

EVALUATION OF THE UNCERTAINTY INCREMENTS FOR THE RECORDS AND RELATED CHARACTERIZATIONS

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SUMMARY

The extropy measure is a complementary dual function of Shannon entropy which was proposed as a measure of the information content and uncertainty. It is received a considerable attention in the last five years. This paper presents some results on the adjacent and non-adjacent increments of the records extropy for a sequence of independent identically distributed random variables with continuous cumulative distribution function. The results for the spacing between lower and upper records are also discussed. Further, the paper characterizes general probability distributions for which the maximal evaluation of the extropy increments are attained.

Keywords and phrases: Extropy; records; increments; characterization.

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