

# Využití VR a AR v GIS

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Geo-harmonizer project (2018-EU-IA-0095)

# Převod GIS dat a specifikace funkcí

## Fáze testování

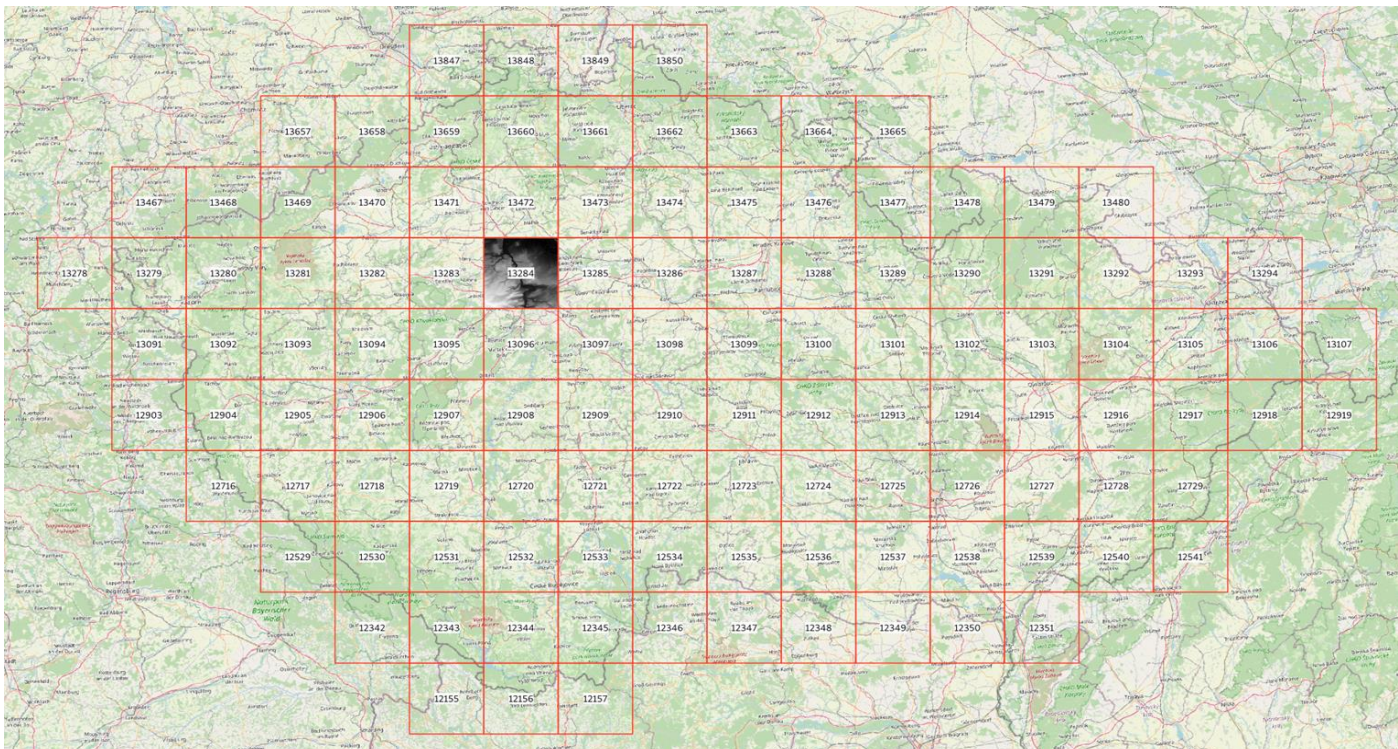
- Volba vhodného softwaru
- Volba vhodných formátů – glTF, usdz, fbx, obj
- Požadované funkce – LandCover, porovnání, OSM

