

# OpenStreetMap

mapping your tomorrow

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# Introduction

# What is OpenStreetMap (OSM)?

- OpenStreetMap is a free, editable map of the whole world that is being built by volunteers largely from scratch and released with an open-content license.
- The project aims to promote new and interesting uses of this data.
- The mapping project is equivalent to the Wikipedia project.

# Why are you making OpenStreetMap?

- Geographical data (geo data) is not free in many parts of the world.
- Generally these places have given the task of mapping to various government agencies who in return get to make money by selling the data back to you and me.
- If you live in one of these countries, then your taxes pay for the mapping and then you have to pay again to get a copy of it.

# Why don't you just use Google Maps/whoever for your data?

## Short answer:

Because that data is copyrighted and owned by multiple organisations like the Ordnance Survey. Google/whoever just licenses it. Sometimes data itself powering this services is not available at all, or blocked by unfriendly licensing or extreme fees.

## Long answer:

Most hackers around the world are familiar with the difference between "free" as in "free beer" and as in "free speech". Google Maps is free as in beer, not as in speech.

# Why don't you just use Google Maps?

*When using Google Maps/Google Earth, you may not [...] use Google Maps/Google Earth to create or augment any other mapping-related dataset (including a mapping or navigation dataset, business listings database, mailing list or telemarketing list)*

*(c) No Creating Content From Google Maps Content. Customer will not create content based on Google Maps Content. For example, Customer will not: (i) trace or digitize roadways, building outlines, utility posts, or electrical lines from the Maps JavaScript API Satellite base map type; (ii) create 3D building models from 45° Imagery from Maps JavaScript API; (iii) build terrain models based on elevation values from the Elevation API; (iv) use latitude/longitude values from the Places API as an input for point-in-polygon analysis; (v) construct an index of tree locations within a city from Street View imagery; or (vi) convert text-based driving times into synthesized speech results.<sup>[1]</sup>*

# How can a project like this create accurate maps?

- By the very nature of the wiki-style process there is no guarantee of accuracy of any kind. Then again, few proprietary maps carry a guarantee of accuracy, either.
- The essence of a wiki-style process is that all users have a stake in having accurate data. If one person puts in inaccurate data, maliciously or accidentally, the other 99.9% of people can check it, fix it, or get rid of it. The vast majority of good-intentioned participants can automatically correct for the few bad apples.
- The Wikipedia project has shown that a large amount of good quality data can be collected but it can be difficult to weed out the inevitable errors.



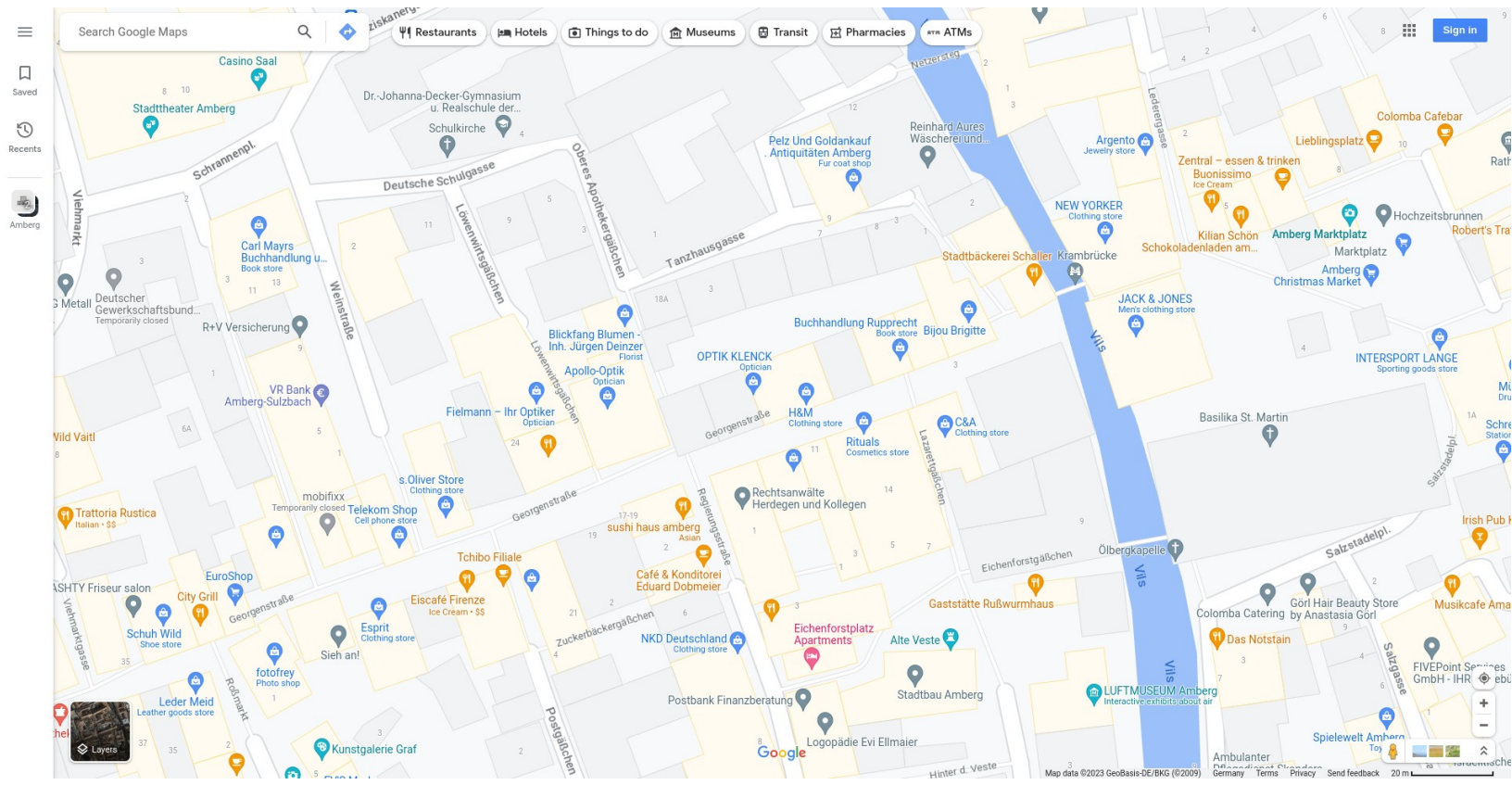
# You seem to have a lot of existing map data. Where did it come from?

- Many keen contributors, and sporadic imports of data from open-licensed sources. In areas where there are no such data sources (most areas) we have to start from a blank slate, and head out there to survey the streets ourselves. Despite starting from scratch, we have achieved a good level of completion in many places.
- Example: Bayern/Gemeindegrenzen-Spende-2010<sup>1</sup>.

[1] <https://wiki.openstreetmap.org/wiki/Bayern/Gemeindegrenzen-Spende-2010>

# Map Examples

# Google Maps



# OpenStreetMap

The screenshot shows the OpenStreetMap web interface. At the top left, the logo "OpenStreetMap" is visible, along with "Edit", "History", and "Export" buttons. A search bar contains the text "Where is this?" and "Go". The main map area displays a street grid in Amberg, Germany, with labels for streets such as "Georgenstraße", "Deutsche Schulgasse", "Fleischbankgasse", and "Marktplatz". Various points of interest are marked with icons, including shops like "H&M", "Cafe Dobmeier", and "Sushi Haus", as well as a church labeled "Basilika Sankt Martin". A scale bar in the bottom left corner indicates 10 meters (50 feet). The bottom right corner of the map area contains the text "© OpenStreetMap contributors" and "Make a Donation, Website and API terms".

