

# Output tables for 1xN statistical comparisons.

October 30, 2021

## 1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

Algorithm	Ranking
brm-original	3.1237
brm-correlation	4.4892
brm-cosine	4.2849
brm-manhattan	2.8656
gmm	3.3118
isof	5.2419
ocsvm	4.6828

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 6 degrees of freedom): 96.8053.  
P-value computed by Friedman Test: 0.

## 2 Post hoc comparison (Friedman)

P-values obtained in by applying post hoc methods over the results of Friedman procedure.

$i$	algorithm	$z = (R_0 - R_i)/SE$	$p$	Holm
6	isof	7.501229	0	0.008333
5	ocsvm	5.736234	0	0.01
4	brm-correlation	5.125274	0	0.0125
3	brm-cosine	4.480372	0.000007	0.016667
2	gmm	1.408602	0.158953	0.025
1	brm-original	0.814613	0.415294	0.05

Table 2: Post Hoc comparison Table for  $\alpha = 0.05$  (FRIEDMAN)

Holm's procedure rejects those hypotheses that have an unadjusted p-value  $\leq 0.025$ .

### 3 Adjusted P-Values (Friedman)

Adjusted P-values obtained through the application of the post hoc methods (Friedman).

i	algorithm	unadjusted $p$	$p_{Holm}$
1	isof	0	0
2	ocsvm	0	0
3	brm-correlation	0	0.000001
4	brm-cosine	0.000007	0.000022
5	gmm	0.158953	0.317906
6	brm-original	0.415294	0.415294

Table 3: Adjusted  $p$ -values (FRIEDMAN) (I)

i	algorithm	unadjusted $p$
1	isof	0
2	ocsvm	0
3	brm-correlation	0
4	brm-cosine	0.000007
5	gmm	0.158953
6	brm-original	0.415294

Table 4: Adjusted  $p$ -values (FRIEDMAN) (II)