

Interactive comment on "A new web-based system to improve the monitoring of snow avalanche hazard in France" by E. Bourova et al.

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Dear Dr. Zweifel,

We are very grateful for your encouragements and your valuable comments. We completely agree that this article essentially concerns the applied research field. Our objective was to develop a new automated system to assist observers in their daily monitoring activity, enhancing the quality and consistency of obtained data. The data from different sources are now stored in a common database and could then be easily explored by researchers. Thus, the new platform facilitates innovative developments to better understand avalanche activity. We believe that this approach could be transferred to other countries and/or other related natural hazards and risks.

Please, find detailed comment-by-comment answers in what follows:

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Comment: Line 30: please use the correct term for the SLF institute which is: WSL Institute for Snow and Avalanche Research SLF

Reply: We modified the SLF institute name as suggested.

Comment: Line 32 to 34: I would recommend to use a more up-to-date publication of the DADB (I would suggest this publication: Techel, F., & Zweifel, B. (2013). Recreational avalanche accidents in Switzerland: Trends and patterns with an emphasis on burial, rescue methods and avalanche danger. In F. Naaim-Bouvet, Y. Durand & R. Lambert (Eds.), International Snow Science Workshop 2013, Proceedings (pp. 1106-1112). Grenoble, France: ANENA, IRSTEA, Météo-France.) By the way: DADB is there mentioned as ADB. However, I think, both is fine since there is no official English term for this database.

Reply: We included the cited reference in the text and specified that the DADB is also named ADB.

Comment: Line 76: Is there any specific reason to write Access with a capital letter?

Reply: Here, "Access" is the name of the software used in a previous version of our platform. To avoid any misunderstanding with the common word "access", we changed "Access" to "Microsoft Access" in the text.

Comment: - Line 104, 129: I think, peer-reviewed is not the appropriate term for the procedure you mention. It is more of a cross check through another person. The process of peer-review is closely correlated to scientific writing though.

Reply: The "cross check" term is indeed much more accurate in this situation. Thank you for this suggestion. We modified the text accordingly.

Comment: Line 125: I'm just wondering: 48 h is quite a lot since conditions can change very quickly especially in these storm periods when the significant avalanche happen. Is there any reason for taking that long time or would there be the chance to be quicker?

Reply: For major avalanches that attain the alert threshold, the observer is expected to alert Irstea and the National Forest Office for possible further research investigations. For example, to collect data about the snow deposit of such exceptional events could be particularly important for CLPA map updates. The observer is asked to rise alert as soon as possible. 48 hours are given in the guidelines as a reasonable maximum limit.

Comment: - Line 136: the term i.e. seems to be in a different format?

Reply: We corrected this issue in the text.

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