0.0581 , -0.0173]	0.95024
ClusterAnalysis	[-0.0051 , 0.0223]	0.95024
DIBD	[-0.049 , 0.01735]	0.95024
Distance	[-0.06595 , -0.0022]	0.95024
EqualFrequency	[-0.0471 , -0.0024]	0.95024
EqualWidth	[-0.0352 , 0.00885]	0.95024
Extended Chi2	[-0.0348 , -0.00175]	0.95024
FFD	[-0.0189 , 0.0109]	0.95024
FUSINTER	[-0.0716 , -0.01145]	0.95024
HellingerBD	[-0.04015 , 0.003]	0.95024
Heter-Disc	[0.0037 , 0.0952]	0.95024
ID3	[-0.0021 , 0.0211]	0.95024
IDD	[-0.0108 , 0.05875]	0.95024
Khiops	[-0.04405 , -0.0028]	0.95024
MDLP	[-0.0659 , -0.00445]	0.95024
Modified Chi2	[-0.0377 , 0]	0.95024
MODL	[-0.047 , -0.00225]	0.95024
MVD	[-0.00755 , 0.05825]	0.95024
PKID	[-0.02785 , 0.0061]	0.95024
UCPD	[-0.0562 , -0.00735]	0.95024
USD	[-0.0091 , 0.0131]	0.95024
Zeta	[-0.0583 , -0.0135]	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	592.0	188.0	0.004088	0.004715
Ameva	336.0	484.0	≥ 0.2	1
Bayesian	679.0	141.0	1.5974E-4	0.000292
CACC	331.0	449.0	≥ 0.2	1
CADD	814.0	6.0	2.546E-11	0
CAIM	230.0	550.0	≥ 0.2	1
Chi2	319.0	501.0	≥ 0.2	1
ChiMerge	281.0	539.0	≥ 0.2	1
ClusterAnalysis	608.0	172.0	0.0018188	0.002295
DIBD	452.0	328.0	≥ 0.2	0.383106
Distance	270.0	510.0	≥ 0.2	1
EqualFrequency	360.0	423.0	≥ 0.2	1
EqualWidth	476.5	306.5	≥ 0.2	0.489986
Extended Chi2	412.5	407.5	≥ 0.2	0.967781
FFD	575.0	208.0	0.0298	0.029824
FUSINTER	204.5	615.5	≥ 0.2	1
HDD	537.5	282.5	≥ 0.2	0.199334
Heter-Disc	710.0	110.0	1.806E-5	0.000054
ID3	664.0	119.0	2.508E-4	0.00044
IDD	705.0	115.0	2.64E-5	0.000071
Khiops	369.0	451.0	≥ 0.2	1
MDLP	251.0	529.0	≥ 0.2	1
Modified Chi2	337.0	443.0	≥ 0.2	1
MODL	360.0	460.0	≥ 0.2	1
MVD	604.0	216.0	0.008264	0.00894
PKID	561.0	222.0	0.05086	0.049854
UCPD	289.0	491.0	≥ 0.2	1
USD	596.0	184.0	0.003362	0.003955
Zeta	272.0	508.0	≥ 0.2	1

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

18.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.01225 , 0.06145]	0.90276
Ameva	[-0.0227 , 0.004]	0.90276
Bayesian	[0.0233 , 0.0766]	0.90276
CACC	[-0.01605 , 0.00635]	0.90276
CADD	[0.09115 , 0.1785]	0.90276
CAIM	[-0.0236 , -0.00335]	0.90276
Chi2	[-0.01985 , 0.00275]	0.90276
ChiMerge	[-0.02695 , -0.00045]	0.90276
ClusterAnalysis	[0.0135 , 0.0535]	0.90276
DIBD	[-0.0071 , 0.0243]	0.90276
Distance	[-0.0316 , -0.00015]	0.90276
EqualFrequency	[-0.01385 , 0.00765]	0.90276
EqualWidth	[-0.0015 , 0.01445]	0.90276
Extended Chi2	[-0.01235 , 0.0227]	0.90276
FFD	[0.005 , 0.02685]	0.90276
FUSINTER	[-0.0344 , -0.00835]	0.90276
HDD	[0.00035 , 0.0349]	0.90276
Heter-Disc	[0.0419 , 0.1024]	0.90276
ID3	[0.0187 , 0.07265]	0.90276
IDD	[0.02725 , 0.07315]	0.90276
Khiops	[-0.0122 , 0.005]	0.90276
MDLP	[-0.0312 , -0.0028]	0.90276
Modified Chi2	[-0.01385 , 0.0054]	0.90276
MODL	[-0.01955 , 0.00795]	0.90276
MVD	[0.0102 , 0.07555]	0.90276
PKID	[0.00525 , 0.02975]	0.90276
UCPD	[-0.0214 , 0.00135]	0.90276
USD	[0.0111 , 0.05975]	0.90276
Zeta	[-0.0248 , -0.00015]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0097 , 0.0682]	0.95024
Ameva	[-0.0258 , 0.00655]	0.95024
Bayesian	[0.02075 , 0.08635]	0.95024
CACC	[-0.0184 , 0.00875]	0.95024
CADD	[0.08465 , 0.18715]	0.95024
CAIM	[-0.027 , -0.0018]	0.95024
Chi2	[-0.0224 , 0.0046]	0.95024
ChiMerge	[-0.0297 , 0.0011]	0.95024
ClusterAnalysis	[0.01155 , 0.05975]	0.95024
DIBD	[-0.0098 , 0.0278]	0.95024
Distance	[-0.03455 , 0.00315]	0.95024
EqualFrequency	[-0.01695 , 0.0094]	0.95024
EqualWidth	[-0.00315 , 0.01625]	0.95024
Extended Chi2	[-0.0158 , 0.0328]	0.95024
FFD	[0.00335 , 0.03145]	0.95024
FUSINTER	[-0.037 , -0.00585]	0.95024
HDD	[-0.003 , 0.04015]	0.95024
Heter-Disc	[0.03815 , 0.1132]	0.95024
ID3	[0.01725 , 0.0783]	0.95024
IDD	[0.02435 , 0.0767]	0.95024
Khiops	[-0.0148 , 0.0065]	0.95024
MDLP	[-0.034 , 0.00035]	0.95024
Modified Chi2	[-0.01605 , 0.00705]	0.95024
MODL	[-0.0226 , 0.0097]	0.95024
MVD	[0.0071 , 0.0892]	0.95024
PKID	[0.00335 , 0.03295]	0.95024
UCPD	[-0.02485 , 0.0029]	0.95024
USD	[0.00875 , 0.06695]	0.95024
Zeta	[-0.02665 , 0.00155]	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	327.5	492.5	≥ 0.2	1
Ameva	54.0	766.0	≥ 0.2	1
Bayesian	339.0	481.0	≥ 0.2	1
CACC	85.5	734.5	≥ 0.2	1
CADD	567.0	253.0	≥ 0.2	1
CAIM	68.0	752.0	≥ 0.2	1
Chi2	69.0	711.0	≥ 0.2	1
ChiMerge	72.0	748.0	≥ 0.2	1
ClusterAnalysis	285.5	534.5	≥ 0.2	1
DIBD	151.0	669.0	≥ 0.2	1
Distance	88.0	732.0	≥ 0.2	1
EqualFrequency	109.0	671.0	≥ 0.2	1
EqualWidth	139.0	681.0	≥ 0.2	1
Extended Chi2	171.5	648.5	≥ 0.2	1
FFD	198.5	621.5	≥ 0.2	1
FUSINTER	41.0	739.0	≥ 0.2	1
HDD	239.0	581.0	≥ 0.2	1
HellingerBD	110.0	710.0	≥ 0.2	1
ID3	299.0	521.0	≥ 0.2	1
IDD	357.0	426.0	≥ 0.2	1
Khiops	92.0	728.0	≥ 0.2	1
MDLP	96.0	724.0	≥ 0.2	1
Modified Chi2	68.0	712.0	≥ 0.2	1
MODL	128.0	692.0	≥ 0.2	1
MVD	274.0	513.0	≥ 0.2	1
PKID	171.0	612.0	≥ 0.2	1
UCPD	16.0	804.0	≥ 0.2	1
USD	260.0	520.0	≥ 0.2	1
Zeta	60.0	760.0	≥ 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	[-0.04135 , 0.0057]	0.90276
Ameva	[-0.11045 , -0.05035]	0.90276
Bayesian	[-0.05235 , 0.0099]	0.90276
CACC	[-0.09555 , -0.04065]	0.90276
CADD	[0 , 0.1037]	0.90276
CAIM	[-0.11715 , -0.0495]	0.90276
Chi2	[-0.1122 , -0.0525]	0.90276
ChiMerge	[-0.12035 , -0.0524]	0.90276
ClusterAnalysis	[-0.06645 , 0]	0.90276
DIBD	[-0.0715 , -0.02055]	0.90276
Distance	[-0.11965 , -0.0473]	0.90276
EqualFrequency	[-0.11355 , -0.0458]	0.90276
EqualWidth	[-0.1114 , -0.03715]	0.90276
Extended Chi2	[-0.09625 , -0.0373]	0.90276
FFD	[-0.0912 , -0.01855]	0.90276
FUSINTER	[-0.1386 , -0.05855]	0.90276
HDD	[-0.0781 , -0.0098]	0.90276
HellingerBD	[-0.1024 , -0.0419]	0.90276
ID3	[-0.0621 , 0.0001]	0.90276
IDD	[-0.03295 , 0.015]	0.90276
Khiops	[-0.1051 , -0.0465]	0.90276
MDLP	[-0.1204 , -0.0484]	0.90276
Modified Chi2	[-0.1078 , -0.04435]	0.90276
MODL	[-0.11035 , -0.0339]	0.90276
MVD	[-0.06315 , 0]	0.90276
PKID	[-0.09055 , -0.0259]	0.90276
UCPD	[-0.1088 , -0.05035]	0.90276
USD	[-0.0739 , -0.00425]	0.90276
Zeta	[-0.1205 , -0.0482]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.04805 , 0.01145]	0.95024
Ameva	[-0.11855 , -0.0474]	0.95024
Bayesian	[-0.0618 , 0.0147]	0.95024
CACC	[-0.1019 , -0.0373]	0.95024
CADD	[0 , 0.1084]	0.95024
CAIM	[-0.1298 , -0.0468]	0.95024
Chi2	[-0.12025 , -0.0488]	0.95024
ChiMerge	[-0.13005 , -0.04755]	0.95024
ClusterAnalysis	[-0.074 , 0.0059]	0.95024
DIBD	[-0.08305 , -0.01695]	0.95024
Distance	[-0.1279 , -0.04265]	0.95024
EqualFrequency	[-0.1197 , -0.0399]	0.95024
EqualWidth	[-0.11905 , -0.0326]	0.95024
Extended Chi2	[-0.1086 , -0.0319]	0.95024
FFD	[-0.1008 , -0.0143]	0.95024
FUSINTER	[-0.1475 , -0.0548]	0.95024
HDD	[-0.0952 , -0.0037]	0.95024
HellingerBD	[-0.1132 , -0.03815]	0.95024
ID3	[-0.07345 , 0.00505]	0.95024
IDD	[-0.0418 , 0.0207]	0.95024
Khiops	[-0.11275 , -0.04225]	0.95024
MDLP	[-0.12965 , -0.04245]	0.95024
Modified Chi2	[-0.1153 , -0.04065]	0.95024
MODL	[-0.11975 , -0.031]	0.95024
MVD	[-0.0696 , 0.0036]	0.95024
PKID	[-0.0977 , -0.01855]	0.95024
UCPD	[-0.11675 , -0.0479]	0.95024
USD	[-0.0854 , 0.002]	0.95024
Zeta	[-0.12965 , -0.04505]	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	337.0	443.0	≥ 0.2	1
Ameva	110.0	670.0	≥ 0.2	1
Bayesian	442.5	377.5	≥ 0.2	1
CACC	201.0	579.0	≥ 0.2	1
CADD	628.5	156.5	0.008456	0.009207
CAIM	87.0	733.0	≥ 0.2	1
Chi2	75.5	744.5	≥ 0.2	1
ChiMerge	68.0	752.0	≥ 0.2	1
ClusterAnalysis	403.5	416.5	≥ 0.2	1
DIBD	253.0	567.0	≥ 0.2	1
Distance	161.5	618.5	≥ 0.2	1
EqualFrequency	114.0	669.0	≥ 0.2	1
EqualWidth	186.5	598.5	≥ 0.2	1
Extended Chi2	174.0	606.0	≥ 0.2	1
FFD	183.5	601.5	≥ 0.2	1
FUSINTER	70.0	750.0	≥ 0.2	1
HDD	343.0	477.0	≥ 0.2	1
HellingerBD	119.0	664.0	≥ 0.2	1
Heter-Disc	521.0	299.0	≥ 0.2	1
IDD	365.0	455.0	≥ 0.2	1
Khiops	109.5	710.5	≥ 0.2	1
MDLP	149.0	631.0	≥ 0.2	1
Modified Chi2	100.5	682.5	≥ 0.2	1
MODL	150.0	630.0	≥ 0.2	1
MVD	412.0	368.0	≥ 0.2	0.753531
PKID	180.0	607.0	≥ 0.2	1
UCPD	125.0	695.0	≥ 0.2	1
USD	230.5	554.5	≥ 0.2	1
Zeta	75.5	704.5	≥ 0.2	1

