

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	173.0	647.0	≥ 0.2	1
Bayesian	425.5	394.5	≥ 0.2	1
CACC	165.0	655.0	≥ 0.2	1
CADD	641.5	147.5	0.04907	0.047243
CAIM	82.0	738.0	≥ 0.2	1
Chi2	131.0	649.0	≥ 0.2	1
ChiMerge	85.0	735.0	≥ 0.2	1
ClusterAnalysis	404.0	379.0	≥ 0.2	1
DIBD	148.0	632.0	≥ 0.2	1
Distance	119.0	701.0	≥ 0.2	1
EqualFrequency	171.0	609.0	≥ 0.2	1
EqualWidth	269.5	550.5	≥ 0.2	1
Extended Chi2	215.0	568.0	≥ 0.2	1
FFD	353.0	430.0	≥ 0.2	1
FUSINTER	95.0	725.0	≥ 0.2	1
HDD	302.5	480.5	≥ 0.2	1
HellingerBD	186.5	633.5	≥ 0.2	1
Heter-Disc	436.5	383.5	≥ 0.2	1
ID3	467.5	352.5	≥ 0.2	1
IDD	420.0	369.0	≥ 0.2	1
Khiops	169.5	650.5	≥ 0.2	1
MDLP	106.0	714.0	≥ 0.2	1
Modified Chi2	172.0	611.0	≥ 0.2	1
MODL	166.5	653.5	≥ 0.2	1
MVD	355.0	465.0	≥ 0.2	1
PKID	395.0	425.0	≥ 0.2	1
UCPD	133.0	687.0	≥ 0.2	1
USD	379.5	440.5	≥ 0.2	1
Zeta	100.0	720.0	≥ 0.2	1

Table 1: Results obtained by the Wilcoxon test for algorithm 1R

1.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
Ameva	[-0.11265 , -0.02975]	0.90276
Bayesian	[-0.0174 , 0.014]	0.90276
CACC	[-0.1059 , -0.02885]	0.90276
CADD	[0.0073 , 0.068]	0.90276
CAIM	[-0.12815 , -0.0425]	0.90276
Chi2	[-0.1164 , -0.02375]	0.90276
ChiMerge	[-0.12675 , -0.0397]	0.90276
ClusterAnalysis	[-0.0317 , 0.0301]	0.90276
DIBD	[-0.08315 , -0.0184]	0.90276
Distance	[-0.1219 , -0.03845]	0.90276
EqualFrequency	[-0.10225 , -0.011]	0.90276
EqualWidth	[-0.08975 , -0.00425]	0.90276
Extended Chi2	[-0.0734 , -0.01025]	0.90276
FFD	[-0.06145 , 0.0092]	0.90276
FUSINTER	[-0.1413 , -0.039]	0.90276
HDD	[-0.0601 , 0.0062]	0.90276
HellingerBD	[-0.10735 , -0.0231]	0.90276
Heter-Disc	[-0.0208 , 0.0255]	0.90276
ID3	[-0.0228 , 0.0398]	0.90276
IDD	[-0.0061 , 0.00955]	0.90276
Khiops	[-0.10895 , -0.019]	0.90276
MDLP	[-0.11935 , -0.04205]	0.90276
Modified Chi2	[-0.11695 , -0.01385]	0.90276
MODL	[-0.09635 , -0.0155]	0.90276
MVD	[-0.04855 , 0.01285]	0.90276
PKID	[-0.06375 , 0.01875]	0.90276
UCPD	[-0.11205 , -0.03005]	0.90276
USD	[-0.04785 , 0.0111]	0.90276
Zeta	[-0.11715 , -0.0276]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
Ameva	[-0.12435 , -0.02525]	0.95024
Bayesian	[-0.0254 , 0.0187]	0.95024
CACC	[-0.11335 , -0.0231]	0.95024
CADD	[0.00645 , 0.08335]	0.95024
CAIM	[-0.1334 , -0.03875]	0.95024
Chi2	[-0.13065 , -0.0189]	0.95024
ChiMerge	[-0.1346 , -0.03475]	0.95024
ClusterAnalysis	[-0.0403 , 0.0383]	0.95024
DIBD	[-0.088 , -0.0149]	0.95024
Distance	[-0.12825 , -0.03255]	0.95024
EqualFrequency	[-0.11495 , -0.00895]	0.95024
EqualWidth	[-0.09965 , 0.0001]	0.95024
Extended Chi2	[-0.1033 , -0.00665]	0.95024
FFD	[-0.0815 , 0.0149]	0.95024
FUSINTER	[-0.14785 , -0.0329]	0.95024
HDD	[-0.0715 , 0.009]	0.95024
HellingerBD	[-0.11735 , -0.0164]	0.95024
Heter-Disc	[-0.03875 , 0.03035]	0.95024
ID3	[-0.0448 , 0.0514]	0.95024
IDD	[-0.0098 , 0.01235]	0.95024
Khiops	[-0.1219 , -0.01395]	0.95024
MDLP	[-0.1315 , -0.0382]	0.95024
Modified Chi2	[-0.1294 , -0.01025]	0.95024
MODL	[-0.10575 , -0.0135]	0.95024
MVD	[-0.053 , 0.01645]	0.95024
PKID	[-0.0782 , 0.02375]	0.95024
UCPD	[-0.12225 , -0.0232]	0.95024
USD	[-0.05805 , 0.01665]	0.95024
Zeta	[-0.1261 , -0.0237]	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	647.0	173.0	0.0010488	0.001411
Bayesian	709.0	111.0	1.95E-5	0.000057
CACC	392.5	396.5	≥ 0.2	1
CADD	774.0	46.0	3.48E-8	0.000001
CAIM	322.5	497.5	≥ 0.2	1
Chi2	377.0	443.0	≥ 0.2	1
ChiMerge	295.5	524.5	≥ 0.2	1
ClusterAnalysis	670.0	150.0	2.806E-4	0.000463
DIBD	516.5	303.5	0.15577000000000002	0.149687
Distance	388.0	432.0	≥ 0.2	1
EqualFrequency	454.0	326.0	≥ 0.2	0.365554
EqualWidth	556.0	224.0	0.019712	0.019935
Extended Chi2	562.0	258.0	0.0408	0.040384
FFD	607.5	172.5	0.0018681000000000001	0.002267
FUSINTER	265.0	518.0	≥ 0.2	1
HDD	574.5	210.5	0.08865	0.084827
HellingerBD	468.0	312.0	≥ 0.2	0.272475
Heter-Disc	690.5	89.5	6.575999999999999E-6	0.000026
ID3	681.5	138.5	4.858E-4	0.00073
IDD	690.5	129.5	7.453E-5	0.000155
Khiops	415.5	364.5	≥ 0.2	0.714828
MDLP	327.5	492.5	≥ 0.2	1
Modified Chi2	426.5	393.5	≥ 0.2	1
MODL	436.0	384.0	≥ 0.2	1
MVD	654.0	166.0	7.144E-4	0.001015
PKID	647.0	173.0	0.00347	0.003953
UCPD	426.0	394.0	≥ 0.2	0.824484
USD	593.0	187.0	0.003894	0.004514
Zeta	453.0	367.0	≥ 0.2	1

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

2.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.02975 , 0.11265]	0.90276
Bayesian	[0.03145 , 0.0828]	0.90276
CACC	[-0.00305 , 0.0043]	0.90276
CADD	[0.0952 , 0.1758]	0.90276
CAIM	[-0.0099 , 0.0012]	0.90276
Chi2	[-0.00805 , 0.0055]	0.90276
ChiMerge	[-0.0108 , 0]	0.90276
ClusterAnalysis	[0.0256 , 0.07985]	0.90276
DIBD	[-0.0011 , 0.0329]	0.90276
Distance	[-0.0075 , 0.00335]	0.90276
EqualFrequency	[-0.0049 , 0.02695]	0.90276
EqualWidth	[0.00575 , 0.0341]	0.90276
Extended Chi2	[0.00265 , 0.0443]	0.90276
FFD	[0.0158 , 0.0499]	0.90276
FUSINTER	[-0.01755 , -0.00055]	0.90276
HDD	[0.00845 , 0.06355]	0.90276
HellingerBD	[-0.00485 , 0.0175]	0.90276
Heter-Disc	[0.0421 , 0.10355]	0.90276
ID3	[0.03405 , 0.0847]	0.90276
IDD	[0.0318 , 0.09875]	0.90276
Khiops	[-0.0079 , 0.0134]	0.90276
MDLP	[-0.0134 , 0.00195]	0.90276
Modified Chi2	[-0.0093 , 0.0186]	0.90276
MODL	[-0.00655 , 0.01345]	0.90276
MVD	[0.0151 , 0.0743]	0.90276
PKID	[0.02315 , 0.0719]	0.90276
UCPD	[-0.00815 , 0.0107]	0.90276
USD	[0.0165 , 0.06675]	0.90276
Zeta	[-0.00405 , 0.01]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.02525 , 0.12435]	0.95024
Bayesian	[0.02795 , 0.0881]	0.95024
CACC	[-0.00375 , 0.00575]	0.95024
CADD	[0.0854 , 0.1834]	0.95024
CAIM	[-0.01215 , 0.00155]	0.95024
Chi2	[-0.00975 , 0.0076]	0.95024
ChiMerge	[-0.0131 , 0.0013]	0.95024
ClusterAnalysis	[0.02165 , 0.0875]	0.95024
DIBD	[-0.00305 , 0.03505]	0.95024
Distance	[-0.01 , 0.00445]	0.95024
EqualFrequency	[-0.0067 , 0.02945]	0.95024
EqualWidth	[0.00295 , 0.0364]	0.95024
Extended Chi2	[0.00065 , 0.05105]	0.95024
FFD	[0.0122 , 0.0564]	0.95024
FUSINTER	[-0.01955 , 0.00085]	0.95024
HDD	[0.00475 , 0.0708]	0.95024
HellingerBD	[-0.0069 , 0.0193]	0.95024
Heter-Disc	[0.0389 , 0.11155]	0.95024
ID3	[0.0318 , 0.09]	0.95024
IDD	[0.02795 , 0.10625]	0.95024
Khiops	[-0.0096 , 0.01535]	0.95024
MDLP	[-0.0153 , 0.00325]	0.95024
Modified Chi2	[-0.011 , 0.02255]	0.95024
MODL	[-0.00895 , 0.01985]	0.95024
MVD	[0.01195 , 0.08105]	0.95024
PKID	[0.02015 , 0.0766]	0.95024
UCPD	[-0.0099 , 0.0131]	0.95024
USD	[0.01295 , 0.07335]	0.95024
Zeta	[-0.0053 , 0.0117]	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	394.5	425.5	≥ 0.2	1
Ameva	111.0	709.0	≥ 0.2	1
CACC	153.5	666.5	≥ 0.2	1
CADD	635.5	184.5	≥ 0.2	0.318491
CAIM	34.0	786.0	≥ 0.2	1
Chi2	100.5	719.5	≥ 0.2	1
ChiMerge	31.0	789.0	≥ 0.2	1
ClusterAnalysis	412.5	407.5	≥ 0.2	1
DIBD	199.5	620.5	≥ 0.2	1
Distance	146.0	674.0	≥ 0.2	1
EqualFrequency	122.0	698.0	≥ 0.2	1
EqualWidth	186.5	633.5	≥ 0.2	1
Extended Chi2	165.5	654.5	≥ 0.2	1
FFD	309.5	510.5	≥ 0.2	1
FUSINTER	46.0	734.0	≥ 0.2	1
HDD	285.0	502.0	≥ 0.2	1
HellingerBD	161.0	619.0	≥ 0.2	1
Heter-Disc	484.5	300.5	≥ 0.2	0.805924
ID3	462.5	326.5	≥ 0.2	1
IDD	355.5	464.5	≥ 0.2	1
Khiops	164.0	616.0	≥ 0.2	1
MDLP	112.0	668.0	≥ 0.2	1
Modified Chi2	115.0	672.0	≥ 0.2	1
MODL	113.5	706.5	≥ 0.2	1
MVD	354.5	434.5	≥ 0.2	1
PKID	270.0	517.0	≥ 0.2	1
UCPD	99.0	681.0	≥ 0.2	1
USD	249.5	570.5	≥ 0.2	1
Zeta	37.0	783.0	≥ 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	[-0.014 , 0.0174]	0.90276
Ameva	[-0.0828 , -0.03145]	0.90276
CACC	[-0.06925 , -0.01975]	0.90276
CADD	[0.01285 , 0.12]	0.90276
CAIM	[-0.1023 , -0.03985]	0.90276
Chi2	[-0.0699 , -0.02595]	0.90276
ChiMerge	[-0.08925 , -0.04135]	0.90276
ClusterAnalysis	[-0.0104 , 0.0135]	0.90276
DIBD	[-0.0619 , -0.01175]	0.90276
Distance	[-0.0858 , -0.0254]	0.90276
EqualFrequency	[-0.0654 , -0.02]	0.90276
EqualWidth	[-0.0569 , -0.0119]	0.90276
Extended Chi2	[-0.0498 , -0.0139]	0.90276
FFD	[-0.03485 , 0.0017]	0.90276
FUSINTER	[-0.09025 , -0.03395]	0.90276
HDD	[-0.0299 , 0]	0.90276
HellingerBD	[-0.0704 , -0.01765]	0.90276
Heter-Disc	[-0.00335 , 0.04765]	0.90276
ID3	[-0.0043 , 0.0259]	0.90276
IDD	[-0.01495 , 0.00625]	0.90276
Khiops	[-0.07655 , -0.01825]	0.90276
MDLP	[-0.09095 , -0.0264]	0.90276
Modified Chi2	[-0.0699 , -0.0204]	0.90276
MODL	[-0.0661 , -0.0188]	0.90276
MVD	[-0.02225 , 0.0108]	0.90276
PKID	[-0.0294 , 0]	0.90276
UCPD	[-0.07785 , -0.02215]	0.90276
USD	[-0.01505 , -0.0002]	0.90276
Zeta	[-0.0841 , -0.0326]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0187 , 0.0254]	0.95024
Ameva	[-0.0881 , -0.02795]	0.95024
CACC	[-0.07405 , -0.01635]	0.95024
CADD	[0.0037 , 0.136]	0.95024
CAIM	[-0.108 , -0.03495]	0.95024
Chi2	[-0.0761 , -0.02215]	0.95024
ChiMerge	[-0.096 , -0.039]	0.95024
ClusterAnalysis	[-0.01205 , 0.0165]	0.95024
DIBD	[-0.0689 , -0.0086]	0.95024
Distance	[-0.09225 , -0.0221]	0.95024
EqualFrequency	[-0.0686 , -0.01745]	0.95024
EqualWidth	[-0.06045 , -0.0094]	0.95024
Extended Chi2	[-0.05435 , -0.0119]	0.95024
FFD	[-0.04455 , 0.00335]	0.95024
FUSINTER	[-0.0962 , -0.02975]	0.95024
HDD	[-0.03485 , 0.00315]	0.95024
HellingerBD	[-0.0754 , -0.0148]	0.95024
Heter-Disc	[-0.0073 , 0.06175]	0.95024
ID3	[-0.00625 , 0.02905]	0.95024
IDD	[-0.01665 , 0.01]	0.95024
Khiops	[-0.0823 , -0.014]	0.95024
MDLP	[-0.09835 , -0.023]	0.95024
Modified Chi2	[-0.0767 , -0.01595]	0.95024
MODL	[-0.07305 , -0.01705]	0.95024
MVD	[-0.0256 , 0.0167]	0.95024
PKID	[-0.0355 , 0.0005]	0.95024
UCPD	[-0.0819 , -0.0194]	0.95024
USD	[-0.0164 , 0]	0.95024
Zeta	[-0.0897 , -0.02945]	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	655.0	165.0	6.754E-4	0.000967
Ameva	396.5	392.5	≥ 0.2	1
Bayesian	666.5	153.5	0.001200999999999998	0.001609
CADD	750.0	70.0	5.278E-7	0.000005
CAIM	276.5	508.5	≥ 0.2	1
Chi2	368.5	414.5	≥ 0.2	1
ChiMerge	304.5	478.5	≥ 0.2	1
ClusterAnalysis	663.0	157.0	4.266E-4	0.000642
DIBD	509.5	310.5	0.18537	0.178176
Distance	359.5	460.5	≥ 0.2	1
EqualFrequency	415.0	368.0	≥ 0.2	1
EqualWidth	529.5	290.5	≥ 0.2	0.243035
Extended Chi2	504.0	316.0	≥ 0.2	0.203252
FFD	609.5	210.5	0.019486	0.019933
FUSINTER	244.0	576.0	≥ 0.2	1
HDD	540.5	279.5	≥ 0.2	0.751786
HellingerBD	451.5	368.5	≥ 0.2	1
Heter-Disc	685.0	98.0	5.138E-5	0.000127
ID3	607.0	176.0	0.007206	0.007926
IDD	672.0	148.0	2.482E-4	0.000418
Khiops	469.5	350.5	≥ 0.2	0.765828
MDLP	295.5	489.5	≥ 0.2	1
Modified Chi2	400.0	420.0	≥ 0.2	1
MODL	419.5	365.5	≥ 0.2	1
MVD	553.0	230.0	0.06756	0.065691
PKID	598.5	221.5	0.03014	0.030152
UCPD	406.0	374.0	≥ 0.2	0.817892
USD	567.5	252.5	0.08851	0.085702
Zeta	402.5	417.5	≥ 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	[0.02885 , 0.1059]	0.90276
Ameva	[-0.0043 , 0.00305]	0.90276
Bayesian	[0.01975 , 0.06925]	0.90276
CADD	[0.08895 , 0.1691]	0.90276
CAIM	[-0.01225 , 0]	0.90276
Chi2	[-0.01035 , 0.0065]	0.90276
ChiMerge	[-0.0214 , 0.00195]	0.90276
ClusterAnalysis	[0.01835 , 0.06795]	0.90276
DIBD	[-0.00205 , 0.02735]	0.90276
Distance	[-0.0064 , 0.00215]	0.90276
EqualFrequency	[-0.008 , 0.0189]	0.90276
EqualWidth	[-0.0003 , 0.0242]	0.90276
Extended Chi2	[-0.00225 , 0.0368]	0.90276
FFD	[0.0094 , 0.04465]	0.90276
FUSINTER	[-0.0193 , -0.00235]	0.90276
HDD	[0 , 0.0456]	0.90276
HellingerBD	[-0.0056 , 0.0152]	0.90276
Heter-Disc	[0.03625 , 0.09615]	0.90276
ID3	[0.02025 , 0.0816]	0.90276
IDD	[0.0301 , 0.0962]	0.90276
Khiops	[-0.00665 , 0.01445]	0.90276
MDLP	[-0.01205 , 0.0009]	0.90276
Modified Chi2	[-0.0145 , 0.01185]	0.90276
MODL	[-0.00745 , 0.00955]	0.90276
MVD	[0.0082 , 0.05315]	0.90276
PKID	[0.00805 , 0.05745]	0.90276
UCPD	[-0.0077 , 0.0097]	0.90276
USD	[0.00445 , 0.05345]	0.90276
Zeta	[-0.00895 , 0.0073]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0231 , 0.11335]	0.95024
Ameva	[-0.00575 , 0.00375]	0.95024
Bayesian	[0.01635 , 0.07405]	0.95024
CADD	[0.0803 , 0.1787]	0.95024
CAIM	[-0.01465 , 0.00045]	0.95024
Chi2	[-0.0125 , 0.0077]	0.95024
ChiMerge	[-0.02375 , 0.00315]	0.95024
ClusterAnalysis	[0.01565 , 0.0743]	0.95024
DIBD	[-0.0036 , 0.0317]	0.95024
Distance	[-0.0075 , 0.00285]	0.95024
EqualFrequency	[-0.01035 , 0.02205]	0.95024
EqualWidth	[-0.00255 , 0.02675]	0.95024
Extended Chi2	[-0.00375 , 0.04205]	0.95024
FFD	[0.0066 , 0.0477]	0.95024
FUSINTER	[-0.02125 , -0.0011]	0.95024
HDD	[-0.0001 , 0.0506]	0.95024
HellingerBD	[-0.008 , 0.0167]	0.95024
Heter-Disc	[0.0313 , 0.10485]	0.95024
ID3	[0.0152 , 0.08685]	0.95024
IDD	[0.0237 , 0.10395]	0.95024
Khiops	[-0.00785 , 0.01655]	0.95024
MDLP	[-0.0136 , 0.00145]	0.95024
Modified Chi2	[-0.01715 , 0.01395]	0.95024
MODL	[-0.0107 , 0.01285]	0.95024
MVD	[0.0044 , 0.0599]	0.95024
PKID	[0.0056 , 0.062]	0.95024
UCPD	[-0.00965 , 0.01105]	0.95024
USD	[0.0015 , 0.06085]	0.95024
Zeta	[-0.0108 , 0.0091]	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	147.5	641.5	≥ 0.2	1
Ameva	46.0	774.0	≥ 0.2	1
Bayesian	184.5	635.5	≥ 0.2	1
CACC	70.0	750.0	≥ 0.2	1
CAIM	18.0	802.0	≥ 0.2	1
Chi2	43.5	776.5	≥ 0.2	1
ChiMerge	13.0	767.0	≥ 0.2	1
ClusterAnalysis	155.5	664.5	≥ 0.2	1
DIBD	38.0	745.0	≥ 0.2	1
Distance	51.0	769.0	≥ 0.2	1
EqualFrequency	22.0	763.0	≥ 0.2	1
EqualWidth	36.0	784.0	≥ 0.2	1
Extended Chi2	94.0	693.0	≥ 0.2	1
FFD	107.0	713.0	≥ 0.2	1
FUSINTER	26.5	793.5	≥ 0.2	1
HDD	163.0	657.0	≥ 0.2	1
HellingerBD	15.0	805.0	≥ 0.2	1
Heter-Disc	298.0	522.0	≥ 0.2	1
ID3	253.0	538.0	≥ 0.2	1
IDD	167.0	653.0	≥ 0.2	1
Khiops	23.0	757.0	≥ 0.2	1
MDLP	32.0	748.0	≥ 0.2	1
Modified Chi2	37.5	747.5	≥ 0.2	1
MODL	76.5	743.5	≥ 0.2	1
MVD	174.5	614.5	≥ 0.2	1
PKID	123.0	664.0	≥ 0.2	1
UCPD	20.0	800.0	≥ 0.2	1
USD	157.0	630.0	≥ 0.2	1
Zeta	23.0	797.0	≥ 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	[-0.068 , -0.0073]	0.90276
Ameva	[-0.1758 , -0.0952]	0.90276
Bayesian	[-0.12 , -0.01285]	0.90276
CACC	[-0.1691 , -0.08895]	0.90276
CAIM	[-0.19815 , -0.1198]	0.90276
Chi2	[-0.19355 , -0.10205]	0.90276
ChiMerge	[-0.1962 , -0.11225]	0.90276
ClusterAnalysis	[-0.1186 , -0.03095]	0.90276
DIBD	[-0.1535 , -0.0715]	0.90276
Distance	[-0.1928 , -0.1064]	0.90276
EqualFrequency	[-0.17045 , -0.0923]	0.90276
EqualWidth	[-0.1613 , -0.08435]	0.90276
Extended Chi2	[-0.159 , -0.065]	0.90276
FFD	[-0.1488 , -0.04205]	0.90276
FUSINTER	[-0.2152 , -0.11885]	0.90276
HDD	[-0.14665 , -0.04835]	0.90276
HellingerBD	[-0.1721 , -0.09585]	0.90276
Heter-Disc	[-0.09255 , 0]	0.90276
ID3	[-0.12445 , 0]	0.90276
IDD	[-0.09375 , -0.0084]	0.90276
Khiops	[-0.18285 , -0.1007]	0.90276
MDLP	[-0.19625 , -0.11215]	0.90276
Modified Chi2	[-0.187 , -0.0938]	0.90276
MODL	[-0.1714 , -0.0791]	0.90276
MVD	[-0.11025 , -0.03535]	0.90276
PKID	[-0.1443 , -0.037]	0.90276
UCPD	[-0.1796 , -0.0957]	0.90276
USD	[-0.1436 , -0.02485]	0.90276
Zeta	[-0.1851 , -0.1049]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.08335 , -0.00645]	0.95024
Ameva	[-0.1834 , -0.0854]	0.95024
Bayesian	[-0.136 , -0.0037]	0.95024
CACC	[-0.1787 , -0.0803]	0.95024
CAIM	[-0.20865 , -0.1098]	0.95024
Chi2	[-0.2058 , -0.0942]	0.95024
ChiMerge	[-0.20455 , -0.10525]	0.95024
ClusterAnalysis	[-0.1312 , -0.0238]	0.95024
DIBD	[-0.1622 , -0.066]	0.95024
Distance	[-0.2035 , -0.099]	0.95024
EqualFrequency	[-0.17885 , -0.08435]	0.95024
EqualWidth	[-0.1696 , -0.07215]	0.95024
Extended Chi2	[-0.16575 , -0.0549]	0.95024
FFD	[-0.15415 , -0.03625]	0.95024
FUSINTER	[-0.2262 , -0.10825]	0.95024
HDD	[-0.15205 , -0.04165]	0.95024
HellingerBD	[-0.1804 , -0.087]	0.95024
Heter-Disc	[-0.1005 , 0]	0.95024
ID3	[-0.1358 , 0]	0.95024
IDD	[-0.10075 , -0.0073]	0.95024
Khiops	[-0.19035 , -0.09145]	0.95024
MDLP	[-0.2074 , -0.1057]	0.95024
Modified Chi2	[-0.20575 , -0.0831]	0.95024
MODL	[-0.1836 , -0.07145]	0.95024
MVD	[-0.11565 , -0.0276]	0.95024
PKID	[-0.14855 , -0.0243]	0.95024
UCPD	[-0.18565 , -0.09]	0.95024
USD	[-0.1471 , -0.0216]	0.95024
Zeta	[-0.19575 , -0.1007]	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	738.0	82.0	1.6944E-6	0.00001
Ameva	497.5	322.5	≥ 0.2	1
Bayesian	786.0	34.0	6.776E-9	0
CACC	508.5	276.5	≥ 0.2	0.522962
CADD	802.0	18.0	4.602E-10	0
Chi2	521.0	299.0	≥ 0.2	0.587808
ChiMerge	417.5	367.5	≥ 0.2	1
ClusterAnalysis	746.5	73.5	7.509000000000001E-7	0.000006
DIBD	613.5	206.5	0.005454000000000005	0.006021
Distance	460.0	323.0	≥ 0.2	0.660547
EqualFrequency	613.0	207.0	0.016852	0.017187
EqualWidth	657.0	123.0	9.094E-5	0.000189
Extended Chi2	651.5	168.5	8.21E-4	0.001099
FFD	704.5	78.5	9.404999999999999E-6	0.000036
FUSINTER	391.0	392.0	≥ 0.2	1
HDD	652.0	139.0	0.09196	0.087593
HellingerBD	609.5	210.5	0.019486	0.019933
Heter-Disc	709.5	70.5	1.104E-6	0.000008
ID3	710.5	74.5	2.493E-5	0.000079
IDD	764.0	56.0	1.1634E-7	0.000002
Khiops	523.5	259.5	0.16941	0.162078
MDLP	419.5	400.5	≥ 0.2	1
Modified Chi2	507.0	273.0	0.1045	0.101065
MODL	578.0	242.0	0.15682	0.150571
MVD	656.0	124.0	9.754E-5	0.0002
PKID	706.0	77.0	8.156E-6	0.000033
UCPD	532.0	288.0	0.1029	0.099649
USD	683.5	99.5	5.803E-5	0.000135
Zeta	563.5	225.5	≥ 0.2	0.650592

