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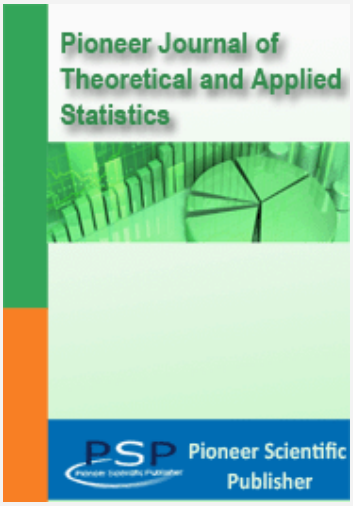

INFLUENCE ANALYSIS FOR ZERO-TRUNCATED POISSON REGRESSION MODEL

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Abstract

Poisson regression model is one of the important count model. In practice, however, we often find not only that the count has no zeros but also that it structurally excludes having 0 counts. Zero-truncated count regression models have been used to analysis these data sets. In this paper, we present diagnostic and local influence method for Zero-truncated Poisson regression model. Several diagnostic measures are obtained in both case-deletion model and local influence analysis. Hospital length of stay data is used to illustrate the results.

Keywords and phrases: Poisson regression, zero-truncated, generalized Cook distance, local influence, generalized leverage.