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

20.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0496 , 0.0206]	0.90276
Ameva	[-0.0893 , -0.03095]	0.90276
Bayesian	[-0.00715 , 0.0118]	0.90276
CACC	[-0.07755 , -0.0123]	0.90276
CADD	[0.0351 , 0.12965]	0.90276
CAIM	[-0.09165 , -0.03455]	0.90276
Chi2	[-0.0785 , -0.0249]	0.90276
ChiMerge	[-0.0943 , -0.03735]	0.90276
ClusterAnalysis	[-0.0128 , 0.00875]	0.90276
DIBD	[-0.076 , -0.0073]	0.90276
Distance	[-0.0989 , -0.01925]	0.90276
EqualFrequency	[-0.06735 , -0.0242]	0.90276
EqualWidth	[-0.06345 , -0.01]	0.90276
Extended Chi2	[-0.0508 , -0.0123]	0.90276
FFD	[-0.0452 , -0.00515]	0.90276
FUSINTER	[-0.1032 , -0.034]	0.90276
HDD	[-0.0153 , 0.00145]	0.90276
HellingerBD	[-0.07265 , -0.0187]	0.90276
Heter-Disc	[-0.0001 , 0.0621]	0.90276
IDD	[-0.03205 , 0.019]	0.90276
Khiops	[-0.0725 , -0.0209]	0.90276
MDLP	[-0.09755 , -0.02405]	0.90276
Modified Chi2	[-0.07335 , -0.01625]	0.90276
MODL	[-0.08125 , -0.02235]	0.90276
MVD	[-0.02385 , 0.04095]	0.90276
PKID	[-0.04595 , -0.0109]	0.90276
UCPD	[-0.08925 , -0.0268]	0.90276
USD	[-0.0121 , -0.00165]	0.90276
Zeta	[-0.0882 , -0.0301]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0572 , 0.0299]	0.95024
Ameva	[-0.0948 , -0.025]	0.95024
Bayesian	[-0.0093 , 0.01405]	0.95024
CACC	[-0.08665 , -0.00915]	0.95024
CADD	[0.0274 , 0.14495]	0.95024
CAIM	[-0.099 , -0.0311]	0.95024
Chi2	[-0.08545 , -0.02145]	0.95024
ChiMerge	[-0.10095 , -0.03295]	0.95024
ClusterAnalysis	[-0.01595 , 0.01075]	0.95024
DIBD	[-0.08245 , -0.0018]	0.95024
Distance	[-0.10395 , -0.01615]	0.95024
EqualFrequency	[-0.07405 , -0.0209]	0.95024
EqualWidth	[-0.0746 , -0.00655]	0.95024
Extended Chi2	[-0.056 , -0.00955]	0.95024
FFD	[-0.0553 , -0.0031]	0.95024
FUSINTER	[-0.114 , -0.03035]	0.95024
HDD	[-0.0211 , 0.0021]	0.95024
HellingerBD	[-0.0783 , -0.01725]	0.95024
Heter-Disc	[-0.00505 , 0.07345]	0.95024
IDD	[-0.0361 , 0.0265]	0.95024
Khiops	[-0.07895 , -0.0185]	0.95024
MDLP	[-0.10515 , -0.02035]	0.95024
Modified Chi2	[-0.079 , -0.0139]	0.95024
MODL	[-0.0886 , -0.01945]	0.95024
MVD	[-0.0284 , 0.0472]	0.95024
PKID	[-0.04915 , -0.0075]	0.95024
UCPD	[-0.0997 , -0.02365]	0.95024
USD	[-0.0128 , -0.0007]	0.95024
Zeta	[-0.096 , -0.02805]	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	274.5	545.5	≥ 0.2	1
Ameva	85.0	735.0	≥ 0.2	1
Bayesian	511.0	272.0	≥ 0.2	0.226593
CACC	119.5	700.5	≥ 0.2	1
CADD	711.0	109.0	2.326E-4	0.000409
CAIM	42.0	778.0	≥ 0.2	1
Chi2	65.0	755.0	≥ 0.2	1
ChiMerge	57.0	763.0	≥ 0.2	1
ClusterAnalysis	381.0	399.0	≥ 0.2	1
DIBD	169.5	610.5	≥ 0.2	1
Distance	97.0	683.0	≥ 0.2	1
EqualFrequency	155.0	665.0	≥ 0.2	1
EqualWidth	187.0	633.0	≥ 0.2	1
Extended Chi2	190.5	629.5	≥ 0.2	1
FFD	236.0	584.0	≥ 0.2	1
FUSINTER	38.0	782.0	≥ 0.2	1
HDD	329.0	491.0	≥ 0.2	1
HellingerBD	115.0	705.0	≥ 0.2	1
Heter-Disc	426.0	357.0	≥ 0.2	1
ID3	455.0	365.0	≥ 0.2	0.540816
Khiops	110.0	710.0	≥ 0.2	1
MDLP	88.0	732.0	≥ 0.2	1
Modified Chi2	133.5	686.5	≥ 0.2	1
MODL	113.0	707.0	≥ 0.2	1
MVD	348.5	471.5	≥ 0.2	1
PKID	222.5	597.5	≥ 0.2	1
UCPD	73.0	747.0	≥ 0.2	1
USD	416.5	403.5	≥ 0.2	0.924913
Zeta	71.5	748.5	≥ 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	[-0.02485 , -0.0006]	0.90276
Ameva	[-0.0819 , -0.031]	0.90276
Bayesian	[0 , 0.02965]	0.90276
CACC	[-0.0789 , -0.0311]	0.90276
CADD	[0.03335 , 0.0897]	0.90276
CAIM	[-0.0825 , -0.0315]	0.90276
Chi2	[-0.08355 , -0.0329]	0.90276
ChiMerge	[-0.0832 , -0.03575]	0.90276
ClusterAnalysis	[-0.03025 , 0.01785]	0.90276
DIBD	[-0.05935 , -0.0188]	0.90276
Distance	[-0.09295 , -0.03535]	0.90276
EqualFrequency	[-0.07545 , -0.0213]	0.90276
EqualWidth	[-0.06775 , -0.0161]	0.90276
Extended Chi2	[-0.0664 , -0.0158]	0.90276
FFD	[-0.05635 , -0.00645]	0.90276
FUSINTER	[-0.09865 , -0.0406]	0.90276
HDD	[-0.05435 , 0.0073]	0.90276
HellingerBD	[-0.07315 , -0.02725]	0.90276
Heter-Disc	[-0.015 , 0.03295]	0.90276
ID3	[-0.019 , 0.03205]	0.90276
Khiops	[-0.07945 , -0.0294]	0.90276
MDLP	[-0.0923 , -0.03425]	0.90276
Modified Chi2	[-0.0753 , -0.02565]	0.90276
MODL	[-0.07355 , -0.02535]	0.90276
MVD	[-0.0256 , 0.00945]	0.90276
PKID	[-0.05545 , -0.0066]	0.90276
UCPD	[-0.0903 , -0.03395]	0.90276
USD	[-0.0252 , 0.0226]	0.90276
Zeta	[-0.08125 , -0.0343]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0273 , 0.0005]	0.95024
