ABOUT THE APPLICATION OF GIS TECHNOLOGY IN THE MILITARY FIELD

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During the conduct of military operations, a situation may arise in which it is not possible to directly observe the enemy's ground targets, especially those located in mountainous areas [1-3]. In such cases, uncertainty arises in the information to be processed, and therefore the risk of making the wrong decision to destroy the targets increases. The optimal option for solving this problem - the problem of determining the 3D coordinate of the enemy target and the distance to it is the use of GIS technology [4-7].

The experience of modern battles and exercises clearly shows that the side that uses the terrain factors skillfully and applies weapons and equipment more effectively has a greater chance of success. GIS technology in the military field has great advantages in terms of time and accuracy in studying the observation conditions of the area. By using this technology, it is also possible to calculate the slope of the terrain of the areas close to the enemy, the calculation of visibility parameters, the regulation of the movement of equipment and manpower, as well as military and strategic planning. Possibilities of solving the above-mentioned issues are practically shown in the article.

Thus, a 3-dimensional model of a specific mountainous area selected as an example was built using GIS technology to study the observation conditions of the area. According to this model, the profile of the territory was extracted and the territory was mapped. Using ArcGis straight-line visibility analysis, it was investigated whether the visible and invisible areas up to the target point can be kept under control when viewed from the observation point.

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