9th Alexander von Humboldt International Conference Istanbul | Turkey | 24 – 28 March 2014 AvH9-8 © Author(s) 2014. CC Attribution 3.0 License.



Quantification of economic and individual debris flows risk at the Black Sea coast of the Northern Caucasus

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Debris flows are the most frequent and disastrous natural hazards among other exogenic processes at the Black Sea coast of the Northern Caucasus. Numerous debris flows releases are reported every year between Novorossisk and Krasnaya Polyana. The debris flows bring economic losses, and sometimes loss of human lives. Quantification of the economic and individual debris flows risk is based on their spatial distribution, repeatability, debris flows' regime, as well as economical and social characteristics of the territory accounted for. Estimation of the individual debris flow risk did show that the level of such risk corresponds to allowable and acceptable degrees – less than 3.3×10^{-6} . The maximal values of the economic debris flows risk are estimated for the Adler region – more than 1 mln. rub. per year.

The work was supported by the State contract of the Ministry of Education No. 14.515.11.0009 and by the Contract No. 11.G34.31.0007.