

## Physics &gt; Data Analysis, Statistics and Probability

# The Anderson-Darling test of fit for the power law distribution from left censored samples

H.F. Coronel-Brizio (1), A.R. Hernandez-Montoya (1) ((1) Facultad de Fisica e Inteligencia Artificial, Departamento de Inteligencia Artificial, Universidad Veracruzana, Mexico)

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Maximum likelihood estimation and a test of fit based on the Anderson-Darling statistic is presented for the case of the power law distribution when the parameters are estimated from a left-censored sample. Expressions for the maximum likelihood estimators and tables of asymptotic percentage points for the  $A^2$  statistic are given. The technique is illustrated for data from the Dow Jones Industrial Average index, an example of high theoretical and practical importance in Econophysics, Finance, Physics, Biology and, in general, in other related Sciences such as Complexity Sciences.

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