



## ***Interactive comment on “PRACTISE – Photo Rectification And Classification Software (V.1.0)”***

### **by S. Härer et al.**

**S. Pohl (Referee)**

stefan.pohl@hydrology.uni-freiburg.de

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The paper by Härer et al. presents an interesting new software designed to aid in the use of photographs in the observation of snow cover patterns. The use of time lapse photography has become more frequent recently, not just in snow hydrology, and such software is therefore a potentially very useful tool for such studies. The language of the paper is adequate and the described algorithms and equations do not seem to contain any major flaws. However, it would be beneficial to more clearly identify the improvement included in this software as compared to the earlier codes mentioned in the paper (i.e. Aschenwald 2001, Corripio 2004). I also agree with the first reviewers comments about the sometimes misleading terminology in regards to the use of the phrases projected and georeferenced. This should be changed.

C30

In addition to the comments made by reviewer 1 there are some minor issues I would recommend changing before the paper can be published.

p. 174 line 12. The sentence should probably read: “PRACTISE also contains an automatic . . .” not “obtains”.

p175 line 1. The authors mention that 2061 photographs were taken but also imply that some of them were not suitable for image processing. I think it would be beneficial for readers planning similar studies to know how many pictures had to be discarded and for what reasons.

P180 line 18. The authors state “Different to Corripio (2004), we reduce the 3-D problem (Pcr to Pp) to two 2-D problems; a horizontal (Pcrx to Ppx) and a vertical (Pcry to Ppy) one.” The authors should probably explain why this was done, or more importantly what the advantage is.

P184 Although this issue was already mentioned by reviewer 1, I would also strongly recommend adding further discussion about the DDS optimization. This “optional” procedure improves the photo processing in the test area to a great extent. Is this likely the case for most situations or was there something unusual about the test location that lead to this?

p. 185 line 10 The snow cover extent taken from the photographs is given in ha, which I find unusual especially since other area sizes are given in m<sup>2</sup> (compare the previous page). I’m also not entirely certain whether the mentioned “investigation area” black dotted line in Figure 10 is identical to the “test area” depicted by the black box in Figure 9. Please clarify.

Fig. 1 The legends and scales are hard to read. The Figure caption seems exceptionally long. I think information about the spatial resolution of the DEM, the date of installment, and the time interval set is contained in the text and could be removed from the Figure caption.

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Fig. 8 The choice of colors make this Figure and the similar graphs in Figure 9 a little tough to read. The blue line is very hard to see against the backdrop of the blue-green bars. Also the font for the axis labels and titles has to be bigger.

Fig. 9 This Figure has to revised completely. The axis legends and titles are not legible, why are the plots of RGB values superimposed on the photographs and what is depicted in Figure d. I assume it is the manual classification of the August picture but the caption is missing. Also you might want to show that Figure right after the initial August picture (b) which would probably make it easier to compare the two.

Figure 10. Why are only 3 of the 4 snow cover extent calculation made and shown in Figure 9 shown in Figure 10? Would it make more sense to show all 4, especially since this would show the readers once again any potential differences in the resulting snow cover extent between the automatically and manually classified August image.

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Interactive comment on Geosci. Model Dev. Discuss., 6, 171, 2013.