# OpenStreetMap with Note Layer

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright Help About barefootstache

Search Where is this? Go

## Unresolved note #3523608

### Description

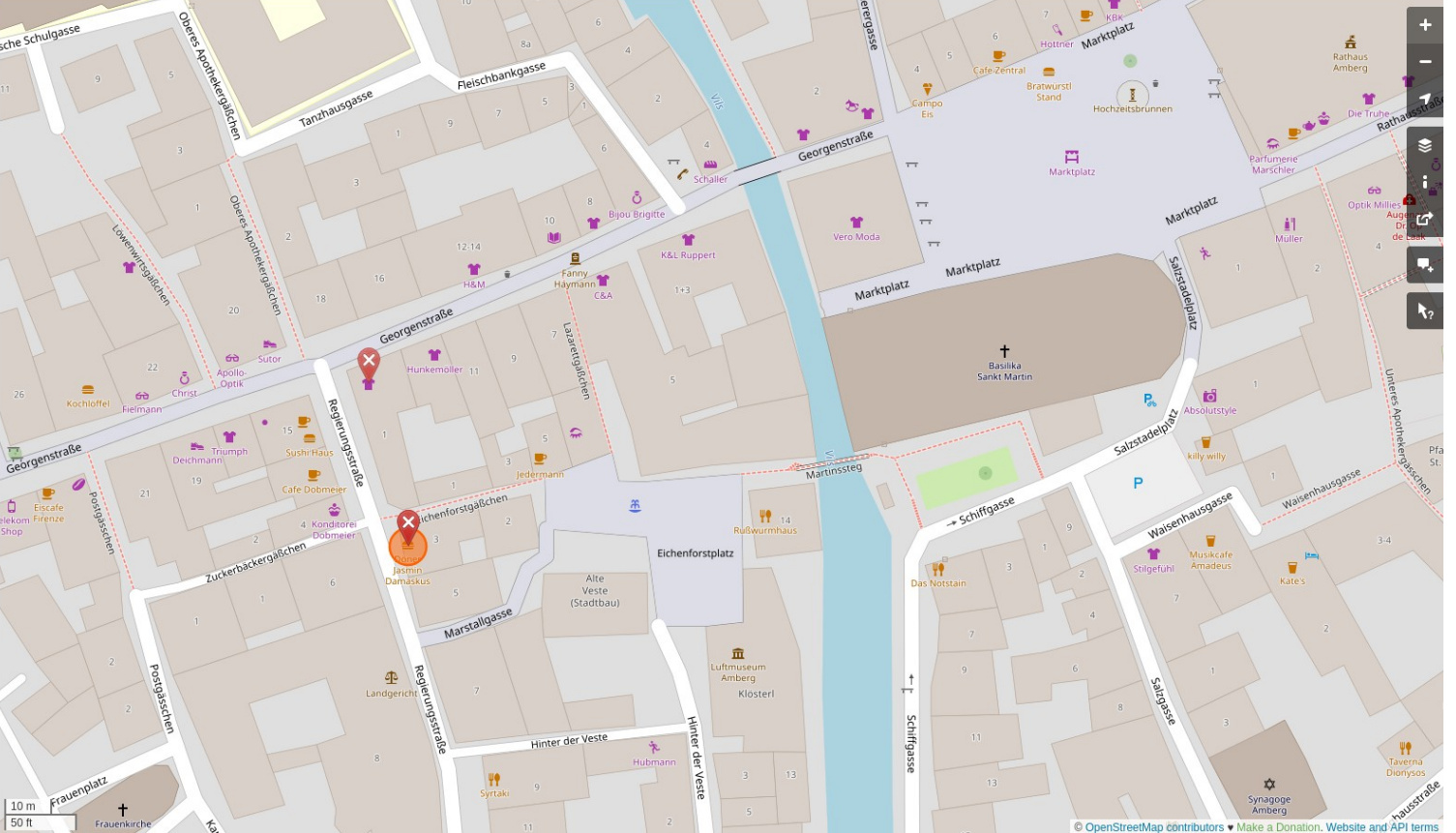
Dönerladen existiert nicht mehr. Laden ist leer

Created by anonymous 3 months ago  
Location: 49.4445064, 11.8561175

This note includes comments from anonymous users which should be independently verified.

Resolve Comment

If this note contains sensitive information that needs to be removed, you can report this note. For all other problems with the note, please resolve it yourself with a comment.



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# OpenStreetMap: The Woodlands



# Wheelmap

wheelmap.org Find wheelchair accessible places.

Mitmachen News Presse Kontakt Impressum FAQ Events Neuen Ort hinzufügen

Search for place or address

**Bekleidung** ×

**Not wheelchair accessible** ✎  
Entrance has a high step or several steps, none of the rooms are accessible.

**Nearest WC** 61 yd →

+  
-  
Turn on location services 📍

📷 **Add images** 🗨️ Your good deed of the day!

