09-Mar-20

Dear Dr. Masteller,

We are very pleased that you as well as both the reviewers are generally pleased with the revised manuscript. We would like to thank both reviewers again, for their hard and detailed work, which have much improved this manuscript. We are pleased to submit are revised manuscript and we believe that it is now suitable for publication.

Regarding the two main suggestions raised:

1) We have revised the discussion section to include the paleoclimate records that were previously introduced in the conclusions. We thank the reviewers for this suggestion.

2) Regarding a more thorough discussion of certain references, I will address each mentioned reference separately.

   - Regarding the Feinstein et al. (2013) paper. In this paper the authors discuss the uplift and denudation history of the eastern Dead Sea rift, SW Jordan, using evidence from fission-track data. In general, we have complied with previous and current comments and have expanded the section in the discussion that addresses the uplift history of the region. However, we would like to remind the reviewers, that while the uplift history of the Suez Rift is interesting it is not the focus of this manuscript. We reference the paper by Feinstein et al. (2013) three times in the manuscript and we do not see any reason to discuss it further, as it does not contribute additional information pertaining to this manuscript.

   - Regarding further discussion of the Sinclair et al. (2019) paper, in this manuscript the authors use cosmogenic 21Ne to study the duration of sediment routing from source to sink. This is an interesting and innovative application of cosmogenic 21Ne, especially coupled with the developed model. While we do reference the manuscript, we believe the data presented in this manuscript is robust and does not warrant additional discussion. A comparison to the Sinclair et al. (2019) paper will neither strengthen nor weaken our interpretation of the data and is therefore beyond the scope of this work.

Regarding the suggested technical corrections, we have complied with the majority of the suggestions as well as fixed incomplete sentences, typos, and grammatical errors throughout the manuscript. Please see the revised manuscript submitted.

We do however oppose the following, small number, of suggestions, see are response in blue:

L339-L344: I think that you should clarify here that chert pebbles were only active during the Miocene, as compare to the recycled sand samples, and that their inheritance of 21Ne from previous cycles inhibits their use to infer erosion rates. In particular, I am not sure the contrast between the exhumation and transport histories of the sand and chert and made as distinct as they could be. I suggest the authors clarify this point.

While we now include additional explanation of this issue (see lines 299-306), we would like to point the reviewer to lines 102-108 in section 3.1 where we go into details regarding this difference between the cherts and quartz. Therefore, we do not think an additional clarification is needed.

Fig. 2a – please indicate units for elevation colorbar

Please see that above the colorbar m.a.s.l is indicated.

Fig 4 – use of a log scale may make the data more visible (especially in panel 3) – you might want to give that a try and see how it looks. I defer to the authors on this.

While we have considered and attempted this suggestion, we believe that this presentation of the data makes the comparison between the radioactive nuclides reaching an equilibrium and the stable nuclide increasing linearly, clearer.

Please find attached below the revised manuscript. Page and line numbers refer to the revised version of the manuscript.

Sincerely,

Michal Ben-Israel

Michal Ben-Israel
(on behalf of all the authors)