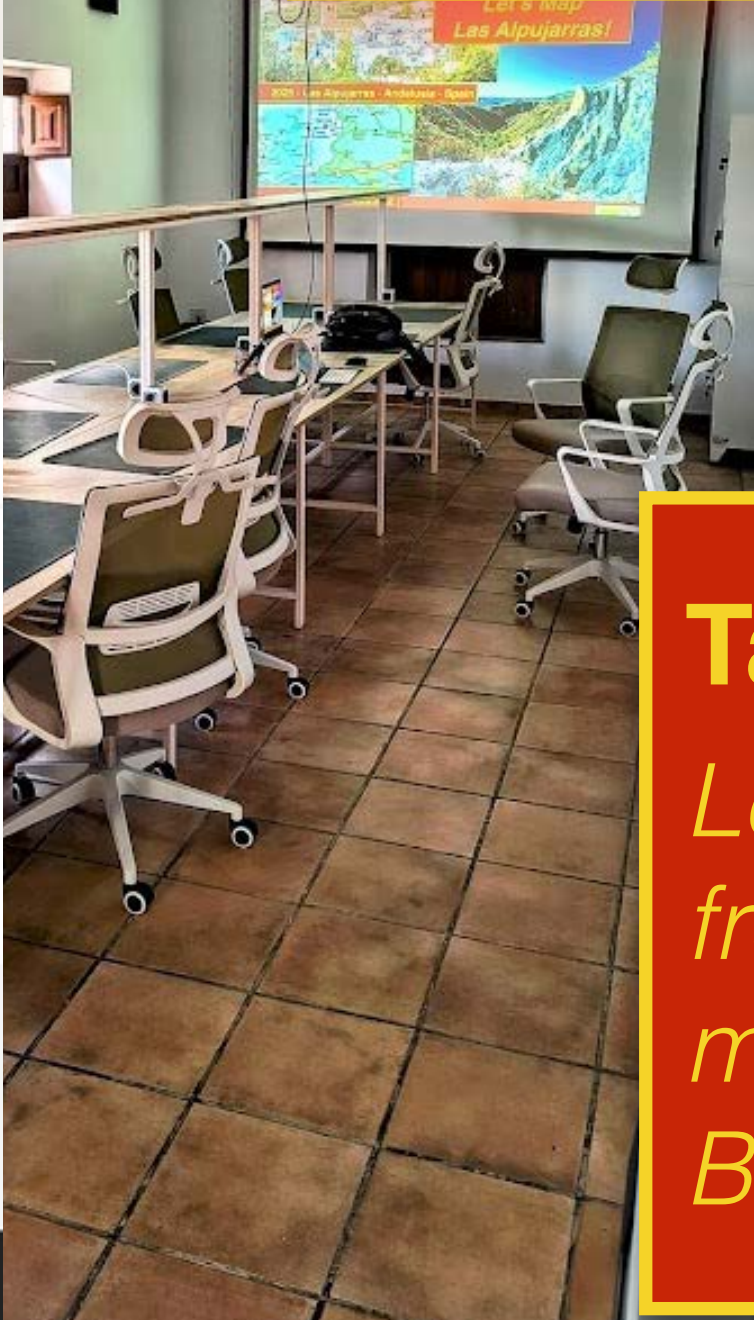


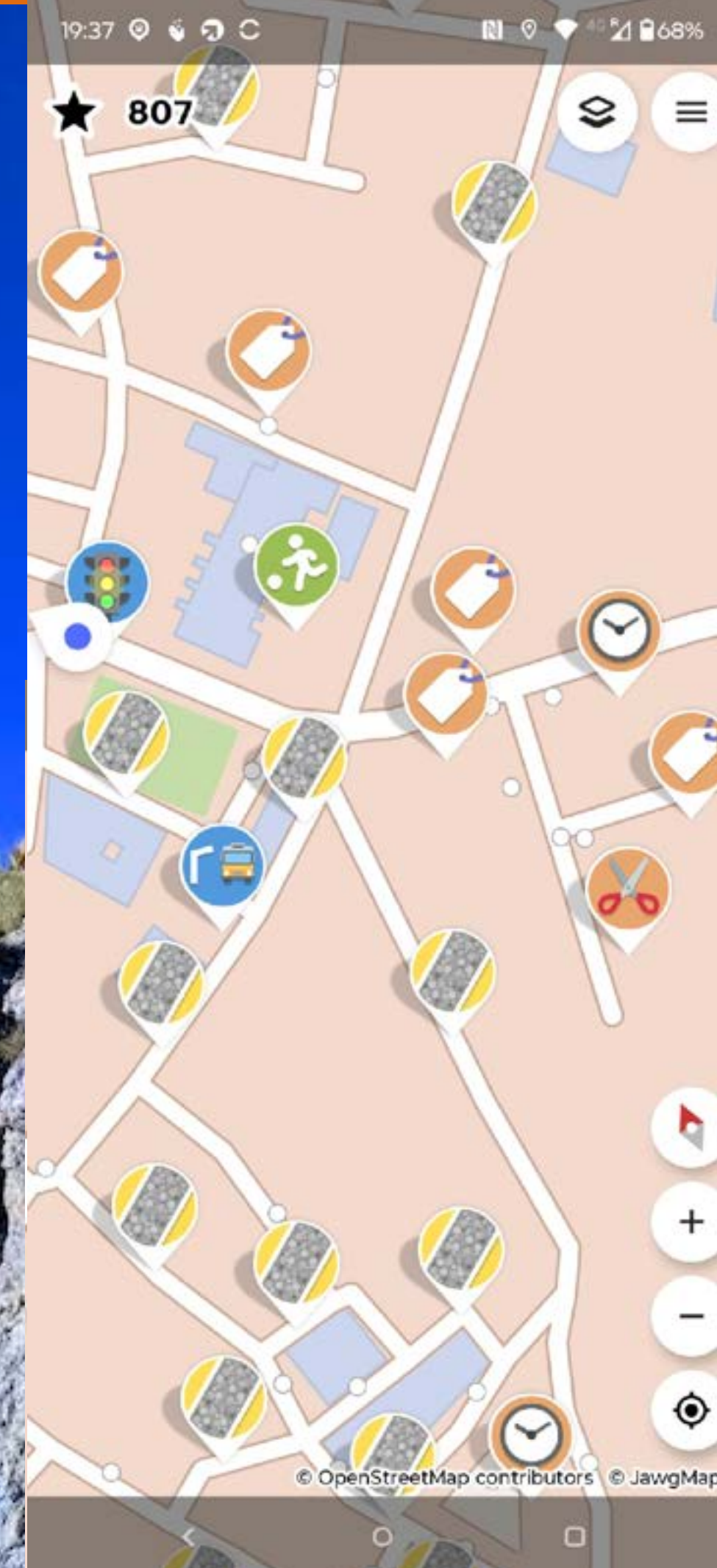
# Vamos a mapear Las Alpujarras! Let's Map Las Alpujarras!