📱 Open on Maps app

📍 Open on OpenStreetMap

📄 Share

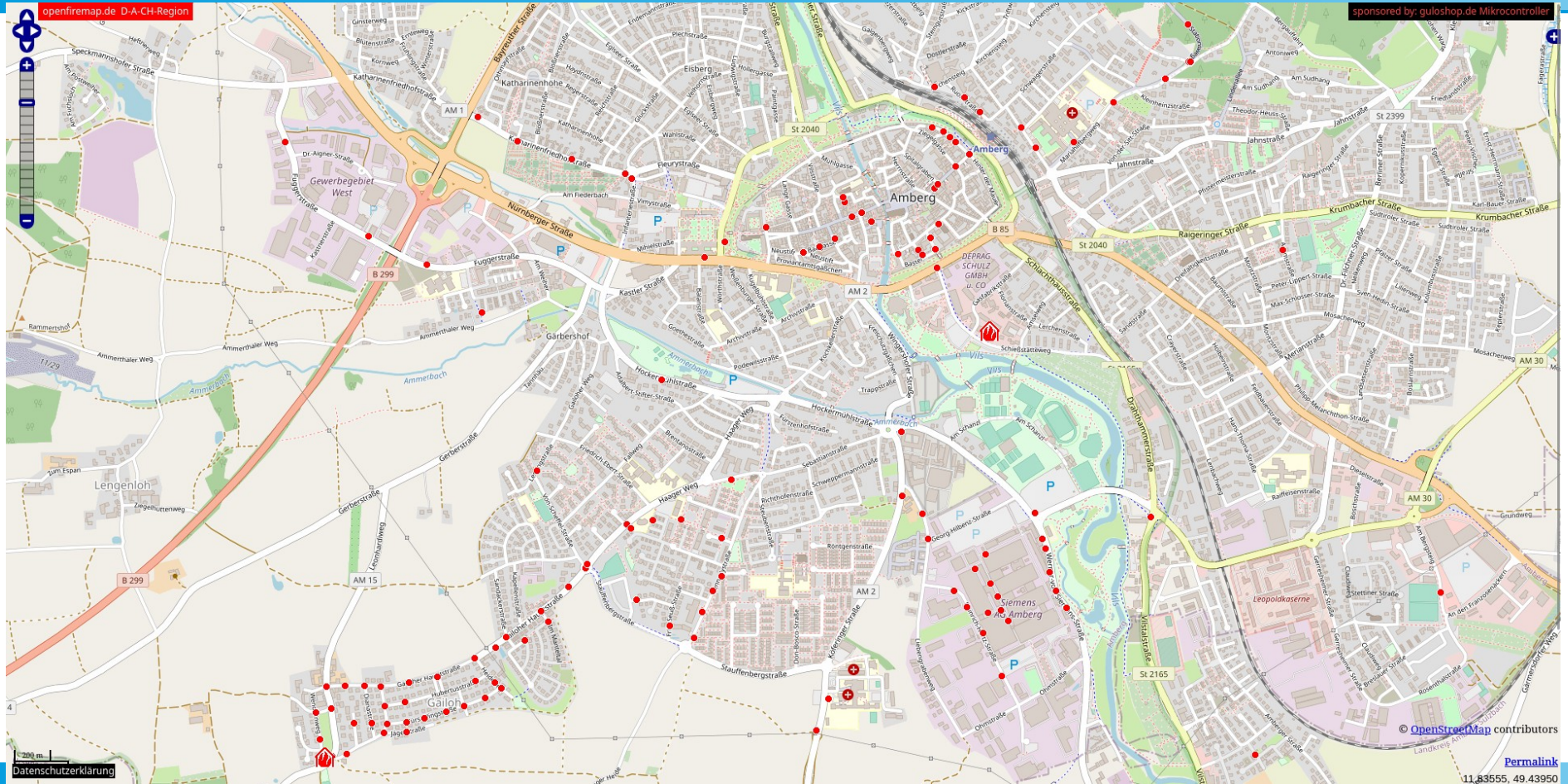
🚩 Report a problem

Georgenstrasse  
Regienungstrasse  
Zuckerbäckergäßchen  
Eichenforstgäßchen  
Vils  
Martinssteg  
Schiffgasse  
Schiff  
Marktplatz

mapbox

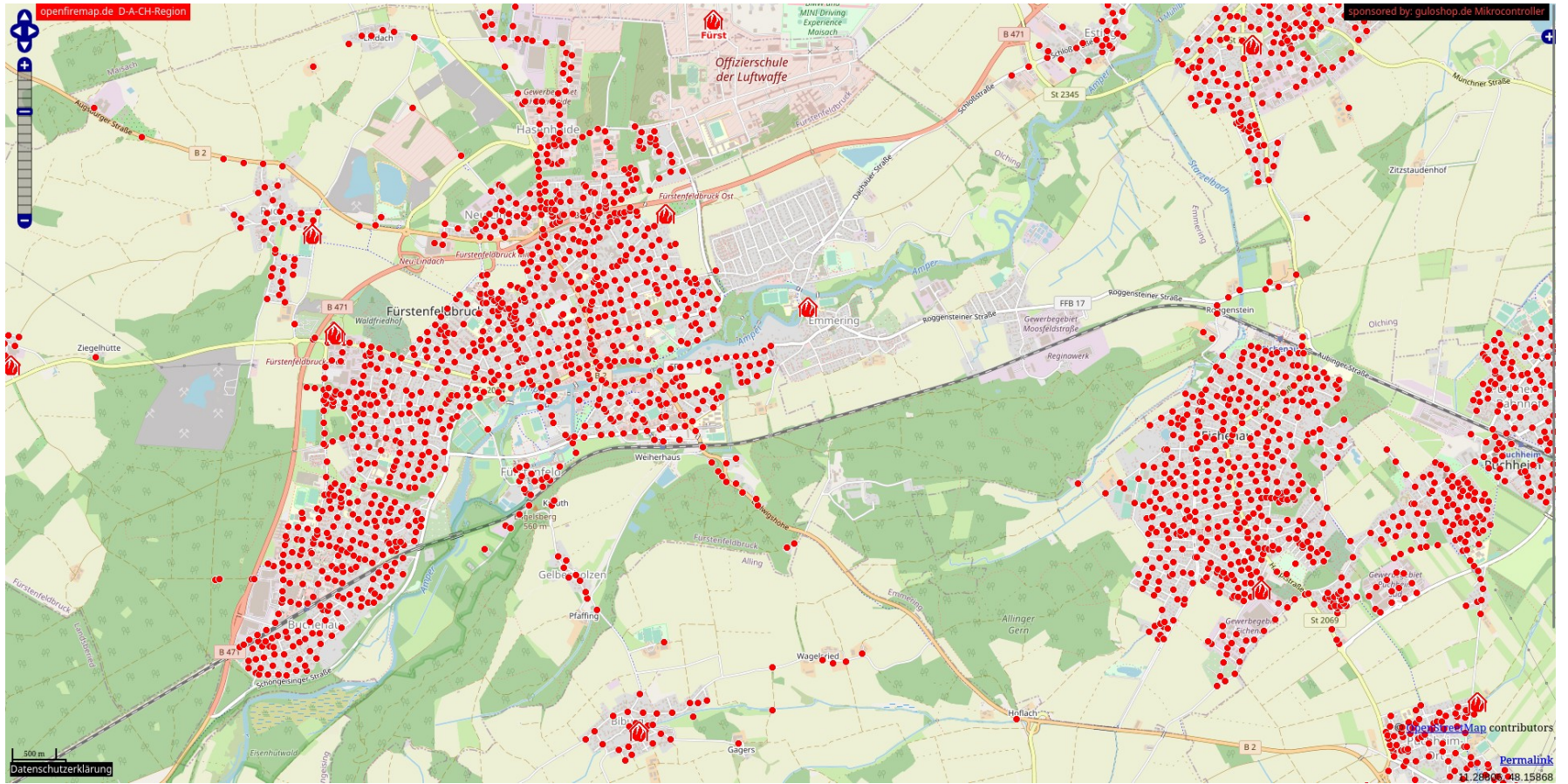
SOZIALHELDEN | © Mapbox | © OpenStreetMap | Improve this map

