

NEW APPROACHES TO THE DISPLAY OF PERMAFROST LANDFORMS ON DIGITAL TOPOGRAPHIC MAPS OF THE SIBERIAN ARCTIC ZONE

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The analysis of traditional topographic maps and plans of the Siberian Arctic zone shows that their relevance and completeness of content do not fully meet the modern requirements for the further development of this region. There is a need for targeted specialization of a new generation of topographic maps and plans of Arctic territories, taking into account their physical and geographical specifics. The purpose of the work was to determine the possibility of such specialization based on the use of remote sensing materials from space and computer technologies. To achieve this goal, studies have been conducted to determine the visual and automated decryption capabilities of Landsat Sentinel satellite images in order to expand and refine the existing system of conventional signs of cryogenic relief. Based on these studies, new conventional signs for polygonal, bumpy, solifluctional and thermokarst forms are proposed. The conclusion is made about the need for specialization of other specific elements of Arctic maps – vegetation, hydrography, soils.

Keywords: siberian zone of the Arctic, specialized topographic map, decoding of remote sensing of the Earth, conventional signs of topographic maps and plans

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