Interactive comment on “Computational snow avalanche simulation in forested terrain” by M. Teich et al.

M. Teich et al.
teich@slf.ch

Received and published: 10 April 2014

We do address this important issue at Lines 155-157: “This assumption is based on observations where trees in the path of small- to medium-scale avalanches did not break and, therefore, can act like obstacles and “detrain” respectively extract avalanche mass (Faug et al., 2004).” and also mentioned it somehow at Lines 451-456. However, we will make this clearer (see also Feistl et al. 2014). Actually, we can’t tell, if there was woody debris which might have added some uncertainty to our simulation results. However, like you said, we assume that such small avalanches did not generate enough power to break or uproot trees. In fact, we assume that these avalanches lost most of their mass (and momentum) within the first 200 m since they already started in forested terrain which leads to a significant shortening of runout distances (see also Teich et al., 2012a).