



Stratigraphic scale the Lower Precambrian of Russia

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The quality of state geological maps depends on the quality of the combined serial legends, which are based on the adopted stratigraphic scheme of the General stratigraphic scale, regional and local stratigraphic schemes.

The main task of the General stratigraphic scale is the temporal correlation of stratigraphic units of regional schemes and the age of their boundaries.

For the Precambrian age determination is based on paleontological and geochronological methods. Currently, work is being carried out to update the stratigraphic framework of the formations of the upper Proterozoic (Riphean and Vendian). Relatively less studied is the stratigraphy of the lower Precambrian.

To the bottom are Precambrian structurally-material complexes of Archean and lower Proterozoic rocks, crystalline basement of ancient platforms and also included in the fold belts.

The solution to the problems of stratigraphy of the lower Precambrian is possible only by creating and improving regional stratigraphic schemes. Such work should be based on the study of stratotype sections and references of boundaries in the model regions of the lower Precambrian.

The current General stratigraphic scale of the lower Precambrian of Russia (RGSS) consists of the Lower Archean (Sami) and the Upper Archean (Lopi) and lower Proterozoic (Karelian) Eonotam.

Archean is divided into two Eonotam in Russian General stratigraphic scale, in the International Chronostratigraphic Chart (ICC) – three units, designated as Eon. The age of the boundary between Eonotam and Eon the same (3200 million years). The same and the age of the boundary between the Archean and the Proterozoic.

The RGSS of the Precambrian, based on the comprehensive study of typical sections and analysis of isotopic Dating of different methods.

Stratotype reference sections of the districts of Karelia and the Kola Peninsula represent different types of sections, the time (geochronological) correlation which was the basis for the regional scheme.

For the Asian part of Russia regional stratigraphic schemes approved only for the Altai-Sayan region, Verkhoyansk-Chukchi region and the Aldan-Baikal series.

The metamorphic complexes must be independent of the correlation diagram that reflects all the above-mentioned problems.

The Stratotype section of the Kola-Karelian region will be candidate by Global Boundary Stratotype Section and Points (GSSP) for the Archean and Proterozoic.