

# Mobile Mapping for OpenStreetMap

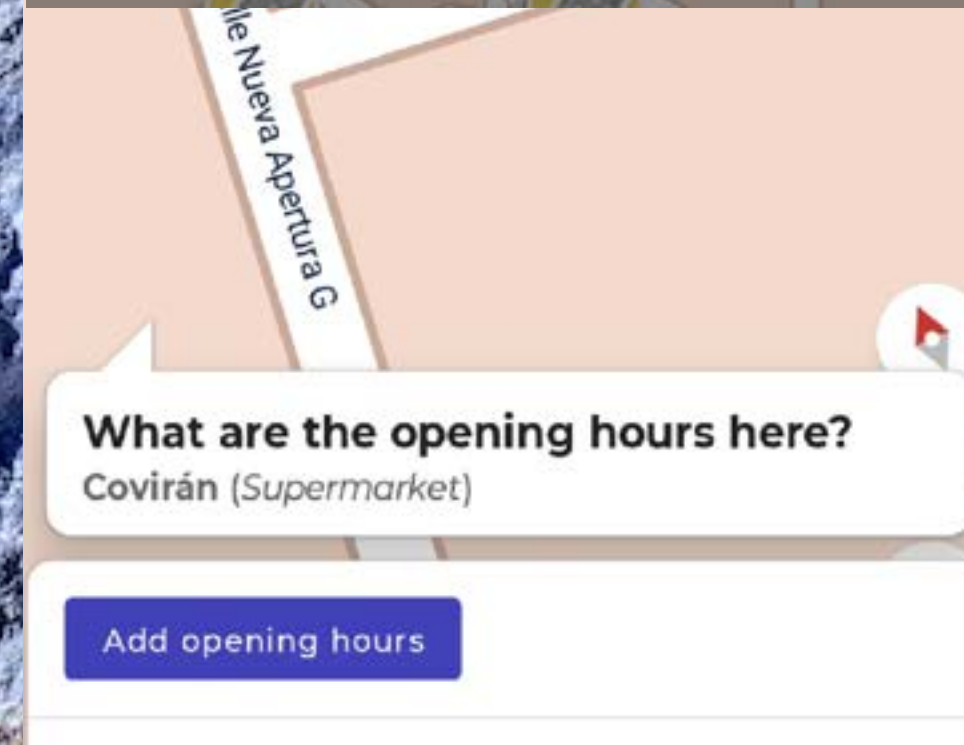
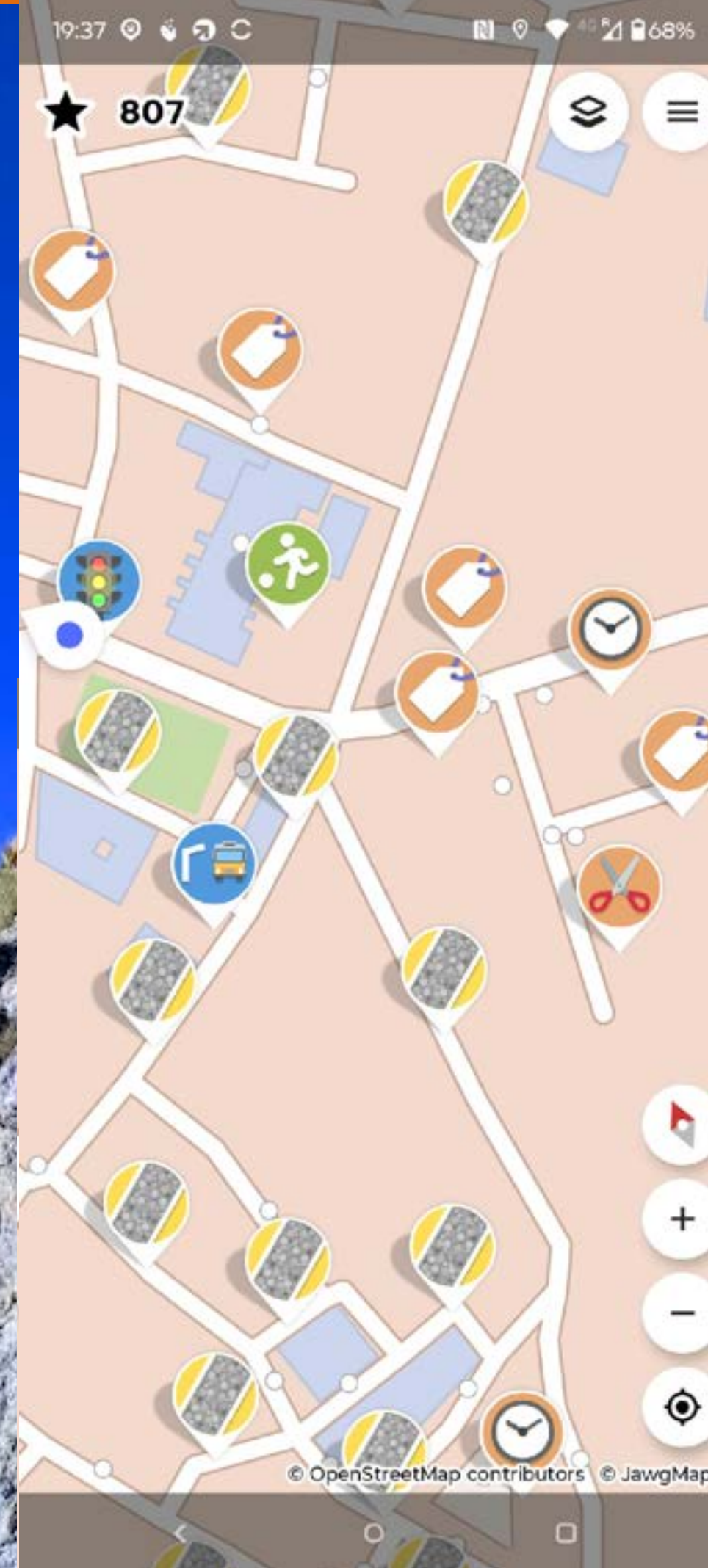
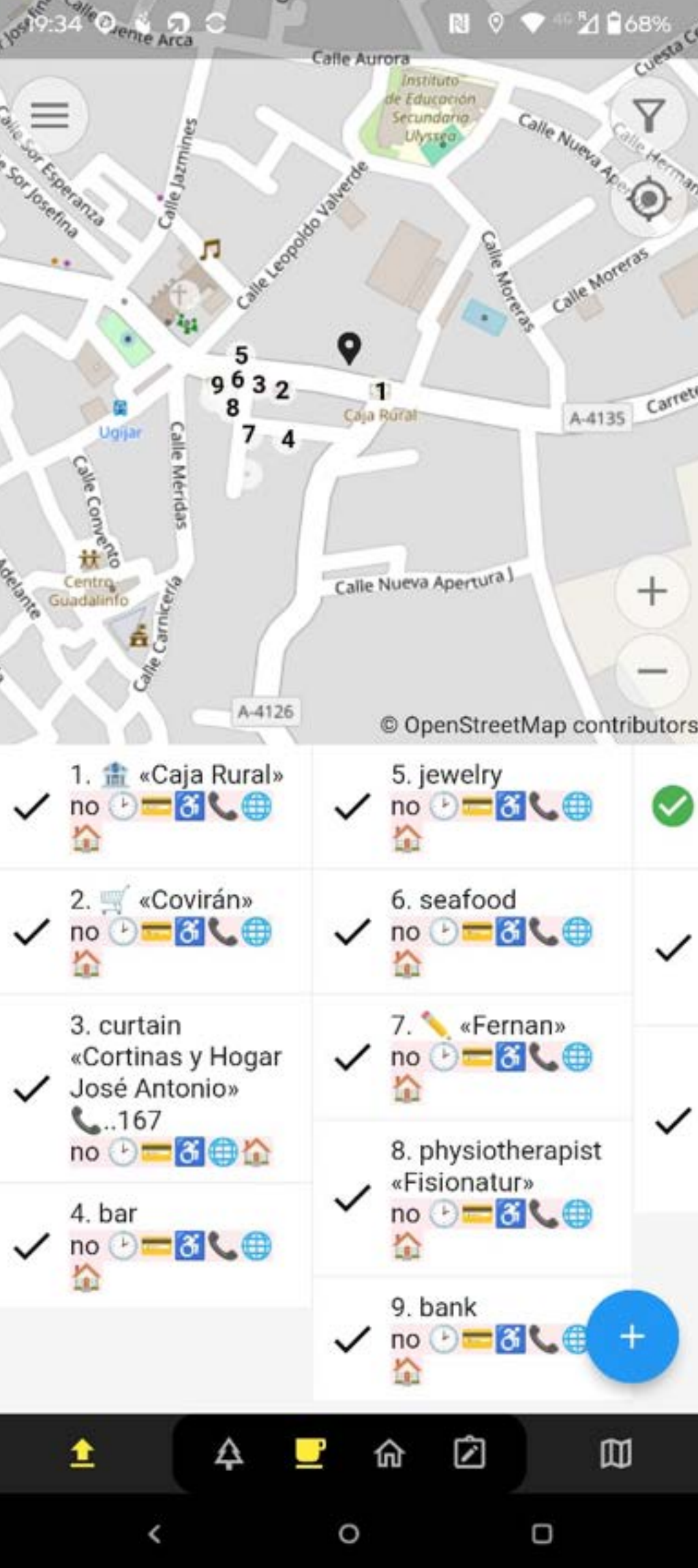


## Taller - Workshop - (English)

*Learn how to map on OpenStreetMap, the free map of the world, the "Wikipedia of maps". Roads, paths, bars, shops,...*  
*By: Just van den Broecke (OSM-NL)*

workshop docs  
[alpumapa.xyz](http://alpumapa.xyz)

