



## QGIS Web Client goes 3D



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**SOURCEPOLE**  
Linux & Open Source Solutions

## › Web GIS

- › QGIS Webclient (QWC)
- › qgiscloud.com
- › BBOX OGC API & vector tile server

## › QGIS

- › 4 C++ core developers
- › QGIS server, printing, plugins, ...
- › QGIS Enterprise (maintenance und support)

## › Other OSGeo project contributions

- › OGR/GDAL, PostGIS, MapServer, Openlayers, OSGeoLive...

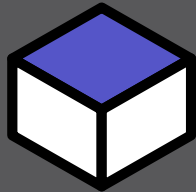


## ➤ QWC

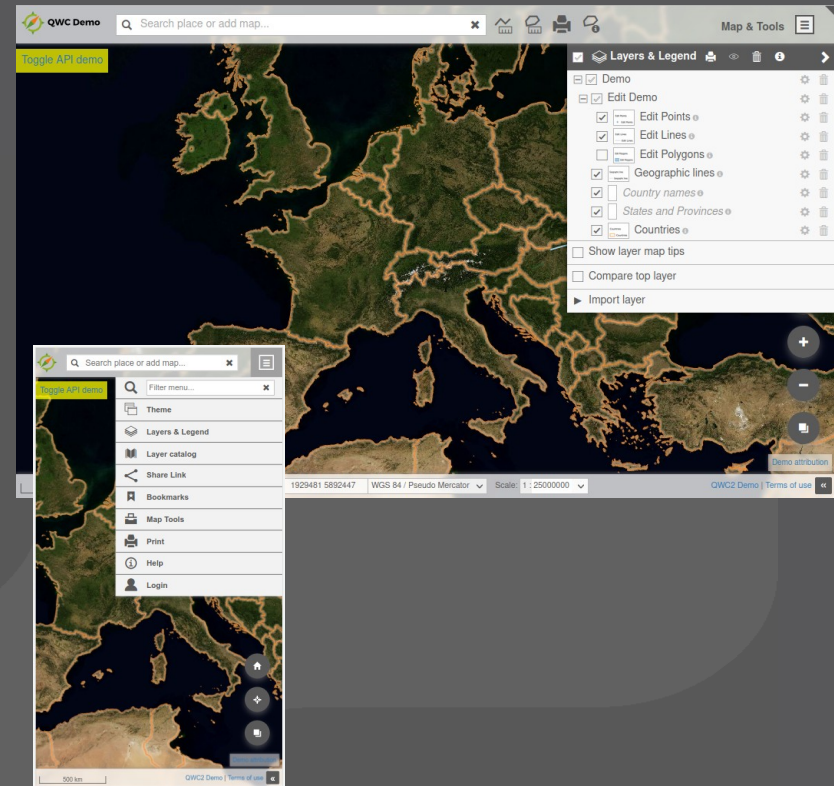
- Web maps based on QGIS projects

## ➤ qwc-services

- Micro services for extending QWC

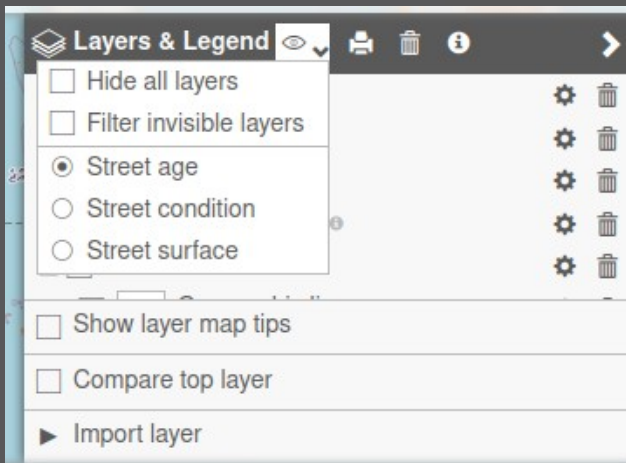
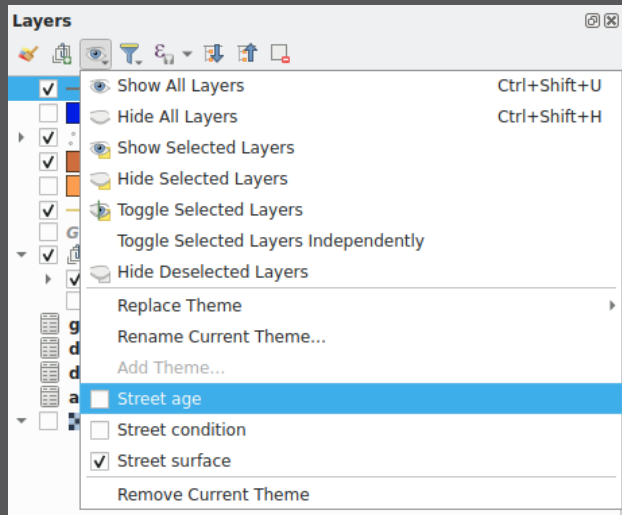


