Case studies with SamosAT based on several avalanche events in February and March 2009

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In summer 2009 a recalibration of the avalanche simulation model SamosAT was carried out on the basis of 20 well documented reference avalanches and revised input values for the powder snow model were determined. In February and March 2009 numerous avalanche events take place in Austria (Granig, 2009). The extent of the dense flow part and the effect of the powder part of the avalanche was mapped by means of GPS, sounding and photos. In Austria a databased platform was implemented in 2005, where large-scale avalanches has to be located and documented by members of the Austrian Service for Torrent and Avalanche Control. A couple of dry snow avalanches in the period February and March 2009 were chosen for a recalculation with the SamosAT powder part module. In general a precise mapping of recent events, a careful study of the chronicle and a personal interview with locals can be very helpful for further hazard zone mapping. In agreement with this historical data the results of simulation models can be a useful tool for measurement planning in the catchment area of an avalanche.