

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	274.0	546.0	≥ 0.2	1
Bayesian	410.0	370.0	≥ 0.2	0.774819
CACC	404.0	416.0	≥ 0.2	1
CADD	728.5	56.5	3.865E-6	0.000022
CAIM	239.5	580.5	≥ 0.2	1
Chi2	274.0	546.0	≥ 0.2	1
ChiMerge	230.0	590.0	≥ 0.2	1
ClusterAnalysis	314.0	466.0	≥ 0.2	1
DIBD	487.5	332.5	≥ 0.2	0.293633
Distance	441.0	379.0	≥ 0.2	0.672003
EqualFrequency	173.5	646.5	≥ 0.2	1
EqualWidth	257.0	563.0	≥ 0.2	1
Extended Chi2	395.0	425.0	≥ 0.2	1
FFD	152.5	667.5	≥ 0.2	1
FUSINTER	221.0	599.0	≥ 0.2	1
HDD	352.0	468.0	≥ 0.2	1
HellingerBD	286.0	534.0	≥ 0.2	1
Heter-Disc	627.0	156.0	0.002536	0.003107
ID3	356.0	464.0	≥ 0.2	1
IDD	347.0	473.0	≥ 0.2	1
Khiops	150.0	670.0	≥ 0.2	1
MDLP	336.0	444.0	≥ 0.2	1
Modified Chi2	163.0	657.0	≥ 0.2	1
MODL	229.0	591.0	≥ 0.2	1
MVD	526.5	293.5	≥ 0.2	0.260179
PKID	106.0	714.0	≥ 0.2	1
UCPD	403.0	417.0	≥ 0.2	1
USD	316.0	504.0	≥ 0.2	1
Zeta	365.5	454.5	≥ 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	[-0.05655 , -0.00105]	0.90276
Bayesian	[-0.0222 , 0.0355]	0.90276
CACC	[-0.0494 , 0.03035]	0.90276
CADD	[0.0668 , 0.19675]	0.90276
CAIM	[-0.0895 , -0.0075]	0.90276
Chi2	[-0.0757 , -0.0032]	0.90276
ChiMerge	[-0.07865 , -0.012]	0.90276
ClusterAnalysis	[-0.06375 , 0.007]	0.90276
DIBD	[-0.01015 , 0.0484]	0.90276
Distance	[-0.0318 , 0.03015]	0.90276
EqualFrequency	[-0.08005 , -0.017]	0.90276
EqualWidth	[-0.0707 , -0.00495]	0.90276
Extended Chi2	[-0.0532 , 0.04085]	0.90276
FFD	[-0.08545 , -0.0176]	0.90276
FUSINTER	[-0.0675 , -0.0114]	0.90276
HDD	[-0.0537 , 0.01665]	0.90276
HellingerBD	[-0.0578 , -0.0003]	0.90276
Heter-Disc	[0.05085 , 0.171]	0.90276
ID3	[-0.05265 , 0.0163]	0.90276
IDD	[-0.0133 , 0.00355]	0.90276
Khiops	[-0.0802 , -0.0176]	0.90276
MDLP	[-0.0415 , 0.01235]	0.90276
Modified Chi2	[-0.08655 , -0.0143]	0.90276
MODL	[-0.0756 , -0.0124]	0.90276
MVD	[-0.0017 , 0.08205]	0.90276
PKID	[-0.0895 , -0.0287]	0.90276
UCPD	[-0.05295 , 0.0275]	0.90276
USD	[-0.064 , 0.00815]	0.90276
Zeta	[-0.0653 , 0.0124]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.075 , 0.00135]	0.95024
Bayesian	[-0.03055 , 0.03925]	0.95024
CACC	[-0.0548 , 0.03765]	0.95024
CADD	[0.05995 , 0.21535]	0.95024
CAIM	[-0.09955 , -0.00405]	0.95024
Chi2	[-0.086 , 0.0019]	0.95024
ChiMerge	[-0.0902 , -0.0066]	0.95024
ClusterAnalysis	[-0.0732 , 0.01065]	0.95024
DIBD	[-0.0236 , 0.05305]	0.95024
Distance	[-0.0436 , 0.03635]	0.95024
EqualFrequency	[-0.09295 , -0.01325]	0.95024
EqualWidth	[-0.08385 , -0.00085]	0.95024
Extended Chi2	[-0.064 , 0.04725]	0.95024
FFD	[-0.0976 , -0.0149]	0.95024
FUSINTER	[-0.0802 , -0.0085]	0.95024
HDD	[-0.0652 , 0.02135]	0.95024
HellingerBD	[-0.0691 , 0.0039]	0.95024
Heter-Disc	[0.0367 , 0.18615]	0.95024
ID3	[-0.0679 , 0.0226]	0.95024
IDD	[-0.01605 , 0.00505]	0.95024
Khiops	[-0.08635 , -0.0153]	0.95024
MDLP	[-0.05455 , 0.01875]	0.95024
Modified Chi2	[-0.09435 , -0.0124]	0.95024
MODL	[-0.08115 , -0.00745]	0.95024
MVD	[-0.00725 , 0.09735]	0.95024
PKID	[-0.1015 , -0.02575]	0.95024
UCPD	[-0.06125 , 0.0326]	0.95024
USD	[-0.07345 , 0.0123]	0.95024
Zeta	[-0.0796 , 0.0178]	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	546.0	274.0	0.06822	0.066545
Bayesian	613.0	207.0	0.005576	0.006232
CACC	620.5	199.5	0.012223	0.012877
CADD	763.0	57.0	1.3044E-7	0.000002
CAIM	326.5	456.5	≥ 0.2	1
Chi2	451.0	369.0	≥ 0.2	0.576972
ChiMerge	351.0	432.0	≥ 0.2	1
ClusterAnalysis	465.0	355.0	≥ 0.2	0.455672
DIBD	679.5	140.5	1.5476E-4	0.000278
Distance	598.0	222.0	0.010628	0.011287
EqualFrequency	281.0	539.0	≥ 0.2	1
EqualWidth	358.0	422.0	≥ 0.2	1
Extended Chi2	517.0	263.0	0.07738	0.075197
FFD	245.5	574.5	≥ 0.2	1
FUSINTER	291.0	489.0	≥ 0.2	1
HDD	485.5	334.5	≥ 0.2	0.595908
HellingerBD	433.0	387.0	≥ 0.2	0.752101
Heter-Disc	744.0	36.0	1.811E-8	0.000001
ID3	477.0	343.0	≥ 0.2	0.364255
IDD	503.0	277.0	0.1172	0.111962
Khiops	239.5	540.5	≥ 0.2	1
MDLP	467.0	353.0	≥ 0.2	0.793695
Modified Chi2	300.0	480.0	≥ 0.2	1
MODL	329.0	451.0	≥ 0.2	1
MVD	633.0	187.0	0.002166	0.002663
PKID	137.0	643.0	≥ 0.2	1
UCPD	575.5	244.5	0.02543999999999997	0.025417
USD	469.0	351.0	≥ 0.2	0.423851
Zeta	521.5	258.5	0.06717000000000001	0.064529

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	[0.00105 , 0.05655]	0.90276
Bayesian	[0.016 , 0.0738]	0.90276
CACC	[0.0073 , 0.0441]	0.90276
CADD	[0.14375 , 0.2781]	0.90276
CAIM	[-0.0101 , 0.00285]	0.90276
Chi2	[-0.0152 , 0.02465]	0.90276
ChiMerge	[-0.012 , 0.0051]	0.90276
ClusterAnalysis	[-0.00865 , 0.0251]	0.90276
DIBD	[0.027 , 0.0654]	0.90276
Distance	[0.0072 , 0.0481]	0.90276
EqualFrequency	[-0.02055 , -0.00015]	0.90276
EqualWidth	[-0.01825 , 0.0102]	0.90276
Extended Chi2	[0.0015 , 0.0555]	0.90276
FFD	[-0.02435 , -0.0027]	0.90276
FUSINTER	[-0.02015 , 0.0015]	0.90276
HDD	[-0.00665 , 0.03615]	0.90276
HellingerBD	[-0.015 , 0.02175]	0.90276
Heter-Disc	[0.08815 , 0.22065]	0.90276
ID3	[-0.00825 , 0.0341]	0.90276
IDD	[-0.00085 , 0.03935]	0.90276
Khiops	[-0.0259 , -0.00305]	0.90276
MDLP	[-0.00715 , 0.0287]	0.90276
Modified Chi2	[-0.02405 , 0.0026]	0.90276
MODL	[-0.01605 , 0.00475]	0.90276
MVD	[0.01665 , 0.1065]	0.90276
PKID	[-0.03495 , -0.0118]	0.90276
UCPD	[0.00395 , 0.0336]	0.90276
USD	[-0.01195 , 0.03045]	0.90276
Zeta	[0.001 , 0.02955]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00135 , 0.075]	0.95024
Bayesian	[0.0126 , 0.07885]	0.95024
CACC	[0.00515 , 0.0493]	0.95024
CADD	[0.1216 , 0.28855]	0.95024
CAIM	[-0.0112 , 0.00415]	0.95024
Chi2	[-0.0186 , 0.02875]	0.95024
ChiMerge	[-0.01345 , 0.0083]	0.95024
ClusterAnalysis	[-0.01265 , 0.02935]	0.95024
DIBD	[0.0236 , 0.0687]	0.95024
Distance	[0.00355 , 0.0558]	0.95024
EqualFrequency	[-0.0226 , 0.0015]	0.95024
EqualWidth	[-0.02255 , 0.0133]	0.95024
Extended Chi2	[-0.00145 , 0.0599]	0.95024
FFD	[-0.02825 , -0.00125]	0.95024
FUSINTER	[-0.02305 , 0.00345]	0.95024
HDD	[-0.01075 , 0.04285]	0.95024
HellingerBD	[-0.0185 , 0.02655]	0.95024
Heter-Disc	[0.08275 , 0.2274]	0.95024
ID3	[-0.01545 , 0.03815]	0.95024
IDD	[-0.00355 , 0.04595]	0.95024
Khiops	[-0.0286 , -0.0014]	0.95024
MDLP	[-0.00885 , 0.0369]	0.95024
Modified Chi2	[-0.0272 , 0.00395]	0.95024
MODL	[-0.0183 , 0.0074]	0.95024
MVD	[0.01495 , 0.115]	0.95024
PKID	[-0.03875 , -0.01005]	0.95024
UCPD	[0.0014 , 0.03645]	0.95024
USD	[-0.0191 , 0.03325]	0.95024
Zeta	[-0.0006 , 0.03485]	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	370.0	410.0	≥ 0.2	1
Ameva	207.0	613.0	≥ 0.2	1
CACC	296.5	523.5	≥ 0.2	1
CADD	693.0	87.0	5.268E-6	0.000023
CAIM	175.0	645.0	≥ 0.2	1
Chi2	238.0	582.0	≥ 0.2	1
ChiMerge	172.0	648.0	≥ 0.2	1
ClusterAnalysis	186.0	594.0	≥ 0.2	1
DIBD	431.0	389.0	≥ 0.2	0.772591
Distance	356.0	464.0	≥ 0.2	1
EqualFrequency	117.0	663.0	≥ 0.2	1
EqualWidth	173.0	607.0	≥ 0.2	1
Extended Chi2	307.0	513.0	≥ 0.2	1
FFD	91.0	689.0	≥ 0.2	1
FUSINTER	171.0	649.0	≥ 0.2	1
HDD	208.0	612.0	≥ 0.2	1
HellingerBD	203.0	617.0	≥ 0.2	1
Heter-Disc	630.0	150.0	5.26E-4	0.00079
ID3	200.0	580.0	≥ 0.2	1
IDD	286.0	494.0	≥ 0.2	1
Khiops	141.0	639.0	≥ 0.2	1
MDLP	277.0	543.0	≥ 0.2	1
Modified Chi2	76.0	744.0	≥ 0.2	1
MODL	73.0	747.0	≥ 0.2	1
MVD	514.0	306.0	0.1659	0.160136
PKID	74.0	746.0	≥ 0.2	1
UCPD	306.0	514.0	≥ 0.2	1
USD	79.0	741.0	≥ 0.2	1
Zeta	276.0	504.0	≥ 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	[-0.0355 , 0.0222]	0.90276
Ameva	[-0.0738 , -0.016]	0.90276
CACC	[-0.03275 , 0.00235]	0.90276
CADD	[0.0904 , 0.21595]	0.90276
CAIM	[-0.0855 , -0.0219]	0.90276
Chi2	[-0.0646 , -0.01195]	0.90276
ChiMerge	[-0.08205 , -0.02065]	0.90276
ClusterAnalysis	[-0.0547 , -0.01445]	0.90276
DIBD	[-0.0231 , 0.0364]	0.90276
Distance	[-0.0433 , 0.01625]	0.90276
EqualFrequency	[-0.0868 , -0.0325]	0.90276
EqualWidth	[-0.07255 , -0.0204]	0.90276
Extended Chi2	[-0.0398 , 0.00725]	0.90276
FFD	[-0.08865 , -0.039]	0.90276
FUSINTER	[-0.0711 , -0.02165]	0.90276
HDD	[-0.03205 , -0.00765]	0.90276
HellingerBD	[-0.06435 , -0.0162]	0.90276
Heter-Disc	[0.06335 , 0.17385]	0.90276
ID3	[-0.02985 , -0.0059]	0.90276
IDD	[-0.0449 , 0.003]	0.90276
Khiops	[-0.0777 , -0.02845]	0.90276
MDLP	[-0.05595 , -0.0029]	0.90276
Modified Chi2	[-0.07825 , -0.03485]	0.90276
MODL	[-0.0646 , -0.0299]	0.90276
MVD	[-0.0064 , 0.0979]	0.90276
PKID	[-0.0956 , -0.04405]	0.90276
UCPD	[-0.0514 , 0.0048]	0.90276
USD	[-0.04015 , -0.0147]	0.90276
Zeta	[-0.063 , 0.0008]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03925 , 0.03055]	0.95024
Ameva	[-0.07885 , -0.0126]	0.95024
CACC	[-0.03555 , 0.00525]	0.95024
CADD	[0.08065 , 0.22935]	0.95024
CAIM	[-0.08965 , -0.0191]	0.95024
Chi2	[-0.07095 , -0.0066]	0.95024
ChiMerge	[-0.0866 , -0.01725]	0.95024
ClusterAnalysis	[-0.06015 , -0.01055]	0.95024
DIBD	[-0.02985 , 0.04005]	0.95024
Distance	[-0.0479 , 0.0239]	0.95024
EqualFrequency	[-0.0938 , -0.0291]	0.95024
EqualWidth	[-0.07635 , -0.0178]	0.95024
Extended Chi2	[-0.04265 , 0.0177]	0.95024
FFD	[-0.0937 , -0.0341]	0.95024
FUSINTER	[-0.0769 , -0.0178]	0.95024
HDD	[-0.0351 , -0.0051]	0.95024
HellingerBD	[-0.0692 , -0.0118]	0.95024
Heter-Disc	[0.05185 , 0.1845]	0.95024
ID3	[-0.033 , -0.0043]	0.95024
IDD	[-0.0498 , 0.0074]	0.95024
Khiops	[-0.08335 , -0.0231]	0.95024
MDLP	[-0.0586 , 0.00265]	0.95024
Modified Chi2	[-0.08365 , -0.03075]	0.95024
MODL	[-0.0681 , -0.02765]	0.95024
MVD	[-0.0132 , 0.10945]	0.95024
PKID	[-0.10045 , -0.042]	0.95024
UCPD	[-0.05515 , 0.0102]	0.95024
USD	[-0.0438 , -0.01345]	0.95024
Zeta	[-0.06835 , 0.00735]	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	416.0	404.0	≥ 0.2	0.930379
Ameva	199.5	620.5	≥ 0.2	1
Bayesian	523.5	296.5	0.12983	0.124812
CADD	723.0	97.0	6.358E-6	0.000025
CAIM	227.0	593.0	≥ 0.2	1
Chi2	270.5	509.5	≥ 0.2	1
ChiMerge	240.0	580.0	≥ 0.2	1
ClusterAnalysis	289.0	531.0	≥ 0.2	1
DIBD	484.0	336.0	≥ 0.2	0.315831
Distance	368.0	412.0	≥ 0.2	1
EqualFrequency	160.5	619.5	≥ 0.2	1
EqualWidth	232.0	588.0	≥ 0.2	1
Extended Chi2	375.0	445.0	≥ 0.2	1
FFD	129.0	691.0	≥ 0.2	1
FUSINTER	165.0	615.0	≥ 0.2	1
HDD	393.0	427.0	≥ 0.2	1
HellingerBD	275.0	505.0	≥ 0.2	1
Heter-Disc	707.5	112.5	8.186E-5	0.000178
ID3	352.0	428.0	≥ 0.2	1
IDD	367.0	453.0	≥ 0.2	1
Khiops	155.0	665.0	≥ 0.2	1
MDLP	263.0	517.0	≥ 0.2	1
Modified Chi2	120.0	700.0	≥ 0.2	1
MODL	139.0	681.0	≥ 0.2	1
MVD	500.0	283.0	≥ 0.2	0.297897
PKID	96.5	723.5	≥ 0.2	1
UCPD	378.0	442.0	≥ 0.2	1
USD	319.5	500.5	≥ 0.2	1
Zeta	330.5	449.5	≥ 0.2	1