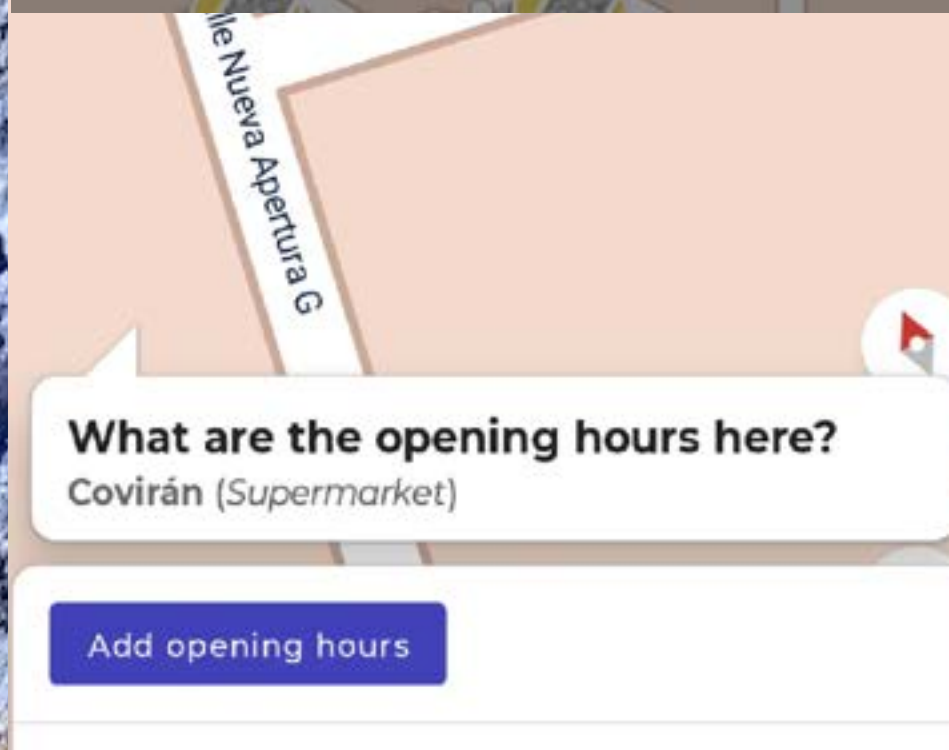
## Taller - Workshop - (English)

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)



**More**  
[alpumapa.xyz](http://alpumapa.xyz) - workshop  
[alpujarraknowmads.com](http://alpujarraknowmads.com)  
[openstreetmap.org](http://openstreetmap.org)  
[openstreetmap.es](http://openstreetmap.es)  
Próximamente también en español!  
contact: justb4@gmail.com