## Fáze tvorby samotné aplikace

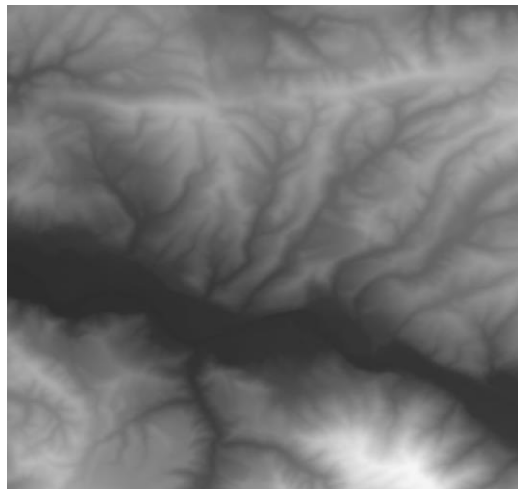
- Standardizovat postup
- Tvorba komplexní aplikace pro zobrazení zvolených dat



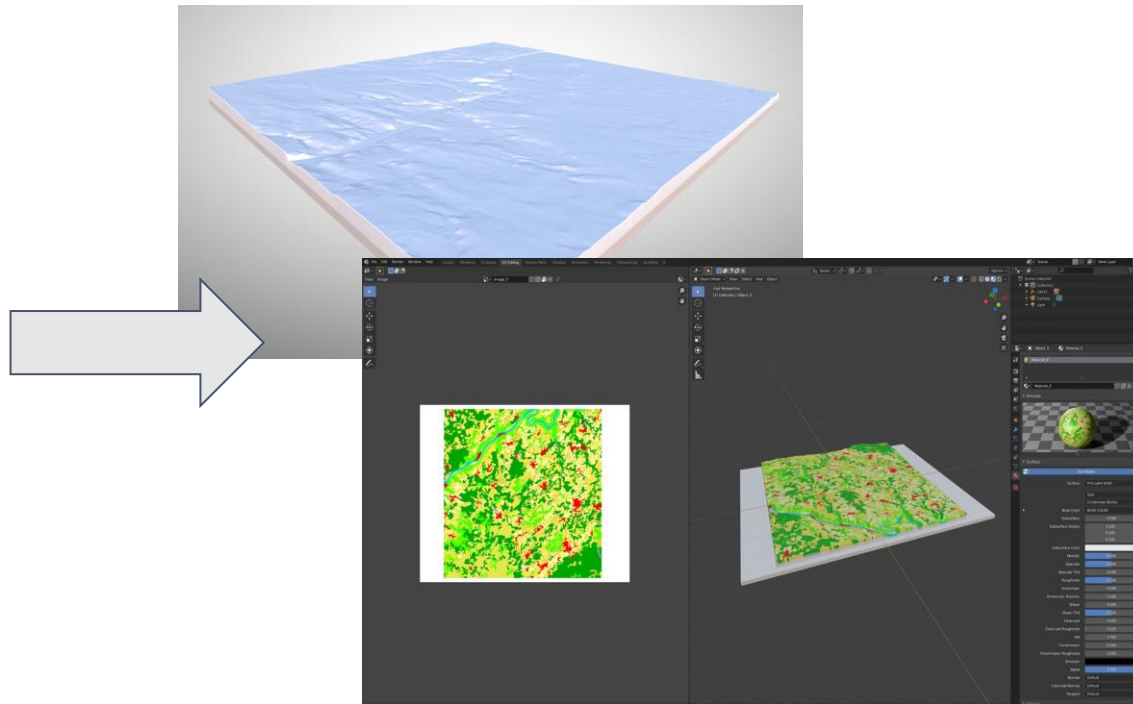