# OpenFireMap

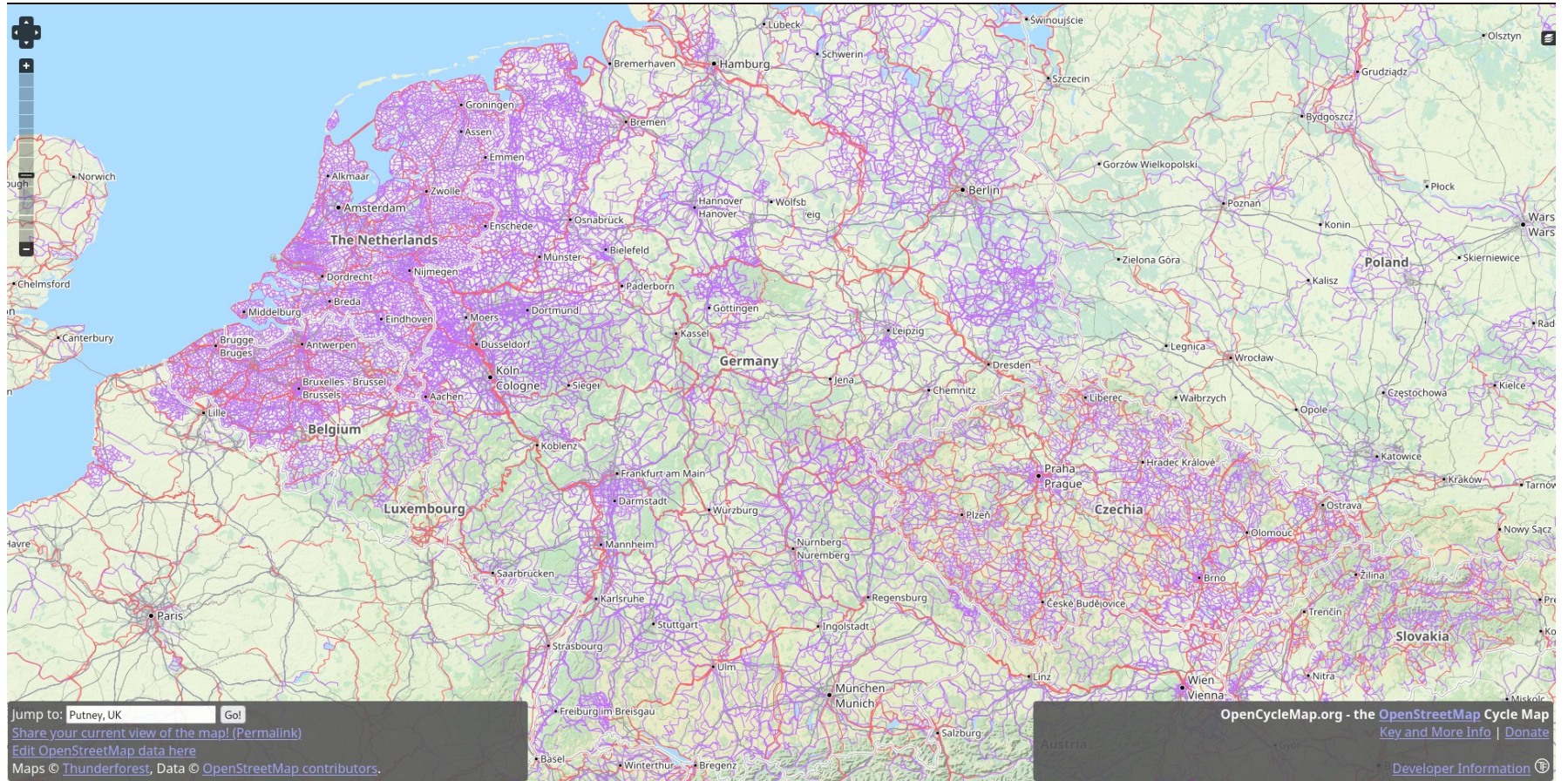




# OpenFireMap




# Cycle Map





# ÖPNV Karte

**ÖPNVKARTE**  
Öffentliche Verkehrsmittel - Netzwerk

**INFORMATION**

**Hello and Welcome to ÖPNVKarte.**















We display worldwide public transport facilities on a uniform map, so that you can forget about browsing individual operators websites.

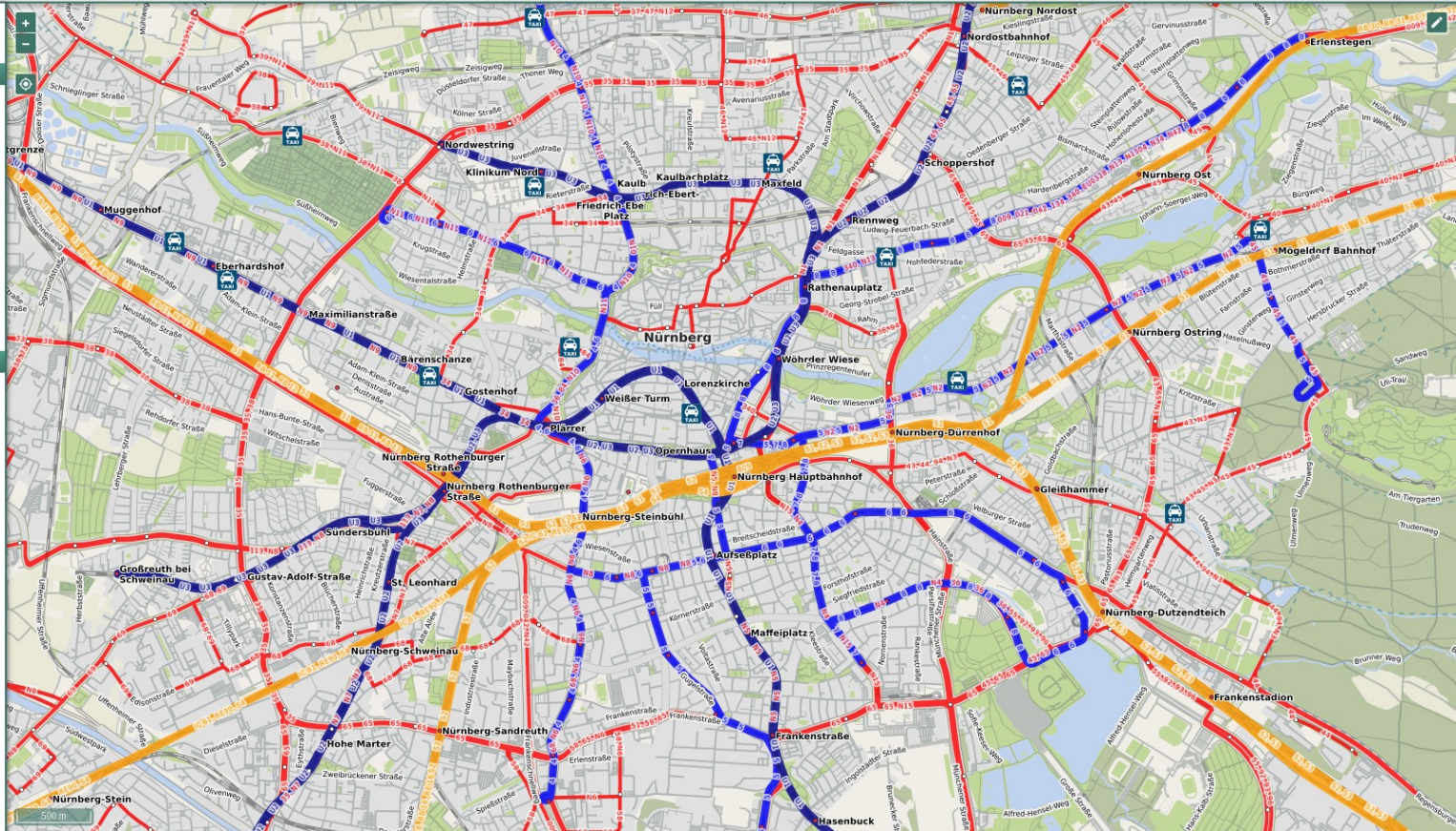
The map is implemented with Openstreetmap data, which leads to the ability to complete and correct the map on your own. If you are new to Openstreetmap you can find a beginners guide about adding data to the map [here](#), afterwards the Openstreetmap Wiki has also information on adding public transports in general and specifically about this map.

This project is operated by MeMoMaps. If you are interested in realizing custom projects with Openstreetmap, don't hesitate to contact me.