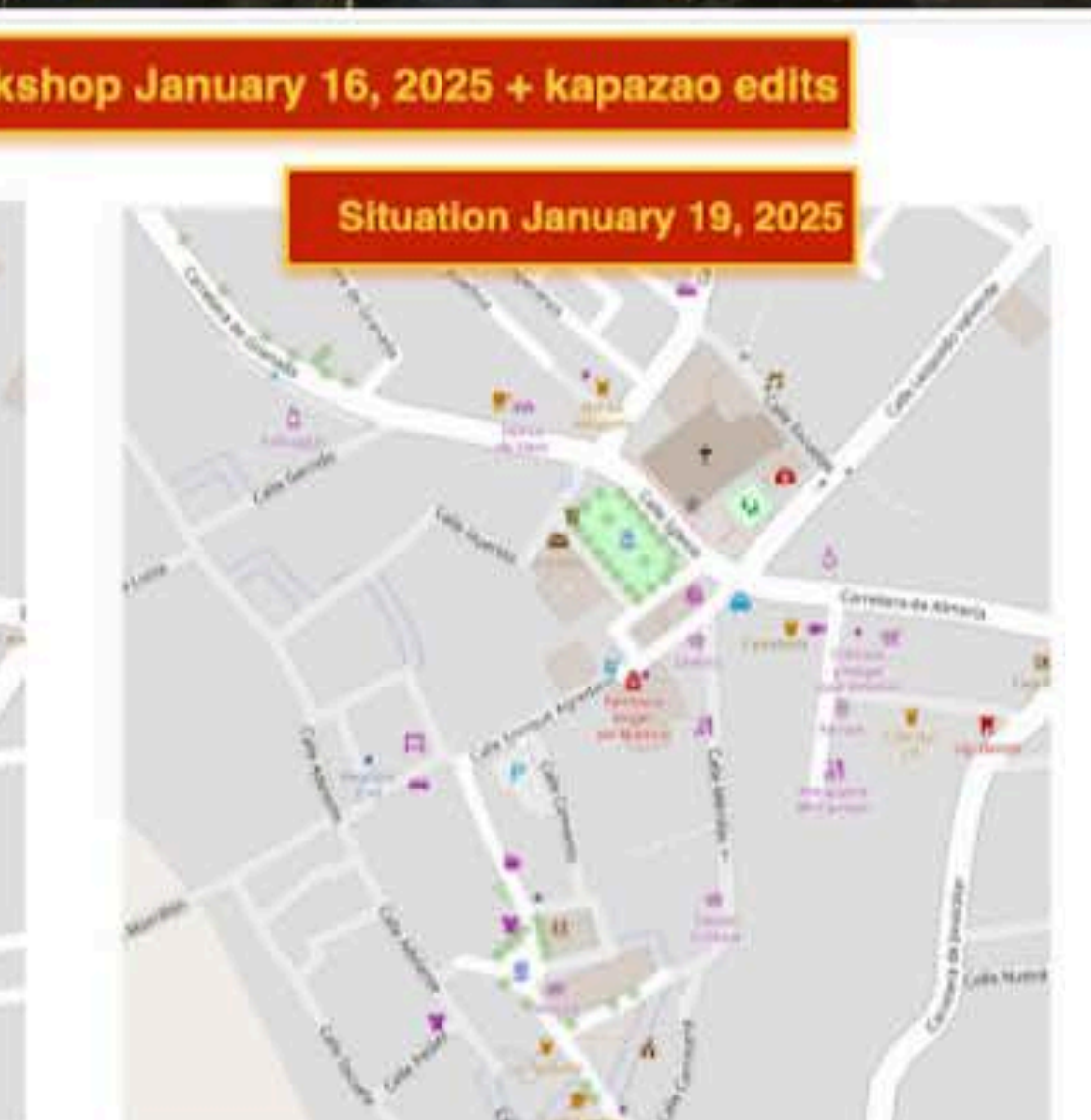
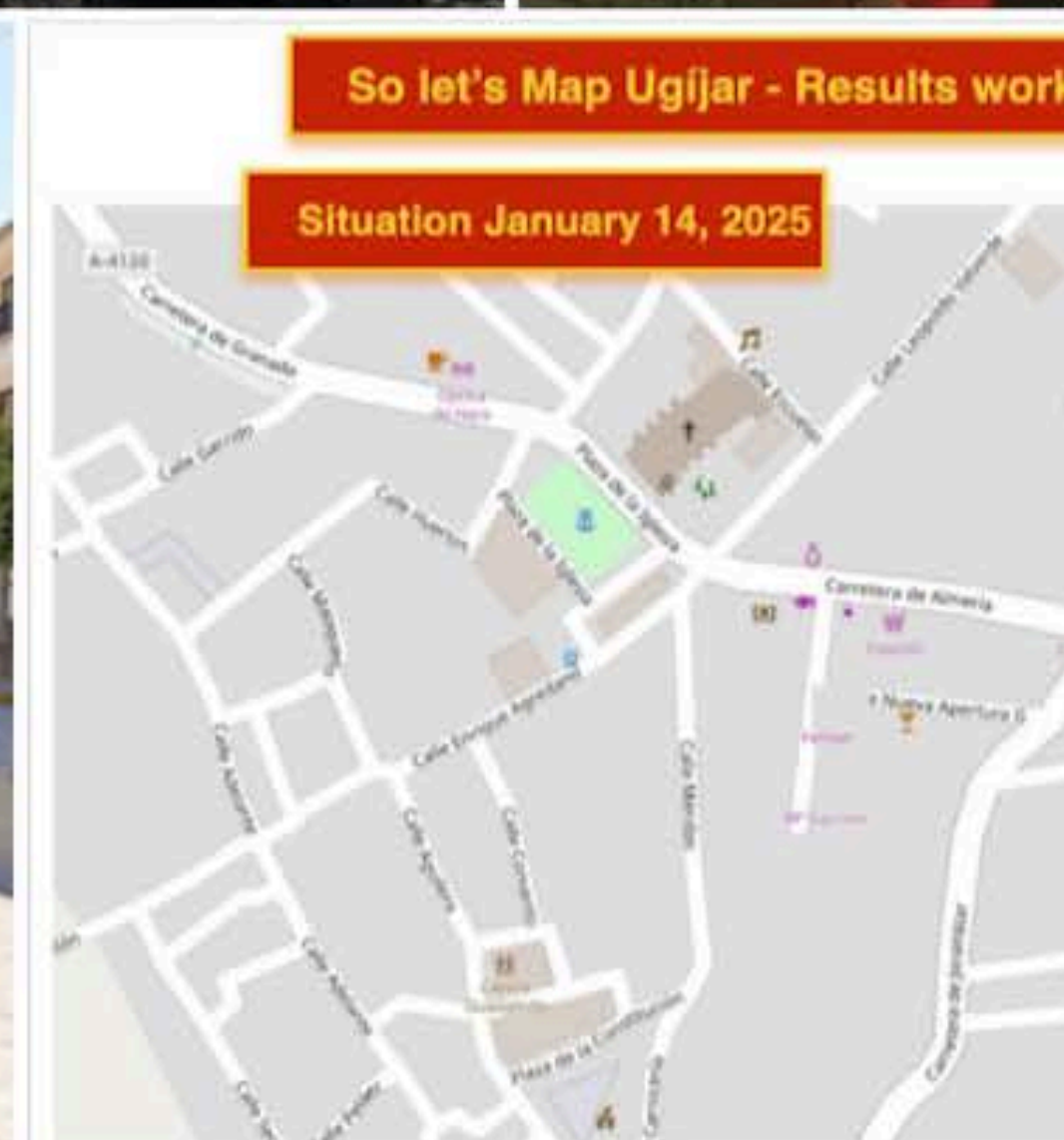
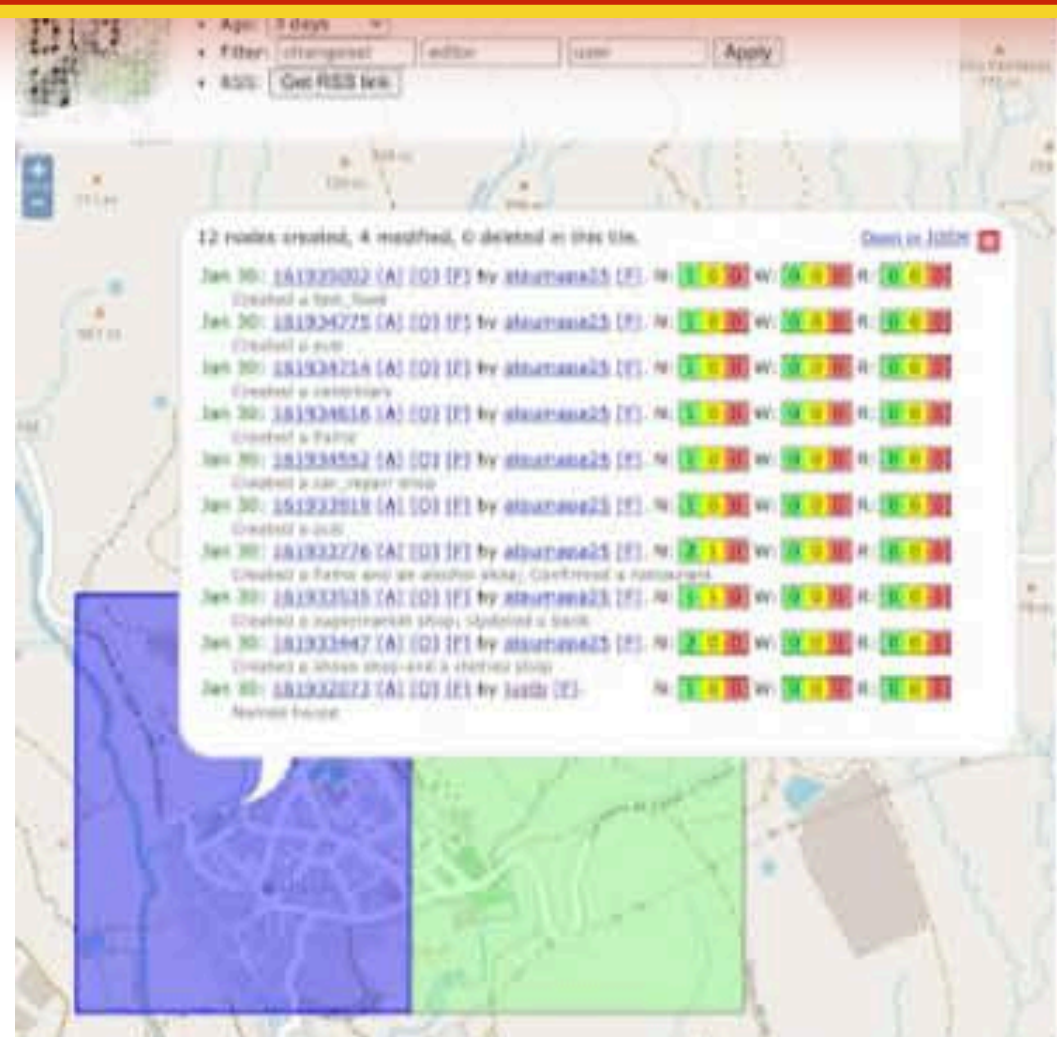
V2







