

## Effectiveness of the consecutive cross sections expression for the relief representation

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A map that shows the relief topography is having a lot of kinds. For example altitude tints map, and a color shaded relief map, etc. In late years, by a detailed digital altitude model, we can come to express an irregularity of the slight topography. In this way, we can recognize the topography intuitively.

However, like a contour line, it is important that we grasp ups and downs of the topography quantitatively. Therefore we stack a contour line on topography irregularity map and are effective in visualizing the ups and downs between specific two spots by beginning to talk about any section. Furthermore, we may express the topography as a map of the subject by handling shadow in the continuation section that cut and brought down a parallel section to equal distance continually. In addition, it may show former city space structure by grasping ups and downs of such slight topography.

This study made the topography irregularity map around the rich moat of topography ups and downs. Furthermore, I visualize the city space structure that watched "Ichigaya Hachiman" from a geographic characteristic as an example by consecutive cross section expression. And I reevaluate an effect of the consecutive section expression in the topography irregularity map.

As a result, I showed city space structure and ups and downs of the slight topography by an irregularity map clearly as well as superficial contour line and color shaded relief. And the consecutive cross section expression expressed detailed topography incline to supplement an irregularity map.

**Keywords:** topographic map, consecutive cross sections, urban space structure, moat of a Edo castle, hilly sections of Tokyo, shrine