APPLICATION OF GIS TECHNIQUES FOR VISUAL DATABASE GENERATION IN FLIGHT SIMULATION

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ABSTRACT

This paper presents the application of GIS techniques to generate a large database (12 gigabytes) for use in flight simulation. The methodology involves use of imagery from multiple sources such as aerial photographs, sensor data, satellite imagery, etc. GIS techniques such as geocoding, image enhancement, image fusion, etc., are utilized to generate "viewplanes" at multiple resolutions. The resulting viewplanes are recorded onto optical video disks and are accessed in real time by the flight simulator for use by the trainee.