

Interactive comment on “A propensity index for surface runoff on a karst plateau” by Christian Reszler et al.

Anonymous Referee #3

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General comments: The authors propose a new mapping approach for karst environments, based on local data in combination with visual mapping. The method offers potential for a broader use as all mapping variables can be assessed from distance and derived easily from DTM and geological maps. However, some important corrections of this manuscript have to be made. Beside specific comments listed below, a major aspect is as follows: From my perspective, the present paper is mainly based on describing the methodology of this approach. A “Technical Note” format might prove more useful. The discussion section could strongly improve from discussing limitations of the proposed method more in detail. It could also address whether this method is transferable to other geological settings and catchment types.

Specific comment: Page 1, Line 10: Instead of frequency, better use “spatial distribu-

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tion” or “occurrence”. Page 1, Line 17: please put “in the study area” at the end or beginning of this sentence. Page 3, Line 15: How did you delineate the catchment extent? I assume that this is derived from GIS delineation based on the surface topography (not accounting for the subsurface catchment)? Page 4, Line 16: How was the lookout point chosen? Were there logistical constraints? Page 5, Line 1 -5: Please rephrase here. Page 5, Line 19: “show” instead of “shows” Page 8, Line 11-12: Please rephrase. Page 11, Line 8: “runoff” instead of “runon”.

Figure 1: Please put the label “LKAS2” in the map and show the state Austria in a smaller map with the location of this study area. Figure 2: Why does Zone no 7 not go further downslope into Zone no 1? As the visible bedrock outcrop emerges below. Figure 3: Please enlarge labels in the cross-section Figure 6/7: Please use a) and b) labels for both subplots. Also use a colour for the Spitzboden catchment extent in the lower subplot.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-228>, 2018.

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