

## Simulation analysis of tsunami hitting Kaohsiung Cijin : The Application of City Information Model<sup>1</sup>

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**ABSTRACT.** *Although urban planning still relies on 2D planary map data today, the paper and digital cartographic information and data respectively used in early stage and recent years have a gap with realistic 3D spatial data. In other words, the traditional and conventional cartographic system cannot timely solve problems derived from 3D information integration, complex dimensions and the comprehensive decision-making support system. This study adopts City Information Model (CIM), including an integration of AutoCAD, Google Earth, Sketchup, 3DsMax and aerial photography of unmanned aerial vehicle (UAV), to simulate scenarios of tsunami effects and strategy to respond thereto. The simulation analysis results are expected to be used as a reference to quickly respond to potential tsunamis; plan disaster prevention strategy; and make engineering and construction decisions for the future development of Cijin.*

**Keywords:** *CIM (City Information Model); Simulation Analysis; Urban Planning; Disaster prevention strategy*

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