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METHODS FOR CONSTRUCTING THREE-DIMENSIONAL MODELING OF GEODETIC VALUES IN ARCGIS AND DETERMINING THE AREAS OF SOIL EROSION

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ABSTRACT

The main focus of this work is on the mathematical processing of geodetic measurements based on ArcGIS, as well as ways to create and manage GEODATA and the introduction of modern methods for fast and efficient mapping of eroded territories. The paper presents some problematic questions about soil erosion and research.

KEYWORDS: *(Water And Wind Erosion, Elements Of The Irrigation Technique Will Add This Table Of Contents Attributes From The Inscriptions Contour).*

INTRODUCTION

Currently, data processing problems are common in every area. It is difficult to imagine any business or organization without an automated information system. All automated data systems are based on DBMS. The database is formed on the basis of DBMS. The course examines the theoretical foundations and methods of creating and managing geospatial databases. It discusses the basic concepts of databases and geo-databases and their relationships, classification, data structure, and related DBMS types. Today, any GIS project is difficult to imagine without a geographical database.

Today geodesy is widely used in all sectors of the economy. Therefore, the integration of GIS and geodesy requires a large amount of written and graphical geographically related geographical data. Geographic databases are created using special GIS software. Given the fact that the ESRI ArcGIS program is currently being selected in several regions of the country, this methodology is focused on using GIS systems for mathematical processing of geodetic measurements, creating GEODATA and erosion risk categories based on ArcGIS.

It should be noted that with this ArcGIS software, GAT projects are developed and maintained in our country, as is now the case in many developed countries. Knowledge of geospatial knowledge is required for the creation and effective use of geo-information systems projects.

ArcGIS software and its applications

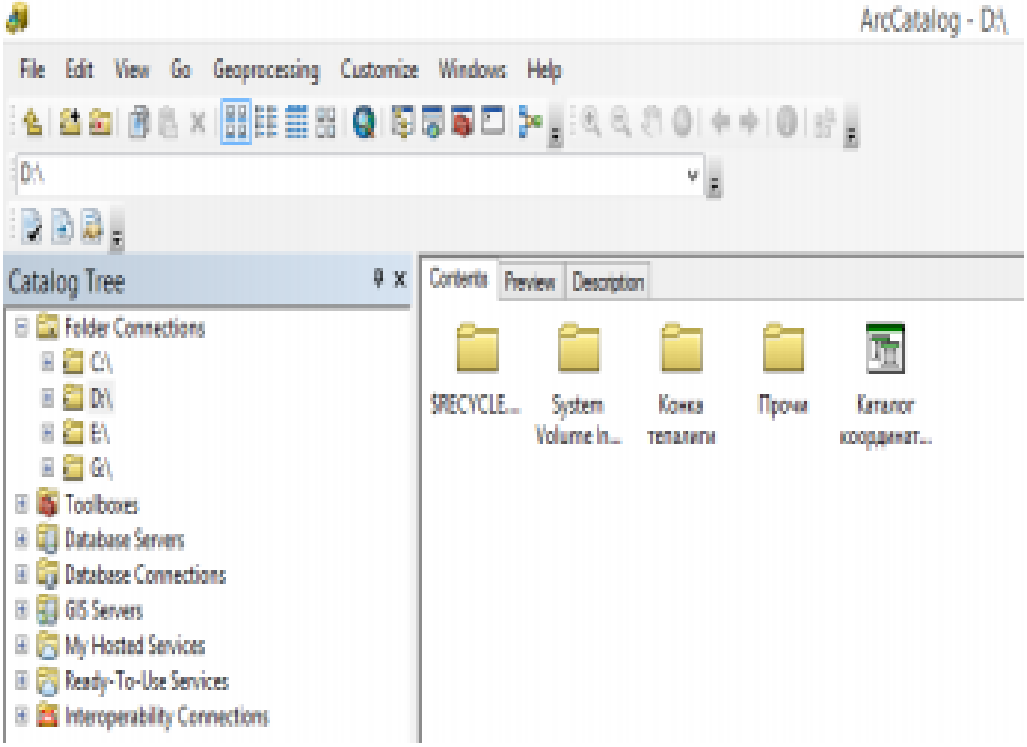
ArcCatalog is an ArcGIS application that manages and manages geographic information in workspaces and geospatial databases. Business areas are folders containing disk files that are used to organize your data - card documents, images, data files, geo-referenced models, databases, and more. Workplaces are an easy way to organize and share GIS data.