# Workshops in Spain



**¡Vamos a mapear Las Alpujarras!**  
**Let's Map Las Alpujarras!**

**Taller - Workshop - (English)**  
Learn how to map on OpenStreetMap, the free map of the world, the "Wikipedia of maps". Roads, paths, bars, shops,....  
By: Just van den Broecke (OSM-NL)

**Thu, January 16, 2025 - 10:00-12:00**  
Ugijar Co-workspace  
Centro de Interpretación de La Alpujarra  
C. Rabilillas, 2, 18480 Ugijar, Granada  
+34 6477887139 (Juan Luis, library)

**More**  
alpujarras.xyz - workshop  
alpujarrasnowmads.com  
openstreetmap.org



# Agenda

- Introduction (presentation slides)
- Workshop via [alpumapa.xyz](http://alpumapa.xyz)
  - create account on [openstreetmap.org](http://openstreetmap.org)
  - learn, install and configure apps
  - go on the streets to map! OR remain inside (armchair mapping)  
***BE CAREFUL WHILE LOOKING AT PHONE AND WALKING!***
  - return here for looking at results & evaluation

OSM Website: [openstreetmap.org](http://openstreetmap.org)



**Just van den Broecke**  
**Open Source**  
**Geospatial Professional**  
[www.justobjects.nl](http://www.justobjects.nl)

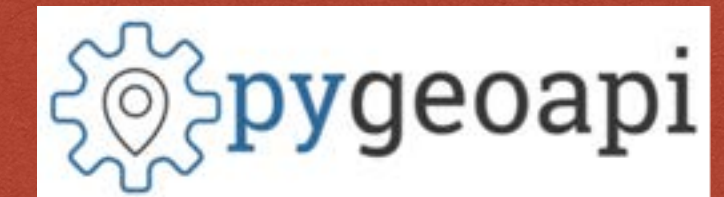
*Soy  
hollandés*

**About  
Me**

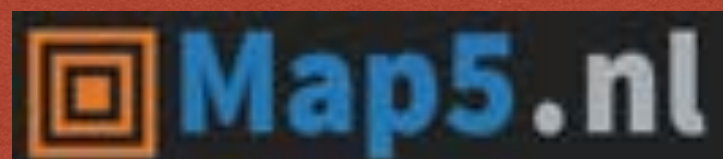
Founder



**FOSS Projects**

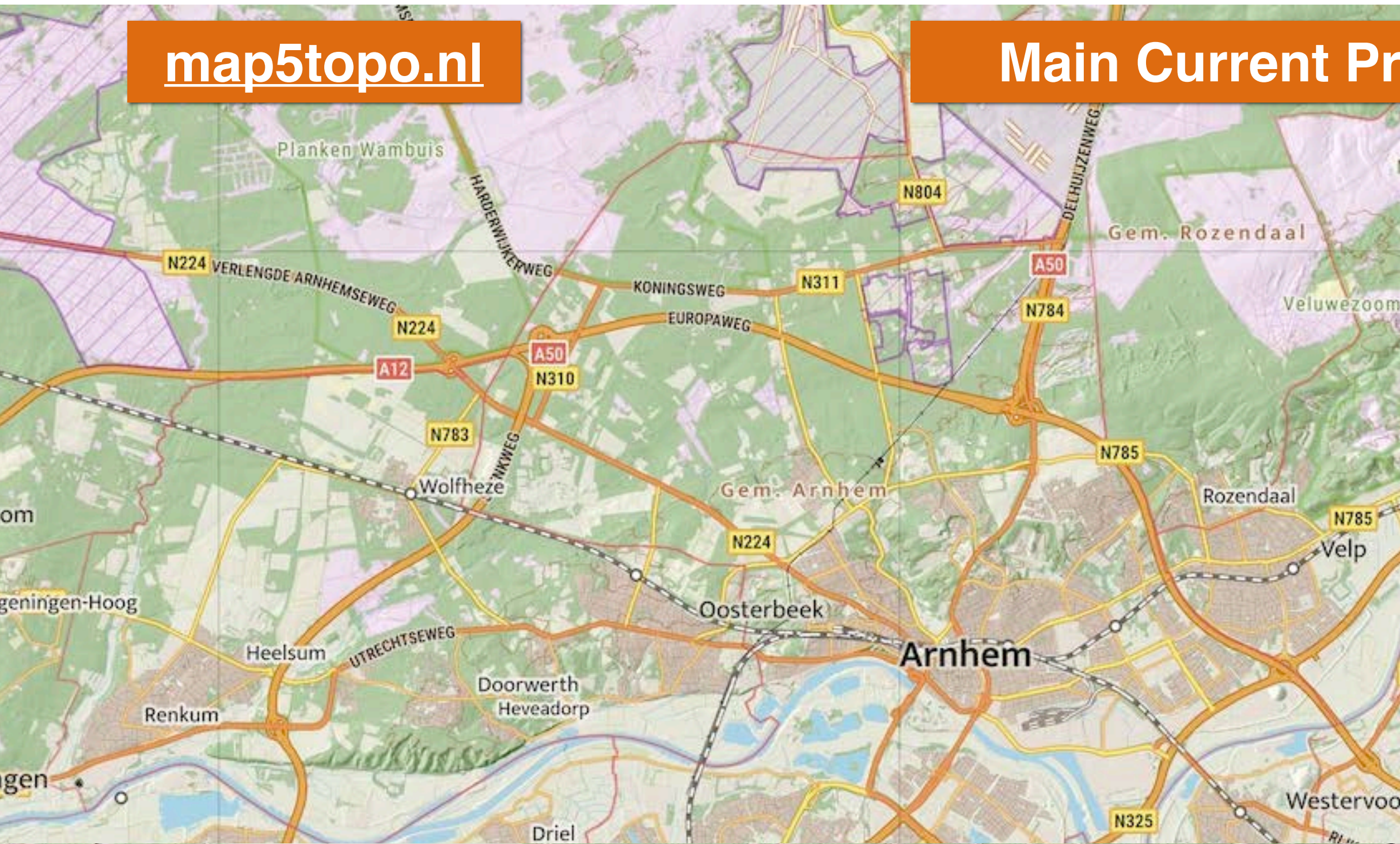


**Cloud Services**



**OpenStreetMap Mapper**  
[openstreetmap.org/user/justb](http://openstreetmap.org/user/justb)







# What is OpenStreetMap?

- **Definition:**  
*A free, open-source, and collaborative mapping platform where anyone can contribute, edit, and use map data.*
- **Mission:**  
*To create and provide free geographic data to everyone.*
- **Fun Fact:**  
*Often referred to as "the Wikipedia of maps."*

