

Review Form 3

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| Journal Name: | International Journal of Environment and Climate Change |
| Manuscript Number: | Ms_IJECC_127927 |
| Title of the Manuscript: | Geomorphological Characteristics of Venna River basin of Maharashtra using RS and GIS. |
| Type of the Article | |

PART 1: Comments

| | Reviewer's comment | Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
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| Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part. | This article is relevant for the scientific community in the field of land use, specialists in hydrology and hydrotechnical arrangements. When considering a territory for construction or arrangements in different urban planning this calculation could be very helpful. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | The title of the article is a little bit incomplete. Because I fully understood that it was about India when I saw the map of the location of the study area and started reading the article. I suggest tha more complete for the title would be: <i>The geomorphological characteristics of a hydrographic basin using RS and GIS on the example of the Venna river (Maharashtra, India)</i> | |
| 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. | The abstract is comprehensive. No need to change something | |
| Is the manuscript scientifically, correct? Please write here. | | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | There are too many bibliographical references, this is the first thing that caught my attention. The article is not an article in which the author would have done a review of the literature or a review of research in the given territory. After checking the bibliographic list, I noticed that two bibliographic sources are cited in the text that are not found in the bibliographic list (1. Nag and Chakraborty 2003, Sethupathi et al., 2011). And the following are in the bibliographic list and are not cited in the text, my opinion is that these sources should be excluded from the bibliographic list: Hadley, R.F. and S.A. Schumm. (1961). Sediment sources and drainage basin characteristics in upper Cheyenne River basin. <i>US Geological Survey</i> , USGS water supply paper, 1531-B. Hlaing, T. K., S. Haruyama and Aye, MM, (2008). Using GIS-based distributed soil loss modelling and morphometric analysis to prioritize watershed for soil conservation in Bago River basin of lower Myanmar. <i>Front Earth Science China</i> , 2, 465–478. Hurtrez, J.E., C. Sol and F. Lucazeau. (1999). Effect of drainage area on hypsometry from analysis of small-scale drainage basins in the Siwalik Hills (Central Nepal). <i>Earth Surface Processes and Landforms</i> , v, 24 (9), 799–808. Javed, A., M. Y. Khanday and R. Ahmed. (2009). Prioritization of sub watershed based on morphometric and land use analysis using remote sensing and GIS techniques. <i>Journal of Indian Society & Remote Sensing</i> , 37, 261–274. Melton, M. A. (1957). An analysis of the relations among elements of climate, surface properties and geomorphology. Project NR 389- 042, technical report 11, Columbia University. | |

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| | <p>Miller, V.C. (1953). A quantitative geomorphic study of drainage basin characteristics in the Clinch Mountain area, Virginia and Tennessee. Columbia University, New York (3).</p> <p>Nookaratnam, K., Y. K. Srivastava., V. Venkateswarao., E. Amminedu and K. S. R. Murthy. (2005). Check dam positioning by prioritization of micro-watersheds using SYI model and morphometric analysis remote sensing and GIS perspective. <i>Journal of the Indian Society of Remote Sensing</i>.33 (1), 25–38.</p> <p>Pande, C.B. and K. Moharir. (2015). GIS based quantitative morphometric analysis and its consequences: a case study from Shanur River Basin, Maharashtra India. <i>Applied Water Science</i>. doi:10.1007/s13201-015- 0298-7.</p> <p>Pankaj, A. and P. Kumar. (2009). GIS based morphometric analysis of five major sub- watershed of Song River, Dehradun district, Uttarakhand with special reference to landslide incidences. <i>Journal of Indian Society & Remote Sensing</i>, 37, 157–166.</p> <p>Singh, S. and Singh, M. (1997). Morphometric Analysis of Kanhar River Basin. <i>National Geographer</i>.</p> <p>Strahler, A.N. (1964) Quantitative geomorphology of drainage basins and channel networks. In: Chow VT (ed) Handbook of applied hydrogeology. McGraw Hill, New York, pp 4–76</p> <p>Wilson John, J. S., N. Chandrasekar. and N. S. Magesh. (2012). Morphometric Analysis of Major Sub-Watersheds in Aiyar and Karai Pottanar Basin, Central Tamil Nadu, India Using Remote Sensing and GIS Techniques. <i>International Journal of Industrial Engineering and Management Science</i>, 2(1), pp.8-15.</p> | |
| <p>Is the language/English quality of the article suitable for scholarly communications?</p> | <p>The English is understandable, no grammatical mistakes or mistakes of the terms are observed</p> | |
| <p>Optional/General comments</p> | <ol style="list-style-type: none"> At the methodology section, when we talk about the location of the study area, in a scientific article in the field of physical geography and especially geomorphology, it would be appropriate to represent the hydrographic basin on the background of a physical-geographical map of the area, or at least of the representation of a DEM of the area. There are so many numerical parameters about relief and geomorphological characteristics, but the area appears on the administrative background, and that is not clear, for example for a user from outside India, who does not know all the districts and has no idea where and what is in from an administrative point of view, it is not clear what the physical-geographic basis of the studio area is. Both the introduction and the results and discussions section talk about morphometry, the size and shape of the relief, it would be much clearer if all of these would be accompanied by thematic cartographic materials, such as slope, hypsometry, orientation (maps and graphs), etc. | |

PART 2:

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

Reviewer Details:

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|---|---|
| <p>Name:</p> | <p>Cantir Angela</p> |
| <p>Department, University & Country</p> | <p>Institute of Ecology and Geography, Moldova State University, Republic of Moldova</p> |