

SUMMARY

Snow avalanches stand frequent repeatability in Georgia unlike other natural disasters, causing significant damage to the country's economy annually, threat to human life, interferes with the normal processes in the utilization of mountain regions. The importance of analysis of development and the looming threat of avalanches can be seen in that background. After many years of experience of avalanche studies in Georgia, should be noted that lack of modern research methods and field data hampers the detailed studies. Therefore we think to begin study this important process with use of a new way and timely modern research methods, which in turn positively affect the quality of the master thesis. The project aims to create model with GIS data that will identify and provide us with an accurate picture of the avalanche terrain of Racha: a) depositional terrain traps (steep sided gullies) b) trigger points. The study involves several stages: first of all collect the data. ASTER 30m resolution DEM. Data about land cover/land use was collected by field observations and as well as raster data resulted of a latest digital image (Landsat 8 OLI) classification. Spatial model for data process was created where raster layers about terrain and LC/LU were placed. A GIS is able to use for modeling, analysis, forecasting and visualization of avalanche hazardous terrain.

Scientific paper about research methods and its results was prepared and sent to the Journal of young researchers for publication, which will support young scientists to be interested in this issue and undertake the fundamental research.