ABSTRACT

An avalanche path is a landform, that is being modeled by surface snow avalanches, debris flows and other slope processes. It consists of starting zone, track and runout zone. The submitted bachelor thesis is concerned with the characteristics of avalanche paths used in literature and generates their classification. The morphometric GIS analysis is performed in the Eastern High Sudetes. The measured vlaues of 16 avalanche paths from 6 sites are statistically processed and compared. The Sudetic paths are shorter but they have similar slope in comparison with paths in alpine environment. The spatial distribution of avalanche paths is bound to lee parts of the anemo-orographic systems. The aspect is predominantly southeastern, the slope is between 20 and 30° and the length is usually between 200 and 400 m. The path lenght depends inversely on the slope of the starting zone. There is also a relation between the avalanche path morphology and the area of alpine tundra on the etchplain above the timberline, from where the snow is being blowed to the starting zones.

Key words: snow avalanche, morphometry, Eastern High Sudetes, Altvatergebirge, Glatzer Schneeberg