# 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!  
***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)

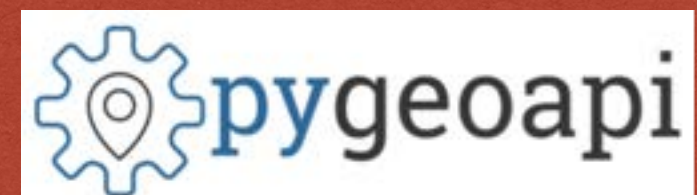
*Soy  
hollandés*

**About  
Me**

Founder

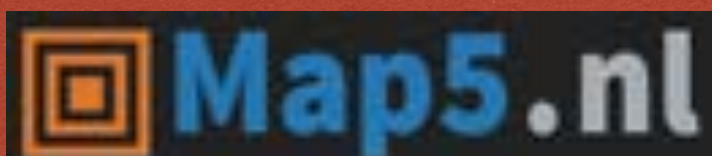


**FLOSS Projects**

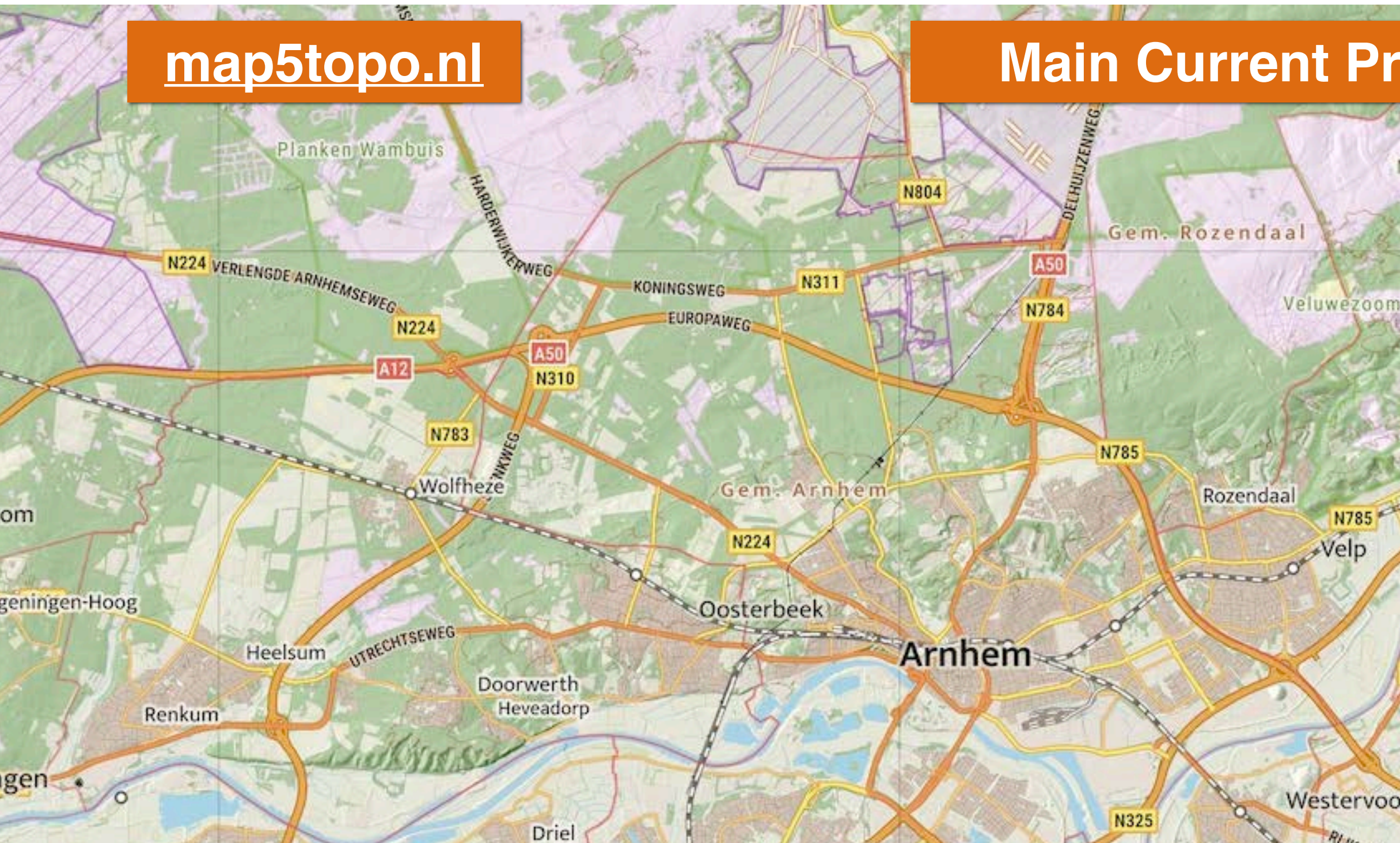


**nlextract**

**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)

Translate to English

Pinned Message #1  
Bienvenida/o al grupo de mensajería instantánea...

El en Corral-Rubio lo has puesto 2 veces.  
01:10

Héctor 🐼

<https://www.msn.com/en-us/news/technology/pok%C3%A9mon-go-saves-stranded-group-after-google-maps-fails-them/ar-AA1w5Wf3>

Nombran a OSM muy de pasada, pero sí, OSM es útil de muchas maneras que no podemos ni llegar a imaginar.

MSN

**Pokémon Go saves stranded group after Google maps fails them**

A small group of tourists found themselves lost in a forest in Spain and were struggling to find their way back to civilization. When they realized that Google Maps wouldn't be of any help, one of them had the idea of...