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

4.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.03035 , 0.0494]	0.90276
Ameva	[-0.0441 , -0.0073]	0.90276
Bayesian	[-0.00235 , 0.03275]	0.90276
CADD	[0.09455 , 0.213]	0.90276
CAIM	[-0.05145 , -0.0124]	0.90276
Chi2	[-0.05155 , 0.0001]	0.90276
ChiMerge	[-0.05235 , -0.0074]	0.90276
ClusterAnalysis	[-0.04005 , 0.00035]	0.90276
DIBD	[-0.0071 , 0.04425]	0.90276
Distance	[-0.02395 , 0.01715]	0.90276
EqualFrequency	[-0.07005 , -0.0205]	0.90276
EqualWidth	[-0.06065 , -0.0106]	0.90276
Extended Chi2	[-0.02285 , 0.0142]	0.90276
FFD	[-0.07205 , -0.02335]	0.90276
FUSINTER	[-0.045 , -0.01375]	0.90276
HDD	[-0.024 , 0.01215]	0.90276
HellingerBD	[-0.0478 , 0.0004]	0.90276
Heter-Disc	[0.0688 , 0.16665]	0.90276
ID3	[-0.02585 , 0.01065]	0.90276
IDD	[-0.033 , 0.0184]	0.90276
Khiops	[-0.06045 , -0.0192]	0.90276
MDLP	[-0.03785 , -0.0021]	0.90276
Modified Chi2	[-0.05745 , -0.0202]	0.90276
MODL	[-0.04655 , -0.01395]	0.90276
MVD	[-0.00295 , 0.09075]	0.90276
PKID	[-0.0804 , -0.0302]	0.90276
UCPD	[-0.02885 , 0.0139]	0.90276
USD	[-0.0318 , 0.00355]	0.90276
Zeta	[-0.03875 , 0.01095]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03765 , 0.0548]	0.95024
Ameva	[-0.0493 , -0.00515]	0.95024
Bayesian	[-0.00525 , 0.03555]	0.95024
CADD	[0.08535 , 0.2296]	0.95024
CAIM	[-0.0625 , -0.00895]	0.95024
Chi2	[-0.0557 , 0.004]	0.95024
ChiMerge	[-0.0554 , -0.005]	0.95024
ClusterAnalysis	[-0.04565 , 0.004]	0.95024
DIBD	[-0.01255 , 0.0486]	0.95024
Distance	[-0.02755 , 0.02285]	0.95024
EqualFrequency	[-0.07675 , -0.01775]	0.95024
EqualWidth	[-0.0687 , -0.0061]	0.95024
Extended Chi2	[-0.0264 , 0.02105]	0.95024
FFD	[-0.07685 , -0.0198]	0.95024
FUSINTER	[-0.0512 , -0.0116]	0.95024
HDD	[-0.02805 , 0.01465]	0.95024
HellingerBD	[-0.0555 , 0.00405]	0.95024
Heter-Disc	[0.0578 , 0.1782]	0.95024
ID3	[-0.0305 , 0.01285]	0.95024
IDD	[-0.03815 , 0.0247]	0.95024
Khiops	[-0.0687 , -0.0167]	0.95024
MDLP	[-0.0411 , 0.00295]	0.95024
Modified Chi2	[-0.06155 , -0.01705]	0.95024
MODL	[-0.05065 , -0.01165]	0.95024
MVD	[-0.00745 , 0.0994]	0.95024
PKID	[-0.08685 , -0.02625]	0.95024
UCPD	[-0.0352 , 0.0183]	0.95024
USD	[-0.03535 , 0.0057]	0.95024
Zeta	[-0.04175 , 0.01685]	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	56.5	728.5	≥ 0.2	1
Ameva	57.0	763.0	≥ 0.2	1
Bayesian	87.0	693.0	≥ 0.2	1
CACC	97.0	723.0	≥ 0.2	1
CAIM	23.0	797.0	≥ 0.2	1
Chi2	43.0	777.0	≥ 0.2	1
ChiMerge	33.0	787.0	≥ 0.2	1
ClusterAnalysis	32.0	748.0	≥ 0.2	1
DIBD	116.0	664.0	≥ 0.2	1
Distance	81.0	699.0	≥ 0.2	1
EqualFrequency	20.0	760.0	≥ 0.2	1
EqualWidth	32.0	788.0	≥ 0.2	1
Extended Chi2	108.5	711.5	≥ 0.2	1
FFD	15.0	805.0	≥ 0.2	1
FUSINTER	20.0	800.0	≥ 0.2	1
HDD	55.0	765.0	≥ 0.2	1
HellingerBD	17.0	803.0	≥ 0.2	1
Heter-Disc	363.0	428.0	≥ 0.2	1
ID3	69.0	751.0	≥ 0.2	1
IDD	48.0	735.0	≥ 0.2	1
Khiops	14.0	806.0	≥ 0.2	1
MDLP	50.0	730.0	≥ 0.2	1
Modified Chi2	16.0	804.0	≥ 0.2	1
MODL	16.0	804.0	≥ 0.2	1
MVD	190.0	593.0	≥ 0.2	1
PKID	13.0	807.0	≥ 0.2	1
UCPD	78.0	742.0	≥ 0.2	1
USD	52.0	768.0	≥ 0.2	1
Zeta	50.0	730.0	≥ 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	[-0.19675 , -0.0668]	0.90276
Ameva	[-0.2781 , -0.14375]	0.90276
Bayesian	[-0.21595 , -0.0904]	0.90276
CACC	[-0.213 , -0.09455]	0.90276
CAIM	[-0.29255 , -0.15495]	0.90276
Chi2	[-0.2739 , -0.15625]	0.90276
ChiMerge	[-0.28565 , -0.15775]	0.90276
ClusterAnalysis	[-0.23055 , -0.1214]	0.90276
DIBD	[-0.22745 , -0.07335]	0.90276
Distance	[-0.2152 , -0.10315]	0.90276
EqualFrequency	[-0.3134 , -0.16445]	0.90276
EqualWidth	[-0.3017 , -0.14845]	0.90276
Extended Chi2	[-0.19735 , -0.0835]	0.90276
FFD	[-0.3153 , -0.16435]	0.90276
FUSINTER	[-0.3012 , -0.1441]	0.90276
HDD	[-0.2424 , -0.11885]	0.90276
HellingerBD	[-0.2739 , -0.1347]	0.90276
Heter-Disc	[-0.03465 , 0.0145]	0.90276
ID3	[-0.2587 , -0.11365]	0.90276
IDD	[-0.20135 , -0.0882]	0.90276
Khiops	[-0.3104 , -0.1538]	0.90276
MDLP	[-0.2226 , -0.1054]	0.90276
Modified Chi2	[-0.30995 , -0.168]	0.90276
MODL	[-0.28125 , -0.1382]	0.90276
MVD	[-0.1468 , -0.0229]	0.90276
PKID	[-0.32625 , -0.1791]	0.90276
UCPD	[-0.26545 , -0.1092]	0.90276
USD	[-0.25515 , -0.1243]	0.90276
Zeta	[-0.2531 , -0.1267]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.21535 , -0.05995]	0.95024
Ameva	[-0.28855 , -0.1216]	0.95024
Bayesian	[-0.22935 , -0.08065]	0.95024
CACC	[-0.2296 , -0.08535]	0.95024
CAIM	[-0.3046 , -0.14255]	0.95024
Chi2	[-0.2933 , -0.1441]	0.95024
ChiMerge	[-0.30885 , -0.14105]	0.95024
ClusterAnalysis	[-0.2463 , -0.1126]	0.95024
DIBD	[-0.2454 , -0.0587]	0.95024
Distance	[-0.23825 , -0.07975]	0.95024
EqualFrequency	[-0.3235 , -0.1543]	0.95024
EqualWidth	[-0.31445 , -0.1396]	0.95024
Extended Chi2	[-0.21495 , -0.0717]	0.95024
FFD	[-0.3297 , -0.1567]	0.95024
FUSINTER	[-0.31265 , -0.12355]	0.95024
HDD	[-0.25925 , -0.1082]	0.95024
HellingerBD	[-0.29695 , -0.1227]	0.95024
Heter-Disc	[-0.0648 , 0.01625]	0.95024
ID3	[-0.27765 , -0.10655]	0.95024
IDD	[-0.21765 , -0.0776]	0.95024
Khiops	[-0.33 , -0.13705]	0.95024
MDLP	[-0.244 , -0.09265]	0.95024
Modified Chi2	[-0.3256 , -0.15775]	0.95024
MODL	[-0.3067 , -0.1253]	0.95024
MVD	[-0.1569 , -0.0178]	0.95024
PKID	[-0.3409 , -0.1686]	0.95024
UCPD	[-0.28915 , -0.09495]	0.95024
USD	[-0.27035 , -0.1165]	0.95024
Zeta	[-0.278 , -0.11125]	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	580.5	239.5	0.021150000000000002	0.021317
Ameva	456.5	326.5	≥ 0.2	0.699381
Bayesian	645.0	175.0	0.0011672	0.001549
CACC	593.0	227.0	0.013026	0.013488
CADD	797.0	23.0	1.1642E-9	0
Chi2	500.0	320.0	≥ 0.2	0.458718
ChiMerge	340.0	440.0	≥ 0.2	1
ClusterAnalysis	469.5	310.5	≥ 0.2	0.263417
DIBD	677.0	143.0	1.8148E-4	0.000324
Distance	638.5	181.5	0.0016402	0.002048
EqualFrequency	299.5	480.5	≥ 0.2	1
EqualWidth	432.5	387.5	≥ 0.2	1
Extended Chi2	564.0	216.0	0.014286	0.014712
FFD	302.0	478.0	≥ 0.2	1
FUSINTER	341.0	439.0	≥ 0.2	1
HDD	498.0	289.0	≥ 0.2	1
HellingerBD	411.0	409.0	≥ 0.2	0.983887
Heter-Disc	795.0	25.0	1.6444E-9	0
ID3	490.0	290.0	0.16676	0.160773
IDD	548.0	272.0	0.06414	0.062657
Khiops	325.5	494.5	≥ 0.2	1
MDLP	519.0	261.0	0.0727	0.070245
Modified Chi2	354.0	466.0	≥ 0.2	1
MODL	403.0	377.0	≥ 0.2	0.850569
MVD	626.0	194.0	0.003052	0.003614
PKID	191.0	629.0	≥ 0.2	1
UCPD	580.0	200.0	0.007162	0.007851
USD	487.0	293.0	0.18012	0.173636
Zeta	631.5	148.5	4.808E-4	0.000702

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	[0.0075 , 0.0895]	0.90276
Ameva	[-0.00285 , 0.0101]	0.90276
Bayesian	[0.0219 , 0.0855]	0.90276
CACC	[0.0124 , 0.05145]	0.90276
CADD	[0.15495 , 0.29255]	0.90276
Chi2	[-0.0065 , 0.0342]	0.90276
ChiMerge	[-0.00945 , 0.00305]	0.90276
ClusterAnalysis	[-0.00395 , 0.03]	0.90276
DIBD	[0.03105 , 0.0728]	0.90276
Distance	[0.0124 , 0.04885]	0.90276
EqualFrequency	[-0.0157 , 0.0022]	0.90276
EqualWidth	[-0.00905 , 0.0153]	0.90276
Extended Chi2	[0.00745 , 0.0565]	0.90276
FFD	[-0.01975 , 0.00205]	0.90276
FUSINTER	[-0.02105 , 0.0084]	0.90276
HDD	[-0.00005 , 0.03685]	0.90276
HellingerBD	[-0.01345 , 0.0215]	0.90276
Heter-Disc	[0.10455 , 0.23075]	0.90276
ID3	[-0.0023 , 0.0409]	0.90276
IDD	[0.00195 , 0.052]	0.90276
Khiops	[-0.02115 , 0.0032]	0.90276
MDLP	[0.0008 , 0.0341]	0.90276
Modified Chi2	[-0.01945 , 0.0061]	0.90276
MODL	[-0.0104 , 0.01295]	0.90276
MVD	[0.02065 , 0.16755]	0.90276
PKID	[-0.0293 , -0.0067]	0.90276
UCPD	[0.00795 , 0.0395]	0.90276
USD	[-0.0028 , 0.0367]	0.90276
Zeta	[0.00795 , 0.02625]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00405 , 0.09955]	0.95024
Ameva	[-0.00415 , 0.0112]	0.95024
Bayesian	[0.0191 , 0.08965]	0.95024
CACC	[0.00895 , 0.0625]	0.95024
CADD	[0.14255 , 0.3046]	0.95024
Chi2	[-0.0105 , 0.0373]	0.95024
ChiMerge	[-0.0105 , 0.00425]	0.95024
ClusterAnalysis	[-0.00835 , 0.0352]	0.95024
DIBD	[0.02805 , 0.0774]	0.95024
Distance	[0.0093 , 0.05235]	0.95024
EqualFrequency	[-0.01865 , 0.0042]	0.95024
EqualWidth	[-0.01305 , 0.01815]	0.95024
Extended Chi2	[0.0046 , 0.06125]	0.95024
FFD	[-0.023 , 0.00375]	0.95024
FUSINTER	[-0.02465 , 0.0124]	0.95024
HDD	[-0.0029 , 0.0392]	0.95024
HellingerBD	[-0.0158 , 0.02435]	0.95024
Heter-Disc	[0.0959 , 0.24135]	0.95024
ID3	[-0.00715 , 0.04755]	0.95024
IDD	[-0.0012 , 0.0584]	0.95024
Khiops	[-0.02485 , 0.00505]	0.95024
MDLP	[-0.00135 , 0.03965]	0.95024
Modified Chi2	[-0.0223 , 0.0081]	0.95024
MODL	[-0.01285 , 0.0161]	0.95024
MVD	[0.0163 , 0.18965]	0.95024
PKID	[-0.03145 , -0.005]	0.95024
UCPD	[0.00595 , 0.044]	0.95024
USD	[-0.0065 , 0.04025]	0.95024
Zeta	[0.00665 , 0.02885]	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	546.0	274.0	0.06822	0.066545
Ameva	369.0	451.0	≥ 0.2	1
Bayesian	582.0	238.0	0.019988	0.020415
CACC	509.5	270.5	0.09712	0.09344
CADD	777.0	43.0	2.362E-8	0.000001
CAIM	320.0	500.0	≥ 0.2	1
ChiMerge	320.0	500.0	≥ 0.2	1
ClusterAnalysis	466.0	314.0	≥ 0.2	0.28572
DIBD	633.0	187.0	0.002166	0.002663
Distance	526.0	254.0	0.05806	0.056367
EqualFrequency	279.5	540.5	≥ 0.2	1
EqualWidth	350.0	430.0	≥ 0.2	1
Extended Chi2	609.0	211.0	0.006658	0.007328
FFD	252.0	568.0	≥ 0.2	1
FUSINTER	344.0	436.0	≥ 0.2	1
HDD	488.5	331.5	≥ 0.2	0.287487
HellingerBD	409.0	411.0	≥ 0.2	1
Heter-Disc	728.0	92.0	4.154E-6	0.000019
ID3	453.0	327.0	≥ 0.2	0.375541
IDD	514.0	306.0	0.1659	0.158731
Khiops	284.0	536.0	≥ 0.2	1
MDLP	477.0	343.0	≥ 0.2	0.364255
Modified Chi2	268.0	552.0	≥ 0.2	1
MODL	397.0	423.0	≥ 0.2	1
MVD	654.0	166.0	7.144E-4	0.001015
PKID	132.5	647.5	≥ 0.2	1
UCPD	552.0	268.0	0.05658	0.055443
USD	452.5	367.5	≥ 0.2	0.562624
Zeta	457.0	363.0	≥ 0.2	0.522474

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	[0.0032 , 0.0757]	0.90276
Ameva	[-0.02465 , 0.0152]	0.90276
Bayesian	[0.01195 , 0.0646]	0.90276
CACC	[-0.0001 , 0.05155]	0.90276
CADD	[0.15625 , 0.2739]	0.90276
CAIM	[-0.0342 , 0.0065]	0.90276
ChiMerge	[-0.0266 , 0.00435]	0.90276
ClusterAnalysis	[-0.00895 , 0.0282]	0.90276
DIBD	[0.0282 , 0.08105]	0.90276
Distance	[0.00455 , 0.06055]	0.90276
EqualFrequency	[-0.03275 , -0.0003]	0.90276
EqualWidth	[-0.0264 , 0.00855]	0.90276
Extended Chi2	[0.00925 , 0.0514]	0.90276
FFD	[-0.0331 , -0.0036]	0.90276
FUSINTER	[-0.02345 , 0.00725]	0.90276
HDD	[-0.0073 , 0.0333]	0.90276
HellingerBD	[-0.01765 , 0.0197]	0.90276
Heter-Disc	[0.10405 , 0.2291]	0.90276
ID3	[-0.01115 , 0.0309]	0.90276
IDD	[-0.00295 , 0.0352]	0.90276
Khiops	[-0.02765 , -0.0006]	0.90276
MDLP	[-0.01105 , 0.04195]	0.90276
Modified Chi2	[-0.02595 , -0.0015]	0.90276
MODL	[-0.0215 , 0.0152]	0.90276
MVD	[0.0329 , 0.15]	0.90276
PKID	[-0.04755 , -0.0128]	0.90276
UCPD	[0.0041 , 0.04875]	0.90276
USD	[-0.0131 , 0.02185]	0.90276
Zeta	[-0.01495 , 0.0302]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0019 , 0.086]	0.95024
Ameva	[-0.02875 , 0.0186]	0.95024
Bayesian	[0.0066 , 0.07095]	0.95024
CACC	[-0.004 , 0.0557]	0.95024
CADD	[0.1441 , 0.2933]	0.95024
CAIM	[-0.0373 , 0.0105]	0.95024
ChiMerge	[-0.0302 , 0.0095]	0.95024
ClusterAnalysis	[-0.0146 , 0.0322]	0.95024
DIBD	[0.0226 , 0.0856]	0.95024
Distance	[-0.0002 , 0.06555]	0.95024
EqualFrequency	[-0.03815 , 0.0014]	0.95024
EqualWidth	[-0.0313 , 0.0112]	0.95024
Extended Chi2	[0.00665 , 0.05735]	0.95024
FFD	[-0.0372 , -0.0017]	0.95024
FUSINTER	[-0.0258 , 0.0104]	0.95024
HDD	[-0.0113 , 0.03595]	0.95024
HellingerBD	[-0.0215 , 0.0234]	0.95024
Heter-Disc	[0.09305 , 0.2357]	0.95024
ID3	[-0.0166 , 0.0348]	0.95024
IDD	[-0.00605 , 0.0423]	0.95024
Khiops	[-0.0313 , 0.0034]	0.95024
MDLP	[-0.0159 , 0.0458]	0.95024
Modified Chi2	[-0.028 , 0.0001]	0.95024
MODL	[-0.02565 , 0.01905]	0.95024
MVD	[0.0262 , 0.16775]	0.95024
PKID	[-0.0516 , -0.01085]	0.95024
UCPD	[-0.0005 , 0.05455]	0.95024
USD	[-0.01705 , 0.025]	0.95024
Zeta	[-0.0184 , 0.03685]	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	590.0	230.0	0.014678	0.01526
Ameva	432.0	351.0	≥ 0.2	0.987941
Bayesian	648.0	172.0	9.936E-4	0.001347
CACC	580.0	240.0	0.02154	0.021921
CADD	787.0	33.0	5.844E-9	0
CAIM	440.0	340.0	≥ 0.2	0.479446
Chi2	500.0	320.0	≥ 0.2	0.22304
ClusterAnalysis	507.0	273.0	0.1045	0.101065
DIBD	667.0	113.0	4.4E-5	0.000105
Distance	669.0	111.0	3.784E-5	0.000093
EqualFrequency	365.0	455.0	≥ 0.2	1
EqualWidth	501.0	319.0	≥ 0.2	0.218743
Extended Chi2	543.5	236.5	0.03166	0.031037
FFD	349.0	471.0	≥ 0.2	1
FUSINTER	386.0	394.0	≥ 0.2	1
HDD	522.0	258.0	0.0661	0.064452
HellingerBD	459.0	361.0	≥ 0.2	0.50583
Heter-Disc	788.0	32.0	5.03E-9	0
ID3	526.0	294.0	0.1214	0.117369
IDD	572.0	248.0	0.02884	0.028947
Khiops	339.0	481.0	≥ 0.2	1
MDLP	551.0	229.0	0.02392	0.024213
Modified Chi2	335.0	485.0	≥ 0.2	1
MODL	406.5	413.5	≥ 0.2	1
MVD	659.0	161.0	5.382E-4	0.000798
PKID	244.0	536.0	≥ 0.2	1
UCPD	615.0	205.0	0.005096	0.005742
USD	494.0	326.0	≥ 0.2	0.256045
Zeta	672.5	147.5	2.407E-4	0.000399

