New CGMW Tectonic Map of the Arctic

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In 2019, the compilation of the new Tectonic Map of the Arctic (Tectonic Map of the Arctic, 2019: eds. O. Petrov, M. Pubellier) was completed. The map was compiled under the international project Atlas of Geological Maps of the Circumpolar Arctic, 1:5M with the participation of representatives of all Arctic states under the auspices of the Commission for the Geological Map of the World at UNESCO. The new 1:5M Tectonic map of the Arctic is a GIS project, which provides a transition to three-dimensional geological mapping of the Arctic. The project includes the crustal and sedimentary cover thickness maps, the crustal types map, the tectonic zonality map of the basement, schematic map of key igneous provinces of the Circum-Arctic region and the geological transect compiled taking into account the latest scientific geological and geophysical data accumulated in recent decades as a result of high-latitude expeditions and scientific programs to substantiate the extended continental shelf in the Arctic. The new Tectonic map of the Arctic proved the continental nature of the Central Arctic Uplifts as a natural geological extension of Eurasia. Close structural relationships of deep-water parts of the Central Arctic and the shallow continental shelf of Northern Eurasia are substantiated by geological and geophysical characteristics of the consolidated crust, the upper mantle and sedimentary cover, as well as the common parameters of the magnetic and gravitational potential fields.