

Review of: "Variable selection in generalized extreme value regression model using Bootstrap method"

Leandro Pereira¹

1 Universidade Federal de Uberlândia

Potential competing interests: No potential competing interests to declare.

The article presents editing errors, as well as errors in theory. The authors need to improve the overall quality of the work, presenting a better description of the model.

On paragraph 5, we have the following sentence: "In this work we propose a procedure variable selection in linear regression model using bootstrap method" But the purpose of the article is to describe extreme value regression models".

Equation (1), although the authors mention that it is the same as that presented by Calabrese and Osmetti (2013), it does not is described in the same way. The signs of some terms are switched. Is there any special reason for this? The "+" sign appeared in the equation as a superscript right after the linear predictor. What does that mean? The authors need to explain these facts better.

In my opinion, the method used to obtain p-values for model selection has serious theoretical errors. Firstly, the method uses the student's T distribution to calculate the p-values in step 2 of the presented algorithm, but the T distribution should only be used under the assumption of normality of the residuals. Furthermore, bootstrap samples are generated without considering the assumption of independence of the variable to be tested. The ideal would be to perform Bootstrap by resampling the residuals.

Qeios ID: 5M3WAL · https://doi.org/10.32388/5M3WAL