The paper has in my opinion been significantly improved. But I also think the general approach taken by the authors is still not clearly described, and that improvement must still be done in the presentation of the paper.

My main comments are as follows. Again, I stress that I have no expertise whatsoever on the occurrence of landslides, and my comments bear exclusively on the methodological aspects and the presentation of the paper.

The line numbers below refer to file nhess-2021-360-ATC1.pdf, *i.e.* the file containing the Author's Tracked Changes.

1. Although I think I have now basically understood what the authors have done, I still think the paper would be difficult to understand for a non-expert reader. For instance, I not found that Figure 1, which is meant to describe the general methodological approach of the paper, is really useful.

1*a*. The general methodological approach is described in Section 3, and particularly in subsection 3.2, entitled *Cross validation (CV) and input perturbations for reliable uncertainty estimation*. The subsection begins with introduction of the Brier score (Eq. 2). From what I understand, the Brier score has nothing to do with either cross validation or input perturbations *per se*, but only with the assessment of the input perturbations. It should be introduced at a later stage, and certainly after cross validation has been introduced.

1*b*. In any case, a 'predicted average' LSS^{bar} (sorry, no upper bar on my text editor) is introduced on the occasion of the Brier score. It is not clearly said which kind of average that is, nor on which kind of prediction it is obtained. By the time the Brier score is introduced, it should have already been said that the output of the entire estimation process essentially consists of two *LSS* maps, *viz*. LSS_{100} and LSS_{2500}, and that LSS^{bar} will normally be, for each grid cell *i*, the average of *LSS* over one of those two maps.

1*c*. Then, just after Eq. (2) (l. 217), reference is made to an undefined ensemble variance σ^2_{LSS} which has nothing to do with the Brier score, and to an undefined *'actual' uncertainty*.

1*d*. It is only later, in the course of rather intricate explanations, that the two maps LSS_{100} and LSS_{2500} are introduced (ll. 237-238 for LSS_{100}, and ll. 244-245 for LSS_{2500}).

All that is only to stress how confusing the paper can be for a reader who is an outsider. I suggest that, as is a common practice in scientific literature, the authors end their Introduction with brief description of the text that will follow, with what will be the content of each Section.

And, for another example, the authors write (ll. 236-237) *This results in 5 different model equations …* Simply writing *model equations of form (1) …* would make it much easier for the reader.

2. Ll. 137-138, *We* […] *sample from the absence grid cells …* Random sampling, or what ?

Then, later on (l. 237), *By repeating the absence sampling 20 times ….* Is that a new sampling of the same kind as in ll. 137-138, or something else ? Please clarify.

L. 255, … *the logistic regression* […] *is asymptotic*. What do you mean by *asymptotic* (you use the same word on a number of other occasions, for instance ll. 433-435) ?

Figures 2 (right) and 7. The exact meaning of boxes and vertical lines (total spread ?) does not seem to be mentioned.

Ll. 195-196, *The 6 α-values are assumed to come from a zero-mean normal distribution*. What does that mean ? The text that follows says that the quantity RND has not been used as a predictor variable, but does not really explain how the parameter α has been defined.

Ll. 177-178, *A one unit change in the predictor variable x_i results in a muliplicative change in the odds of landslide presence by exp(β_i)*. Well, only for small $P(Y=1)$

Figure 4b does not seem to be commented upon. There is no point in including a figure in a paper if it not for saying what conclusion, however succinct, must be drawn from it.

Ll. 261-262, *true positive rate* , *false positive rate*. Explain

Ll. 324 and 409, *Sinai peninsula,* actually the Sinai peninsula is a very small region at a global scale. I suspect you mean *Arabian peninsula*

Same lines, *Sahara → a large part of Africa*

Ll. 347-348, … *the ensemble averages* […] *are similar,* …. That is actually visible from the bottom panel 4c. Correct accordingly.

L. 433, LSS_{2500}- $\sigma_{LSS2500}$ (not $LSS_{2500-\sigma LSS2500}$)