

**Review Form 3**

Journal Name:	<a href="#">Advances in Research</a>
Manuscript Number:	Ms_AIR_124077
Title of the Manuscript:	<b>SEDIMENT SIMULATION USING MULTI LAYER PERCEPTRON (MLP), CO-ACTIVE NEURO-FUZZY INFERENCE SYSTEM (CANFIS) AND MULTIPLE LINEAR REGRESSION TECHNIQUES (MLR) FOR HURDAG WATERSHED</b>
Type of the Article	Research paper

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>In this paper, the authors simulate sediment in the Hugdag watershed using several methods, including a multi-layer perceptron (MLP), a co-active neuro-fuzzy inference system (CANFIS), and multiple linear regression techniques (MLR). The work is of interest and may be published in this journal, provided that the authors undertake the requisite revisions to their document. Please specify which sediment transport models the authors have employed. Does the model account for turbulence? Please elucidate the advantages of these methodologies in comparison to conventional methods, such as the finite volume method.</p>	<p>dv</p>
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>It is necessary to revise the title of the document.</p>	
<p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p>	<p>The abstract requires revision. The paper's originality is not readily apparent.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>The document's structure is appropriate but could be enhanced by providing a more explicit problem statement.</p>	
<p><b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>The work addresses the simulation of sedimentary processes through the application of diverse technical methodologies. Each method has both advantages and disadvantages, as indicated in the paper. The strategies employed herein may be extended in future research endeavors.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b> =</p>	<p>Please more references are required in the document including recent developments on sediment modeling (see for example (1) Application and Engineering Science, Vol 17, 100148. <a href="https://doi.org/10.1016/j.apples.2023.100148">https://doi.org/10.1016/j.apples.2023.100148</a>; (2) European Journal of Environment and Civil Engineering, 2024, 1-34. <a href="https://doi.org/10.1080/19648189.2024.2332460">https://doi.org/10.1080/19648189.2024.2332460</a> ; (3) Partial Differential Equations in Applied Mathematics, 9 (2024) 10060 ; (4) Application and Engineering Science, (2024), 100167. <a href="https://doi.org/10.1016/j.apples.2023.100167">https://doi.org/10.1016/j.apples.2023.100167</a></p> <p>The introduction would benefit from additional references. For illustrative purposes, consider the following sentences.</p> <p>. In hydrology, ANNs are used for modeling daily rainfall-runoff, runoff-sediment yield, and assessing the ecological and hydrological impacts of climate change on streamflow, sediment transport, and groundwater quality [ ], [ ], [ ], .....</p> <p>. In hydrological modeling, MLP has been extensively applied due to its ability to model complex relationships. [ ], [ ], [ ] .....</p>	

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	The conventional CANFIS model is an extension of the original ANFIS model, allowing for multiple input-output pairs. [], [], [] .....	
Minor REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language/English quality of the article is suitable	
Optional/General comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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