

State of the information and analytic database of exogenous geological processes on the territory of the Ural Federal District

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Abstract. 13 genetic types of dangerous exogenous geological processes (EGP) have been developed on the territory of the Ural Federal District (UFD). This work aims to illustrate the system of accounting and accumulating information on the manifestations of dangerous EGPs of each genetic type. When conducting the state monitoring of the subsurface state (SMSS), the information about the EGP manifestations is accumulated in the structured data arrays (SDAs), which are organized for each subject of the Russian Federation within the UFD. The sources of information are the results of areal regular and one-time engineering and geological surveys, materials from official open and stock sources. On the basis of accumulated data, we have concluded that the most common genetic types of dangerous EGPs in the UFD territory are gully erosion (28.4 %) and karst-suffusion process (21.5 %), which make up about half of the total number of all recorded manifestations. The operation of the information and analytical base of the SMSS EGP allows to perform accounting, analytical (including the identification of patterns of EGP development for a selected time interval), reporting and statistical functions, increases the reliability of seasonal and annual forecasts.

Keywords:

**structured data array, dangerous exogenous geological processes,
monitoring of the subsurface state, Ural Federal District**

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