# Tvorba DEM dlaždic



# Převod DEM TIF dlaždice do glTF

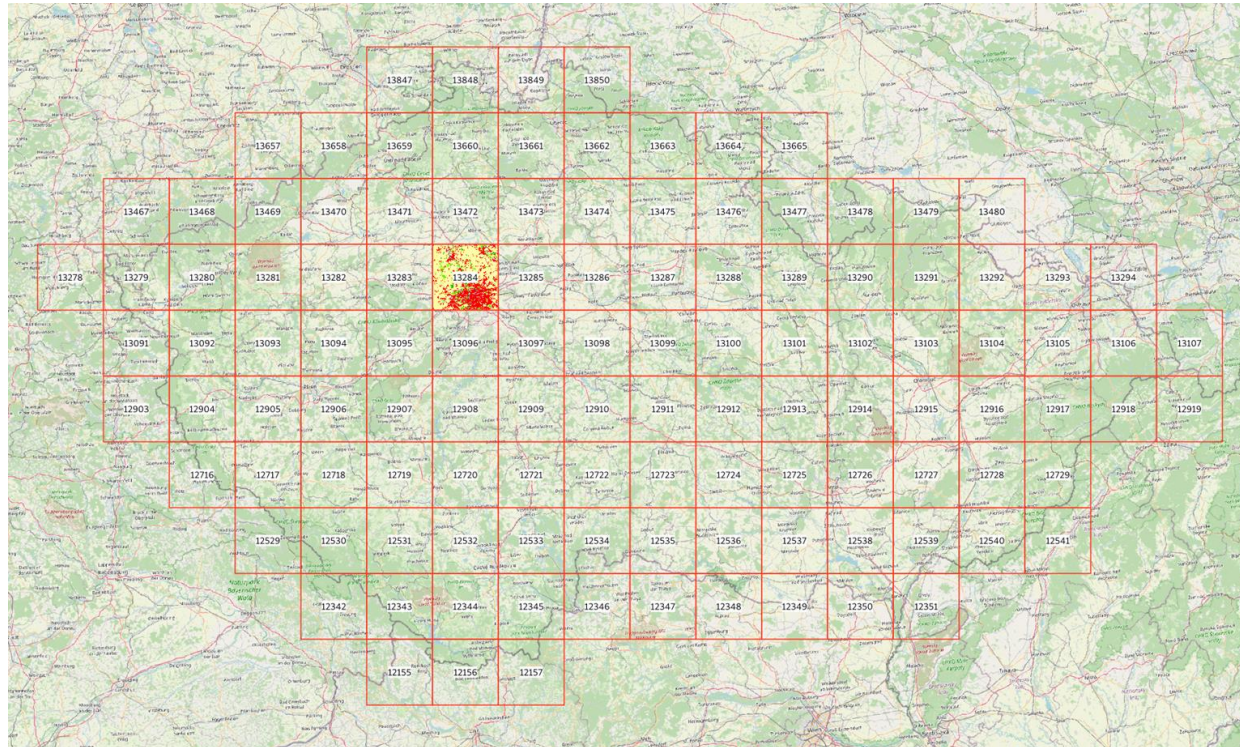


DEM GeoTIFF 16-bit

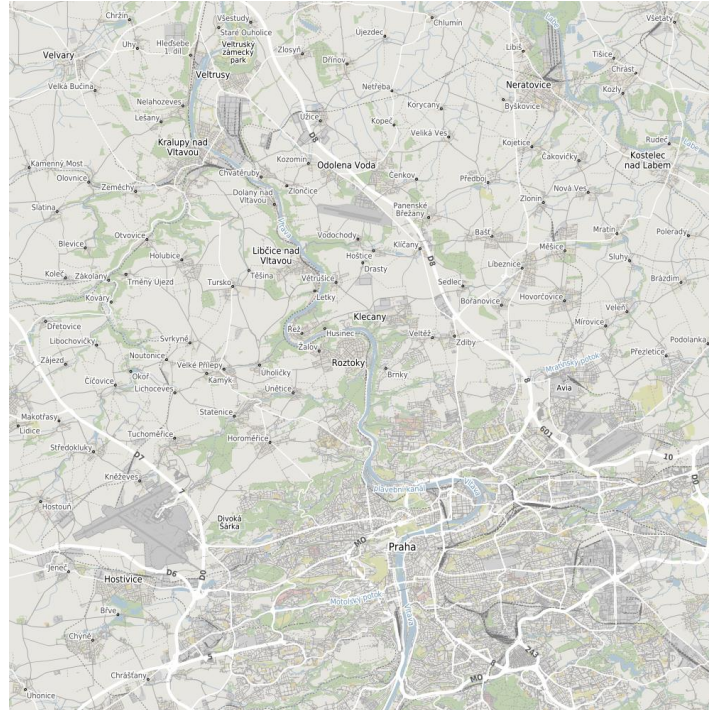


