The relative height map which visualized the slight topography of the flooding plains by aviation laser data

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In late years the damage caused by the flood of the small and medium size scale decreases as river improvement measures of the river advance. However, the development of the flooding plains along the river advances with this, and companies performing population and economic activities to settle down in without assuming a flood risk increase.The government works on making, publication of the hazard map and the maintenance of the caution refuge system continuously now. However, it is the event of the dike over there, and, for inhabitants, a company targeted for many staffs of local government and refuge, the flood is said to be it when hard to be readily arrested as a realistic risk since it is invisible. Particularly, the slight topography of the flooding plains that greatly influence distribution of the inundation depth at the time of a flood is very incomprehensible for a citizen, and understanding is difficult when I do not have a skill to be able to comprehend the special drawings such as figures of river improvement topography classification.In late years the maintenance of the highly precise numerical value topography model by the aviation laser measurement advanced and almost completed the maintenance of the numerical value topography model of the big river riverside. In addition, I came to be able to photograph a high-resolution aerial photo relatively easily. I visualize the slight topography such as the flooding plains, at the back damp ground which I match these techniques and use it, and influences the understanding of the flood risk along the river and the three-dimensional management of river facilities for a citizen and the administrative person in charge, and a technique to be actualized with a risk attracts attention.In the case of Kanto, Tohoku heavy rain, large-scale flood damage visualized the slight topography of flooding plains about Joso-City that occurred in September, 2015 and it was plain and, in this study, produced "a relative height map" to accuse experimentally.The topography which a human being usually sees is an irregularity in comparison with the neighborhood namely relative height, and the relative height is one of the elements which it is big, and influences the big things and small things of the inundation risk for at the time of floods again."The relative height map" sets a datum level to represent level ground of the river rear and makes the thing which I analyze the relative height with it and expressed with an appropriate color by letting irregularity information of the ground do an overlay. At this chance it was important that I let you display it at appropriate gradation and it was plain and was able to express the slight topography of flooding plains as a result of adjustment to emphasize a little slight topography of flooding plains. In addition, I was able to regard the slight topography of flooding plains as dike high School integrally by making "a relative height map" with the ground about the bank of a river separately, and fitting it.I compare it with overflow water, a rip point and the distribution of the depth of the inundation that "a relative height map" and Ministry of Land, Infrastructure and Transport and the research organization others which I made announce and am going to repeat improvement in future so that it is with "the relative height map" which can read a flood risk more precisely.

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