experimental perturbational calculation

To assess the uncertainty of derived final results from a least-squares procedure one can investigate the sensitivity of output data for errors in the input data by means of this calculation. One performs the calculations many times with perturbed input data and studies the relation between the changes (perturbations) in the input data and the changes in the output data. The perturbations are preferably generated using random numbers with a distribution function chosen to mimic the distribution of uncertainties in the primary results.
See also: least-squares technique

Source:
PAC, 1981, *53*, 1805 *(Assignment and presentation of uncertainties of the numerical results of thermodynamic measurements (Provisional))* on page 1823