

Impact structure in Mongolia

P. Khosbayar, Ariunbileg, Kh.Ariunbayar, Institute of Geology and Mineral Resources of MAS, Ulaanbaatar, Mongolia

Regional geological mapping covered the territory of Mongolia. A new geological map of the Mongolia in scale 1:1000000 presents the geodynamic particularities peculiar to the main stages of folded structures in the Earth crust development. For mapping the regional geological survey, space and aerial imagery. As a result of research work, over 20 ring structures with different sizes were discovered. This ring structure with its geological structure and with its genetic features, morphology and inner structure depend on meteoritic and impact-meteorite origin. Besides appeared meteorite craters like Tavan-Khar ovoo, Aldarkhan, Khasagtkhairkhan, Bayannuur, Nomin Tsenkher, Zavkhan, Binder, also Beger, Khantaishir, Delgerkhaan, and others were discovered. The size of the studied impact structure is ranging from 21m to 7.5km in diameter.

On the base analysis of the geological investigations characterized by morphology and inner structure of craters, composition and structure of structural-lithological complex. Inner structure of stratum of impact breccia and the features of shock metamorphism (shatter cones) diaplectic minerals and glasses are determined.

There are investigated structure of sockle and morphology of the inner funnel and composition of filling complex of astroblemes.