Ameva	[-0.08645 , -0.0272]	0.95024
Bayesian	[-0.0017 , 0.03195]	0.95024
CACC	[-0.08345 , -0.02675]	0.95024
CADD	[0.0277 , 0.1004]	0.95024
CAIM	[-0.0871 , -0.0282]	0.95024
Chi2	[-0.08795 , -0.02945]	0.95024
ChiMerge	[-0.0892 , -0.0327]	0.95024
ClusterAnalysis	[-0.0371 , 0.0203]	0.95024
DIBD	[-0.06345 , -0.0147]	0.95024
Distance	[-0.09935 , -0.02985]	0.95024
EqualFrequency	[-0.08045 , -0.0167]	0.95024
EqualWidth	[-0.07155 , -0.0133]	0.95024
Extended Chi2	[-0.0717 , -0.01285]	0.95024
FFD	[-0.06145 , -0.0032]	0.95024
FUSINTER	[-0.10635 , -0.03785]	0.95024
HDD	[-0.05875 , 0.0108]	0.95024
HellingerBD	[-0.0767 , -0.02435]	0.95024
Heter-Disc	[-0.0207 , 0.0418]	0.95024
ID3	[-0.0265 , 0.0361]	0.95024
Khiops	[-0.08545 , -0.0257]	0.95024
MDLP	[-0.1009 , -0.02985]	0.95024
Modified Chi2	[-0.0822 , -0.02045]	0.95024
MODL	[-0.0793 , -0.0199]	0.95024
MVD	[-0.0321 , 0.02095]	0.95024
PKID	[-0.06045 , -0.00435]	0.95024
UCPD	[-0.0949 , -0.03]	0.95024
USD	[-0.03055 , 0.027]	0.95024
Zeta	[-0.08735 , -0.02965]	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	642.0	138.0	2.496E-4	0.000426
Ameva	332.0	488.0	≥ 0.2	1
Bayesian	651.0	129.0	1.3768E-4	0.000257
CACC	355.0	425.0	≥ 0.2	1
CADD	809.0	11.0	1.0004E-10	0
CAIM	271.5	548.5	≥ 0.2	1
Chi2	318.0	462.0	≥ 0.2	1
ChiMerge	264.0	556.0	≥ 0.2	1
ClusterAnalysis	662.0	118.0	6.36E-5	0.000143
DIBD	470.0	310.0	≥ 0.2	0.261277
Distance	263.0	517.0	≥ 0.2	1
EqualFrequency	413.5	406.5	≥ 0.2	1
EqualWidth	494.0	326.0	≥ 0.2	0.513249
Extended Chi2	422.0	398.0	≥ 0.2	0.866571
FFD	641.0	142.0	0.0011258	0.001534
FUSINTER	203.0	577.0	≥ 0.2	1
HDD	588.5	231.5	0.04368	0.043066
HellingerBD	451.0	369.0	≥ 0.2	0.976692
Heter-Disc	728.0	92.0	4.154E-6	0.000019
ID3	710.5	109.5	6.537E-5	0.000149
IDD	710.0	110.0	1.806E-5	0.000054
MDLP	253.5	566.5	≥ 0.2	1
Modified Chi2	363.5	456.5	≥ 0.2	1
MODL	373.0	447.0	≥ 0.2	1
MVD	535.0	245.0	0.04284	0.042311
PKID	671.0	149.0	0.00312	0.003681
UCPD	312.5	507.5	≥ 0.2	1
USD	638.5	181.5	0.005314	0.005993
Zeta	312.0	508.0	≥ 0.2	1

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

22.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.01855 , 0.0652]	0.90276
Ameva	[-0.0222 , 0.00395]	0.90276
Bayesian	[0.02235 , 0.0823]	0.90276
CACC	[-0.01385 , 0.0073]	0.90276
CADD	[0.09965 , 0.18395]	0.90276
CAIM	[-0.01845 , -0.00075]	0.90276
Chi2	[-0.01415 , 0.0034]	0.90276
ChiMerge	[-0.0226 , -0.00205]	0.90276
ClusterAnalysis	[0.0212 , 0.0535]	0.90276
DIBD	[-0.00495 , 0.03335]	0.90276
Distance	[-0.02415 , -0.00045]	0.90276
EqualFrequency	[-0.00785 , 0.0113]	0.90276
EqualWidth	[-0.0036 , 0.0196]	0.90276
Extended Chi2	[-0.0116 , 0.01775]	0.90276
FFD	[0.0087 , 0.03055]	0.90276
FUSINTER	[-0.03035 , -0.0047]	0.90276
HDD	[0.00535 , 0.04035]	0.90276
HellingerBD	[-0.005 , 0.0122]	0.90276
Heter-Disc	[0.0465 , 0.1051]	0.90276
ID3	[0.0209 , 0.0725]	0.90276
IDD	[0.0294 , 0.07945]	0.90276
MDLP	[-0.024 , -0.00305]	0.90276
Modified Chi2	[-0.0121 , 0.0066]	0.90276
MODL	[-0.01415 , 0.00735]	0.90276
MVD	[0.0033 , 0.08075]	0.90276
PKID	[0.0101 , 0.0301]	0.90276
UCPD	[-0.0204 , 0.0016]	0.90276
USD	[0.01315 , 0.0541]	0.90276
Zeta	[-0.02125 , 0.00235]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0158 , 0.07625]	0.95024
Ameva	[-0.0255 , 0.00655]	0.95024
Bayesian	[0.0197 , 0.08785]	0.95024
CACC	[-0.0159 , 0.0093]	0.95024
CADD	[0.09105 , 0.1952]	0.95024
CAIM	[-0.0203 , 0.0005]	0.95024
Chi2	[-0.0161 , 0.00515]	0.95024
ChiMerge	[-0.02535 , -0.00025]	0.95024
ClusterAnalysis	[0.01975 , 0.0592]	0.95024
DIBD	[-0.0074 , 0.0396]	0.95024
Distance	[-0.02645 , 0.0013]	0.95024
EqualFrequency	[-0.0102 , 0.0137]	0.95024
EqualWidth	[-0.00525 , 0.02215]	0.95024
Extended Chi2	[-0.01315 , 0.02385]	0.95024
FFD	[0.00755 , 0.03335]	0.95024
FUSINTER	[-0.0327 , -0.0032]	0.95024
HDD	[0.0028 , 0.04405]	0.95024
HellingerBD	[-0.0065 , 0.0148]	0.95024
Heter-Disc	[0.04225 , 0.11275]	0.95024
ID3	[0.0185 , 0.07895]	0.95024
IDD	[0.0257 , 0.08545]	0.95024
MDLP	[-0.0265 , -0.00065]	0.95024
Modified Chi2	[-0.01435 , 0.0087]	0.95024
MODL	[-0.0159 , 0.01025]	0.95024
MVD	[0.0004 , 0.09355]	0.95024
PKID	[0.0081 , 0.03275]	0.95024
UCPD	[-0.02275 , 0.00355]	0.95024
USD	[0.00985 , 0.05955]	0.95024
Zeta	[-0.0239 , 0.0044]	0.95024