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	[0.012 , 0.07865]	0.90276
Ameva	[-0.0051 , 0.012]	0.90276
Bayesian	[0.02065 , 0.08205]	0.90276
CACC	[0.0074 , 0.05235]	0.90276
CADD	[0.15775 , 0.28565]	0.90276
CAIM	[-0.00305 , 0.00945]	0.90276
Chi2	[-0.00435 , 0.0266]	0.90276
ClusterAnalysis	[0 , 0.03085]	0.90276
DIBD	[0.03735 , 0.075]	0.90276
Distance	[0.0178 , 0.05335]	0.90276
EqualFrequency	[-0.0135 , 0.00455]	0.90276
EqualWidth	[-0.0044 , 0.02055]	0.90276
Extended Chi2	[0.0033 , 0.0592]	0.90276
FFD	[-0.0206 , 0.004]	0.90276
FUSINTER	[-0.0153 , 0.0115]	0.90276
HDD	[0.00195 , 0.04675]	0.90276
HellingerBD	[-0.00765 , 0.0202]	0.90276
Heter-Disc	[0.1119 , 0.2275]	0.90276
ID3	[-0.0017 , 0.0467]	0.90276
IDD	[0.00405 , 0.0511]	0.90276
Khiops	[-0.01635 , 0.0036]	0.90276
MDLP	[0.004 , 0.04585]	0.90276
Modified Chi2	[-0.01725 , 0.0037]	0.90276
MODL	[-0.01275 , 0.0121]	0.90276
MVD	[0.0263 , 0.15045]	0.90276
PKID	[-0.02845 , -0.0024]	0.90276
UCPD	[0.01035 , 0.0394]	0.90276
USD	[-0.00885 , 0.0362]	0.90276
Zeta	[0.01105 , 0.03245]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0066 , 0.0902]	0.95024
Ameva	[-0.0083 , 0.01345]	0.95024
Bayesian	[0.01725 , 0.0866]	0.95024
CACC	[0.005 , 0.0554]	0.95024
CADD	[0.14105 , 0.30885]	0.95024
CAIM	[-0.00425 , 0.0105]	0.95024
Chi2	[-0.0095 , 0.0302]	0.95024
ClusterAnalysis	[-0.003 , 0.0359]	0.95024
DIBD	[0.0331 , 0.0798]	0.95024
Distance	[0.0159 , 0.05885]	0.95024
EqualFrequency	[-0.0171 , 0.0062]	0.95024
EqualWidth	[-0.0075 , 0.0219]	0.95024
Extended Chi2	[0.0011 , 0.06395]	0.95024
FFD	[-0.0241 , 0.0063]	0.95024
FUSINTER	[-0.01825 , 0.01475]	0.95024
HDD	[-0.00065 , 0.05]	0.95024
HellingerBD	[-0.0099 , 0.02305]	0.95024
Heter-Disc	[0.1025 , 0.23845]	0.95024
ID3	[-0.0076 , 0.0504]	0.95024
IDD	[0.00165 , 0.0571]	0.95024
Khiops	[-0.0193 , 0.00545]	0.95024
MDLP	[0.0015 , 0.05235]	0.95024
Modified Chi2	[-0.0195 , 0.0056]	0.95024
MODL	[-0.0157 , 0.0143]	0.95024
MVD	[0.0211 , 0.16315]	0.95024
PKID	[-0.03155 , -0.0006]	0.95024
UCPD	[0.00665 , 0.0415]	0.95024
USD	[-0.0147 , 0.03955]	0.95024
Zeta	[0.00955 , 0.03665]	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	466.0	314.0	≥ 0.2	0.28572
Ameva	355.0	465.0	≥ 0.2	1
Bayesian	594.0	186.0	0.003708	0.00432
CACC	531.0	289.0	0.10582	0.101292
CADD	748.0	32.0	1.006E-8	0.000001
CAIM	310.5	469.5	≥ 0.2	1
Chi2	314.0	466.0	≥ 0.2	1
ChiMerge	273.0	507.0	≥ 0.2	1
DIBD	611.5	168.5	0.0015089	0.001913
Distance	502.0	278.0	0.12056	0.11643
EqualFrequency	200.5	619.5	≥ 0.2	1
EqualWidth	266.0	554.0	≥ 0.2	1
Extended Chi2	474.0	306.0	≥ 0.2	0.23832
FFD	170.5	649.5	≥ 0.2	1
FUSINTER	323.5	496.5	≥ 0.2	1
HDD	517.0	303.0	0.15378	0.148475
HellingerBD	375.0	405.0	≥ 0.2	1
Heter-Disc	742.0	38.0	2.402E-8	0.000001
ID3	487.5	292.5	0.17785	0.170693
IDD	420.0	360.0	≥ 0.2	0.670379
Khiops	264.0	556.0	≥ 0.2	1
MDLP	436.0	384.0	≥ 0.2	0.721695
Modified Chi2	239.5	580.5	≥ 0.2	1
MODL	323.0	497.0	≥ 0.2	1
MVD	651.0	169.0	8.436E-4	0.00117
PKID	132.5	687.5	≥ 0.2	1
UCPD	547.0	273.0	0.06616	0.064577
USD	448.0	372.0	≥ 0.2	0.604207
Zeta	470.5	349.5	≥ 0.2	0.411476

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	[-0.007 , 0.06375]	0.90276
Ameva	[-0.0251 , 0.00865]	0.90276
Bayesian	[0.01445 , 0.0547]	0.90276
CACC	[-0.00035 , 0.04005]	0.90276
CADD	[0.1214 , 0.23055]	0.90276
CAIM	[-0.03 , 0.00395]	0.90276
Chi2	[-0.0282 , 0.00895]	0.90276
ChiMerge	[-0.03085 , 0]	0.90276
DIBD	[0.02355 , 0.0627]	0.90276
Distance	[-0.00065 , 0.03865]	0.90276
EqualFrequency	[-0.0299 , -0.0071]	0.90276
EqualWidth	[-0.0216 , -0.0017]	0.90276
Extended Chi2	[-0.0041 , 0.04015]	0.90276
FFD	[-0.02875 , -0.0094]	0.90276
FUSINTER	[-0.0283 , 0.0038]	0.90276
HDD	[-0.0018 , 0.02165]	0.90276
HellingerBD	[-0.0169 , 0.01295]	0.90276
Heter-Disc	[0.08995 , 0.1933]	0.90276
ID3	[-0.00235 , 0.02375]	0.90276
IDD	[-0.0126 , 0.03065]	0.90276
Khiops	[-0.02845 , -0.0029]	0.90276
MDLP	[-0.01145 , 0.02365]	0.90276
Modified Chi2	[-0.035 , -0.0045]	0.90276
MODL	[-0.02435 , 0.00465]	0.90276
MVD	[0.0309 , 0.11225]	0.90276
PKID	[-0.0444 , -0.0153]	0.90276
UCPD	[0.00175 , 0.03665]	0.90276
USD	[-0.00855 , 0.01625]	0.90276
Zeta	[-0.0087 , 0.02415]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01065 , 0.0732]	0.95024
Ameva	[-0.02935 , 0.01265]	0.95024
Bayesian	[0.01055 , 0.06015]	0.95024
CACC	[-0.004 , 0.04565]	0.95024
CADD	[0.1126 , 0.2463]	0.95024
CAIM	[-0.0352 , 0.00835]	0.95024
Chi2	[-0.0322 , 0.0146]	0.95024
ChiMerge	[-0.0359 , 0.003]	0.95024
DIBD	[0.01865 , 0.0683]	0.95024
Distance	[-0.0038 , 0.0446]	0.95024
EqualFrequency	[-0.0358 , -0.0053]	0.95024
EqualWidth	[-0.02505 , 0]	0.95024
Extended Chi2	[-0.0069 , 0.0448]	0.95024
FFD	[-0.0318 , -0.00775]	0.95024
FUSINTER	[-0.0332 , 0.00665]	0.95024
HDD	[-0.00445 , 0.02355]	0.95024
HellingerBD	[-0.0199 , 0.0157]	0.95024
Heter-Disc	[0.0815 , 0.20085]	0.95024
ID3	[-0.00705 , 0.02675]	0.95024
IDD	[-0.0169 , 0.03685]	0.95024
Khiops	[-0.03135 , -0.0002]	0.95024
MDLP	[-0.0141 , 0.0288]	0.95024
Modified Chi2	[-0.03965 , -0.0025]	0.95024
MODL	[-0.02795 , 0.00685]	0.95024
MVD	[0.02235 , 0.1242]	0.95024
PKID	[-0.04715 , -0.01335]	0.95024
UCPD	[-0.0011 , 0.03995]	0.95024
USD	[-0.0124 , 0.0192]	0.95024
Zeta	[-0.0128 , 0.03095]	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	332.5	487.5	≥ 0.2	1
Ameva	140.5	679.5	≥ 0.2	1
Bayesian	389.0	431.0	≥ 0.2	1
CACC	336.0	484.0	≥ 0.2	1
CADD	664.0	116.0	5.496E-5	0.000128
CAIM	143.0	677.0	≥ 0.2	1
Chi2	187.0	633.0	≥ 0.2	1
ChiMerge	113.0	667.0	≥ 0.2	1
ClusterAnalysis	168.5	611.5	≥ 0.2	1
Distance	327.5	455.5	≥ 0.2	1
EqualFrequency	34.0	746.0	≥ 0.2	1
EqualWidth	103.0	717.0	≥ 0.2	1
Extended Chi2	325.0	495.0	≥ 0.2	1
FFD	28.0	792.0	≥ 0.2	1
FUSINTER	87.0	733.0	≥ 0.2	1
HDD	253.0	527.0	≥ 0.2	1
HellingerBD	108.0	712.0	≥ 0.2	1
Heter-Disc	703.5	116.5	1.0977E-4	0.000224
ID3	236.0	544.0	≥ 0.2	1
IDD	260.5	559.5	≥ 0.2	1
Khiops	51.0	769.0	≥ 0.2	1
MDLP	243.0	537.0	≥ 0.2	1
Modified Chi2	75.0	745.0	≥ 0.2	1
MODL	101.0	719.0	≥ 0.2	1
MVD	444.0	336.0	≥ 0.2	0.446927
PKID	28.0	792.0	≥ 0.2	1
UCPD	192.5	627.5	≥ 0.2	1
USD	226.5	593.5	≥ 0.2	1
Zeta	213.0	567.0	≥ 0.2	1

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

10.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0484 , 0.01015]	0.90276
Ameva	[-0.0654 , -0.027]	0.90276
Bayesian	[-0.0364 , 0.0231]	0.90276
CACC	[-0.04425 , 0.0071]	0.90276
CADD	[0.07335 , 0.22745]	0.90276
CAIM	[-0.0728 , -0.03105]	0.90276
Chi2	[-0.08105 , -0.0282]	0.90276
ChiMerge	[-0.075 , -0.03735]	0.90276
ClusterAnalysis	[-0.0627 , -0.02355]	0.90276
Distance	[-0.02955 , 0.0072]	0.90276
EqualFrequency	[-0.08535 , -0.0471]	0.90276
EqualWidth	[-0.0733 , -0.0339]	0.90276
Extended Chi2	[-0.05275 , 0.0124]	0.90276
FFD	[-0.09125 , -0.0532]	0.90276
FUSINTER	[-0.0807 , -0.04015]	0.90276
HDD	[-0.0551 , -0.0058]	0.90276
HellingerBD	[-0.06985 , -0.0345]	0.90276
Heter-Disc	[0.0399 , 0.15735]	0.90276
ID3	[-0.06135 , -0.00825]	0.90276
IDD	[-0.05345 , -0.0066]	0.90276
Khiops	[-0.08535 , -0.0487]	0.90276
MDLP	[-0.04935 , -0.00565]	0.90276
Modified Chi2	[-0.0919 , -0.0451]	0.90276
MODL	[-0.074 , -0.0362]	0.90276
MVD	[-0.0173 , 0.05945]	0.90276
PKID	[-0.09815 , -0.05965]	0.90276
UCPD	[-0.04765 , -0.01625]	0.90276
USD	[-0.06665 , -0.0151]	0.90276
Zeta	[-0.0514 , -0.0088]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.05305 , 0.0236]	0.95024
Ameva	[-0.0687 , -0.0236]	0.95024
Bayesian	[-0.04005 , 0.02985]	0.95024
CACC	[-0.0486 , 0.01255]	0.95024
CADD	[0.0587 , 0.2454]	0.95024
CAIM	[-0.0774 , -0.02805]	0.95024
Chi2	[-0.0856 , -0.0226]	0.95024
ChiMerge	[-0.0798 , -0.0331]	0.95024
ClusterAnalysis	[-0.0683 , -0.01865]	0.95024
Distance	[-0.0332 , 0.01045]	0.95024
EqualFrequency	[-0.0897 , -0.04445]	0.95024
EqualWidth	[-0.0786 , -0.0307]	0.95024
Extended Chi2	[-0.057 , 0.01955]	0.95024
FFD	[-0.09605 , -0.04915]	0.95024
FUSINTER	[-0.08525 , -0.0363]	0.95024
HDD	[-0.0613 , 0.00015]	0.95024
HellingerBD	[-0.0744 , -0.0315]	0.95024
Heter-Disc	[0.0345 , 0.16545]	0.95024
ID3	[-0.0669 , -0.00255]	0.95024
IDD	[-0.0566 , -0.0004]	0.95024
Khiops	[-0.0898 , -0.04655]	0.95024
MDLP	[-0.0537 , -0.00145]	0.95024
Modified Chi2	[-0.0963 , -0.0424]	0.95024
MODL	[-0.07985 , -0.0319]	0.95024
MVD	[-0.02165 , 0.0747]	0.95024
PKID	[-0.10435 , -0.05655]	0.95024
UCPD	[-0.05075 , -0.01135]	0.95024
USD	[-0.07125 , -0.00895]	0.95024
Zeta	[-0.0556 , -0.0055]	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	379.0	441.0	≥ 0.2	1
Ameva	222.0	598.0	≥ 0.2	1
Bayesian	464.0	356.0	≥ 0.2	0.463081
CACC	412.0	368.0	≥ 0.2	0.753114
CADD	699.0	81.0	3.05E-6	0.000016
CAIM	181.5	638.5	≥ 0.2	1
Chi2	254.0	526.0	≥ 0.2	1
ChiMerge	111.0	669.0	≥ 0.2	1
ClusterAnalysis	278.0	502.0	≥ 0.2	1
DIBD	455.5	327.5	≥ 0.2	0.71115
EqualFrequency	115.0	665.0	≥ 0.2	1
EqualWidth	192.0	628.0	≥ 0.2	1
Extended Chi2	402.0	418.0	≥ 0.2	1
FFD	104.0	716.0	≥ 0.2	1
FUSINTER	127.5	692.5	≥ 0.2	1
HDD	363.0	457.0	≥ 0.2	1
HellingerBD	170.0	650.0	≥ 0.2	1
Heter-Disc	710.0	70.0	1.0484E-6	0.000008
ID3	334.0	446.0	≥ 0.2	1
IDD	315.0	505.0	≥ 0.2	1
Khiops	105.0	715.0	≥ 0.2	1
MDLP	201.5	618.5	≥ 0.2	1
Modified Chi2	102.0	678.0	≥ 0.2	1
MODL	174.0	646.0	≥ 0.2	1
MVD	448.0	332.0	≥ 0.2	0.41429
PKID	74.5	745.5	≥ 0.2	1
UCPD	377.0	443.0	≥ 0.2	1
USD	306.0	474.0	≥ 0.2	1
Zeta	317.5	502.5	≥ 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	[-0.03015 , 0.0318]	0.90276
Ameva	[-0.0481 , -0.0072]	0.90276
Bayesian	[-0.01625 , 0.0433]	0.90276
CACC	[-0.01715 , 0.02395]	0.90276
CADD	[0.10315 , 0.2152]	0.90276
CAIM	[-0.04885 , -0.0124]	0.90276
Chi2	[-0.06055 , -0.00455]	0.90276
ChiMerge	[-0.05335 , -0.0178]	0.90276
ClusterAnalysis	[-0.03865 , 0.00065]	0.90276
DIBD	[-0.0072 , 0.02955]	0.90276
EqualFrequency	[-0.07695 , -0.02275]	0.90276
EqualWidth	[-0.0551 , -0.0102]	0.90276
Extended Chi2	[-0.0269 , 0.0207]	0.90276
FFD	[-0.078 , -0.0267]	0.90276
FUSINTER	[-0.0654 , -0.0209]	0.90276
HDD	[-0.0366 , 0.0183]	0.90276
HellingerBD	[-0.05645 , -0.017]	0.90276
Heter-Disc	[0.07055 , 0.1731]	0.90276
ID3	[-0.0424 , 0.01465]	0.90276
IDD	[-0.03395 , 0.0048]	0.90276
Khiops	[-0.06155 , -0.02565]	0.90276
MDLP	[-0.01675 , -0.00435]	0.90276
Modified Chi2	[-0.0743 , -0.022]	0.90276
MODL	[-0.0585 , -0.01515]	0.90276
MVD	[-0.01125 , 0.09155]	0.90276
PKID	[-0.0835 , -0.03345]	0.90276
UCPD	[-0.0264 , 0.01075]	0.90276
USD	[-0.046 , 0.00575]	0.90276
Zeta	[-0.0287 , 0.0033]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03635 , 0.0436]	0.95024
Ameva	[-0.0558 , -0.00355]	0.95024
Bayesian	[-0.0239 , 0.0479]	0.95024
CACC	[-0.02285 , 0.02755]	0.95024
CADD	[0.07975 , 0.23825]	0.95024
CAIM	[-0.05235 , -0.0093]	0.95024
Chi2	[-0.06555 , 0.0002]	0.95024
ChiMerge	[-0.05885 , -0.0159]	0.95024
ClusterAnalysis	[-0.0446 , 0.0038]	0.95024
DIBD	[-0.01045 , 0.0332]	0.95024
EqualFrequency	[-0.087 , -0.01945]	0.95024
EqualWidth	[-0.0634 , -0.0085]	0.95024
Extended Chi2	[-0.03265 , 0.03205]	0.95024
FFD	[-0.0843 , -0.025]	0.95024
FUSINTER	[-0.06975 , -0.01815]	0.95024
HDD	[-0.0409 , 0.0222]	0.95024
HellingerBD	[-0.0608 , -0.01445]	0.95024
Heter-Disc	[0.06455 , 0.18135]	0.95024
ID3	[-0.04795 , 0.0202]	0.95024
IDD	[-0.03845 , 0.0088]	0.95024
Khiops	[-0.06855 , -0.02205]	0.95024
MDLP	[-0.0188 , -0.00335]	0.95024
Modified Chi2	[-0.08065 , -0.0184]	0.95024
MODL	[-0.0636 , -0.012]	0.95024
MVD	[-0.01505 , 0.1068]	0.95024
PKID	[-0.09 , -0.03055]	0.95024
UCPD	[-0.03485 , 0.01315]	0.95024
USD	[-0.0556 , 0.00905]	0.95024
Zeta	[-0.0317 , 0.005]	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	646.5	173.5	0.0010777	0.001418
Ameva	539.0	281.0	0.19922	0.189405
Bayesian	663.0	117.0	5.914E-5	0.000135
CACC	619.5	160.5	9.7E-4	0.001278
CADD	760.0	20.0	1.3496E-9	0
CAIM	480.5	299.5	≥ 0.2	0.203329
Chi2	540.5	279.5	0.08052000000000001	0.07777
ChiMerge	455.0	365.0	≥ 0.2	0.540135
ClusterAnalysis	619.5	200.5	0.012768	0.013412
DIBD	746.0	34.0	1.3552E-8	0.000001
Distance	665.0	115.0	5.106E-5	0.000121
EqualWidth	505.0	278.0	≥ 0.2	0.263356
Extended Chi2	623.0	157.0	7.94E-4	0.00112
FFD	377.0	443.0	≥ 0.2	1
FUSINTER	506.0	314.0	≥ 0.2	0.194602
HDD	611.0	169.0	0.0015496	0.001995
HellingerBD	591.5	228.5	0.03918	0.038774
Heter-Disc	762.0	18.0	9.204E-10	0
ID3	580.5	199.5	0.0070030000000000005	0.007584
IDD	632.0	188.0	0.002276	0.002783
Khiops	409.5	410.5	≥ 0.2	1
MDLP	621.0	199.0	0.011956	0.012457
Modified Chi2	479.5	340.5	≥ 0.2	0.345137
MODL	538.0	282.0	0.08666	0.08361
MVD	672.0	108.0	3.008E-5	0.000081
PKID	276.5	503.5	≥ 0.2	1
UCPD	724.0	96.0	5.846E-6	0.000024
USD	609.0	211.0	0.006658	0.007328
Zeta	599.0	184.0	0.010562	0.011261

