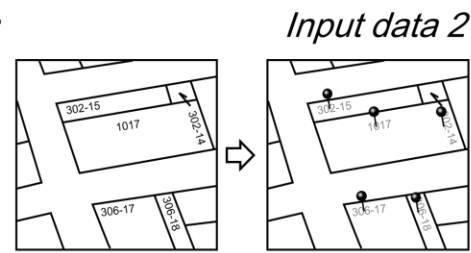


1.



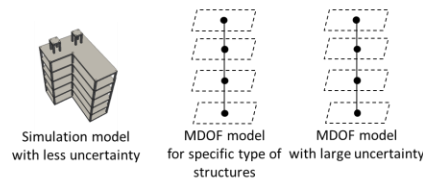
CAD polygon surfaces representing each building of a target city

2.



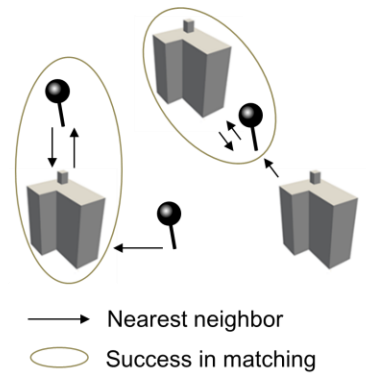
Extraction of position and attribute data from land lot maps relating to official building registry

6.



Sequential trial of model construction

3.



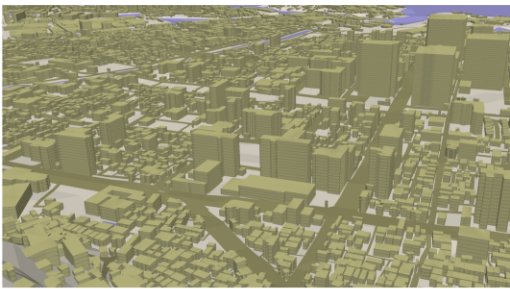
Matching of CAD polygon surfaces and attribute data

4.

Building Footprint	Building Footprint
<ul style="list-style-type: none">• Number of stories	<ul style="list-style-type: none">• Structure type• Number of stories
Model Shape	Model Shape
<ul style="list-style-type: none">• Location• Structure type• Construction date• Number of stories• Floor area	

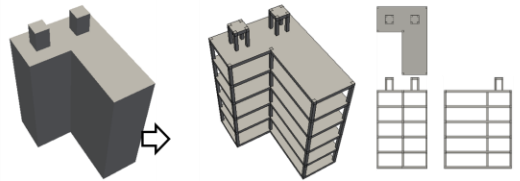
Automatically generated heterogeneous structure datasets of a target city

7.

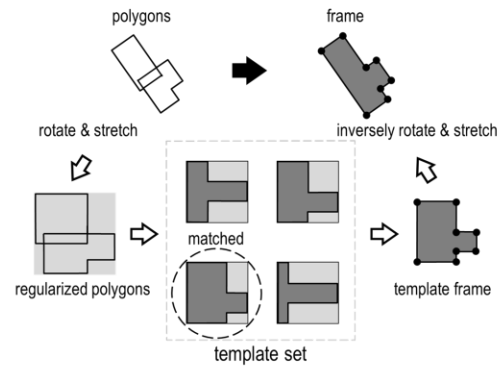


Structure models for urban earthquake simulation

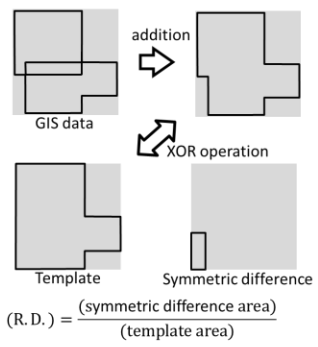
5.



Conversion of CAD polygon surfaces to 3D shapes with topological information making use of template fitting methodology



Schematic of template fitting



Evaluation of the relative difference between polygons