

# The gamma half-Cauchy distribution: Properties and applications

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## Abstract

A new distribution, namely, the Gamma-Half-Cauchy distribution is proposed. Various properties of the Gamma-Half-Cauchy distribution are studied in detail such as limiting behavior, moments, mean deviations and Shannon entropy. The model parameters are estimated by the method of maximum likelihood and the observed information matrix is obtained. Two data sets are used to illustrate the applications of Gamma-Half-Cauchy distribution.

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