Online Demo Collection

The following demos show street models for different cities including the area around TU Munich, Grafing, Tokyo, New York City and Melbourne.

The 3DCityDB Web-Map-Client is a web based front-end for 3D visualization and interactive exploration of semantic 3D city models.

Find below some examples for different city / street space models. Click on a specific link to be redirected. (Google Chrome-Webbrowser recommended)

<table>
<thead>
<tr>
<th>City</th>
<th>Link</th>
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<tbody>
<tr>
<td>Ingolstadt</td>
<td><strong>Link: Detailed Streetspace model generated from OpenDRIVE data (textured with DOP20)</strong> Including diving lanes, crosswalks, bike lanes, sidewalks, markings, vegetation and city furniture (traffic signs, traffic lights, lanterns, etc.). The original OpenDRIVE data was produced by 3D Mapping Solutions GmbH <a href="https://www.3d-mapping.de/">https://www.3d-mapping.de/</a> The traffic sign models were provided by Software-Service John GmbH</td>
</tr>
</tbody>
</table>

![Image of Ingolstadt demo](image.png)

**Link: Detailed Streetspace model generated from OpenDRIVE data**

Including diving lanes, crosswalks, bike lanes, sidewalks, markings, vegetation and city furniture (traffic signs, traffic lights, lanterns, etc.).
Link: Motorway Interchange in Ingolstadt

Due to the large number of individual objects in this demo, the web-client might take a moment to load. The Google Chrome web browser is recommended to view this visualization.

Each TrafficArea contains information on function, area in square meter and the IDs of the corresponding OpenDRIVE referenceline (for driving lanes). This includes TrafficAreas with multiple functions such as driving lane, crosswalk or bike lane. Each TrafficArea can belong to multiple OpenDRIVE referencelines. Note that geometries do not overlap (non-redundant).

The image below shows a query of all TrafficAreas belonging to an OpenDRIVE referenceline with id = 3124035 (highlighted in yellow).
Link: Ingolstadt LoD3 Streetspace (derived form OpenDRIVE data) + LoD3 Buildings Demo
Munich

**Frankfurter Ring**

Link: Bridge and Streetspace model including 3D traffic simulation visualization (including vegetation and traffic signs)
This Web-Client was created using CityGML data provided by the city of Tokyo (Project PLATEAU).

**Link: Center of Tokyo - Results of a Solar Potential Simulation**

The solar potential simulation was conducted for an area in central Tokyo. Each Building contains information on direct, diffuse and global irradiation values in \([\text{kwh/m}^2]\), as well as a Sky View Factor (SVF). The simulation was done using a tool developed at the TUM Cair of Geoinformatics. Some OuterCeilingSurfaces were disregarded on purpose.
Vienna

**Link:** Center of Vienna (Roads and LoD1 Buildings)

TU Munich - CityGML3.0 Transportation concept demos

**Link:** TUM CityGML3.0 Traffic Spaces

**Link:** TUM CityGML3.0 Traffic Areas
Link: TUM CityGML3.0 Traffic Lines

Link: TUM Streetspace and Buildings textured with TrueDOP20
New York City

**Link:** 3D City Model of New York City - Including Buildings and Street Space

**Link:** Solar Potential Analysis for Central Manhattan (Buildings + Street Space)
Grafing near Munich

Link: Street Space Model including City Furniture, Vegetation and Traffic Simulation

Link: Comparison of OpenDRIVE and CityGML
**Melbourne**

**Link:** LoD2 Street Space Model of Central Melbourne

**Link:** LoD1 Street Space Model of Central Melbourne
Link: CityGML Streetspace around the White House in Washington D.C.