

## Response to the expert's comment of the manuscript: egusphere-2023-899 "Assessment of plot scale sediment transport on young moraines in the Swiss Alps using a fluorescent sand tracer".

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Comments of the expert are shown in black; the answers of the authors are shown in blue

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Line192f (in the author's tracked changes document): This sentence is too short to give a reproducible account of how the rock cover was determined. The authors are asked to expand a bit, and to give a reference.

We thank the expert for this useful feedback. We agree that the provided information was not enough to fully explain the calculation of the rock cover. Thus, we have expanded that section (L. 172 ff. in the new author's tracked changes document) to better describe how rock and stone surfaces of the plot areas were calculated with the color range tool. In addition, we provided some references of other studies that also used this method for digital image analysis and classification in geosciences (e.g., Dorador et al., 2014; Zhang et al., 2014). More specifically, we selected the plot area with the "marquee" tool and set it as the area of interest. Then we chose the color range tool (settings: radio button set to "selection"; selection preview set to "black matte") to select pixels (test areas) of the photograph that represent the color range characteristics of stones or rocks. During this process, an automatic algorithm adds additional pixels to the selection that correspond to the color range of the test areas. We kept doing this until the selected pixels visually matched the rock cover. The larger the number of correct test areas, the better is the classification result. The selection of test areas can also be increased by increasing the fuzziness within the color range tool. When the desired surface area was selected, the number of chosen pixels was determined in the histogram (settings: "expanded mode" and "show statistics") and divided by the total number of pixels of the plot area, to obtain the percentage of rock cover.