

# Trans Europ Express

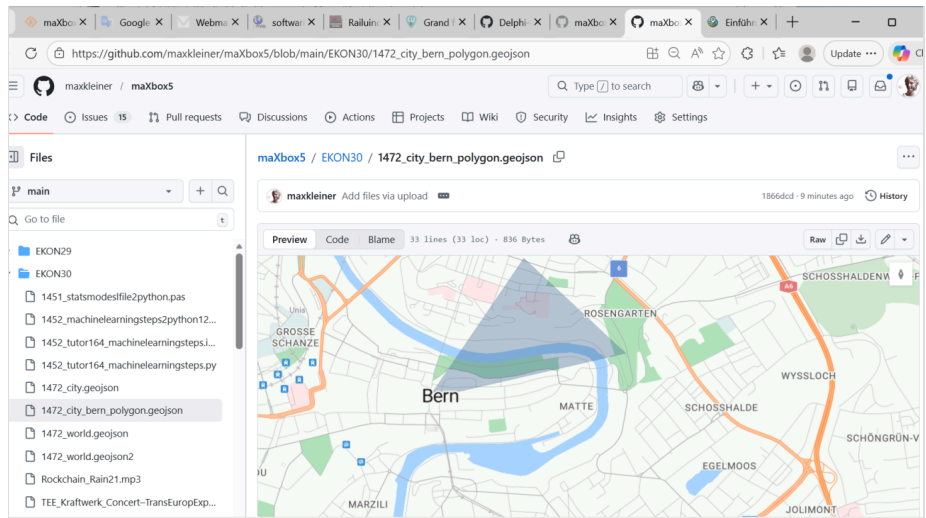
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about



## GeoJSON

March 14, 2026

GeoJSON is an open standard format that stores geographic data in an easily readable structure. It is based on JSON (JavaScript Object Notation) and was specifically designed to represent geodata such as points, lines, and polygons. Thanks to its simplicity and versatility, GeoJSON is now indispensable in many mapping and GIS applications.

GeoJSON supports Point, LineString, Polygon, and other geometry types, as well as Feature and FeatureCollection objects. Learn about the GeoJSON Specification (RFC 7946).

A GeoJSON is essentially a JSON structure that organizes geographic information. Here's a simple example of a polygon representing the location of the Bern City and Breitsch Area:

```

1  {
2      "type": "FeatureCollection",
3      "features": [
4          {
5              "type": "Feature",
6              "geometry": {
7                  "type": "Polygon",
8                  "coordinates": [
9                      [
10                     7.4474,
11                     46.948
12                 ],
13                 [
14                     7.4535,
15                     46.9542
16                 ],
17                 [
18                     7.46,
19                     46.95
20                 ],
21                 [
22                     7.4474,
23                     46.948
24                 ]
25             ]
26         },
27         "properties": {
28             "name": "Bern City Center",
29             "timestamp": "2026-03-14 15:01:40"
30         }
31     }

```

```

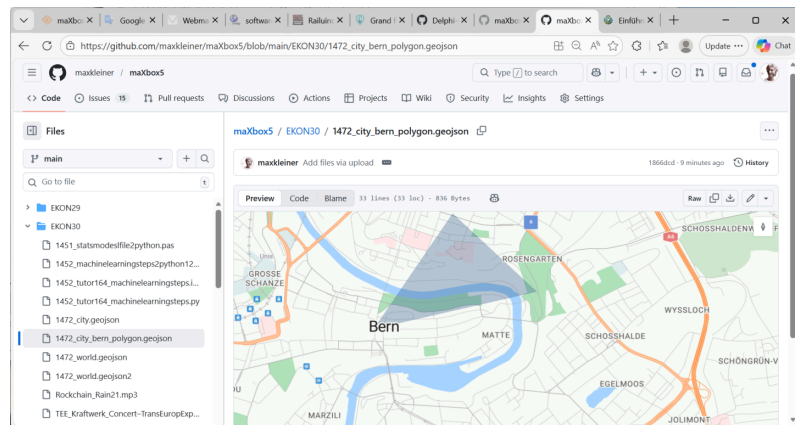
32     ]
33   }
34   API Response: {
35     "id": 101
36   }

```

In this example, the GeoJSON contains 4 coordinates ([[7.4474,46.948],[7.4535,46.9542],[7.46,46.95],[7.4474,46.948]]) that points to the Bern City Point Zytglogge in Bern but shows then a polygon of the upper area; so the type in GeoJSON is **polygon**. Additional information, such as the name, timestamp or address, is contained in the "properties" attribute. This structure makes GeoJSON versatile and easily readable.

