

Thanks got to Referee #3. Find below our responses (underlined) to individual issues raised by the reviewer. All changes made to the text are highlighted with color.

Introduction

“I suggest to move the last paragraph (L78-82) to the results section...” Done.

Study Area

“I suggest to include some data regarding to the specific location with latitude/longitude.” Done; actually, a cut/paste from the “Methods” section.

“... I wonder, if the authors could add some information regarding to the synoptic climatology of the summer...” Done. The following statement has been added (L 110-113): For the seasonal cycle, Liu et al. (2016) have ascertained that there are strong winds, especially in spring and autumn, with maximum wind speeds of 16.5 m/s. West winds prevailing during summer in the area thereby interact with humid air masses of the summer monsoon further south to release occasional heavy rain fall and thunderstorms (Domrös and Peng, 2012), which may occur at least in the Badain Jaran and Tengger Deserts (Wünnemann, 1999).

L101/102: changed to km²

L105: changed to ¹⁴C

L112: Done; changed to m s⁻¹

L114: Done; hyphen in ice-free.

L118-126: Summary of is demanded. This part has been shortened now: two sentences have been deleted without losing the main message.

Methods

L260-266: and I suggest to re-locate them to move to the “Results section”. Done.

L129: “maximum distance”? Could they specify it? We deleted the word *maximum*.

L276-277: change exponent to superscript. Done.

L278-280: We changed the units of the production rate to “atoms (g quartz)⁻¹ yr⁻¹. Note: It is also changed in Table 2!

L280: We replaced “stopped” with “slow”.

L281: We changed the notation accordingly.

L282: We clarified that the CRONUScalc online calculator has been used.

L284-285: format length and density units. Done.

L287: please move to the ‘Results’ section. We deleted it. It is redundant with other statements.

Results

L293: the three units should be mentioned now. Done.

L357: I recommend to move it to the discussion section. Done with some rephrasing: In this sense, the two upper radionuclide ages (> 2 Ma BP) are reversals (Fig. 4), which can be explained by reworking of old material that has been eroded and transported from the catchment prior to its final deposition in the Ejina Basin. In contrast, the lower sample age at 53.1 m depth (0.84 ±0.12 Ma BP) is accepted as supporting the palaeomagnetic depth-to-age-distribution, because of its approximate overlap with it.

L363, L366, L367: change to “cm ka⁻¹”. Done.

L389: move it to the discussion section. Done.

L421: Done; moved to discussion chapter.

L430-431: Done; moved to discussion chapter.

L437-438: Done; moved to discussion chapter.

L439: Done; decimal separators corrected.

L445-447: Done; moved to discussion chapter.

L450-458: Done; shortened and moved to discussion chapter.

L526: Done; typo deleted, *Chenopodiaceae* in italics.

L556, L557: Done; change to “ka⁻¹”.

L616-618: Further support is now given for the reasoning of Heihe fan as an upwind source to the loess plateau. The statement is backed-up with an additional reference (Herzschuh et al., 2019).

L627: abbreviation MPT is not introduced. In fact, MPT is introduced; see L621.

L629: Done; subscript in CaCO₃.