glTF 3D object

# Tvorba PNG souboru pro Land Cover

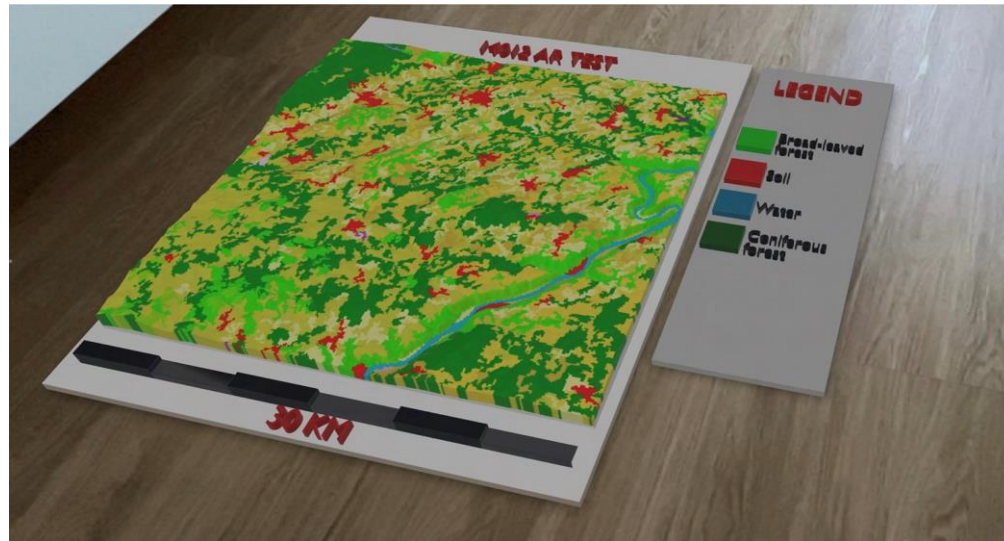


# Tvorba podkladové mapy OSM



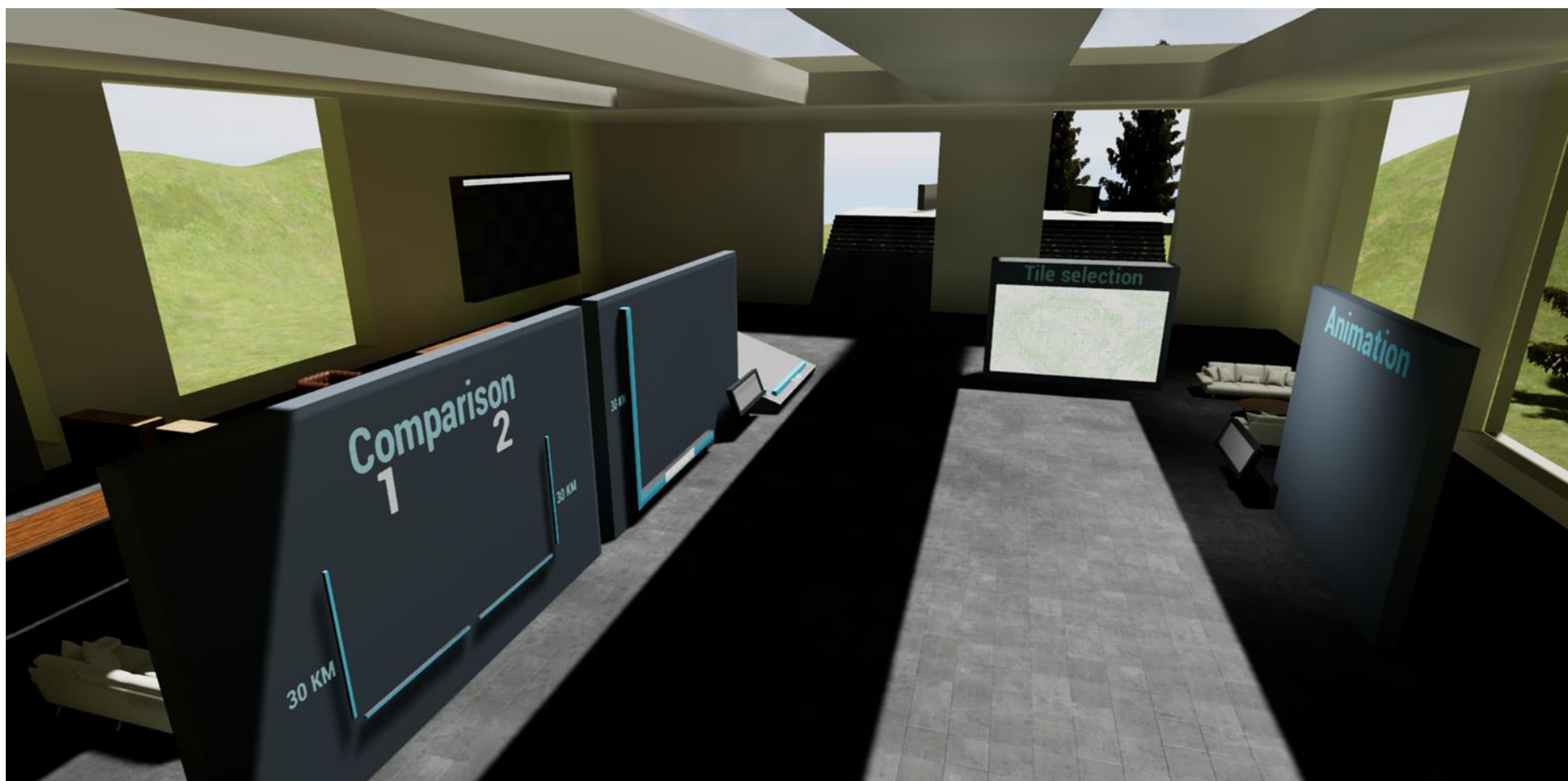