**MAP KEY**

**Transportation**

-  Railway
-  Train
-  Light rail
-  Tram
-  Subway
-  Ferry
-  Trolleybus
-  Bus
- POIs**
-  Airport
-  Bus stop
-  Stop
-  Taxi rank
- Streets**
-  Motorway
-  Trunk road



# outdooractive

## Activity



Hiking Route

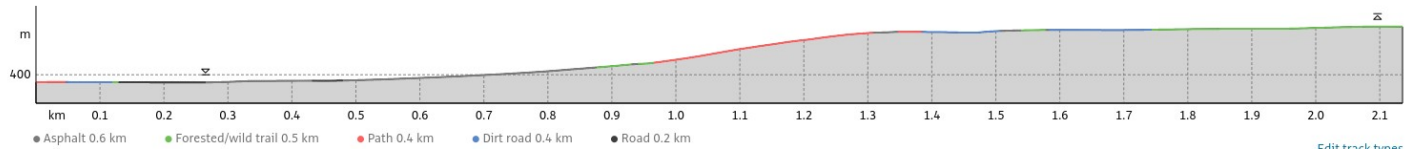
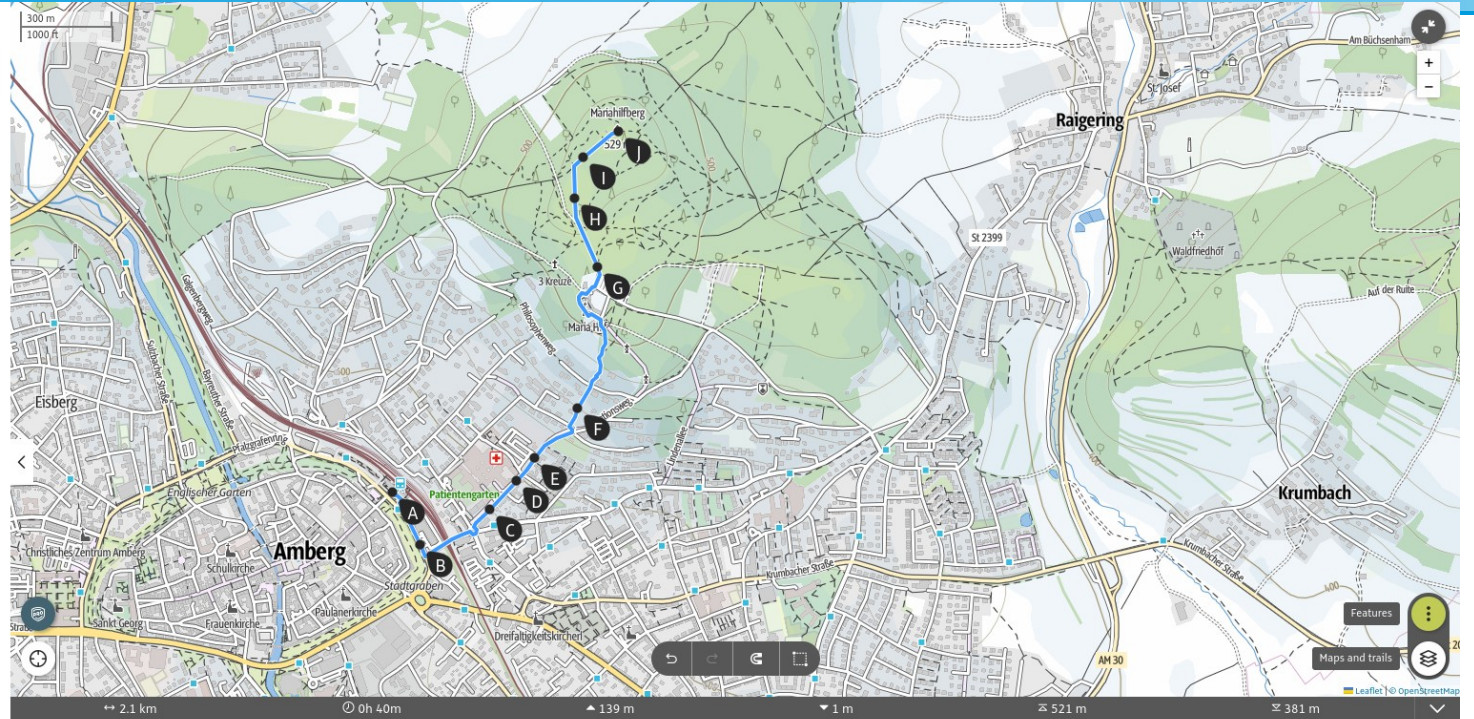
Change

## Route

- A 49.447308,11.862498
- B 49.445766,11.863722
- C 49.446826,11.866844
- D 49.447607,11.868153
- E 49.448332,11.868882
- F 49.449769,11.870813
- G 49.453905,11.871747
- H 49.455907,11.870727
- I 49.457127,11.871060
- J 49.457849,11.872669
- K Where do you want to go to?

[Import GPX Track](#) | [Reverse](#) | [Reset](#)  
[Same way back](#) | [Close loop](#)

Continue



● Asphalt 0.6 km ● Forested/wild trail 0.5 km ● Path 0.4 km ● Dirt road 0.4 km ● Road 0.2 km

Edit track types

# Reit- und Wanderkarte

The screenshot displays the 'Reit- und Wanderkarte' application interface. On the left, a dark blue sidebar contains navigation and information tools. The main area shows a detailed map of Amberg, Germany, with various landmarks, streets, and a highlighted route. The interface includes a search bar, zoom controls, and a list of menu items.

**Reit- und Wanderkarte**

1:3386 Zoom 17

- Legende
- Ortssuche
- Position merken
- Kartenwerkzeuge
- Routeneditor
- Verzeichnisse
- Information

Neuigkeiten (04.09.2022)  
Informationen zur Karte  
Garminkarten  
Wandershop  
FAQ  
Forum  
Lizenz + Quellen  
Getestet ab Firefox 32

