

Interactive comment on “Applied tracers for the observation of subsurface stormflow at the hillslope scale” by J. Wienhöfer et al.

Anonymous Referee #1

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This is a good and well written paper that presents the application of different tracers as well at the hillslope scale as on laboratory experiments. The authors are using a transfer function approach in order to interpret the tracer breakthrough curves. The topic is very relevant, suitable for HESS and definitely of high interest for the international Tracer Hydrology community. The paper is organized, structured and generally well written. All tables and figures are helpful and an extensive list of references is given. To summarize, I am recommending minor revision of the submitted paper according to the specific suggestions given below and in the annotated text files.

1) p. 2965, 13 and 18/19: The statement “Advantages of salt tracers are that they are non-sorptive and conservative.” is quite general. I think this should be specified. 2) p. 2966, 2: Change “Heums” to “Heumös”. 3) p. 2966, 17: Change “;” to “and”. 4) p.

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2966, 18: Change “m” to “m a.s.l.”. 5) p. 2966, 24: Change “;” to “and”. 6) p. 2966, 25: Change “is” to “accumulates to”. 7) p. 2967, 3: Add “of” to “...steep side slopes of the catchment.”. 8) p.2967, 5: The terms “sycamore maple or great maple” appear to be more appropriate here than only “sycamore”. 9) p. 2969, 15: Change “IV-I” to “IV to I”. 10) p. 2971, 25: Delete “/” and add a space character. 11) p. 2988, 3: The term “fluorescence tracers” appears to be more appropriate here than “fluorochromes”. 12) p. 2990, 25: Write out “hydrological processes” in title of reference. 13) p. 2996-3001, 3003 and 3005: see the annotated text file.

Please also note the Supplement to this comment.

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