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	[0.0425 , 0.12815]	0.90276
Ameva	[-0.0012 , 0.0099]	0.90276
Bayesian	[0.03985 , 0.1023]	0.90276
CACC	[0 , 0.01225]	0.90276
CADD	[0.1198 , 0.19815]	0.90276
Chi2	[-0.00015 , 0.0165]	0.90276
ChiMerge	[-0.00435 , 0.00595]	0.90276
ClusterAnalysis	[0.04455 , 0.1045]	0.90276
DIBD	[0.00745 , 0.03745]	0.90276
Distance	[-0.0019 , 0.00715]	0.90276
EqualFrequency	[0.00945 , 0.0371]	0.90276
EqualWidth	[0.016 , 0.0458]	0.90276
Extended Chi2	[0.0094 , 0.05605]	0.90276
FFD	[0.03215 , 0.07225]	0.90276
FUSINTER	[-0.006 , 0.0065]	0.90276
HDD	[0.02695 , 0.0764]	0.90276
HellingerBD	[0.00795 , 0.03175]	0.90276
Heter-Disc	[0.05125 , 0.1343]	0.90276
ID3	[0.0435 , 0.1186]	0.90276
IDD	[0.0454 , 0.1148]	0.90276
Khiops	[0.0011 , 0.02555]	0.90276
MDLP	[-0.0049 , 0.0065]	0.90276
Modified Chi2	[-0.0003 , 0.0308]	0.90276
MODL	[0.00315 , 0.0234]	0.90276
MVD	[0.0269 , 0.10225]	0.90276
PKID	[0.0388 , 0.0848]	0.90276
UCPD	[-0.00005 , 0.01915]	0.90276
USD	[0.02655 , 0.08005]	0.90276
Zeta	[0.00145 , 0.01055]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.03875 , 0.1334]	0.95024
Ameva	[-0.00155 , 0.01215]	0.95024
Bayesian	[0.03495 , 0.108]	0.95024
CACC	[-0.00045 , 0.01465]	0.95024
CADD	[0.1098 , 0.20865]	0.95024
Chi2	[-0.0012 , 0.0178]	0.95024
ChiMerge	[-0.00585 , 0.007]	0.95024
ClusterAnalysis	[0.0401 , 0.1131]	0.95024
DIBD	[0.0055 , 0.0425]	0.95024
Distance	[-0.0031 , 0.0085]	0.95024
EqualFrequency	[0.00715 , 0.039]	0.95024
EqualWidth	[0.01445 , 0.04955]	0.95024
Extended Chi2	[0.00765 , 0.06085]	0.95024
FFD	[0.02965 , 0.0777]	0.95024
FUSINTER	[-0.00735 , 0.00765]	0.95024
HDD	[0.00955 , 0.0793]	0.95024
HellingerBD	[0.00585 , 0.03365]	0.95024
Heter-Disc	[0.04755 , 0.14435]	0.95024
ID3	[0.0406 , 0.12365]	0.95024
IDD	[0.0397 , 0.12425]	0.95024
Khiops	[-0.0005 , 0.02805]	0.95024
MDLP	[-0.0061 , 0.0083]	0.95024
Modified Chi2	[-0.0027 , 0.03335]	0.95024
MODL	[0.0016 , 0.02555]	0.95024
MVD	[0.02125 , 0.11055]	0.95024
PKID	[0.0347 , 0.0887]	0.95024
UCPD	[-0.00255 , 0.02045]	0.95024
USD	[0.0241 , 0.08965]	0.95024
Zeta	[0.0002 , 0.012]	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	649.0	131.0	1.5756E-4	0.000293
Ameva	443.0	377.0	≥ 0.2	1
Bayesian	719.5	100.5	3.238E-5	0.000088
CACC	414.5	368.5	≥ 0.2	1
CADD	776.5	43.5	1.0097E-7	0.000002
CAIM	299.0	521.0	≥ 0.2	1
ChiMerge	304.0	481.0	≥ 0.2	1
ClusterAnalysis	663.0	117.0	5.914E-5	0.000132
DIBD	505.0	275.0	0.11072	0.107005
Distance	416.5	403.5	≥ 0.2	1
EqualFrequency	484.5	335.5	≥ 0.2	0.606671
EqualWidth	606.0	214.0	0.02246	0.022549
Extended Chi2	520.0	263.0	0.18656	0.179376
FFD	664.5	118.5	2.4220000000000003E-4	0.000417
FUSINTER	299.0	521.0	≥ 0.2	1
HDD	592.5	227.5	≥ 0.2	0.228086
HellingerBD	497.0	283.0	0.13846	0.132218
Heter-Disc	721.5	98.5	2.754E-5	0.000078
ID3	672.5	112.5	5.712E-4	0.000884
IDD	696.5	123.5	1.8018E-4	0.000332
Khiops	488.0	295.0	≥ 0.2	0.389834
MDLP	373.5	446.5	≥ 0.2	1
Modified Chi2	471.0	349.0	≥ 0.2	1
MODL	432.5	352.5	≥ 0.2	1
MVD	608.5	211.5	0.020303	0.020716
PKID	689.0	131.0	0.0010566	0.001466
UCPD	461.0	359.0	≥ 0.2	0.488064
USD	611.5	208.5	0.0506	0.049104
Zeta	393.5	391.5	≥ 0.2	1

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

7.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.02375 , 0.1164]	0.90276
Ameva	[-0.0055 , 0.00805]	0.90276
Bayesian	[0.02595 , 0.0699]	0.90276
CACC	[-0.0065 , 0.01035]	0.90276
CADD	[0.10205 , 0.19355]	0.90276
CAIM	[-0.0165 , 0.00015]	0.90276
ChiMerge	[-0.0131 , 0.001]	0.90276
ClusterAnalysis	[0.0286 , 0.08585]	0.90276
DIBD	[-0.00015 , 0.0258]	0.90276
Distance	[-0.00665 , 0.0065]	0.90276
EqualFrequency	[-0.00365 , 0.03]	0.90276
EqualWidth	[0.00655 , 0.02915]	0.90276
Extended Chi2	[0.00035 , 0.03105]	0.90276
FFD	[0.0164 , 0.0481]	0.90276
FUSINTER	[-0.01025 , 0.0003]	0.90276
HDD	[0.005 , 0.03835]	0.90276
HellingerBD	[-0.00115 , 0.02025]	0.90276
Heter-Disc	[0.0417 , 0.1183]	0.90276
ID3	[0.02925 , 0.0968]	0.90276
IDD	[0.02305 , 0.10205]	0.90276
Khiops	[-0.00175 , 0.01485]	0.90276
MDLP	[-0.0108 , 0.00365]	0.90276
Modified Chi2	[-0.00285 , 0.0095]	0.90276
MODL	[-0.0053 , 0.0104]	0.90276
MVD	[0.008 , 0.06805]	0.90276
PKID	[0.01745 , 0.0584]	0.90276
UCPD	[-0.0045 , 0.01465]	0.90276
USD	[0.008 , 0.05305]	0.90276
Zeta	[-0.008 , 0.0059]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0189 , 0.13065]	0.95024
Ameva	[-0.0076 , 0.00975]	0.95024
Bayesian	[0.02215 , 0.0761]	0.95024
CACC	[-0.0077 , 0.0125]	0.95024
CADD	[0.0942 , 0.2058]	0.95024
CAIM	[-0.0178 , 0.0012]	0.95024
ChiMerge	[-0.01685 , 0.00185]	0.95024
ClusterAnalysis	[0.02385 , 0.09455]	0.95024
DIBD	[-0.0021 , 0.02935]	0.95024
Distance	[-0.00815 , 0.00775]	0.95024
EqualFrequency	[-0.00515 , 0.033]	0.95024
EqualWidth	[0.00505 , 0.03205]	0.95024
Extended Chi2	[-0.0009 , 0.0412]	0.95024
FFD	[0.014 , 0.05095]	0.95024
FUSINTER	[-0.0121 , 0.0012]	0.95024
HDD	[0.00345 , 0.04095]	0.95024
HellingerBD	[-0.0032 , 0.0229]	0.95024
Heter-Disc	[0.0379 , 0.12995]	0.95024
ID3	[0.0264 , 0.10665]	0.95024
IDD	[0.0203 , 0.11005]	0.95024
Khiops	[-0.0037 , 0.0166]	0.95024
MDLP	[-0.0126 , 0.0046]	0.95024
Modified Chi2	[-0.00365 , 0.01135]	0.95024
MODL	[-0.00725 , 0.01215]	0.95024
MVD	[0.00605 , 0.08575]	0.95024
PKID	[0.0142 , 0.06625]	0.95024
UCPD	[-0.00595 , 0.0166]	0.95024
USD	[0.00585 , 0.0629]	0.95024
Zeta	[-0.01085 , 0.0079]	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	735.0	85.0	2.232E-6	0.000012
Ameva	524.5	295.5	≥ 0.2	0.965835
Bayesian	789.0	31.0	4.32E-9	0
CACC	478.5	304.5	≥ 0.2	0.472787
CADD	767.0	13.0	3.202E-10	0
CAIM	367.5	417.5	≥ 0.2	1
Chi2	481.0	304.0	≥ 0.2	0.849987
ClusterAnalysis	727.0	53.0	1.6374E-7	0.000002
DIBD	595.5	224.5	0.011776	0.01227
Distance	465.0	355.0	≥ 0.2	1
EqualFrequency	616.5	203.5	0.014535	0.01477
EqualWidth	702.5	117.5	1.1798E-4	0.000231
Extended Chi2	633.0	187.0	0.002166	0.002663
FFD	746.0	74.0	3.094E-6	0.000016
FUSINTER	389.0	394.0	≥ 0.2	1
HDD	679.5	140.5	5.507999999999999E-4	0.000829
HellingerBD	596.0	184.0	0.003362	0.003955
Heter-Disc	748.5	71.5	2.4199999999999997E-6	0.000014
ID3	719.0	64.0	2.218E-6	0.000014
IDD	780.0	40.0	1.582E-8	0.000001
Khiops	524.0	256.0	0.06198	0.060525
MDLP	413.5	406.5	≥ 0.2	1
Modified Chi2	520.5	262.5	0.18405	0.175311
MODL	561.0	259.0	≥ 0.2	0.504011
MVD	723.0	97.0	6.358E-6	0.000025
PKID	748.5	71.5	2.4199999999999997E-6	0.000014
UCPD	549.5	270.5	0.06122	0.059009
USD	698.0	82.0	3.348E-6	0.000017
Zeta	556.5	228.5	0.16083	0.154161

