

Automated processing for 3D Mosaic generation, a change of paradigm

Frank Bignone (Japan)

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SUMMARY

During last two years, a boom has been seen in the use of new generation of 3D database mainly pushed by the automatic processing of oblique imageries into real 3D models, known as example as 3D Mosaic. The introduction of such product has changed the way how people are interacting with 3D information and using that 3D information into their geographic system and organization. This paper will focus on the advantages of automated processing for 3D mosaic generation with some real case applications of such final product. Indeed, introducing automatic processing for such database has changed the current paradigm that 3D realistic database can only be acquired and generated with lots of manual work and taking months to get small area. Introducing fast automatic processing gives ability to map a whole city in few weeks and then to make available such data with very dense 3D details to numerous actors which can then integrate it into their application. It opens also real possibilities of asset monitoring, urban management on large scale while lowering the overall cost of 3D database management and maintenance. Demonstration of such automatic processing of large 3D dataset in short time and comparison with classic technology will be shown through numerous real-case examples. Real end-user applications will also be provided showing the benefit of such approach compared to classic means of 3D database production.