ISSN: 2278-4853 Vol 9, Issue 5, May, Spl Issue, 2020 Impact Factor: SJIF 2020 = 6.882

A geographic database is a collection of different geographic data sets that are used in ArcGIS. There are several ways to store information from a geodatabase:

• The database file, the folder containing the files on the disk;

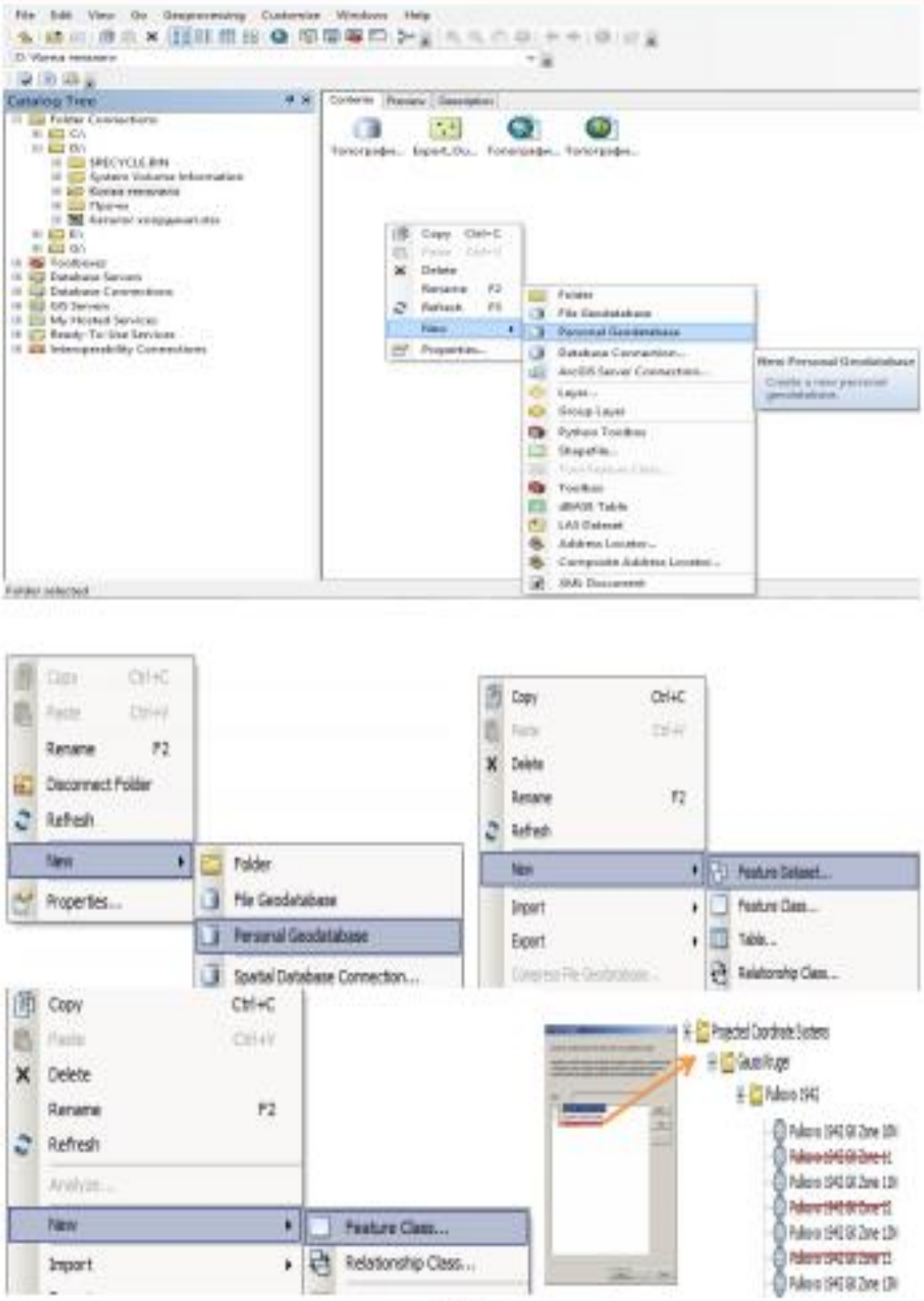
* Personal Geoscience database•MicrosftAccess database file (.mdb).



Pic. 1

ArcGis, an ESRI•based application, uses this program's ArcCatalog application to create geographic databases. When the ArcCatalog maintenance window opens, the catalytic erosion categories are selected using the region's massive GAT systems and selecting the desired disk.

