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Change Point Analysis in Average Ozone Layer Temperature Using Exponential Lomax Distribution

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Abstract : Change point detection is an important part of data analysis. The presence of a change point refers to a significant change in the behavior of a time series. In this article, we examine the detection of multiple change points of parameters of the exponential Lomax distribution, which is broad and flexible compared with other distributions while fitting data. We used the Schwarz information criterion and binary segmentation to detect multiple change points in publicly available data on the average temperature in the ozone layer. The change points were successfully located.

Keywords : binary segmentation, change point, exponentialLomax distribution, information criterion
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