

The authors state that they examined the changing hydro-geomorphological properties of the Mayurakshi River located in a plateau fringe region in Jharkhand and West Bengal. They have stated that the field investigation of 14 cross-sectional sites was conducted to determine important hydraulic properties during postmonsoon season of 2021. Postprocessed Kinematic Survey (PPK) and Current Meter tool has been used to measure the riverbed profile and channel velocity respectively, to obtain more accurate locational information by Authors. Considering the methods and results in this paper results, it seems that the paper will be incomplete for reaching the conclusions and desired values. It can be seen that the obtained correlation results by the Authors are not very high. With important additions to the article, it can only be considered suitable for the publication. Hence, the paper is recommended as **major revisions**.

Many mistakes and suggestions regarding the article are listed as can be seen below:

- In the Abstract section, a few sentences about **the important numerical results** of this study should be included.
- Since abbreviations are specified in the Abstract, it would be appropriate to write "..., **KWP, DGPS survey**" in the Keywords section.
- It may be more appropriate to give examples of literature studies in a single chronology, from old to new or new to old.
- It is seen that some sentences are not completed using a **dot**, or some are finished with a "-".

*"The output of such research work will not only bring interests to the local stakeholders, 122 but also make a significant contribution to the international **science**" (dot?)*

"Authors have also tried to analyse the necessary hydraulic relationships between important variables that are discussed as follows-

*"Groundwater is being over-exploited in many places of the country to meet the growing food demand. **During** dry months, the base flow of the river **are** lowered by falling groundwater tables. **During** the lean period, river flows have not been adequate to meet irrigational needs in that area, ultimately destroying the entire hydrological system."*

"are"-----"is"

- The spelling of Figure representations is incorrect. The article has started with Fig. 2b, then Fig. 1 continues.
- Page 6, Line 201: khals/nalas should be changed as "**Khals/Nalas**"
- References should be added to some sentences. For example:

Page 8, Line 217: *"During this survey Post Processed Kinematic Survey (PPK) method has been applied by which the measured elevation data has been calibrated with reference to*

its closest permanent/local benchmark point using Trimble Business Centre software in post survey period."

Page 9, Line 263: *"Manning's equation of flow is regarded as one of the most versatile and can widely be used in the analysis of open channel flow where channel bed roughness has been incorporated for the estimation of flow velocity (Summerfield 1991)."* **Current Literature Examples???** Because it can be considered as one of the focus methods of the study. Choosing them up to date in terms of the published literature will be an important detail.

Page 9, Line 266: *"The Manning's equation defines the mean flow velocity (v) using the following equation"* **Reference/s?**

Page 22- Line???: *"As shown in Figure 7, the data calculated with Manning's equation give better results than the data estimated with Kinematic Wave Parameter method."* **Reference/s?**

- Page 10, Line 296: xi should be changed as " **x_i** "
- Page 11, Line 318: D50 should be changed as " **D_{50}** "
- The writing of some words should be changed. For example:

Co-efficient----**Coefficient**;

co-relation---**corelation**;

M3/S (Page 22)--- **m^3/s** ;

r^2 --- **r^2**

- Page 11, Line 324: **"Considering..."**
- Why was only **RMSE** used as an evaluation performance criteria? Could more different criteria have been selected for the study as well.
- Available graphs can be slightly enlarged to improve readability.
- Page 15, Line ???: *"Source: Computed by authors"* **Is it necessary to show it this way? Why?**
- Most of the obtained r^2 values are low, and in my opinion, these results are weak for strong relationship in the article. Moreover, it can be thought that the applied methods cannot fully meet the desired success of this study.
- Why are the colorings in Fig. 6 different? It should be explained.
- Page 22, Line ???: *"It has been proved from the result (Table 5) that the Manning's formula has minimum error and can be scientifically accepted to estimate lean period flow amount within a section of a tropical river in a costeffective way."*

It may not be very appropriate to make such exact conclusions. It should be reevaluated.

- Page 22, Line ???: “Root Mean Square Error” should be changed as “**RMSE**”
- Conclusion and discussion sentences are rather weak, these sections must be improved.
- In the References Section, “*Islam A, Sarkar B (2021)...*”

Page 5, Line 134: “*Islam and Sarkar 2020*” **2020 or 2021?**