



Characteristics of snow avalanches in the Southern Carpathians

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Snow research for avalanche prevention is developed in Romania since 2000. The present study is a synthesis of the work of avalanche study in the last 5 winters in Romania. The study is based both on snow research methods used at Centre d'Etude de la Neige, Meteo France, Grenoble which are applied in the National Meteorological Administration in the a common research program, as well as geomorphologic analysis of the terrain and climatologically methods. We picked out study areas in the Mountains Bucegi, Piatra Craiului and Fagaras where snow measurements were done weekly for a period of 3 winters. WE took in account as well data about avalanches collected since 1952 by the Romanian Alpine Club and mountain rescue services. Avalanche events were described and classified taking in account the characteristics specific for the specific regions. The snow features was registered in the application GELINIV 2.10, and modeled with Crocus Mepra PC version Roumanie.

The terrain particularities as well as the microclimate for each mountain range are definitely features for avalanches in Romanian Carpathians. The terrain features was modeled using GIS models at 1:25 000 scale. For some specific regions we used a more detailed scale.

The described study cases of avalanches which produced big forest damages or human victims are examples of the avalanches in the South Eastern Carpathians.