- Authentication + user permissions
- Editing
- Permalinks
- ...





# Project news



## ➤ Visibility and style presets

➤ QGIS "Themes"

## ➤ Lock QWC theme to preset

➤ Locks styles

➤ Multiple themes for same project with different styles

## ➤ Autorefresh layers

➤ As configured in QGIS layer properties



▼ ☒ **Control Visibility by Expression**

Editing ^ >

Leitung ▼

Pick Draw Table

Typ Stromleitung ▼

Stromleitung

Spannung 230

✓ Commit ✗ Discard

Editing ^ >

Leitung ▼

Pick Draw Table

Typ Wasserleitung ▼

Wasserleitung

Durchmesser 20

✓ Commit ✗ Discard

**Provider Specific Filter Expression**

Enter a [PostgreSQL WHERE clause](#) to filter the layer

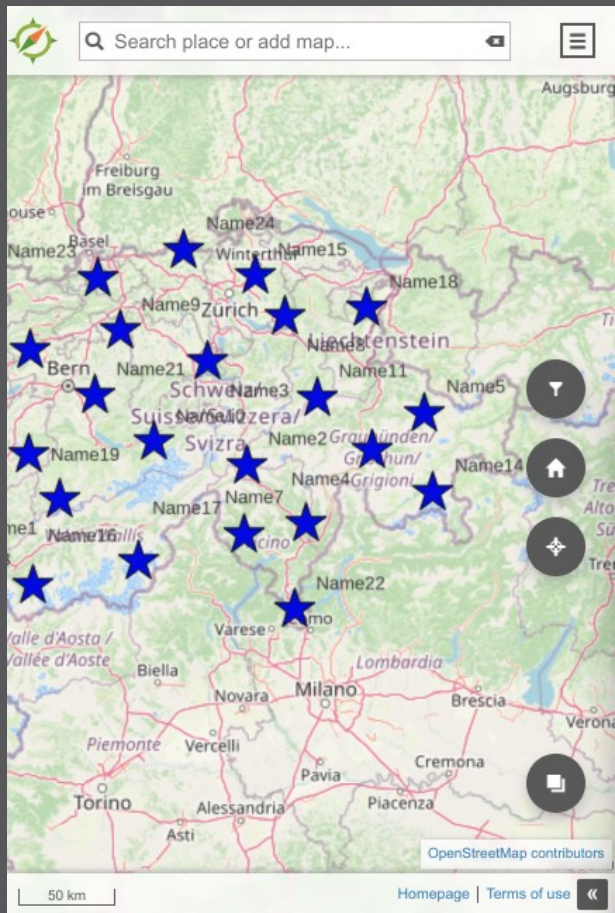
`create_date > '2025-01-01'`

Help Test Clear Save... Lo

- Curve geometry datasets
  - Edit attributes
  - Geometry read-only
- Multi-select edit widget
- QGIS field expressions
  - Default value
  - Value relation filter
  - Groupbox visibility
- QGIS data source filter



