



SuperMap





Beijing, 1997
Found by Dr. Ershun Zhong

23+

Years for GIS software

4k

Employees

1k

Partners in 30+ countries

38

**Branch offices and
subsidiaries**



5 Main Key Technologies

BIG DATA GIS

AI GIS

THREE DIMENSION GIS

CROSS PLATFORM GIS

CLOUD COMPUTING



SuperMap iDesktop Empower **Smart City** with **3D GIS** Capabilities

Firdausi Zahara Gandes – SuperMap Instructor

Smart City

Accessible and has an element of intelligence information

Provide more decent life

Good quality education

Increase job opportunities

Clean environment

...

GIS is everywhere...

Traffic Application

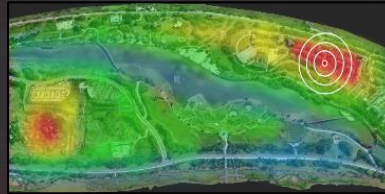


Visual display



Location service

Emergency application

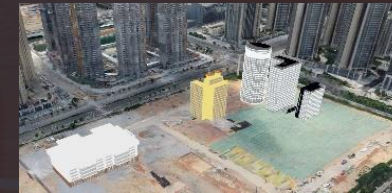


Heatmap



Visual exercise application

Social governance



Spatial analysis



