

*Review of «Impact of information presentation on interpretability of spatial hazard information: Lessons from a study in avalanche safety» by Fisher et al., <https://nhess.copernicus.org/preprints/nhess-2021-147>*

The manuscript is well written and includes a thorough analysis of a relatively large data set from a web-based survey – to test how effectively the aspect and elevation of avalanche problems may be communicated in avalanche forecasts.

The scope of manuscript is narrow, limited to testing how to graphically communicate two parameters related to avalanche problems. A broader scope could be beneficial, e.g. testing more options such as presenting the two properties on maps or including the results from testing interactive exercises.

However, the narrow scope facilitates a well-structured and easy to follow manuscript in all parts and I recommend it for publication in NHES after minor revisions. It is well suited for publication in NHES.

Specific comments, referring to line or chapter numbers in the manuscript:

Line 32: Suggest adding “may be” after risk

Chapter 3.1: I would appreciate a more comprehensive presentation of the participants, it would be nice to see the numbers for all types of activities, user types etc.

Chapter 3.2 and 4: A 0.7 probability of completing the task correctly suggest that many of the users would make the wrong decision about which route to choose. Even though it is positive that probabilities increase with training, it is worrying that it is not easier to make the right choice. I am missing a discussion about whether a probability of 0.7 indicate that the avalanche problem location is effectively communicated or rather calls for improved communication practices. It would be useful to elaborate on which other means could be available, e.g., could presenting the information about the avalanche problem location directly on the maps use in the route ranking test give better results. It would also be interesting to include a discussion on the fact that several warning services present the elevation limits in meters above sea level rather referring to the tree line – how may the results of this study be relevant and transferable to graphics which not only relate to the tree line?

Chapter 3: Chapter 3.2 and 3.3 analyse the results wrt. route ranking task completion correctness and completion time. Would it be possible and useful to analyse the data wrt. the primary activity of the participants in more detail? How are the results for snowmobilers vs. skiers? This is just an idea, if there is more of value to extract from the data set.

Line 403: I presume “out” should read “without”

Figure 4: The figures are slightly difficult to read, in particular the legend of the middle diagram. Using easily separable symbols for the different classes of points would improve the diagram.

*Rune Verpe Engeset, Oslo, 1 September 2021*