**OSM Website: [openstreetmap.org](https://openstreetmap.org)**



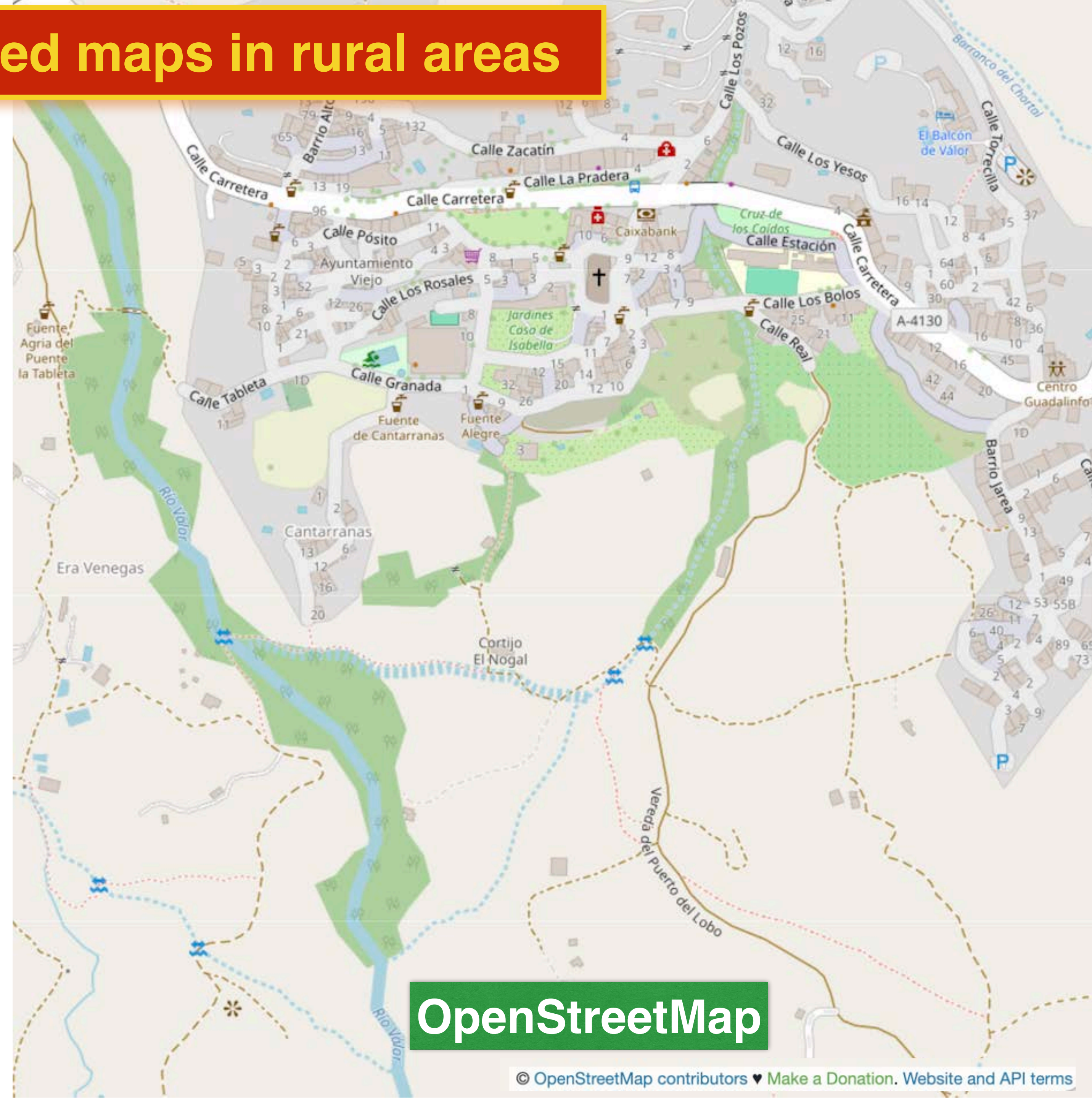
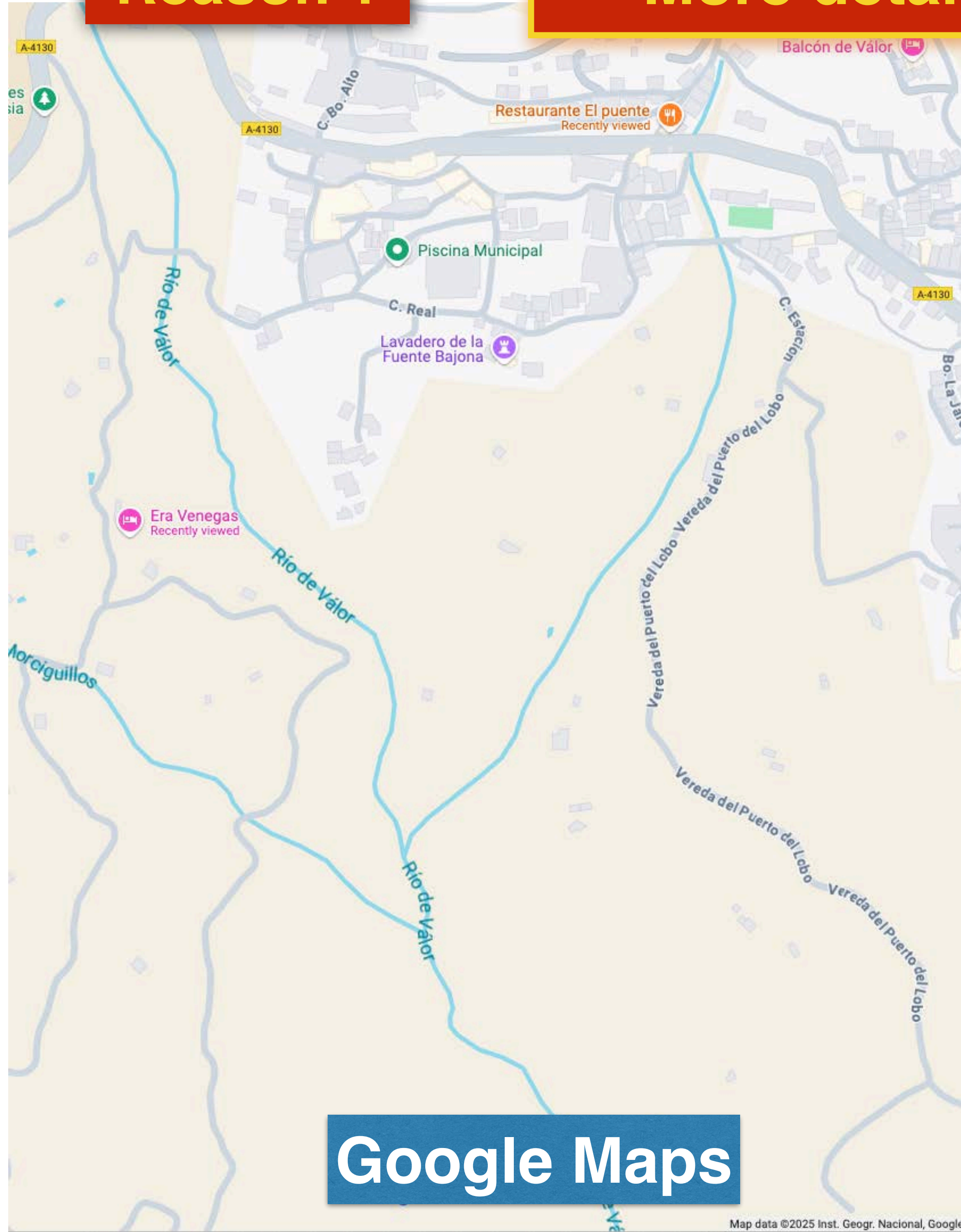
Why? Por que?