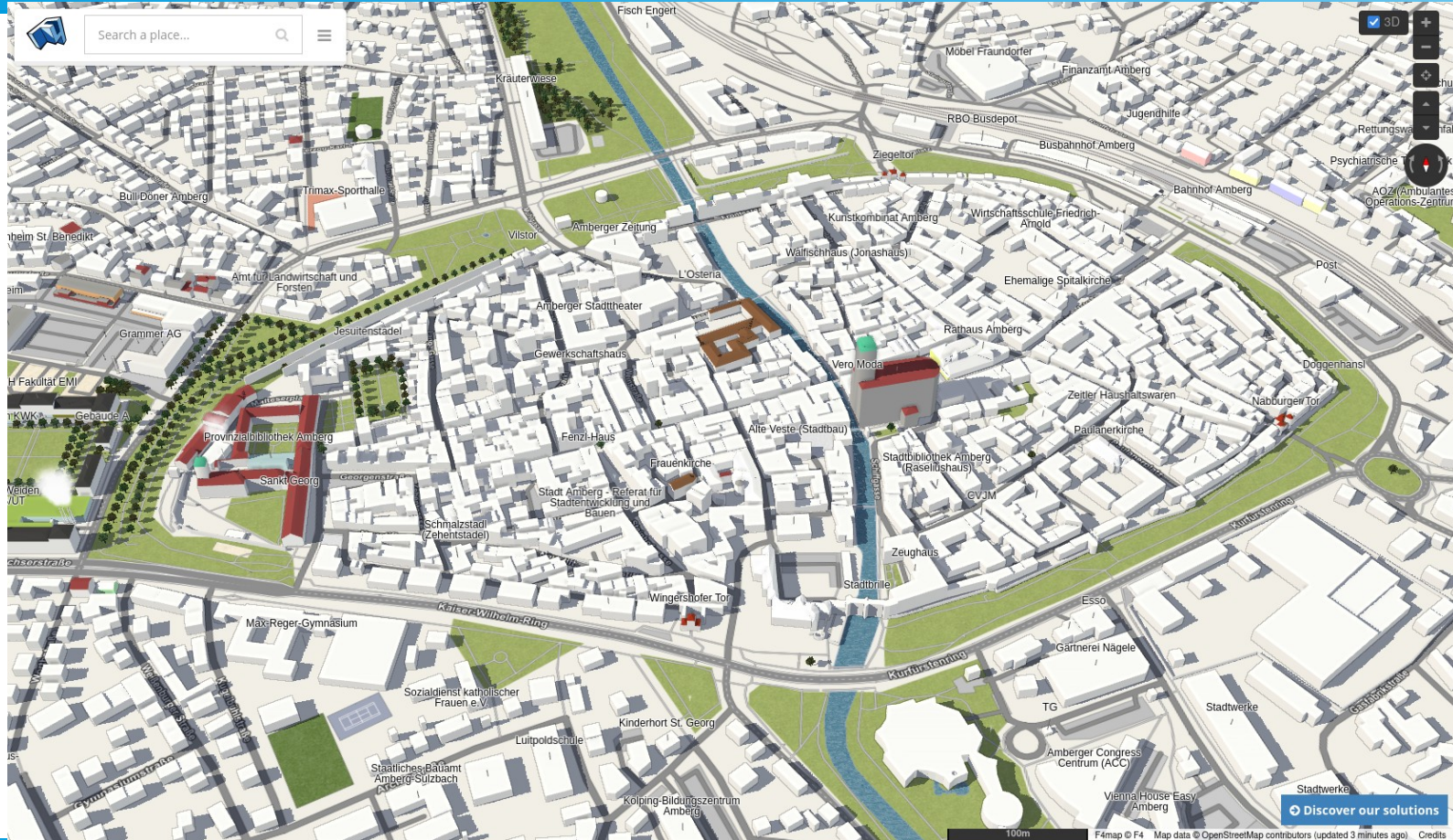
Impressum  
Datenschutz

Position: E 11.851, N 49.449

50 m

Nop's Reit- & Wanderkarte Daten: OSM, DEM, CIA/T

# F4Map



# F4Map





# F4Map



# Mapping Tools

# Armchair vs Street Level Mapping

- **Armchair:**  
Armchair mapping is mapping using aerial imagery.
- **Street Level:**  
Street Level mapping is mapping at the location or data gathered from surveying.

# iD Editor

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright Help About barefootstache

**Edit feature** Inspect Point Line Area Add Feature Undo / Redo

**Feature Type**  
Building

**Fields**

Name  
Common name (if any)

Building  
yes

Levels  
2, 4, 6...

Height (Meters)  
Unknown

Address  
Beethovenstraße 6  
92224 Amberg

Sources  
Bing

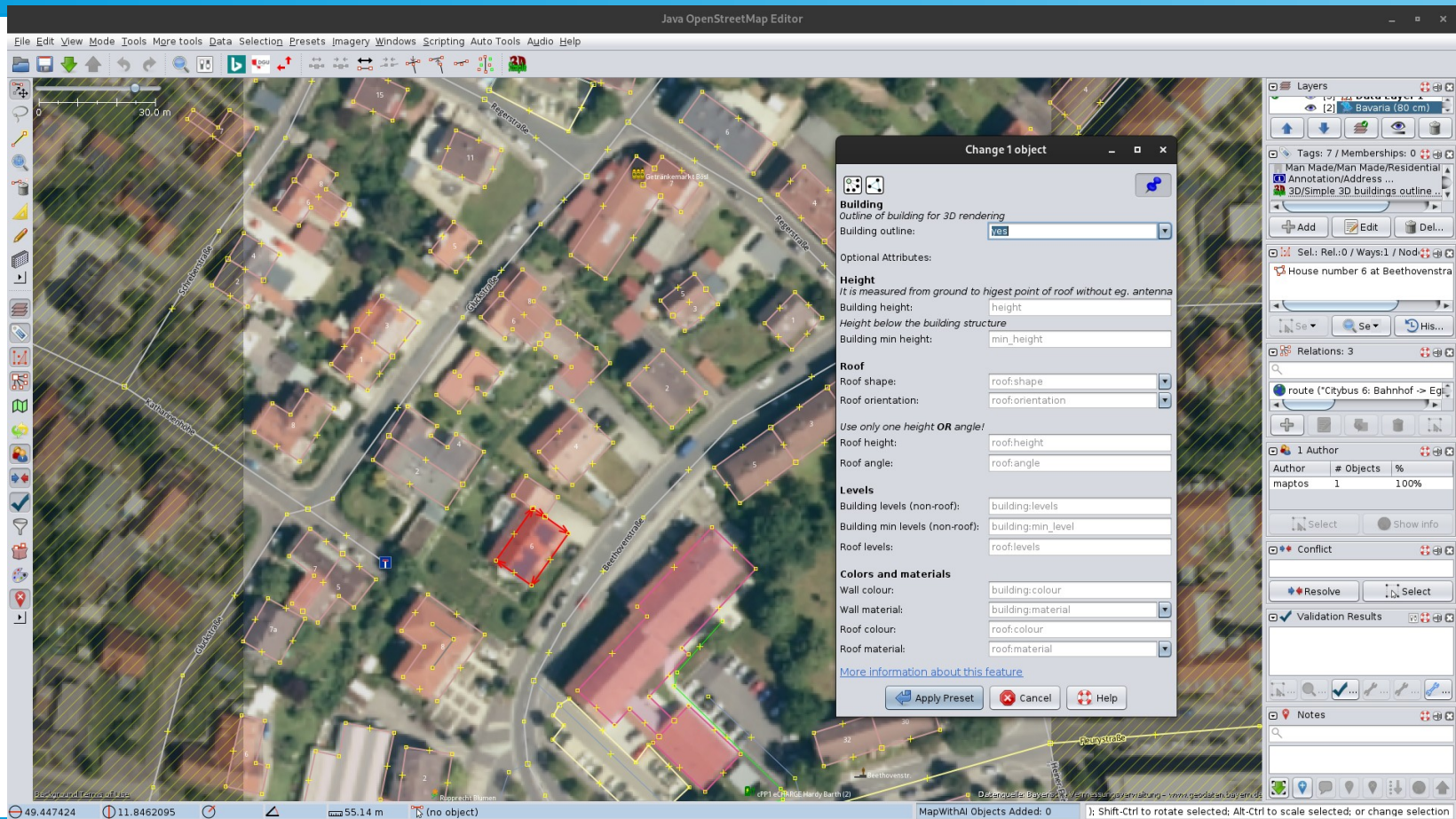
Add field: Architect, Description, Elevation (Meters)...