ISSN: 2278-4853 Vol 9, Issue 5, May, Spl Issue, 2020 Impact Factor: SJIF 2020 = 6.882



Pic 2

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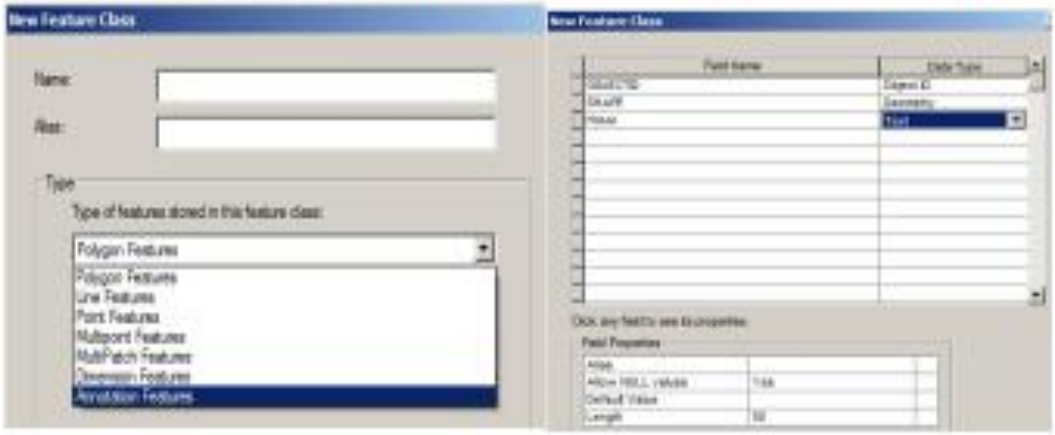
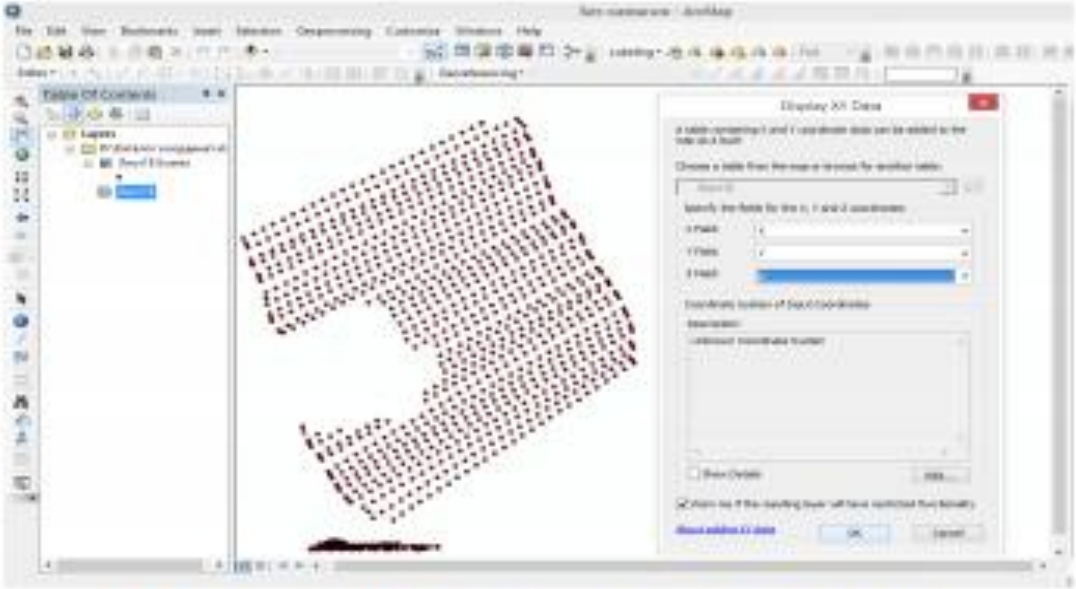


Pic 3. Three-dimensional modeling of the Arctic zone of the processing of geodetic values.

As soon as the ArcMap app is loaded, the "add this" button "point-to-point" will be loaded using the coordinate catalog loaded from the electronic tachometer. As a result, this table of contents file is converted to a table of contents. In the coordinate file, right-click the file and type " add x, y, x, y ". The arrows to be displayed are indicated by data, and the arrow key is a geographical representation based on the value (coordinates) of the table data.

