عنوان مقاله:

Phase I monitoring of simple linear profiles in multistage processes in the presence of outliers

محل انتشار:

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خلاصه مقاله:

In this paper monitoring of simple linear profiles in multistage processes in the presence of outliers is studied in which a robust approach based on the Huber's M-estimator is proposed to estimate the parameters of the profile in each stage of the process and consequently eliminate the effect of the outliers on the parameters' estimates. The performance of the proposed method is evaluated under both weak and strong autocorrelations and the results are compared to the ones obtained from classical estimator of ordinary least square. The results show that the proposed method performs well in which it removes the effect of outliers provides better results than the classical estimator under both weak and strong autocorrelations.

کلمات کلیدی:

M-estimator; multistage process; profiles

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