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	[0.0397 , 0.12675]	0.90276
Ameva	[0 , 0.0108]	0.90276
Bayesian	[0.04135 , 0.08925]	0.90276
CACC	[-0.00195 , 0.0214]	0.90276
CADD	[0.11225 , 0.1962]	0.90276
CAIM	[-0.00595 , 0.00435]	0.90276
Chi2	[-0.001 , 0.0131]	0.90276
ClusterAnalysis	[0.04335 , 0.0955]	0.90276
DIBD	[0.0065 , 0.0391]	0.90276
Distance	[-0.00445 , 0.0128]	0.90276
EqualFrequency	[0.01055 , 0.0367]	0.90276
EqualWidth	[0.0189 , 0.0415]	0.90276
Extended Chi2	[0.0107 , 0.0502]	0.90276
FFD	[0.03075 , 0.06605]	0.90276
FUSINTER	[-0.0072 , 0.00675]	0.90276
HDD	[0.0252 , 0.067]	0.90276
HellingerBD	[0.00815 , 0.02875]	0.90276
Heter-Disc	[0.05105 , 0.13015]	0.90276
ID3	[0.04655 , 0.11155]	0.90276
IDD	[0.04325 , 0.11]	0.90276
Khiops	[0.00165 , 0.0254]	0.90276
MDLP	[-0.00755 , 0.0077]	0.90276
Modified Chi2	[0.00015 , 0.02975]	0.90276
MODL	[0.00065 , 0.02025]	0.90276
MVD	[0.02825 , 0.0926]	0.90276
PKID	[0.0369 , 0.07815]	0.90276
UCPD	[0.0011 , 0.0181]	0.90276
USD	[0.0282 , 0.0727]	0.90276
Zeta	[0.00205 , 0.01275]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.03475 , 0.1346]	0.95024
Ameva	[-0.0013 , 0.0131]	0.95024
Bayesian	[0.039 , 0.096]	0.95024
CACC	[-0.00315 , 0.02375]	0.95024
CADD	[0.10525 , 0.20455]	0.95024
CAIM	[-0.007 , 0.00585]	0.95024
Chi2	[-0.00185 , 0.01685]	0.95024
ClusterAnalysis	[0.0389 , 0.1022]	0.95024
DIBD	[0.0044 , 0.04235]	0.95024
Distance	[-0.0065 , 0.0141]	0.95024
EqualFrequency	[0.0076 , 0.03865]	0.95024
EqualWidth	[0.01645 , 0.04495]	0.95024
Extended Chi2	[0.0081 , 0.0543]	0.95024
FFD	[0.0295 , 0.06835]	0.95024
FUSINTER	[-0.0082 , 0.00815]	0.95024
HDD	[0.02245 , 0.0703]	0.95024
HellingerBD	[0.0063 , 0.03075]	0.95024
Heter-Disc	[0.0479 , 0.13685]	0.95024
ID3	[0.0427 , 0.1155]	0.95024
IDD	[0.03945 , 0.117]	0.95024
Khiops	[-0.00045 , 0.0274]	0.95024
MDLP	[-0.00975 , 0.01]	0.95024
Modified Chi2	[-0.00045 , 0.03205]	0.95024
MODL	[0 , 0.02415]	0.95024
MVD	[0.02375 , 0.10205]	0.95024
PKID	[0.03495 , 0.083]	0.95024
UCPD	[-0.00035 , 0.02025]	0.95024
USD	[0.02445 , 0.07875]	0.95024
Zeta	[0.001 , 0.0144]	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	379.0	404.0	≥ 0.2	1
Ameva	150.0	670.0	≥ 0.2	1
Bayesian	407.5	412.5	≥ 0.2	1
CACC	157.0	663.0	≥ 0.2	1
CADD	664.5	155.5	0.014192	0.01484
CAIM	73.5	746.5	≥ 0.2	1
Chi2	117.0	663.0	≥ 0.2	1
ChiMerge	53.0	727.0	≥ 0.2	1
DIBD	213.0	567.0	≥ 0.2	1
Distance	141.0	679.0	≥ 0.2	1
EqualFrequency	62.5	722.5	≥ 0.2	1
EqualWidth	148.0	635.0	≥ 0.2	1
Extended Chi2	177.5	642.5	≥ 0.2	1
FFD	256.5	563.5	≥ 0.2	1
FUSINTER	52.0	728.0	≥ 0.2	1
HDD	265.5	519.5	≥ 0.2	1
HellingerBD	123.0	657.0	≥ 0.2	1
Heter-Disc	520.5	264.5	≥ 0.2	0.403528
ID3	434.0	386.0	≥ 0.2	1
IDD	428.0	392.0	≥ 0.2	1
Khiops	110.0	670.0	≥ 0.2	1
MDLP	103.5	716.5	≥ 0.2	1
Modified Chi2	88.0	695.0	≥ 0.2	1
MODL	108.0	672.0	≥ 0.2	1
MVD	420.5	399.5	≥ 0.2	1
PKID	264.5	520.5	≥ 0.2	1
UCPD	93.0	727.0	≥ 0.2	1
USD	291.5	493.5	≥ 0.2	1
Zeta	84.0	736.0	≥ 0.2	1

Table 25: Results obtained by the Wilcoxon test for algorithm ClusterAnalysis

9.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0301 , 0.0317]	0.90276
Ameva	[-0.07985 , -0.0256]	0.90276
Bayesian	[-0.0135 , 0.0104]	0.90276
CACC	[-0.06795 , -0.01835]	0.90276
CADD	[0.03095 , 0.1186]	0.90276
CAIM	[-0.1045 , -0.04455]	0.90276
Chi2	[-0.08585 , -0.0286]	0.90276
ChiMerge	[-0.0955 , -0.04335]	0.90276
DIBD	[-0.066 , -0.00985]	0.90276
Distance	[-0.09265 , -0.02805]	0.90276
EqualFrequency	[-0.0648 , -0.0255]	0.90276
EqualWidth	[-0.0515 , -0.01495]	0.90276
Extended Chi2	[-0.0548 , -0.0134]	0.90276
FFD	[-0.04215 , -0.0019]	0.90276
FUSINTER	[-0.10385 , -0.0366]	0.90276
HDD	[-0.02665 , -0.00055]	0.90276
HellingerBD	[-0.0592 , -0.01985]	0.90276
Heter-Disc	[0.00015 , 0.05]	0.90276
ID3	[-0.0043 , 0.0163]	0.90276
IDD	[-0.0207 , 0.0252]	0.90276
Khiops	[-0.07325 , -0.02405]	0.90276
MDLP	[-0.09245 , -0.0312]	0.90276
Modified Chi2	[-0.0743 , -0.02275]	0.90276
MODL	[-0.07075 , -0.0208]	0.90276
MVD	[-0.02705 , 0.0211]	0.90276
PKID	[-0.03405 , -0.00005]	0.90276
UCPD	[-0.0709 , -0.02155]	0.90276
USD	[-0.0248 , 0.00095]	0.90276
Zeta	[-0.0877 , -0.0354]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0383 , 0.0403]	0.95024
Ameva	[-0.0875 , -0.02165]	0.95024
Bayesian	[-0.0165 , 0.01205]	0.95024
CACC	[-0.0743 , -0.01565]	0.95024
CADD	[0.0238 , 0.1312]	0.95024
CAIM	[-0.1131 , -0.0401]	0.95024
Chi2	[-0.09455 , -0.02385]	0.95024
ChiMerge	[-0.1022 , -0.0389]	0.95024
DIBD	[-0.07605 , -0.0057]	0.95024
Distance	[-0.099 , -0.0232]	0.95024
EqualFrequency	[-0.06785 , -0.0221]	0.95024
EqualWidth	[-0.05465 , -0.01255]	0.95024
Extended Chi2	[-0.06495 , -0.0108]	0.95024
FFD	[-0.04395 , 0]	0.95024
FUSINTER	[-0.11005 , -0.03155]	0.95024
HDD	[-0.0321 , 0.0001]	0.95024
HellingerBD	[-0.0641 , -0.01625]	0.95024
Heter-Disc	[-0.0004 , 0.0642]	0.95024
ID3	[-0.00565 , 0.0224]	0.95024
IDD	[-0.02555 , 0.03095]	0.95024
Khiops	[-0.07785 , -0.0211]	0.95024
MDLP	[-0.09825 , -0.0286]	0.95024
Modified Chi2	[-0.08225 , -0.01975]	0.95024
MODL	[-0.0776 , -0.0181]	0.95024
MVD	[-0.02935 , 0.0234]	0.95024
PKID	[-0.0369 , 0.0001]	0.95024
UCPD	[-0.07705 , -0.01885]	0.95024
USD	[-0.0315 , 0.0021]	0.95024
Zeta	[-0.0954 , -0.03115]	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	632.0	148.0	4.662E-4	0.000714
Ameva	303.5	516.5	≥ 0.2	1
Bayesian	620.5	199.5	0.012223	0.012877
CACC	310.5	509.5	≥ 0.2	1
CADD	745.0	38.0	9.606E-8	0.000002
CAIM	206.5	613.5	≥ 0.2	1
Chi2	275.0	505.0	≥ 0.2	1
ChiMerge	224.5	595.5	≥ 0.2	1
ClusterAnalysis	567.0	213.0	0.01261	0.013249
Distance	208.5	611.5	≥ 0.2	1
EqualFrequency	377.0	443.0	≥ 0.2	1
EqualWidth	438.0	382.0	≥ 0.2	0.701663
Extended Chi2	381.0	399.0	≥ 0.2	1
FFD	543.5	236.5	0.03166	0.031332
FUSINTER	175.0	645.0	≥ 0.2	1
HDD	491.0	329.0	≥ 0.2	0.273313
HellingerBD	349.0	471.0	≥ 0.2	1
Heter-Disc	649.5	133.5	6.632000000000001E-4	0.000937
ID3	598.0	222.0	0.010628	0.011287
IDD	629.0	151.0	5.586E-4	0.000831
Khiops	302.0	518.0	≥ 0.2	1
MDLP	178.0	642.0	≥ 0.2	1
Modified Chi2	324.0	496.0	≥ 0.2	1
MODL	328.0	452.0	≥ 0.2	1
MVD	515.0	268.0	≥ 0.2	0.205067
PKID	560.5	259.5	0.04291000000000004	0.041702
UCPD	229.0	591.0	≥ 0.2	1
USD	533.0	287.0	0.10004	0.096354
Zeta	268.0	552.0	≥ 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	[0.0184 , 0.08315]	0.90276
Ameva	[-0.0329 , 0.0011]	0.90276
Bayesian	[0.01175 , 0.0619]	0.90276
CACC	[-0.02735 , 0.00205]	0.90276
CADD	[0.0715 , 0.1535]	0.90276
CAIM	[-0.03745 , -0.00745]	0.90276
Chi2	[-0.0258 , 0.00015]	0.90276
ChiMerge	[-0.0391 , -0.0065]	0.90276
ClusterAnalysis	[0.00985 , 0.066]	0.90276
Distance	[-0.0376 , -0.00575]	0.90276
EqualFrequency	[-0.01865 , 0.0091]	0.90276
EqualWidth	[-0.01155 , 0.0185]	0.90276
Extended Chi2	[-0.01555 , 0.0223]	0.90276
FFD	[0.0069 , 0.0466]	0.90276
FUSINTER	[-0.0418 , -0.0085]	0.90276
HDD	[-0.00635 , 0.038]	0.90276
HellingerBD	[-0.0252 , 0.0078]	0.90276
Heter-Disc	[0.02165 , 0.0643]	0.90276
ID3	[0.0163 , 0.08795]	0.90276
IDD	[0.0203 , 0.0723]	0.90276
Khiops	[-0.02855 , 0.00125]	0.90276
MDLP	[-0.04085 , -0.01]	0.90276
Modified Chi2	[-0.02735 , 0.0053]	0.90276
MODL	[-0.0253 , 0.0066]	0.90276
MVD	[0 , 0.04635]	0.90276
PKID	[0.0046 , 0.0526]	0.90276
UCPD	[-0.0301 , -0.00345]	0.90276
USD	[-0 , 0.05545]	0.90276
Zeta	[-0.02885 , -0.0019]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0149 , 0.088]	0.95024
Ameva	[-0.03505 , 0.00305]	0.95024
Bayesian	[0.0086 , 0.0689]	0.95024
CACC	[-0.0317 , 0.0036]	0.95024
CADD	[0.066 , 0.1622]	0.95024
CAIM	[-0.0425 , -0.0055]	0.95024
Chi2	[-0.02935 , 0.0021]	0.95024
ChiMerge	[-0.04235 , -0.0044]	0.95024
ClusterAnalysis	[0.0057 , 0.07605]	0.95024
Distance	[-0.04245 , -0.0041]	0.95024
EqualFrequency	[-0.0223 , 0.01265]	0.95024
EqualWidth	[-0.01495 , 0.02165]	0.95024
Extended Chi2	[-0.0183 , 0.0283]	0.95024
FFD	[0.0031 , 0.0503]	0.95024
FUSINTER	[-0.0485 , -0.0072]	0.95024
HDD	[-0.0102 , 0.0441]	0.95024
HellingerBD	[-0.0295 , 0.00995]	0.95024
Heter-Disc	[0.01765 , 0.07415]	0.95024
ID3	[0.012 , 0.09525]	0.95024
IDD	[0.01565 , 0.07875]	0.95024
Khiops	[-0.0344 , 0.0034]	0.95024
MDLP	[-0.0462 , -0.00745]	0.95024
Modified Chi2	[-0.03215 , 0.0079]	0.95024
MODL	[-0.02855 , 0.00865]	0.95024
MVD	[-0.0026 , 0.0523]	0.95024
PKID	[0.00135 , 0.057]	0.95024
UCPD	[-0.0356 , -0.00195]	0.95024
USD	[-0.0037 , 0.06235]	0.95024
Zeta	[-0.03275 , 0.0003]	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	701.0	119.0	3.546E-5	0.000084
Ameva	432.0	388.0	≥ 0.2	1
Bayesian	674.0	146.0	2.192E-4	0.000378
CACC	460.5	359.5	≥ 0.2	1
CADD	769.0	51.0	6.46E-8	0.000001
CAIM	323.0	460.0	≥ 0.2	1
Chi2	403.5	416.5	≥ 0.2	1
ChiMerge	355.0	465.0	≥ 0.2	1
ClusterAnalysis	679.0	141.0	1.5974E-4	0.000292
DIBD	611.5	208.5	0.005964000000000006	0.006534
EqualFrequency	481.0	299.0	≥ 0.2	0.201644
EqualWidth	555.0	225.0	0.0205	0.020913
Extended Chi2	502.0	318.0	≥ 0.2	0.21298
FFD	614.0	166.0	0.0013168	0.001699
FUSINTER	248.5	531.5	≥ 0.2	1
HDD	514.5	305.5	≥ 0.2	0.341288
HellingerBD	536.5	283.5	≥ 0.2	0.204459
Heter-Disc	725.0	95.0	5.372E-6	0.000022
ID3	640.5	179.5	0.004817	0.005483
IDD	672.0	108.0	3.008E-5	0.000081
Khiops	528.0	252.0	0.05434	0.052436
MDLP	271.0	514.0	≥ 0.2	1
Modified Chi2	386.0	394.0	≥ 0.2	1
MODL	464.0	356.0	≥ 0.2	1
MVD	592.0	228.0	0.013558	0.014166
PKID	616.5	203.5	0.014535	0.015135
UCPD	485.5	334.5	≥ 0.2	0.306186
USD	550.0	230.0	0.02486	0.025105
Zeta	455.0	365.0	≥ 0.2	0.930409

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	[0.03845 , 0.1219]	0.90276
Ameva	[-0.00335 , 0.0075]	0.90276
Bayesian	[0.0254 , 0.0858]	0.90276
CACC	[-0.00215 , 0.0064]	0.90276
CADD	[0.1064 , 0.1928]	0.90276
CAIM	[-0.00715 , 0.0019]	0.90276
Chi2	[-0.0065 , 0.00665]	0.90276
ChiMerge	[-0.0128 , 0.00445]	0.90276
ClusterAnalysis	[0.02805 , 0.09265]	0.90276
DIBD	[0.00575 , 0.0376]	0.90276
EqualFrequency	[-0.00425 , 0.0303]	0.90276
EqualWidth	[0.00725 , 0.0347]	0.90276
Extended Chi2	[-0.00205 , 0.0381]	0.90276
FFD	[0.0206 , 0.06695]	0.90276
FUSINTER	[-0.01275 , -0.0018]	0.90276
HDD	[-0.0018 , 0.044]	0.90276
HellingerBD	[0.00015 , 0.0268]	0.90276
Heter-Disc	[0.0445 , 0.1249]	0.90276
ID3	[0.0266 , 0.09955]	0.90276
IDD	[0.0364 , 0.10335]	0.90276
Khiops	[0.00145 , 0.0196]	0.90276
MDLP	[-0.00625 , 0]	0.90276
Modified Chi2	[-0.00865 , 0.01385]	0.90276
MODL	[-0.0036 , 0.01225]	0.90276
MVD	[0.0073 , 0.08295]	0.90276
PKID	[0.0178 , 0.0739]	0.90276
UCPD	[-0.00325 , 0.0144]	0.90276
USD	[0.0064 , 0.0798]	0.90276
Zeta	[-0.0033 , 0.0126]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.03255 , 0.12825]	0.95024
Ameva	[-0.00445 , 0.01]	0.95024
Bayesian	[0.0221 , 0.09225]	0.95024
CACC	[-0.00285 , 0.0075]	0.95024
CADD	[0.099 , 0.2035]	0.95024
CAIM	[-0.0085 , 0.0031]	0.95024
Chi2	[-0.00775 , 0.00815]	0.95024
ChiMerge	[-0.0141 , 0.0065]	0.95024
ClusterAnalysis	[0.0232 , 0.099]	0.95024
DIBD	[0.0041 , 0.04245]	0.95024
EqualFrequency	[-0.0067 , 0.0327]	0.95024
EqualWidth	[0.0033 , 0.03865]	0.95024
Extended Chi2	[-0.003 , 0.05065]	0.95024
FFD	[0.0162 , 0.0742]	0.95024
FUSINTER	[-0.0137 , -0.0002]	0.95024
HDD	[-0.0031 , 0.04935]	0.95024
HellingerBD	[-0.00145 , 0.0289]	0.95024
Heter-Disc	[0.0406 , 0.12875]	0.95024
ID3	[0.0229 , 0.1085]	0.95024
IDD	[0.0324 , 0.1122]	0.95024
Khiops	[-0.00025 , 0.0212]	0.95024
MDLP	[-0.0068 , 0.0004]	0.95024
Modified Chi2	[-0.01 , 0.0175]	0.95024
MODL	[-0.00455 , 0.01415]	0.95024
MVD	[0.00445 , 0.0897]	0.95024
PKID	[0.01115 , 0.0821]	0.95024
UCPD	[-0.00415 , 0.01615]	0.95024
USD	[0.00255 , 0.08655]	0.95024
Zeta	[-0.0064 , 0.01395]	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	609.0	171.0	0.0017248	0.00219
Ameva	326.0	454.0	≥ 0.2	1
Bayesian	698.0	122.0	5.846E-4	0.000891
CACC	368.0	415.0	≥ 0.2	1
CADD	763.0	22.0	3.12E-8	0.000001
CAIM	207.0	613.0	≥ 0.2	1
Chi2	335.5	484.5	≥ 0.2	1
ChiMerge	203.5	616.5	≥ 0.2	1
ClusterAnalysis	722.5	62.5	7.4480000000000005E-6	0.000034
DIBD	443.0	377.0	≥ 0.2	1
Distance	299.0	481.0	≥ 0.2	1
EqualWidth	524.5	260.5	≥ 0.2	0.367667
Extended Chi2	500.0	320.0	≥ 0.2	0.832035
FFD	729.0	91.0	7.73E-4	0.001178
FUSINTER	210.5	609.5	≥ 0.2	1
HDD	588.5	231.5	≥ 0.2	0.255572
HellingerBD	419.0	364.0	≥ 0.2	1
Heter-Disc	661.0	122.0	3.09E-4	0.000521
ID3	719.0	68.0	5.1E-5	0.000137
IDD	675.5	144.5	7.046E-4	0.001021
Khiops	349.5	470.5	≥ 0.2	1
MDLP	279.5	540.5	≥ 0.2	1
Modified Chi2	381.0	439.0	≥ 0.2	1
MODL	370.5	449.5	≥ 0.2	1
MVD	580.0	207.0	0.1948	0.186095
PKID	703.0	84.0	2.248E-4	0.000432
UCPD	328.0	492.0	≥ 0.2	1
USD	592.0	193.0	0.04564	0.044372
Zeta	233.0	547.0	≥ 0.2	1

