عنوان مقاله:

A review on the MCUSUM Charts in Detecting the Shifts of the Process with Comparison Study

نویسندگان:

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خلاصه مقاله:

In this paper, we compare the performance of different MCUSUM methods presented in the literature. First, we briefly introduce MCUSUM methods in multivariate normal distribution. In order to evaluate their performance, we present a comparative study with simulation. Furthermore, we compare the average out-of-control run length of MCUSUM methods under different scenarios of mean shifts, standard deviation shifts, and correlation shifts. The results of the simulation study show that MCUSUM methods have different efficiency in detecting process shifts and based on the required application, the appropriate MCUSUM chart should be selected.In this paper, we compare the performance of different MCUSUM methods presented in the literature. First, we briefly introduce MCUSUM methods in multivariate normal distribution. In order to evaluate their performance, we present a comparative study with simulation. Furthermore, we compare the average out-of-control run length of MCUSUM methods under different scenarios of mean shifts, standard deviation shifts, and correlation shifts. The results of the simulation study show that MCUSUM methods have different efficiency in detecting process shifts and based on the required application, the appropriate MCUSUM chart should be selected.

کلمات کلیدی:

MCUSUM Charts, Comparison Study, Average Run Length

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