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THE COMBINED POISSON INMA(2) MODELS FOR INTEGER-VALUED TIME SERIES

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Abstract. In this paper, we introduce a new combined integer-valued moving average model of order 2 with poisson innovation, denoted by PCINMA(2). We consider some properties of this process, such as expectation, variance, autocovariance function. Stationary and ergodicity are obtained. We estimate the unknown parameters by using Yule-Walker estimation, and use simulation to assess the performance of Yule-Walker estimators.

Keywords. INMA; Poisson; Binomial thinning; Stationary; Ergodicity.

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