# Image Fusion On The Basis Of Multi-Resolution Analysis Grey Modulation

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**Abstract:**

It has already been an important task for setting up corresponding 3D landscape map by using 3D GIS. At present,there are roughly three kinds of traditional methods for solving this key problem, But their space geographical information expression function is deficient very much, which is unfavorable to set up high accurate digital campus basic geographical information database and infrastructure information database.
This paper expounds flow and procedure of making three-dimension landscape map based on aerial photograph or large-scale topographic map through all-digital photogrammetry software(virtuozo) and 3D visualization GIS software (IMAGIS), the former uses campus range aerial photograph in 2002.making measures stereo images of regular feature through virtuozo system.producing XYZ file of the building, at the same time , texture of building and terrain can
Extracted.however , significant building lateral texture on campus needs to utilize the digital camera to photograph, while using the digital camera to collect texture , conducting normal case photography as possible as soon. Reproducing the three-dimensional authentic scene finally.
As to making three-dimensional landscape map on the basis of large-scale the whole element topographic map, before modeling, corresponding compilation and process of digital map must be carried out using CASS4.0 software based on autocad environment. Meanwhile, pile of 3D building model and terrain features reproduces the true digital topographical model in IMAGIS environment, next, introducing height,color attribute of every building from the digital map, and then, establishing building model automatically in unison. After Basic model built up , through gathering building texture on the spot ,pasting all objects texture utilizing texture mapping function of IMAGIS, the result of the three-dimensional campus landscape map is more lifelike and more vivid.concluding from above , heavy characteristic of IMAGIS reflects in establishment of the three dimensional model , the system has offered many kinds of models establishment way, among them,three-dimensional entity modeling tool is its strongest function. Which have fully shown that surveying & mapping and virtual reality technologies possess strong function in digital campus construction.