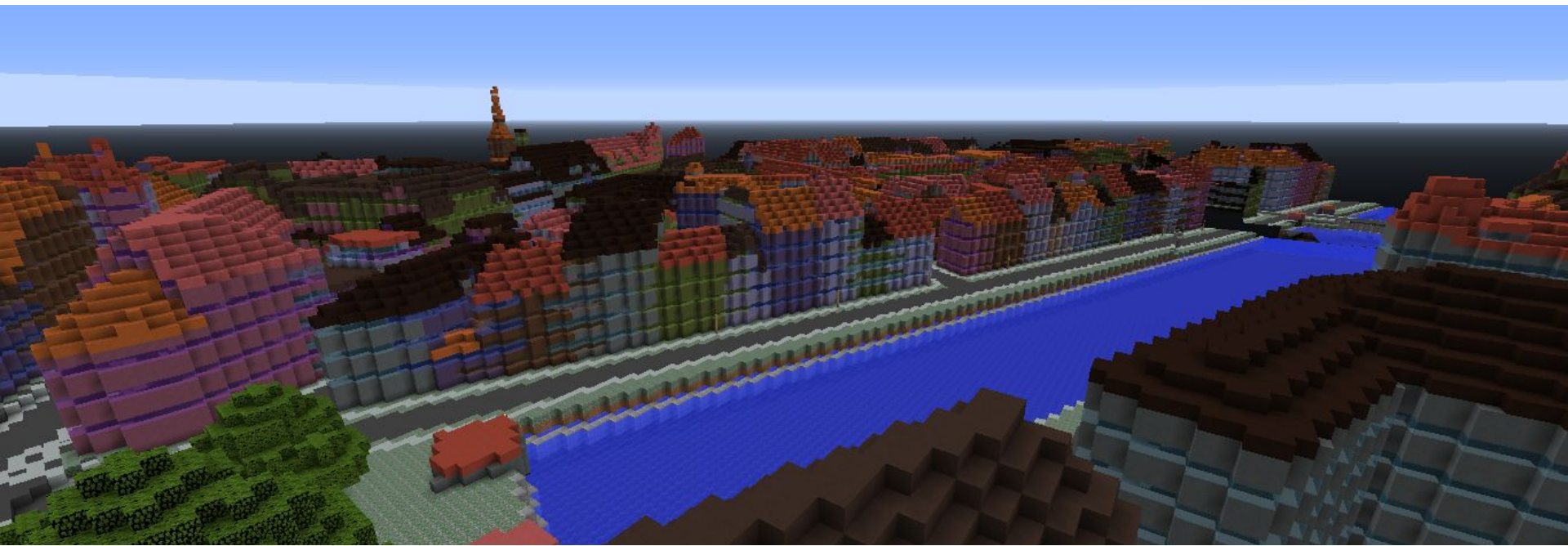


Using Minecraft to involve citizens in urban planning and design

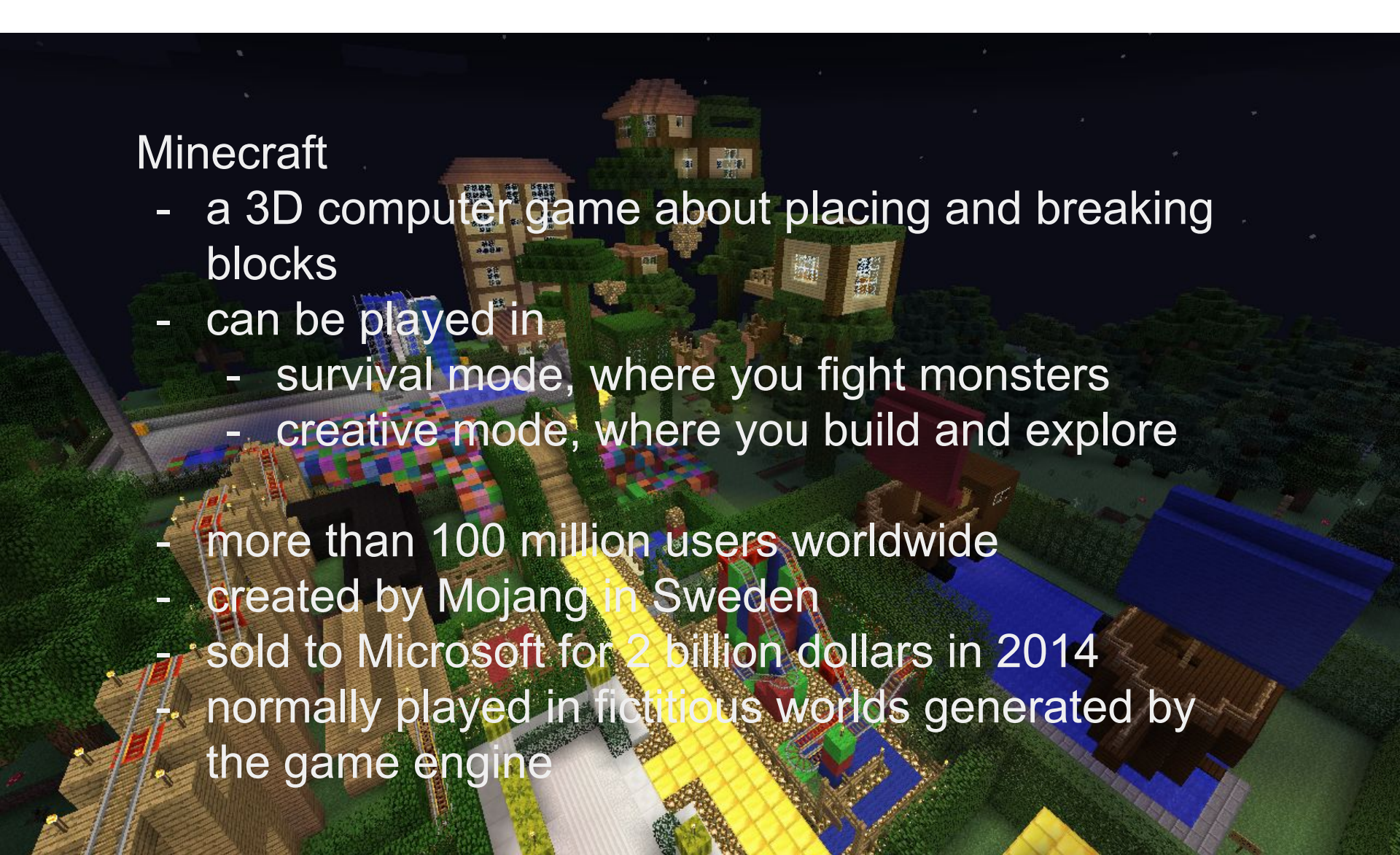


Real-world data in Minecraft



Minecraft

- a 3D computer game about placing and breaking blocks
- can be played in
 - survival mode, where you fight monsters
 - creative mode, where you build and explore
- more than 100 million users worldwide
- created by Mojang in Sweden
- sold to Microsoft for 2 billion dollars in 2014
- normally played in fictitious worlds generated by the game engine



The world is urbanizing

People living in cities:

1950: 746 million

2014: 3.9 billion

... 2050: 6.4 billion (~ 66 % of the world's pop. is urban)

United Nations, 2014: <https://esa.un.org/unpd/wup/>

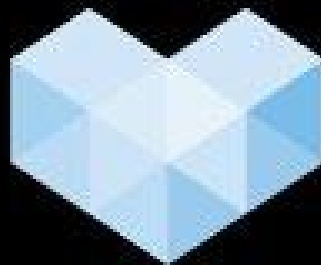
Why involve children and youth in urban design and planning?

They

- see cities from their perspective
- learn about architecture, sustainability, urban planning
- contribute with ideas
- gain confidence, when listened to
- become more engaged citizens
- grow up and become tax payers and voters



BLOCK BY BLOCK™



BLOCK BY BLOCK™

“We think [Minecraft] is a great tool for engaging citizens, particularly normally hard to reach groups such as youth, women and slum dwellers in urban design.” *Pontus Westerberg, Digital Projects Officer, Urban Planning and Design Branch, UN Habitat*

