Major suggestions

1. As mentioned above, this work in its current form is very long and overly elaborate. This work tests an existing published tool with data from three locations using 14 figures and four data tables, all of which are in the main text. In several cases, these figures do not significantly add new information and can probably be summarized into 3-4 figures. This work reads more like a literature review, with paragraphs and tables summarizing previous works without discussing new information (see examples in the detailed comments). As most readers of this type of paper are well informed in the methodology and background, I would suggest writing it as a short technical note focused on the findings.

2. Additionally, this work while very elaborate is a bit lacking in data. Given that the author examines an existing previously published ArcGIS tool, it should be relatively easy to also examine other shielding factors from published works. Specifically, I think this work would benefit from shielding factors from data with both high and low 10Be concentrations and production rates. I would be interested in seeing whether SRTM vs field-measured shielding calculations make more or less of a difference for different settings. As 10Be data is easily available (see ICE-D and OCTOPUS databases), this would make the results more robust and would this work more interesting.

3. The data for this manuscript is only available upon request from the author (see line 524). This does not go in line with the data policy of Copernicus and can be uploaded to any one of several online repositories.

Detailed comments

Abstract: The abstract is missing a short summary of the results. It would have been helpful if the abstract had a short summary of the CRE age differences.

Lines 31-33: This sentence can probably be removed altogether. People reading this will already be familiar with this.

Lines 85-86: The phrasing is confusing. The sentence would probably be clearer if it skipped the first part and started with "three sets of previously…"

Lines 90-95: questions 2 and 3 are similar and should probably be presented as a single question.

Line 98: What does "at least" mean in this context? What more might this require?

Line 114: How far is farthest? Is there a maximum limit?

Line 288: Can you explain why this discrepancy exists?

Lines 434-449: this whole section should also be in a supplemental section.

Lines 465-472: This section is not necessary. It is a summary of a previously published paper. The relevant results of this work should be briefly referred to with a reference.

Figure 1: This is a published tool. This figure is not needed in this type of manuscript.

Figure 2 is a little confusing and does not really add new information. It is probably better to move it to a supplemental section.

Figures 8-9: These are excellent figures that make the actual differences and their consequences easy to understand. It would be helpful to add the cumulative frequency on the y-axis.

Figure 11: This too should also go to a supplemental section.

There should be one figure like this for all data and the rest should go in a supplemental section.

Table 1: This table can be moved to a supplemental section and is not needed in the main text.