

The recent proliferation of sensitivity-based methods of uncertainty analysis has provided new tools for users to quantify the sources of uncertainty in their models and perform adjustments on the data to minimize the resultant uncertainty. These adjustments, while they do improve the accuracy of modeling and simulation tools, do not preserve the underlying physics of the compound system. This work aims to examine the use of windowed multipole temperature and pole sensitivities as an analog for R-matrix resonance parameter sensitivities. This is of interest as the windowed multipole sensitivities can be found quickly and analytically. The uncertainty associated with the resonance parameters will be calculated using the numeric and analytic methods and compared.