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	[0.017 , 0.08005]	0.90276
Ameva	[0.00015 , 0.02055]	0.90276
Bayesian	[0.0325 , 0.0868]	0.90276
CACC	[0.0205 , 0.07005]	0.90276
CADD	[0.16445 , 0.3134]	0.90276
CAIM	[-0.0022 , 0.0157]	0.90276
Chi2	[0.0003 , 0.03275]	0.90276
ChiMerge	[-0.00455 , 0.0135]	0.90276
ClusterAnalysis	[0.0071 , 0.0299]	0.90276
DIBD	[0.0471 , 0.08535]	0.90276
Distance	[0.02275 , 0.07695]	0.90276
EqualWidth	[-0.0002 , 0.01]	0.90276
Extended Chi2	[0.0145 , 0.06485]	0.90276
FFD	[-0.0052 , 0.0033]	0.90276
FUSINTER	[-0.0021 , 0.0179]	0.90276
HDD	[0.01265 , 0.04995]	0.90276
HellingerBD	[0.00425 , 0.0307]	0.90276
Heter-Disc	[0.1172 , 0.2491]	0.90276
ID3	[0.01165 , 0.04785]	0.90276
IDD	[0.0116 , 0.04605]	0.90276
Khiops	[-0.00985 , 0.00535]	0.90276
MDLP	[0.00915 , 0.0584]	0.90276
Modified Chi2	[-0.0041 , 0.0147]	0.90276
MODL	[0.0002 , 0.02495]	0.90276
MVD	[0.0373 , 0.1476]	0.90276
PKID	[-0.01285 , 0.00015]	0.90276
UCPD	[0.02315 , 0.05225]	0.90276
USD	[0.00755 , 0.0426]	0.90276
Zeta	[0.0086 , 0.0481]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01325 , 0.09295]	0.95024
Ameva	[-0.0015 , 0.0226]	0.95024
Bayesian	[0.0291 , 0.0938]	0.95024
CACC	[0.01775 , 0.07675]	0.95024
CADD	[0.1543 , 0.3235]	0.95024
CAIM	[-0.0042 , 0.01865]	0.95024
Chi2	[-0.0014 , 0.03815]	0.95024
ChiMerge	[-0.0062 , 0.0171]	0.95024
ClusterAnalysis	[0.0053 , 0.0358]	0.95024
DIBD	[0.04445 , 0.0897]	0.95024
Distance	[0.01945 , 0.087]	0.95024
EqualWidth	[-0.00095 , 0.0127]	0.95024
Extended Chi2	[0.0119 , 0.06975]	0.95024
FFD	[-0.0061 , 0.00405]	0.95024
FUSINTER	[-0.0037 , 0.02105]	0.95024
HDD	[0.01045 , 0.0528]	0.95024
HellingerBD	[0.0024 , 0.03355]	0.95024
Heter-Disc	[0.1029 , 0.26215]	0.95024
ID3	[0.00865 , 0.0515]	0.95024
IDD	[0.00835 , 0.0537]	0.95024
Khiops	[-0.01105 , 0.0071]	0.95024
MDLP	[0.0058 , 0.0642]	0.95024
Modified Chi2	[-0.0062 , 0.0166]	0.95024
MODL	[-0.0017 , 0.02715]	0.95024
MVD	[0.03055 , 0.1884]	0.95024
PKID	[-0.016 , 0.0008]	0.95024
UCPD	[0.02085 , 0.05515]	0.95024
USD	[0.00475 , 0.0449]	0.95024
Zeta	[0.0072 , 0.05085]	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	563.0	257.0	0.03944	0.03909
Ameva	422.0	358.0	≥ 0.2	0.650162
Bayesian	607.0	173.0	0.0019174	0.002404
CACC	588.0	232.0	0.015876	0.016428
CADD	788.0	32.0	5.03E-9	0
CAIM	387.5	432.5	≥ 0.2	1
Chi2	430.0	350.0	≥ 0.2	0.571282
ChiMerge	319.0	501.0	≥ 0.2	1
ClusterAnalysis	554.0	266.0	0.13264	0.127133
DIBD	717.0	103.0	1.0404E-5	0.000036
Distance	628.0	192.0	0.00277	0.003262
EqualFrequency	278.0	505.0	≥ 0.2	1
Extended Chi2	531.0	249.0	0.04914	0.04831
FFD	258.5	561.5	≥ 0.2	1
FUSINTER	384.0	396.0	≥ 0.2	1
HDD	566.5	253.5	0.09132	0.088378
HellingerBD	435.0	348.0	≥ 0.2	0.951881
Heter-Disc	781.0	39.0	1.3796E-8	0.000001
ID3	533.0	250.0	0.12866	0.123853
IDD	494.5	285.5	0.14812999999999998	0.142149
Khiops	311.0	509.0	≥ 0.2	1
MDLP	514.0	266.0	0.08484	0.082317
Modified Chi2	325.0	495.0	≥ 0.2	1
MODL	387.0	433.0	≥ 0.2	1
MVD	664.0	156.0	4.022E-4	0.000611
PKID	131.0	652.0	≥ 0.2	1
UCPD	596.0	224.0	0.011536	0.012183
USD	496.0	284.0	0.14226	0.137224
Zeta	535.0	245.0	0.04284	0.041952

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	[0.00495 , 0.0707]	0.90276
Ameva	[-0.0102 , 0.01825]	0.90276
Bayesian	[0.0204 , 0.07255]	0.90276
CACC	[0.0106 , 0.06065]	0.90276
CADD	[0.14845 , 0.3017]	0.90276
CAIM	[-0.0153 , 0.00905]	0.90276
Chi2	[-0.00855 , 0.0264]	0.90276
ChiMerge	[-0.02055 , 0.0044]	0.90276
ClusterAnalysis	[0.0017 , 0.0216]	0.90276
DIBD	[0.0339 , 0.0733]	0.90276
Distance	[0.0102 , 0.0551]	0.90276
EqualFrequency	[-0.01 , 0.0002]	0.90276
Extended Chi2	[0.0022 , 0.0639]	0.90276
FFD	[-0.02335 , -0.0013]	0.90276
FUSINTER	[-0.01335 , 0.0107]	0.90276
HDD	[0.00345 , 0.03785]	0.90276
HellingerBD	[-0.00695 , 0.0182]	0.90276
Heter-Disc	[0.10425 , 0.2398]	0.90276
ID3	[0.00295 , 0.0366]	0.90276
IDD	[-0.00205 , 0.0407]	0.90276
Khiops	[-0.02165 , 0.00185]	0.90276
MDLP	[0.0004 , 0.0301]	0.90276
Modified Chi2	[-0.02035 , 0.0033]	0.90276
MODL	[-0.0185 , 0.01295]	0.90276
MVD	[0.03035 , 0.1346]	0.90276
PKID	[-0.03035 , -0.0074]	0.90276
UCPD	[0.0097 , 0.0455]	0.90276
USD	[-0.0008 , 0.03625]	0.90276
Zeta	[0.00265 , 0.0299]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00085 , 0.08385]	0.95024
Ameva	[-0.0133 , 0.02255]	0.95024
Bayesian	[0.0178 , 0.07635]	0.95024
CACC	[0.0061 , 0.0687]	0.95024
CADD	[0.1396 , 0.31445]	0.95024
CAIM	[-0.01815 , 0.01305]	0.95024
Chi2	[-0.0112 , 0.0313]	0.95024
ChiMerge	[-0.0219 , 0.0075]	0.95024
ClusterAnalysis	[0 , 0.02505]	0.95024
DIBD	[0.0307 , 0.0786]	0.95024
Distance	[0.0085 , 0.0634]	0.95024
EqualFrequency	[-0.0127 , 0.00095]	0.95024
Extended Chi2	[0 , 0.0716]	0.95024
FFD	[-0.0269 , -0.00005]	0.95024
FUSINTER	[-0.0165 , 0.01355]	0.95024
HDD	[0.00095 , 0.04045]	0.95024
HellingerBD	[-0.0086 , 0.02145]	0.95024
Heter-Disc	[0.0921 , 0.25175]	0.95024
ID3	[0 , 0.03985]	0.95024
IDD	[-0.00435 , 0.047]	0.95024
Khiops	[-0.02495 , 0.0034]	0.95024
MDLP	[-0.0016 , 0.0361]	0.95024
Modified Chi2	[-0.0238 , 0.00645]	0.95024
MODL	[-0.02195 , 0.0167]	0.95024
MVD	[0.02505 , 0.15595]	0.95024
PKID	[-0.0328 , -0.00605]	0.95024
UCPD	[0.00685 , 0.04885]	0.95024
USD	[-0.00475 , 0.0394]	0.95024
Zeta	[0.00025 , 0.0344]	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	425.0	395.0	≥ 0.2	0.834963
Ameva	263.0	517.0	≥ 0.2	1
Bayesian	513.0	307.0	0.17008	0.164173
CACC	445.0	375.0	≥ 0.2	0.633244
CADD	711.5	108.5	6.059E-5	0.000141
CAIM	216.0	564.0	≥ 0.2	1
Chi2	211.0	609.0	≥ 0.2	1
ChiMerge	236.5	543.5	≥ 0.2	1
ClusterAnalysis	306.0	474.0	≥ 0.2	1
DIBD	495.0	325.0	≥ 0.2	0.250461
Distance	418.0	402.0	≥ 0.2	0.909039
EqualFrequency	157.0	623.0	≥ 0.2	1
EqualWidth	249.0	531.0	≥ 0.2	1
FFD	155.0	665.0	≥ 0.2	1
FUSINTER	244.5	538.5	≥ 0.2	1
HDD	312.0	468.0	≥ 0.2	1
HellingerBD	253.0	527.0	≥ 0.2	1
Heter-Disc	645.0	135.0	2.054E-4	0.000363
ID3	361.0	459.0	≥ 0.2	1
IDD	368.0	452.0	≥ 0.2	1
Khiops	211.0	569.0	≥ 0.2	1
MDLP	317.0	463.0	≥ 0.2	1
Modified Chi2	125.5	694.5	≥ 0.2	1
MODL	214.0	566.0	≥ 0.2	1
MVD	560.0	260.0	0.04362	0.043082
PKID	101.0	719.0	≥ 0.2	1
UCPD	421.0	399.0	≥ 0.2	0.877156
USD	277.0	503.0	≥ 0.2	1
Zeta	349.5	470.5	≥ 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	[-0.04085 , 0.0532]	0.90276
Ameva	[-0.0555 , -0.0015]	0.90276
Bayesian	[-0.00725 , 0.0398]	0.90276
CACC	[-0.0142 , 0.02285]	0.90276
CADD	[0.0835 , 0.19735]	0.90276
CAIM	[-0.0565 , -0.00745]	0.90276
Chi2	[-0.0514 , -0.00925]	0.90276
ChiMerge	[-0.0592 , -0.0033]	0.90276
ClusterAnalysis	[-0.04015 , 0.0041]	0.90276
DIBD	[-0.0124 , 0.05275]	0.90276
Distance	[-0.0207 , 0.0269]	0.90276
EqualFrequency	[-0.06485 , -0.0145]	0.90276
EqualWidth	[-0.0639 , -0.0022]	0.90276
FFD	[-0.06435 , -0.0159]	0.90276
FUSINTER	[-0.0556 , -0.0028]	0.90276
HDD	[-0.0371 , 0.0046]	0.90276
HellingerBD	[-0.0544 , -0.0029]	0.90276
Heter-Disc	[0.06905 , 0.1769]	0.90276
ID3	[-0.0345 , 0.00895]	0.90276
IDD	[-0.044 , 0.0208]	0.90276
Khiops	[-0.05375 , -0.0087]	0.90276
MDLP	[-0.0417 , 0.0062]	0.90276
Modified Chi2	[-0.05605 , -0.01045]	0.90276
MODL	[-0.039 , -0.00615]	0.90276
MVD	[0.00685 , 0.1066]	0.90276
PKID	[-0.084 , -0.0232]	0.90276
UCPD	[-0.02935 , 0.02645]	0.90276
USD	[-0.02575 , 0.00045]	0.90276
Zeta	[-0.04125 , 0.00885]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.04725 , 0.064]	0.95024
Ameva	[-0.0599 , 0.00145]	0.95024
Bayesian	[-0.0177 , 0.04265]	0.95024
CACC	[-0.02105 , 0.0264]	0.95024
CADD	[0.0717 , 0.21495]	0.95024
CAIM	[-0.06125 , -0.0046]	0.95024
Chi2	[-0.05735 , -0.00665]	0.95024
ChiMerge	[-0.06395 , -0.0011]	0.95024
ClusterAnalysis	[-0.0448 , 0.0069]	0.95024
DIBD	[-0.01955 , 0.057]	0.95024
Distance	[-0.03205 , 0.03265]	0.95024
EqualFrequency	[-0.06975 , -0.0119]	0.95024
EqualWidth	[-0.0716 , 0]	0.95024
FFD	[-0.07225 , -0.01305]	0.95024
FUSINTER	[-0.0671 , -0.00055]	0.95024
HDD	[-0.0461 , 0.0075]	0.95024
HellingerBD	[-0.0582 , 0.00015]	0.95024
Heter-Disc	[0.06115 , 0.19005]	0.95024
ID3	[-0.0494 , 0.01185]	0.95024
IDD	[-0.0513 , 0.0258]	0.95024
Khiops	[-0.0614 , -0.00565]	0.95024
MDLP	[-0.0467 , 0.0135]	0.95024
Modified Chi2	[-0.0627 , -0.0093]	0.95024
MODL	[-0.0458 , -0.0039]	0.95024
MVD	[0.0022 , 0.1158]	0.95024
PKID	[-0.08955 , -0.02035]	0.95024
UCPD	[-0.0394 , 0.0303]	0.95024
USD	[-0.03105 , 0.00225]	0.95024
Zeta	[-0.0458 , 0.01195]	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	667.5	152.5	3.266E-4	0.000513
Ameva	574.5	245.5	0.02638	0.026314
Bayesian	689.0	91.0	7.486E-6	0.000029
CACC	691.0	129.0	7.198E-5	0.000151
CADD	805.0	15.0	2.492E-10	0
CAIM	478.0	302.0	≥ 0.2	0.216824
Chi2	568.0	252.0	0.03322	0.033135
ChiMerge	471.0	349.0	≥ 0.2	0.408441
ClusterAnalysis	649.5	170.5	0.003051	0.00358
DIBD	792.0	28.0	2.698E-9	0
Distance	716.0	104.0	1.1274E-5	0.000038
EqualFrequency	443.0	377.0	≥ 0.2	1
EqualWidth	561.5	258.5	≥ 0.2	0.236833
Extended Chi2	665.0	155.0	3.79E-4	0.000582
FUSINTER	522.0	298.0	0.13508	0.129205
HDD	626.0	154.0	6.67E-4	0.000966
HellingerBD	577.0	206.0	0.0275	0.027623
Heter-Disc	805.0	15.0	2.492E-10	0
ID3	660.5	159.5	0.005546000000000001	0.006162
IDD	681.5	138.5	1.3597000000000001E-4	0.000244
Khiops	374.5	405.5	≥ 0.2	1
MDLP	617.0	203.0	0.004654	0.005134
Modified Chi2	506.5	273.5	0.10603	0.101328
MODL	503.0	277.0	0.1172	0.113218
MVD	731.0	89.0	3.194E-6	0.000016
PKID	221.5	598.5	≥ 0.2	1
UCPD	769.5	50.5	2.429E-7	0.000003
USD	648.0	172.0	9.936E-4	0.001322
Zeta	646.0	174.0	0.0011066	0.001479

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	[0.0176 , 0.08545]	0.90276
Ameva	[0.0027 , 0.02435]	0.90276
Bayesian	[0.039 , 0.08865]	0.90276
CACC	[0.02335 , 0.07205]	0.90276
CADD	[0.16435 , 0.3153]	0.90276
CAIM	[-0.00205 , 0.01975]	0.90276
Chi2	[0.0036 , 0.0331]	0.90276
ChiMerge	[-0.004 , 0.0206]	0.90276
ClusterAnalysis	[0.0094 , 0.02875]	0.90276
DIBD	[0.0532 , 0.09125]	0.90276
Distance	[0.0267 , 0.078]	0.90276
EqualFrequency	[-0.0033 , 0.0052]	0.90276
EqualWidth	[0.0013 , 0.02335]	0.90276
Extended Chi2	[0.0159 , 0.06435]	0.90276
FUSINTER	[-0.001 , 0.0209]	0.90276
HDD	[0.01445 , 0.04855]	0.90276
HellingerBD	[0.0052 , 0.0335]	0.90276
Heter-Disc	[0.1223 , 0.2494]	0.90276
ID3	[0.0125 , 0.0479]	0.90276
IDD	[0.01625 , 0.0494]	0.90276
Khiops	[-0.0048 , 0.00355]	0.90276
MDLP	[0.00905 , 0.05925]	0.90276
Modified Chi2	[0 , 0.0134]	0.90276
MODL	[-0.00045 , 0.0237]	0.90276
MVD	[0.03975 , 0.14945]	0.90276
PKID	[-0.014 , -0.0014]	0.90276
UCPD	[0.02885 , 0.05595]	0.90276
USD	[0.01305 , 0.0396]	0.90276
Zeta	[0.0149 , 0.0494]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0149 , 0.0976]	0.95024
Ameva	[0.00125 , 0.02825]	0.95024
Bayesian	[0.0341 , 0.0937]	0.95024
CACC	[0.0198 , 0.07685]	0.95024
CADD	[0.1567 , 0.3297]	0.95024
CAIM	[-0.00375 , 0.023]	0.95024
Chi2	[0.0017 , 0.0372]	0.95024
ChiMerge	[-0.0063 , 0.0241]	0.95024
ClusterAnalysis	[0.00775 , 0.0318]	0.95024
DIBD	[0.04915 , 0.09605]	0.95024
Distance	[0.025 , 0.0843]	0.95024
EqualFrequency	[-0.00405 , 0.0061]	0.95024
EqualWidth	[0.00005 , 0.0269]	0.95024
Extended Chi2	[0.01305 , 0.07225]	0.95024
FUSINTER	[-0.00265 , 0.02335]	0.95024
HDD	[0.0125 , 0.05195]	0.95024
HellingerBD	[0.00325 , 0.0367]	0.95024
Heter-Disc	[0.10705 , 0.25915]	0.95024
ID3	[0.0118 , 0.05185]	0.95024
IDD	[0.01305 , 0.05595]	0.95024
Khiops	[-0.00565 , 0.0046]	0.95024
MDLP	[0.0042 , 0.06505]	0.95024
Modified Chi2	[-0.00095 , 0.015]	0.95024
MODL	[-0.0027 , 0.02685]	0.95024
MVD	[0.0336 , 0.1868]	0.95024
PKID	[-0.0147 , -0.00105]	0.95024
UCPD	[0.0266 , 0.0596]	0.95024
USD	[0.0103 , 0.04295]	0.95024
Zeta	[0.0118 , 0.0523]	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	599.0	221.0	0.010198	0.010861
Ameva	489.0	291.0	0.17114	0.164978
Bayesian	649.0	171.0	9.412E-4	0.001286
CACC	615.0	165.0	0.0012464	0.00162
CADD	800.0	20.0	6.748E-10	0
CAIM	439.0	341.0	≥ 0.2	0.489709
Chi2	436.0	344.0	≥ 0.2	0.515666
ChiMerge	394.0	386.0	≥ 0.2	0.949928
ClusterAnalysis	496.5	323.5	≥ 0.2	0.240661
DIBD	733.0	87.0	2.674E-6	0.000014
Distance	692.5	127.5	6.493E-5	0.000139
EqualFrequency	314.0	506.0	≥ 0.2	1
EqualWidth	396.0	384.0	≥ 0.2	0.927599
Extended Chi2	538.5	244.5	0.10876	0.104197
FFD	298.0	522.0	≥ 0.2	1
HDD	525.5	254.5	0.05903	0.056842
HellingerBD	454.0	366.0	≥ 0.2	0.549748
Heter-Disc	753.0	27.0	4.588E-9	0
ID3	554.5	265.5	0.05224	0.050129
IDD	592.0	228.0	0.013558	0.014004
Khiops	295.5	484.5	≥ 0.2	1
MDLP	585.5	234.5	0.04861	0.047753
Modified Chi2	310.0	470.0	≥ 0.2	1
MODL	384.0	436.0	≥ 0.2	1
MVD	687.0	133.0	9.446E-5	0.000192
PKID	176.5	603.5	≥ 0.2	1
UCPD	653.0	167.0	7.554E-4	0.001064
USD	510.5	309.5	≥ 0.2	0.371584
Zeta	586.0	234.0	0.017158	0.017673