Three Reasons  
Tres Razones



Reason 1

More detailed maps in rural areas



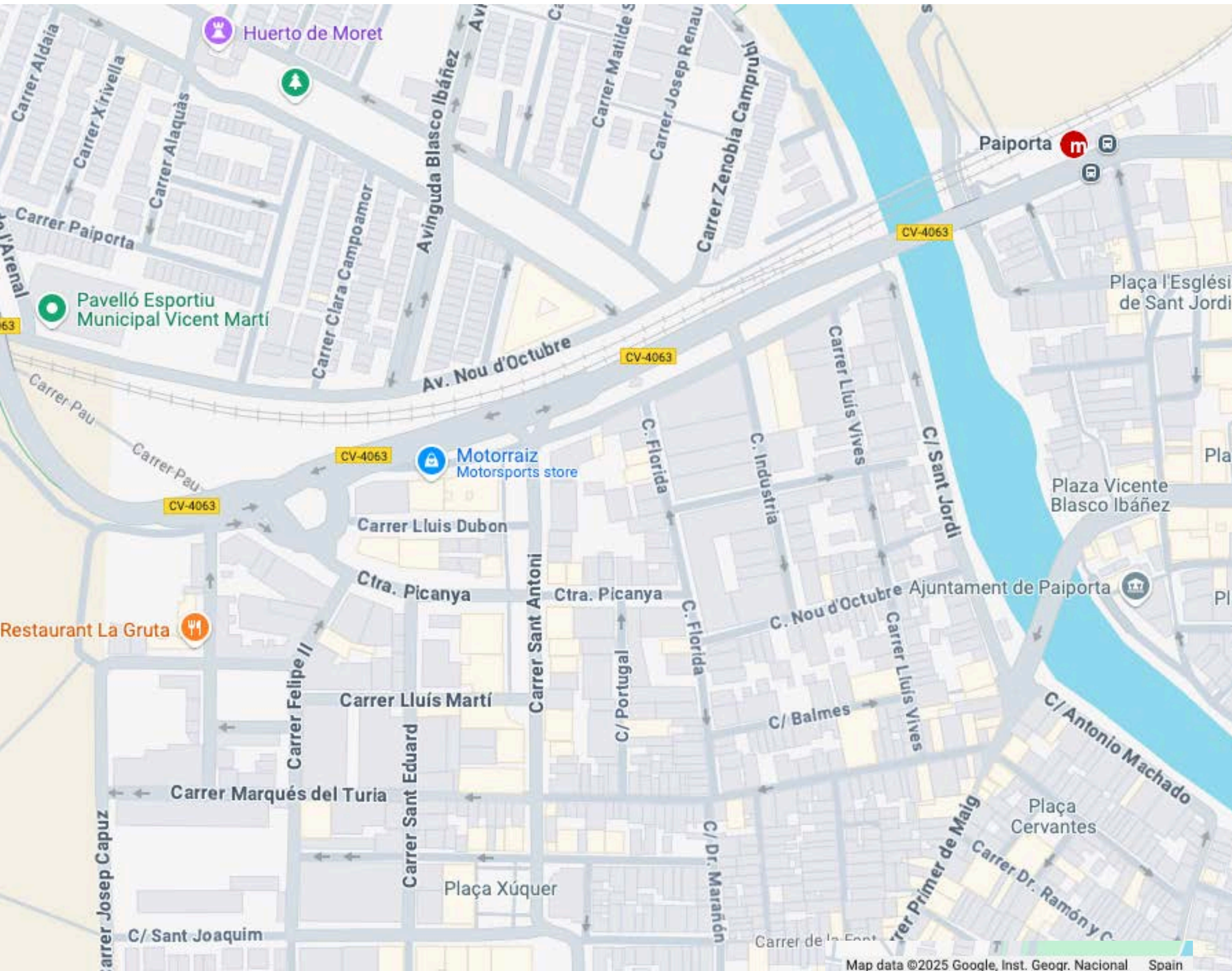
OpenStreetMap

© OpenStreetMap contributors ♥ Make a Donation. Website and API terms

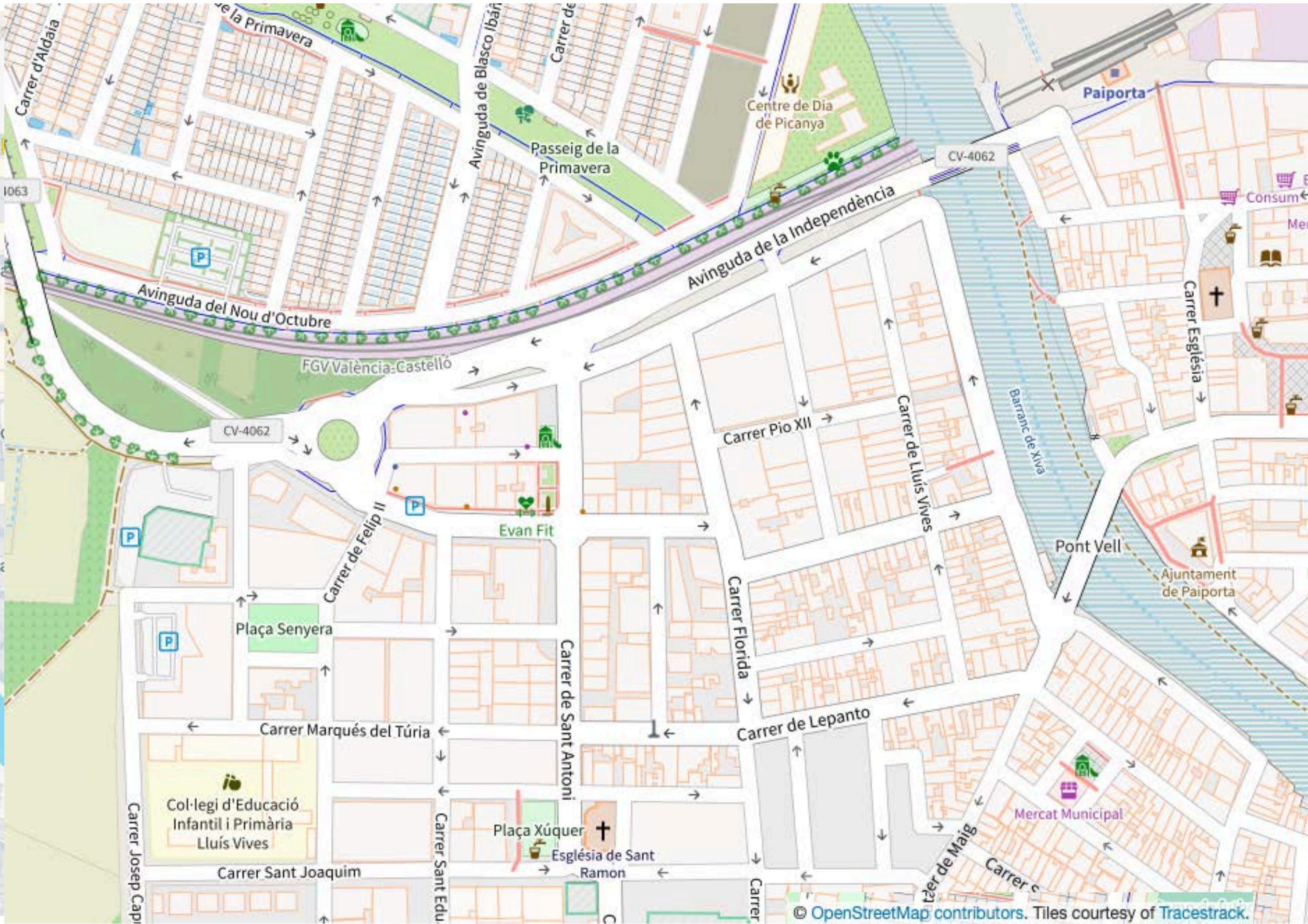


# Reason 1

## More detailed maps in general



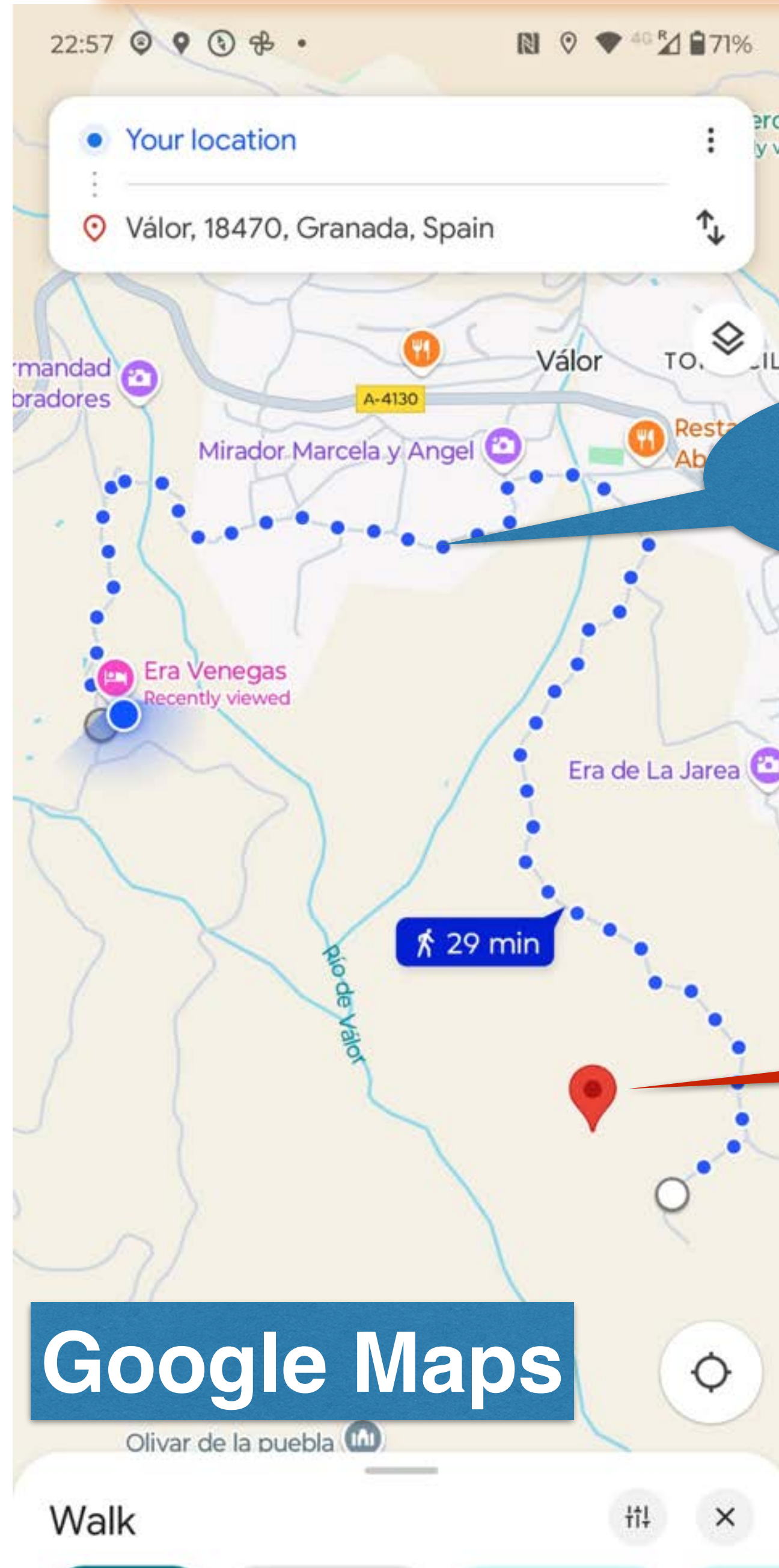
# Google Maps



# OpenStreetMap



# Pedestrian Routing - Google Maps vs CoMaps (OSM)



Routing over car roads: 29 min

"Take me to G&T"

Routing over "Senderos": 22 min





## Reason 2

# Disaster Response and Humanitarian Mapping

Mapping our world together

HOT Humanitarian OpenStreetMap Team

WHAT WE DO OUR WORK TOOLS & DATA NEWS

OPEN MAPPING HUBS COMMUNITY & ORGANIZATION PARTNER WITH US GET INVOLVED

DONATE

HOT IS AN INTERNATIONAL TEAM DEDICATED TO HUMANITARIAN ACTION AND COMMUNITY DEVELOPMENT THROUGH OPEN MAPPING.

LEARN WHAT WE DO START MAPPING >

491K Total Mappers<sup>①</sup>

260M Total Map Edits<sup>①</sup>

156.4M Buildings Mapped<sup>①</sup>


3.4M Roads Mapped (KM)<sup>①</sup>

alpumapa.xyz



## Reason 2

## Disaster Response and Humanitarian Mapping

**Humanitarian OpenStreetMap Team**  
23,363 followers  
2mo • 

#OSM Community, we urgently need your help to map roads and pathways in #Valencia and other affected municipalities due to severe flooding from #DANA. Your contributions can make a huge difference in the response efforts! Let's map: <http://bit.ly/SPNFloods24>

URGENT ACTIVATION



We require your **urgent support** mapping.

**CAMPAIGN** [bit.ly/SPNFloods24](http://bit.ly/SPNFloods24)

Spain Floods 2024 | [tasks.hotosm.org](https://tasks.hotosm.org)

Mapping our world together

Humanitarian OpenStreetMap Team Website

**Tasking Manager** EXPLORE PROJECTS MY CONTRIBUTIONS LEARN ABOUT SUPPORT

#17948 | OSM España HIGH






### SPAIN FLOODS 2024: VALENCIA ROADS AND PATHS (OTHER AFFECTED MUNICIPALITIES)

Spain Floods 2024 · Spain · disaster response

On 29 October 2024, torrential rain caused by an isolated low-pressure area at high levels brought over a year's worth of precipitation to several areas in southeastern Spain, including the Valencian Community. The resulting floodwaters caused the deaths of at least 205 people and substantial property damage. It is one of the worst natural disasters in the history of Spain by the number of confirmed deaths. See more in the [October 2024 Spain floods Wiki](#).

The OSM España community has identified it as a priority to complete the road network in the most affected region. Please contribute to this project to fill these data needs. See more in the [España/Humanitario/DANA 2024 Wiki](#).

Please map the priority area marked in red first. When that area is nearly finished, move to the rest