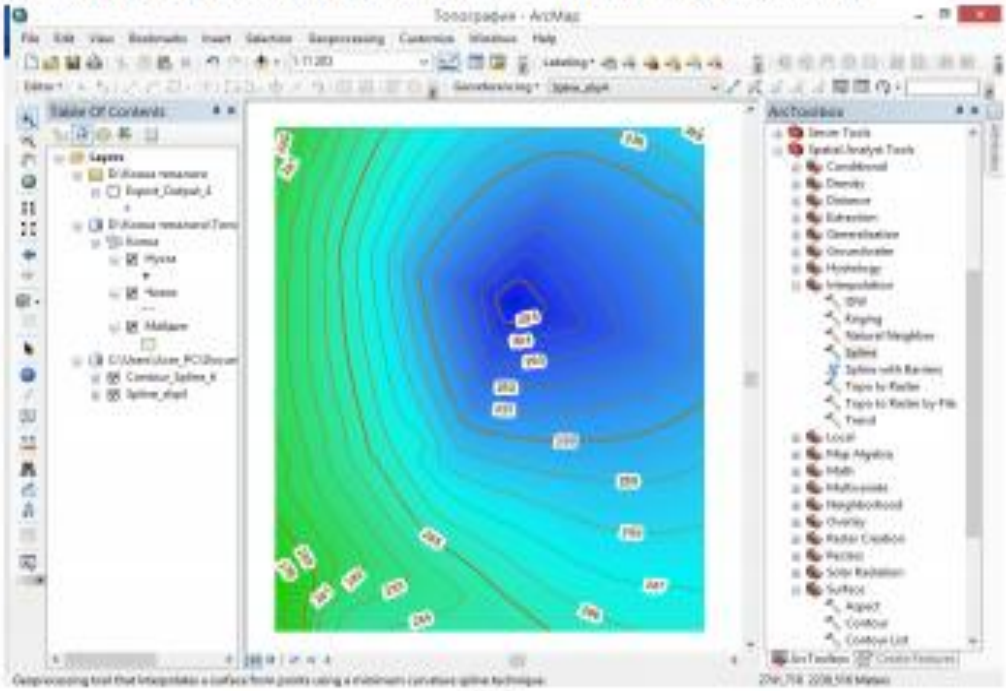


Pic 4. Converts rendered coordinate values into layers of thematic vector types.

As a result, coordinate values that have been converted to vector types are removed from the table data source. A symbolic layer will be assigned, and attribute entries from "labels" will be made.

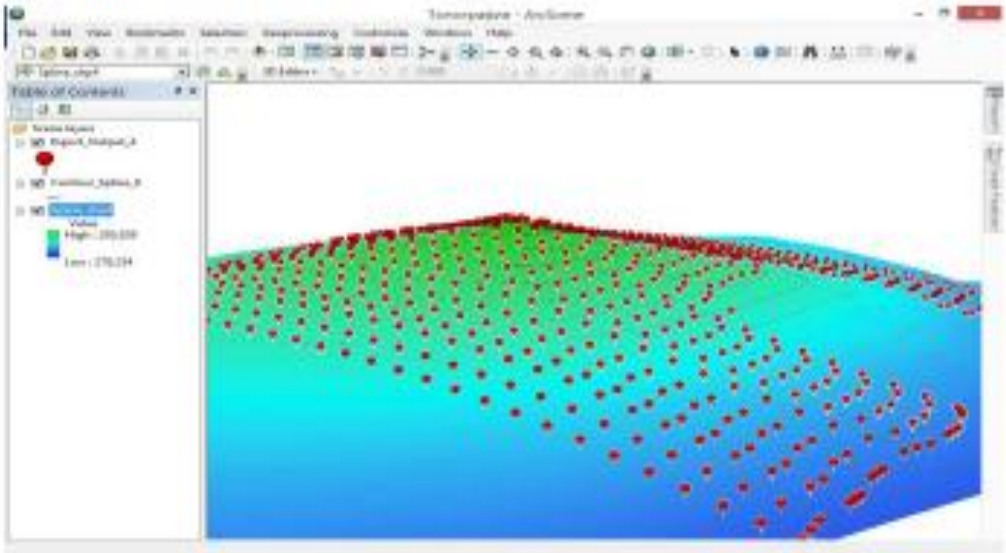
Liberation of the territory by interpolation using point thematic layers. For this. ArcToolbox will be activated. Click the SpatialAnalyst Tools section and open the Interpolation tab, then double-click the spline in the resulting Analytics row. The resulting window requirements are met, and an arrow key is created, and an external zone is created. Using the resulting surface, the Surface

element opens in the SpatialAnalystTools window, and the Contour Analytics command is selected. As a result, a window appears on the screen. The created surface is displayed in a window with the height of the relief area in the scale and by pressing the arrow key.