# «Pop-out» dialog windows



Attribute Table - Chromium

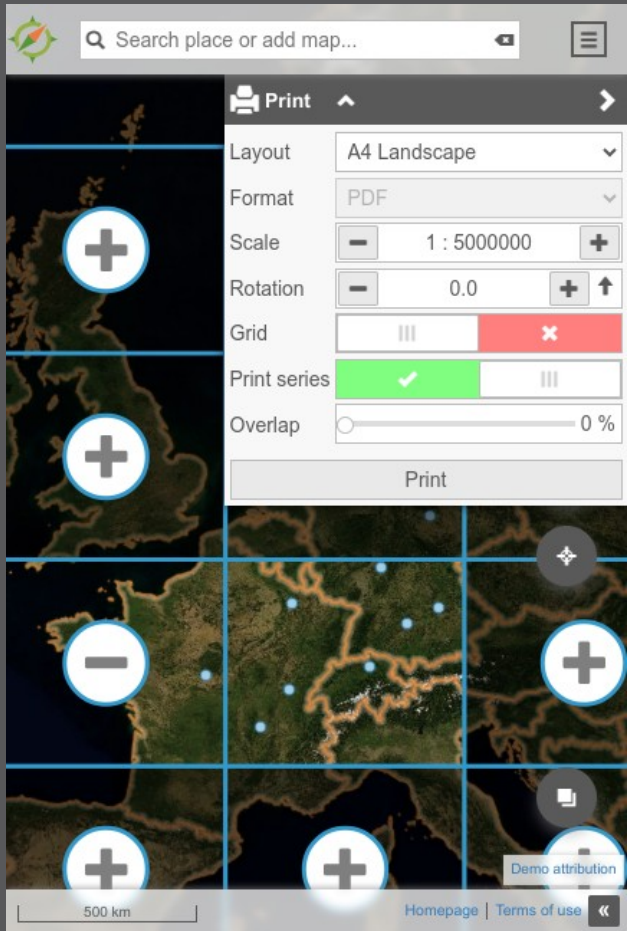
about:blank

Attribute Table

obs\_points

|                          | id | name  | startdate  | enddate    | type | observer |
|--------------------------|----|-------|------------|------------|------|----------|
| <input type="checkbox"/> | 1  | Name1 | 10/24/2020 | 11/14/2020 | 1    | sm       |
| <input type="checkbox"/> | 2  | Name2 | 07/14/2020 | 05/26/2020 | 2    | vv       |
| <input type="checkbox"/> | 3  | Name3 | 05/15/2020 | 04/16/2020 | 3    | mm       |
| <input type="checkbox"/> | 4  | Name4 | 06/20/2020 | 05/06/2020 | 4    | rw       |
| <input type="checkbox"/> | 5  | Name5 | 05/30/2020 | 06/25/2020 | 5    | sm       |
| <input type="checkbox"/> | 6  | Name6 | 09/17/2020 | 11/14/2020 | 1    | rd       |
| <input type="checkbox"/> | 7  | Name7 | 06/06/2020 | 12/31/2020 | 2    | rd       |
| <input type="checkbox"/> | 8  | Name8 | 04/10/2020 | 09/22/2020 | 2    | vv       |