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

12.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.011 , 0.10225]	0.90276
Ameva	[-0.02695 , 0.0049]	0.90276
Bayesian	[0.02 , 0.0654]	0.90276
CACC	[-0.0189 , 0.008]	0.90276
CADD	[0.0923 , 0.17045]	0.90276
CAIM	[-0.0371 , -0.00945]	0.90276
Chi2	[-0.03 , 0.00365]	0.90276
ChiMerge	[-0.0367 , -0.01055]	0.90276
ClusterAnalysis	[0.0255 , 0.0648]	0.90276
DIBD	[-0.0091 , 0.01865]	0.90276
Distance	[-0.0303 , 0.00425]	0.90276
EqualWidth	[0.00005 , 0.01695]	0.90276
Extended Chi2	[-0.00285 , 0.01805]	0.90276
FFD	[0.0132 , 0.0298]	0.90276
FUSINTER	[-0.0368 , -0.00575]	0.90276
HDD	[0.0036 , 0.03455]	0.90276
HellingerBD	[-0.0087 , 0.0122]	0.90276
Heter-Disc	[0.0297 , 0.1136]	0.90276
ID3	[0.02195 , 0.07235]	0.90276
IDD	[0.0238 , 0.08435]	0.90276
Khiops	[-0.0165 , 0.0041]	0.90276
MDLP	[-0.03475 , -0.00105]	0.90276
Modified Chi2	[-0.01935 , 0.0061]	0.90276
MODL	[-0.0156 , 0.005]	0.90276
MVD	[0.00835 , 0.06825]	0.90276
PKID	[0.0129 , 0.05]	0.90276
UCPD	[-0.01505 , 0.002]	0.90276
USD	[0.0069 , 0.05055]	0.90276
Zeta	[-0.02445 , -0.0032]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00895 , 0.11495]	0.95024
Ameva	[-0.02945 , 0.0067]	0.95024
Bayesian	[0.01745 , 0.0686]	0.95024
CACC	[-0.02205 , 0.01035]	0.95024
CADD	[0.08435 , 0.17885]	0.95024
CAIM	[-0.039 , -0.00715]	0.95024
Chi2	[-0.033 , 0.00515]	0.95024
ChiMerge	[-0.03865 , -0.0076]	0.95024
ClusterAnalysis	[0.0221 , 0.06785]	0.95024
DIBD	[-0.01265 , 0.0223]	0.95024
Distance	[-0.0327 , 0.0067]	0.95024
EqualWidth	[-0.00005 , 0.01885]	0.95024
Extended Chi2	[-0.00695 , 0.02085]	0.95024
FFD	[0.01185 , 0.03345]	0.95024
FUSINTER	[-0.03995 , -0.00305]	0.95024
HDD	[0.00285 , 0.03675]	0.95024
HellingerBD	[-0.0107 , 0.01355]	0.95024
Heter-Disc	[0.0261 , 0.12065]	0.95024
ID3	[0.0187 , 0.08035]	0.95024
IDD	[0.0152 , 0.09055]	0.95024
Khiops	[-0.01835 , 0.00555]	0.95024
MDLP	[-0.03695 , 0.0016]	0.95024
Modified Chi2	[-0.02345 , 0.0072]	0.95024
MODL	[-0.01665 , 0.007]	0.95024
MVD	[0.0048 , 0.0764]	0.95024
PKID	[0.01215 , 0.0532]	0.95024
UCPD	[-0.0174 , 0.0031]	0.95024
USD	[0.00505 , 0.0567]	0.95024
Zeta	[-0.0264 , -0.00155]	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	550.5	269.5	0.14642	0.141026
Ameva	224.0	556.0	≥ 0.2	1
Bayesian	633.5	186.5	0.02051	0.020668
CACC	290.5	529.5	≥ 0.2	1
CADD	784.0	36.0	1.4488E-7	0.000003
CAIM	123.0	657.0	≥ 0.2	1
Chi2	214.0	606.0	≥ 0.2	1
ChiMerge	117.5	702.5	≥ 0.2	1
ClusterAnalysis	635.0	148.0	0.0016086	0.002087
DIBD	382.0	438.0	≥ 0.2	1
Distance	225.0	555.0	≥ 0.2	1
EqualFrequency	260.5	524.5	≥ 0.2	1
Extended Chi2	367.5	452.5	≥ 0.2	1
FFD	597.0	223.0	≥ 0.2	0.198798
FUSINTER	100.5	682.5	≥ 0.2	1
HDD	510.5	274.5	≥ 0.2	0.501873
HellingerBD	301.0	519.0	≥ 0.2	1
Heter-Disc	650.5	169.5	0.002896	0.003476
ID3	650.0	137.0	0.009304	0.009917
IDD	592.0	191.0	0.014532	0.015145
Khiops	284.5	535.5	≥ 0.2	1
MDLP	179.0	601.0	≥ 0.2	1
Modified Chi2	282.0	503.0	≥ 0.2	1
MODL	298.5	521.5	≥ 0.2	1
MVD	563.0	257.0	≥ 0.2	0.228503
PKID	530.0	257.0	≥ 0.2	0.668048
UCPD	231.0	589.0	≥ 0.2	1
USD	536.0	284.0	≥ 0.2	0.43586
Zeta	151.0	629.0	≥ 0.2	1

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

13.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.00425 , 0.08975]	0.90276
Ameva	[-0.0341 , -0.00575]	0.90276
Bayesian	[0.0119 , 0.0569]	0.90276
CACC	[-0.0242 , 0.0003]	0.90276
CADD	[0.08435 , 0.1613]	0.90276
CAIM	[-0.0458 , -0.016]	0.90276
Chi2	[-0.02915 , -0.00655]	0.90276
ChiMerge	[-0.0415 , -0.0189]	0.90276
ClusterAnalysis	[0.01495 , 0.0515]	0.90276
DIBD	[-0.0185 , 0.01155]	0.90276
Distance	[-0.0347 , -0.00725]	0.90276
EqualFrequency	[-0.01695 , -0.00005]	0.90276
Extended Chi2	[-0.01825 , 0.0099]	0.90276
FFD	[0.0035 , 0.02645]	0.90276
FUSINTER	[-0.038 , -0.0166]	0.90276
HDD	[0 , 0.0236]	0.90276
HellingerBD	[-0.0168 , 0.00105]	0.90276
Heter-Disc	[0.0228 , 0.10465]	0.90276
ID3	[0.0098 , 0.05385]	0.90276
IDD	[0.0144 , 0.07335]	0.90276
Khiops	[-0.02805 , -0.0002]	0.90276
MDLP	[-0.04085 , -0.01145]	0.90276
Modified Chi2	[-0.02565 , 0]	0.90276
MODL	[-0.0229 , 0.0017]	0.90276
MVD	[0.0034 , 0.05315]	0.90276
PKID	[0.00055 , 0.035]	0.90276
UCPD	[-0.025 , -0.00425]	0.90276
USD	[0 , 0.0408]	0.90276
Zeta	[-0.031 , -0.01055]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0001 , 0.09965]	0.95024
Ameva	[-0.0364 , -0.00295]	0.95024
Bayesian	[0.0094 , 0.06045]	0.95024
CACC	[-0.02675 , 0.00255]	0.95024
CADD	[0.07215 , 0.1696]	0.95024
CAIM	[-0.04955 , -0.01445]	0.95024
Chi2	[-0.03205 , -0.00505]	0.95024
ChiMerge	[-0.04495 , -0.01645]	0.95024
ClusterAnalysis	[0.01255 , 0.05465]	0.95024
DIBD	[-0.02165 , 0.01495]	0.95024
Distance	[-0.03865 , -0.0033]	0.95024
EqualFrequency	[-0.01885 , 0.00005]	0.95024
Extended Chi2	[-0.0206 , 0.0137]	0.95024
FFD	[0.00275 , 0.03045]	0.95024
FUSINTER	[-0.0408 , -0.0153]	0.95024
HDD	[-0.00225 , 0.0292]	0.95024
HellingerBD	[-0.01855 , 0.00275]	0.95024
Heter-Disc	[0.0184 , 0.116]	0.95024
ID3	[0.0081 , 0.06035]	0.95024
IDD	[0.00955 , 0.08335]	0.95024
Khiops	[-0.0322 , 0.00105]	0.95024
MDLP	[-0.0443 , -0.00915]	0.95024
Modified Chi2	[-0.0289 , 0.0033]	0.95024
MODL	[-0.02505 , 0.00465]	0.95024
MVD	[0.0012 , 0.05905]	0.95024
PKID	[0 , 0.04005]	0.95024
UCPD	[-0.0279 , -0.00225]	0.95024
USD	[-0.0016 , 0.04465]	0.95024
Zeta	[-0.03375 , -0.0085]	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	568.0	215.0	0.03918	0.038751
Ameva	258.0	562.0	≥ 0.2	1
Bayesian	654.5	165.5	0.00757	0.008054
CACC	316.0	504.0	≥ 0.2	1
CADD	693.0	94.0	5.144E-4	0.000834
CAIM	168.5	651.5	≥ 0.2	1
Chi2	263.0	520.0	≥ 0.2	1
ChiMerge	187.0	633.0	≥ 0.2	1
ClusterAnalysis	642.5	177.5	0.004361	0.005013
DIBD	399.0	381.0	≥ 0.2	0.894531
Distance	318.0	502.0	≥ 0.2	1
EqualFrequency	320.0	500.0	≥ 0.2	1
EqualWidth	452.5	367.5	≥ 0.2	0.959518
FFD	485.0	298.0	≥ 0.2	0.415267
FUSINTER	227.5	592.5	≥ 0.2	1
HDD	468.0	315.0	≥ 0.2	0.576713
HellingerBD	344.5	475.5	≥ 0.2	1
Heter-Disc	593.5	191.5	0.04295	0.042254
ID3	621.5	163.5	0.012094	0.012788
IDD	585.5	199.5	0.059	0.057436
Khiops	333.0	447.0	≥ 0.2	1
MDLP	298.5	521.5	≥ 0.2	1
Modified Chi2	324.5	460.5	≥ 0.2	1
MODL	379.5	440.5	≥ 0.2	1
MVD	504.5	280.5	≥ 0.2	0.566462
PKID	556.0	264.0	≥ 0.2	0.274884
UCPD	315.5	504.5	≥ 0.2	1
USD	534.0	286.0	≥ 0.2	0.455515
Zeta	250.5	529.5	≥ 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	[0.01025 , 0.0734]	0.90276
Ameva	[-0.0443 , -0.00265]	0.90276
Bayesian	[0.0139 , 0.0498]	0.90276
CACC	[-0.0368 , 0.00225]	0.90276
CADD	[0.065 , 0.159]	0.90276
CAIM	[-0.05605 , -0.0094]	0.90276
Chi2	[-0.03105 , -0.00035]	0.90276
ChiMerge	[-0.0502 , -0.0107]	0.90276
ClusterAnalysis	[0.0134 , 0.0548]	0.90276
DIBD	[-0.0223 , 0.01555]	0.90276
Distance	[-0.0381 , 0.00205]	0.90276
EqualFrequency	[-0.01805 , 0.00285]	0.90276
EqualWidth	[-0.0099 , 0.01825]	0.90276
FFD	[-0.00285 , 0.03075]	0.90276
FUSINTER	[-0.0574 , -0.00335]	0.90276
HDD	[-0.00275 , 0.02635]	0.90276
HellingerBD	[-0.0329 , 0.0063]	0.90276
Heter-Disc	[0.0247 , 0.0861]	0.90276
ID3	[0.01045 , 0.05165]	0.90276
IDD	[0.00805 , 0.0783]	0.90276
Khiops	[-0.03745 , 0.00895]	0.90276
MDLP	[-0.04 , 0.00045]	0.90276
Modified Chi2	[-0.0159 , 0.0032]	0.90276
MODL	[-0.02435 , 0.00555]	0.90276
MVD	[0 , 0.05735]	0.90276
PKID	[0.00135 , 0.03975]	0.90276
UCPD	[-0.03215 , 0.002]	0.90276
USD	[0 , 0.02615]	0.90276
Zeta	[-0.0405 , -0.00185]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.00665 , 0.1033]	0.95024
Ameva	[-0.05105 , -0.00065]	0.95024
Bayesian	[0.0119 , 0.05435]	0.95024
CACC	[-0.04205 , 0.00375]	0.95024
CADD	[0.0549 , 0.16575]	0.95024
CAIM	[-0.06085 , -0.00765]	0.95024
Chi2	[-0.0412 , 0.0009]	0.95024
ChiMerge	[-0.0543 , -0.0081]	0.95024
ClusterAnalysis	[0.0108 , 0.06495]	0.95024
DIBD	[-0.0283 , 0.0183]	0.95024
Distance	[-0.05065 , 0.003]	0.95024
EqualFrequency	[-0.02085 , 0.00695]	0.95024
EqualWidth	[-0.0137 , 0.0206]	0.95024
FFD	[-0.0053 , 0.03385]	0.95024
FUSINTER	[-0.06655 , -0.00185]	0.95024
HDD	[-0.00405 , 0.03065]	0.95024
HellingerBD	[-0.0396 , 0.0092]	0.95024
Heter-Disc	[0.01825 , 0.0957]	0.95024
ID3	[0.0069 , 0.0715]	0.95024
IDD	[0.00665 , 0.0896]	0.95024
Khiops	[-0.05185 , 0.01085]	0.95024
MDLP	[-0.0585 , 0.00165]	0.95024
Modified Chi2	[-0.0203 , 0.0049]	0.95024
MODL	[-0.02965 , 0.0067]	0.95024
MVD	[-0.00475 , 0.0666]	0.95024
PKID	[0 , 0.0418]	0.95024
UCPD	[-0.045 , 0.0039]	0.95024
USD	[-0.002 , 0.0322]	0.95024
Zeta	[-0.0456 , 0.0001]	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	430.0	353.0	≥ 0.2	1
Ameva	172.5	607.5	≥ 0.2	1
Bayesian	510.5	309.5	≥ 0.2	1
CACC	210.5	609.5	≥ 0.2	1
CADD	713.0	107.0	0.002564	0.003157
CAIM	78.5	704.5	≥ 0.2	1
Chi2	118.5	664.5	≥ 0.2	1
ChiMerge	74.0	746.0	≥ 0.2	1
ClusterAnalysis	563.5	256.5	≥ 0.2	0.478011
DIBD	236.5	543.5	≥ 0.2	1
Distance	166.0	614.0	≥ 0.2	1
EqualFrequency	91.0	729.0	≥ 0.2	1
EqualWidth	223.0	597.0	≥ 0.2	1
Extended Chi2	298.0	485.0	≥ 0.2	1
FUSINTER	56.0	764.0	≥ 0.2	1
HDD	395.0	425.0	≥ 0.2	1
HellingerBD	155.0	665.0	≥ 0.2	1
Heter-Disc	548.5	271.5	≥ 0.2	0.650507
ID3	556.5	263.5	≥ 0.2	1
IDD	473.5	346.5	≥ 0.2	1
Khiops	144.0	676.0	≥ 0.2	1
MDLP	155.5	664.5	≥ 0.2	1
Modified Chi2	168.0	652.0	≥ 0.2	1
MODL	177.5	642.5	≥ 0.2	1
MVD	456.5	363.5	≥ 0.2	1
PKID	380.0	411.0	≥ 0.2	1
UCPD	134.0	686.0	≥ 0.2	1
USD	336.5	450.5	≥ 0.2	1
Zeta	98.0	682.0	≥ 0.2	1

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

15.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0092 , 0.06145]	0.90276
Ameva	[-0.0499 , -0.0158]	0.90276
Bayesian	[-0.0017 , 0.03485]	0.90276
CACC	[-0.04465 , -0.0094]	0.90276
CADD	[0.04205 , 0.1488]	0.90276
CAIM	[-0.07225 , -0.03215]	0.90276
Chi2	[-0.0481 , -0.0164]	0.90276
ChiMerge	[-0.06605 , -0.03075]	0.90276
ClusterAnalysis	[0.0019 , 0.04215]	0.90276
DIBD	[-0.0466 , -0.0069]	0.90276
Distance	[-0.06695 , -0.0206]	0.90276
EqualFrequency	[-0.0298 , -0.0132]	0.90276
EqualWidth	[-0.02645 , -0.0035]	0.90276
Extended Chi2	[-0.03075 , 0.00285]	0.90276
FUSINTER	[-0.066 , -0.0279]	0.90276
HDD	[-0.01115 , 0.00745]	0.90276
HellingerBD	[-0.03335 , -0.0127]	0.90276
Heter-Disc	[0.0015 , 0.0763]	0.90276
ID3	[0 , 0.03295]	0.90276
IDD	[-0.0067 , 0.0568]	0.90276
Khiops	[-0.04795 , -0.0168]	0.90276
MDLP	[-0.0698 , -0.0251]	0.90276
Modified Chi2	[-0.0532 , -0.0129]	0.90276
MODL	[-0.0448 , -0.01565]	0.90276
MVD	[-0.0129 , 0.04885]	0.90276
PKID	[-0.007 , 0.00325]	0.90276
UCPD	[-0.0536 , -0.01665]	0.90276
USD	[-0.01045 , 0.0023]	0.90276
Zeta	[-0.0557 , -0.02385]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0149 , 0.0815]	0.95024
Ameva	[-0.0564 , -0.0122]	0.95024
Bayesian	[-0.00335 , 0.04455]	0.95024
CACC	[-0.0477 , -0.0066]	0.95024
CADD	[0.03625 , 0.15415]	0.95024
CAIM	[-0.0777 , -0.02965]	0.95024
Chi2	[-0.05095 , -0.014]	0.95024
ChiMerge	[-0.06835 , -0.0295]	0.95024
ClusterAnalysis	[0 , 0.04395]	0.95024
DIBD	[-0.0503 , -0.0031]	0.95024
Distance	[-0.0742 , -0.0162]	0.95024
EqualFrequency	[-0.03345 , -0.01185]	0.95024
EqualWidth	[-0.03045 , -0.00275]	0.95024
Extended Chi2	[-0.03385 , 0.0053]	0.95024
FUSINTER	[-0.0727 , -0.02565]	0.95024
HDD	[-0.0131 , 0.01]	0.95024
HellingerBD	[-0.03635 , -0.00985]	0.95024
Heter-Disc	[0 , 0.0859]	0.95024
ID3	[0 , 0.03705]	0.95024
IDD	[-0.01145 , 0.06185]	0.95024
Khiops	[-0.05175 , -0.0132]	0.95024
MDLP	[-0.07555 , -0.02125]	0.95024
Modified Chi2	[-0.05825 , -0.0105]	0.95024
MODL	[-0.04865 , -0.012]	0.95024
MVD	[-0.01685 , 0.0611]	0.95024
PKID	[-0.0083 , 0.0056]	0.95024
UCPD	[-0.06 , -0.0157]	0.95024
USD	[-0.01285 , 0.00315]	0.95024
Zeta	[-0.06195 , -0.0217]	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	725.0	95.0	5.372E-6	0.000022
Ameva	518.0	265.0	0.19692	0.188514
Bayesian	734.0	46.0	6.956E-8	0.000002
CACC	576.0	244.0	0.16634	0.159695
CADD	793.5	26.5	8.476E-9	0.000001
CAIM	392.0	391.0	≥ 0.2	1
Chi2	521.0	299.0	≥ 0.2	0.587808
ChiMerge	394.0	389.0	≥ 0.2	1
ClusterAnalysis	728.0	52.0	1.4542E-7	0.000002
DIBD	645.0	175.0	0.0011672	0.001549
Distance	531.5	248.5	0.04832	0.047136
EqualFrequency	609.5	210.5	0.14066	0.134668
EqualWidth	682.5	100.5	6.286E-5	0.00014
Extended Chi2	592.5	227.5	0.03776	0.037082
FFD	764.0	56.0	1.8344E-6	0.000013
HDD	652.5	132.5	0.002155	0.002669
HellingerBD	639.0	144.0	0.0012698	0.001701
Heter-Disc	737.0	43.0	4.722E-8	0.000001
ID3	763.5	56.5	7.672E-6	0.000036
IDD	721.0	59.0	3.258E-7	0.000004
Khiops	637.0	183.0	0.01753	0.018057
MDLP	469.0	311.0	≥ 0.2	0.266413
Modified Chi2	520.0	265.0	≥ 0.2	0.406229
MODL	573.5	209.5	0.03164	0.031251
MVD	697.0	123.0	6.254E-4	0.000858
PKID	727.5	57.5	4.323E-6	0.000021
UCPD	619.5	200.5	0.012768	0.013412
USD	709.0	111.0	2.694E-4	0.000473
Zeta	510.0	270.0	0.09568	0.090947

