

***Interactive comment on “Early–mid Miocene erosion rates measured in pre-Dead Sea rift Hazeva River using cosmogenic  $^{21}\text{Ne}$  in fluvial chert pebbles” by Michal Ben-Israel et al.***

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Thanks for the clarification. This is indeed an interesting point and one that we will discuss with regard to all samples in the revised manuscript.

As a general note, I think this type of problem should mostly be considered in cases where desert surfaces are dated for extended exposure. In the case of fluvial sediment, as temperatures drop dramatically even a few centimeters below the surface (unlike production rate that only decreases a little), it seems impossible to make an estimation for diffusion. For fluvial samples, we have no way of knowing whether they were actually at the surface or at 5 to tens cm depth, which is most likely the case

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during most of the fluvial transport.

I agree that this is a worthwhile discussion and one that should take place in this manuscript.

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