# AR aplikace

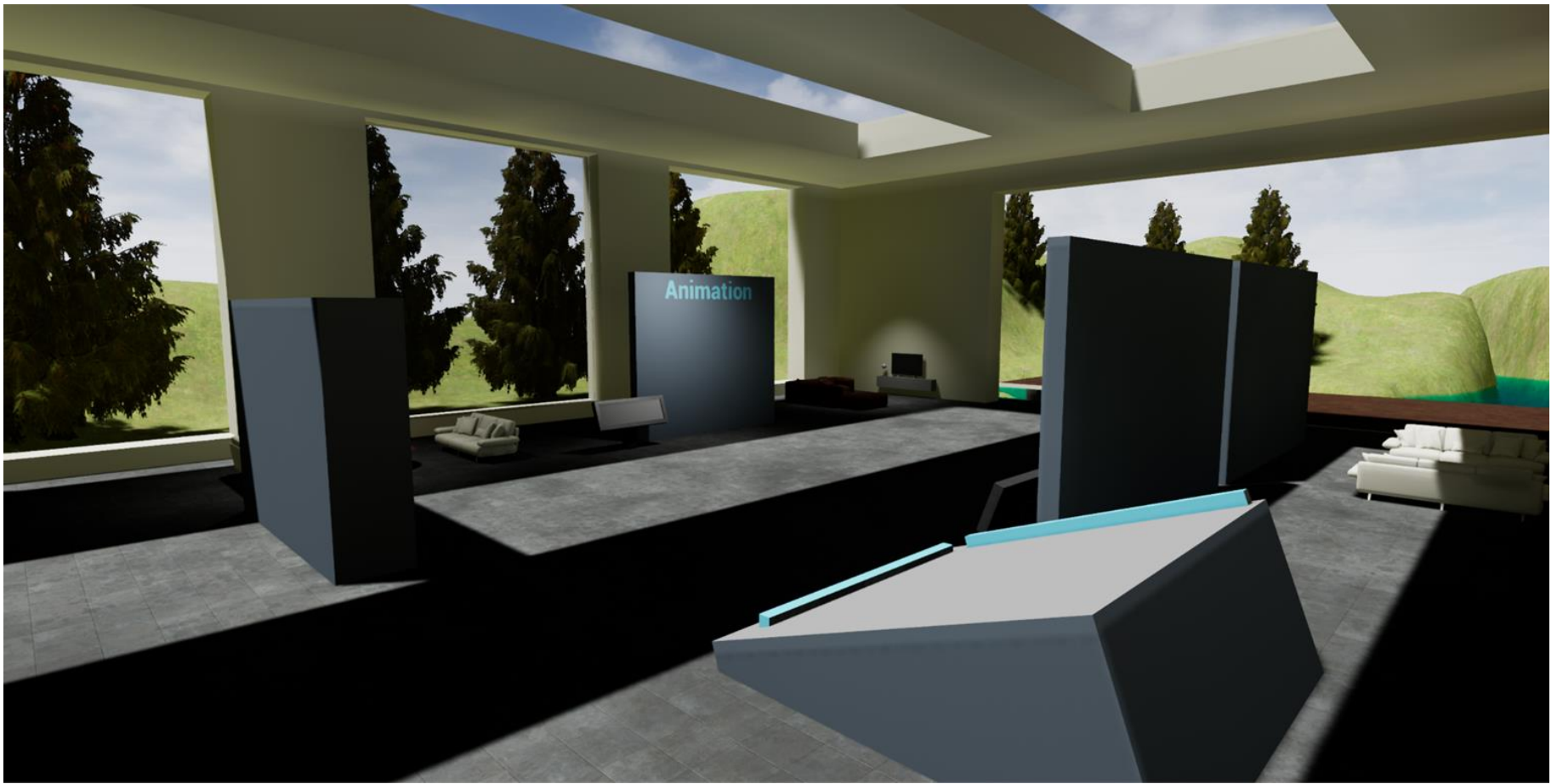
[https://www.dropbox.com/s/9593gt4c91l79nf/CVUT\\_AR.mov?dl=0](https://www.dropbox.com/s/9593gt4c91l79nf/CVUT_AR.mov?dl=0)

