

## ***Interactive comment on “Determination limits for cosmogenic $^{10}\text{Be}$ and their importance for geomorphic applications” by Sara Savi et al.***

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In this revised version of our paper we have addressed most of the critical points raised by Referee #1. In particular, we hope to have clarified the aim and the target audience of our work, which we believe were the first cause of misunderstanding. Following the most constructive comments of the referee, we have:

- Introduced a brief discussion on boron interference and how to deal with it;
- Explained the differences between type I and type II errors in statistics, and how it could influence the choice of the confidence interval for the definition of a lower threshold;
- Added more references, including the papers suggested by the referee.

We have also analyzed in details other papers that have dealt with low cosmogenic

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concentrations, as suggested by the referee. Unfortunately, due to missing information in the original manuscripts, we have not been able to use these papers in our examples (see the last point in the detailed answer for more information on this issue).

This latter point highlights once more the importance of our work, and the necessity to raise the awareness of people dealing with low cosmogenic concentrations on the problems and the issues that should be considered during the whole research, from sample preparation to the interpretation of the results. Also, a common reference on how to report and interpret data is necessary to make results comparable and re-usable. We hope to have clarified our position, and why we believe this paper is valuable, timely, and of broad interest for the cosmogenic nuclide community.

Please also note the supplement to this comment:

<https://www.earth-surf-dynam-discuss.net/esurf-2017-30/esurf-2017-30-AC3-supplement.pdf>

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