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

23 Detailed results for MDLP

23.1 Results

VS	R^+	R^-	Exact P-value	Asymptotic P-value
1R	685.5	134.5	1.0448E-4	0.000197
Ameva	412.0	408.0	≥ 0.2	1
Bayesian	698.0	122.0	4.404E-5	0.000105
CACC	529.5	290.5	≥ 0.2	0.242181
CADD	786.0	34.0	6.776E-9	0
CAIM	416.0	404.0	≥ 0.2	1
Chi2	479.5	340.5	≥ 0.2	0.34595
ChiMerge	377.5	405.5	≥ 0.2	1
ClusterAnalysis	631.5	148.5	4.808E-4	0.000717
DIBD	602.0	218.0	0.008996	0.009669
Distance	416.5	368.5	≥ 0.2	1
EqualFrequency	499.5	320.5	≥ 0.2	0.463946
EqualWidth	548.0	232.0	0.0268	0.026976
Extended Chi2	462.5	317.5	≥ 0.2	0.307494
FFD	609.0	171.0	0.0017248	0.00219
FUSINTER	267.0	513.0	≥ 0.2	1
HDD	575.0	208.0	0.0298	0.029824
HellingerBD	529.0	251.0	0.05256	0.051568
Heter-Disc	724.0	96.0	5.846E-6	0.000024
ID3	631.0	149.0	4.954E-4	0.000751
IDD	732.0	88.0	2.924E-6	0.000015
Khiops	566.5	253.5	0.09132	0.088378
Modified Chi2	512.0	308.0	≥ 0.2	0.6887
MODL	543.0	277.0	0.1795	0.172036
MVD	598.0	222.0	0.010628	0.011287
PKID	621.0	159.0	8.906E-4	0.001211
UCPD	417.0	363.0	≥ 0.2	0.701155
USD	647.5	172.5	0.0033829999999999997	0.003993
Zeta	406.0	377.0	≥ 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	[0.02625 , 0.08295]	0.90276
Ameva	[-0.01165 , 0.0097]	0.90276
Bayesian	[0.0329 , 0.0945]	0.90276
CACC	[-0.00015 , 0.01265]	0.90276
CADD	[0.1044 , 0.1968]	0.90276
CAIM	[-0.00675 , 0.00855]	0.90276
Chi2	[-0.00325 , 0.01535]	0.90276
ChiMerge	[-0.00845 , 0.00825]	0.90276
ClusterAnalysis	[0.02305 , 0.0729]	0.90276
DIBD	[0.0079 , 0.04365]	0.90276
Distance	[-0.0032 , 0.0048]	0.90276
EqualFrequency	[-0.00365 , 0.02565]	0.90276
EqualWidth	[0.0044 , 0.03]	0.90276
Extended Chi2	[-0.00475 , 0.0319]	0.90276
FFD	[0.0126 , 0.04145]	0.90276
FUSINTER	[-0.01355 , -0.00035]	0.90276
HDD	[0.0066 , 0.05555]	0.90276
HellingerBD	[0.0028 , 0.0312]	0.90276
Heter-Disc	[0.0484 , 0.1204]	0.90276
ID3	[0.02405 , 0.09755]	0.90276
IDD	[0.03425 , 0.0923]	0.90276
Khiops	[0.00305 , 0.024]	0.90276
Modified Chi2	[-0.00145 , 0.0195]	0.90276
MODL	[0.0007 , 0.01655]	0.90276
MVD	[0.0091 , 0.09045]	0.90276
PKID	[0.01185 , 0.04425]	0.90276
UCPD	[-0.0079 , 0.01195]	0.90276
USD	[0.01835 , 0.07645]	0.90276
Zeta	[-0.0082 , 0.00725]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0221 , 0.09135]	0.95024
Ameva	[-0.01455 , 0.01115]	0.95024
Bayesian	[0.02785 , 0.1031]	0.95024
CACC	[-0.0023 , 0.0135]	0.95024
CADD	[0.09605 , 0.20875]	0.95024
CAIM	[-0.0083 , 0.0105]	0.95024
Chi2	[-0.00495 , 0.0176]	0.95024
ChiMerge	[-0.01055 , 0.01005]	0.95024
ClusterAnalysis	[0.01955 , 0.08065]	0.95024
DIBD	[0.0057 , 0.0475]	0.95024
Distance	[-0.00385 , 0.00575]	0.95024
EqualFrequency	[-0.0061 , 0.02815]	0.95024
EqualWidth	[0.00185 , 0.03285]	0.95024
Extended Chi2	[-0.0066 , 0.03865]	0.95024
FFD	[0.0106 , 0.04665]	0.95024
FUSINTER	[-0.0154 , 0.0007]	0.95024
HDD	[0.00445 , 0.0659]	0.95024
HellingerBD	[-0.00035 , 0.034]	0.95024
Heter-Disc	[0.04245 , 0.12965]	0.95024
ID3	[0.02035 , 0.10515]	0.95024
IDD	[0.02985 , 0.1009]	0.95024
Khiops	[0.00065 , 0.0265]	0.95024
Modified Chi2	[-0.0029 , 0.0221]	0.95024
MODL	[-0.0011 , 0.01845]	0.95024
MVD	[0.00585 , 0.09625]	0.95024
PKID	[0.01035 , 0.0488]	0.95024
UCPD	[-0.00965 , 0.01335]	0.95024
USD	[0.01515 , 0.08485]	0.95024
Zeta	[-0.0102 , 0.0097]	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	621.5	198.5	0.0037790000000000002	0.004312
Ameva	306.0	514.0	≥ 0.2	1
Bayesian	749.5	70.5	5.56E-7	0.000005
CACC	360.0	420.0	≥ 0.2	1
CADD	757.0	23.0	2.328E-9	0
CAIM	264.0	516.0	≥ 0.2	1
Chi2	255.5	529.5	≥ 0.2	1
ChiMerge	236.0	544.0	≥ 0.2	1
ClusterAnalysis	726.5	93.5	1.8183E-5	0.000057
DIBD	518.5	301.5	0.14799	0.142222
Distance	306.0	477.0	≥ 0.2	1
EqualFrequency	403.0	380.0	≥ 0.2	1
EqualWidth	486.0	294.0	0.18474	0.177334
Extended Chi2	353.5	466.5	≥ 0.2	1
FFD	625.0	195.0	0.010006	0.010277
FUSINTER	206.0	574.0	≥ 0.2	1
HDD	535.0	248.0	0.12112	0.116654
HellingerBD	443.0	337.0	≥ 0.2	0.454522
Heter-Disc	712.0	68.0	8.544E-7	0.000007
ID3	682.5	100.5	6.286E-5	0.00014
IDD	686.5	133.5	3.526E-4	0.000573
Khiops	456.5	363.5	≥ 0.2	0.913387
MDLP	308.0	512.0	≥ 0.2	1
MODL	379.0	401.0	≥ 0.2	1
MVD	566.0	214.0	0.01315	0.013776
PKID	587.0	196.0	0.018098	0.0186
UCPD	311.0	509.0	≥ 0.2	1
USD	637.0	146.0	0.0014302	0.001848
Zeta	233.0	550.0	≥ 0.2	1