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	[0.0114 , 0.0675]	0.90276
Ameva	[-0.0015 , 0.02015]	0.90276
Bayesian	[0.02165 , 0.0711]	0.90276
CACC	[0.01375 , 0.045]	0.90276
CADD	[0.1441 , 0.3012]	0.90276
CAIM	[-0.0084 , 0.02105]	0.90276
Chi2	[-0.00725 , 0.02345]	0.90276
ChiMerge	[-0.0115 , 0.0153]	0.90276
ClusterAnalysis	[-0.0038 , 0.0283]	0.90276
DIBD	[0.04015 , 0.0807]	0.90276
Distance	[0.0209 , 0.0654]	0.90276
EqualFrequency	[-0.0179 , 0.0021]	0.90276
EqualWidth	[-0.0107 , 0.01335]	0.90276
Extended Chi2	[0.0028 , 0.0556]	0.90276
FFD	[-0.0209 , 0.001]	0.90276
HDD	[0.0021 , 0.04195]	0.90276
HellingerBD	[-0.0075 , 0.01665]	0.90276
Heter-Disc	[0.11275 , 0.2282]	0.90276
ID3	[0.0031 , 0.0386]	0.90276
IDD	[0.00605 , 0.0443]	0.90276
Khiops	[-0.0175 , 0.0021]	0.90276
MDLP	[0.0041 , 0.0523]	0.90276
Modified Chi2	[-0.01615 , 0.0031]	0.90276
MODL	[-0.01115 , 0.0111]	0.90276
MVD	[0.03065 , 0.1358]	0.90276
PKID	[-0.02805 , -0.0075]	0.90276
UCPD	[0.01795 , 0.04375]	0.90276
USD	[-0.0024 , 0.02805]	0.90276
Zeta	[0.0064 , 0.0389]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0085 , 0.0802]	0.95024
Ameva	[-0.00345 , 0.02305]	0.95024
Bayesian	[0.0178 , 0.0769]	0.95024
CACC	[0.0116 , 0.0512]	0.95024
CADD	[0.12355 , 0.31265]	0.95024
CAIM	[-0.0124 , 0.02465]	0.95024
Chi2	[-0.0104 , 0.0258]	0.95024
ChiMerge	[-0.01475 , 0.01825]	0.95024
ClusterAnalysis	[-0.00665 , 0.0332]	0.95024
DIBD	[0.0363 , 0.08525]	0.95024
Distance	[0.01815 , 0.06975]	0.95024
EqualFrequency	[-0.02105 , 0.0037]	0.95024
EqualWidth	[-0.01355 , 0.0165]	0.95024
Extended Chi2	[0.00055 , 0.0671]	0.95024
FFD	[-0.02335 , 0.00265]	0.95024
HDD	[-0.00005 , 0.0468]	0.95024
HellingerBD	[-0.0092 , 0.02025]	0.95024
Heter-Disc	[0.10745 , 0.23975]	0.95024
ID3	[0 , 0.04185]	0.95024
IDD	[0.0041 , 0.04855]	0.95024
Khiops	[-0.01915 , 0.00435]	0.95024
MDLP	[0.00235 , 0.05765]	0.95024
Modified Chi2	[-0.01805 , 0.00495]	0.95024
MODL	[-0.0137 , 0.0134]	0.95024
MVD	[0.02575 , 0.14975]	0.95024
PKID	[-0.03005 , -0.00585]	0.95024
UCPD	[0.0155 , 0.04765]	0.95024
USD	[-0.00625 , 0.03275]	0.95024
Zeta	[0.0042 , 0.0424]	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	468.0	352.0	≥ 0.2	0.431682
Ameva	334.5	485.5	≥ 0.2	1
Bayesian	612.0	208.0	0.005832	0.006402
CACC	427.0	393.0	≥ 0.2	0.814036
CADD	765.0	55.0	1.0366E-7	0.000002
CAIM	289.0	498.0	≥ 0.2	1
Chi2	331.5	488.5	≥ 0.2	1
ChiMerge	258.0	522.0	≥ 0.2	1
ClusterAnalysis	303.0	517.0	≥ 0.2	1
DIBD	527.0	253.0	0.05618	0.055008
Distance	457.0	363.0	≥ 0.2	0.523173
EqualFrequency	169.0	611.0	≥ 0.2	1
EqualWidth	253.5	566.5	≥ 0.2	1
Extended Chi2	468.0	312.0	≥ 0.2	0.273312
FFD	154.0	626.0	≥ 0.2	1
FUSINTER	254.5	525.5	≥ 0.2	1
HellingerBD	280.0	500.0	≥ 0.2	1
Heter-Disc	714.0	106.0	1.3218E-5	0.000043
ID3	452.0	368.0	≥ 0.2	1
IDD	404.0	416.0	≥ 0.2	1
Khiops	221.0	559.0	≥ 0.2	1
MDLP	370.0	410.0	≥ 0.2	1
Modified Chi2	192.0	628.0	≥ 0.2	1
MODL	222.0	558.0	≥ 0.2	1
MVD	605.0	215.0	0.007918	0.008595
PKID	87.0	693.0	≥ 0.2	1
UCPD	456.0	364.0	≥ 0.2	0.531958
USD	326.5	493.5	≥ 0.2	1
Zeta	439.0	381.0	≥ 0.2	0.691723

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	[-0.01665 , 0.0537]	0.90276
Ameva	[-0.03615 , 0.00665]	0.90276
Bayesian	[0.00765 , 0.03205]	0.90276
CACC	[-0.01215 , 0.024]	0.90276
CADD	[0.11885 , 0.2424]	0.90276
CAIM	[-0.03685 , 0.00005]	0.90276
Chi2	[-0.0333 , 0.0073]	0.90276
ChiMerge	[-0.04675 , -0.00195]	0.90276
ClusterAnalysis	[-0.02165 , 0.0018]	0.90276
DIBD	[0.0058 , 0.0551]	0.90276
Distance	[-0.0183 , 0.0366]	0.90276
EqualFrequency	[-0.04995 , -0.01265]	0.90276
EqualWidth	[-0.03785 , -0.00345]	0.90276
Extended Chi2	[-0.0046 , 0.0371]	0.90276
FFD	[-0.04855 , -0.01445]	0.90276
FUSINTER	[-0.04195 , -0.0021]	0.90276
HellingerBD	[-0.0317 , 0.00065]	0.90276
Heter-Disc	[0.08465 , 0.19835]	0.90276
ID3	[-0.002 , 0.00465]	0.90276
IDD	[-0.02445 , 0.0219]	0.90276
Khiops	[-0.0457 , -0.0066]	0.90276
MDLP	[-0.0268 , 0.01845]	0.90276
Modified Chi2	[-0.04545 , -0.008]	0.90276
MODL	[-0.0327 , -0.00455]	0.90276
MVD	[0.0233 , 0.11295]	0.90276
PKID	[-0.0537 , -0.02005]	0.90276
UCPD	[-0.0142 , 0.0316]	0.90276
USD	[-0.01015 , 0.0021]	0.90276
Zeta	[-0.0199 , 0.0254]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.02135 , 0.0652]	0.95024
Ameva	[-0.04285 , 0.01075]	0.95024
Bayesian	[0.0051 , 0.0351]	0.95024
CACC	[-0.01465 , 0.02805]	0.95024
CADD	[0.1082 , 0.25925]	0.95024
CAIM	[-0.0392 , 0.0029]	0.95024
Chi2	[-0.03595 , 0.0113]	0.95024
ChiMerge	[-0.05 , 0.00065]	0.95024
ClusterAnalysis	[-0.02355 , 0.00445]	0.95024
DIBD	[-0.00015 , 0.0613]	0.95024
Distance	[-0.0222 , 0.0409]	0.95024
EqualFrequency	[-0.0528 , -0.01045]	0.95024
EqualWidth	[-0.04045 , -0.00095]	0.95024
Extended Chi2	[-0.0075 , 0.0461]	0.95024
FFD	[-0.05195 , -0.0125]	0.95024
FUSINTER	[-0.0468 , 0.00005]	0.95024
HellingerBD	[-0.0376 , 0.0034]	0.95024
Heter-Disc	[0.0701 , 0.21065]	0.95024
ID3	[-0.0033 , 0.00565]	0.95024
IDD	[-0.0296 , 0.02585]	0.95024
Khiops	[-0.0489 , -0.00405]	0.95024
MDLP	[-0.03005 , 0.0222]	0.95024
Modified Chi2	[-0.0481 , -0.00615]	0.95024
MODL	[-0.0361 , -0.0026]	0.95024
MVD	[0.01625 , 0.1258]	0.95024
PKID	[-0.05765 , -0.01775]	0.95024
UCPD	[-0.02075 , 0.03595]	0.95024
USD	[-0.0119 , 0.00375]	0.95024
Zeta	[-0.0235 , 0.0303]	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	534.0	286.0	0.09724	0.09424
Ameva	387.0	433.0	≥ 0.2	1
Bayesian	617.0	203.0	0.004654	0.005286
CACC	505.0	275.0	0.11072	0.107005
CADD	803.0	17.0	3.766E-10	0
CAIM	409.0	411.0	≥ 0.2	1
Chi2	411.0	409.0	≥ 0.2	0.983914
ChiMerge	361.0	459.0	≥ 0.2	1
ClusterAnalysis	405.0	375.0	≥ 0.2	0.828752
DIBD	712.0	108.0	1.5466E-5	0.000048
Distance	650.0	170.0	8.912E-4	0.001227
EqualFrequency	228.5	591.5	≥ 0.2	1
EqualWidth	348.0	435.0	≥ 0.2	1
Extended Chi2	527.0	253.0	0.05618	0.054585
FFD	206.0	577.0	≥ 0.2	1
FUSINTER	366.0	454.0	≥ 0.2	1
HDD	500.0	280.0	0.1275	0.122414
Heter-Disc	775.5	44.5	2.877E-8	0.000001
ID3	483.5	336.5	≥ 0.2	0.616204
IDD	519.0	301.0	0.14608	0.141069
Khiops	299.5	520.5	≥ 0.2	1
MDLP	537.0	283.0	0.0892	0.086043
Modified Chi2	283.0	537.0	≥ 0.2	1
MODL	342.5	477.5	≥ 0.2	1
MVD	649.5	170.5	9.162E-4	0.001232
PKID	135.0	685.0	≥ 0.2	1
UCPD	601.5	218.5	0.02684	0.026995
USD	431.0	389.0	≥ 0.2	0.772591
Zeta	538.0	282.0	0.08666	0.084131

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	[0.0003 , 0.0578]	0.90276
Ameva	[-0.02175 , 0.015]	0.90276
Bayesian	[0.0162 , 0.06435]	0.90276
CACC	[-0.0004 , 0.0478]	0.90276
CADD	[0.1347 , 0.2739]	0.90276
CAIM	[-0.0215 , 0.01345]	0.90276
Chi2	[-0.0197 , 0.01765]	0.90276
ChiMerge	[-0.0202 , 0.00765]	0.90276
ClusterAnalysis	[-0.01295 , 0.0169]	0.90276
DIBD	[0.0345 , 0.06985]	0.90276
Distance	[0.017 , 0.05645]	0.90276
EqualFrequency	[-0.0307 , -0.00425]	0.90276
EqualWidth	[-0.0182 , 0.00695]	0.90276
Extended Chi2	[0.0029 , 0.0544]	0.90276
FFD	[-0.0335 , -0.0052]	0.90276
FUSINTER	[-0.01665 , 0.0075]	0.90276
HDD	[-0.00065 , 0.0317]	0.90276
Heter-Disc	[0.10235 , 0.21925]	0.90276
ID3	[-0.00355 , 0.03155]	0.90276
IDD	[-0.0022 , 0.035]	0.90276
Khiops	[-0.0248 , 0.0007]	0.90276
MDLP	[0.0007 , 0.0423]	0.90276
Modified Chi2	[-0.0293 , -0.00035]	0.90276
MODL	[-0.01915 , 0.00635]	0.90276
MVD	[0.03085 , 0.1259]	0.90276
PKID	[-0.0358 , -0.01045]	0.90276
UCPD	[0.0088 , 0.0393]	0.90276
USD	[-0.0133 , 0.02445]	0.90276
Zeta	[0.0011 , 0.03345]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0039 , 0.0691]	0.95024
Ameva	[-0.02655 , 0.0185]	0.95024
Bayesian	[0.0118 , 0.0692]	0.95024
CACC	[-0.00405 , 0.0555]	0.95024
CADD	[0.1227 , 0.29695]	0.95024
CAIM	[-0.02435 , 0.0158]	0.95024
Chi2	[-0.0234 , 0.0215]	0.95024
ChiMerge	[-0.02305 , 0.0099]	0.95024
ClusterAnalysis	[-0.0157 , 0.0199]	0.95024
DIBD	[0.0315 , 0.0744]	0.95024
Distance	[0.01445 , 0.0608]	0.95024
EqualFrequency	[-0.03355 , -0.0024]	0.95024
EqualWidth	[-0.02145 , 0.0086]	0.95024
Extended Chi2	[-0.00015 , 0.0582]	0.95024
FFD	[-0.0367 , -0.00325]	0.95024
FUSINTER	[-0.02025 , 0.0092]	0.95024
HDD	[-0.0034 , 0.0376]	0.95024
Heter-Disc	[0.09325 , 0.23]	0.95024
ID3	[-0.0058 , 0.0365]	0.95024
IDD	[-0.00505 , 0.0408]	0.95024
Khiops	[-0.0291 , 0.00175]	0.95024
MDLP	[-0.00195 , 0.04655]	0.95024
Modified Chi2	[-0.0344 , 0.00085]	0.95024
MODL	[-0.0221 , 0.00865]	0.95024
MVD	[0.0241 , 0.15445]	0.95024
PKID	[-0.0384 , -0.00805]	0.95024
UCPD	[0.0067 , 0.042]	0.95024
USD	[-0.01685 , 0.0293]	0.95024
Zeta	[-0.00185 , 0.03675]	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	156.0	627.0	≥ 0.2	1
Ameva	36.0	744.0	≥ 0.2	1
Bayesian	150.0	630.0	≥ 0.2	1
CACC	112.5	707.5	≥ 0.2	1
CADD	428.0	363.0	≥ 0.2	1
CAIM	25.0	795.0	≥ 0.2	1
Chi2	92.0	728.0	≥ 0.2	1
ChiMerge	32.0	788.0	≥ 0.2	1
ClusterAnalysis	38.0	742.0	≥ 0.2	1
DIBD	116.5	703.5	≥ 0.2	1
Distance	70.0	710.0	≥ 0.2	1
EqualFrequency	18.0	762.0	≥ 0.2	1
EqualWidth	39.0	781.0	≥ 0.2	1
Extended Chi2	135.0	645.0	≥ 0.2	1
FFD	15.0	805.0	≥ 0.2	1
FUSINTER	27.0	753.0	≥ 0.2	1
HDD	106.0	714.0	≥ 0.2	1
HellingerBD	44.5	775.5	≥ 0.2	1
ID3	118.0	702.0	≥ 0.2	1
IDD	124.0	659.0	≥ 0.2	1
Khiops	14.0	806.0	≥ 0.2	1
MDLP	56.0	724.0	≥ 0.2	1
Modified Chi2	36.0	784.0	≥ 0.2	1
MODL	23.0	797.0	≥ 0.2	1
MVD	269.5	515.5	≥ 0.2	1
PKID	23.0	797.0	≥ 0.2	1
UCPD	67.0	753.0	≥ 0.2	1
USD	97.0	723.0	≥ 0.2	1
Zeta	68.0	712.0	≥ 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	[-0.171 , -0.05085]	0.90276
Ameva	[-0.22065 , -0.08815]	0.90276
Bayesian	[-0.17385 , -0.06335]	0.90276
CACC	[-0.16665 , -0.0688]	0.90276
CADD	[-0.0145 , 0.03465]	0.90276
CAIM	[-0.23075 , -0.10455]	0.90276
Chi2	[-0.2291 , -0.10405]	0.90276
ChiMerge	[-0.2275 , -0.1119]	0.90276
ClusterAnalysis	[-0.1933 , -0.08995]	0.90276
DIBD	[-0.15735 , -0.0399]	0.90276
Distance	[-0.1731 , -0.07055]	0.90276
EqualFrequency	[-0.2491 , -0.1172]	0.90276
EqualWidth	[-0.2398 , -0.10425]	0.90276
Extended Chi2	[-0.1769 , -0.06905]	0.90276
FFD	[-0.2494 , -0.1223]	0.90276
FUSINTER	[-0.2282 , -0.11275]	0.90276
HDD	[-0.19835 , -0.08465]	0.90276
HellingerBD	[-0.21925 , -0.10235]	0.90276
ID3	[-0.20485 , -0.08665]	0.90276
IDD	[-0.1795 , -0.0605]	0.90276
Khiops	[-0.2296 , -0.1181]	0.90276
MDLP	[-0.1832 , -0.0839]	0.90276
Modified Chi2	[-0.24985 , -0.122]	0.90276
MODL	[-0.21945 , -0.10755]	0.90276
MVD	[-0.12215 , 0]	0.90276
PKID	[-0.2644 , -0.1276]	0.90276
UCPD	[-0.18795 , -0.07305]	0.90276
USD	[-0.2117 , -0.09175]	0.90276
Zeta	[-0.2033 , -0.0873]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.18615 , -0.0367]	0.95024
Ameva	[-0.2274 , -0.08275]	0.95024
Bayesian	[-0.1845 , -0.05185]	0.95024
CACC	[-0.1782 , -0.0578]	0.95024
CADD	[-0.01625 , 0.0648]	0.95024
CAIM	[-0.24135 , -0.0959]	0.95024
Chi2	[-0.2357 , -0.09305]	0.95024
ChiMerge	[-0.23845 , -0.1025]	0.95024
ClusterAnalysis	[-0.20085 , -0.0815]	0.95024
DIBD	[-0.16545 , -0.0345]	0.95024
Distance	[-0.18135 , -0.06455]	0.95024
EqualFrequency	[-0.26215 , -0.1029]	0.95024
EqualWidth	[-0.25175 , -0.0921]	0.95024
Extended Chi2	[-0.19005 , -0.06115]	0.95024
FFD	[-0.25915 , -0.10705]	0.95024
FUSINTER	[-0.23975 , -0.10745]	0.95024
HDD	[-0.21065 , -0.0701]	0.95024
HellingerBD	[-0.23 , -0.09325]	0.95024
ID3	[-0.2257 , -0.07035]	0.95024
IDD	[-0.19455 , -0.0526]	0.95024
Khiops	[-0.24545 , -0.11055]	0.95024
MDLP	[-0.1933 , -0.07605]	0.95024
Modified Chi2	[-0.25825 , -0.108]	0.95024
MODL	[-0.22795 , -0.0993]	0.95024
MVD	[-0.13475 , 0.00385]	0.95024
PKID	[-0.27445 , -0.11635]	0.95024
UCPD	[-0.20095 , -0.06615]	0.95024
USD	[-0.22335 , -0.0811]	0.95024
Zeta	[-0.21675 , -0.07965]	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	464.0	356.0	≥ 0.2	0.463833
Ameva	343.0	477.0	≥ 0.2	1
Bayesian	580.0	200.0	0.007162	0.007743
CACC	428.0	352.0	≥ 0.2	0.591083
CADD	751.0	69.0	4.766E-7	0.000004
CAIM	290.0	490.0	≥ 0.2	1
Chi2	327.0	453.0	≥ 0.2	1
ChiMerge	294.0	526.0	≥ 0.2	1
ClusterAnalysis	292.5	487.5	≥ 0.2	1
DIBD	544.0	236.0	0.03108	0.03108
Distance	446.0	334.0	≥ 0.2	0.430429
EqualFrequency	199.5	580.5	≥ 0.2	1
EqualWidth	250.0	533.0	≥ 0.2	1
Extended Chi2	459.0	361.0	≥ 0.2	0.505115
FFD	159.5	660.5	≥ 0.2	1
FUSINTER	265.5	554.5	≥ 0.2	1
HDD	368.0	452.0	≥ 0.2	1
HellingerBD	336.5	483.5	≥ 0.2	1
Heter-Disc	702.0	118.0	3.296E-5	0.000084
IDD	404.0	416.0	≥ 0.2	1
Khiops	219.0	561.0	≥ 0.2	1
MDLP	371.0	449.0	≥ 0.2	1
Modified Chi2	166.0	654.0	≥ 0.2	1
MODL	232.0	588.0	≥ 0.2	1
MVD	615.0	205.0	0.005096	0.005742
PKID	83.5	736.5	≥ 0.2	1
UCPD	434.0	346.0	≥ 0.2	0.533888
USD	249.5	530.5	≥ 0.2	1
Zeta	419.0	401.0	≥ 0.2	0.898222

