**** 11th Nov 2024

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To

The Editor

Journal of Hydrology

Elsevier

**Subject: Manuscript submission in Journal of Hydrology**

Dear Sir/Madam,

Enclosed herewith please find our manuscript of the research paper titled “**Morph\_CNeT: A new GIS tool to extract morphometric attributes characterising channel network topology of Indian catchments**” authored by Saroj Rana and myself**,** submitted for your kind consideration and possible publication in Journal of Hydrology.

In this paper a novel, easy-to-use and time efficient Python based GIS code/tool named as Morph\_CNeT within ArcGIS framework is Developed which provides an algorithmic way to extract the morphometric attributes of cathments. The Morph\_CNeT tool is then used to create a repository named as Morph\_CNeT-India. However, the lack of analysis-ready datasets has often limited the representation of Indian catchments in global hydro-geomorphological studies. To bridge this gap, Morph\_CNeT-India database containing morphometric attributes for 1,749 Indian catchments has been prepared in this study. Additionally, using the Morph\_CNeT-India repository the catchments are classified according to channel network topology. This database is essential for advancing our understanding of hydrologic processes across multiple spatial scales and to support various applications in water resource planning and regulation across India.

It is certified that this work has not been previously published and is not presently under consideration for publication elsewhere. Kindly acknowledge for having received the soft copy of the paper.

Sincerely

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