Revised manuscript—review by John Nimmo.

This manuscript is well-revised should be published in HESS. Especially important is the added and clarified material on flow types in sections 2.3 and 3.2. As to its value, I agree with my previous statement: "This paper is dense with useful information and provides insights into the development of preferential flow paths during landscape evolution and several other important facets of unsaturated flow in calcareous soils."

Before publication, I recommend only minor changes, listed below.

- 8:11 Should be "low-permeability or".
- 8:12 Replace "low" with "minimal" and "high" with "extensive".
- 8:20 Replace "transport and leave" with "transport, leaving".
- 8:22 Replace "this" with "the Weiler and Flühler".
- 8:27 Delete "both".
- 8:33 Replace "Both" with "These".
- 13:10 "at the 110a moraine"
- 13:17 Plural: "110a and 160a moraines."
- 14:6 Replace "In" with "At".
- 15:13 Unclear sentence: "In case of SAD trends differed between the age classes."
- 19:15 Word order: "could be made neither through"
- 19:23 Change word: "At the other depths"
- 19:23-32 The expression "at the XXa" should be either "at XXa" or "at the XXa moraine"
- 22:12 Maybe "dense", or "high-density" instead of "high".
- 23:12 Authors here should not be in parentheses.
- 25:4 Not "caused by" but "evidenced by."
- 25:15 Should be "Different from".
- 25:15 (and elsewhere) Flux is a rate, so it should be just "the flux" not "the flux rate".

- 27:14 "quantitative"
- 27:32 "major" would be better than "primary". Or else delete "only".

27:31-28:5 The new material here should be rewritten to flow more smoothly. There are too many uses of "therefore". Many of the factors here can be stated without implying causal relationships among them. And the transfer functions seem to come out of nowhere—maybe omit mention, or connect them more to your approach or findings.