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	[0.039 , 0.1413]	0.90276
Ameva	[0.00055 , 0.01755]	0.90276
Bayesian	[0.03395 , 0.09025]	0.90276
CACC	[0.00235 , 0.0193]	0.90276
CADD	[0.11885 , 0.2152]	0.90276
CAIM	[-0.0065 , 0.006]	0.90276
Chi2	[-0.0003 , 0.01025]	0.90276
ChiMerge	[-0.00675 , 0.0072]	0.90276
ClusterAnalysis	[0.0366 , 0.10385]	0.90276
DIBD	[0.0085 , 0.0418]	0.90276
Distance	[0.0018 , 0.01275]	0.90276
EqualFrequency	[0.00575 , 0.0368]	0.90276
EqualWidth	[0.0166 , 0.038]	0.90276
Extended Chi2	[0.00335 , 0.0574]	0.90276
FFD	[0.0279 , 0.066]	0.90276
HDD	[0.0149 , 0.0539]	0.90276
HellingerBD	[0.0104 , 0.0367]	0.90276
Heter-Disc	[0.05015 , 0.14485]	0.90276
ID3	[0.0353 , 0.11185]	0.90276
IDD	[0.03925 , 0.1142]	0.90276
Khiops	[0.00835 , 0.0294]	0.90276
MDLP	[-0.0018 , 0.00805]	0.90276
Modified Chi2	[0 , 0.0148]	0.90276
MODL	[0.00335 , 0.01475]	0.90276
MVD	[0.0192 , 0.0905]	0.90276
PKID	[0.0261 , 0.07735]	0.90276
UCPD	[0.00325 , 0.01865]	0.90276
USD	[0.0133 , 0.0761]	0.90276
Zeta	[0.00005 , 0.01195]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0329 , 0.14785]	0.95024
Ameva	[-0.00085 , 0.01955]	0.95024
Bayesian	[0.02975 , 0.0962]	0.95024
CACC	[0.0011 , 0.02125]	0.95024
CADD	[0.10825 , 0.2262]	0.95024
CAIM	[-0.00765 , 0.00735]	0.95024
Chi2	[-0.0012 , 0.0121]	0.95024
ChiMerge	[-0.00815 , 0.0082]	0.95024
ClusterAnalysis	[0.03155 , 0.11005]	0.95024
DIBD	[0.0072 , 0.0485]	0.95024
Distance	[0.0002 , 0.0137]	0.95024
EqualFrequency	[0.00305 , 0.03995]	0.95024
EqualWidth	[0.0153 , 0.0408]	0.95024
Extended Chi2	[0.00185 , 0.06655]	0.95024
FFD	[0.02565 , 0.0727]	0.95024
HDD	[0.0117 , 0.06085]	0.95024
HellingerBD	[0.0096 , 0.03865]	0.95024
Heter-Disc	[0.04645 , 0.15125]	0.95024
ID3	[0.03155 , 0.1227]	0.95024
IDD	[0.0331 , 0.13025]	0.95024
Khiops	[0.00655 , 0.03265]	0.95024
MDLP	[-0.00295 , 0.00925]	0.95024
Modified Chi2	[-0.0003 , 0.0179]	0.95024
MODL	[0.0026 , 0.01565]	0.95024
MVD	[0.016 , 0.10255]	0.95024
PKID	[0.02265 , 0.08345]	0.95024
UCPD	[0.0026 , 0.0198]	0.95024
USD	[0.01145 , 0.08815]	0.95024
Zeta	[-0.0013 , 0.0131]	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	480.5	302.5	≥ 0.2	0.45435
Ameva	210.5	574.5	≥ 0.2	1
Bayesian	502.0	285.0	≥ 0.2	1
CACC	279.5	540.5	≥ 0.2	1
CADD	657.0	163.0	0.05954	0.057704
CAIM	139.0	652.0	≥ 0.2	1
Chi2	227.5	592.5	≥ 0.2	1
ChiMerge	140.5	679.5	≥ 0.2	1
ClusterAnalysis	519.5	265.5	≥ 0.2	0.412811
DIBD	329.0	491.0	≥ 0.2	1
Distance	305.5	514.5	≥ 0.2	1
EqualFrequency	231.5	588.5	≥ 0.2	1
EqualWidth	274.5	510.5	≥ 0.2	1
Extended Chi2	315.0	468.0	≥ 0.2	1
FFD	425.0	395.0	≥ 0.2	1
FUSINTER	132.5	652.5	≥ 0.2	1
HellingerBD	270.0	513.0	≥ 0.2	1
Heter-Disc	560.5	259.5	≥ 0.2	0.510399
ID3	530.5	289.5	≥ 0.2	1
IDD	489.5	295.5	≥ 0.2	0.742719
Khiops	260.5	559.5	≥ 0.2	1
MDLP	211.0	609.0	≥ 0.2	1
Modified Chi2	225.5	594.5	≥ 0.2	1
MODL	257.0	528.0	≥ 0.2	1
MVD	456.0	364.0	≥ 0.2	1
PKID	402.0	418.0	≥ 0.2	1
UCPD	259.0	561.0	≥ 0.2	1
USD	366.0	425.0	≥ 0.2	1
Zeta	209.0	574.0	≥ 0.2	1

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

17.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0062 , 0.0601]	0.90276
Ameva	[-0.06355 , -0.00845]	0.90276
Bayesian	[0 , 0.0299]	0.90276
CACC	[-0.0456 , 0]	0.90276
CADD	[0.04835 , 0.14665]	0.90276
CAIM	[-0.0764 , -0.02695]	0.90276
Chi2	[-0.03835 , -0.005]	0.90276
ChiMerge	[-0.067 , -0.0252]	0.90276
ClusterAnalysis	[0.00055 , 0.02665]	0.90276
DIBD	[-0.038 , 0.00635]	0.90276
Distance	[-0.044 , 0.0018]	0.90276
EqualFrequency	[-0.03455 , -0.0036]	0.90276
EqualWidth	[-0.0236 , 0]	0.90276
Extended Chi2	[-0.02635 , 0.00275]	0.90276
FFD	[-0.00745 , 0.01115]	0.90276
FUSINTER	[-0.0539 , -0.0149]	0.90276
HellingerBD	[-0.03645 , 0]	0.90276
Heter-Disc	[0.0065 , 0.0777]	0.90276
ID3	[0 , 0.0198]	0.90276
IDD	[-0.00335 , 0.05595]	0.90276
Khiops	[-0.04085 , -0.0014]	0.90276
MDLP	[-0.0488 , -0.0072]	0.90276
Modified Chi2	[-0.0353 , -0.0042]	0.90276
MODL	[-0.03395 , -0.0003]	0.90276
MVD	[-0.00855 , 0.0346]	0.90276
PKID	[-0.00745 , 0.0081]	0.90276
UCPD	[-0.046 , -0.00405]	0.90276
USD	[-0.0108 , 0.0054]	0.90276
Zeta	[-0.059 , -0.0149]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.009 , 0.0715]	0.95024
Ameva	[-0.0708 , -0.00475]	0.95024
Bayesian	[-0.00315 , 0.03485]	0.95024
CACC	[-0.0506 , 0.0001]	0.95024
CADD	[0.04165 , 0.15205]	0.95024
CAIM	[-0.0793 , -0.00955]	0.95024
Chi2	[-0.04095 , -0.00345]	0.95024
ChiMerge	[-0.0703 , -0.02245]	0.95024
ClusterAnalysis	[-0.0001 , 0.0321]	0.95024
DIBD	[-0.0441 , 0.0102]	0.95024
Distance	[-0.04935 , 0.0031]	0.95024
EqualFrequency	[-0.03675 , -0.00285]	0.95024
EqualWidth	[-0.0292 , 0.00225]	0.95024
Extended Chi2	[-0.03065 , 0.00405]	0.95024
FFD	[-0.01 , 0.0131]	0.95024
FUSINTER	[-0.06085 , -0.0117]	0.95024
HellingerBD	[-0.03975 , 0.0014]	0.95024
Heter-Disc	[0 , 0.09435]	0.95024
ID3	[0 , 0.02065]	0.95024
IDD	[-0.0084 , 0.06145]	0.95024
Khiops	[-0.0461 , 0]	0.95024
MDLP	[-0.05615 , -0.00455]	0.95024
Modified Chi2	[-0.03895 , -0.002]	0.95024
MODL	[-0.0368 , 0]	0.95024
MVD	[-0.0119 , 0.04315]	0.95024
PKID	[-0.0094 , 0.01065]	0.95024
UCPD	[-0.05195 , -0.00065]	0.95024
USD	[-0.01335 , 0.00825]	0.95024
Zeta	[-0.0677 , -0.00595]	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	633.5	186.5	0.006758	0.007458
Ameva	312.0	468.0	≥ 0.2	1
Bayesian	619.0	161.0	9.974E-4	0.001362
CACC	368.5	451.5	≥ 0.2	1
CADD	805.0	15.0	2.492E-10	0
CAIM	210.5	609.5	≥ 0.2	1
Chi2	283.0	497.0	≥ 0.2	1
ChiMerge	184.0	596.0	≥ 0.2	1
ClusterAnalysis	657.0	123.0	9.094E-5	0.000189
DIBD	471.0	349.0	≥ 0.2	0.408441
Distance	283.5	536.5	≥ 0.2	1
EqualFrequency	364.0	419.0	≥ 0.2	1
EqualWidth	519.0	301.0	≥ 0.2	0.609636
Extended Chi2	475.5	344.5	≥ 0.2	0.374208
FFD	665.0	155.0	0.004354	0.004956
FUSINTER	144.0	639.0	≥ 0.2	1
HDD	513.0	270.0	≥ 0.2	0.215193
Heter-Disc	679.0	141.0	1.5974E-4	0.000292
ID3	675.5	144.5	0.00241	0.002929
IDD	623.5	156.5	7.717E-4	0.001071
Khiops	316.5	466.5	≥ 0.2	1
MDLP	235.5	584.5	≥ 0.2	1
Modified Chi2	341.0	442.0	≥ 0.2	1
MODL	306.0	477.0	≥ 0.2	1
MVD	562.5	257.5	0.10327	0.099762
PKID	642.0	178.0	0.013926	0.014566
UCPD	382.0	438.0	≥ 0.2	1
USD	562.0	221.0	0.04904	0.04812
Zeta	284.0	496.0	≥ 0.2	1

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

18.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0231 , 0.10735]	0.90276
Ameva	[-0.0175 , 0.00485]	0.90276
Bayesian	[0.01765 , 0.0704]	0.90276
CACC	[-0.0152 , 0.0056]	0.90276
CADD	[0.09585 , 0.1721]	0.90276
CAIM	[-0.03175 , -0.00795]	0.90276
Chi2	[-0.02025 , 0.00115]	0.90276
ChiMerge	[-0.02875 , -0.00815]	0.90276
ClusterAnalysis	[0.01985 , 0.0592]	0.90276
DIBD	[-0.0078 , 0.0252]	0.90276
Distance	[-0.0268 , -0.00015]	0.90276
EqualFrequency	[-0.0122 , 0.0087]	0.90276
EqualWidth	[-0.00105 , 0.0168]	0.90276
Extended Chi2	[-0.0063 , 0.0329]	0.90276
FFD	[0.0127 , 0.03335]	0.90276
FUSINTER	[-0.0367 , -0.0104]	0.90276
HDD	[0 , 0.03645]	0.90276
Heter-Disc	[0.0376 , 0.1085]	0.90276
ID3	[0.0195 , 0.06775]	0.90276
IDD	[0.0207 , 0.09355]	0.90276
Khiops	[-0.0153 , 0.00465]	0.90276
MDLP	[-0.03065 , -0.00465]	0.90276
Modified Chi2	[-0.0241 , 0.0067]	0.90276
MODL	[-0.0193 , 0.00295]	0.90276
MVD	[0.00485 , 0.0768]	0.90276
PKID	[0.01045 , 0.0423]	0.90276
UCPD	[-0.0158 , 0.00585]	0.90276
USD	[0.00545 , 0.0467]	0.90276
Zeta	[-0.02015 , 0.00155]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0164 , 0.11735]	0.95024
Ameva	[-0.0193 , 0.0069]	0.95024
Bayesian	[0.0148 , 0.0754]	0.95024
CACC	[-0.0167 , 0.008]	0.95024
CADD	[0.087 , 0.1804]	0.95024
CAIM	[-0.03365 , -0.00585]	0.95024
Chi2	[-0.0229 , 0.0032]	0.95024
ChiMerge	[-0.03075 , -0.0063]	0.95024
ClusterAnalysis	[0.01625 , 0.0641]	0.95024
DIBD	[-0.00995 , 0.0295]	0.95024
Distance	[-0.0289 , 0.00145]	0.95024
EqualFrequency	[-0.01355 , 0.0107]	0.95024
EqualWidth	[-0.00275 , 0.01855]	0.95024
Extended Chi2	[-0.0092 , 0.0396]	0.95024
FFD	[0.00985 , 0.03635]	0.95024
FUSINTER	[-0.03865 , -0.0096]	0.95024
HDD	[-0.0014 , 0.03975]	0.95024
Heter-Disc	[0.03105 , 0.1209]	0.95024
ID3	[0.0163 , 0.0786]	0.95024
IDD	[0.01655 , 0.10135]	0.95024
Khiops	[-0.01735 , 0.0064]	0.95024
MDLP	[-0.03325 , -0.0027]	0.95024
Modified Chi2	[-0.0279 , 0.009]	0.95024
MODL	[-0.0228 , 0.00565]	0.95024
MVD	[0.0016 , 0.0896]	0.95024
PKID	[0.0059 , 0.0499]	0.95024
UCPD	[-0.01835 , 0.00695]	0.95024
USD	[0.00345 , 0.0598]	0.95024
Zeta	[-0.0228 , 0.00365]	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	383.5	436.5	≥ 0.2	1
Ameva	89.5	690.5	≥ 0.2	1
Bayesian	300.5	484.5	≥ 0.2	1
CACC	98.0	685.0	≥ 0.2	1
CADD	522.0	298.0	≥ 0.2	1
CAIM	70.5	709.5	≥ 0.2	1
Chi2	98.5	721.5	≥ 0.2	1
ChiMerge	71.5	748.5	≥ 0.2	1
ClusterAnalysis	264.5	520.5	≥ 0.2	1
DIBD	133.5	649.5	≥ 0.2	1
Distance	95.0	725.0	≥ 0.2	1
EqualFrequency	122.0	661.0	≥ 0.2	1
EqualWidth	169.5	650.5	≥ 0.2	1
Extended Chi2	191.5	593.5	≥ 0.2	1
FFD	271.5	548.5	≥ 0.2	1
FUSINTER	43.0	737.0	≥ 0.2	1
HDD	259.5	560.5	≥ 0.2	1
HellingerBD	141.0	679.0	≥ 0.2	1
ID3	331.0	489.0	≥ 0.2	1
IDD	394.0	426.0	≥ 0.2	1
Khiops	94.0	686.0	≥ 0.2	1
MDLP	64.0	716.0	≥ 0.2	1
Modified Chi2	91.0	692.0	≥ 0.2	1
MODL	149.0	631.0	≥ 0.2	1
MVD	317.0	503.0	≥ 0.2	1
PKID	238.0	582.0	≥ 0.2	1
UCPD	36.0	784.0	≥ 0.2	1
USD	247.0	536.0	≥ 0.2	1
Zeta	99.0	721.0	≥ 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	[-0.0255 , 0.0208]	0.90276
Ameva	[-0.10355 , -0.0421]	0.90276
Bayesian	[-0.04765 , 0.00335]	0.90276
CACC	[-0.09615 , -0.03625]	0.90276
CADD	[0 , 0.09255]	0.90276
CAIM	[-0.1343 , -0.05125]	0.90276
Chi2	[-0.1183 , -0.0417]	0.90276
ChiMerge	[-0.13015 , -0.05105]	0.90276
ClusterAnalysis	[-0.05 , -0.00015]	0.90276
DIBD	[-0.0643 , -0.02165]	0.90276
Distance	[-0.1249 , -0.0445]	0.90276
EqualFrequency	[-0.1136 , -0.0297]	0.90276
EqualWidth	[-0.10465 , -0.0228]	0.90276
Extended Chi2	[-0.0861 , -0.0247]	0.90276
FFD	[-0.0763 , -0.0015]	0.90276
FUSINTER	[-0.14485 , -0.05015]	0.90276
HDD	[-0.0777 , -0.0065]	0.90276
HellingerBD	[-0.1085 , -0.0376]	0.90276
ID3	[-0.03925 , 0.00455]	0.90276
IDD	[-0.02635 , 0.0142]	0.90276
Khiops	[-0.111 , -0.03945]	0.90276
MDLP	[-0.12635 , -0.04805]	0.90276
Modified Chi2	[-0.12025 , -0.03275]	0.90276
MODL	[-0.11385 , -0.02785]	0.90276
MVD	[-0.0572 , 0.00095]	0.90276
PKID	[-0.06835 , -0.00585]	0.90276
UCPD	[-0.10185 , -0.04415]	0.90276
USD	[-0.07015 , -0.00625]	0.90276
Zeta	[-0.1227 , -0.0423]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.03035 , 0.03875]	0.95024
Ameva	[-0.11155 , -0.0389]	0.95024
Bayesian	[-0.06175 , 0.0073]	0.95024
CACC	[-0.10485 , -0.0313]	0.95024
CADD	[0 , 0.1005]	0.95024
CAIM	[-0.14435 , -0.04755]	0.95024
Chi2	[-0.12995 , -0.0379]	0.95024
ChiMerge	[-0.13685 , -0.0479]	0.95024
ClusterAnalysis	[-0.0642 , 0.0004]	0.95024
DIBD	[-0.07415 , -0.01765]	0.95024
Distance	[-0.12875 , -0.0406]	0.95024
EqualFrequency	[-0.12065 , -0.0261]	0.95024
EqualWidth	[-0.116 , -0.0184]	0.95024
Extended Chi2	[-0.0957 , -0.01825]	0.95024
FFD	[-0.0859 , 0]	0.95024
FUSINTER	[-0.15125 , -0.04645]	0.95024
HDD	[-0.09435 , 0]	0.95024
HellingerBD	[-0.1209 , -0.03105]	0.95024
ID3	[-0.0539 , 0.01275]	0.95024
IDD	[-0.03295 , 0.0195]	0.95024
Khiops	[-0.1183 , -0.03455]	0.95024
MDLP	[-0.13175 , -0.04385]	0.95024
Modified Chi2	[-0.12675 , -0.028]	0.95024
MODL	[-0.1213 , -0.0223]	0.95024
MVD	[-0.06675 , 0.0093]	0.95024
PKID	[-0.07725 , -0.0027]	0.95024
UCPD	[-0.11195 , -0.04065]	0.95024
USD	[-0.078 , -0.0005]	0.95024
Zeta	[-0.13055 , -0.03805]	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	352.5	467.5	≥ 0.2	1
Ameva	138.5	681.5	≥ 0.2	1
Bayesian	326.5	462.5	≥ 0.2	1
CACC	176.0	607.0	≥ 0.2	1
CADD	538.0	253.0	≥ 0.2	1
CAIM	74.5	710.5	≥ 0.2	1
Chi2	112.5	672.5	≥ 0.2	1
ChiMerge	64.0	719.0	≥ 0.2	1
ClusterAnalysis	386.0	434.0	≥ 0.2	1
DIBD	222.0	598.0	≥ 0.2	1
Distance	179.5	640.5	≥ 0.2	1
EqualFrequency	68.0	719.0	≥ 0.2	1
EqualWidth	137.0	650.0	≥ 0.2	1
Extended Chi2	163.5	621.5	≥ 0.2	1
FFD	263.5	556.5	≥ 0.2	1
FUSINTER	56.5	763.5	≥ 0.2	1
HDD	289.5	530.5	≥ 0.2	1
HellingerBD	144.5	675.5	≥ 0.2	1
Heter-Disc	489.0	331.0	≥ 0.2	1
IDD	318.0	469.0	≥ 0.2	1
Khiops	118.5	666.5	≥ 0.2	1
MDLP	143.5	676.5	≥ 0.2	1
Modified Chi2	84.5	735.5	≥ 0.2	1
MODL	131.5	653.5	≥ 0.2	1
MVD	361.0	459.0	≥ 0.2	1
PKID	175.5	619.5	≥ 0.2	1
UCPD	127.0	693.0	≥ 0.2	1
USD	170.5	649.5	≥ 0.2	1
Zeta	97.5	722.5	≥ 0.2	1