**Tags (7)**

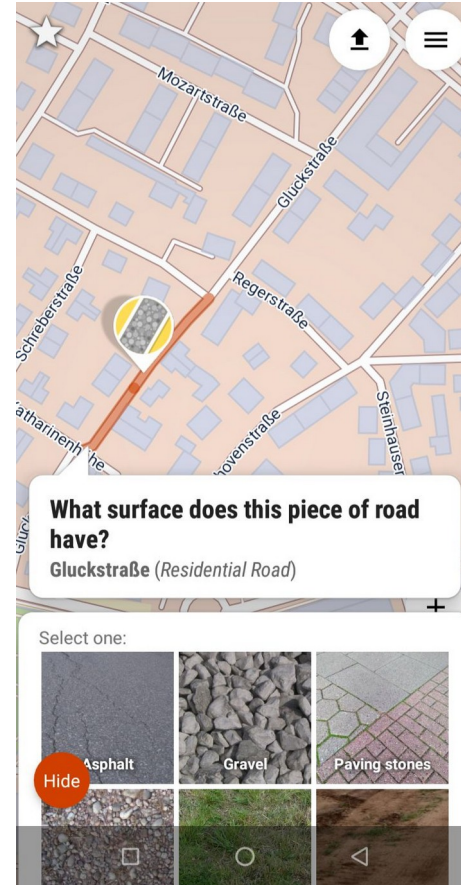
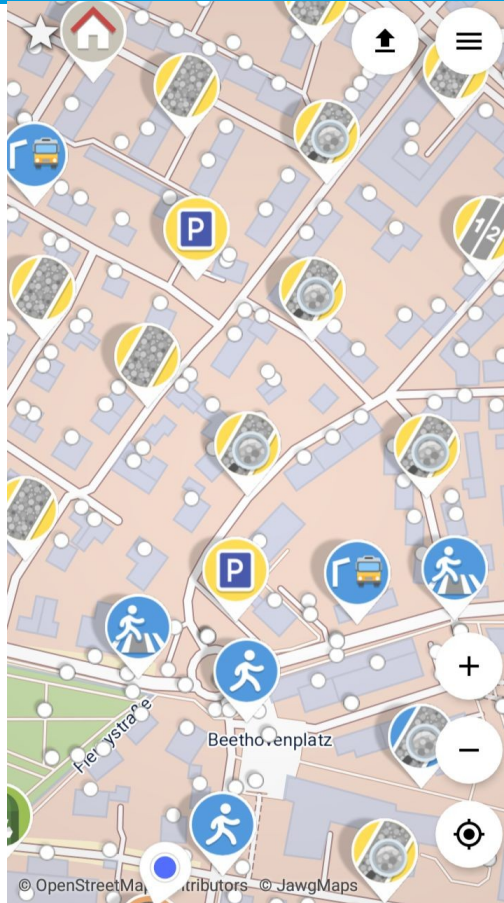
addr:city Amberg

[View on openstreetmap.org](#)

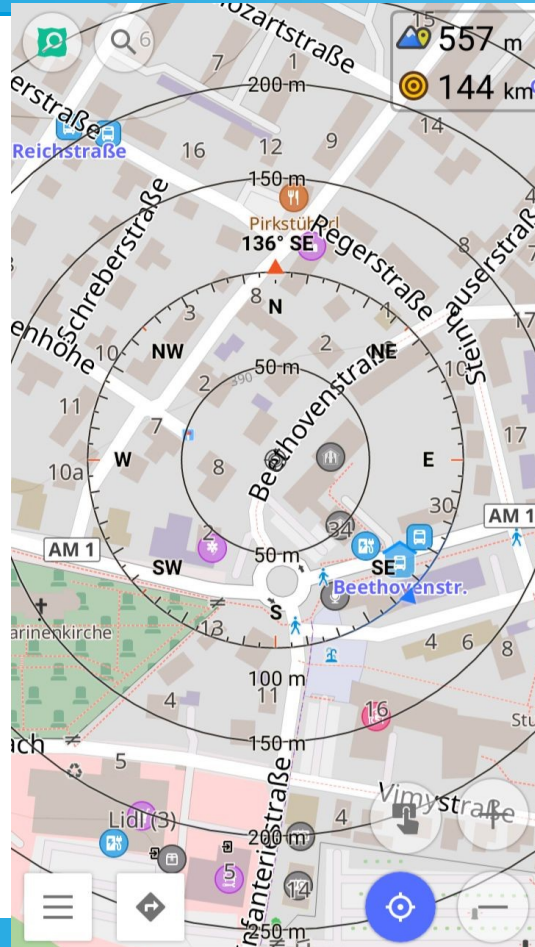
# JOSM Editor



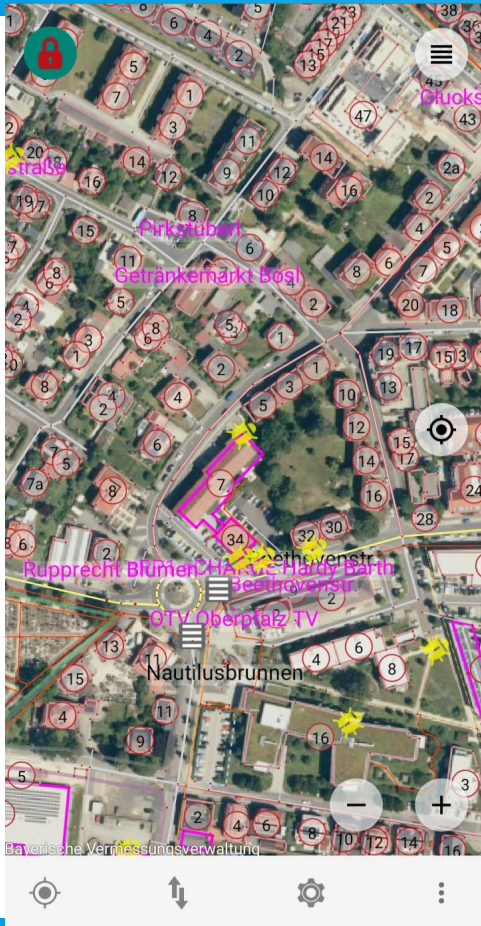
# StreetComplete



# OsmAnd



# Vespucci



Presets	Properties	Details
Building		
Building	Yes	
Levels above ground	Type or tap for values	
Levels below ground	Tap for values	
Height (meters)	Type value	
Min. level	Type or tap for values	
Max. level	Type or tap for values	
Building use	Tap for values	
Building colour	Type or tap for values	
Building material	Tap for values	
Roof type	Tap for values	
Roof orientation	<input type="radio"/> Across <input type="radio"/> Along	
Roof colour	Type or tap for values	
Levels (roof)	Type or tap for values	
Roof material	Type or tap for values	



# OpenStreetMap meets Wikimedia

# OpenStreetMap

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright Help About barefootstache

addr:city	Amberg
addr:housenumber	2
addr:postcode	92224
addr:street	Marktplatz
amenity	place_of_worship
building	church
building:colour	gray
denomination	catholic
height	50
name	Basilika Sankt Martin
note	height etc. just estimated
religion	christian
roof:angle	45
roof:colour	red
roof:shape	hipped
toilets:wheelchair	no
website	<a href="http://www.amberg-st-martin.de/">http://www.amberg-st-martin.de/</a>
wheelchair	yes
wikidata	Q328701
wikipedia	de:St. Martin (Amberg)

**Nodes**  
▶ 18 nodes

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- Main page
- Community portal
- Project chat
- Create a new item
- Recent changes
- Random item
- Query Service
- Nearby
- Help
- Donate

- Lexicographical data
- Create a new Lexeme
- Recent changes
- Random Lexeme

#### Tools

- What links here
- Related changes
- Special pages
- Permanent link
- Page information
- Concept URI
- Cite this page

