

Map of Ore Zones (Predictive-Metallogenic Map) of Sedimentary Cover of the East European Platform

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The map contains the up-to-date, most comprehensive information on proved and inferred economic minerals on the platform indicating the location of mineral deposits of different size.

The map is compiled on a basis of main ore-forming factors: major faults, ore-enclosing geological formations, etc; shown are genesis of deposits, an assumed ore source: mantle, crustal or mantle-crustal. 228 ore zones are shown, 57 being distinguished as most promising. 823 mineral deposits occur within them. 14 uraniferous, 5 auriferous and 6 diamondiferous zones with different types of deposits are first shown.

The main economic minerals are represented by iron, titanium, aluminium, manganese, rare metals and rare earths, phosphorus, rock and potash salts, sulfur, diamonds. Gold, uranium, molybdenum, fluorite are regarded as new potential economic minerals.

The deposits of titanium, phosphorus (apatite), aluminium (nepheline), tantalum, niobium, rare earths (cerium group), molybdenum, lead, zinc, mercury, gold, diamond have their sources in the mantle. The mantle-crustal sources are typical of rock salt, potash salt and ratofkite. The crustal source is characteristic of uranium, phosphorite, titanium (placer deposits), aluminium (bauxite), cerium (celestite), sedimentary copper occurrences.

The explanatory notes deal with close relationship between the mantle and platform covers and the fact that many of the deposits are confined to aulacogens (rifts).

The map is a part of the set of maps of the East European

platform on 1:2,500,000 scale, prepared by Russia, Ukraine and Byelorussia.