< 1 > 50 per page id ~ Limit to map extent



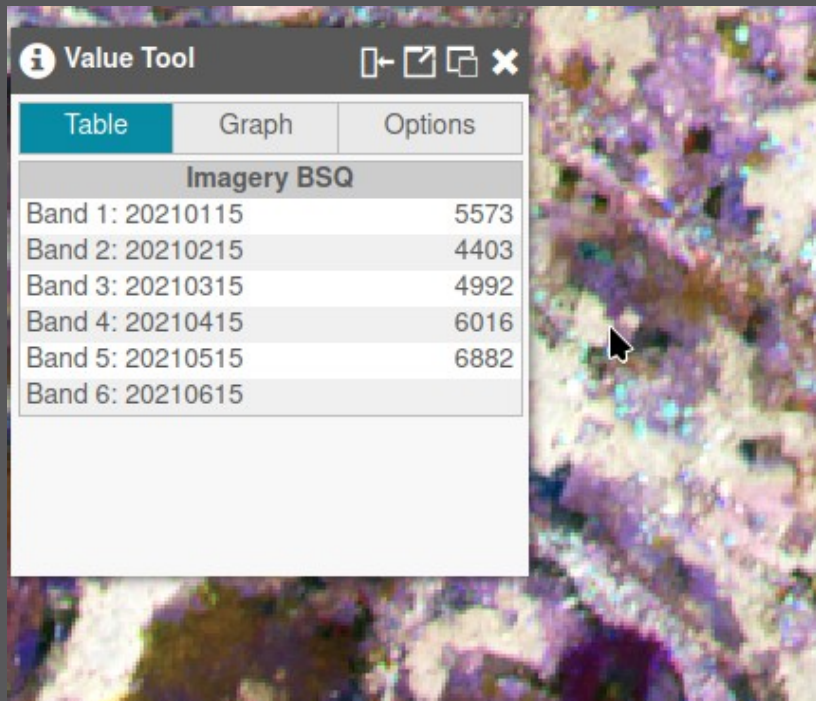
## ➤ Printing

- Print series

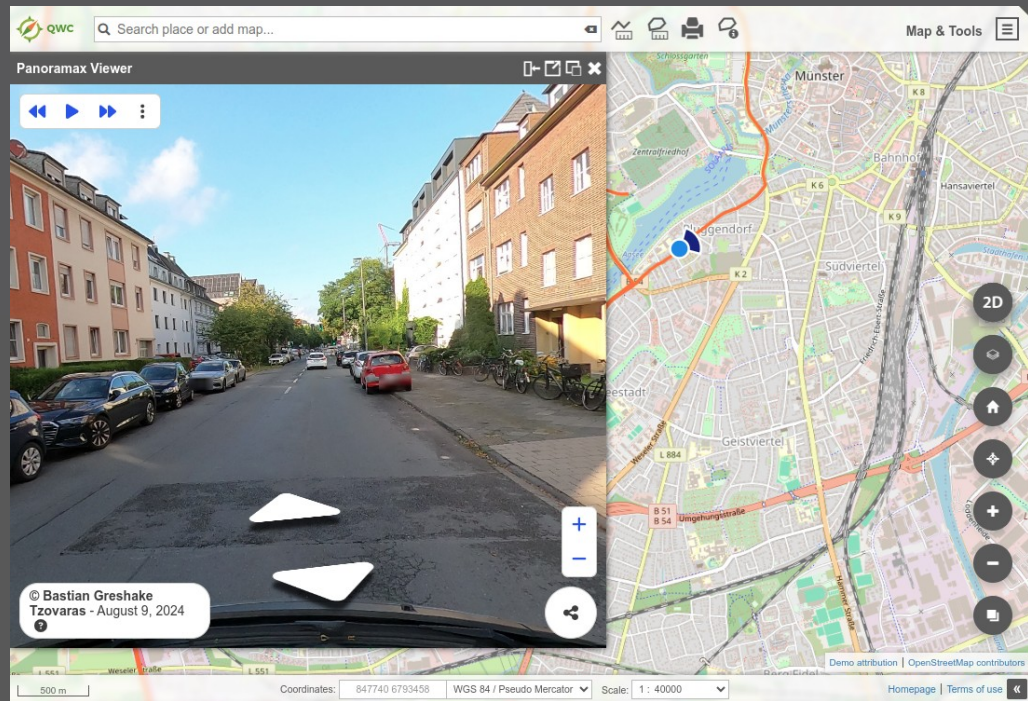
## ➤ Cross-theme DXF-Export

- Include layers imported from other themes

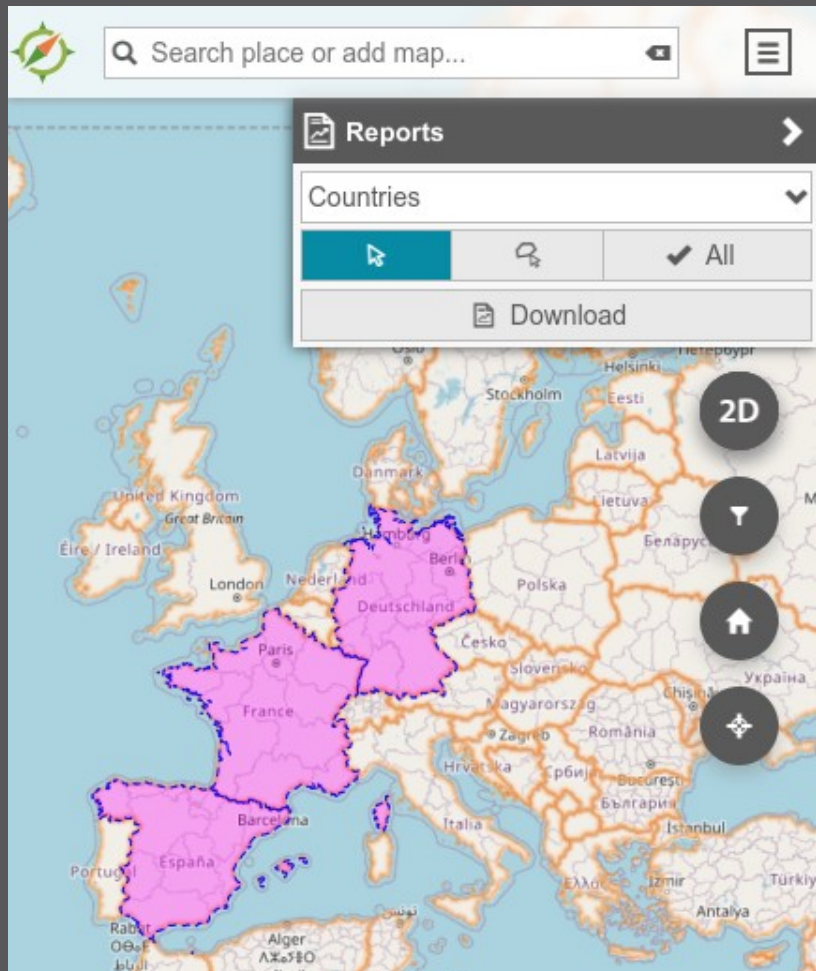




- Value Tool
- Port of the QGIS plugin



- Panoramax
- Crowdsourced street level imagery



- Jasper-Reports
- New Backend
  - qwc-document-service
- Multiple report templates per layer
- Aggregated reports
  - Multi-report (one report per feature)
  - Single report (one report for multiple features)



## QWC Admin

Administration tool for QWC services

[Generate service configuration](#)

☒ Use cached project metadata if available

☐ **Make all edit datasets read-only**

[Read QGIS Server logs](#)

100 Number of lines

[ConfigGenerator logs](#) [QGIS Server logs](#)

```
16:57:26 INFO Server[155]: - FORMAT : image/png
16:57:26 INFO Server[155]: - TRANSPARENT : true
```

## Users

[+ New user](#)

« 1 »

| ID | Name  |                                                                             |
|----|-------|-----------------------------------------------------------------------------|
| 1  | admin | <a href="#">Edit</a> <a href="#">Send invitation</a> <a href="#">Remove</a> |
| 2  | demo  | <a href="#">Edit</a> <a href="#">Send invitation</a> <a href="#">Remove</a> |

- Capabilities-Cache
- QGIS Server Logs
- Live-streamed config-generator logs
- Send invitations to users



- **Loading of complex QGIS Projects can be slow**
  - QGIS Server will keep loaded projects in cache
- **qwc-qgs-cache-preseed**
  - Periodically send capability requests to QGIS Server instances for desired projects
  - Ensures they are kept in cache
  - ⇒ **Consistently fast load times in QWC**



- **New Backend for qwc-fulltext-search-service**
  - Alternative to Solr
  - SQL Queries in Service configuration
    - Static or Jinja templates

```
SELECT
    display, facet_id, id_field_name, feature_id, bbox, srid
FROM searchidx
WHERE
    {% for word in words %}
        searchterms ILIKE '%' || '{{ word }}' || '%'
        {% if not loop.last %} AND {% endif %}
    {% endfor %}
ORDER BY
    {% for word in words %}
        similarity(searchterms, '{{ word }}')
        {% if not loop.last %} + {% endif %}
    {% endfor %}
DESC
```



