ANALYSIS OF METHODS AND MEANS OF CONTROL OF MAIN PIPELINES' PROTECTIVE STRUCTURES

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The purpose of research is to justify methods and means of remote sensing for monitoring of technical state of various types of main pipelines' protective structures. An analysis of accidents at main pipelines based on the data of the Federal Service for Ecological, Technological and Nuclear Supervision, as well as the Ministry of Energy of the Russian Federation is given. The analysis revealed that all protective structures are divided into 2 types - engineering and earth structures. The essence of main methods of active remote sensing is described: radar imaging, radar interferometry, aerial, mobile and ground laser scanning. Accuracy characteristics are given. Justification of monitoring methods application for various types of engineering structures is performed.

Keywords: protective structures, active remote sensing methods, control, monitoring, main pipelines, accidents, laser scanning, radar interferometry

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