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	[-0.0163 , 0.05265]	0.90276
Ameva	[-0.0341 , 0.00825]	0.90276
Bayesian	[0.0059 , 0.02985]	0.90276
CACC	[-0.01065 , 0.02585]	0.90276
CADD	[0.11365 , 0.2587]	0.90276
CAIM	[-0.0409 , 0.0023]	0.90276
Chi2	[-0.0309 , 0.01115]	0.90276
ChiMerge	[-0.0467 , 0.0017]	0.90276
ClusterAnalysis	[-0.02375 , 0.00235]	0.90276
DIBD	[0.00825 , 0.06135]	0.90276
Distance	[-0.01465 , 0.0424]	0.90276
EqualFrequency	[-0.04785 , -0.01165]	0.90276
EqualWidth	[-0.0366 , -0.00295]	0.90276
Extended Chi2	[-0.00895 , 0.0345]	0.90276
FFD	[-0.0479 , -0.0125]	0.90276
FUSINTER	[-0.0386 , -0.0031]	0.90276
HDD	[-0.00465 , 0.002]	0.90276
HellingerBD	[-0.03155 , 0.00355]	0.90276
Heter-Disc	[0.08665 , 0.20485]	0.90276
IDD	[-0.0248 , 0.0231]	0.90276
Khiops	[-0.0447 , -0.00725]	0.90276
MDLP	[-0.0292 , 0.02035]	0.90276
Modified Chi2	[-0.04675 , -0.00695]	0.90276
MODL	[-0.03525 , -0.0059]	0.90276
MVD	[0.022 , 0.11385]	0.90276
PKID	[-0.05715 , -0.0251]	0.90276
UCPD	[-0.01365 , 0.03245]	0.90276
USD	[-0.01075 , -0.0006]	0.90276
Zeta	[-0.02615 , 0.02535]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0226 , 0.0679]	0.95024
Ameva	[-0.03815 , 0.01545]	0.95024
Bayesian	[0.0043 , 0.033]	0.95024
CACC	[-0.01285 , 0.0305]	0.95024
CADD	[0.10655 , 0.27765]	0.95024
CAIM	[-0.04755 , 0.00715]	0.95024
Chi2	[-0.0348 , 0.0166]	0.95024
ChiMerge	[-0.0504 , 0.0076]	0.95024
ClusterAnalysis	[-0.02675 , 0.00705]	0.95024
DIBD	[0.00255 , 0.0669]	0.95024
Distance	[-0.0202 , 0.04795]	0.95024
EqualFrequency	[-0.0515 , -0.00865]	0.95024
EqualWidth	[-0.03985 , 0]	0.95024
Extended Chi2	[-0.01185 , 0.0494]	0.95024
FFD	[-0.05185 , -0.0118]	0.95024
FUSINTER	[-0.04185 , 0]	0.95024
HDD	[-0.00565 , 0.0033]	0.95024
HellingerBD	[-0.0365 , 0.0058]	0.95024
Heter-Disc	[0.07035 , 0.2257]	0.95024
IDD	[-0.02745 , 0.0292]	0.95024
Khiops	[-0.047 , -0.00455]	0.95024
MDLP	[-0.03395 , 0.0265]	0.95024
Modified Chi2	[-0.04905 , -0.0055]	0.95024
MODL	[-0.039 , -0.00345]	0.95024
MVD	[0.0167 , 0.125]	0.95024
PKID	[-0.0589 , -0.022]	0.95024
UCPD	[-0.0184 , 0.03645]	0.95024
USD	[-0.0118 , 0]	0.95024
Zeta	[-0.0288 , 0.032]	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	473.0	347.0	≥ 0.2	1
Ameva	277.0	503.0	≥ 0.2	1
Bayesian	494.0	286.0	0.15012	0.144759
CACC	453.0	367.0	≥ 0.2	0.558752
CADD	735.0	48.0	3.566E-7	0.000005
CAIM	272.0	548.0	≥ 0.2	1
Chi2	306.0	514.0	≥ 0.2	1
ChiMerge	248.0	572.0	≥ 0.2	1
ClusterAnalysis	360.0	420.0	≥ 0.2	1
DIBD	559.5	260.5	0.04436	0.043426
Distance	505.0	315.0	≥ 0.2	0.199267
EqualFrequency	188.0	632.0	≥ 0.2	1
EqualWidth	285.5	494.5	≥ 0.2	1
Extended Chi2	452.0	368.0	≥ 0.2	0.567175
FFD	138.5	681.5	≥ 0.2	1
FUSINTER	228.0	592.0	≥ 0.2	1
HDD	416.0	404.0	≥ 0.2	0.930379
HellingerBD	301.0	519.0	≥ 0.2	1
Heter-Disc	659.0	124.0	3.542E-4	0.000582
ID3	416.0	404.0	≥ 0.2	0.930379
Khiops	174.0	646.0	≥ 0.2	1
MDLP	381.5	398.5	≥ 0.2	1
Modified Chi2	185.0	595.0	≥ 0.2	1
MODL	256.5	563.5	≥ 0.2	1
MVD	555.0	225.0	0.0205	0.020913
PKID	68.0	752.0	≥ 0.2	1
UCPD	460.0	360.0	≥ 0.2	0.497274
USD	356.5	423.5	≥ 0.2	1
Zeta	390.0	430.0	≥ 0.2	1

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

21.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.00355 , 0.0133]	0.90276
Ameva	[-0.03935 , 0.00085]	0.90276
Bayesian	[-0.003 , 0.0449]	0.90276
CACC	[-0.0184 , 0.033]	0.90276
CADD	[0.0882 , 0.20135]	0.90276
CAIM	[-0.052 , -0.00195]	0.90276
Chi2	[-0.0352 , 0.00295]	0.90276
ChiMerge	[-0.0511 , -0.00405]	0.90276
ClusterAnalysis	[-0.03065 , 0.0126]	0.90276
DIBD	[0.0066 , 0.05345]	0.90276
Distance	[-0.0048 , 0.03395]	0.90276
EqualFrequency	[-0.04605 , -0.0116]	0.90276
EqualWidth	[-0.0407 , 0.00205]	0.90276
Extended Chi2	[-0.0208 , 0.044]	0.90276
FFD	[-0.0494 , -0.01625]	0.90276
FUSINTER	[-0.0443 , -0.00605]	0.90276
HDD	[-0.0219 , 0.02445]	0.90276
HellingerBD	[-0.035 , 0.0022]	0.90276
Heter-Disc	[0.0605 , 0.1795]	0.90276
ID3	[-0.0231 , 0.0248]	0.90276
Khiops	[-0.0539 , -0.01365]	0.90276
MDLP	[-0.01565 , 0.01625]	0.90276
Modified Chi2	[-0.0473 , -0.0093]	0.90276
MODL	[-0.04175 , -0.0034]	0.90276
MVD	[0.01215 , 0.09065]	0.90276
PKID	[-0.05565 , -0.0226]	0.90276
UCPD	[-0.01805 , 0.03225]	0.90276
USD	[-0.0301 , 0.0177]	0.90276
Zeta	[-0.03285 , 0.02005]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.00505 , 0.01605]	0.95024
Ameva	[-0.04595 , 0.00355]	0.95024
Bayesian	[-0.0074 , 0.0498]	0.95024
CACC	[-0.0247 , 0.03815]	0.95024
CADD	[0.0776 , 0.21765]	0.95024
CAIM	[-0.0584 , 0.0012]	0.95024
Chi2	[-0.0423 , 0.00605]	0.95024
ChiMerge	[-0.0571 , -0.00165]	0.95024
ClusterAnalysis	[-0.03685 , 0.0169]	0.95024
DIBD	[0.0004 , 0.0566]	0.95024
Distance	[-0.0088 , 0.03845]	0.95024
EqualFrequency	[-0.0537 , -0.00835]	0.95024
EqualWidth	[-0.047 , 0.00435]	0.95024
Extended Chi2	[-0.0258 , 0.0513]	0.95024
FFD	[-0.05595 , -0.01305]	0.95024
FUSINTER	[-0.04855 , -0.0041]	0.95024
HDD	[-0.02585 , 0.0296]	0.95024
HellingerBD	[-0.0408 , 0.00505]	0.95024
Heter-Disc	[0.0526 , 0.19455]	0.95024
ID3	[-0.0292 , 0.02745]	0.95024
Khiops	[-0.05835 , -0.0109]	0.95024
MDLP	[-0.01985 , 0.0189]	0.95024
Modified Chi2	[-0.06325 , -0.0073]	0.95024
MODL	[-0.0454 , -0.0009]	0.95024
MVD	[0.00665 , 0.1018]	0.95024
PKID	[-0.06145 , -0.01925]	0.95024
UCPD	[-0.02305 , 0.03635]	0.95024
USD	[-0.03605 , 0.02145]	0.95024
Zeta	[-0.03845 , 0.0251]	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	670.0	150.0	2.806E-4	0.000463
Ameva	540.5	239.5	0.0353	0.034782
Bayesian	639.0	141.0	3.022E-4	0.000498
CACC	665.0	155.0	3.79E-4	0.000582
CADD	806.0	14.0	2.0E-10	0
CAIM	494.5	325.5	≥ 0.2	0.509348
Chi2	536.0	284.0	0.09182	0.08907
ChiMerge	481.0	339.0	≥ 0.2	0.641992
ClusterAnalysis	556.0	264.0	0.04976	0.048936
DIBD	769.0	51.0	6.46E-8	0.000001
Distance	715.0	105.0	1.221E-5	0.00004
EqualFrequency	410.5	409.5	≥ 0.2	1
EqualWidth	509.0	311.0	≥ 0.2	0.383363
Extended Chi2	569.0	211.0	0.01159	0.012097
FFD	405.5	374.5	≥ 0.2	0.821789
FUSINTER	484.5	295.5	0.19184	0.183398
HDD	559.0	221.0	0.0175	0.018012
HellingerBD	520.5	299.5	≥ 0.2	0.2989
Heter-Disc	806.0	14.0	2.0E-10	0
ID3	561.0	219.0	0.016148	0.016509
IDD	646.0	174.0	0.0011066	0.001451
MDLP	593.5	226.5	0.012768999999999999	0.013236
Modified Chi2	473.5	346.5	≥ 0.2	0.388059
MODL	449.0	331.0	≥ 0.2	0.40224
MVD	721.0	59.0	3.258E-7	0.000004
PKID	269.0	511.0	≥ 0.2	1
UCPD	679.0	101.0	1.729E-5	0.000053
USD	565.0	255.0	0.03684	0.036607
Zeta	600.0	180.0	0.002752	0.003308

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	[0.0176 , 0.0802]	0.90276
Ameva	[0.00305 , 0.0259]	0.90276
Bayesian	[0.02845 , 0.0777]	0.90276
CACC	[0.0192 , 0.06045]	0.90276
CADD	[0.1538 , 0.3104]	0.90276
CAIM	[-0.0032 , 0.02115]	0.90276
Chi2	[0.0006 , 0.02765]	0.90276
ChiMerge	[-0.0036 , 0.01635]	0.90276
ClusterAnalysis	[0.0029 , 0.02845]	0.90276
DIBD	[0.0487 , 0.08535]	0.90276
Distance	[0.02565 , 0.06155]	0.90276
EqualFrequency	[-0.00535 , 0.00985]	0.90276
EqualWidth	[-0.00185 , 0.02165]	0.90276
Extended Chi2	[0.0087 , 0.05375]	0.90276
FFD	[-0.00355 , 0.0048]	0.90276
FUSINTER	[-0.0021 , 0.0175]	0.90276
HDD	[0.0066 , 0.0457]	0.90276
HellingerBD	[-0.0007 , 0.0248]	0.90276
Heter-Disc	[0.1181 , 0.2296]	0.90276
ID3	[0.00725 , 0.0447]	0.90276
IDD	[0.01365 , 0.0539]	0.90276
MDLP	[0.0056 , 0.05085]	0.90276
Modified Chi2	[-0.0054 , 0.0114]	0.90276
MODL	[-0.00625 , 0.0192]	0.90276
MVD	[0.04115 , 0.1279]	0.90276
PKID	[-0.016 , -0.00015]	0.90276
UCPD	[0.0252 , 0.0505]	0.90276
USD	[0.00515 , 0.03735]	0.90276
Zeta	[0.01215 , 0.04605]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0153 , 0.08635]	0.95024
Ameva	[0.0014 , 0.0286]	0.95024
Bayesian	[0.0231 , 0.08335]	0.95024
CACC	[0.0167 , 0.0687]	0.95024
CADD	[0.13705 , 0.33]	0.95024
CAIM	[-0.00505 , 0.02485]	0.95024
Chi2	[-0.0034 , 0.0313]	0.95024
ChiMerge	[-0.00545 , 0.0193]	0.95024
ClusterAnalysis	[0.0002 , 0.03135]	0.95024
DIBD	[0.04655 , 0.0898]	0.95024
Distance	[0.02205 , 0.06855]	0.95024
EqualFrequency	[-0.0071 , 0.01105]	0.95024
EqualWidth	[-0.0034 , 0.02495]	0.95024
Extended Chi2	[0.00565 , 0.0614]	0.95024
FFD	[-0.0046 , 0.00565]	0.95024
FUSINTER	[-0.00435 , 0.01915]	0.95024
HDD	[0.00405 , 0.0489]	0.95024
HellingerBD	[-0.00175 , 0.0291]	0.95024
Heter-Disc	[0.11055 , 0.24545]	0.95024
ID3	[0.00455 , 0.047]	0.95024
IDD	[0.0109 , 0.05835]	0.95024
MDLP	[0.0029 , 0.0563]	0.95024
Modified Chi2	[-0.0076 , 0.0127]	0.95024
MODL	[-0.00835 , 0.0212]	0.95024
MVD	[0.0378 , 0.14015]	0.95024
PKID	[-0.018 , 0.0011]	0.95024
UCPD	[0.02255 , 0.0537]	0.95024
USD	[0.002 , 0.04005]	0.95024
Zeta	[0.0104 , 0.0527]	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	444.0	336.0	≥ 0.2	0.446927
Ameva	353.0	467.0	≥ 0.2	1
Bayesian	543.0	277.0	0.07472	0.072747
CACC	517.0	263.0	0.07738	0.075197
CADD	730.0	50.0	1.143E-7	0.000002
CAIM	261.0	519.0	≥ 0.2	1
Chi2	343.0	477.0	≥ 0.2	1
ChiMerge	229.0	551.0	≥ 0.2	1
ClusterAnalysis	384.0	436.0	≥ 0.2	1
DIBD	537.0	243.0	0.03996	0.039555
Distance	618.5	201.5	0.10307	0.098981
EqualFrequency	199.0	621.0	≥ 0.2	1
EqualWidth	266.0	514.0	≥ 0.2	1
Extended Chi2	463.0	317.0	≥ 0.2	0.305037
FFD	203.0	617.0	≥ 0.2	1
FUSINTER	234.5	585.5	≥ 0.2	1
HDD	410.0	370.0	≥ 0.2	0.774819
HellingerBD	283.0	537.0	≥ 0.2	1
Heter-Disc	724.0	56.0	2.32E-7	0.000003
ID3	449.0	371.0	≥ 0.2	0.594847
IDD	398.5	381.5	≥ 0.2	0.899879
Khiops	226.5	593.5	≥ 0.2	1
Modified Chi2	237.0	583.0	≥ 0.2	1
MODL	280.0	500.0	≥ 0.2	1
MVD	576.5	243.5	0.06618	0.064452
PKID	131.0	689.0	≥ 0.2	1
UCPD	482.0	338.0	≥ 0.2	0.329811
USD	422.0	398.0	≥ 0.2	0.866571
Zeta	389.0	391.0	≥ 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	[-0.01235 , 0.0415]	0.90276
Ameva	[-0.0287 , 0.00715]	0.90276
Bayesian	[0.0029 , 0.05595]	0.90276
CACC	[0.0021 , 0.03785]	0.90276
CADD	[0.1054 , 0.2226]	0.90276
CAIM	[-0.0341 , -0.0008]	0.90276
Chi2	[-0.04195 , 0.01105]	0.90276
ChiMerge	[-0.04585 , -0.004]	0.90276
ClusterAnalysis	[-0.02365 , 0.01145]	0.90276
DIBD	[0.00565 , 0.04935]	0.90276
Distance	[0.00435 , 0.01675]	0.90276
EqualFrequency	[-0.0584 , -0.00915]	0.90276
EqualWidth	[-0.0301 , -0.0004]	0.90276
Extended Chi2	[-0.0062 , 0.0417]	0.90276
FFD	[-0.05925 , -0.00905]	0.90276
FUSINTER	[-0.0523 , -0.0041]	0.90276
HDD	[-0.01845 , 0.0268]	0.90276
HellingerBD	[-0.0423 , -0.0007]	0.90276
Heter-Disc	[0.0839 , 0.1832]	0.90276
ID3	[-0.02035 , 0.0292]	0.90276
IDD	[-0.01625 , 0.01565]	0.90276
Khiops	[-0.05085 , -0.0056]	0.90276
Modified Chi2	[-0.05455 , -0.0048]	0.90276
MODL	[-0.04305 , 0.00095]	0.90276
MVD	[0.00855 , 0.10915]	0.90276
PKID	[-0.0604 , -0.0194]	0.90276
UCPD	[-0.0125 , 0.029]	0.90276
USD	[-0.0276 , 0.02075]	0.90276
Zeta	[-0.0142 , 0.0123]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01875 , 0.05455]	0.95024
Ameva	[-0.0369 , 0.00885]	0.95024
Bayesian	[-0.00265 , 0.0586]	0.95024
CACC	[-0.00295 , 0.0411]	0.95024
CADD	[0.09265 , 0.244]	0.95024
CAIM	[-0.03965 , 0.00135]	0.95024
Chi2	[-0.0458 , 0.0159]	0.95024
ChiMerge	[-0.05235 , -0.0015]	0.95024
ClusterAnalysis	[-0.0288 , 0.0141]	0.95024
DIBD	[0.00145 , 0.0537]	0.95024
Distance	[0.00335 , 0.0188]	0.95024
EqualFrequency	[-0.0642 , -0.0058]	0.95024
EqualWidth	[-0.0361 , 0.0016]	0.95024
Extended Chi2	[-0.0135 , 0.0467]	0.95024
FFD	[-0.06505 , -0.0042]	0.95024
FUSINTER	[-0.05765 , -0.00235]	0.95024
HDD	[-0.0222 , 0.03005]	0.95024
HellingerBD	[-0.04655 , 0.00195]	0.95024
Heter-Disc	[0.07605 , 0.1933]	0.95024
ID3	[-0.0265 , 0.03395]	0.95024
IDD	[-0.0189 , 0.01985]	0.95024
Khiops	[-0.0563 , -0.0029]	0.95024
Modified Chi2	[-0.06005 , -0.00285]	0.95024
MODL	[-0.04955 , 0.0026]	0.95024
MVD	[0.00405 , 0.1228]	0.95024
PKID	[-0.0658 , -0.01675]	0.95024
UCPD	[-0.0202 , 0.03175]	0.95024
USD	[-0.0322 , 0.02595]	0.95024
Zeta	[-0.01775 , 0.0142]	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	657.0	163.0	6.032E-4	0.000879
Ameva	480.0	300.0	≥ 0.2	0.206615
Bayesian	744.0	76.0	9.584E-7	0.000007
CACC	700.0	120.0	1.4094E-4	0.000266
CADD	804.0	16.0	3.074E-10	0
CAIM	466.0	354.0	≥ 0.2	0.447593
Chi2	552.0	268.0	0.14038	0.134537
ChiMerge	485.0	335.0	≥ 0.2	0.309379
ClusterAnalysis	580.5	239.5	0.021150000000000002	0.021317
DIBD	745.0	75.0	8.694E-7	0.000006
Distance	678.0	102.0	1.8742E-5	0.000057
EqualFrequency	340.5	479.5	≥ 0.2	1
EqualWidth	495.0	325.0	≥ 0.2	0.250461
Extended Chi2	694.5	125.5	5.648E-5	0.000124
FFD	273.5	506.5	≥ 0.2	1
FUSINTER	470.0	310.0	≥ 0.2	0.261277
HDD	628.0	192.0	0.00277	0.003315
HellingerBD	537.0	283.0	0.0892	0.086572
Heter-Disc	784.0	36.0	9.054E-9	0
ID3	654.0	166.0	7.144E-4	0.000995
IDD	595.0	185.0	0.003532	0.004134
Khiops	346.5	473.5	≥ 0.2	1
MDLP	583.0	237.0	0.019246	0.019697
MODL	489.0	294.0	≥ 0.2	0.381571
MVD	679.5	100.5	1.6615999999999998E-5	0.00005
PKID	197.0	623.0	≥ 0.2	1
UCPD	656.0	124.0	9.754E-5	0.000195
USD	618.0	202.0	0.004444	0.004924
Zeta	597.0	183.0	0.003198	0.003784