Item [Discussion](#)

Read

[View history](#)

## St. Martin (Q328701)

parish church in Amberg

[edit](#)

[In more languages](#)


[Configure](#)

Language	Label	Description	Also known as
English	St. Martin	parish church in Amberg	
German	St. Martin	Kirchengebäude in Amberg, Bayern	
French	basilique Saint-Martin d'Amberg	église allemande	
Bavarian	No label defined	No description defined	

All entered languages

### Statements

<b>instance of</b>	<span>parish church</span> <a href="#">edit</a>
	<a href="#">0 references</a>
	<a href="#">+ add reference</a>
<b>minor basilica</b>	<span>1980</span> <a href="#">edit</a>
	<a href="#">start time</a>
	<a href="#">0 references</a>
	<a href="#">+ add reference</a>
	<a href="#">+ add value</a>

<b>image</b>	 <a href="#">edit</a>
--------------	---

**Wikipedia** (6 entries) [edit](#)

be	Базіліка Святога Марціна (Амберг)
cs	St. Martin (Amberg)
de	St. Martin (Amberg)
fr	Basilique Saint-Martin d'Amberg
ru	Базилика Святого Мартина (Амберг)
zh	圣马尔定圣殿 (安贝格)

**Wikibooks** (0 entries) [edit](#)

**Wikinews** (0 entries) [edit](#)

**Wikiquote** (0 entries) [edit](#)

**Wikisource** (0 entries) [edit](#)

**Wikiversity** (0 entries) [edit](#)

**Wikivoyage** (0 entries) [edit](#)

**Wiktionary** (0 entries) [edit](#)

**Multilingual sites** (1 entry) [edit](#)

[commons](#) [Category:St. Martin \(Amberg\)](#)



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Die freie Enzyklopädie

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Special pages  
Permanent link  
Page information  
Cite this page  
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Wikimedia Commons

In other languages

Беларуская  
Čeština  
Français  
Русский  
中文

Edit links

Page Discussion

Read Edit Edit source View history

Search Wikipedia



Photograph nature for Wikipedia and win!

Koordinaten: 49° 26′ 41,8″ N, 11° 51′ 27,9″ O

## St. Martin (Amberg)

Die Basilika **St. Martin** ist eine katholische Pfarrkirche in Amberg in der bayerischen Diözese Regensburg. Sie ist die größte gotische Hallenkirche der Oberpfalz.<sup>[1]</sup>

### Contents [hide]

- Baugeschichte
- Basilica minor
- Orgel
- Glocken
- Siehe auch
- Literatur
- Einzelnachweise
- Weblinks

## Baugeschichte [ edit | edit source ]

Der Vorgängerbau der heute bestehenden St-Martins-Kirche war eine dreischiffige romanische Basilika mit drei Apsiden, einer Doppelturmfassade und einem Chorturm. Diese Basilika lag auf dem Bereich des heutigen Langhauses.<sup>[2]</sup> Die an der Südseite des Marktplatzes gelegene Kirche wurde ab 1421 durch die Amberger Bürger im spätgotischen Stil errichtet. Bauform ist eine dreischiffige Hallenkirche mit einem gemeinsamen Dach. Die Kirche hat eine Länge von 72 Metern und eine Breite von 27,8 Metern. Der öffentlich zugängliche Turm hat eine Höhe von fast 92 Metern und prägt damit das Stadtbild von Amberg. Ein Kranz von 19 Kapellen umgibt die Kirche, welche durch eine gemeinsame Empore nach oben abgeschlossen werden. Von der Bauform her wurde St. Martin Vorbild für viele Kirchen im sächsischen Bergbaubereich, darunter den Freiburger Dom.

Wenige Jahrzehnte nach der Fertigstellung wurden im Zuge der Reformation ab 1544 protestantische Gottesdienste gehalten. Auf Anordnung des Kurfürsten Ottheinrich von der Pfalz erfolgte 1557 durch die Calvinisten ein reformatorischer Bildersturm, sie entfernten die Nebenaltäre und Bildwerke. Später wurde die Kirche vollständig ausgeräumt und die Fresken fielen der Zerstörung anheim.

Nach der Gegenreformation erhielt die Kirche einen neuen barocken Hochaltar mit einem Gemälde von Gaspar de Crayer, einem Schüler von Peter Paul Rubens. Ab 1628 wurde die Kirche so barockisiert.<sup>[3]</sup> Nach Schäden durch Beschuss 1703 im Spanischen Erbfolgekrieg – dabei gingen auch die alten Glasfenster zu Bruch – erhielt die Kirche eine kostbare Barockausstattung. 1720 gab man dem Turm seine heutige Form; aufgrund schwerer Schäden musste er neu aufgebaut werden.<sup>[4]</sup> Von der barocken Ausstattung ist heute neben den Wangen des Gestühls nur noch das Altarbild von Caspar de Crayer erhalten.<sup>[5]</sup> Zwischen 1869 und 1879 erfolgte die Regotisierung des Kirchenbaus. Dabei wurde auch die Westempore eingebaut.<sup>[6]</sup>

Die heutigen Glasfenster sowie die neugotische Ausstattung stammen von einer Restaurierung Ende des 19. Jahrhunderts. Seit 2003 läuft eine umfassende Renovierung; diejenige des Dachstuhles und des Daches wurde 2009 erfolgreich abgeschlossen, die von Fundament und Turm 2017.<sup>[7]</sup> Von 2020 bis 2024 erfolgt die intensive Außensanierung der Basilika. Diese betrifft Arbeiten am Naturstein der Kirchenfassade, an den Buntglasfenster sowie Arbeiten an der Elektroinstallation.<sup>[8]</sup>

Der Dachstuhl ist einzigartig für seine Zeit. Mit Balken und Sparren, die jeweils die Länge von fast 38 Metern aufweisen, wurde eine freitragende Dachkonstruktion aus Eichenbalken



Basilika St. Martin in Amberg

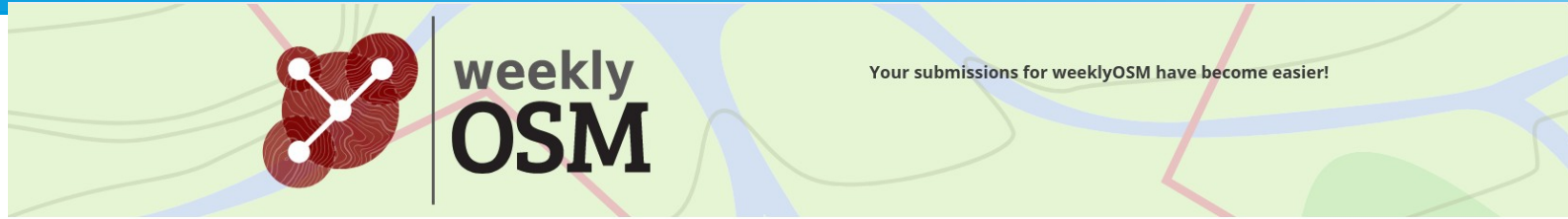


Innenraum mit Altar der St.-Martins-Kirche



Staying up to date

# weekly OSM



## weeklyOSM 666

📅 2023-04-30 ✍️ weeklyteam 🏷️ Weekly

18/04/2023-24/04/2023

🗨️ No Comments

Language:



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OSM

OpenStreetMap is a huge database, allows everybody to create maps

