

# NIST Decision Tree Report

## Summary

Include	Laboratory	Result	Uncertainty	DegreesOfFreedom
TRUE	Lab 1	2.5361	1	10
TRUE	Lab 2	6.9120	2	10
TRUE	Lab 3	2.3291	1	10
TRUE	Lab 4	5.9823	2	10
TRUE	Lab 5	9.8207	1	10

Date: 2022-04-04

Selected Procedure: Adaptive Weighted Average

Consensus estimate: 5.445

Standard uncertainty: 1.728

95% coverage interval: (2.058, 8.832)

Dark uncertainty (tau): 1.894

## Decision Tree Hypothesis test results

Cochran's test for Homogeneity:

p-value:  $p < 0.001$

$Q = 37.55$  (Reference Distribution: Chi-Square with 4 Degrees of Freedom)

tau est. = 3.587

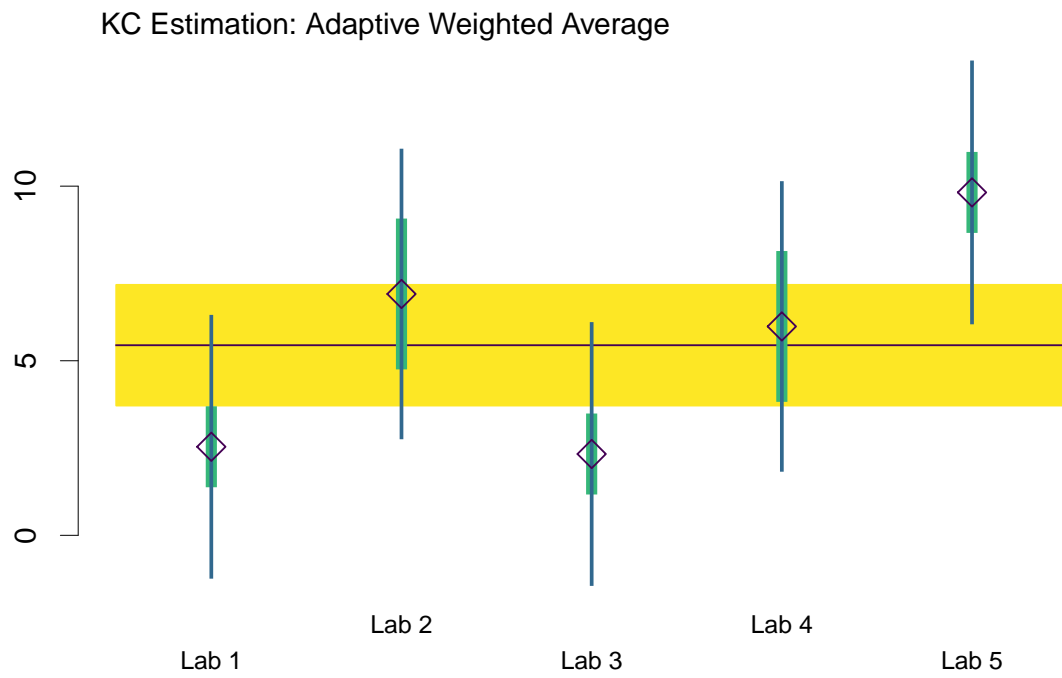
tau/median(x) = 0.5997

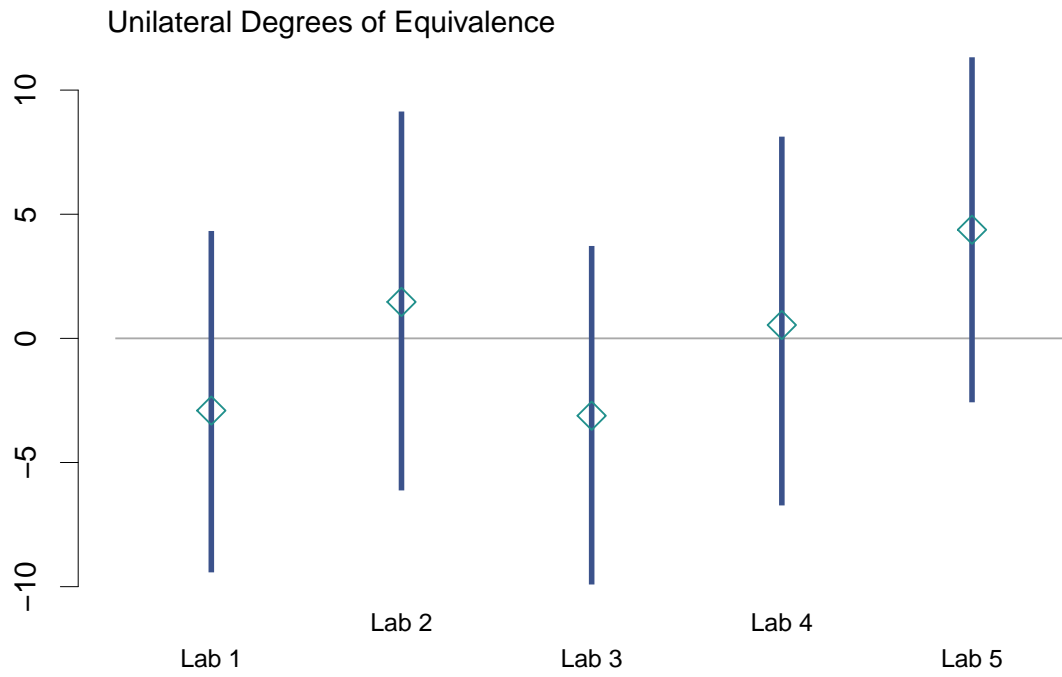
tau/median(u) = 3.587

Shapiro-Wilk test for Normality:  $p = 0.46$

Miao-Gel-Gastwirth test of Symmetry:  $p = 0.565$

## Plots





```
##      Lab      DoE.x  DoE.U95  DoE.Lwr  DoE.Upr
## Lab 1 Lab 1 -2.9086309 6.820329 -9.312499 4.213307
## Lab 2 Lab 2  1.4672691 7.518336 -6.011657 9.024963
## Lab 3 Lab 3 -3.1156309 6.720909 -9.801315 3.609456
## Lab 4 Lab 4  0.5375691 7.382677 -6.616760 8.013292
## Lab 5 Lab 5  4.3759691 6.827560 -2.462281 11.209844
```