

Interactive comment on “Avalanche situation in Turkey and back-calculation of selected events” by A. Aydin et al.

A. Aydin et al.

aaydin@duzce.edu.tr

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I would like to thank for the reviewer's valuable comments to improve the quality of the paper. The responses on the comments raised by the reviewer are summarized below.

Reviewer's comment: The paper deals with the avalanche situation in Turkey, a "developing country" in the field of avalanche science. I think that it is very interesting and worst to show the Turkish context to the rest of the scientific world. I would accept the paper with one explanatory paragraph on the avalanche fatalities from the cited references where indicated below and some technical corrections.

Authors' Response: Many thanks for Reviewer's valuable comments.

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Reviewer's comment: Page 586 Line 17-19. Expand your paragraph linked with fatalities during the given decades for Schweizer and Lütschg (2001) study and give the proportion of the recreational activities. Similarly it would be better if you give information about the proportions of recreatioanal activities within total fatalities for Zweifel et al (2012) and Atkins (2010) studies.

Authors' Response: The paragraph linked with fatalities expanded as suggested. The new paragraph changed as: "In contrast, in the European Alps and in North America, most casualties result from winter sport activities. For instance, in Switzerland for the winter seasons of 1987/88 to 1996/97, the average number of avalanche fatalities was 22.9 per year and, 90% of these were related to recreational activities (Schweizer and Lütschg 2001); fatalities due to recreational activities were 22.45 per year for the winter seasons of 1970/1971 to 2009/2010 (Zweifel et al 2012). Similarly, in the United States, recreational activities accounted for 96% of all avalanche fatalities from 1999/2000 through 2008/2009 (Atkins 2010)."

Technical corrections:

Reviewer's comment: 1) Page 582 Line 14: delete "..., flow velocities,..."

Authors' Response: deleted as suggested.

Reviewer's comment: 2) Title 7.3 Flow heights, velocities and impact pressures. Remove "velocities" from title. Because velocity function of impact pressure for presented paper not necessary to go give information about velocity.

Authors' Response: Removed as suggested.

Reviewer's comment: 3) Page 593 Line 12: delete "Flow velocity and" start with "Impact pressure..." Because in Fig 8 flow velocity not necessary to show and removed.

Authors' Response: "Flow velocity" deleted. Since in Figure 8 we show the results of flow height and impact pressure we rephrase the sentence as: "Flow height and impact pressure for the entire avalanche track are given in Figure 8."

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Reviewer's comment: 4) Figure caption of Fig 8. Delete "maximum flow velocity (middle).

Authors' Response: deleted as suggested.

The final revised version of manuscript will submit to the editorial office as soon as other comments received.

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