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Hydrology and Earth System Sciences
Discussions

# *Interactive comment on* "Technical note: A time-integrated sediment trap to sample diatoms for hydrological tracing" *by* Jasper Foets et al.

**Anonymous Referee #1**

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General comments: In general, the manuscript is well-written, well-structured, and well-referenced. The language is fluent and easy to follow. The authors present a novel concept and tool for hydrological tracing examination. I believe it will be attractive not only by the hydrological community but also by broader readers. Specific comments: Abstract: Half of the abstract are talking about the background and the importance of the study. Limited contents reflect the methods and results of this study. Results: Regarding the goal of treating diatoms as a tracer, I assume that the terrestrial species in the samples are especially important for evaluating the events and the capture rates of the method. I would recommend offering a list of the species list in the Appendix. In addition, regardless of the characteristics of the dominant species in the samples, changes in the terrestrial diatoms would be meaningful as well. I realize that the au-



thors provide a figure for the percentage of the terrestrial diatom, while without telling which kind of percentage it is. Is that the species richness changes or abundance or biomass? Whether they have same or different percentages from the two sampling methods? Discussion: I really like the introduction part which fully links the sediments and diatoms, and the reason why the diatoms species-specific traits could influence the sampling results. However, its pity that there are no further relevant answers to them either in results or discussion part. I would suggest that it could be extended and supplemented regarding the findings of the present study. Technical corrections (typing errors): Line 336, "JFI" may change to "JF".

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