

Interactive comment on “Geomorphometry of drainage basins: a global view from the Shuttle Radar Topography Mission” by P. L. Guth

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I am unable to offer any substantial criticism of this paper. I am not sure whether this is because the author has produced a paper that is beyond criticism or that I lack the capacity to identify aspects of the paper that deserve criticism.

This paper is extremely well organized, well written and well argued. It is comprehensible and convincing even to someone with limited familiarity with some of the technical considerations. Explanations provided for the input data sets, the analysis methods and the results are all very clear, succinct and understandable.

Perhaps the only criticism that comes to mind would have to do with motivation for the work or the main ways in which the results can be used and interpreted. Perhaps

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users would be more convinced of the value of the work if it were made more clear how the data provided for each drainage basin can be used to analyze differences and similarities between basins and provide explanations for why and how basins perform and respond differently. It appears that the author is assuming all readers will already know and appreciate the importance and usefulness of morphometric descriptors of drainage basins and that this does not require elaboration.

The author has done the community a service by making all result data sets freely available through a web link. Perhaps this link can be highlighted more prominently.

I find I am unable to come up with any bright ideas for how this paper might be improved. Perhaps, the author could have included a small insert in which he reapplied the methodology to a limited number of drainage basins using the full resolution 3 arc-second SRTM DEM data just to demonstrate what might have been different if he had used the full 3 arc-second data instead of the 15' degraded DEM.

I am sorry that I can't be of more help and offer more significant and meaningful suggestions for changes or improvements. This is just not a paper that screams out for changes or improvements, as far as I can see.

Bob MacMillan

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 1929, 2011.