THE PROJECTION OF SPATIAL CURVES ON A GIVEN SURFACE IN APPLIED GEOINFORMATICS

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In Geoinformatics, the purpose of studying systems is to determine their space-time state, i.e. to determine the shape, size and position in space as functions of time. The shape and size of the system are determined by the boundary separating the system from the environment.

Geometrical images of this boundary are lines and surfaces. One of the tasks of determining the space-time state of the systems is to display the curved boundaries of the systems on a given surface. In applied Geoinformatics and cartography such problems are solved by depicting the relief of the physical fields of the Earth, various linear objects, curved boundaries of natural and artificial systems, etc. In general case, the boundary of the system is determined either by a set of points belonging to it or by a certain functional dependence. The article deals with the display of curvilinear boundaries of systems with parallel and Central projection on a given surface.

Key words: parallel projection, central projection, ruled surface, ORT vector of projection direction, curvilinear boundary of the system.

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