Review Form 1.7

Journal Name:	**Journal of Advances in Mathematics and Computer Science**
Manuscript Number:	**Ms_JAMCS_101594**
Title of the Manuscript:	**One-way ANOVA with Bimodal Error Terms**
Type of the Article	**Original Research Article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Review:** The paper addresses an interesting problem of modeling bimodal error terms in one-way ANOVA. The introduction provides a clear overview of the traditional assumptions and their limitations in ANOVA models. The motivation to explore non-normal distributions is well-established, and the choice of the ASN distribution is justified based on its flexibility. The derivation of the ML estimators and test statistics is presented concisely, along with the necessary mathematical equations. The authors demonstrate a thorough understanding of the ASN distribution and its properties. The Monte Carlo simulation study provides valuable insights into the efficiency of the ML estimators and the power of the proposed test statistics. The results convincingly show that the ML estimators outperform traditional estimators based on normality. The inclusion of a real-life example strengthens the practical relevance of the proposed methodology. Analyzing the Environmental Performance Index (EPI) data from different continents demonstrates the applicability of the ASN distribution in detecting significant differences. The comparison between the results obtained using the ASN distribution and normal theory enhances the paper's contributions. **However, there are a few aspects that could be improved.** 1. Firstly, the paper lacks a clear statement of the objectives and hypotheses being tested. Providing specific research questions would help readers understand the purpose of the study. 2. Secondly, more details regarding the Monte Carlo simulation settings and parameters would enhance the reproducibility of the results. 3. Additionally, it would be helpful to discuss the potential limitations and assumptions of the proposed methodology. 4. The paper presents a valuable contribution by introducing the ASN distribution for modeling bimodal error terms in one-way ANOVA. 5. The theoretical derivations, simulation study, and real-life example provide strong support for the proposed methodology. 6. Addressing the suggested improvements would further enhance the clarity and impact of the paper.	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**		
Optional/General comments		

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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Reviewer Details:

Name:	**K. Ravichandran**
Department, University & Country	**Dr MGR Educational and Research Institute, India**