Denmark in Minecraft



Denmark in Minecraft

43.000 km²

4000 billion Minecraft blocks

Elevation models and map data

Made for the Danish Geodata Agency in 2014



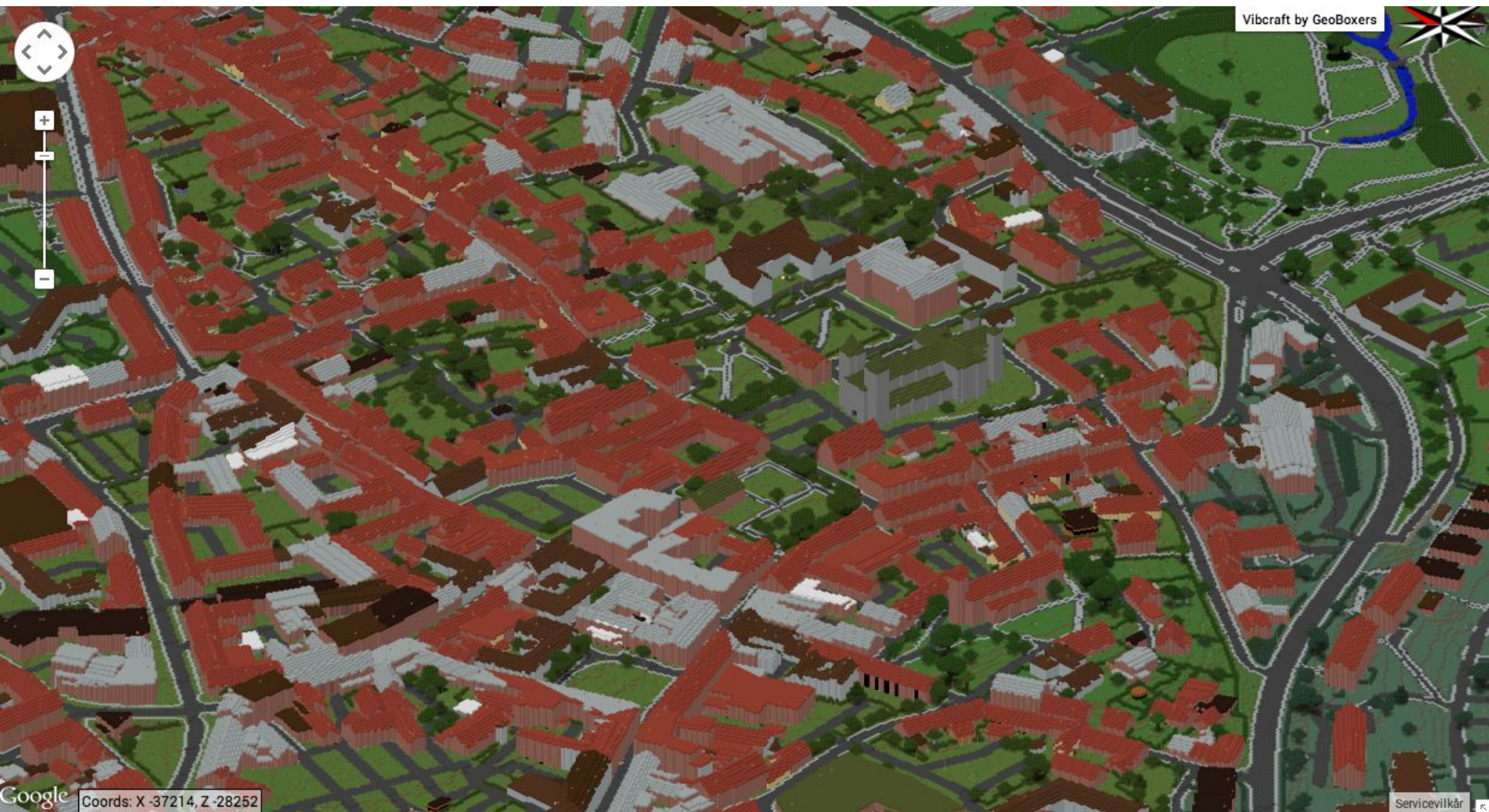
<http://www.geoboxers.com/denmark-in-minecraft/>



Data used: Danish Geodata Agency and Danish Municipalities



Data used: Danish Geodata Agency and Danish Municipalities



[3D overview of Viborg in Minecraft.](#)

[Vibcraft - the municipality of Viborg in Minecraft](#)



Use

- in education
- citizen involvement in urban planning
- branding
- fun...

Vibcraft - the City of Viborg in Denmark in Minecraft.



Data used:
Elevation model
Map features
3D city model
Building materials
Geology
Crops in fields

3D point clouds

Vibcraft

<http://www.geoboxers.com/vibcraft-viborg-in-minecraft/>

Stavanger city in Minecraft



Data used: Stavanger Kommune and OpenStreetMap contributors

... Stavanger city in Minecraft



How to get started?

