## NIST Decision Tree Report

#### Summary

| Include | Laboratory | Result | Uncertainty | DegreesOfFreedom |
|---------|------------|--------|-------------|------------------|
| TRUE    | IRMM       | 34.30  | 1.03        | 60               |
| TRUE    | KRISS      | 32.90  | 0.69        | 4                |
| TRUE    | NARL       | 34.53  | 0.83        | 18               |
| TRUE    | NIST       | 32.42  | 0.29        | 2                |
| TRUE    | NMIJ       | 31.90  | 0.40        | 13               |
| TRUE    | NRC        | 35.80  | 0.38        | 60               |

Date: 2022-05-23

Selected Procedure: Hierarchical Gauss-Gauss

Consensus estimate: 33.61 Standard uncertainty: 0.7996

95% coverage interval: (32.01, 35.21)

Dark uncertainty (tau): 1.685

Tau posterior 0.025 and 0.975 quantiles: (0.8328,3.399)

#### Decision Tree Hypothesis test results

Cochran's test for Homogeneity:

p-value: p < 0.001

Q = 68.22 (Reference Distribution: Chi-Square with 5 Degrees of Freedom)

 $tau\ est.\,=\,1.711$ 

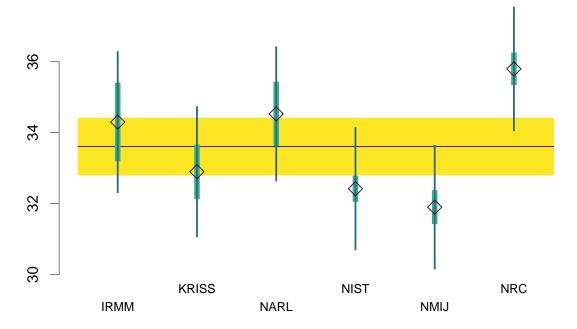
tau/median(x) = 0.05093tau/median(u) = 3.14

Shapiro-Wilk test for Normality: p = 0.5301

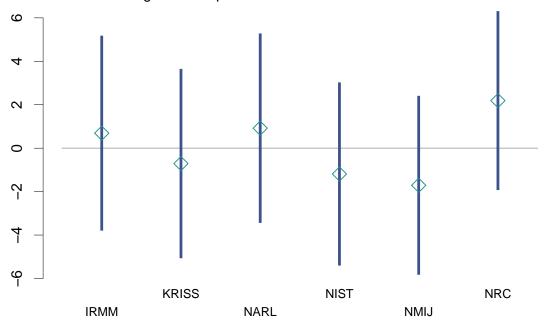
Miao-Gel-Gastwirth test of Symmetry: p = 0.9446

## Plots

### KCRV Estimation: Hierarchical Gauss-Gauss



# Unilateral Degrees of Equivalence



|       | Lab   | DoE.x   | DoE.U95 | DoE.Lwr | ${\rm DoE.Upr}$ |
|-------|-------|---------|---------|---------|-----------------|
| IRMM  | IRMM  | 0.6914  | 4.481   | -3.733  | 5.116           |
| KRISS | KRISS | -0.7086 | 4.293   | -5.003  | 3.586           |
| NARL  | NARL  | 0.9214  | 4.339   | -3.376  | 5.219           |
| NIST  | NIST  | -1.1890 | 4.152   | -5.341  | 2.964           |
| NMIJ  | NMIJ  | -1.7090 | 4.048   | -5.764  | 2.347           |
| NRC   | NRC   | 2.1910  | 4.057   | -1.863  | 6.246           |