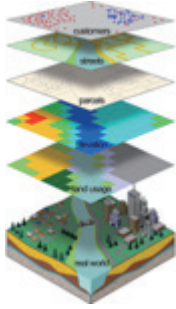# Outdoor Environmental Simulation using GIS data

## scSTREAM function

Using geographic data for more accurate analysis

## Outline

Within various graphical data in GIS data, the topography, buildings and trees can be read as an analysis model. Also, the shape created by native format of BIM-CAD or by general format can be read as well.
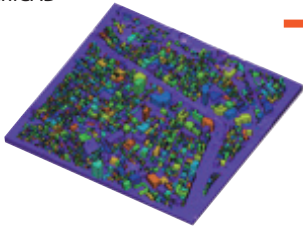


- **Geographical data**
  - Latitude and longitude
- **Shapes**
  - Terrain
  - Buildings
  - Trees
- **Materials**
  - Ground surface
  - (Buildings)
- **Settings**
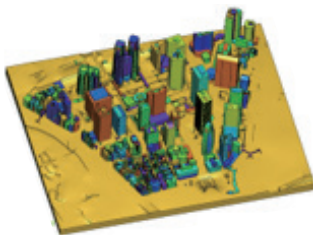  - Traffic > Heat load
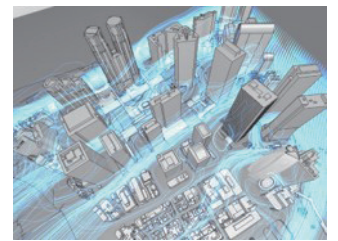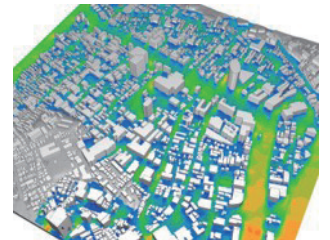  - > Gas concentration
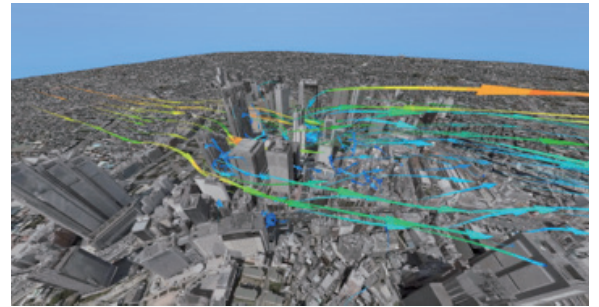


## Importing topography and building data

- Autodesk® Revit® Architecture
- GRAPHISOFT ArchiCAD
- CATIA
- ProE
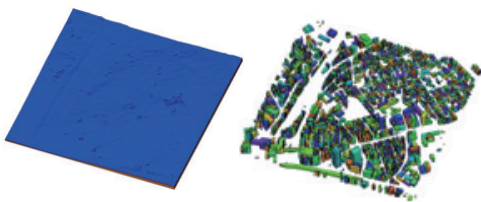- Solidworks
  (and more)

- Parasolid
- STEP
- SHAPE (GIS)

scSTREAM
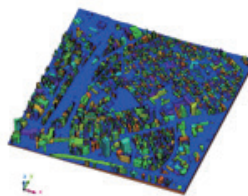Thermofluid Analysis System
with Structured Mesh

**Analysis result**



## Combining topography data and building data

**Topography** **+** **Building**



**Combine**

**Combined by scSTREAM**



**Analysis result**