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

24.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0134 , 0.0741]	0.90276
Ameva	[-0.0238 , 0.0017]	0.90276
Bayesian	[0.0236 , 0.0779]	0.90276
CACC	[-0.0159 , 0.0074]	0.90276
CADD	[0.09305 , 0.19185]	0.90276
CAIM	[-0.0197 , -0.0004]	0.90276
Chi2	[-0.015 , -0.0005]	0.90276
ChiMerge	[-0.0233 , -0.0023]	0.90276
ClusterAnalysis	[0.0191 , 0.04965]	0.90276
DIBD	[-0.0024 , 0.0329]	0.90276
Distance	[-0.0232 , 0.0029]	0.90276
EqualFrequency	[-0.00945 , 0.01225]	0.90276
EqualWidth	[-0.00175 , 0.01605]	0.90276
Extended Chi2	[-0.01335 , 0.01095]	0.90276
FFD	[0.00655 , 0.02775]	0.90276
FUSINTER	[-0.0246 , -0.00475]	0.90276
HDD	[0.00235 , 0.03295]	0.90276
HellingerBD	[-0.0054 , 0.01385]	0.90276
Heter-Disc	[0.04435 , 0.1078]	0.90276
ID3	[0.01625 , 0.07335]	0.90276
IDD	[0.02565 , 0.0753]	0.90276
Khiops	[-0.0066 , 0.0121]	0.90276
MDLP	[-0.0195 , 0.00145]	0.90276
MODL	[-0.01075 , 0.0093]	0.90276
MVD	[0.0102 , 0.06745]	0.90276
PKID	[0.0068 , 0.02855]	0.90276
UCPD	[-0.01935 , 0.0016]	0.90276
USD	[0.00955 , 0.0587]	0.90276
Zeta	[-0.01705 , -0.0022]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0098 , 0.0819]	0.95024
Ameva	[-0.0265 , 0.0039]	0.95024
Bayesian	[0.02165 , 0.0842]	0.95024
CACC	[-0.01945 , 0.01005]	0.95024
CADD	[0.0864 , 0.203]	0.95024
CAIM	[-0.02245 , 0.00045]	0.95024
Chi2	[-0.0161 , 0]	0.95024
ChiMerge	[-0.02535 , -0.0011]	0.95024
ClusterAnalysis	[0.01745 , 0.05415]	0.95024
DIBD	[-0.0053 , 0.036]	0.95024
Distance	[-0.02545 , 0.0056]	0.95024
EqualFrequency	[-0.01125 , 0.01415]	0.95024
EqualWidth	[-0.0029 , 0.01935]	0.95024
Extended Chi2	[-0.0149 , 0.0188]	0.95024
FFD	[0.0043 , 0.0296]	0.95024
FUSINTER	[-0.0267 , -0.00315]	0.95024
HDD	[0 , 0.0377]	0.95024
HellingerBD	[-0.00705 , 0.01605]	0.95024
Heter-Disc	[0.04065 , 0.1153]	0.95024
ID3	[0.0139 , 0.079]	0.95024
IDD	[0.02045 , 0.0822]	0.95024
Khiops	[-0.0087 , 0.01435]	0.95024
MDLP	[-0.0221 , 0.0029]	0.95024
MODL	[-0.0119 , 0.01165]	0.95024
MVD	[0.0069 , 0.07665]	0.95024
PKID	[0.0047 , 0.03075]	0.95024
UCPD	[-0.0209 , 0.0044]	0.95024
USD	[0.0075 , 0.06495]	0.95024
Zeta	[-0.0194 , -0.0009]	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	569.0	211.0	0.01159	0.012248
Ameva	322.0	498.0	≥ 0.2	1
Bayesian	703.5	116.5	2.953E-5	0.000075
CACC	362.5	457.5	≥ 0.2	1
CADD	800.0	20.0	6.748E-10	0
CAIM	330.0	490.0	≥ 0.2	1
Chi2	342.0	438.0	≥ 0.2	1
ChiMerge	277.5	542.5	≥ 0.2	1
ClusterAnalysis	658.0	162.0	5.698E-4	0.000837
DIBD	507.0	313.0	0.19686	0.190018
Distance	267.0	513.0	≥ 0.2	1
EqualFrequency	437.0	383.0	≥ 0.2	0.711654
EqualWidth	492.0	328.0	≥ 0.2	0.26747
Extended Chi2	429.0	391.0	≥ 0.2	0.7929
FFD	546.0	234.0	0.02888	0.028965
FUSINTER	208.0	575.0	≥ 0.2	1
HDD	580.0	240.0	0.02154	0.021921
HellingerBD	460.0	360.0	≥ 0.2	0.497274
Heter-Disc	692.0	128.0	6.718E-5	0.000146
ID3	630.0	150.0	5.26E-4	0.00079
IDD	707.0	113.0	2.27E-5	0.000064
Khiops	447.0	373.0	≥ 0.2	0.613631
MDLP	277.0	543.0	≥ 0.2	1
Modified Chi2	401.0	379.0	≥ 0.2	0.87228
MVD	594.0	226.0	0.012512	0.012836
PKID	561.0	259.0	0.0422	0.041715
UCPD	279.0	541.0	≥ 0.2	1
USD	642.5	177.5	0.004361	0.004934
Zeta	325.0	495.0	≥ 0.2	1