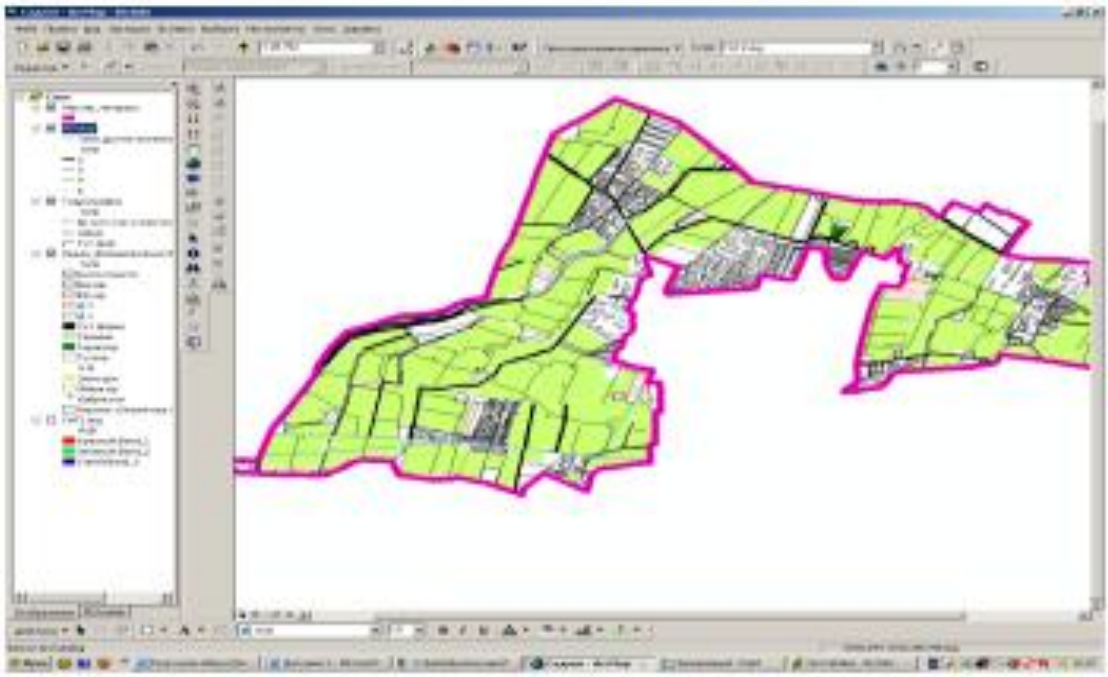


Pic 5.

Based on the above, topographic plans and maps will be created by mathematical processing of territories in modern programs to determine the values of topographic surveys during field work using an electronic total station.



Pic 6.



Pic 7. Prepared plan

In addition, the volume and level of data available today is so large that it is impossible to analyze and analyze them without the use of modern computing and software tools. Therefore, the creation of automated systems based on modern computer technologies that provide detailed information about natural resources and methods of soil erosion, which play an important role in the development of the national economy, is one of the most relevant.

Currently, the use of modern technologies in the field of land management, business process automation. One of them is the technology of creating electronic maps for land use and land management. Currently, geographic information systems, ArcGIS software, and computer technologies are widely used in almost all sectors of the economy. This is a very easy-to-use program.

Using space and aerospace widely used digital information maps to create geo-information systems in various sectors of the national economy, the technology for creating high-quality digital maps has been created and is being created. At the same time, digital maps created in various formats are converted to ArcGIS software formats and electronic maps are created.

With the help of the programarcgis for agricultural land on an area of 52.0 hectares against wind erosion and flooding of water bodies using a GIS system and three-dimensional data collection in the farms of Turkmenistan, Shirinobod, Samarkand and Uchmullinishansky district of Kashkadarya region and electronic maps.

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Pic 8. Map of the location of crops in the farm "Samarkand" Nishansky district.

Creating digital maps in ArcGIS software for land use and state land cadastre, as well as for other purposes.

Thus the benefits of ArcGIS:

- Development of high-quality maps and plans;
- providing digital maps of different sizes;
- Speed of the map creation process compared to other programs;
- Creation of centralized databases;
- Remote editing of digital maps (Internet);
- Ability to accurately deliver maps to GPS and electronic taximeters;
- Provision of interactive geo-information services.

CONCLUSION

ArcGIS, currently a widely used GIS system, is now very important for creating electronic maps and maps for mapping and planning agriculture. It is an automated system that allows the use of graphical and thematic databases for mapping, as well as for monitoring and application of monitoring data. This technology of making maps is one of the most popular and fast-growing industries today. ArcGIS is a powerful tool that allows companies and organizations to convert thematic maps and plans from paper to digital. When you enter digital data or map data into an electronic digital map and plan generated by ArcGIS, the program data will be automatically

downloaded, making it easier for us to prepare data about agricultural land or territories in MicrocoftExcel. In addition, a business or district diagram is added automatically if it includes a map diagram and a plan.

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