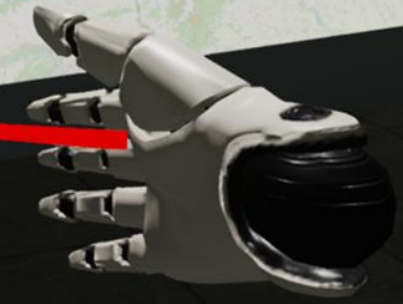






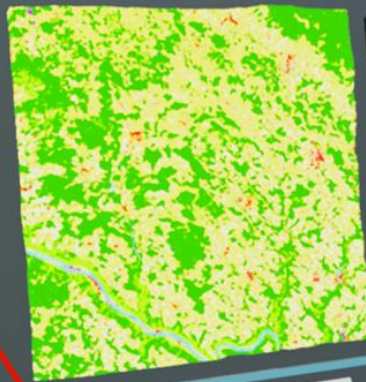
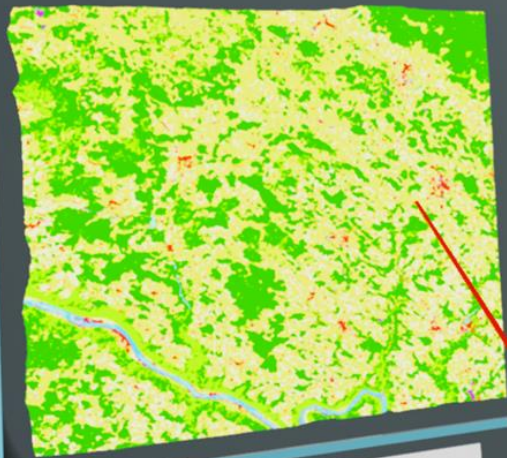






