

THE DERIVATION OF MEASURE OF AN ADDITIVE OUTLIER EFFECT IN BL(1,0,1,1) PROCESS

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Abstract

The existence of outlier in bilinear time series process is studied. In this estimation stage, the nonlinear least squares method was used to estimate the parameter of BL(1,0,1,1) models. A common type of outlier is the additive outlier(AO). Interest lies in developing a procedure of detecting the AO. For that, in this paper, a measure of AO effect will be derived using least squares method. For illustration, simulated data will be considered.

Keywords: Bilinear, additive outlier, least squares method, measure of AO effect.