# Wilcoxon Signed Ranks test.

KEEL non-parametric statistical module

August 20, 2024

### 1 Detailed results for BHCVRP-act

#### 1.1 Results

VS	$R^+$	$R^-$	Exact P-value	Asymptotic P-value
BHCVRP	1.0	35.0	$\geq 0.2$	1

Table 1: Results obtained by the Wilcoxon test for algorithm BHCVRP-act

#### 1.2 Confidence intervals for Median of differences

$\alpha$ =0.90	Confidence interval	Exact confidence
BHCVRP	[-3.36 , 1,597.44]	0

Table 2: Confidence intervals for algorithm BHCVRP-act ( $\alpha$ =0.90)

$\alpha$ =0.95	Confidence interval	Exact confidence
BHCVRP	[-3.36, 1,597.44]	0

Table 3: Confidence intervals for algorithm BHCVRP-act ( $\alpha$ =0.95)

## 2 Detailed results for BHCVRP

#### 2.1 Results

VS	$R^+$	$R^-$	Exact P-value	Asymptotic P-value
BHCVRP-act	35.0	1.0	$\geq 0.2$	0.014266

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

#### 2.2 Confidence intervals for Median of differences

$\alpha$ =0.90	Confidence interval	Exact confidence
BHCVRP-act	[-1,597.44, 3.36]	0

Table 5: Confidence intervals for algorithm BHCVRP ( $\alpha{=}0.90)$ 

$\alpha$ =0.95	Confidence interval	Exact confidence
BHCVRP-act	[-1,597.44 , 3.36]	0

Table 6: Confidence intervals for algorithm BHCVRP ( $\alpha{=}0.95)$