

AGE OF DETRITAL ACCESSORY MINERALS AND BIG STRATIGRAPHIC DISCORDANCES IN EASTERN PART OF UKRAINIAN'S SHIELD.

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U-Pb geochronological data on detrital zircon is determined for age of low metamorphosed sedimentary rocks of Mesoarchean and Paleoproterozoic Ukrainian's Shield.

On Priazov block stratigraphic discordance between Paleoarchean granulite-gneiss and Mesoarchean greenstone complexes is observed in Soroki Greenstone Structure. Detrit zircon with age 3320 ± 80 Ma confidently being diagnosed in metamorphosed sandstones and gravelites of this structure. This one is identical to zircon from Paleoarchean plagiogneisses with age 3350 ± 120 Ma. The Proterozoic sedimentary rocks this bloc was formed in muldo-like structures on granitoids of Neoarchean. Detrital zircon with age 2900 ± 100 Ma contains in metamorphosed sandstones of Gulaipol brachisynclinal, which identical to zircon of plagiogranites underlayes this structure.

In Middle-Dnieper Greenstone belts metasedimentary rocks with detrital zircon of more ancient basement was not established and therefore age of their basement remains unknown.

Discordance between Archean and Proterozoic in this block fixes in basement of Krivoi-rog synclinal. In metamorphosed conglomerates and sandstones there is zircon of plagiogranites with ages 2950 ± 100 Ma (it is absolutely predominant) and detrital monazite with age 2800 Ma in local regions. The U-Pb age of detrital zircon indicate on a big tectonics activity of the Earth after 3300 ± 100 and 2900 ± 100 Ma ago. The first correspond to formation of Mesoarchean greenstone belts, and second – of Paleoproterozoic graben-synclinales.