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

20.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0398 , 0.0228]	0.90276
Ameva	[-0.0847 , -0.03405]	0.90276
Bayesian	[-0.0259 , 0.0043]	0.90276
CACC	[-0.0816 , -0.02025]	0.90276
CADD	[0 , 0.12445]	0.90276
CAIM	[-0.1186 , -0.0435]	0.90276
Chi2	[-0.0968 , -0.02925]	0.90276
ChiMerge	[-0.11155 , -0.04655]	0.90276
ClusterAnalysis	[-0.0163 , 0.0043]	0.90276
DIBD	[-0.08795 , -0.0163]	0.90276
Distance	[-0.09955 , -0.0266]	0.90276
EqualFrequency	[-0.07235 , -0.02195]	0.90276
EqualWidth	[-0.05385 , -0.0098]	0.90276
Extended Chi2	[-0.05165 , -0.01045]	0.90276
FFD	[-0.03295 , 0]	0.90276
FUSINTER	[-0.11185 , -0.0353]	0.90276
HDD	[-0.0198 , 0]	0.90276
HellingerBD	[-0.06775 , -0.0195]	0.90276
Heter-Disc	[-0.00455 , 0.03925]	0.90276
IDD	[-0.0315 , 0.0065]	0.90276
Khiops	[-0.0917 , -0.0241]	0.90276
MDLP	[-0.103 , -0.02905]	0.90276
Modified Chi2	[-0.09455 , -0.027]	0.90276
MODL	[-0.0811 , -0.0215]	0.90276
MVD	[-0.029 , 0.01305]	0.90276
PKID	[-0.0383 , -0.0016]	0.90276
UCPD	[-0.09585 , -0.0259]	0.90276
USD	[-0.0322 , -0.00625]	0.90276
Zeta	[-0.10435 , -0.03745]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.0514 , 0.0448]	0.95024
Ameva	[-0.09 , -0.0318]	0.95024
Bayesian	[-0.02905 , 0.00625]	0.95024
CACC	[-0.08685 , -0.0152]	0.95024
CADD	[0 , 0.1358]	0.95024
CAIM	[-0.12365 , -0.0406]	0.95024
Chi2	[-0.10665 , -0.0264]	0.95024
ChiMerge	[-0.1155 , -0.0427]	0.95024
ClusterAnalysis	[-0.0224 , 0.00565]	0.95024
DIBD	[-0.09525 , -0.012]	0.95024
Distance	[-0.1085 , -0.0229]	0.95024
EqualFrequency	[-0.08035 , -0.0187]	0.95024
EqualWidth	[-0.06035 , -0.0081]	0.95024
Extended Chi2	[-0.0715 , -0.0069]	0.95024
FFD	[-0.03705 , 0]	0.95024
FUSINTER	[-0.1227 , -0.03155]	0.95024
HDD	[-0.02065 , 0]	0.95024
HellingerBD	[-0.0786 , -0.0163]	0.95024
Heter-Disc	[-0.01275 , 0.0539]	0.95024
IDD	[-0.03785 , 0.013]	0.95024
Khiops	[-0.0955 , -0.02165]	0.95024
MDLP	[-0.1113 , -0.02555]	0.95024
Modified Chi2	[-0.1049 , -0.02515]	0.95024
MODL	[-0.0879 , -0.0189]	0.95024
MVD	[-0.03565 , 0.01785]	0.95024
PKID	[-0.041 , -0.00135]	0.95024
UCPD	[-0.10655 , -0.0209]	0.95024
USD	[-0.03425 , -0.005]	0.95024
Zeta	[-0.1117 , -0.0348]	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	369.0	420.0	≥ 0.2	1
Ameva	129.5	690.5	≥ 0.2	1
Bayesian	464.5	355.5	≥ 0.2	1
CACC	148.0	672.0	≥ 0.2	1
CADD	653.0	167.0	≥ 0.2	0.405885
CAIM	56.0	764.0	≥ 0.2	1
Chi2	123.5	696.5	≥ 0.2	1
ChiMerge	40.0	780.0	≥ 0.2	1
ClusterAnalysis	392.0	428.0	≥ 0.2	1
DIBD	151.0	629.0	≥ 0.2	1
Distance	108.0	672.0	≥ 0.2	1
EqualFrequency	144.5	675.5	≥ 0.2	1
EqualWidth	191.0	592.0	≥ 0.2	1
Extended Chi2	199.5	585.5	≥ 0.2	1
FFD	346.5	473.5	≥ 0.2	1
FUSINTER	59.0	721.0	≥ 0.2	1
HDD	295.5	489.5	≥ 0.2	1
HellingerBD	156.5	623.5	≥ 0.2	1
Heter-Disc	426.0	394.0	≥ 0.2	1
ID3	469.0	318.0	≥ 0.2	1
Khiops	147.5	632.5	≥ 0.2	1
MDLP	83.0	737.0	≥ 0.2	1
Modified Chi2	148.5	636.5	≥ 0.2	1
MODL	114.5	705.5	≥ 0.2	1
MVD	340.0	447.0	≥ 0.2	1
PKID	359.5	460.5	≥ 0.2	1
UCPD	119.0	701.0	≥ 0.2	1
USD	398.5	421.5	≥ 0.2	1
Zeta	62.5	757.5	≥ 0.2	1

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

21.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.00955 , 0.0061]	0.90276
Ameva	[-0.09875 , -0.0318]	0.90276
Bayesian	[-0.00625 , 0.01495]	0.90276
CACC	[-0.0962 , -0.0301]	0.90276
CADD	[0.0084 , 0.09375]	0.90276
CAIM	[-0.1148 , -0.0454]	0.90276
Chi2	[-0.10205 , -0.02305]	0.90276
ChiMerge	[-0.11 , -0.04325]	0.90276
ClusterAnalysis	[-0.0252 , 0.0207]	0.90276
DIBD	[-0.0723 , -0.0203]	0.90276
Distance	[-0.10335 , -0.0364]	0.90276
EqualFrequency	[-0.08435 , -0.0238]	0.90276
EqualWidth	[-0.07335 , -0.0144]	0.90276
Extended Chi2	[-0.0783 , -0.00805]	0.90276
FFD	[-0.0568 , 0.0067]	0.90276
FUSINTER	[-0.1142 , -0.03925]	0.90276
HDD	[-0.05595 , 0.00335]	0.90276
HellingerBD	[-0.09355 , -0.0207]	0.90276
Heter-Disc	[-0.0142 , 0.02635]	0.90276
ID3	[-0.0065 , 0.0315]	0.90276
Khiops	[-0.09485 , -0.02435]	0.90276
MDLP	[-0.10925 , -0.04105]	0.90276
Modified Chi2	[-0.0887 , -0.0149]	0.90276
MODL	[-0.07595 , -0.02365]	0.90276
MVD	[-0.0378 , 0.0137]	0.90276
PKID	[-0.04855 , 0.00825]	0.90276
UCPD	[-0.0941 , -0.0329]	0.90276
USD	[-0.02985 , 0.01095]	0.90276
Zeta	[-0.1028 , -0.03465]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01235 , 0.0098]	0.95024
Ameva	[-0.10625 , -0.02795]	0.95024
Bayesian	[-0.01 , 0.01665]	0.95024
CACC	[-0.10395 , -0.0237]	0.95024
CADD	[0.0073 , 0.10075]	0.95024
CAIM	[-0.12425 , -0.0397]	0.95024
Chi2	[-0.11005 , -0.0203]	0.95024
ChiMerge	[-0.117 , -0.03945]	0.95024
ClusterAnalysis	[-0.03095 , 0.02555]	0.95024
DIBD	[-0.07875 , -0.01565]	0.95024
Distance	[-0.1122 , -0.0324]	0.95024
EqualFrequency	[-0.09055 , -0.0152]	0.95024
EqualWidth	[-0.08335 , -0.00955]	0.95024
Extended Chi2	[-0.0896 , -0.00665]	0.95024
FFD	[-0.06185 , 0.01145]	0.95024
FUSINTER	[-0.13025 , -0.0331]	0.95024
HDD	[-0.06145 , 0.0084]	0.95024
HellingerBD	[-0.10135 , -0.01655]	0.95024
Heter-Disc	[-0.0195 , 0.03295]	0.95024
ID3	[-0.013 , 0.03785]	0.95024
Khiops	[-0.1004 , -0.01865]	0.95024
MDLP	[-0.1136 , -0.03745]	0.95024
Modified Chi2	[-0.1031 , -0.01245]	0.95024
MODL	[-0.0811 , -0.0207]	0.95024
MVD	[-0.053 , 0.0165]	0.95024
PKID	[-0.05515 , 0.01055]	0.95024
UCPD	[-0.09795 , -0.0252]	0.95024
USD	[-0.03775 , 0.0129]	0.95024
Zeta	[-0.10835 , -0.03135]	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	650.5	169.5	0.002896	0.003476
Ameva	364.5	415.5	≥ 0.2	1
Bayesian	616.0	164.0	0.0011794	0.001544
CACC	350.5	469.5	≥ 0.2	1
CADD	757.0	23.0	2.328E-9	0
CAIM	259.5	523.5	≥ 0.2	1
Chi2	295.0	488.0	≥ 0.2	1
ChiMerge	256.0	524.0	≥ 0.2	1
ClusterAnalysis	670.0	110.0	3.506E-5	0.000091
DIBD	518.0	302.0	0.1499	0.144061
Distance	252.0	528.0	≥ 0.2	1
EqualFrequency	470.5	349.5	≥ 0.2	1
EqualWidth	535.5	284.5	≥ 0.2	0.20968
Extended Chi2	447.0	333.0	≥ 0.2	0.422314
FFD	676.0	144.0	0.00234	0.002909
FUSINTER	183.0	637.0	≥ 0.2	1
HDD	559.5	260.5	≥ 0.2	0.521445
HellingerBD	466.5	316.5	≥ 0.2	0.591561
Heter-Disc	686.0	94.0	9.682E-6	0.000035
ID3	666.5	118.5	8.678E-4	0.001252
IDD	632.5	147.5	4.525E-4	0.000681
MDLP	185.0	595.0	≥ 0.2	1
Modified Chi2	365.0	418.0	≥ 0.2	1
MODL	356.0	464.0	≥ 0.2	1
MVD	528.0	255.0	0.14906	0.143366
PKID	658.5	126.5	0.0014751999999999999	0.001964
UCPD	374.0	446.0	≥ 0.2	1
USD	590.0	230.0	0.10794	0.10394
Zeta	333.5	486.5	≥ 0.2	1

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

22.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.019 , 0.10895]	0.90276
Ameva	[-0.0134 , 0.0079]	0.90276
Bayesian	[0.01825 , 0.07655]	0.90276
CACC	[-0.01445 , 0.00665]	0.90276
CADD	[0.1007 , 0.18285]	0.90276
CAIM	[-0.02555 , -0.0011]	0.90276
Chi2	[-0.01485 , 0.00175]	0.90276
ChiMerge	[-0.0254 , -0.00165]	0.90276
ClusterAnalysis	[0.02405 , 0.07325]	0.90276
DIBD	[-0.00125 , 0.02855]	0.90276
Distance	[-0.0196 , -0.00145]	0.90276
EqualFrequency	[-0.0041 , 0.0165]	0.90276
EqualWidth	[0.0002 , 0.02805]	0.90276
Extended Chi2	[-0.00895 , 0.03745]	0.90276
FFD	[0.0168 , 0.04795]	0.90276
FUSINTER	[-0.0294 , -0.00835]	0.90276
HDD	[0.0014 , 0.04085]	0.90276
HellingerBD	[-0.00465 , 0.0153]	0.90276
Heter-Disc	[0.03945 , 0.111]	0.90276
ID3	[0.0241 , 0.0917]	0.90276
IDD	[0.02435 , 0.09485]	0.90276
MDLP	[-0.0248 , -0.00645]	0.90276
Modified Chi2	[-0.0145 , 0.0092]	0.90276
MODL	[-0.0159 , 0.00595]	0.90276
MVD	[0.00235 , 0.08055]	0.90276
PKID	[0.01545 , 0.0537]	0.90276
UCPD	[-0.01255 , 0.00555]	0.90276
USD	[0.0052 , 0.06215]	0.90276
Zeta	[-0.01615 , 0.0037]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01395 , 0.1219]	0.95024
Ameva	[-0.01535 , 0.0096]	0.95024
Bayesian	[0.014 , 0.0823]	0.95024
CACC	[-0.01655 , 0.00785]	0.95024
CADD	[0.09145 , 0.19035]	0.95024
CAIM	[-0.02805 , 0.0005]	0.95024
Chi2	[-0.0166 , 0.0037]	0.95024
ChiMerge	[-0.0274 , 0.00045]	0.95024
ClusterAnalysis	[0.0211 , 0.07785]	0.95024
DIBD	[-0.0034 , 0.0344]	0.95024
Distance	[-0.0212 , 0.00025]	0.95024
EqualFrequency	[-0.00555 , 0.01835]	0.95024
EqualWidth	[-0.00105 , 0.0322]	0.95024
Extended Chi2	[-0.01085 , 0.05185]	0.95024
FFD	[0.0132 , 0.05175]	0.95024
FUSINTER	[-0.03265 , -0.00655]	0.95024
HDD	[0 , 0.0461]	0.95024
HellingerBD	[-0.0064 , 0.01735]	0.95024
Heter-Disc	[0.03455 , 0.1183]	0.95024
ID3	[0.02165 , 0.0955]	0.95024
IDD	[0.01865 , 0.1004]	0.95024
MDLP	[-0.02615 , -0.0052]	0.95024
Modified Chi2	[-0.01685 , 0.0107]	0.95024
MODL	[-0.0178 , 0.00825]	0.95024
MVD	[-0.00075 , 0.08695]	0.95024
PKID	[0.014 , 0.0581]	0.95024
UCPD	[-0.01425 , 0.00695]	0.95024
USD	[0.003 , 0.07575]	0.95024
Zeta	[-0.0181 , 0.00615]	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	714.0	106.0	1.3218E-5	0.000043
Ameva	492.5	327.5	≥ 0.2	0.525131
Bayesian	668.0	112.0	4.082E-5	0.000102
CACC	489.5	295.5	≥ 0.2	0.743227
CADD	748.0	32.0	1.006E-8	0.000001
CAIM	400.5	419.5	≥ 0.2	1
Chi2	446.5	373.5	≥ 0.2	1
ChiMerge	406.5	413.5	≥ 0.2	1
ClusterAnalysis	716.5	103.5	4.112E-5	0.000102
DIBD	642.0	178.0	0.00447	0.005047
Distance	514.0	271.0	≥ 0.2	0.465166
EqualFrequency	540.5	279.5	0.19166	0.183727
EqualWidth	601.0	179.0	0.002616	0.003163
Extended Chi2	521.5	298.5	0.13688	0.131565
FFD	664.5	155.5	0.0013468	0.001777
FUSINTER	311.0	469.0	≥ 0.2	1
HDD	609.0	211.0	0.019886	0.020095
HellingerBD	584.5	235.5	0.05035	0.049407
Heter-Disc	716.0	64.0	5.618E-7	0.000005
ID3	676.5	143.5	6.629E-4	0.000969
IDD	737.0	83.0	1.8586E-6	0.000011
Khiops	595.0	185.0	0.003532	0.004134
Modified Chi2	439.0	341.0	≥ 0.2	0.48895
MODL	539.0	281.0	≥ 0.2	0.409482
MVD	605.0	175.0	0.002128	0.002636
PKID	655.5	164.5	0.002219	0.002747
UCPD	528.5	291.5	0.113410000000000001	0.10911
USD	589.0	191.0	0.00472	0.005369
Zeta	490.0	293.0	≥ 0.2	0.373417