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

25.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.00875 , 0.05895]	0.90276
Ameva	[-0.0224 , 0.00275]	0.90276
Bayesian	[0.02845 , 0.07965]	0.90276
CACC	[-0.0147 , 0.005]	0.90276
CADD	[0.0862 , 0.17905]	0.90276
CAIM	[-0.0123 , 0.0026]	0.90276
Chi2	[-0.01325 , 0.00585]	0.90276
ChiMerge	[-0.01815 , -0.0005]	0.90276
ClusterAnalysis	[0.0206 , 0.06175]	0.90276
DIBD	[-0.00395 , 0.0293]	0.90276
Distance	[-0.0196 , -0.0005]	0.90276
EqualFrequency	[-0.0114 , 0.01685]	0.90276
EqualWidth	[-0.00345 , 0.02175]	0.90276
Extended Chi2	[-0.01225 , 0.0183]	0.90276
FFD	[0.0035 , 0.0319]	0.90276
FUSINTER	[-0.02365 , -0.00395]	0.90276
HDD	[0.00425 , 0.04185]	0.90276
HellingerBD	[-0.00795 , 0.01955]	0.90276
Heter-Disc	[0.0339 , 0.11035]	0.90276
ID3	[0.02235 , 0.08125]	0.90276
IDD	[0.02535 , 0.07355]	0.90276
Khiops	[-0.00735 , 0.01415]	0.90276
MDLP	[-0.01655 , -0.0007]	0.90276
Modified Chi2	[-0.0093 , 0.01075]	0.90276
MVD	[0.01075 , 0.0769]	0.90276
PKID	[0.00355 , 0.03275]	0.90276
UCPD	[-0.0183 , -0.0005]	0.90276
USD	[0.0121 , 0.0631]	0.90276
Zeta	[-0.0154 , 0.00265]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00635 , 0.06885]	0.95024
Ameva	[-0.0242 , 0.0049]	0.95024
Bayesian	[0.02505 , 0.087]	0.95024
CACC	[-0.01575 , 0.00715]	0.95024
CADD	[0.0801 , 0.1855]	0.95024
CAIM	[-0.01425 , 0.00365]	0.95024
Chi2	[-0.01585 , 0.00785]	0.95024
ChiMerge	[-0.02025 , 0.0006]	0.95024
ClusterAnalysis	[0.0167 , 0.06695]	0.95024
DIBD	[-0.0063 , 0.033]	0.95024
Distance	[-0.02125 , 0.0014]	0.95024
EqualFrequency	[-0.01425 , 0.0202]	0.95024
EqualWidth	[-0.00605 , 0.02425]	0.95024
Extended Chi2	[-0.0139 , 0.02165]	0.95024
FFD	[0.00145 , 0.0348]	0.95024
FUSINTER	[-0.02705 , -0.0026]	0.95024
HDD	[0.00225 , 0.047]	0.95024
HellingerBD	[-0.0097 , 0.0226]	0.95024
Heter-Disc	[0.031 , 0.11975]	0.95024
ID3	[0.01945 , 0.0886]	0.95024
IDD	[0.0199 , 0.0793]	0.95024
Khiops	[-0.01025 , 0.0159]	0.95024
MDLP	[-0.01845 , 0.0011]	0.95024
Modified Chi2	[-0.01165 , 0.0119]	0.95024
MVD	[0.00645 , 0.08505]	0.95024
PKID	[0.00045 , 0.0356]	0.95024
UCPD	[-0.0203 , 0.00075]	0.95024
USD	[0.00935 , 0.0694]	0.95024
Zeta	[-0.0176 , 0.00465]	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	395.0	388.0	≥ 0.2	1
Ameva	131.0	689.0	≥ 0.2	1
Bayesian	483.5	336.5	≥ 0.2	0.616844
CACC	246.5	573.5	≥ 0.2	1
CADD	684.0	136.0	0.0014462	0.001917
CAIM	121.0	659.0	≥ 0.2	1
Chi2	176.0	604.0	≥ 0.2	1
ChiMerge	92.0	688.0	≥ 0.2	1
ClusterAnalysis	392.0	391.0	≥ 0.2	1
DIBD	269.0	511.0	≥ 0.2	1
Distance	223.0	557.0	≥ 0.2	1
EqualFrequency	245.5	574.5	≥ 0.2	1
EqualWidth	277.0	543.0	≥ 0.2	1
Extended Chi2	240.0	540.0	≥ 0.2	1
FFD	310.0	470.0	≥ 0.2	1
FUSINTER	143.5	676.5	≥ 0.2	1
HDD	307.5	512.5	≥ 0.2	1
HellingerBD	216.0	604.0	≥ 0.2	1
Heter-Disc	513.0	274.0	≥ 0.2	0.900464
ID3	368.0	412.0	≥ 0.2	1
IDD	471.5	348.5	≥ 0.2	0.744196
Khiops	245.0	535.0	≥ 0.2	1
MDLP	222.0	598.0	≥ 0.2	1
Modified Chi2	214.0	566.0	≥ 0.2	1
MODL	226.0	594.0	≥ 0.2	1
PKID	315.5	504.5	≥ 0.2	1
UCPD	226.0	594.0	≥ 0.2	1
USD	336.5	443.5	≥ 0.2	1
Zeta	130.0	690.0	≥ 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	[-0.025 , 0.0236]	0.90276
Ameva	[-0.0757 , -0.0183]	0.90276
Bayesian	[-0.0071 , 0.0266]	0.90276
CACC	[-0.0574 , -0.00545]	0.90276
CADD	[0.0409 , 0.1003]	0.90276
CAIM	[-0.08255 , -0.02075]	0.90276
Chi2	[-0.0729 , -0.013]	0.90276
ChiMerge	[-0.08425 , -0.02275]	0.90276
ClusterAnalysis	[-0.0368 , 0.01725]	0.90276
DIBD	[-0.04915 , 0]	0.90276
Distance	[-0.09055 , -0.00895]	0.90276
EqualFrequency	[-0.0813 , -0.0074]	0.90276
EqualWidth	[-0.07495 , -0.00195]	0.90276
Extended Chi2	[-0.06535 , -0.0052]	0.90276
FFD	[-0.06305 , 0.00635]	0.90276
FUSINTER	[-0.0952 , -0.02155]	0.90276
HDD	[-0.0535 , 0.00365]	0.90276
HellingerBD	[-0.07555 , -0.0102]	0.90276
Heter-Disc	[0 , 0.06315]	0.90276
ID3	[-0.04095 , 0.02385]	0.90276
IDD	[-0.00945 , 0.0256]	0.90276
Khiops	[-0.08075 , -0.0033]	0.90276
MDLP	[-0.09045 , -0.0091]	0.90276
Modified Chi2	[-0.06745 , -0.0102]	0.90276
MODL	[-0.0769 , -0.01075]	0.90276
PKID	[-0.0657 , 0.00505]	0.90276
UCPD	[-0.0837 , -0.01275]	0.90276
USD	[-0.0452 , 0.01345]	0.90276
Zeta	[-0.0824 , -0.0228]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0318 , 0.0266]	0.95024
Ameva	[-0.08715 , -0.01625]	0.95024
Bayesian	[-0.01185 , 0.0305]	0.95024
CACC	[-0.0635 , -0.00225]	0.95024
CADD	[0.03735 , 0.10665]	0.95024
CAIM	[-0.09535 , -0.0159]	0.95024
Chi2	[-0.08715 , -0.0102]	0.95024
ChiMerge	[-0.0971 , -0.02015]	0.95024
ClusterAnalysis	[-0.04105 , 0.0208]	0.95024
DIBD	[-0.0596 , 0.0038]	0.95024
Distance	[-0.09925 , -0.00365]	0.95024
EqualFrequency	[-0.0895 , -0.0033]	0.95024
EqualWidth	[-0.084 , 0.0027]	0.95024
Extended Chi2	[-0.07585 , -0.00135]	0.95024
FFD	[-0.0719 , 0.0099]	0.95024
FUSINTER	[-0.10325 , -0.0173]	0.95024
HDD	[-0.05825 , 0.00755]	0.95024
HellingerBD	[-0.0892 , -0.0071]	0.95024
Heter-Disc	[-0.0036 , 0.0696]	0.95024
ID3	[-0.0472 , 0.0284]	0.95024
IDD	[-0.02095 , 0.0321]	0.95024
Khiops	[-0.09355 , -0.0004]	0.95024
MDLP	[-0.09625 , -0.00585]	0.95024
Modified Chi2	[-0.07665 , -0.0069]	0.95024
MODL	[-0.08505 , -0.00645]	0.95024
PKID	[-0.07185 , 0.0089]	0.95024
UCPD	[-0.0914 , -0.0086]	0.95024
USD	[-0.0503 , 0.019]	0.95024
Zeta	[-0.09525 , -0.01645]	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	462.0	318.0	≥ 0.2	0.310819
Ameva	172.0	648.0	≥ 0.2	1
Bayesian	598.0	182.0	0.003042	0.003619
CACC	242.0	538.0	≥ 0.2	1
CADD	783.0	37.0	1.6696E-7	0.000003
CAIM	111.5	708.5	≥ 0.2	1
Chi2	130.0	650.0	≥ 0.2	1
ChiMerge	110.0	710.0	≥ 0.2	1
ClusterAnalysis	608.5	211.5	0.020303	0.020716
DIBD	363.0	457.0	≥ 0.2	1
Distance	200.0	580.0	≥ 0.2	1
EqualFrequency	168.5	614.5	≥ 0.2	1
EqualWidth	301.0	519.0	≥ 0.2	1
Extended Chi2	301.5	518.5	≥ 0.2	1
FFD	412.0	373.0	≥ 0.2	1
FUSINTER	88.0	732.0	≥ 0.2	1
HDD	444.5	340.5	≥ 0.2	1
HellingerBD	222.0	561.0	≥ 0.2	1
Heter-Disc	612.0	171.0	0.005618	0.006322
ID3	607.0	180.0	0.07372	0.070499
IDD	597.5	222.5	0.03131	0.031273
Khiops	149.0	671.0	≥ 0.2	1
MDLP	159.0	621.0	≥ 0.2	1
Modified Chi2	196.0	587.0	≥ 0.2	1
MODL	259.0	561.0	≥ 0.2	1
MVD	504.5	315.5	≥ 0.2	0.420048
UCPD	154.0	666.0	≥ 0.2	1
USD	519.0	261.0	0.0727	0.070245
Zeta	129.5	690.5	≥ 0.2	1