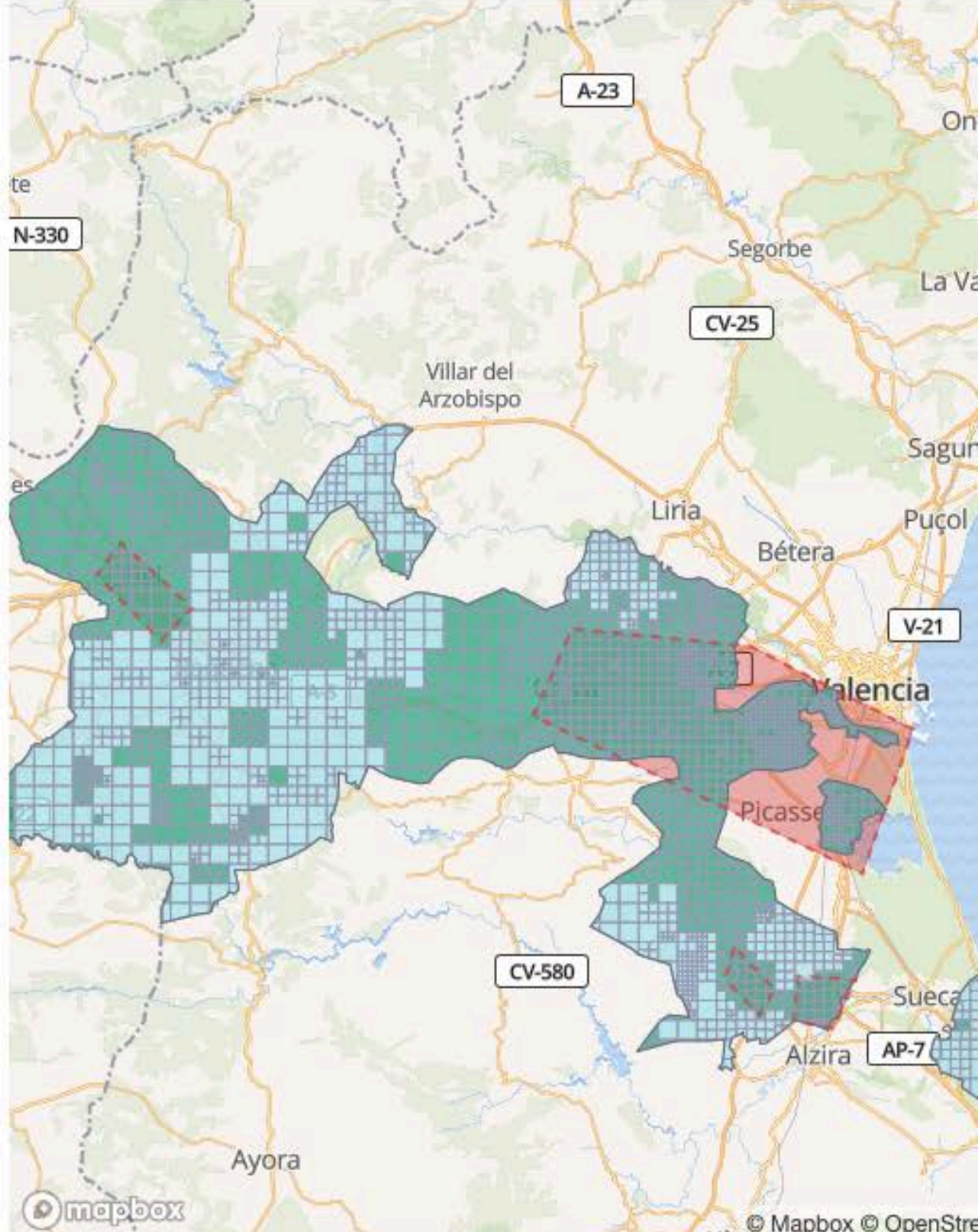
TYPES OF MAPPING     

IMAGERY **ESRI World Imagery**

694 contributors Last contribution 1 month ago

Moderate No due date specified

Overview · Description · Coordination · Teams & Permissions · Questions and comments · Contribution > Share Add to Favorites Contribute



**DANA Valencia (2024):  
OSM played a crucial role in mapping flood-affected areas**



OSM España

516 members, 71 online

Pinned message #1

Bienvenida/o al grupo de mensajería instantánea de la Comunidad de OpenStreetMap en España NORMAS DEL GRUPO: 0- Este grupo es para hablar...

Translate to English

H ;)

Gente!! Activemos nuestro propio "HOT". A causa de la DANA varios puentes han caído y otras carreteras han desaparecido y van a tardar en volver. Especialmente zona de Valencia/Albacete

👍👤

La pasarela de Picanya ya la he quitado yo.

Si conocéis otra zona no dudéis de actuar sobre puentes y otros elementos que tardarán en volver. yo he añadido destroyed al bridge=yes quedando destroyed:bridge=yes

👍👤

He ido aquí ...pero no he visto nada. ¿No había una página con todas estas etiquetas?

[https://wiki.openstreetmap.org/wiki/Disaster-specific\\_tags](https://wiki.openstreetmap.org/wiki/Disaster-specific_tags)

Jordi M

Yo solo he encontrado información útil en la página de 'destroyed' (<https://wiki.openstreetmap.org/wiki/Key:destroyed>.)

Por cierto, 'destroyed:~' también debe de ponerse en la etiqueta highway, ¿no?

H ;)

sí

así lo he hecho, he dejado el nombre solo

la V-30 estará fuera de servicio algún día pero yo no la modificaría a no ser que se cayera algún puente

Tenemos trabajo. Id siguiendo las indicaciones de los vídeos

<https://www.levante-emv.com/videos/camp-turia/2024/10/29/puente-vilamarxant-completamente-agrietado-limite-110838782.html>

Levante-EMV

El puente de Vilamarxant, completamente agrietado y al límite de derrumbarse

fer

H ;)

Si conocéis otra zona no dudéis de actuar sobre puentes y otros elementos que tardarán en volver. yo h...

Yo hice esto mismo en 2 sitios por la dana del año pasado por el centro, luego lo arreglan y se quita el prefijo

Bienvenida/o al grupo de mensajería instantánea de la Comunidad de OpenStreetMap en España NORMAS DEL GRUPO: 0-

Translate to English

WMC

@apuntnoticias | apuntnoticias.es

Jose Luis Infante admin

Así se ve desde el aire el destrozo que ha provocado la DANA en el by-pass | Las Provincias

<https://www.lasprovincias.es/comunitat/aire-destrozo-provocado-dana-bypass-20241031111747-nt.html>

Las Provincias

Así se ve desde el aire el destrozo que ha provocado la DANA en el by-pass | Las Provincias

El Ministro Óscar Puente describió este punto como «crítico» por su situación

Esto lo tenemos?

01 November 2024

Jordi M

Lo estoy mirando

Jose Luis Infante

Esto lo tenemos?

Editado: <https://www.openstreetmap.org/way/1317611449> y <https://www.openstreetmap.org/way/1317611451>

OpenStreetMap

Way: Autovía del Mediterráneo ( 1317611449 )

OpenStreetMap is a map of the world, created by people like you and free to use under an open license.

Matrix Telegram Bridge

Nukeador: Hola, comentaba con Jordi M como podemos ayudar en la zona del DANA, si usando el <https://tareas.openstreetmap.es/explore> para coordinar mapeos

Jordi M

Bienvenido Nuke. Reenvío tus mensajes para que la gente sepa que ya te has presentado en el grupo valenciano de OSM:

Jordi M

Forwarded messages

Nuke 1/11/24

Hola, pertenecemos a la comunidad de datos abiertos BuscaBits en Valladolid, y nos preguntábamos cómo

alpumapa.xyz

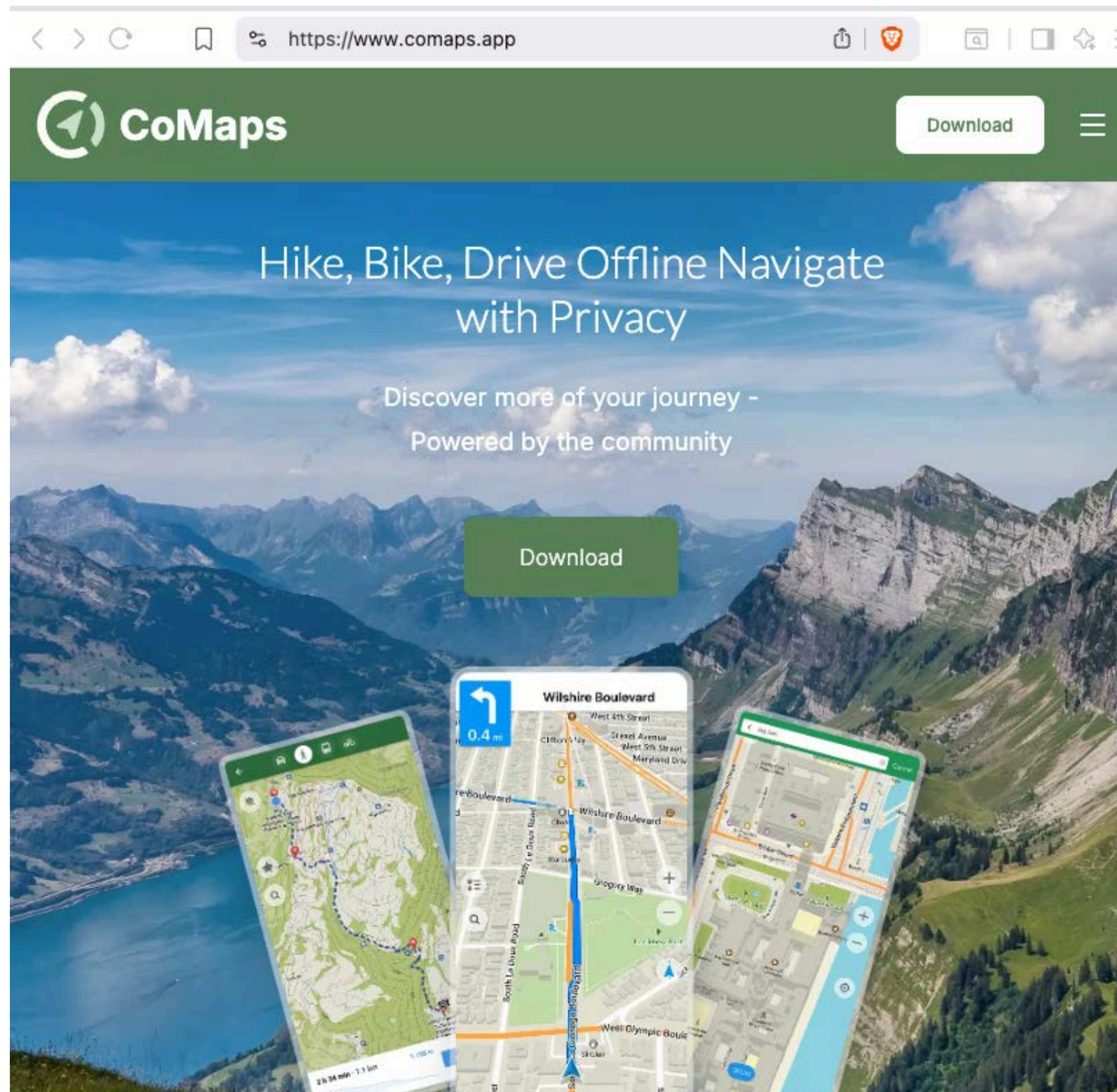


- **People moving away from “USA Big Tech Apps”**
- **Switch to alternatives**
  - from Twitter/X/FaceBook to Mastodon
  - from WhatsApp to Signal
  - from Instagram to PixelFed
  - etc
- **OpenStreetMap fits in this trend**
  - from Google Maps to CoMaps, MagicEarth, OSMAnd..