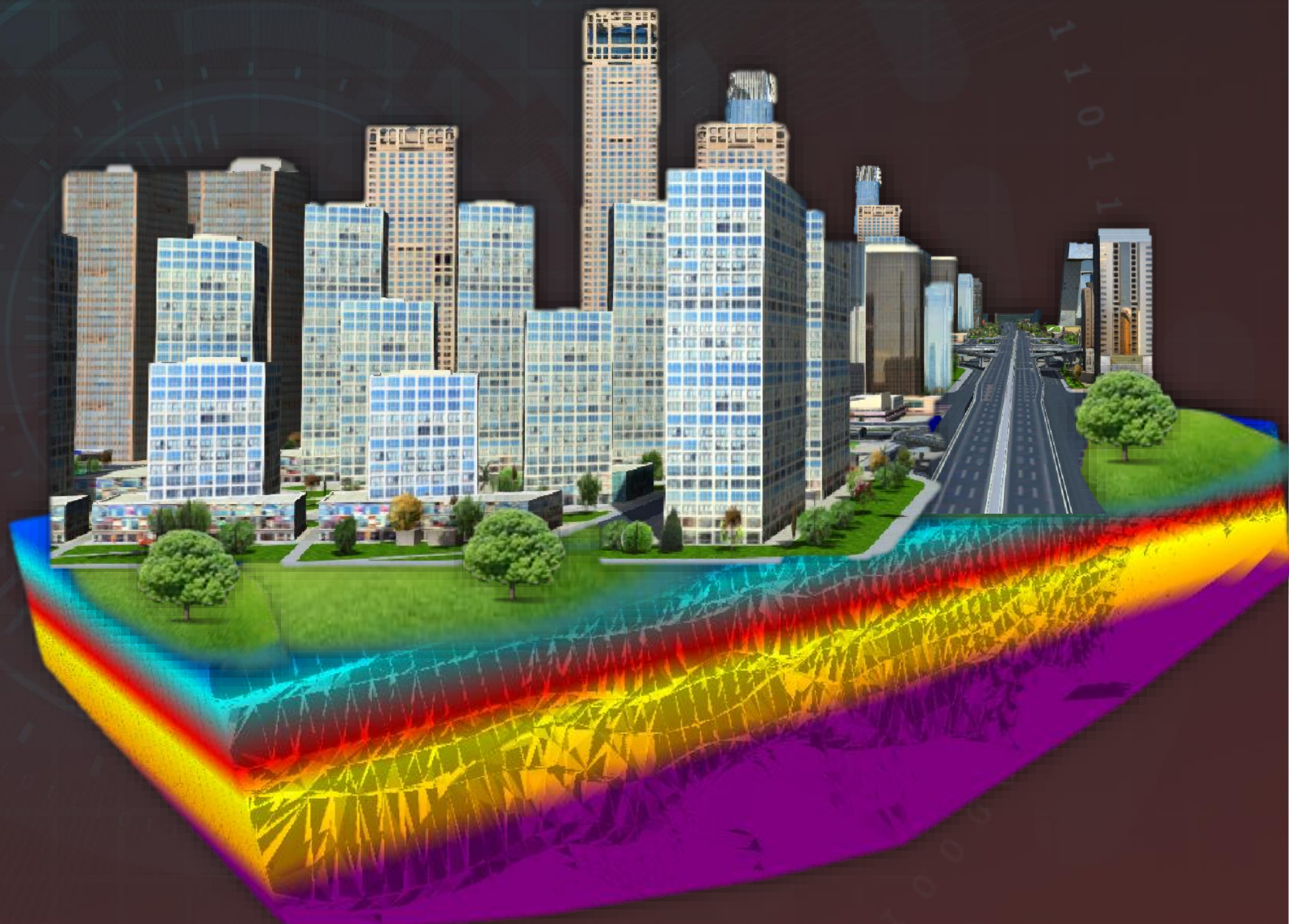
Planning model in
2D and 3D space

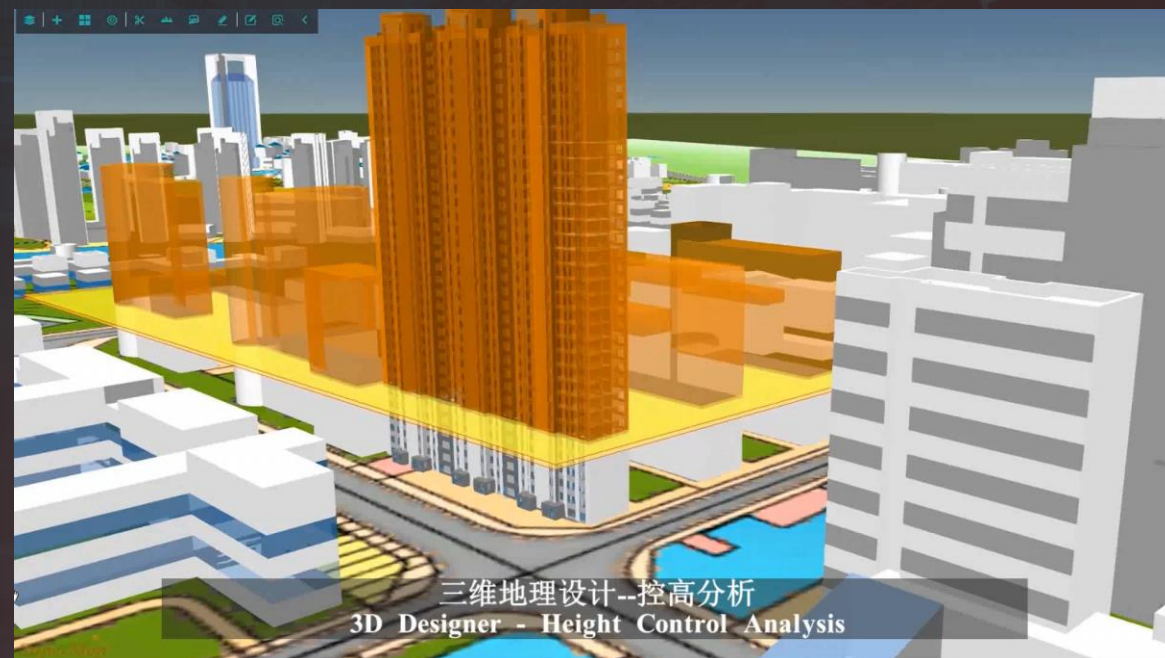
Urban management application

Water application

Business Application

How about
3D GIS ?





3D Legality

New Generation of 3D GIS

SuperMap

Applications of New Generation of 3D GIS

New Technologies of 3D Interactive and Output

3D "Zero Client"

VR

3D

3

Ascending Dimension of IT Technology Experience



Oblique Photography 3D Data



BIM Data



Point Cloud Data



3D Field



3D Terrain Data



Manual Modeling



Symbolic 3D Scene



3D Data of Underground Pipelines

2

Ascending Dimension of Multisource Data

2&3D Integration

Data Models Integration

Symbolic 3D Scene

Analysis Functions Integration

Soft

1

Ascending Dimension of Data Models



中国铁建

中铁十一局集团有限公司

CHINA RAILWAY 11 BUREAU GROUP CO.,LTD.