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	[0.0143 , 0.08655]	0.90276
Ameva	[-0.0026 , 0.02405]	0.90276
Bayesian	[0.03485 , 0.07825]	0.90276
CACC	[0.0202 , 0.05745]	0.90276
CADD	[0.168 , 0.30995]	0.90276
CAIM	[-0.0061 , 0.01945]	0.90276
Chi2	[0.0015 , 0.02595]	0.90276
ChiMerge	[-0.0037 , 0.01725]	0.90276
ClusterAnalysis	[0.0045 , 0.035]	0.90276
DIBD	[0.0451 , 0.0919]	0.90276
Distance	[0.022 , 0.0743]	0.90276
EqualFrequency	[-0.0147 , 0.0041]	0.90276
EqualWidth	[-0.0033 , 0.02035]	0.90276
Extended Chi2	[0.01045 , 0.05605]	0.90276
FFD	[-0.0134 , 0]	0.90276
FUSINTER	[-0.0031 , 0.01615]	0.90276
HDD	[0.008 , 0.04545]	0.90276
HellingerBD	[0.00035 , 0.0293]	0.90276
Heter-Disc	[0.122 , 0.24985]	0.90276
ID3	[0.00695 , 0.04675]	0.90276
IDD	[0.0093 , 0.0473]	0.90276
Khiops	[-0.0114 , 0.0054]	0.90276
MDLP	[0.0048 , 0.05455]	0.90276
MODL	[-0.00165 , 0.01755]	0.90276
MVD	[0.03885 , 0.1749]	0.90276
PKID	[-0.0221 , -0.00595]	0.90276
UCPD	[0.0235 , 0.0557]	0.90276
USD	[0.0055 , 0.03165]	0.90276
Zeta	[0.01165 , 0.04845]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0124 , 0.09435]	0.95024
Ameva	[-0.00395 , 0.0272]	0.95024
Bayesian	[0.03075 , 0.08365]	0.95024
CACC	[0.01705 , 0.06155]	0.95024
CADD	[0.15775 , 0.3256]	0.95024
CAIM	[-0.0081 , 0.0223]	0.95024
Chi2	[-0.0001 , 0.028]	0.95024
ChiMerge	[-0.0056 , 0.0195]	0.95024
ClusterAnalysis	[0.0025 , 0.03965]	0.95024
DIBD	[0.0424 , 0.0963]	0.95024
Distance	[0.0184 , 0.08065]	0.95024
EqualFrequency	[-0.0166 , 0.0062]	0.95024
EqualWidth	[-0.00645 , 0.0238]	0.95024
Extended Chi2	[0.0093 , 0.0627]	0.95024
FFD	[-0.015 , 0.00095]	0.95024
FUSINTER	[-0.00495 , 0.01805]	0.95024
HDD	[0.00615 , 0.0481]	0.95024
HellingerBD	[-0.00085 , 0.0344]	0.95024
Heter-Disc	[0.108 , 0.25825]	0.95024
ID3	[0.0055 , 0.04905]	0.95024
IDD	[0.0073 , 0.06325]	0.95024
Khiops	[-0.0127 , 0.0076]	0.95024
MDLP	[0.00285 , 0.06005]	0.95024
MODL	[-0.0028 , 0.01975]	0.95024
MVD	[0.03215 , 0.19725]	0.95024
PKID	[-0.0236 , -0.0046]	0.95024
UCPD	[0.02075 , 0.05995]	0.95024
USD	[0.00395 , 0.0337]	0.95024
Zeta	[0.00945 , 0.05165]	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	591.0	229.0	0.014108	0.014537
Ameva	451.0	329.0	≥ 0.2	0.389937
Bayesian	747.0	73.0	7.138E-7	0.000006
CACC	681.0	139.0	1.404E-4	0.000263
CADD	804.0	16.0	3.074E-10	0
CAIM	377.0	403.0	≥ 0.2	1
Chi2	423.0	397.0	≥ 0.2	0.856008
ChiMerge	413.5	406.5	≥ 0.2	1
ClusterAnalysis	497.0	323.0	≥ 0.2	0.23955
DIBD	719.0	101.0	8.848E-6	0.000032
Distance	646.0	174.0	0.0011066	0.001451
EqualFrequency	282.0	538.0	≥ 0.2	1
EqualWidth	433.0	387.0	≥ 0.2	0.752101
Extended Chi2	566.0	214.0	0.01315	0.013776
FFD	277.0	503.0	≥ 0.2	1
FUSINTER	436.0	384.0	≥ 0.2	1
HDD	558.0	222.0	0.018214	0.018702
HellingerBD	477.5	342.5	≥ 0.2	0.359096
Heter-Disc	797.0	23.0	1.1642E-9	0
ID3	588.0	232.0	0.015876	0.016247
IDD	563.5	256.5	0.03878	0.038131
Khiops	331.0	449.0	≥ 0.2	1
MDLP	500.0	280.0	0.1275	0.123067
Modified Chi2	294.0	489.0	≥ 0.2	1
MVD	680.0	140.0	1.4978E-4	0.000277
PKID	216.5	603.5	≥ 0.2	1
UCPD	601.0	219.0	0.009382	0.009928
USD	568.0	252.0	0.03322	0.033135
Zeta	515.0	305.0	0.16178	0.156174

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	[0.0124 , 0.0756]	0.90276
Ameva	[-0.00475 , 0.01605]	0.90276
Bayesian	[0.0299 , 0.0646]	0.90276
CACC	[0.01395 , 0.04655]	0.90276
CADD	[0.1382 , 0.28125]	0.90276
CAIM	[-0.01295 , 0.0104]	0.90276
Chi2	[-0.0152 , 0.0215]	0.90276
ChiMerge	[-0.0121 , 0.01275]	0.90276
ClusterAnalysis	[-0.00465 , 0.02435]	0.90276
DIBD	[0.0362 , 0.074]	0.90276
Distance	[0.01515 , 0.0585]	0.90276
EqualFrequency	[-0.02495 , -0.0002]	0.90276
EqualWidth	[-0.01295 , 0.0185]	0.90276
Extended Chi2	[0.00615 , 0.039]	0.90276
FFD	[-0.0237 , 0.00045]	0.90276
FUSINTER	[-0.0111 , 0.01115]	0.90276
HDD	[0.00455 , 0.0327]	0.90276
HellingerBD	[-0.00635 , 0.01915]	0.90276
Heter-Disc	[0.10755 , 0.21945]	0.90276
ID3	[0.0059 , 0.03525]	0.90276
IDD	[0.0034 , 0.04175]	0.90276
Khiops	[-0.0192 , 0.00625]	0.90276
MDLP	[-0.00095 , 0.04305]	0.90276
Modified Chi2	[-0.01755 , 0.00165]	0.90276
MVD	[0.0348 , 0.1445]	0.90276
PKID	[-0.0309 , -0.00735]	0.90276
UCPD	[0.00735 , 0.03875]	0.90276
USD	[0.00405 , 0.02265]	0.90276
Zeta	[-0.00265 , 0.03715]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00745 , 0.08115]	0.95024
Ameva	[-0.0074 , 0.0183]	0.95024
Bayesian	[0.02765 , 0.0681]	0.95024
CACC	[0.01165 , 0.05065]	0.95024
CADD	[0.1253 , 0.3067]	0.95024
CAIM	[-0.0161 , 0.01285]	0.95024
Chi2	[-0.01905 , 0.02565]	0.95024
ChiMerge	[-0.0143 , 0.0157]	0.95024
ClusterAnalysis	[-0.00685 , 0.02795]	0.95024
DIBD	[0.0319 , 0.07985]	0.95024
Distance	[0.012 , 0.0636]	0.95024
EqualFrequency	[-0.02715 , 0.0017]	0.95024
EqualWidth	[-0.0167 , 0.02195]	0.95024
Extended Chi2	[0.0039 , 0.0458]	0.95024
FFD	[-0.02685 , 0.0027]	0.95024
FUSINTER	[-0.0134 , 0.0137]	0.95024
HDD	[0.0026 , 0.0361]	0.95024
HellingerBD	[-0.00865 , 0.0221]	0.95024
Heter-Disc	[0.0993 , 0.22795]	0.95024
ID3	[0.00345 , 0.039]	0.95024
IDD	[0.0009 , 0.0454]	0.95024
Khiops	[-0.0212 , 0.00835]	0.95024
MDLP	[-0.0026 , 0.04955]	0.95024
Modified Chi2	[-0.01975 , 0.0028]	0.95024
MVD	[0.0298 , 0.162]	0.95024
PKID	[-0.0329 , -0.0051]	0.95024
UCPD	[0.0058 , 0.04275]	0.95024
USD	[0.0014 , 0.0252]	0.95024
Zeta	[-0.00575 , 0.04155]	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	293.5	526.5	≥ 0.2	1
Ameva	187.0	633.0	≥ 0.2	1
Bayesian	306.0	514.0	≥ 0.2	1
CACC	283.0	500.0	≥ 0.2	1
CADD	593.0	190.0	0.013896	0.014526
CAIM	194.0	626.0	≥ 0.2	1
Chi2	166.0	654.0	≥ 0.2	1
ChiMerge	161.0	659.0	≥ 0.2	1
ClusterAnalysis	169.0	651.0	≥ 0.2	1
DIBD	336.0	444.0	≥ 0.2	1
Distance	332.0	448.0	≥ 0.2	1
EqualFrequency	108.0	672.0	≥ 0.2	1
EqualWidth	156.0	664.0	≥ 0.2	1
Extended Chi2	260.0	560.0	≥ 0.2	1
FFD	89.0	731.0	≥ 0.2	1
FUSINTER	133.0	687.0	≥ 0.2	1
HDD	215.0	605.0	≥ 0.2	1
HellingerBD	170.5	649.5	≥ 0.2	1
Heter-Disc	515.5	269.5	≥ 0.2	0.451185
ID3	205.0	615.0	≥ 0.2	1
IDD	225.0	555.0	≥ 0.2	1
Khiops	59.0	721.0	≥ 0.2	1
MDLP	243.5	576.5	≥ 0.2	1
Modified Chi2	100.5	679.5	≥ 0.2	1
MODL	140.0	680.0	≥ 0.2	1
PKID	44.0	776.0	≥ 0.2	1
UCPD	261.0	559.0	≥ 0.2	1
USD	189.0	631.0	≥ 0.2	1
Zeta	244.0	536.0	≥ 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	[-0.08205 , 0.0017]	0.90276
Ameva	[-0.1065 , -0.01665]	0.90276
Bayesian	[-0.0979 , 0.0064]	0.90276
CACC	[-0.09075 , 0.00295]	0.90276
CADD	[0.0229 , 0.1468]	0.90276
CAIM	[-0.16755 , -0.02065]	0.90276
Chi2	[-0.15 , -0.0329]	0.90276
ChiMerge	[-0.15045 , -0.0263]	0.90276
ClusterAnalysis	[-0.11225 , -0.0309]	0.90276
DIBD	[-0.05945 , 0.0173]	0.90276
Distance	[-0.09155 , 0.01125]	0.90276
EqualFrequency	[-0.1476 , -0.0373]	0.90276
EqualWidth	[-0.1346 , -0.03035]	0.90276
Extended Chi2	[-0.1066 , -0.00685]	0.90276
FFD	[-0.14945 , -0.03975]	0.90276
FUSINTER	[-0.1358 , -0.03065]	0.90276
HDD	[-0.11295 , -0.0233]	0.90276
HellingerBD	[-0.1259 , -0.03085]	0.90276
Heter-Disc	[0 , 0.12215]	0.90276
ID3	[-0.11385 , -0.022]	0.90276
IDD	[-0.09065 , -0.01215]	0.90276
Khiops	[-0.1279 , -0.04115]	0.90276
MDLP	[-0.10915 , -0.00855]	0.90276
Modified Chi2	[-0.1749 , -0.03885]	0.90276
MODL	[-0.1445 , -0.0348]	0.90276
PKID	[-0.1528 , -0.0538]	0.90276
UCPD	[-0.1101 , -0.00645]	0.90276
USD	[-0.12895 , -0.02585]	0.90276
Zeta	[-0.1454 , -0.0073]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.09735 , 0.00725]	0.95024
Ameva	[-0.115 , -0.01495]	0.95024
Bayesian	[-0.10945 , 0.0132]	0.95024
CACC	[-0.0994 , 0.00745]	0.95024
CADD	[0.0178 , 0.1569]	0.95024
CAIM	[-0.18965 , -0.0163]	0.95024
Chi2	[-0.16775 , -0.0262]	0.95024
ChiMerge	[-0.16315 , -0.0211]	0.95024
ClusterAnalysis	[-0.1242 , -0.02235]	0.95024
DIBD	[-0.0747 , 0.02165]	0.95024
Distance	[-0.1068 , 0.01505]	0.95024
EqualFrequency	[-0.1884 , -0.03055]	0.95024
EqualWidth	[-0.15595 , -0.02505]	0.95024
Extended Chi2	[-0.1158 , -0.0022]	0.95024
FFD	[-0.1868 , -0.0336]	0.95024
FUSINTER	[-0.14975 , -0.02575]	0.95024
HDD	[-0.1258 , -0.01625]	0.95024
HellingerBD	[-0.15445 , -0.0241]	0.95024
Heter-Disc	[-0.00385 , 0.13475]	0.95024
ID3	[-0.125 , -0.0167]	0.95024
IDD	[-0.1018 , -0.00665]	0.95024
Khiops	[-0.14015 , -0.0378]	0.95024
MDLP	[-0.1228 , -0.00405]	0.95024
Modified Chi2	[-0.19725 , -0.03215]	0.95024
MODL	[-0.162 , -0.0298]	0.95024
PKID	[-0.1922 , -0.046]	0.95024
UCPD	[-0.14715 , -0.00115]	0.95024
USD	[-0.149 , -0.02215]	0.95024
Zeta	[-0.1632 , -0.001]	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	714.0	106.0	1.3218E-5	0.000043
Ameva	643.0	137.0	2.34E-4	0.000404
Bayesian	746.0	74.0	7.88E-7	0.000006
CACC	723.5	96.5	2.336E-5	0.000067
CADD	807.0	13.0	1.6008E-10	0
CAIM	629.0	191.0	0.002638	0.003073
Chi2	647.5	132.5	1.742499999999998E-4	0.00031
ChiMerge	536.0	244.0	0.04138	0.040562
ClusterAnalysis	687.5	132.5	3.304E-4	0.00053
DIBD	792.0	28.0	2.698E-9	0
Distance	745.5	74.5	3.252E-6	0.000017
EqualFrequency	503.5	276.5	0.11556	0.108523
EqualWidth	652.0	131.0	5.642E-4	0.000856
Extended Chi2	719.0	101.0	8.848E-6	0.000031
FFD	598.5	221.5	0.03014	0.029261
FUSINTER	603.5	176.5	0.0023020000000000002	0.002775
HDD	693.0	87.0	5.268E-6	0.000023
HellingerBD	685.0	135.0	3.884E-4	0.000593
Heter-Disc	797.0	23.0	1.1642E-9	0
ID3	736.5	83.5	2.919E-5	0.000083
IDD	752.0	68.0	4.3E-7	0.000004
Khiops	511.0	269.0	0.09288	0.089974
MDLP	689.0	131.0	8.252E-5	0.000172
Modified Chi2	623.0	197.0	0.010942	0.011323
MODL	603.5	216.5	0.0084429999999999999	0.009001
MVD	776.0	44.0	2.692E-8	0.000001
UCPD	741.0	39.0	2.76E-8	0.000001
USD	689.0	131.0	8.252E-5	0.000172
Zeta	710.5	109.5	6.537E-5	0.000149