# Comparison 1 2

0 KM



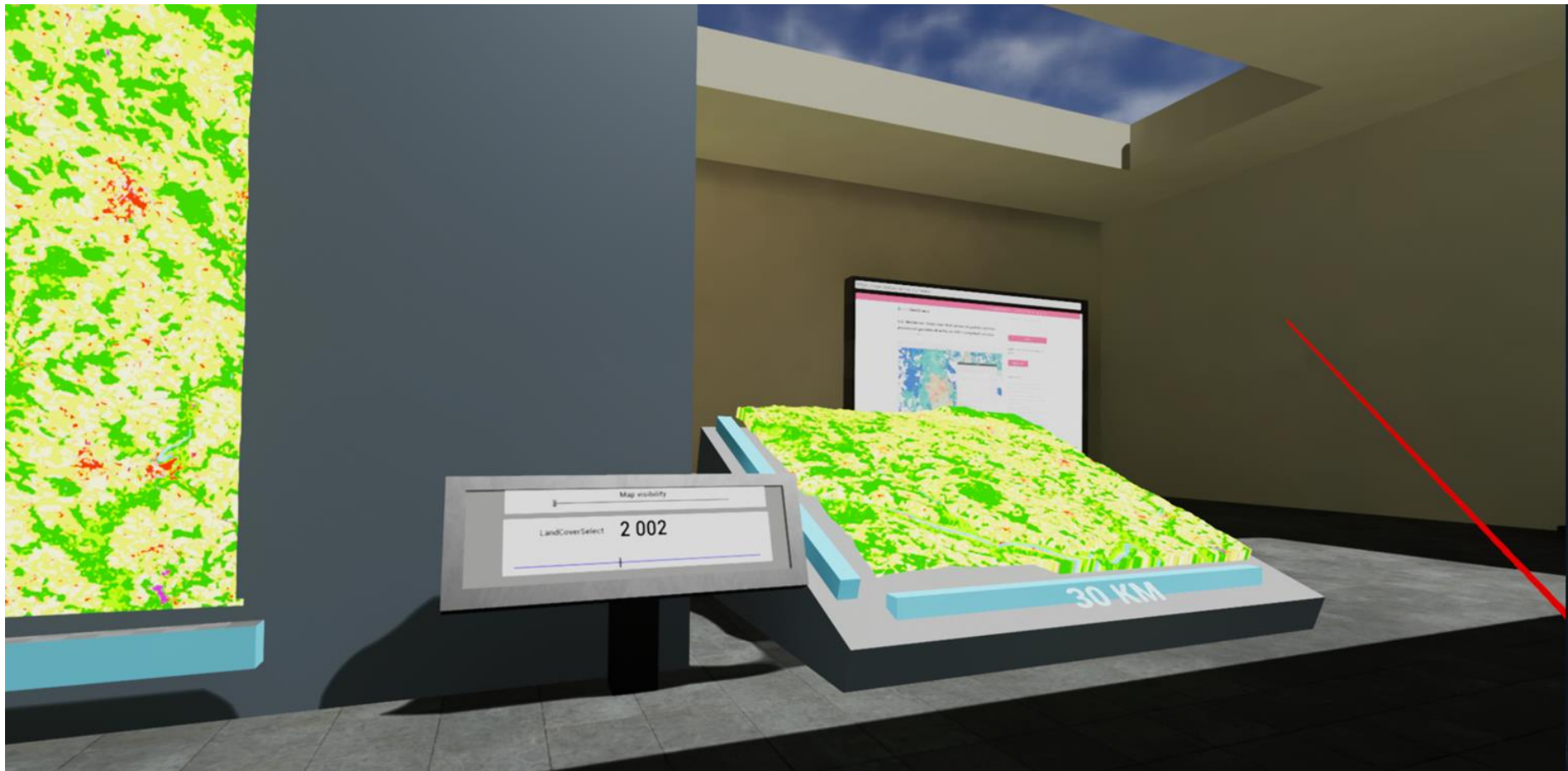
30 KM

30 KM



Fly over selected tile





# Plánované výstupy pro AR a VR apps

1. AR/VR - 118 dlaždic ČR
2. AR/VR – LandCover 2000-2019
3. AR app bude podporovat iPad s LiDAR senzorem
4. Komplexní dokumentace tvorby, která bude k dispozici – open source

Děkuji za pozornost