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	[0.04205 , 0.11935]	0.90276
Ameva	[-0.00195 , 0.0134]	0.90276
Bayesian	[0.0264 , 0.09095]	0.90276
CACC	[-0.0009 , 0.01205]	0.90276
CADD	[0.11215 , 0.19625]	0.90276
CAIM	[-0.0065 , 0.0049]	0.90276
Chi2	[-0.00365 , 0.0108]	0.90276
ChiMerge	[-0.0077 , 0.00755]	0.90276
ClusterAnalysis	[0.0312 , 0.09245]	0.90276
DIBD	[0.01 , 0.04085]	0.90276
Distance	[0 , 0.00625]	0.90276
EqualFrequency	[0.00105 , 0.03475]	0.90276
EqualWidth	[0.01145 , 0.04085]	0.90276
Extended Chi2	[-0.00045 , 0.04]	0.90276
FFD	[0.0251 , 0.0698]	0.90276
FUSINTER	[-0.00805 , 0.0018]	0.90276
HDD	[0.0072 , 0.0488]	0.90276
HellingerBD	[0.00465 , 0.03065]	0.90276
Heter-Disc	[0.04805 , 0.12635]	0.90276
ID3	[0.02905 , 0.103]	0.90276
IDD	[0.04105 , 0.10925]	0.90276
Khiops	[0.00645 , 0.0248]	0.90276
Modified Chi2	[-0.004 , 0.01355]	0.90276
MODL	[0 , 0.0153]	0.90276
MVD	[0.01415 , 0.0847]	0.90276
PKID	[0.0225 , 0.07695]	0.90276
UCPD	[-0.0003 , 0.0175]	0.90276
USD	[0.00925 , 0.08505]	0.90276
Zeta	[-0.00105 , 0.0142]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0382 , 0.1315]	0.95024
Ameva	[-0.00325 , 0.0153]	0.95024
Bayesian	[0.023 , 0.09835]	0.95024
CACC	[-0.00145 , 0.0136]	0.95024
CADD	[0.1057 , 0.2074]	0.95024
CAIM	[-0.0083 , 0.0061]	0.95024
Chi2	[-0.0046 , 0.0126]	0.95024
ChiMerge	[-0.01 , 0.00975]	0.95024
ClusterAnalysis	[0.0286 , 0.09825]	0.95024
DIBD	[0.00745 , 0.0462]	0.95024
Distance	[-0.0004 , 0.0068]	0.95024
EqualFrequency	[-0.0016 , 0.03695]	0.95024
EqualWidth	[0.00915 , 0.0443]	0.95024
Extended Chi2	[-0.00165 , 0.0585]	0.95024
FFD	[0.02125 , 0.07555]	0.95024
FUSINTER	[-0.00925 , 0.00295]	0.95024
HDD	[0.00455 , 0.05615]	0.95024
HellingerBD	[0.0027 , 0.03325]	0.95024
Heter-Disc	[0.04385 , 0.13175]	0.95024
ID3	[0.02555 , 0.1113]	0.95024
IDD	[0.03745 , 0.1136]	0.95024
Khiops	[0.0052 , 0.02615]	0.95024
Modified Chi2	[-0.0054 , 0.01775]	0.95024
MODL	[-0.0008 , 0.0182]	0.95024
MVD	[0.01115 , 0.09445]	0.95024
PKID	[0.0162 , 0.0865]	0.95024
UCPD	[-0.00255 , 0.01895]	0.95024
USD	[0.00695 , 0.0931]	0.95024
Zeta	[-0.00285 , 0.016]	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	611.0	172.0	0.005908	0.006617
Ameva	393.5	426.5	≥ 0.2	1
Bayesian	672.0	115.0	0.002388	0.002952
CACC	420.0	400.0	≥ 0.2	1
CADD	747.5	37.5	3.5889999999999996E-7	0.000005
CAIM	273.0	507.0	≥ 0.2	1
Chi2	349.0	471.0	≥ 0.2	1
ChiMerge	262.5	520.5	≥ 0.2	1
ClusterAnalysis	695.0	88.0	2.218E-5	0.000066
DIBD	496.0	324.0	≥ 0.2	0.243375
Distance	394.0	386.0	≥ 0.2	0.949928
EqualFrequency	439.0	381.0	≥ 0.2	1
EqualWidth	503.0	282.0	≥ 0.2	0.582438
Extended Chi2	460.5	324.5	≥ 0.2	1
FFD	652.0	168.0	0.02608	0.025927
FUSINTER	265.0	520.0	≥ 0.2	1
HDD	594.5	225.5	≥ 0.2	0.215161
HellingerBD	442.0	341.0	≥ 0.2	0.868197
Heter-Disc	692.0	91.0	2.872E-5	0.000082
ID3	735.5	84.5	1.2123E-4	0.000254
IDD	636.5	148.5	0.005496	0.006232
Khiops	418.0	365.0	≥ 0.2	1
MDLP	341.0	439.0	≥ 0.2	1
MODL	440.0	345.0	≥ 0.2	1
MVD	608.0	212.0	0.0577	0.0558
PKID	666.5	153.5	0.012806000000000001	0.013296
UCPD	371.5	448.5	≥ 0.2	1
USD	603.5	216.5	0.1709	0.163509
Zeta	359.5	460.5	≥ 0.2	1

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

24.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.01385 , 0.11695]	0.90276
Ameva	[-0.0186 , 0.0093]	0.90276
Bayesian	[0.0204 , 0.0699]	0.90276
CACC	[-0.01185 , 0.0145]	0.90276
CADD	[0.0938 , 0.187]	0.90276
CAIM	[-0.0308 , 0.0003]	0.90276
Chi2	[-0.0095 , 0.00285]	0.90276
ChiMerge	[-0.02975 , -0.00015]	0.90276
ClusterAnalysis	[0.02275 , 0.0743]	0.90276
DIBD	[-0.0053 , 0.02735]	0.90276
Distance	[-0.01385 , 0.00865]	0.90276
EqualFrequency	[-0.0061 , 0.01935]	0.90276
EqualWidth	[0 , 0.02565]	0.90276
Extended Chi2	[-0.0032 , 0.0159]	0.90276
FFD	[0.0129 , 0.0532]	0.90276
FUSINTER	[-0.0148 , 0]	0.90276
HDD	[0.0042 , 0.0353]	0.90276
HellingerBD	[-0.0067 , 0.0241]	0.90276
Heter-Disc	[0.03275 , 0.12025]	0.90276
ID3	[0.027 , 0.09455]	0.90276
IDD	[0.0149 , 0.0887]	0.90276
Khiops	[-0.0092 , 0.0145]	0.90276
MDLP	[-0.01355 , 0.004]	0.90276
MODL	[-0.00365 , 0.00745]	0.90276
MVD	[0.0111 , 0.06605]	0.90276
PKID	[0.01265 , 0.0568]	0.90276
UCPD	[-0.0123 , 0.00645]	0.90276
USD	[0.0038 , 0.05225]	0.90276
Zeta	[-0.02135 , 0.00605]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.01025 , 0.1294]	0.95024
Ameva	[-0.02255 , 0.011]	0.95024
Bayesian	[0.01595 , 0.0767]	0.95024
CACC	[-0.01395 , 0.01715]	0.95024
CADD	[0.0831 , 0.20575]	0.95024
CAIM	[-0.03335 , 0.0027]	0.95024
Chi2	[-0.01135 , 0.00365]	0.95024
ChiMerge	[-0.03205 , 0.00045]	0.95024
ClusterAnalysis	[0.01975 , 0.08225]	0.95024
DIBD	[-0.0079 , 0.03215]	0.95024
Distance	[-0.0175 , 0.01]	0.95024
EqualFrequency	[-0.0072 , 0.02345]	0.95024
EqualWidth	[-0.0033 , 0.0289]	0.95024
Extended Chi2	[-0.0049 , 0.0203]	0.95024
FFD	[0.0105 , 0.05825]	0.95024
FUSINTER	[-0.0179 , 0.0003]	0.95024
HDD	[0.002 , 0.03895]	0.95024
HellingerBD	[-0.009 , 0.0279]	0.95024
Heter-Disc	[0.028 , 0.12675]	0.95024
ID3	[0.02515 , 0.1049]	0.95024
IDD	[0.01245 , 0.1031]	0.95024
Khiops	[-0.0107 , 0.01685]	0.95024
MDLP	[-0.01775 , 0.0054]	0.95024
MODL	[-0.0053 , 0.0085]	0.95024
MVD	[0.00845 , 0.07425]	0.95024
PKID	[0.00835 , 0.0605]	0.95024
UCPD	[-0.015 , 0.0084]	0.95024
USD	[0.0029 , 0.06075]	0.95024
Zeta	[-0.02485 , 0.0076]	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	653.5	166.5	0.00247	0.00302
Ameva	384.0	436.0	≥ 0.2	1
Bayesian	706.5	113.5	8.815E-5	0.000188
CACC	365.5	419.5	≥ 0.2	1
CADD	743.5	76.5	3.945E-6	0.000019
CAIM	242.0	578.0	≥ 0.2	1
Chi2	352.5	432.5	≥ 0.2	1
ChiMerge	259.0	561.0	≥ 0.2	1
ClusterAnalysis	672.0	108.0	3.008E-5	0.000081
DIBD	452.0	328.0	≥ 0.2	0.382275
Distance	356.0	464.0	≥ 0.2	1
EqualFrequency	449.5	370.5	≥ 0.2	1
EqualWidth	521.5	298.5	≥ 0.2	0.293068
Extended Chi2	440.5	379.5	≥ 0.2	1
FFD	642.5	177.5	0.013607	0.014062
FUSINTER	209.5	573.5	≥ 0.2	1
HDD	528.0	257.0	≥ 0.2	0.336982
HellingerBD	477.0	306.0	≥ 0.2	0.487702
Heter-Disc	631.0	149.0	4.954E-4	0.000751
ID3	653.5	131.5	0.0020251	0.00258
IDD	705.5	114.5	9.488E-5	0.000199
Khiops	464.0	356.0	≥ 0.2	1
MDLP	281.0	539.0	≥ 0.2	1
Modified Chi2	345.0	440.0	≥ 0.2	1
MVD	592.0	191.0	0.014532	0.014765
PKID	619.0	201.0	0.03776	0.037002
UCPD	415.5	404.5	≥ 0.2	0.935506
USD	602.0	218.0	0.07176	0.06959
Zeta	319.0	464.0	≥ 0.2	1

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

25.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[0.0155 , 0.09635]	0.90276
Ameva	[-0.01345 , 0.00655]	0.90276
Bayesian	[0.0188 , 0.0661]	0.90276
CACC	[-0.00955 , 0.00745]	0.90276
CADD	[0.0791 , 0.1714]	0.90276
CAIM	[-0.0234 , -0.00315]	0.90276
Chi2	[-0.0104 , 0.0053]	0.90276
ChiMerge	[-0.02025 , -0.00065]	0.90276
ClusterAnalysis	[0.0208 , 0.07075]	0.90276
DIBD	[-0.0066 , 0.0253]	0.90276
Distance	[-0.01225 , 0.0036]	0.90276
EqualFrequency	[-0.005 , 0.0156]	0.90276
EqualWidth	[-0.0017 , 0.0229]	0.90276
Extended Chi2	[-0.00555 , 0.02435]	0.90276
FFD	[0.01565 , 0.0448]	0.90276
FUSINTER	[-0.01475 , -0.00335]	0.90276
HDD	[0.0003 , 0.03395]	0.90276
HellingerBD	[-0.00295 , 0.0193]	0.90276
Heter-Disc	[0.02785 , 0.11385]	0.90276
ID3	[0.0215 , 0.0811]	0.90276
IDD	[0.02365 , 0.07595]	0.90276
Khiops	[-0.00595 , 0.0159]	0.90276
MDLP	[-0.0153 , -0]	0.90276
Modified Chi2	[-0.00745 , 0.00365]	0.90276
MVD	[0.0083 , 0.0513]	0.90276
PKID	[0.01205 , 0.0516]	0.90276
UCPD	[-0.01045 , 0.0092]	0.90276
USD	[0.0074 , 0.04775]	0.90276
Zeta	[-0.01425 , 0.0022]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0135 , 0.10575]	0.95024
Ameva	[-0.01985 , 0.00895]	0.95024
Bayesian	[0.01705 , 0.07305]	0.95024
CACC	[-0.01285 , 0.0107]	0.95024
CADD	[0.07145 , 0.1836]	0.95024
CAIM	[-0.02555 , -0.0016]	0.95024
Chi2	[-0.01215 , 0.00725]	0.95024
ChiMerge	[-0.02415 , 0]	0.95024
ClusterAnalysis	[0.0181 , 0.0776]	0.95024
DIBD	[-0.00865 , 0.02855]	0.95024
Distance	[-0.01415 , 0.00455]	0.95024
EqualFrequency	[-0.007 , 0.01665]	0.95024
EqualWidth	[-0.00465 , 0.02505]	0.95024
Extended Chi2	[-0.0067 , 0.02965]	0.95024
FFD	[0.012 , 0.04865]	0.95024
FUSINTER	[-0.01565 , -0.0026]	0.95024
HDD	[0 , 0.0368]	0.95024
HellingerBD	[-0.00565 , 0.0228]	0.95024
Heter-Disc	[0.0223 , 0.1213]	0.95024
ID3	[0.0189 , 0.0879]	0.95024
IDD	[0.0207 , 0.0811]	0.95024
Khiops	[-0.00825 , 0.0178]	0.95024
MDLP	[-0.0182 , 0.0008]	0.95024
Modified Chi2	[-0.0085 , 0.0053]	0.95024
MVD	[0.00635 , 0.05775]	0.95024
PKID	[0.00825 , 0.055]	0.95024
UCPD	[-0.0124 , 0.0118]	0.95024
USD	[0.00495 , 0.05425]	0.95024
Zeta	[-0.0165 , 0.0039]	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	465.0	355.0	≥ 0.2	1
Ameva	166.0	654.0	≥ 0.2	1
Bayesian	434.5	354.5	≥ 0.2	1
CACC	230.0	553.0	≥ 0.2	1
CADD	614.5	174.5	0.15454	0.147018
CAIM	124.0	656.0	≥ 0.2	1
Chi2	211.5	608.5	≥ 0.2	1
ChiMerge	97.0	723.0	≥ 0.2	1
ClusterAnalysis	399.5	420.5	≥ 0.2	1
DIBD	268.0	515.0	≥ 0.2	1
Distance	228.0	592.0	≥ 0.2	1
EqualFrequency	207.0	580.0	≥ 0.2	1
EqualWidth	257.0	563.0	≥ 0.2	1
Extended Chi2	280.5	504.5	≥ 0.2	1
FFD	363.5	456.5	≥ 0.2	1
FUSINTER	123.0	697.0	≥ 0.2	1
HDD	364.0	456.0	≥ 0.2	1
HellingerBD	257.5	562.5	≥ 0.2	1
Heter-Disc	503.0	317.0	≥ 0.2	1
ID3	459.0	361.0	≥ 0.2	1
IDD	447.0	340.0	≥ 0.2	1
Khiops	255.0	528.0	≥ 0.2	1
MDLP	175.0	605.0	≥ 0.2	1
Modified Chi2	212.0	608.0	≥ 0.2	1
MODL	191.0	592.0	≥ 0.2	1
PKID	343.5	441.5	≥ 0.2	1
UCPD	234.0	586.0	≥ 0.2	1
USD	356.0	431.0	≥ 0.2	1
Zeta	148.0	632.0	≥ 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	[-0.01285 , 0.04855]	0.90276
Ameva	[-0.0743 , -0.0151]	0.90276
Bayesian	[-0.0108 , 0.02225]	0.90276
CACC	[-0.05315 , -0.0082]	0.90276
CADD	[0.03535 , 0.11025]	0.90276
CAIM	[-0.10225 , -0.0269]	0.90276
Chi2	[-0.06805 , -0.008]	0.90276
ChiMerge	[-0.0926 , -0.02825]	0.90276
ClusterAnalysis	[-0.0211 , 0.02705]	0.90276
DIBD	[-0.04635 , 0]	0.90276
Distance	[-0.08295 , -0.0073]	0.90276
EqualFrequency	[-0.06825 , -0.00835]	0.90276
EqualWidth	[-0.05315 , -0.0034]	0.90276
Extended Chi2	[-0.05735 , 0]	0.90276
FFD	[-0.04885 , 0.0129]	0.90276
FUSINTER	[-0.0905 , -0.0192]	0.90276
HDD	[-0.0346 , 0.00855]	0.90276
HellingerBD	[-0.0768 , -0.00485]	0.90276
Heter-Disc	[-0.00095 , 0.0572]	0.90276
ID3	[-0.01305 , 0.029]	0.90276
IDD	[-0.0137 , 0.0378]	0.90276
Khiops	[-0.08055 , -0.00235]	0.90276
MDLP	[-0.0847 , -0.01415]	0.90276
Modified Chi2	[-0.06605 , -0.0111]	0.90276
MODL	[-0.0513 , -0.0083]	0.90276
PKID	[-0.045 , 0.01365]	0.90276
UCPD	[-0.0748 , -0.0073]	0.90276
USD	[-0.0329 , 0.0125]	0.90276
Zeta	[-0.0882 , -0.0192]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01645 , 0.053]	0.95024
Ameva	[-0.08105 , -0.01195]	0.95024
Bayesian	[-0.0167 , 0.0256]	0.95024
CACC	[-0.0599 , -0.0044]	0.95024
CADD	[0.0276 , 0.11565]	0.95024
CAIM	[-0.11055 , -0.02125]	0.95024
Chi2	[-0.08575 , -0.00605]	0.95024
ChiMerge	[-0.10205 , -0.02375]	0.95024
ClusterAnalysis	[-0.0234 , 0.02935]	0.95024
DIBD	[-0.0523 , 0.0026]	0.95024
Distance	[-0.0897 , -0.00445]	0.95024
EqualFrequency	[-0.0764 , -0.0048]	0.95024
EqualWidth	[-0.05905 , -0.0012]	0.95024
Extended Chi2	[-0.0666 , 0.00475]	0.95024
FFD	[-0.0611 , 0.01685]	0.95024
FUSINTER	[-0.10255 , -0.016]	0.95024
HDD	[-0.04315 , 0.0119]	0.95024
HellingerBD	[-0.0896 , -0.0016]	0.95024
Heter-Disc	[-0.0093 , 0.06675]	0.95024
ID3	[-0.01785 , 0.03565]	0.95024
IDD	[-0.0165 , 0.053]	0.95024
Khiops	[-0.08695 , 0.00075]	0.95024
MDLP	[-0.09445 , -0.01115]	0.95024
Modified Chi2	[-0.07425 , -0.00845]	0.95024
MODL	[-0.05775 , -0.00635]	0.95024
PKID	[-0.05045 , 0.0185]	0.95024
UCPD	[-0.0831 , -0.00495]	0.95024
USD	[-0.0421 , 0.01675]	0.95024
Zeta	[-0.0961 , -0.01475]	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	425.0	395.0	≥ 0.2	1
Ameva	173.0	647.0	≥ 0.2	1
Bayesian	517.0	270.0	≥ 0.2	0.844183
CACC	221.5	598.5	≥ 0.2	1
CADD	664.0	123.0	0.004024	0.004756
CAIM	77.0	706.0	≥ 0.2	1
Chi2	131.0	689.0	≥ 0.2	1
ChiMerge	71.5	748.5	≥ 0.2	1
ClusterAnalysis	520.5	264.5	≥ 0.2	0.403528
DIBD	259.5	560.5	≥ 0.2	1
Distance	203.5	616.5	≥ 0.2	1
EqualFrequency	84.0	703.0	≥ 0.2	1
EqualWidth	257.0	530.0	≥ 0.2	1
Extended Chi2	264.0	556.0	≥ 0.2	1
FFD	411.0	380.0	≥ 0.2	1
FUSINTER	57.5	727.5	≥ 0.2	1
HDD	418.0	402.0	≥ 0.2	1
HellingerBD	178.0	642.0	≥ 0.2	1
Heter-Disc	582.0	238.0	0.13898	0.133521
ID3	619.5	175.5	≥ 0.2	1
IDD	460.5	359.5	≥ 0.2	1
Khiops	126.5	658.5	≥ 0.2	1
MDLP	164.5	655.5	≥ 0.2	1
Modified Chi2	153.5	666.5	≥ 0.2	1
MODL	201.0	619.0	≥ 0.2	1
MVD	441.5	343.5	≥ 0.2	1
UCPD	146.0	674.0	≥ 0.2	1
USD	380.0	440.0	≥ 0.2	1
Zeta	102.5	717.5	≥ 0.2	1

