The correlation of geochronological boundaries between main stratigraphic subdivisions Precambrian of various blocks of the Ukrainian Shield

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The Ukrainian Shield consists of 6 tectonic blocks, each of them has a specific geological history and is characterized by original stratigraphic sequence of geological formations, by metallogenic specialization and other criteria.

The geological history of a Ukrainian Shield begins from 3,65 Ga ago and finishes about 1,2 Ga ago.

Each block is characterized by stratigraphic subdivisions - series complexes of Precambrian rocks. These subdivisions have the geographical names. Thickness of metamorphic volcanic and sedimentic rocks of various series varies from several hundreds up to several thousands meters. A degree of metamorphism rocks varies from greenschist up to granulite facies.

Reliable criterion for correlation of stratigraphic subdivisions between various blocks are precisely established geochronological boundaries between main series of crystal rocks. We have received more than hundred isotope dates by uranium - lead isochron method on accessory minerals, singenetic to magmatism, volcanism, metamorphism.

This correlation permits to establish following six geochronological boundaries: I. 1,76 Ga between Mezo- and Paleoproterozoic; II. 2,05 Ga- inside Paleoproterozoic; III. 2,6 Ga between Paleoproterozoic and Neoarchean; IV. 2,8 Ga between Neo- and Mezoarchean; V. 3,2 Ga between Mezo- and Palaeoarchean; VI. 3,67 Ga - oldest tonalite-toleite magmatism.

After 1,2 Ga geological life was displayed in break tectonic.