On the problem of loss of geometrical accuracy during automatic cartographical generalization

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The article considers the problem of loss of geometrical accuracy during cartographical generalization of digital maps, including the reasons of loss of geometrical accuracy in general and in relation to relief layer. The results of analysis proved applicability of the known algorithms of creating lines of identical level (horizontals, isolines, isohypses). Recommendations on selection of a method for automatic generalization are given. A description of the method and empirical estimation of its parameters are presented. According to the results of testing we offer to identify and generalized contour trend excluding accidental external and internal stochastic influences on its form.

Key words: geographic information systems, cartographical generalization, contour of natural object, horizontal, isohypse, geometrical accuracy, digital maps.

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