SuperMap

0#台 5#墩 7#墩 10#墩 16#墩 22#墩 28#墩

桥梁全长1497米 主要由三部分组成

How to Express 3D Continuous Space

Sunshine Rate

Noise Field

Geological Properties Field

Signal Field

Contamination Rate

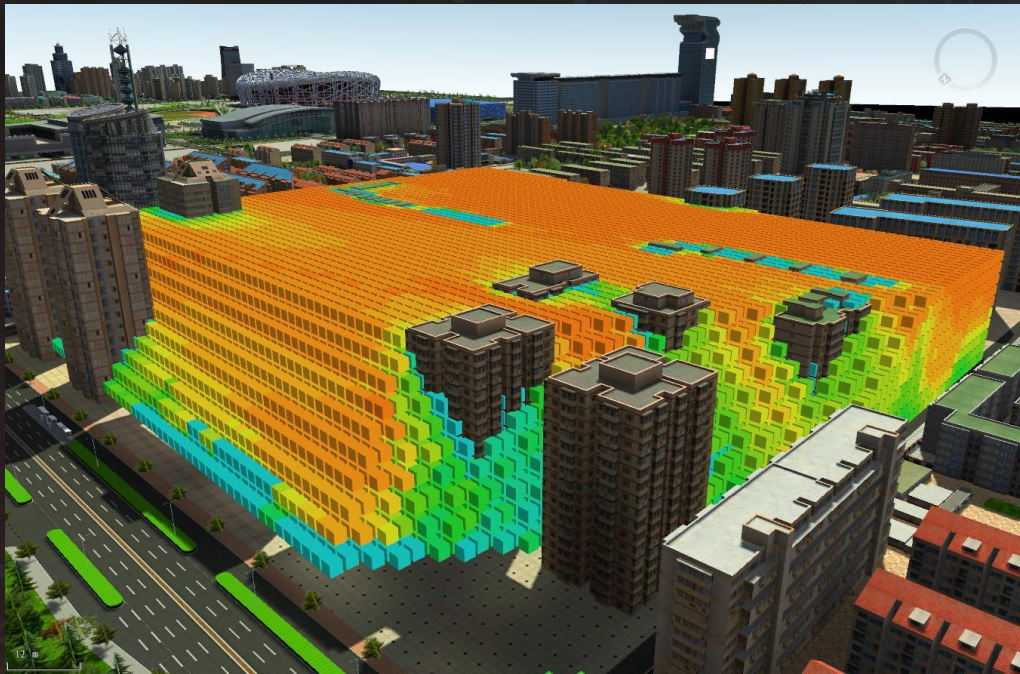
Wind Field

Temperature Field

Seismic Wave

...