## Reason 3

# OpenStreetMap Apps as Big Tech Alternatives



iOS

Android

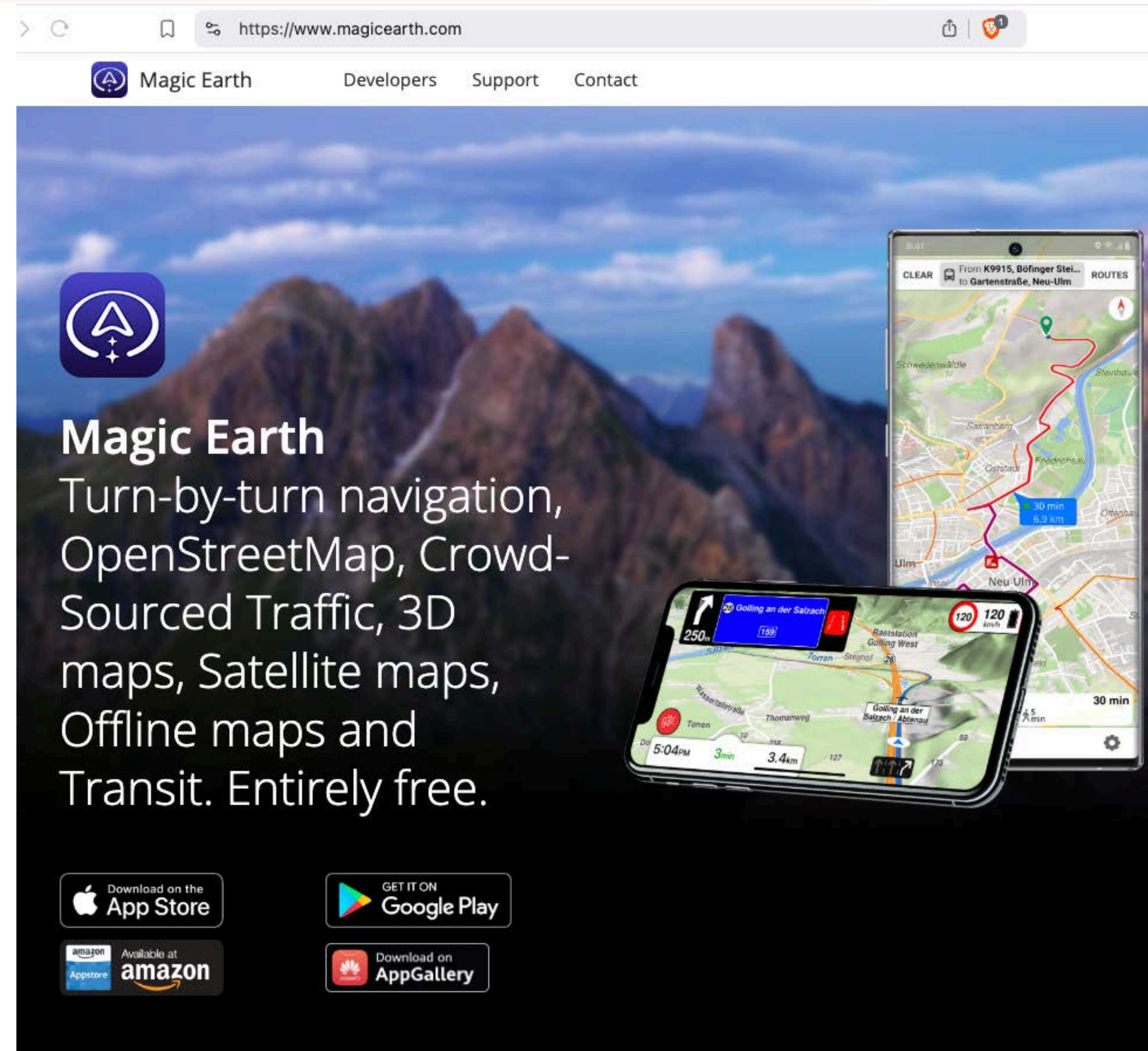
App Store

Google Play

F-Droid

Obtainium

APK Download

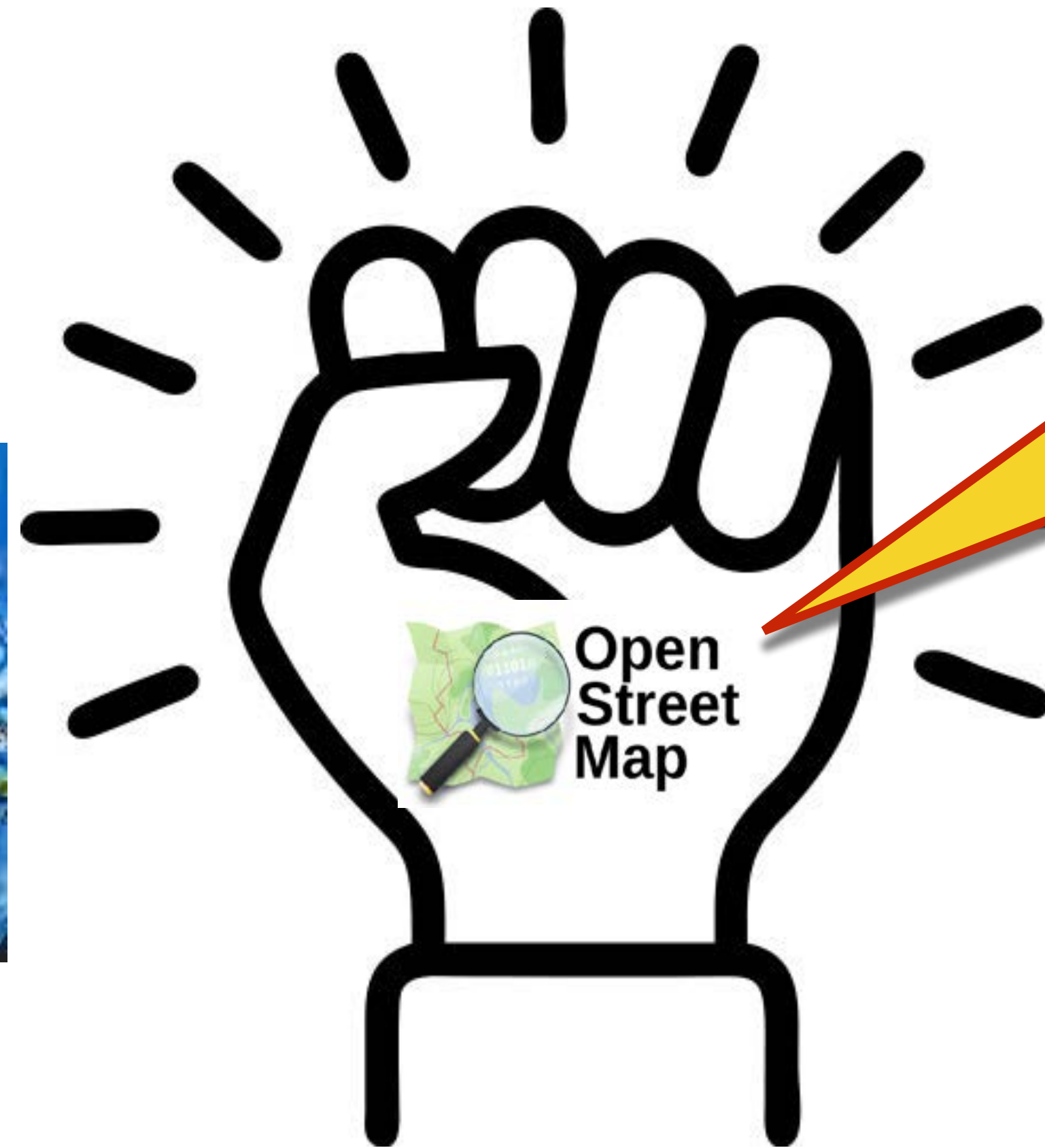




So?

Three Reasons - One Word

*Never mind  
the \$\*@\*% ,  
Let's take Mapping in  
our own hands*



Empowerment - Empoderamiento



# OSM mapping for Válor - status July 6, 2025

**Let's take  
Mapping in  
our own  
hands**



## OSM mapping for Válor - status August 29, 2025

Let's take  
Mapping in  
our own  
hands





## Outdoor Apps Using OpenStreetMap

- **CoMaps:** offline maps with navigation for hiking and cycling
- **Komoot:** route planning for outdoor activities like hiking and biking
- **AllTrails:** provides trail maps and reviews for hiking and running
- **Wikiloc:** trail sharing and GPS navigation for outdoor enthusiasts
- **OsmAnd:** Offline maps with navigation and rich outdoor features



# Editing and Contributing to OSM with Smartphone Apps

- **EveryDoor - [every-door.app](http://every-door.app)**  
add or edit businesses, amenities, and more
- **StreetComplete - [streetcomplete.app](http://streetcomplete.app)**  
improve map by answering map-related questions
- **CoMaps - [comaps.app](http://comaps.app)**  
also allows direct edits to OSM data
- **Many more like Vespucci, Go Map, MapComplete.. ,,**



# OpenStreetMap Inner Workings

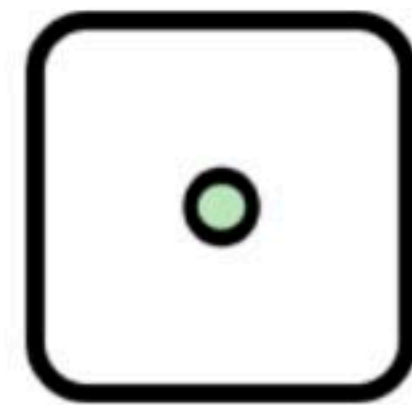
- **IT IS ALL ABOUT DATA!**  
could have called project *OpenGeoData*
- **OSM DATA IS IN ONE BIG DATABASE**  
maps like [openstreetmap.org](https://openstreetmap.org) made with this data
- **ECOSYSTEM OF “APPS” TO EDIT OSM DATA**  
like Id, JOSM, EveryDoor, StreetComplete etc



# Diving Deeper - How is OSM Data Structured?

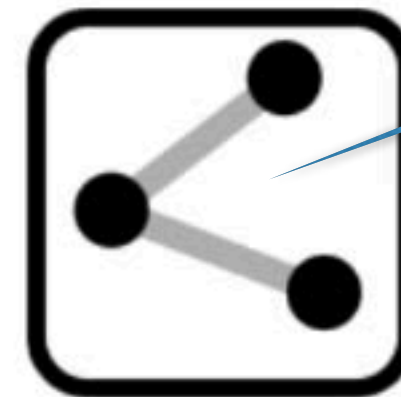
Also Closed  
Ways: Areas like  
Orchards,  
Buildings,..

