

Minimum Hellinger distance estimation for nonstationary processes

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Abstract

In this paper we are interested in the estimation of non stationarity processes by the minimum Hellinger distance estimator (Beran, 1977) in spectral framework. This distance is originally applied to probability distributions. We consider a nonstationary process and we generalize the minimum Hellinger distance estimates method of stationary processes to processes that only show locally stationary behavior. Asymptotic properties of the estimator are showed. The robustness of the estimator is investigated through simulation study.

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