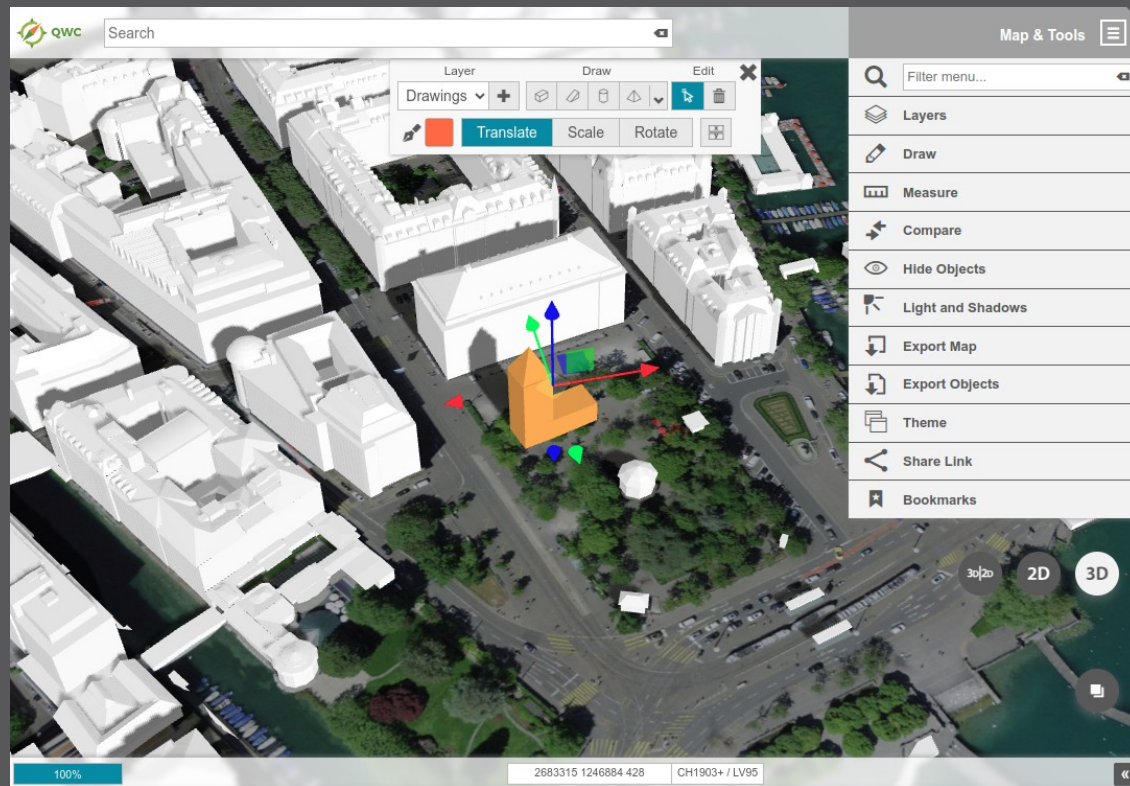
**OWC 3D**

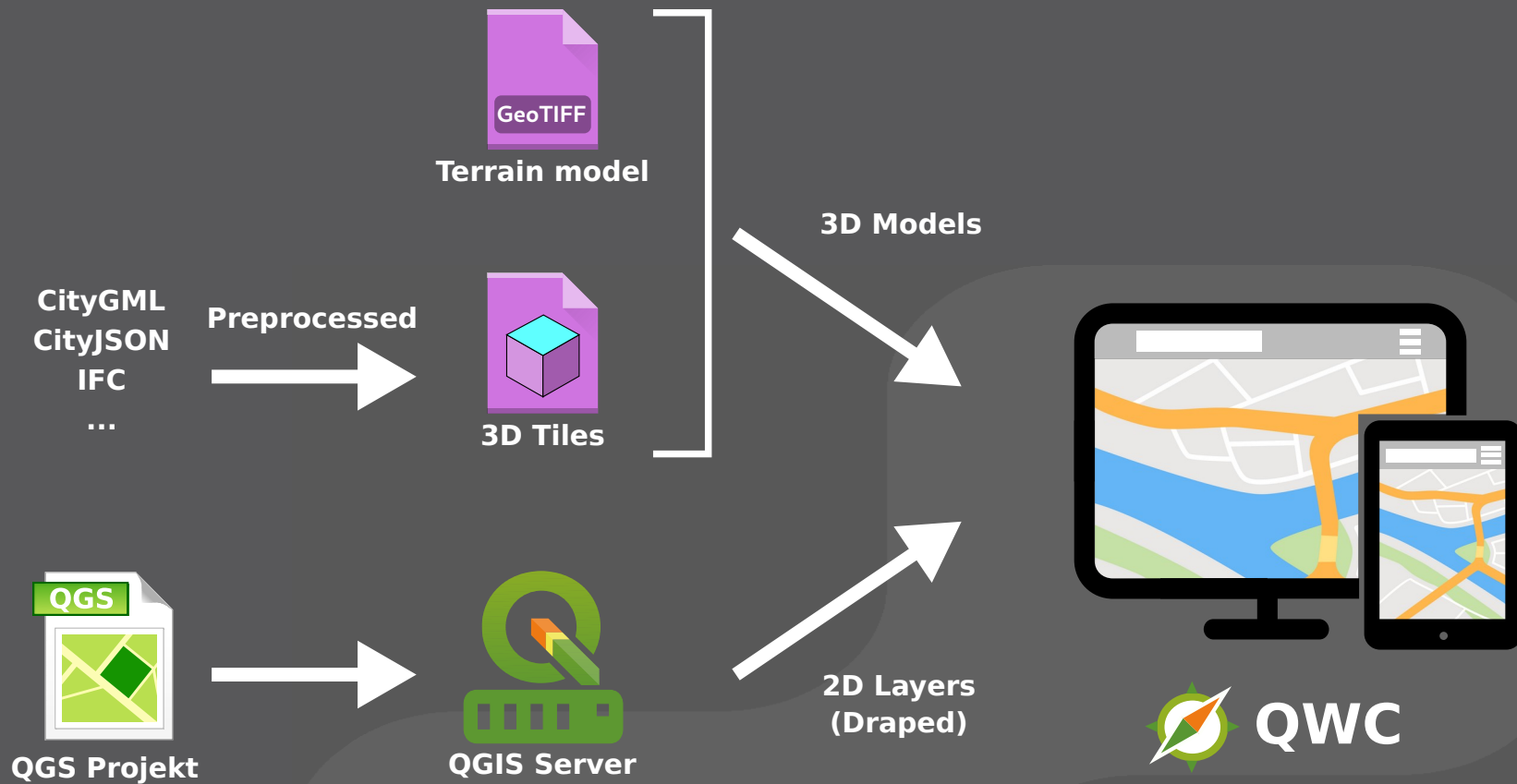


# **OGIS Webclient 3D**



- Tool for urban planning
- Technology base: three.js / Giro3D









OWC 3D





- **OGC API Features support in qwc-ogc-service**
- **Sun exposure analysis tools (3D)**
- **Sensordata integration**
- **Support for translated QGIS projects**
- **Virtual fields in Feature Info form**
- **...**
- **New features from the community!**



## › **GitHub Repositories**

- › <https://github.com/qgis/qwc2>
- › <https://github.com/qwc-services/qwc-docker>

## › **Documentation & ChangeLog**

- › <https://qwc-services.github.io>
- › [https://qwc-services.github.io/master/release\\_notes/ChangeLog/](https://qwc-services.github.io/master/release_notes/ChangeLog/)

## › **Examples**

- › <https://qwc2.sourcepole.ch>
- › <https://qgiscloud.com>
- › <https://geo.so.ch/map/>
- › <https://map.geo.gl.ch>



# Thank you!



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