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Bit



ImmersiveEO

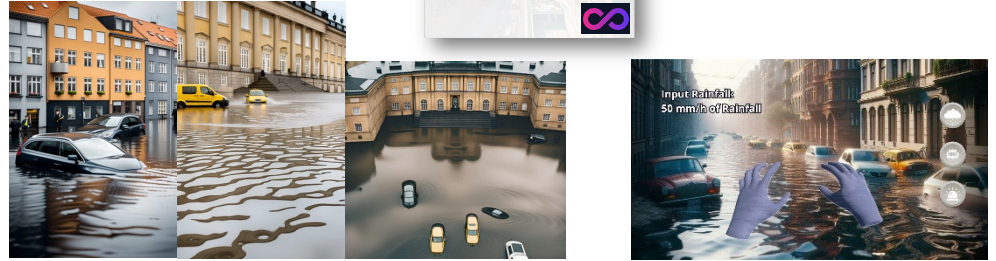
Immersive Visualization Metaverse for EO Applications

Demonstrate the potential of Extended Reality, Immersive Visualization and Metaverse for EO Uses Cases

S. Fratini, 3rd Destination Earth User eXchange, Darmstadt, 15-16 October 2024

Overview

- Demonstrate the potential of **extended reality, immersive visualization and metaverse** for EO uses cases
- Develop **Digital twin** environment
- Foster **Enhanced interactions** and simulations
- Exploit Key techniques of **VR/AR and XAI/GenAI**
- Demonstrate how DT can serve **Policy and Decision Makers**



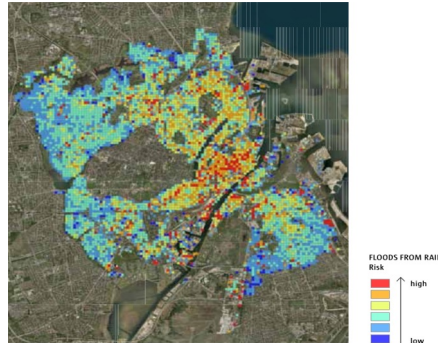
Scenario



- **Climate change** is leading to an increase in heavy precipitations, sea level rise and storm surges.
- **Land cover change** leads to substitution of natural areas with urban areas, changing soil permeability and infiltration.

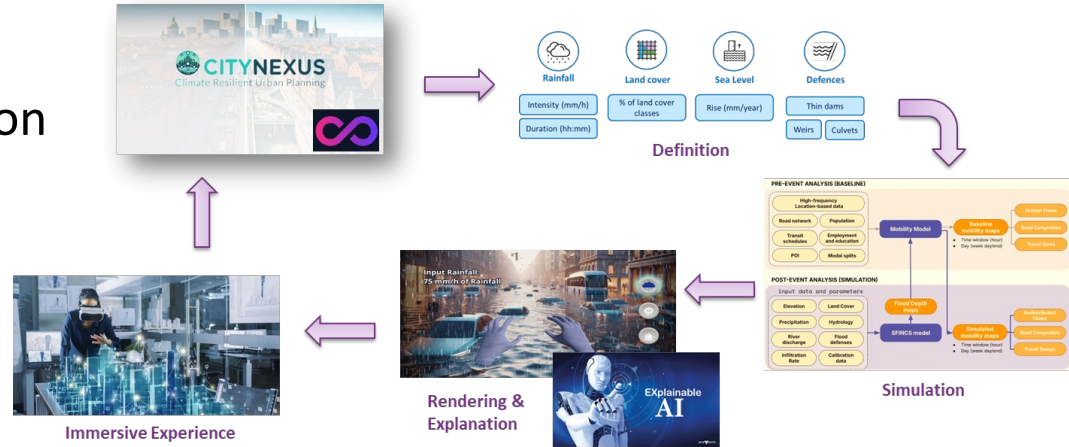
In Denmark:

- By 2100 the intensity of 10-year rain events is expected to increase by around 30% while 100-year rain events by approximately 40%.
- By 2100 the frequency of 1-50 year one-hour rain events are projected to occur every 10 years.
- By 2100 winter precipitation will increase up to 55% while summer precipitation will decrease up to 40%, with more intense rain events



Visu4EO

- Advanced support for policy and decision makers
- Climate Change Adaptation
- “Wow Factor”
- AI/GenAI/XAI/AR/VR



Thank You



Solenix Engineering GmbH
Spreestrasse 3
64295 Darmstadt
Germany



info@solenix.de



www.solenix.de



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