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

27.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.00715 , 0.0439]	0.90276
Ameva	[-0.0501 , -0.0112]	0.90276
Bayesian	[0.01345 , 0.0609]	0.90276
CACC	[-0.0319 , -0.0033]	0.90276
CADD	[0.0755 , 0.1567]	0.90276
CAIM	[-0.05055 , -0.0167]	0.90276
Chi2	[-0.037 , -0.0121]	0.90276
ChiMerge	[-0.05415 , -0.01875]	0.90276
ClusterAnalysis	[0.0069 , 0.03395]	0.90276
DIBD	[-0.0291 , 0.01335]	0.90276
Distance	[-0.04795 , -0.0093]	0.90276
EqualFrequency	[-0.0264 , -0.0084]	0.90276
EqualWidth	[-0.0204 , 0.00125]	0.90276
Extended Chi2	[-0.0242 , 0.0024]	0.90276
FFD	[-0.00545 , 0.00555]	0.90276
FUSINTER	[-0.05545 , -0.0203]	0.90276
HDD	[-0.00395 , 0.0218]	0.90276
HellingerBD	[-0.02975 , -0.00525]	0.90276
Heter-Disc	[0.0259 , 0.09055]	0.90276
ID3	[0.0109 , 0.04595]	0.90276
IDD	[0.0066 , 0.05545]	0.90276
Khiops	[-0.0301 , -0.0101]	0.90276
MDLP	[-0.04425 , -0.01185]	0.90276
Modified Chi2	[-0.02855 , -0.0068]	0.90276
MODL	[-0.03275 , -0.00355]	0.90276
MVD	[-0.00505 , 0.0657]	0.90276
UCPD	[-0.04375 , -0.0133]	0.90276
USD	[0.00085 , 0.03315]	0.90276
Zeta	[-0.0507 , -0.01325]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0095 , 0.05065]	0.95024
Ameva	[-0.05365 , -0.00875]	0.95024
Bayesian	[0.0099 , 0.06605]	0.95024
CACC	[-0.0377 , -0.00095]	0.95024
CADD	[0.06815 , 0.165]	0.95024
CAIM	[-0.0549 , -0.0148]	0.95024
Chi2	[-0.04085 , -0.0102]	0.95024
ChiMerge	[-0.0567 , -0.01595]	0.95024
ClusterAnalysis	[0.0051 , 0.03665]	0.95024
DIBD	[-0.03305 , 0.01735]	0.95024
Distance	[-0.0524 , -0.00645]	0.95024
EqualFrequency	[-0.028 , -0.0059]	0.95024
EqualWidth	[-0.024 , 0.0024]	0.95024
Extended Chi2	[-0.02705 , 0.0059]	0.95024
FFD	[-0.00665 , 0.0062]	0.95024
FUSINTER	[-0.05975 , -0.0182]	0.95024
HDD	[-0.0061 , 0.02785]	0.95024
HellingerBD	[-0.03295 , -0.00335]	0.95024
Heter-Disc	[0.01855 , 0.0977]	0.95024
ID3	[0.0075 , 0.04915]	0.95024
IDD	[0.00435 , 0.06045]	0.95024
Khiops	[-0.03275 , -0.0081]	0.95024
MDLP	[-0.0488 , -0.01035]	0.95024
Modified Chi2	[-0.03075 , -0.0047]	0.95024
MODL	[-0.0356 , -0.00045]	0.95024
MVD	[-0.0089 , 0.07185]	0.95024
UCPD	[-0.0496 , -0.011]	0.95024
USD	[-0.00105 , 0.03735]	0.95024
Zeta	[-0.056 , -0.01085]	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	708.0	112.0	2.104E-5	0.00006
Ameva	381.5	438.5	≥ 0.2	1
Bayesian	694.0	86.0	4.818E-6	0.000021
CACC	440.0	340.0	≥ 0.2	0.480214
CADD	812.0	8.0	4.548E-11	0
CAIM	388.0	392.0	≥ 0.2	1
Chi2	425.0	395.0	≥ 0.2	0.83469
ChiMerge	337.0	443.0	≥ 0.2	1
ClusterAnalysis	675.0	105.0	2.38E-5	0.000068
DIBD	645.5	174.5	0.0011369	0.001486
Distance	387.5	432.5	≥ 0.2	1
EqualFrequency	476.0	304.0	≥ 0.2	0.227391
EqualWidth	568.0	252.0	0.03322	0.033135
Extended Chi2	502.0	318.0	≥ 0.2	0.21375
FFD	662.5	157.5	4.395E-4	0.000658
FUSINTER	309.0	511.0	≥ 0.2	1
HDD	622.5	197.5	0.003605	0.004008
HellingerBD	491.0	289.0	0.16248	0.156649
Heter-Disc	804.0	16.0	3.074E-10	0
ID3	695.0	125.0	5.45E-5	0.000124
IDD	747.0	73.0	7.138E-7	0.000006
Khiops	507.5	312.5	0.19453	0.186272
MDLP	363.0	417.0	≥ 0.2	1
Modified Chi2	509.0	311.0	0.18762	0.181089
MODL	541.0	279.0	0.07932	0.077139
MVD	594.0	226.0	0.012512	0.013141
PKID	666.0	154.0	3.572E-4	0.000565
USD	680.5	139.5	1.4509E-4	0.000264
Zeta	407.0	413.0	≥ 0.2	1

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

28.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0212 , 0.07745]	0.90276
Ameva	[-0.01045 , 0.00625]	0.90276
Bayesian	[0.036 , 0.09075]	0.90276
CACC	[-0.0047 , 0.0126]	0.90276
CADD	[0.09645 , 0.1885]	0.90276
CAIM	[-0.0089 , 0.0084]	0.90276
Chi2	[-0.00685 , 0.0099]	0.90276
ChiMerge	[-0.01265 , 0.0056]	0.90276
ClusterAnalysis	[0.0253 , 0.06705]	0.90276
DIBD	[0.01245 , 0.03995]	0.90276
Distance	[-0.0115 , 0.00735]	0.90276
EqualFrequency	[-0.0032 , 0.01855]	0.90276
EqualWidth	[0.0036 , 0.0262]	0.90276
Extended Chi2	[-0.00285 , 0.0274]	0.90276
FFD	[0.0152 , 0.04295]	0.90276
FUSINTER	[-0.0179 , 0.0015]	0.90276
HDD	[0.0098 , 0.05135]	0.90276
HellingerBD	[-0.00135 , 0.0214]	0.90276
Heter-Disc	[0.05035 , 0.1088]	0.90276
ID3	[0.0268 , 0.08925]	0.90276
IDD	[0.03395 , 0.0903]	0.90276
Khiops	[-0.0016 , 0.0204]	0.90276
MDLP	[-0.01195 , 0.0079]	0.90276
Modified Chi2	[-0.0016 , 0.01935]	0.90276
MODL	[0.0005 , 0.0183]	0.90276
MVD	[0.01275 , 0.0837]	0.90276
PKID	[0.0133 , 0.04375]	0.90276
USD	[0.0201 , 0.07265]	0.90276
Zeta	[-0.0103 , 0.01015]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0189 , 0.0887]	0.95024
Ameva	[-0.0121 , 0.0082]	0.95024
Bayesian	[0.03365 , 0.10045]	0.95024
CACC	[-0.0063 , 0.0147]	0.95024
CADD	[0.0866 , 0.19545]	0.95024
CAIM	[-0.0104 , 0.00995]	0.95024
Chi2	[-0.0084 , 0.0117]	0.95024
ChiMerge	[-0.01445 , 0.007]	0.95024
ClusterAnalysis	[0.02185 , 0.07115]	0.95024
DIBD	[0.01 , 0.04305]	0.95024
Distance	[-0.0132 , 0.00905]	0.95024
EqualFrequency	[-0.0048 , 0.0211]	0.95024
EqualWidth	[0.00145 , 0.02845]	0.95024
Extended Chi2	[-0.00485 , 0.032]	0.95024
FFD	[0.01235 , 0.04625]	0.95024
FUSINTER	[-0.01935 , 0.00325]	0.95024
HDD	[0.00735 , 0.0562]	0.95024
HellingerBD	[-0.0029 , 0.02485]	0.95024
Heter-Disc	[0.0479 , 0.11675]	0.95024
ID3	[0.02365 , 0.0997]	0.95024
IDD	[0.03 , 0.0949]	0.95024
Khiops	[-0.00355 , 0.02275]	0.95024
MDLP	[-0.01335 , 0.00965]	0.95024
Modified Chi2	[-0.0044 , 0.0209]	0.95024
MODL	[-0.00075 , 0.0203]	0.95024
MVD	[0.0086 , 0.0914]	0.95024
PKID	[0.011 , 0.0496]	0.95024
USD	[0.01515 , 0.0826]	0.95024
Zeta	[-0.01355 , 0.0121]	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	355.0	425.0	≥ 0.2	1
Ameva	130.0	650.0	≥ 0.2	1
Bayesian	541.0	279.0	≥ 0.2	0.391873
CACC	219.0	561.0	≥ 0.2	1
CADD	651.0	129.0	1.3768E-4	0.000263
CAIM	98.0	682.0	≥ 0.2	1
Chi2	102.0	678.0	≥ 0.2	1
ChiMerge	94.0	726.0	≥ 0.2	1
ClusterAnalysis	489.0	331.0	≥ 0.2	0.285258
DIBD	284.0	536.0	≥ 0.2	1
Distance	192.0	588.0	≥ 0.2	1
EqualFrequency	184.0	596.0	≥ 0.2	1
EqualWidth	257.0	523.0	≥ 0.2	1
Extended Chi2	215.0	565.0	≥ 0.2	1
FFD	277.5	542.5	≥ 0.2	1
FUSINTER	102.5	677.5	≥ 0.2	1
HDD	379.0	404.0	≥ 0.2	1
HellingerBD	184.0	596.0	≥ 0.2	1
Heter-Disc	520.0	260.0	0.07044	0.068588
ID3	554.5	230.5	0.17097	0.162991
IDD	403.5	416.5	≥ 0.2	1
Khiops	181.5	638.5	≥ 0.2	1
MDLP	172.5	647.5	≥ 0.2	1
Modified Chi2	146.0	637.0	≥ 0.2	1
MODL	177.5	642.5	≥ 0.2	1
MVD	443.5	336.5	≥ 0.2	0.450317
PKID	261.0	519.0	≥ 0.2	1
UCPD	139.5	680.5	≥ 0.2	1
Zeta	103.5	716.5	≥ 0.2	1