Have your area made in Minecraft

Elevation models

Topographic data; eg. roads, buildings,
vegetation, land use

3D city models

3D architectural drawings

Engage with local Minecrafter(s) to assist

Conduct a workshop



GeoBoxers generate Minecraft worlds based on real data:

Elevation models

Topographic data; eg. roads, buildings, vegetation, land use

3D city models

3D architectural drawings

3D point clouds from laser scans or photogrammetry

Visit www.geoboxers.com for more information



GeoBoxers bring real-life geodata in play – 3D play. Our approach and experience opens up new possibilities to introduce the real world in gaming for education, citizen involvement, tourism... and fun.



Real-world data in
Minecraft - for



GIS and geospatial data

We are experienced professionals

Contact:

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nynne@geoboxers.com



Copenhagen in Minecraft



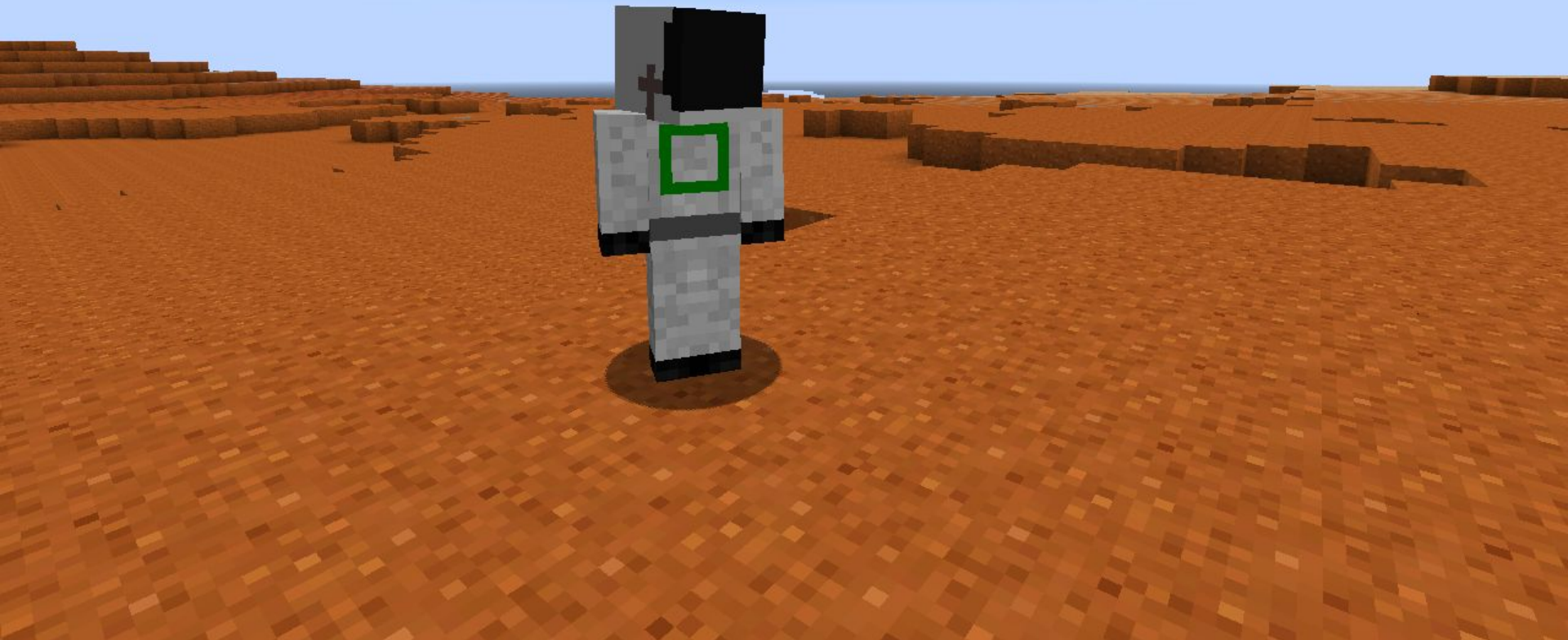
Data: Denmark in Minecraft + 3D citymodel
Watch it here: <http://demo.geoboxers.com>



Data used: Dansih Geodata Agency and the City of Copenhagen

Rundetårn

Mars in Minecraft by GeoBoxers



<http://www.geoboxers.com/life-on-mars-mars-in-minecraft/>

Download (free): <http://www.geoboxers.com/download-mars-in-minecraft/>