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Grimma Floodfighters – Open Geodata in a Real-time Strategy Game

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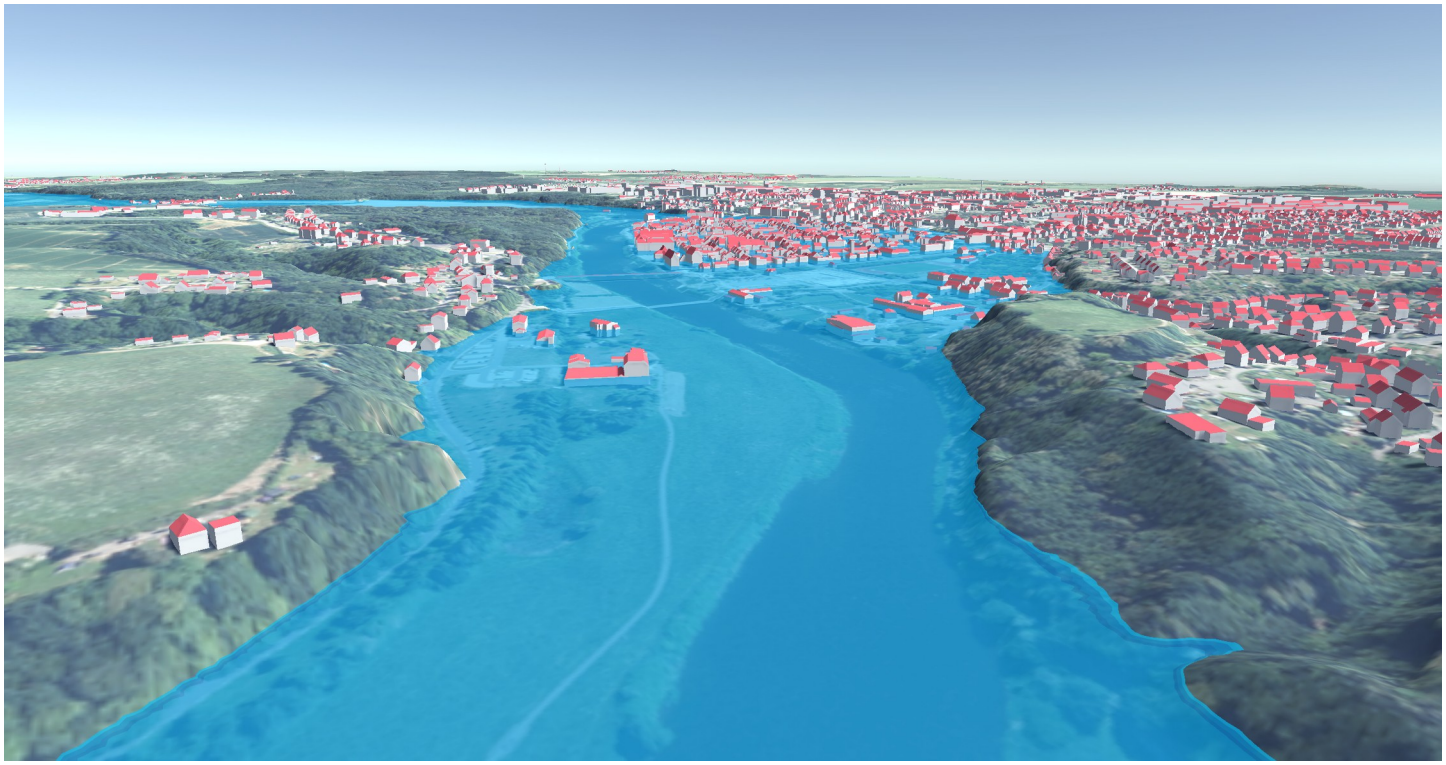

Abstract - ***The integration of open geospatial data into game engines, even today is still a time-consuming process. Different data formats have to be prepared in several steps. This project shows how open geodata can be usefully integrated into a real-time strategy game for a disaster simulation.***

The goal of the game is to fight the consequences of a flood and to rescue people. Floodfighter units can place sandbags and build temporary bridges. In addition, boats and emergency vehicles are at their disposal. The city model provides thematic information in real time to the emergency forces. The city model is based on open geodata of the city of Grimma in Saxony. The integration of the geodata in Unity is done via specially developed scripts.

Keywords – ***Open Geodata; GIS Data; Real-time Strategy Game; Game Engines; Serious Games;***

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References - Höhl, Wolfgang (2020). Official Survey Data and Virtual Worlds - Designing an Integrative and Economical Open Source Production Pipeline for xR-Applications in Small and Medium-Sized Enterprises. Big Data and Cognitive Computing 4(4). MDPI AG: 26. https://doi.org/10.3390/bdcc4040026

Geodata Source: Staatsbetrieb Geobasisinformation und Vermessung Sachsen (GeoSN), Datenlizenz Deutschland – Namensnennung – Version 2.0 (DL-DE/BY-2.0)

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