


Original Paper

Comparison of KCRV and Its Uncertainty of CCM Key Comparisons by Monte Carlo Method

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Abstract

To provide insights for analysis of international key comparisons (KCs) in mass metrology, we have estimated previous KCs with Monte Carlo simulation. Two similar previous KCs in mass metrology of 50 kg scale were taken in this work as the typical example. The key comparison reference value was evaluated with several popular estimators as well as median in this analysis. Their various uncertainties were considered with guide to the expression of uncertainty in measurement and numerical simulation by Monte Carlo method.

Keywords

Monte Carlo method – Key comparison – KCRV – Uncertainty evaluation