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

29.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.03755 , 0.0252]	0.90276
Ameva	[-0.0701 , -0.0241]	0.90276
Bayesian	[0.0003 , 0.01605]	0.90276
CACC	[-0.06945 , -0.0075]	0.90276
CADD	[0.04305 , 0.13665]	0.90276
CAIM	[-0.0724 , -0.0266]	0.90276
Chi2	[-0.06245 , -0.0157]	0.90276
ChiMerge	[-0.0751 , -0.02975]	0.90276
ClusterAnalysis	[-0.0043 , 0.0201]	0.90276
DIBD	[-0.0618 , -0.0009]	0.90276
Distance	[-0.08455 , -0.0133]	0.90276
EqualFrequency	[-0.0568 , -0.0126]	0.90276
EqualWidth	[-0.0498 , -0.0018]	0.90276
Extended Chi2	[-0.0427 , -0.00665]	0.90276
FFD	[-0.0325 , -0.0004]	0.90276
FUSINTER	[-0.08275 , -0.0293]	0.90276
HDD	[-0.01095 , 0.0067]	0.90276
HellingerBD	[-0.05975 , -0.0111]	0.90276
Heter-Disc	[0.00425 , 0.0739]	0.90276
ID3	[0.00165 , 0.0121]	0.90276
IDD	[-0.0226 , 0.0252]	0.90276
Khiops	[-0.0541 , -0.01315]	0.90276
MDLP	[-0.07645 , -0.01835]	0.90276
Modified Chi2	[-0.0587 , -0.00955]	0.90276
MODL	[-0.0631 , -0.0121]	0.90276
MVD	[-0.01345 , 0.0452]	0.90276
PKID	[-0.03315 , -0.00085]	0.90276
UCPD	[-0.07265 , -0.0201]	0.90276
Zeta	[-0.07525 , -0.02345]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0443 , 0.03495]	0.95024
Ameva	[-0.0783 , -0.02035]	0.95024
Bayesian	[-0.00045 , 0.01825]	0.95024
CACC	[-0.07405 , -0.0043]	0.95024
CADD	[0.0375 , 0.1448]	0.95024
CAIM	[-0.07795 , -0.02325]	0.95024
Chi2	[-0.06815 , -0.0132]	0.95024
ChiMerge	[-0.0812 , -0.0267]	0.95024
ClusterAnalysis	[-0.00835 , 0.02295]	0.95024
DIBD	[-0.07025 , 0.0046]	0.95024
Distance	[-0.0894 , -0.0083]	0.95024
EqualFrequency	[-0.06245 , -0.0096]	0.95024
EqualWidth	[-0.05705 , 0.00125]	0.95024
Extended Chi2	[-0.0477 , -0.00455]	0.95024
FFD	[-0.0404 , 0.00095]	0.95024
FUSINTER	[-0.09005 , -0.0255]	0.95024
HDD	[-0.0131 , 0.0091]	0.95024
HellingerBD	[-0.06695 , -0.00875]	0.95024
Heter-Disc	[-0.002 , 0.0854]	0.95024
ID3	[0.0007 , 0.0128]	0.95024
IDD	[-0.027 , 0.03055]	0.95024
Khiops	[-0.05955 , -0.00985]	0.95024
MDLP	[-0.08485 , -0.01515]	0.95024
Modified Chi2	[-0.06495 , -0.0075]	0.95024
MODL	[-0.0694 , -0.00935]	0.95024
MVD	[-0.019 , 0.0503]	0.95024
PKID	[-0.03735 , 0.00105]	0.95024
UCPD	[-0.0826 , -0.01515]	0.95024
Zeta	[-0.0796 , -0.02035]	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	657.0	163.0	6.032E-4	0.000879
Ameva	377.0	443.0	≥ 0.2	1
Bayesian	779.0	41.0	1.811E-8	0.000001
CACC	452.0	328.0	≥ 0.2	0.381443
CADD	816.0	4.0	1.2732E-11	0
CAIM	384.0	436.0	≥ 0.2	1
Chi2	426.0	394.0	≥ 0.2	0.824193
ChiMerge	347.0	436.0	≥ 0.2	1
ClusterAnalysis	740.0	80.0	1.4052E-6	0.000009
DIBD	574.5	245.5	0.02638	0.026062
Distance	406.5	413.5	≥ 0.2	1
EqualFrequency	537.5	282.5	≥ 0.2	0.197704
EqualWidth	615.0	165.0	0.0012464	0.00162
Extended Chi2	511.5	308.5	0.17653	0.168216
FFD	639.0	141.0	3.022E-4	0.000498
FUSINTER	362.5	457.5	≥ 0.2	1
HDD	652.0	131.0	5.642E-4	0.000856
HellingerBD	508.0	272.0	0.1015	0.098195
Heter-Disc	760.0	60.0	1.8268E-7	0.000002
ID3	704.5	75.5	1.8108E-6	0.000011
IDD	748.5	71.5	6.151E-7	0.000005
Khiops	508.0	312.0	≥ 0.2	0.391341
MDLP	377.0	406.0	≥ 0.2	1
Modified Chi2	550.0	233.0	0.07484	0.072072
MODL	495.0	325.0	≥ 0.2	0.249664
MVD	690.0	130.0	7.708E-5	0.000163
PKID	690.5	129.5	2.709E-4	0.000461
UCPD	413.0	407.0	≥ 0.2	0.962478
USD	716.5	103.5	4.112E-5	0.000105

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

30.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0189 , 0.07615]	0.90276
Ameva	[-0.0085 , 0.007]	0.90276
Bayesian	[0.03905 , 0.09325]	0.90276
CACC	[-0.00325 , 0.01205]	0.90276
CADD	[0.09735 , 0.2019]	0.90276
CAIM	[-0.0038 , 0.00355]	0.90276
Chi2	[-0.00655 , 0.01025]	0.90276
ChiMerge	[-0.00685 , 0.00385]	0.90276
ClusterAnalysis	[0.02825 , 0.07395]	0.90276
DIBD	[0.0045 , 0.0385]	0.90276
Distance	[-0.00845 , 0.009]	0.90276
EqualFrequency	[0.0004 , 0.029]	0.90276
EqualWidth	[0.00865 , 0.029]	0.90276
Extended Chi2	[-0.00225 , 0.03575]	0.90276
FFD	[0.0137 , 0.0426]	0.90276
FUSINTER	[-0.01175 , 0.0047]	0.90276
HDD	[0.01825 , 0.05095]	0.90276
HellingerBD	[0.00015 , 0.0248]	0.90276
Heter-Disc	[0.0482 , 0.1205]	0.90276
ID3	[0.0301 , 0.0882]	0.90276
IDD	[0.0343 , 0.08125]	0.90276
Khiops	[-0.00235 , 0.02125]	0.90276
MDLP	[-0.00725 , 0.0082]	0.90276
Modified Chi2	[0.0022 , 0.01705]	0.90276
MODL	[-0.00265 , 0.0154]	0.90276
MVD	[0.0228 , 0.0824]	0.90276
PKID	[0.01325 , 0.0507]	0.90276
UCPD	[-0.01015 , 0.0103]	0.90276
USD	[0.02345 , 0.07525]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0153 , 0.08745]	0.95024
Ameva	[-0.0102 , 0.00975]	0.95024
Bayesian	[0.0356 , 0.0995]	0.95024
CACC	[-0.00465 , 0.01395]	0.95024
CADD	[0.09 , 0.20905]	0.95024
CAIM	[-0.0044 , 0.0042]	0.95024
Chi2	[-0.00795 , 0.01185]	0.95024
ChiMerge	[-0.00775 , 0.00505]	0.95024
ClusterAnalysis	[0.0266 , 0.07915]	0.95024
DIBD	[0.00165 , 0.0427]	0.95024
Distance	[-0.0114 , 0.0109]	0.95024
EqualFrequency	[-0.0019 , 0.0311]	0.95024
EqualWidth	[0.0071 , 0.0313]	0.95024
Extended Chi2	[-0.0034 , 0.03785]	0.95024
FFD	[0.0111 , 0.0489]	0.95024
FUSINTER	[-0.01375 , 0.00625]	0.95024
HDD	[0.0135 , 0.0583]	0.95024
HellingerBD	[-0.00155 , 0.02665]	0.95024
Heter-Disc	[0.04505 , 0.12965]	0.95024
ID3	[0.02805 , 0.096]	0.95024
IDD	[0.02965 , 0.08735]	0.95024
Khiops	[-0.0044 , 0.0239]	0.95024
MDLP	[-0.0097 , 0.0102]	0.95024
Modified Chi2	[0.0009 , 0.0194]	0.95024
MODL	[-0.00465 , 0.0176]	0.95024
MVD	[0.01645 , 0.09525]	0.95024
PKID	[0.01085 , 0.056]	0.95024
UCPD	[-0.0121 , 0.01355]	0.95024
USD	[0.02035 , 0.0796]	0.95024

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