

**CHARACTERIZATION THROUGH DISTRIBUTIONAL PROPERTIES OF
GENERALIZED ORDER STATISTICS**

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Summary

Distributional properties of two non-adjacent generalized order statistics have been used to characterize distributions. Further, one sided random contraction and dilation for the generalized order statistics are discussed and then the results are deduced for dual generalized order statistics, order statistics, lower record statistics, upper record statistics and adjacent generalized order statistics.

Keyword: Order statistics, lower record statistics, upper record statistics, dual generalized order statistics, generalized order statistics, contraction, dilation. Characterization of distributions, exponential, power and Pareto distributions.

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