

Dear reviewer,

Thank you for your valuable feedback and please find our responses below.

**Considering general comments:**

“The work proposes an analysis of the impact of classifying the conditioning factors on landslide susceptibility mapping. The authors identified eleven scenarios for classifying the conditioning factors and used five different statistical models to generate a total of 54 susceptibility maps. The results are satisfying (confirming the key role that the investigation of the most appropriate conditioning factors plays in producing reliable susceptibility maps), and the article is well-written. It represents a valuable contribution to the improvement of the technique.”

Response: Thank you for your positive feedback.

**Considering specific comments:**

“The article is quite long and could be shortened, particularly by summarizing Chapter 2.2 (Input Data), where there are some repetitions, and the results chapter, which contains many statements repeated also in the discussion chapter.”

Response: Thank you for your suggestion. Chapter 2.2 (Input Data) was shortened by removing some unnecessary information, as well as removing Table 2 and merging it with Table 1. Both actions led to the shortening of the article. Significant changes were made to Chapters 4.5 and 4.6 as they were most lengthy and shared most redundancies considering the Discussion Chapter. Namely, they are excluded by transferring key lines into Discussion and removing the remaining lines. Minor changes were done to Chapter 4.2 and none to Chapters 4.3 and 4.4 because we found no redundancies and 4.3 is extremely short. Generally, the modifications in the Results Chapter shortened the paper significantly without losing important content. Significant changes were also made in Chapter 3 to shorten the paper.

“In Chapter 3.2, it would be very helpful for the reader to have an image or summary table to describe the 11 scenarios developed for the classification of the conditioning factors.”

Response: Thank you for highlighting the difficulties and providing suggestions. A new Table 1 is introduced in Chapter 3.1 which explains the relations of LCFs and LSMs, and also enables easier following of the text in Chapter 3.1. We note that the entire Chapter 3 has been modified to make it shorter, simpler and homogenous (see the track-changes version).

"In Figure 1.d there seems to be a problem with the legend: "geological contacts" and "faults" seem to be inverted, or am I mistaken?"

Response: Thank you for your comment, the two are indeed inverted. We modified the legend accordingly to resolve the mistake.