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	[0.0287 , 0.0895]	0.90276
Ameva	[0.0118 , 0.03495]	0.90276
Bayesian	[0.04405 , 0.0956]	0.90276
CACC	[0.0302 , 0.0804]	0.90276
CADD	[0.1791 , 0.32625]	0.90276
CAIM	[0.0067 , 0.0293]	0.90276
Chi2	[0.0128 , 0.04755]	0.90276
ChiMerge	[0.0024 , 0.02845]	0.90276
ClusterAnalysis	[0.0153 , 0.0444]	0.90276
DIBD	[0.05965 , 0.09815]	0.90276
Distance	[0.03345 , 0.0835]	0.90276
EqualFrequency	[-0.00015 , 0.01285]	0.90276
EqualWidth	[0.0074 , 0.03035]	0.90276
Extended Chi2	[0.0232 , 0.084]	0.90276
FFD	[0.0014 , 0.014]	0.90276
FUSINTER	[0.0075 , 0.02805]	0.90276
HDD	[0.02005 , 0.0537]	0.90276
HellingerBD	[0.01045 , 0.0358]	0.90276
Heter-Disc	[0.1276 , 0.2644]	0.90276
ID3	[0.0251 , 0.05715]	0.90276
IDD	[0.0226 , 0.05565]	0.90276
Khiops	[0.00015 , 0.016]	0.90276
MDLP	[0.0194 , 0.0604]	0.90276
Modified Chi2	[0.00595 , 0.0221]	0.90276
MODL	[0.00735 , 0.0309]	0.90276
MVD	[0.0538 , 0.1528]	0.90276
UCPD	[0.0377 , 0.0647]	0.90276
USD	[0.0234 , 0.0506]	0.90276
Zeta	[0.0262 , 0.05625]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02575 , 0.1015]	0.95024
Ameva	[0.01005 , 0.03875]	0.95024
Bayesian	[0.042 , 0.10045]	0.95024
CACC	[0.02625 , 0.08685]	0.95024
CADD	[0.1686 , 0.3409]	0.95024
CAIM	[0.005 , 0.03145]	0.95024
Chi2	[0.01085 , 0.0516]	0.95024
ChiMerge	[0.0006 , 0.03155]	0.95024
ClusterAnalysis	[0.01335 , 0.04715]	0.95024
DIBD	[0.05655 , 0.10435]	0.95024
Distance	[0.03055 , 0.09]	0.95024
EqualFrequency	[-0.0008 , 0.016]	0.95024
EqualWidth	[0.00605 , 0.0328]	0.95024
Extended Chi2	[0.02035 , 0.08955]	0.95024
FFD	[0.00105 , 0.0147]	0.95024
FUSINTER	[0.00585 , 0.03005]	0.95024
HDD	[0.01775 , 0.05765]	0.95024
HellingerBD	[0.00805 , 0.0384]	0.95024
Heter-Disc	[0.11635 , 0.27445]	0.95024
ID3	[0.022 , 0.0589]	0.95024
IDD	[0.01925 , 0.06145]	0.95024
Khiops	[-0.0011 , 0.018]	0.95024
MDLP	[0.01675 , 0.0658]	0.95024
Modified Chi2	[0.0046 , 0.0236]	0.95024
MODL	[0.0051 , 0.0329]	0.95024
MVD	[0.046 , 0.1922]	0.95024
UCPD	[0.0352 , 0.0684]	0.95024
USD	[0.02125 , 0.05555]	0.95024
Zeta	[0.02345 , 0.05895]	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	417.0	403.0	≥ 0.2	0.919702
Ameva	244.5	575.5	≥ 0.2	1
Bayesian	514.0	306.0	0.1659	0.159433
CACC	442.0	378.0	≥ 0.2	0.662226
CADD	742.0	78.0	1.1622E-6	0.000008
CAIM	200.0	580.0	≥ 0.2	1
Chi2	268.0	552.0	≥ 0.2	1
ChiMerge	205.0	615.0	≥ 0.2	1
ClusterAnalysis	273.0	547.0	≥ 0.2	1
DIBD	627.5	192.5	0.002839	0.003334
Distance	443.0	377.0	≥ 0.2	0.652506
EqualFrequency	96.0	724.0	≥ 0.2	1
EqualWidth	224.0	596.0	≥ 0.2	1
Extended Chi2	399.0	421.0	≥ 0.2	1
FFD	50.5	769.5	≥ 0.2	1
FUSINTER	167.0	653.0	≥ 0.2	1
HDD	364.0	456.0	≥ 0.2	1
HellingerBD	218.5	601.5	≥ 0.2	1
Heter-Disc	753.0	67.0	3.876E-7	0.000004
ID3	346.0	434.0	≥ 0.2	1
IDD	360.0	460.0	≥ 0.2	1
Khiops	101.0	679.0	≥ 0.2	1
MDLP	338.0	482.0	≥ 0.2	1
Modified Chi2	124.0	656.0	≥ 0.2	1
MODL	219.0	601.0	≥ 0.2	1
MVD	559.0	261.0	0.0451	0.044487
PKID	39.0	741.0	≥ 0.2	1
USD	322.0	498.0	≥ 0.2	1
Zeta	339.0	441.0	≥ 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	[-0.0275 , 0.05295]	0.90276
Ameva	[-0.0336 , -0.00395]	0.90276
Bayesian	[-0.0048 , 0.0514]	0.90276
CACC	[-0.0139 , 0.02885]	0.90276
CADD	[0.1092 , 0.26545]	0.90276
CAIM	[-0.0395 , -0.00795]	0.90276
Chi2	[-0.04875 , -0.0041]	0.90276
ChiMerge	[-0.0394 , -0.01035]	0.90276
ClusterAnalysis	[-0.03665 , -0.00175]	0.90276
DIBD	[0.01625 , 0.04765]	0.90276
Distance	[-0.01075 , 0.0264]	0.90276
EqualFrequency	[-0.05225 , -0.02315]	0.90276
EqualWidth	[-0.0455 , -0.0097]	0.90276
Extended Chi2	[-0.02645 , 0.02935]	0.90276
FFD	[-0.05595 , -0.02885]	0.90276
FUSINTER	[-0.04375 , -0.01795]	0.90276
HDD	[-0.0316 , 0.0142]	0.90276
HellingerBD	[-0.0393 , -0.0088]	0.90276
Heter-Disc	[0.07305 , 0.18795]	0.90276
ID3	[-0.03245 , 0.01365]	0.90276
IDD	[-0.03225 , 0.01805]	0.90276
Khiops	[-0.0505 , -0.0252]	0.90276
MDLP	[-0.029 , 0.0125]	0.90276
Modified Chi2	[-0.0557 , -0.0235]	0.90276
MODL	[-0.03875 , -0.00735]	0.90276
MVD	[0.00645 , 0.1101]	0.90276
PKID	[-0.0647 , -0.0377]	0.90276
USD	[-0.03575 , 0.0082]	0.90276
Zeta	[-0.02155 , 0.0093]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0326 , 0.06125]	0.95024
Ameva	[-0.03645 , -0.0014]	0.95024
Bayesian	[-0.0102 , 0.05515]	0.95024
CACC	[-0.0183 , 0.0352]	0.95024
CADD	[0.09495 , 0.28915]	0.95024
CAIM	[-0.044 , -0.00595]	0.95024
Chi2	[-0.05455 , 0.0005]	0.95024
ChiMerge	[-0.0415 , -0.00665]	0.95024
ClusterAnalysis	[-0.03995 , 0.0011]	0.95024
DIBD	[0.01135 , 0.05075]	0.95024
Distance	[-0.01315 , 0.03485]	0.95024
EqualFrequency	[-0.05515 , -0.02085]	0.95024
EqualWidth	[-0.04885 , -0.00685]	0.95024
Extended Chi2	[-0.0303 , 0.0394]	0.95024
FFD	[-0.0596 , -0.0266]	0.95024
FUSINTER	[-0.04765 , -0.0155]	0.95024
HDD	[-0.03595 , 0.02075]	0.95024
HellingerBD	[-0.042 , -0.0067]	0.95024
Heter-Disc	[0.06615 , 0.20095]	0.95024
ID3	[-0.03645 , 0.0184]	0.95024
IDD	[-0.03635 , 0.02305]	0.95024
Khiops	[-0.0537 , -0.02255]	0.95024
MDLP	[-0.03175 , 0.0202]	0.95024
Modified Chi2	[-0.05995 , -0.02075]	0.95024
MODL	[-0.04275 , -0.0058]	0.95024
MVD	[0.00115 , 0.14715]	0.95024
PKID	[-0.0684 , -0.0352]	0.95024
USD	[-0.04 , 0.01195]	0.95024
Zeta	[-0.0255 , 0.0133]	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	504.0	316.0	≥ 0.2	0.204012
Ameva	351.0	469.0	≥ 0.2	1
Bayesian	741.0	79.0	1.2784E-6	0.000008
CACC	500.5	319.5	≥ 0.2	0.454325
CADD	768.0	52.0	7.284E-8	0.000001
CAIM	293.0	487.0	≥ 0.2	1
Chi2	367.5	452.5	≥ 0.2	1
ChiMerge	326.0	494.0	≥ 0.2	1
ClusterAnalysis	372.0	448.0	≥ 0.2	1
DIBD	593.5	226.5	0.012768999999999999	0.013236
Distance	474.0	306.0	≥ 0.2	0.23832
EqualFrequency	211.0	609.0	≥ 0.2	1
EqualWidth	284.0	496.0	≥ 0.2	1
Extended Chi2	503.0	277.0	0.1172	0.113218
FFD	172.0	648.0	≥ 0.2	1
FUSINTER	309.5	510.5	≥ 0.2	1
HDD	493.5	326.5	≥ 0.2	0.257266
HellingerBD	389.0	431.0	≥ 0.2	1
Heter-Disc	723.0	97.0	6.358E-6	0.000024
ID3	530.5	249.5	0.049990000000000001	0.048713
IDD	423.5	356.5	≥ 0.2	0.633981
Khiops	255.0	565.0	≥ 0.2	1
MDLP	398.0	422.0	≥ 0.2	1
Modified Chi2	202.0	618.0	≥ 0.2	1
MODL	252.0	568.0	≥ 0.2	1
MVD	631.0	189.0	0.002392	0.002908
PKID	131.0	689.0	≥ 0.2	1
UCPD	498.0	322.0	≥ 0.2	0.233435
Zeta	424.5	355.5	≥ 0.2	0.624038

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	[-0.00815 , 0.064]	0.90276
Ameva	[-0.03045 , 0.01195]	0.90276
Bayesian	[0.0147 , 0.04015]	0.90276
CACC	[-0.00355 , 0.0318]	0.90276
CADD	[0.1243 , 0.25515]	0.90276
CAIM	[-0.0367 , 0.0028]	0.90276
Chi2	[-0.02185 , 0.0131]	0.90276
ChiMerge	[-0.0362 , 0.00885]	0.90276
ClusterAnalysis	[-0.01625 , 0.00855]	0.90276
DIBD	[0.0151 , 0.06665]	0.90276
Distance	[-0.00575 , 0.046]	0.90276
EqualFrequency	[-0.0426 , -0.00755]	0.90276
EqualWidth	[-0.03625 , 0.0008]	0.90276
Extended Chi2	[-0.00045 , 0.02575]	0.90276
FFD	[-0.0396 , -0.01305]	0.90276
FUSINTER	[-0.02805 , 0.0024]	0.90276
HDD	[-0.0021 , 0.01015]	0.90276
HellingerBD	[-0.02445 , 0.0133]	0.90276
Heter-Disc	[0.09175 , 0.2117]	0.90276
ID3	[0.0006 , 0.01075]	0.90276
IDD	[-0.0177 , 0.0301]	0.90276
Khiops	[-0.03735 , -0.00515]	0.90276
MDLP	[-0.02075 , 0.0276]	0.90276
Modified Chi2	[-0.03165 , -0.0055]	0.90276
MODL	[-0.02265 , -0.00405]	0.90276
MVD	[0.02585 , 0.12895]	0.90276
PKID	[-0.0506 , -0.0234]	0.90276
UCPD	[-0.0082 , 0.03575]	0.90276
Zeta	[-0.0215 , 0.02545]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0123 , 0.07345]	0.95024
Ameva	[-0.03325 , 0.0191]	0.95024
Bayesian	[0.01345 , 0.0438]	0.95024
CACC	[-0.0057 , 0.03535]	0.95024
CADD	[0.1165 , 0.27035]	0.95024
CAIM	[-0.04025 , 0.0065]	0.95024
Chi2	[-0.025 , 0.01705]	0.95024
ChiMerge	[-0.03955 , 0.0147]	0.95024
ClusterAnalysis	[-0.0192 , 0.0124]	0.95024
DIBD	[0.00895 , 0.07125]	0.95024
Distance	[-0.00905 , 0.0556]	0.95024
EqualFrequency	[-0.0449 , -0.00475]	0.95024
EqualWidth	[-0.0394 , 0.00475]	0.95024
Extended Chi2	[-0.00225 , 0.03105]	0.95024
FFD	[-0.04295 , -0.0103]	0.95024
FUSINTER	[-0.03275 , 0.00625]	0.95024
HDD	[-0.00375 , 0.0119]	0.95024
HellingerBD	[-0.0293 , 0.01685]	0.95024
Heter-Disc	[0.0811 , 0.22335]	0.95024
ID3	[0 , 0.0118]	0.95024
IDD	[-0.02145 , 0.03605]	0.95024
Khiops	[-0.04005 , -0.002]	0.95024
MDLP	[-0.02595 , 0.0322]	0.95024
Modified Chi2	[-0.0337 , -0.00395]	0.95024
MODL	[-0.0252 , -0.0014]	0.95024
MVD	[0.02215 , 0.149]	0.95024
PKID	[-0.05555 , -0.02125]	0.95024
UCPD	[-0.01195 , 0.04]	0.95024
Zeta	[-0.02535 , 0.0326]	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	454.5	365.5	≥ 0.2	0.544597
Ameva	258.5	521.5	≥ 0.2	1
Bayesian	504.0	276.0	0.11392	0.110077
CACC	449.5	330.5	≥ 0.2	0.401602
CADD	730.0	50.0	1.143E-7	0.000002
CAIM	148.5	631.5	≥ 0.2	1
Chi2	363.0	457.0	≥ 0.2	1
ChiMerge	147.5	672.5	≥ 0.2	1
ClusterAnalysis	349.5	470.5	≥ 0.2	1
DIBD	567.0	213.0	0.01261	0.013249
Distance	502.5	317.5	≥ 0.2	0.437825
EqualFrequency	184.0	599.0	≥ 0.2	1
EqualWidth	245.0	535.0	≥ 0.2	1
Extended Chi2	470.5	349.5	≥ 0.2	0.411476
FFD	174.0	646.0	≥ 0.2	1
FUSINTER	234.0	586.0	≥ 0.2	1
HDD	381.0	439.0	≥ 0.2	1
HellingerBD	282.0	538.0	≥ 0.2	1
Heter-Disc	712.0	68.0	8.544E-7	0.000007
ID3	401.0	419.0	≥ 0.2	1
IDD	430.0	390.0	≥ 0.2	0.782896
Khiops	180.0	600.0	≥ 0.2	1
MDLP	391.0	389.0	≥ 0.2	0.9833
Modified Chi2	183.0	597.0	≥ 0.2	1
MODL	305.0	515.0	≥ 0.2	1
MVD	536.0	244.0	0.04138	0.040913
PKID	109.5	710.5	≥ 0.2	1
UCPD	441.0	339.0	≥ 0.2	0.472337
USD	355.5	424.5	≥ 0.2	1

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

30.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0124 , 0.0653]	0.90276
Ameva	[-0.02955 , -0.001]	0.90276
Bayesian	[-0.0008 , 0.063]	0.90276
CACC	[-0.01095 , 0.03875]	0.90276
CADD	[0.1267 , 0.2531]	0.90276
CAIM	[-0.02625 , -0.00795]	0.90276
Chi2	[-0.0302 , 0.01495]	0.90276
ChiMerge	[-0.03245 , -0.01105]	0.90276
ClusterAnalysis	[-0.02415 , 0.0087]	0.90276
DIBD	[0.0088 , 0.0514]	0.90276
Distance	[-0.0033 , 0.0287]	0.90276
EqualFrequency	[-0.0481 , -0.0086]	0.90276
EqualWidth	[-0.0299 , -0.00265]	0.90276
Extended Chi2	[-0.00885 , 0.04125]	0.90276
FFD	[-0.0494 , -0.0149]	0.90276
FUSINTER	[-0.0389 , -0.0064]	0.90276
HDD	[-0.0254 , 0.0199]	0.90276
HellingerBD	[-0.03345 , -0.0011]	0.90276
Heter-Disc	[0.0873 , 0.2033]	0.90276
ID3	[-0.02535 , 0.02615]	0.90276
IDD	[-0.02005 , 0.03285]	0.90276
Khiops	[-0.04605 , -0.01215]	0.90276
MDLP	[-0.0123 , 0.0142]	0.90276
Modified Chi2	[-0.04845 , -0.01165]	0.90276
MODL	[-0.03715 , 0.00265]	0.90276
MVD	[0.0073 , 0.1454]	0.90276
PKID	[-0.05625 , -0.0262]	0.90276
UCPD	[-0.0093 , 0.02155]	0.90276
USD	[-0.02545 , 0.0215]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0178 , 0.0796]	0.95024
Ameva	[-0.03485 , 0.0006]	0.95024
Bayesian	[-0.00735 , 0.06835]	0.95024
CACC	[-0.01685 , 0.04175]	0.95024
CADD	[0.11125 , 0.278]	0.95024
CAIM	[-0.02885 , -0.00665]	0.95024
Chi2	[-0.03685 , 0.0184]	0.95024
ChiMerge	[-0.03665 , -0.00955]	0.95024
ClusterAnalysis	[-0.03095 , 0.0128]	0.95024
DIBD	[0.0055 , 0.0556]	0.95024
Distance	[-0.005 , 0.0317]	0.95024
EqualFrequency	[-0.05085 , -0.0072]	0.95024
EqualWidth	[-0.0344 , -0.00025]	0.95024
Extended Chi2	[-0.01195 , 0.0458]	0.95024
FFD	[-0.0523 , -0.0118]	0.95024
FUSINTER	[-0.0424 , -0.0042]	0.95024
HDD	[-0.0303 , 0.0235]	0.95024
HellingerBD	[-0.03675 , 0.00185]	0.95024
Heter-Disc	[0.07965 , 0.21675]	0.95024
ID3	[-0.032 , 0.0288]	0.95024
IDD	[-0.0251 , 0.03845]	0.95024
Khiops	[-0.0527 , -0.0104]	0.95024
MDLP	[-0.0142 , 0.01775]	0.95024
Modified Chi2	[-0.05165 , -0.00945]	0.95024
MODL	[-0.04155 , 0.00575]	0.95024
MVD	[0.001 , 0.1632]	0.95024
PKID	[-0.05895 , -0.02345]	0.95024
UCPD	[-0.0133 , 0.0255]	0.95024
USD	[-0.0326 , 0.02535]	0.95024

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