## 1. Core Elements:



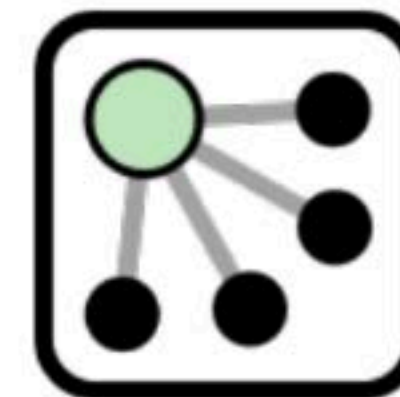
Node

**“Points”**



Way

**“Lines”**



Relation

**“Combinations”**

**Church,  
Restaurant,  
Bench etc**

**Roads, Paths,  
Tracks, etc**

**Busline,  
Hiking Route**

**Examples:**

[wiki.openstreetmap.org/wiki/Beginners\\_Guide\\_1.3](http://wiki.openstreetmap.org/wiki/Beginners_Guide_1.3)

**Nice Overview: [jakobmikschi.eu/post/openstreetmap\\_overview/](http://jakobmikschi.eu/post/openstreetmap_overview/)**

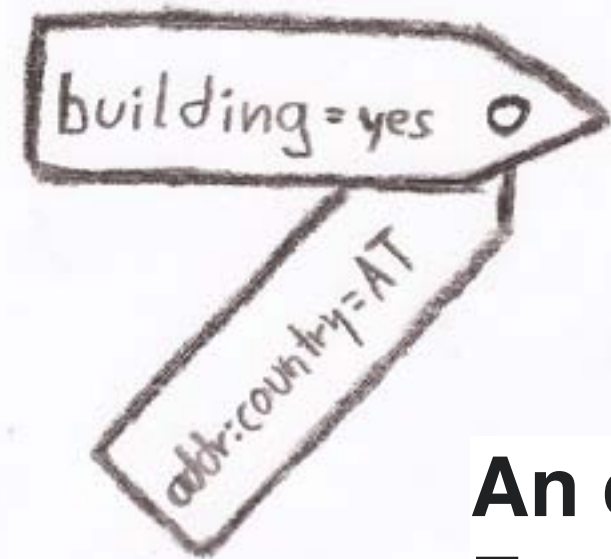


# Diving Deeper - How is OSM Data Structured?

## 2. Tagging

### The Elements Nodes, Ways, Relations have “Tags”

Tags are textual key-value pairs that describe properties of an Element



An element can have **tags**. A tag is a **key=value** pair describing what the element is. For instance, mapping a mobile phone store can be done by creating a **node**, and adding the following tags: **shop=mobile\_phone**, **name=John Smith's phone centre**.

Here are some more examples:

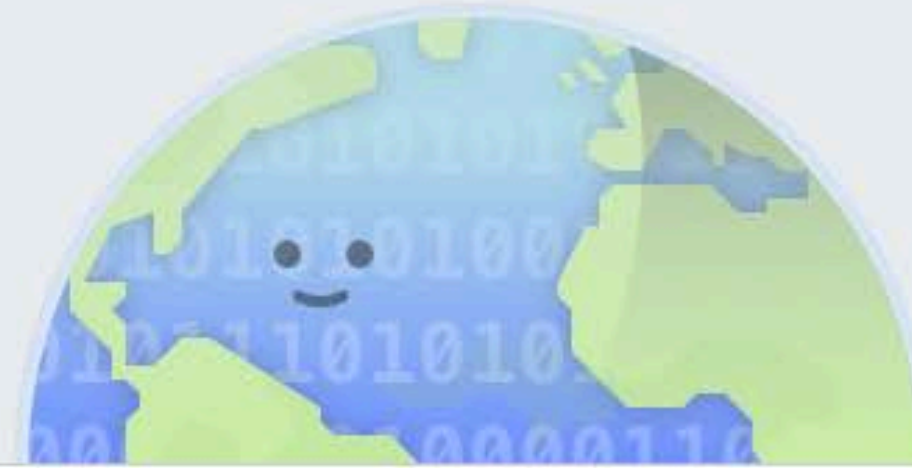
- A parking lot can be a **closed way** tagged with **amenity=parking**
- A building can be a **closed way** tagged with **building=yes**
- A residential road can be a **way** tagged with **highway=residential**.
- A McDonald's branch can be a **node** tagged with **amenity=fast\_food**, **brand=McDonald's**, **name=McDonald's**

[wiki.openstreetmap.org/wiki/Beginners\\_Guide\\_1.3](http://wiki.openstreetmap.org/wiki/Beginners_Guide_1.3)

Nice Overview: [jakobmikschi.eu/post/openstreetmap\\_overview/](http://jakobmikschi.eu/post/openstreetmap_overview/)



# Signup at [openstreetmap.org/user/new](https://openstreetmap.org/user/new)

[Edit](#)[History](#) [Export](#) [GPS Traces](#) [User Diaries](#) [Communities](#) [Copyright](#) [Help](#) [About](#)[Log In](#)[Sign Up](#)[Log in](#)[Sign up](#)

**Free and editable.** Unlike other maps, OpenStreetMap is completely created by people like you, and it's free for anyone to fix, update, download and use.

Sign up to get started contributing.

Email

Your address is not displayed publicly, see our [privacy policy](#) for more information.

Display Name

Your publicly displayed username. You can change this later in the preferences.

Password

Confirm Password

By signing up, you agree to our [Terms of Use](#), [privacy policy](#) and [contributor terms](#).

☐ I consider my contributions to be in the [public domain](#).

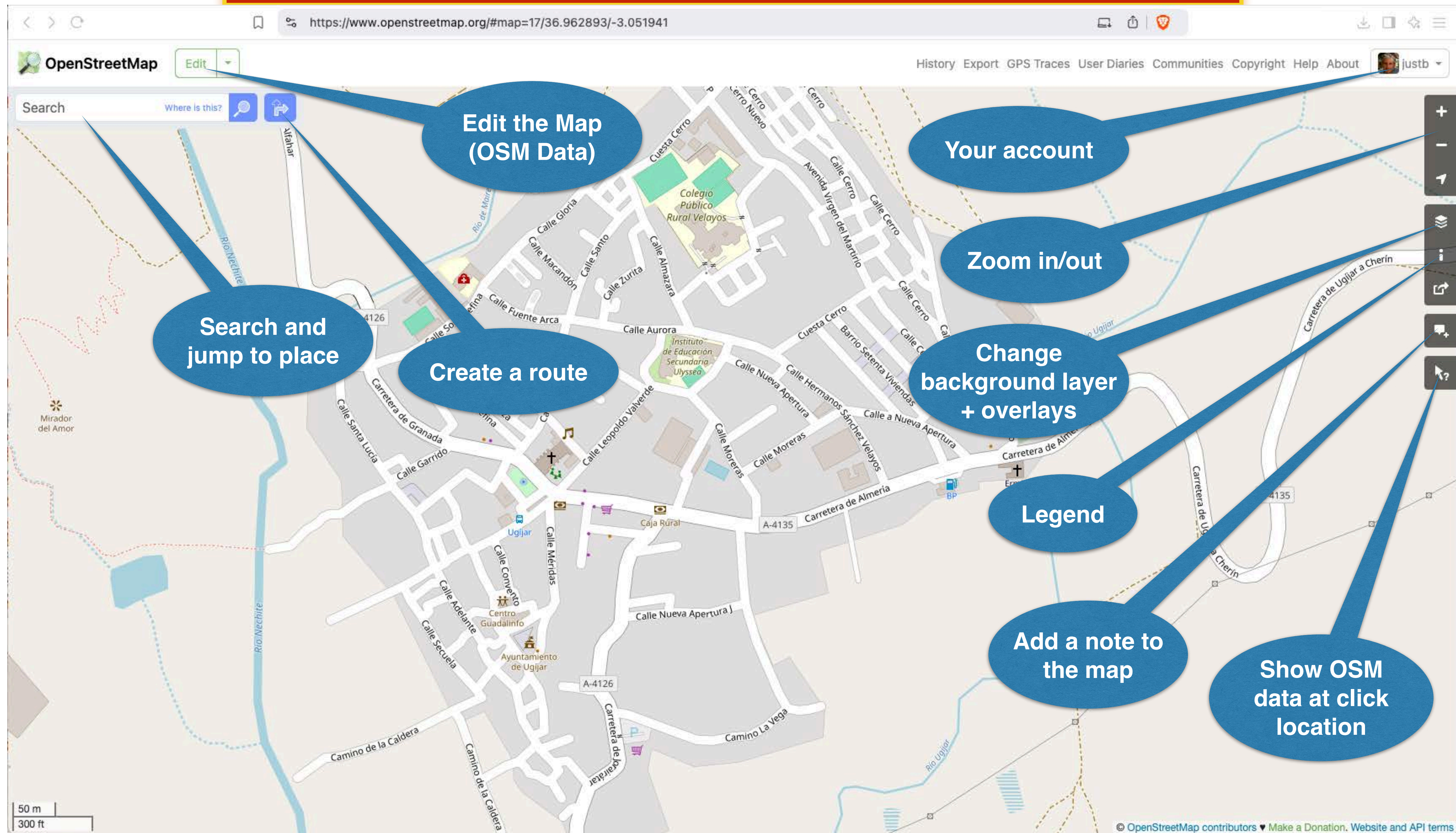
[Sign Up](#)

or sign up with a third party





# Navigating the openstreetmap.org website





**ON TO THE WORKSHOP**

**GO TO [alpumapa.xyz](https://alpumapa.xyz)**



# Thanks! Questions?

Home: [justobjects.nl](http://justobjects.nl)

Mastodon: [mapstodon.space/@justb4](https://mapstodon.space/@justb4)

LinkedIn: [linkedin.com/in/justb4/](https://linkedin.com/in/justb4/)

OSM Workshop: [alpumapa.xyz](http://alpumapa.xyz)