

**Abstract**

The thesis is focused on geomorphological impacts of long lying snow patches in summit areas of the Krkonoše Mts. (Czech Republic). Effects of long laying snow patches on underlying surface were analysed by the means of assessment of weathering mantle movement and soil temperatures. Nine creep probes were set in three snow-influenced localities. Soil temperatures were measured by dataloggers on one of those localities. Values of creep from 14 to 59 mm were measured. Significantly higher rates of weathering mantle downward shifts were ascertained under snow patches. At the same time no regelation cycles were recorded there. Nivation hollows were mapped and data from terrain and from DTM modelling were analyzed. Two groups of nivation hollows were distinguished based on statistical analysis. Formation of protalus rampart-like features was studied. Lichenometry and Schmidt-hammer rebound values were used for dating of those features. Lichenometric growth-curve for Krkonoše Mts. was established. Gradual accumulation of protalus rampart-like landforms was verified and opinion of protalus rampart origin of features was set.