

Review of: "Gumbel's Extreme Value Distribution for Flood Frequency Analyses of Timis River"

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Potential competing interests: No potential competing interests to declare.

The paper utilized the Gumbel distribution to conduct flood frequency analysis of river discharge data. The following comments are made:

- (i) The abstract is incomplete. It should at least indicate the basic background to the study, what was done, the methods used, and the results obtained, with implications in the study domain. The flood magnitudes obtained at different return periods should be included, and the implication for the design of hydraulic structures in and around the location of the gauging station should be emphasized to give meaning to the values obtained.
- 2) The basis for the selection of the Gumbel distribution and the Gringorten plotting position equation for the analyses should be mentioned in the background to the study, as there are other distributions and plotting position equations that could have been utilized. Though the use of the Gringorten plotting position equation by the author for the Gumbel distribution is appropriate, it is, however, necessary to support the same with the literature for the knowledge of readers.
- 3) The author should check and correctly define the symbols used, as there is some mix-up in some cases, for example, in defining symbols for the standard deviation in the Chow frequency factor equation and the definition of symbols used. Also, for the Gringorten formula, " $a - 0.44$ " should be replaced with " $a = 0.44$."
- 4) The relationships " $T_p = 1/q_i$ " and " $P_i = 1 - q_i$ " should be included to guide readers in understanding how the values in the table were populated.
- 5) The author should also comment on the adequacy of the use of 30 years of data for carrying out flood frequency analysis.