

Extensions of the normal distribution using the odd log -logistic family: theory and applications

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Abstract: In this study we propose three new distributions and a study with longitudinal data. The estimation of the model parameters were approached by the method of maximum likelihood. Thus, the models can be used in practical situations for as a completely randomized designs with evidence of asymmetry, kurtosis or bimodality.

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Keywords: Families distributions; Extensions of the normal distribution; Regression model; Experimental designs; Quartiles residuals.

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