Voxel Grid



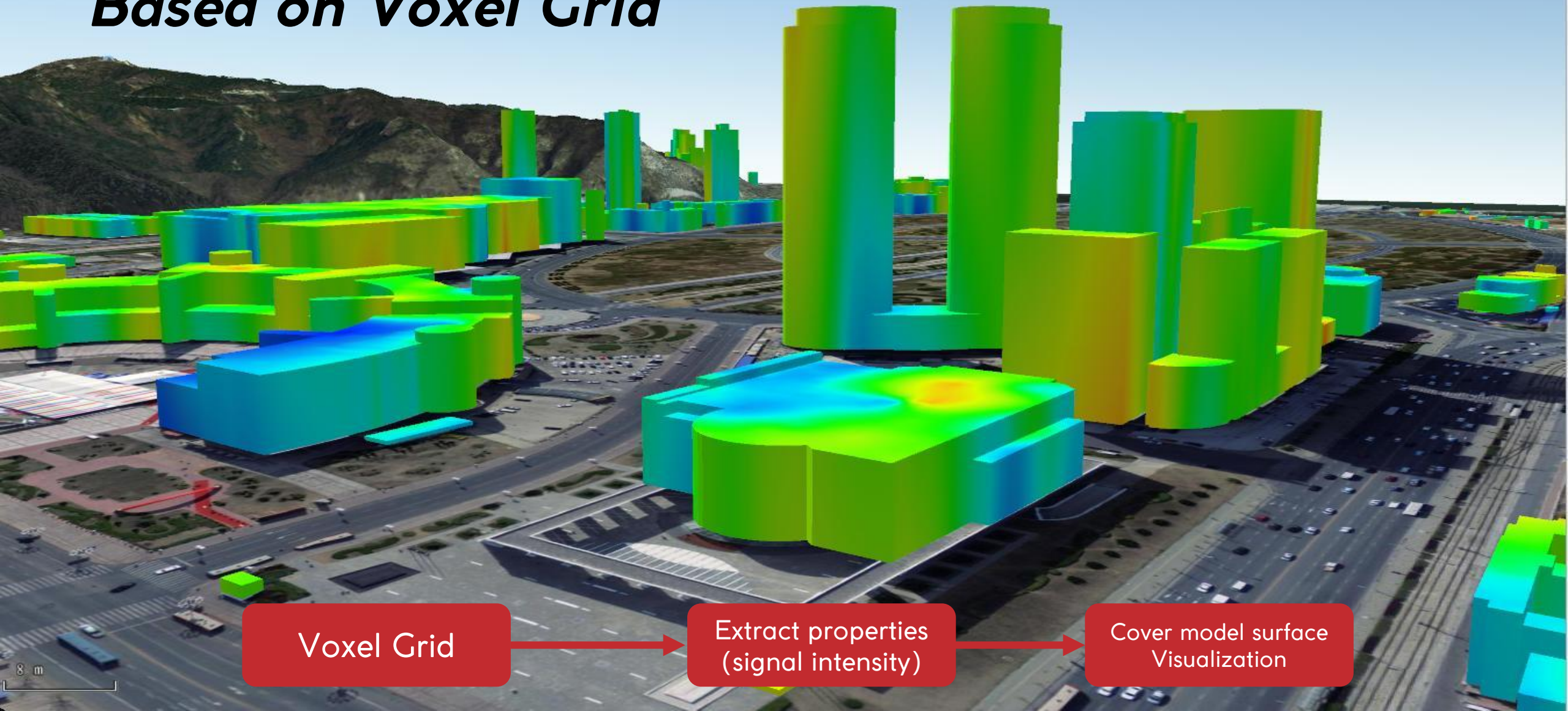
Definition

- Regular division of 3D continuous space or phenomenon.
- Consist of volume elements(Cube/regular hexagonal prism) arranged in regular order in 3D space.
- Simple structure.

Express 3D Continuous Space

- 3D fields : Communication signals、 temperature、 wind field、 contamination etc.
- 3D analysis results: Sunshine rate etc.

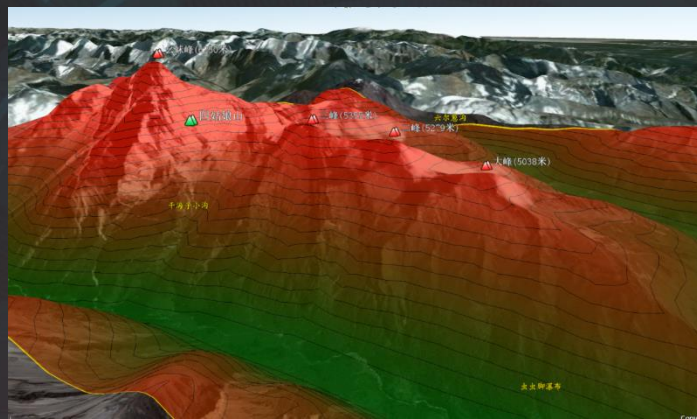
Expression of Signal Field Based on Voxel Grid



Voxel Grid

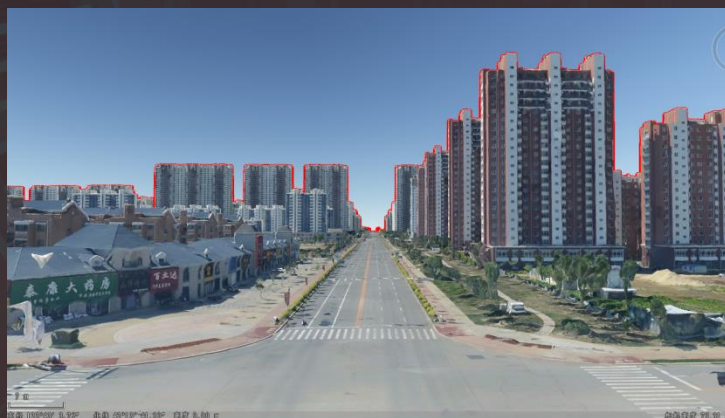
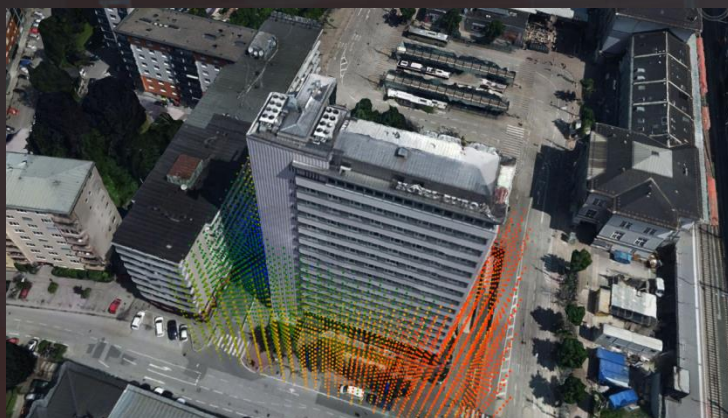
Extract properties
(signal intensity)

Cover model surface
Visualization



3D Spatial Analysis

- Visibility Analysis
- Inter-visibility Analysis
- Shadow Rate Analysis
- Skyline Analysis
- Profile Analysis
- Terrain Contour Map
- Terrain Aspect Map



Today Goals

1. **Generate 3D model from 2D data**
2. **Create voxel grid from 3D points**
3. **Analyze 3D data spatially**
4. **Achieve beautiful effect for 3D data**

Try now!

Download material

https://bit.ly/SMCweb_material

Submission Link

https://bit.ly/SMCweb_submission

Participant who send their submission (details available on submission link) will get certificate from us!

Due date : **08-08-2020**)

Further information please reach us by email at

global@supermap.com or gandes@supermap.com

Or visit supermap.com/en