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

27.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.01875 , 0.06375]	0.90276
Ameva	[-0.0719 , -0.02315]	0.90276
Bayesian	[0 , 0.0294]	0.90276
CACC	[-0.05745 , -0.00805]	0.90276
CADD	[0.037 , 0.1443]	0.90276
CAIM	[-0.0848 , -0.0388]	0.90276
Chi2	[-0.0584 , -0.01745]	0.90276
ChiMerge	[-0.07815 , -0.0369]	0.90276
ClusterAnalysis	[0.00005 , 0.03405]	0.90276
DIBD	[-0.0526 , -0.0046]	0.90276
Distance	[-0.0739 , -0.0178]	0.90276
EqualFrequency	[-0.05 , -0.0129]	0.90276
EqualWidth	[-0.035 , -0.00055]	0.90276
Extended Chi2	[-0.03975 , -0.00135]	0.90276
FFD	[-0.00325 , 0.007]	0.90276
FUSINTER	[-0.07735 , -0.0261]	0.90276
HDD	[-0.0081 , 0.00745]	0.90276
HellingerBD	[-0.0423 , -0.01045]	0.90276
Heter-Disc	[0.00585 , 0.06835]	0.90276
ID3	[0.0016 , 0.0383]	0.90276
IDD	[-0.00825 , 0.04855]	0.90276
Khiops	[-0.0537 , -0.01545]	0.90276
MDLP	[-0.07695 , -0.0225]	0.90276
Modified Chi2	[-0.0568 , -0.01265]	0.90276
MODL	[-0.0516 , -0.01205]	0.90276
MVD	[-0.01365 , 0.045]	0.90276
UCPD	[-0.07135 , -0.0163]	0.90276
USD	[-0.00605 , 0.00425]	0.90276
Zeta	[-0.0715 , -0.03205]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.02375 , 0.0782]	0.95024
Ameva	[-0.0766 , -0.02015]	0.95024
Bayesian	[-0.0005 , 0.0355]	0.95024
CACC	[-0.062 , -0.0056]	0.95024
CADD	[0.0243 , 0.14855]	0.95024
CAIM	[-0.0887 , -0.0347]	0.95024
Chi2	[-0.06625 , -0.0142]	0.95024
ChiMerge	[-0.083 , -0.03495]	0.95024
ClusterAnalysis	[-0.0001 , 0.0369]	0.95024
DIBD	[-0.057 , -0.00135]	0.95024
Distance	[-0.0821 , -0.01115]	0.95024
EqualFrequency	[-0.0532 , -0.01215]	0.95024
EqualWidth	[-0.04005 , 0]	0.95024
Extended Chi2	[-0.0418 , 0]	0.95024
FFD	[-0.0056 , 0.0083]	0.95024
FUSINTER	[-0.08345 , -0.02265]	0.95024
HDD	[-0.01065 , 0.0094]	0.95024
HellingerBD	[-0.0499 , -0.0059]	0.95024
Heter-Disc	[0.0027 , 0.07725]	0.95024
ID3	[0.00135 , 0.041]	0.95024
IDD	[-0.01055 , 0.05515]	0.95024
Khiops	[-0.0581 , -0.014]	0.95024
MDLP	[-0.0865 , -0.0162]	0.95024
Modified Chi2	[-0.0605 , -0.00835]	0.95024
MODL	[-0.055 , -0.00825]	0.95024
MVD	[-0.0185 , 0.05045]	0.95024
UCPD	[-0.0739 , -0.01025]	0.95024
USD	[-0.00785 , 0.00575]	0.95024
Zeta	[-0.07495 , -0.02905]	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	687.0	133.0	9.446E-5	0.000192
Ameva	394.0	426.0	≥ 0.2	1
Bayesian	681.0	99.0	1.469E-5	0.000046
CACC	374.0	406.0	≥ 0.2	1
CADD	800.0	20.0	6.748E-10	0
CAIM	288.0	532.0	≥ 0.2	1
Chi2	359.0	461.0	≥ 0.2	1
ChiMerge	270.5	549.5	≥ 0.2	1
ClusterAnalysis	727.0	93.0	4.528E-6	0.00002
DIBD	591.0	229.0	0.014108	0.014704
Distance	334.5	485.5	≥ 0.2	1
EqualFrequency	492.0	328.0	≥ 0.2	0.266666
EqualWidth	589.0	231.0	0.015266	0.015834
Extended Chi2	504.5	315.5	≥ 0.2	0.200872
FFD	686.0	134.0	1.01E-4	0.000202
FUSINTER	200.5	619.5	≥ 0.2	1
HDD	561.0	259.0	0.0422	0.041715
HellingerBD	438.0	382.0	≥ 0.2	0.701663
Heter-Disc	784.0	36.0	9.054E-9	0
ID3	693.0	127.0	6.268E-5	0.000139
IDD	701.0	119.0	3.546E-5	0.000089
Khiops	446.0	374.0	≥ 0.2	0.622534
MDLP	291.5	528.5	≥ 0.2	1
Modified Chi2	448.5	371.5	≥ 0.2	0.599519
MODL	404.5	415.5	≥ 0.2	1
MVD	586.0	234.0	0.017158	0.017673
PKID	674.0	146.0	2.192E-4	0.000369
USD	601.5	178.5	0.002551	0.00304
Zeta	353.0	467.0	≥ 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	[0.03005 , 0.11205]	0.90276
Ameva	[-0.0107 , 0.00815]	0.90276
Bayesian	[0.02215 , 0.07785]	0.90276
CACC	[-0.0097 , 0.0077]	0.90276
CADD	[0.0957 , 0.1796]	0.90276
CAIM	[-0.01915 , 0.00005]	0.90276
Chi2	[-0.01465 , 0.0045]	0.90276
ChiMerge	[-0.0181 , -0.0011]	0.90276
ClusterAnalysis	[0.02155 , 0.0709]	0.90276
DIBD	[0.00345 , 0.0301]	0.90276
Distance	[-0.0144 , 0.00325]	0.90276
EqualFrequency	[-0.002 , 0.01505]	0.90276
EqualWidth	[0.00425 , 0.025]	0.90276
Extended Chi2	[-0.002 , 0.03215]	0.90276
FFD	[0.01665 , 0.0536]	0.90276
FUSINTER	[-0.01865 , -0.00325]	0.90276
HDD	[0.00405 , 0.046]	0.90276
HellingerBD	[-0.00585 , 0.0158]	0.90276
Heter-Disc	[0.04415 , 0.10185]	0.90276
ID3	[0.0259 , 0.09585]	0.90276
IDD	[0.0329 , 0.0941]	0.90276
Khiops	[-0.00555 , 0.01255]	0.90276
MDLP	[-0.0175 , 0.0003]	0.90276
Modified Chi2	[-0.00645 , 0.0123]	0.90276
MODL	[-0.0092 , 0.01045]	0.90276
MVD	[0.0073 , 0.0748]	0.90276
PKID	[0.0163 , 0.07135]	0.90276
USD	[0.00915 , 0.0719]	0.90276
Zeta	[-0.01305 , 0.0051]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0232 , 0.12225]	0.95024
Ameva	[-0.0131 , 0.0099]	0.95024
Bayesian	[0.0194 , 0.0819]	0.95024
CACC	[-0.01105 , 0.00965]	0.95024
CADD	[0.09 , 0.18565]	0.95024
CAIM	[-0.02045 , 0.00255]	0.95024
Chi2	[-0.0166 , 0.00595]	0.95024
ChiMerge	[-0.02025 , 0.00035]	0.95024
ClusterAnalysis	[0.01885 , 0.07705]	0.95024
DIBD	[0.00195 , 0.0356]	0.95024
Distance	[-0.01615 , 0.00415]	0.95024
EqualFrequency	[-0.0031 , 0.0174]	0.95024
EqualWidth	[0.00225 , 0.0279]	0.95024
Extended Chi2	[-0.0039 , 0.045]	0.95024
FFD	[0.0157 , 0.06]	0.95024
FUSINTER	[-0.0198 , -0.0026]	0.95024
HDD	[0.00065 , 0.05195]	0.95024
HellingerBD	[-0.00695 , 0.01835]	0.95024
Heter-Disc	[0.04065 , 0.11195]	0.95024
ID3	[0.0209 , 0.10655]	0.95024
IDD	[0.0252 , 0.09795]	0.95024
Khiops	[-0.00695 , 0.01425]	0.95024
MDLP	[-0.01895 , 0.00255]	0.95024
Modified Chi2	[-0.0084 , 0.015]	0.95024
MODL	[-0.0118 , 0.0124]	0.95024
MVD	[0.00495 , 0.0831]	0.95024
PKID	[0.01025 , 0.0739]	0.95024
USD	[0.0069 , 0.0766]	0.95024
Zeta	[-0.01425 , 0.0067]	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	440.5	379.5	≥ 0.2	1
Ameva	187.0	593.0	≥ 0.2	1
Bayesian	570.5	249.5	≥ 0.2	1
CACC	252.5	567.5	≥ 0.2	1
CADD	630.0	157.0	0.0266	0.026718
CAIM	99.5	683.5	≥ 0.2	1
Chi2	208.5	611.5	≥ 0.2	1
ChiMerge	82.0	698.0	≥ 0.2	1
ClusterAnalysis	493.5	291.5	≥ 0.2	0.693651
DIBD	287.0	533.0	≥ 0.2	1
Distance	230.0	550.0	≥ 0.2	1
EqualFrequency	193.0	592.0	≥ 0.2	1
EqualWidth	284.0	536.0	≥ 0.2	1
Extended Chi2	286.0	534.0	≥ 0.2	1
FFD	450.5	336.5	≥ 0.2	1
FUSINTER	111.0	709.0	≥ 0.2	1
HDD	425.0	366.0	≥ 0.2	1
HellingerBD	221.0	562.0	≥ 0.2	1
Heter-Disc	536.0	247.0	0.11748	0.11318
ID3	649.5	170.5	≥ 0.2	0.888906
IDD	421.5	398.5	≥ 0.2	1
Khiops	230.0	590.0	≥ 0.2	1
MDLP	191.0	589.0	≥ 0.2	1
Modified Chi2	216.5	603.5	≥ 0.2	1
MODL	218.0	602.0	≥ 0.2	1
MVD	431.0	356.0	≥ 0.2	1
PKID	440.0	380.0	≥ 0.2	1
UCPD	178.5	601.5	≥ 0.2	1
Zeta	133.5	686.5	≥ 0.2	1

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

29.2 Confidence intervals for Median of differences

$\alpha=0.90$	Confidence interval	Exact confidence
1R	[-0.0111 , 0.04785]	0.90276
Ameva	[-0.06675 , -0.0165]	0.90276
Bayesian	[0.0002 , 0.01505]	0.90276
CACC	[-0.05345 , -0.00445]	0.90276
CADD	[0.02485 , 0.1436]	0.90276
CAIM	[-0.08005 , -0.02655]	0.90276
Chi2	[-0.05305 , -0.008]	0.90276
ChiMerge	[-0.0727 , -0.0282]	0.90276
ClusterAnalysis	[-0.00095 , 0.0248]	0.90276
DIBD	[-0.05545 , 0]	0.90276
Distance	[-0.0798 , -0.0064]	0.90276
EqualFrequency	[-0.05055 , -0.0069]	0.90276
EqualWidth	[-0.0408 , 0]	0.90276
Extended Chi2	[-0.02615 , 0]	0.90276
FFD	[-0.0023 , 0.01045]	0.90276
FUSINTER	[-0.0761 , -0.0133]	0.90276
HDD	[-0.0054 , 0.0108]	0.90276
HellingerBD	[-0.0467 , -0.00545]	0.90276
Heter-Disc	[0.00625 , 0.07015]	0.90276
ID3	[0.00625 , 0.0322]	0.90276
IDD	[-0.01095 , 0.02985]	0.90276
Khiops	[-0.06215 , -0.0052]	0.90276
MDLP	[-0.08505 , -0.00925]	0.90276
Modified Chi2	[-0.05225 , -0.0038]	0.90276
MODL	[-0.04775 , -0.0074]	0.90276
MVD	[-0.0125 , 0.0329]	0.90276
PKID	[-0.00425 , 0.00605]	0.90276
UCPD	[-0.0719 , -0.00915]	0.90276
Zeta	[-0.0666 , -0.0208]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[-0.01665 , 0.05805]	0.95024
Ameva	[-0.07335 , -0.01295]	0.95024
Bayesian	[0 , 0.0164]	0.95024
CACC	[-0.06085 , -0.0015]	0.95024
CADD	[0.0216 , 0.1471]	0.95024
CAIM	[-0.08965 , -0.0241]	0.95024
Chi2	[-0.0629 , -0.00585]	0.95024
ChiMerge	[-0.07875 , -0.02445]	0.95024
ClusterAnalysis	[-0.0021 , 0.0315]	0.95024
DIBD	[-0.06235 , 0.0037]	0.95024
Distance	[-0.08655 , -0.00255]	0.95024
EqualFrequency	[-0.0567 , -0.00505]	0.95024
EqualWidth	[-0.04465 , 0.0016]	0.95024
Extended Chi2	[-0.0322 , 0.002]	0.95024
FFD	[-0.00315 , 0.01285]	0.95024
FUSINTER	[-0.08815 , -0.01145]	0.95024
HDD	[-0.00825 , 0.01335]	0.95024
HellingerBD	[-0.0598 , -0.00345]	0.95024
Heter-Disc	[0.0005 , 0.078]	0.95024
ID3	[0.005 , 0.03425]	0.95024
IDD	[-0.0129 , 0.03775]	0.95024
Khiops	[-0.07575 , -0.003]	0.95024
MDLP	[-0.0931 , -0.00695]	0.95024
Modified Chi2	[-0.06075 , -0.0029]	0.95024
MODL	[-0.05425 , -0.00495]	0.95024
MVD	[-0.01675 , 0.0421]	0.95024
PKID	[-0.00575 , 0.00785]	0.95024
UCPD	[-0.0766 , -0.0069]	0.95024
Zeta	[-0.07385 , -0.01685]	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	720.0	100.0	8.152E-6	0.00003
Ameva	367.0	453.0	≥ 0.2	1
Bayesian	783.0	37.0	1.0438E-8	0.000001
CACC	417.5	402.5	≥ 0.2	1
CADD	797.0	23.0	1.1642E-9	0
CAIM	225.5	563.5	≥ 0.2	1
Chi2	391.5	393.5	≥ 0.2	1
ChiMerge	228.5	556.5	≥ 0.2	1
ClusterAnalysis	736.0	84.0	2.038E-6	0.000011
DIBD	552.0	268.0	0.05658	0.055443
Distance	365.0	455.0	≥ 0.2	1
EqualFrequency	547.0	233.0	0.02782	0.027683
EqualWidth	629.0	151.0	5.586E-4	0.000831
Extended Chi2	529.5	250.5	0.0517	0.050334
FFD	682.0	98.0	1.353E-5	0.000045
FUSINTER	270.0	510.0	≥ 0.2	1
HDD	574.0	209.0	0.03102	0.030979
HellingerBD	496.0	284.0	0.14226	0.137224
Heter-Disc	721.0	99.0	7.508E-6	0.000028
ID3	722.5	97.5	2.5370000000000003E-5	0.000073
IDD	757.5	62.5	9.527E-7	0.000007
Khiops	486.5	333.5	≥ 0.2	0.586555
MDLP	293.0	490.0	≥ 0.2	1
Modified Chi2	460.5	359.5	≥ 0.2	0.867546
MODL	464.0	319.0	≥ 0.2	0.617929
MVD	632.0	148.0	4.662E-4	0.000714
PKID	717.5	102.5	3.799E-5	0.000099
UCPD	467.0	353.0	≥ 0.2	0.438827
USD	686.5	133.5	3.526E-4	0.000573

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	[0.0276 , 0.11715]	0.90276
Ameva	[-0.01 , 0.00405]	0.90276
Bayesian	[0.0326 , 0.0841]	0.90276
CACC	[-0.0073 , 0.00895]	0.90276
CADD	[0.1049 , 0.1851]	0.90276
CAIM	[-0.01055 , -0.00145]	0.90276
Chi2	[-0.0059 , 0.008]	0.90276
ChiMerge	[-0.01275 , -0.00205]	0.90276
ClusterAnalysis	[0.0354 , 0.0877]	0.90276
DIBD	[0.0019 , 0.02885]	0.90276
Distance	[-0.0126 , 0.0033]	0.90276
EqualFrequency	[0.0032 , 0.02445]	0.90276
EqualWidth	[0.01055 , 0.031]	0.90276
Extended Chi2	[0.00185 , 0.0405]	0.90276
FFD	[0.02385 , 0.0557]	0.90276
FUSINTER	[-0.01195 , -0.00005]	0.90276
HDD	[0.0149 , 0.059]	0.90276
HellingerBD	[-0.00155 , 0.02015]	0.90276
Heter-Disc	[0.0423 , 0.1227]	0.90276
ID3	[0.03745 , 0.10435]	0.90276
IDD	[0.03465 , 0.1028]	0.90276
Khiops	[-0.0037 , 0.01615]	0.90276
MDLP	[-0.0142 , 0.00105]	0.90276
Modified Chi2	[-0.00605 , 0.02135]	0.90276
MODL	[-0.0022 , 0.01425]	0.90276
MVD	[0.0192 , 0.0882]	0.90276
PKID	[0.03205 , 0.0715]	0.90276
UCPD	[-0.0051 , 0.01305]	0.90276
USD	[0.0208 , 0.0666]	0.90276

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

$\alpha=0.95$	Confidence interval	Exact confidence
1R	[0.0237 , 0.1261]	0.95024
Ameva	[-0.0117 , 0.0053]	0.95024
Bayesian	[0.02945 , 0.0897]	0.95024
CACC	[-0.0091 , 0.0108]	0.95024
CADD	[0.1007 , 0.19575]	0.95024
CAIM	[-0.012 , -0.0002]	0.95024
Chi2	[-0.0079 , 0.01085]	0.95024
ChiMerge	[-0.0144 , -0.001]	0.95024
ClusterAnalysis	[0.03115 , 0.0954]	0.95024
DIBD	[-0.0003 , 0.03275]	0.95024
Distance	[-0.01395 , 0.0064]	0.95024
EqualFrequency	[0.00155 , 0.0264]	0.95024
EqualWidth	[0.0085 , 0.03375]	0.95024
Extended Chi2	[-0.0001 , 0.0456]	0.95024
FFD	[0.0217 , 0.06195]	0.95024
FUSINTER	[-0.0131 , 0.0013]	0.95024
HDD	[0.00595 , 0.0677]	0.95024
HellingerBD	[-0.00365 , 0.0228]	0.95024
Heter-Disc	[0.03805 , 0.13055]	0.95024
ID3	[0.0348 , 0.1117]	0.95024
IDD	[0.03135 , 0.10835]	0.95024
Khiops	[-0.00615 , 0.0181]	0.95024
MDLP	[-0.016 , 0.00285]	0.95024
Modified Chi2	[-0.0076 , 0.02485]	0.95024
MODL	[-0.0039 , 0.0165]	0.95024
MVD	[0.01475 , 0.0961]	0.95024
PKID	[0.02905 , 0.07495]	0.95024
UCPD	[-0.0067 , 0.01425]	0.95024
USD	[0.01685 , 0.07385]	0.95024

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