## The map control

Now we want to show that polygon. For this you save that json above (or upload it with post to an API) and load the saved file in a map control, in our example we use GIT:



[maXbox5/EKON30/1472\\_city\\_bern\\_polygon.geojson](https://github.com/maxkleiner/maXbox5/blob/main/EKON30/1472_city_bern_polygon.geojson) at main · maxkleiner/maXbox5

There are several ways to create GeoJSON files. Some methods include:

- Manual creation: For simple projects, a GeoJSON file like 1472\_city\_bern\_polygon above can be written directly in a text editor.
- Automated tools: Software like QGIS or maXbox5 offers export options for generating GeoJSON.
- Online converters: Web services, such as Git, offer easy solutions for converting data to GeoJSON.

Internally, Git uses a react app the show the Geoworld Data and layers you want:

```

845 <react-app
846   app-name="code-view"
847   initial-path="/maxkleiner/maXbox5/blob/main/EKON30/1472_city_bern_polygon.geojson"
848   style="display: block; min-height: calc(100vh - 64px);"
849   data-attempted-ssr="true"
850   data-ssr="true"
851   data-lazy="false"
852   data-alternate="false"
853   data-data-router-enabled="true"
854   data-react-profiling="false"
855 >
856
857 <script type="application/json" data-target="react-app.embeddedData">{"payload":{"codeViewBlobRoute":{"csv":null,"csvError":null,
858 <div data-target="react-app.reactRoot"><meta name="github-code-view-meta-stats" id="github-code-view-meta-stats" data-hydrostats=
859 </react-app>
860

```

So we can zoom in and out to navigate or hover the perspective in an easy way:



[maxkleiner/Delphi-GeoMap-Component](#): Native Delphi map component with GeoJSON support, markers, and interactive navigation.

The component uses standard GeoJSON FeatureCollection format like above.

## The script control

In the script we generate the GeoJSON in a sort of ringlist collection, cause the first coordinate close the last as the first means the polygon has been closed:

```

207 Feature := TJSONObject.Create(nil);
208 Feature.put14('type', 'Feature');
209
210 // Bern City Polygon (vereinfacht)
211 Geometry := TJSONObject.Create(nil);
212 Geometry.put14('type', 'Polygon');
213 Coords := TJSONArray2.Create(nil);
214 Ring := TJSONArray2.Create(nil);
215 ring.put4(7.4474); ring.put4(46.9488)
216 //ring.clear;
217 Coords.put6(Ring); ring.clear;
218 ring.put4(7.4535); ring.put4(46.9542)
219 Coords.put6(Ring); ring.clear;
220 ring.put4(7.4688); ring.put4(46.9588)
221 Coords.put6(Ring); ring.clear;
222 ring.put4(7.4474); ring.put4(46.9488)

```

```

True
Post GeoJSON created: {"type":"FeatureCollection","features":[{"type":"Feature","geometry":{"type":"Polygon","coordinates":
[[7.4474,46.948],[7.4535,46.9542],[7.46,46.95],[7.4474,46.948]]},"properties":{"name":"Bern City Center","timestamp":"2026-03-14
15:49:19"}}]}
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "geometry": {
        "type": "Polygon",

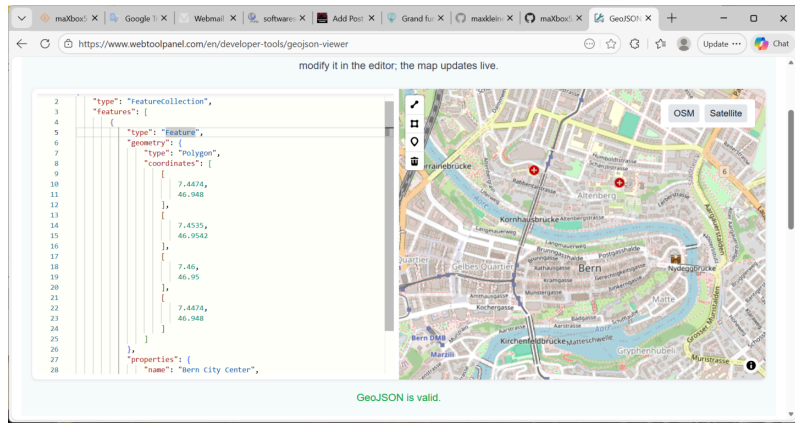
```

[https://sourceforge.net/projects/maxbox5/files/examples/1472\\_GEOMap\\_Routines.txt/download](https://sourceforge.net/projects/maxbox5/files/examples/1472_GEOMap_Routines.txt/download)

To go on with an online tool, we can recommend the GeoJSON Viewer.

### [GeoJSON Viewer • Interactive Map Tool](#)

It draw points, lines, polygons and edit GeoJSON directly on an interactive map. Paste your own GeoJSON or modify it in the editor; the map updates live:



[GeoJSON Viewer • Interactive Map Tool](#)

## Conclusion

In conclusion, GeoJSON is the default language for vector data on the web for good reason. Its blend of humanreadability, native performance in browsers, and reliability as an open standard make it an indispensable format and tool.

Whether you're a developer working on a mapping application, a GIS professional conducting spatial analysis, or simply someone looking to visualize geographic data, GeoJSON offers a robust solution for your needs.



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