



Numerical run-out modelling used for reassessment of existing permanent avalanche paths in the Krkonose Mts., Czechia

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Run-out modelling of snow avalanches is being widely applied in high mountain areas worldwide. This study presents application of snow avalanche run-out calculation applied to mid-mountain ranges – the Krkonose, Jeseniky and Kralicky Sneznik Mountains. All mentioned mountain ranges lie in the northern part of Czechia, close to the border with Poland. Its highest peak reaches only 1602 m a.s.l. However, climatic conditions and regular snowpack presence are the reason why these mountain ranges experience considerable snow avalanche activity every year, sometimes resulting in injuries or even fatalities.

Within the aim of an applied project dealing with snow avalanche hazard prediction a re-assessment of permanent snow avalanche paths has been performed based on extensive statistics covering period from 1961/62 till present. On each avalanche path different avalanches with different return periods were modelled using the RAMMS code. As a result, an up-to-date snow avalanche hazard map was prepared.