nse: Computation of Numerical Standard Errors in R

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Summary

`nse` is an R package (R Core Team (2016)) for computing the numerical standard error (NSE), an estimate of the standard deviation of a simulation result, if the simulation experiment were to be repeated many times. The package provides a set of wrappers around several R packages, which give access to more than thirty estimators, including batch means estimators (Geyer (1992 Section 3.2)), initial sequence estimators (Geyer (1992 Equation 3.3)), spectrum at zero estimators (Heidelberger and Welch (1981),Flegal and Jones (2010)), heteroskedasticity and autocorrelation consistent (HAC) kernel estimators (Newey and West (1987),Andrews (1991),Andrews and Monahan (1992),Newey and West (1994),Hirukawa (2010)), and bootstrap estimators Politis and Romano (1992),Politis and Romano (1994),Politis and White (2004)). The full set of methods available is presented in Ardia, Bluteau, and Hoogerheide (2016) together with several examples of applications of NSE in econometrics and finance. The latest version of the package is available at 'https://github.com/keblu/nse'.

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