

TECHNOLOGICAL PROCESSES OF DRAWING UP DIGITAL LAND CADASTRAL MAPS, THEIR CONTENT AND FEATURES**Khakimova Kamola Rakhimjonovna***Associate Professor of the Department of "Geodesy, Cartography and Cadastre"
of Fergana Polytechnic Institute*k.xakimova@ferpi.uz**G'ofurov Xalimjon Voxidjon o'g'li***Master of Ferghana Polytechnic Institute*

Annotation: *This article provides information on the technological processes of creating digital land cadastral maps, their content and features, preparatory work and photogrammetric processing of aerial photography materials.*

Keywords: *digital, land, cadastre, GAT, geography, aerial photography, aerial photography, map.*

INTRODUCTION.

Geoinformation systems have been influencing many fields such as geography, geology, geodesy, cartography, which have been developing since ancient times. Based on the experience, traditions, and ideas of these fields, emerging science and technology contribute to their development. Geoinformation systems, providing quick and accurate, accurate and complete information, are finally taking an important place in managing territorial and regional development and making relevant decisions. Geodesy, cartography and cadastre widely use the advantages of Geoinformation systems in solving their tasks.

The purpose of this research work is to open the relationship between the rapidly developing fields of geodesy, cartography and cadastre and Geoinformation systems. In connection with this purpose, their brief definition and history, their relationship with other sciences are covered. The reason for paying attention to the cartographic basis of geography information systems is to help to correctly imagine their positive and negative features when using these technologies [1-5].

RESULT AND DISCUSSION.

Compilation of digital land cadastral cards in the complex of works on land inventory using the method of aerial phototopographic surveying includes the following technological processes:

- preparatory works;
- aerial photography;
- preparation of plan-elevation aerial photography materials, creation of a base grid;
- photogrammetric processing of aerial photography materials;
- camera card making works.

Let's look at some of the main technological processes. Preparation works include the following;

- preparing the administrative base;
- collection, processing and systematization of archival data;

- collection and analysis of land cadastral zoning data;
- preparation of the list of land users and legal entities;
- description of data collected in decoding material.

The preparation and processing of the administrative base includes a number of activities carried out in cooperation with the administration:

- tasks of local management bodies to carry out land inventory work in the city, district;
- to announce in the local press and radio that the land inventory is being carried out in the city or region;
- formation of a temporary commission on land inventory under local management bodies.

Aerial photography is carried out using a 23x23 topographic aerial camera. When drawing up large-scale plans of settlements, it is necessary to use an aerial camera with a moving image [6-10].

Two-frequency phased receivers are used to reduce the volume of field work in the preparation of plan-elevation aerial photographs, and GPS methods are used to determine the coordinates of the photographing center.

The preparation of plan-elevation aerial photography materials, drawing of the base grid, as well as the boundaries of settlements, embody the complex of field geodetic works.

The height connectors of the symbols are performed to obtain a digital model of the terrain, which is used in the orthotransformation of aerial photographs. Therefore, the required accuracy in determining the height of the signs is given according to the permissible error of the points on the orthophoto plane 11-17.

Plan-elevation connectors of signs and together with them, the points on the border of the territory are determined using GPS methods, as well as an electronic tachymeter, etc. It is also done with tools.

Photogrammetric processing of aerial photography materials includes the following main processes;

- preparatory works;
- aerial photo scanning;
- creating a photogrammetric project;
- photogrammetric compaction of the type of points by phototriangulation method;
- creating a digital model of the relief for orthotransformation of photos;
- bringing the pictures to the same scale and mounting orthophotoplanes [18-19].

Such works are also carried out at photogrammetric stations. But we will approach this process from the point of view of card making in a camera state. In this case, the result of the work is the vector model of the outline of the objects that make up the main part of the card being created [20-25].

Field studies and field interpretation of aerial photographs are completed by determining the boundaries of land parcels and bringing them to an orthophoto plan or zoomed-in aerial photograph. If necessary, instrumental methods are used to connect the turning points of the borders of the plots that meet the requirements of the accuracy of the map. Also, decoding covers all objects of land cadastral cartography that reflect the content of land cadastral cards and plans. Field surveys of land plots also include collecting all necessary

information about land plots and legal entities, looking at inventory documents (maps) or technical projects. If field research is conducted after camera decoding, the results of camera decoding will be checked and clarified during the research.

The work of creating a camera map includes the entire complex of technological processes related to obtaining a vector model of the contour of objects and their further processing [26-32].

CONCLUSION

In short, the creation of land cadastral cards is directly related to conducting land inventory. As a result of these works, in addition to land cadastral cards, many other documents are drawn up, for example, the explanation of land, the list of land plots with the area according to the document and the actual area, etc. It should be noted that the preparation of the vector model of the contours, other cartographic data and all output products (as well as the explanation and list of land plots) are the main processes for applying GIS technology.

During the application of the technological scheme of the work, the initial camera decoding is performed at the stage of creating a camera map, in which the vector model of the contours is processed with the previously obtained field research materials.

It should be noted that old cartographic materials, results of tacheometric measurements are used as additional information in the construction of a camera map.

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