

# ***Interactive comment on “GRAINet: Mapping grain size distributions in river beds from UAV images with convolutional neural networks” by Nico Lang et al.***

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Since this is meant as a discussion, I'd like to point out that the issue of ground-truthing in photosieving has been popping up in the reviews of such work for decades. The core question is what are you measuring? Anybody that uses photosieving must be made aware that they should not expect the same grain size that they would obtain from a bulk sample. It is not even as simple as equating it to a Wolman count because armoring and embedding confuse what you can see from a nadir photo.

But there is work reporting such errors. In past papers, the solution has usually been to mention this body of work and recognise the caveats above. I think this could go in

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the same direction as my own comments along the lines that this paper must do more to discuss errors of past photosieving work in relation to the results presented here.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-196>, 2020.

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