On MLEs of the parameters of a new extended Weibull distribution based on record values

Zoran Vidović¹

 1 Teacher Training Faculty, University of Belgrade, Kraljice Natalije 43, 11000 Belgrade, Serbia, zoran.vidovic@uf.bg.ac.rs

In this paper, we proved that the MLEs of the parameters of a new extended Weibull lifetime model with possible upside-down bathtub shape and monotonic hazard rate function, proposed by Peng and Yan in [1], exist and are unique based on upper kth record values.

References

[1] X. Peng and Z. Yan, Estimation and application for a new extended Weibull distribution, Reliability Engineering & System Safety 121 (2014), 34–42.