2 09:40

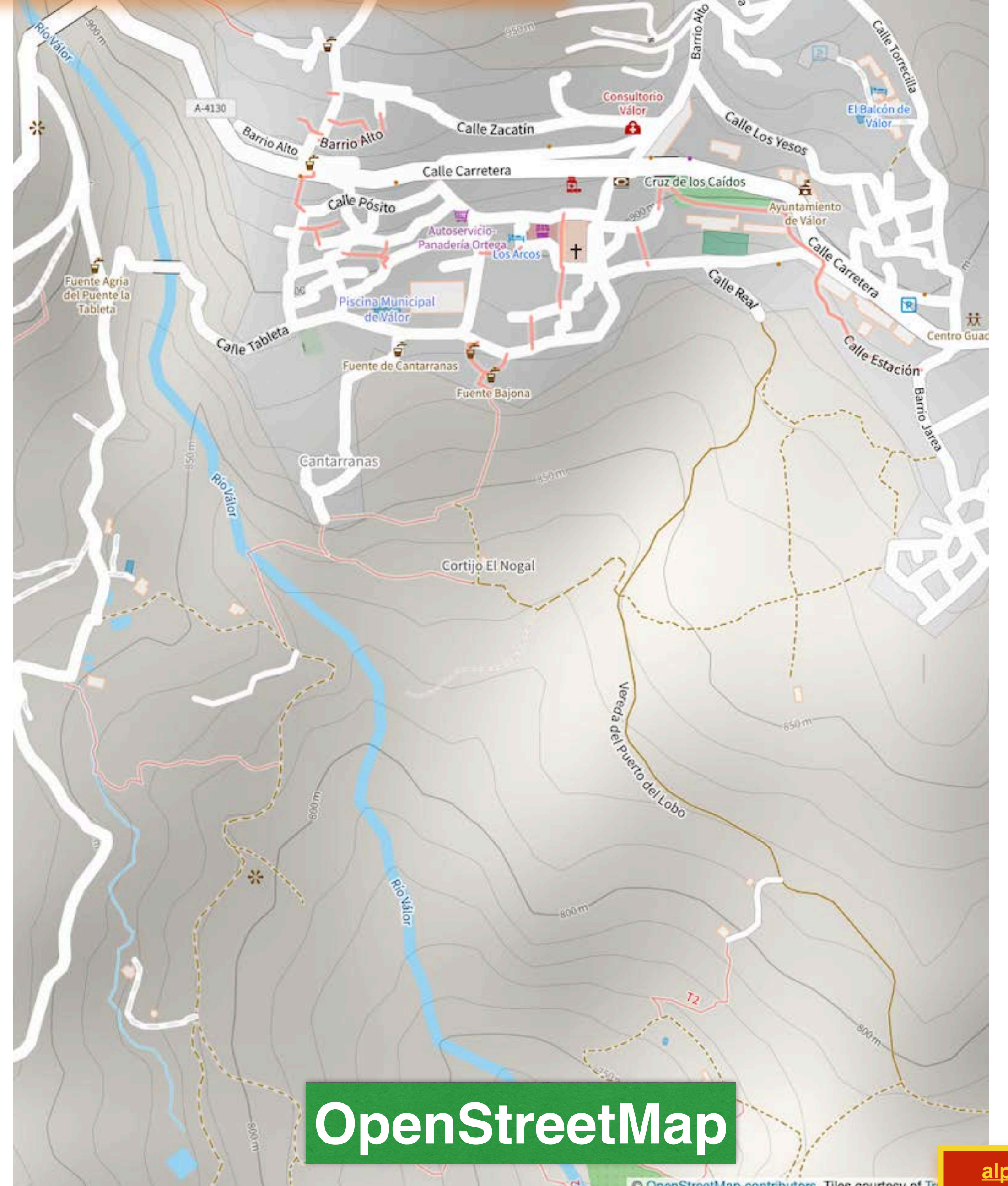
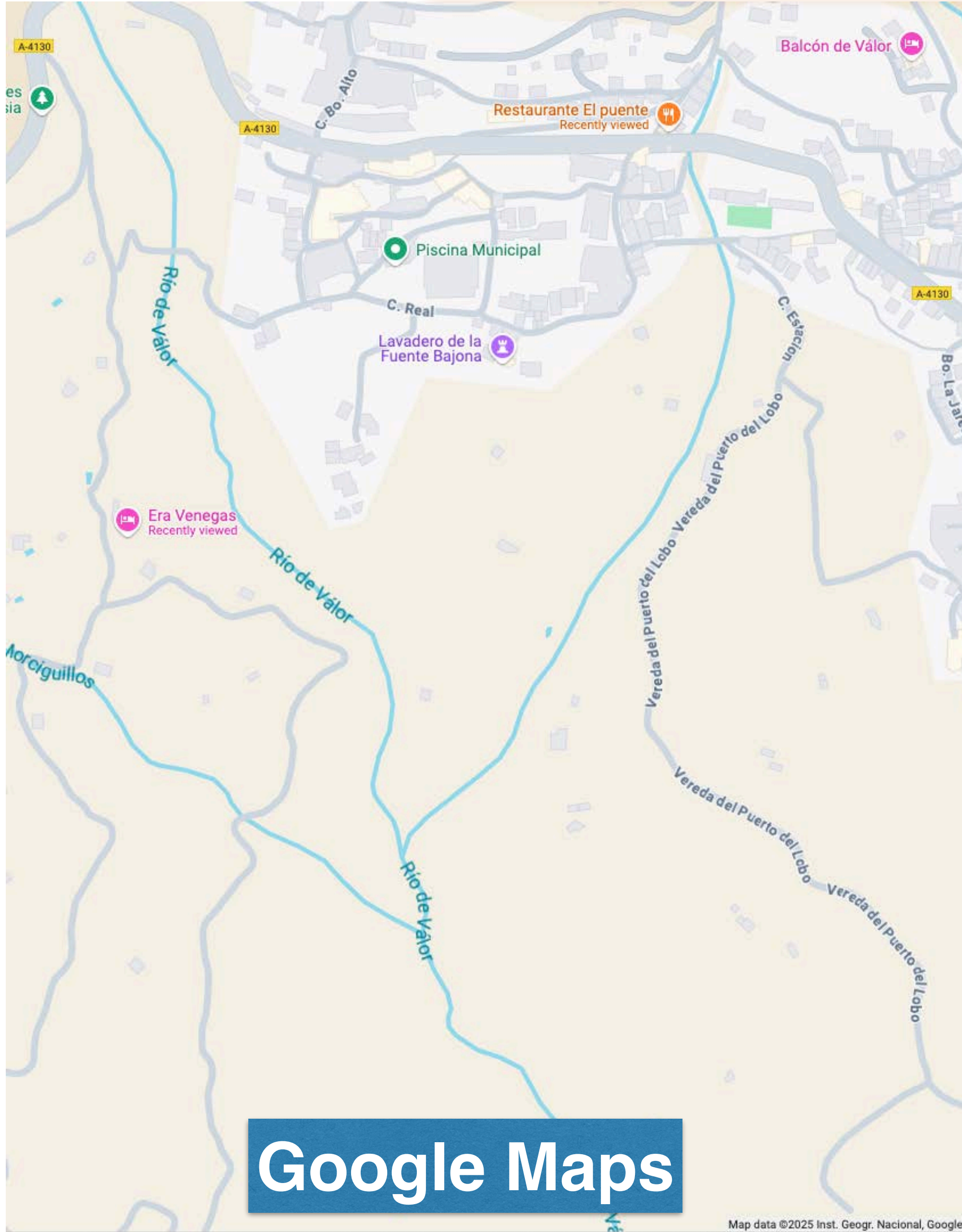
Javier ★

Why? Por que?

Three Reasons  
Tres Razones

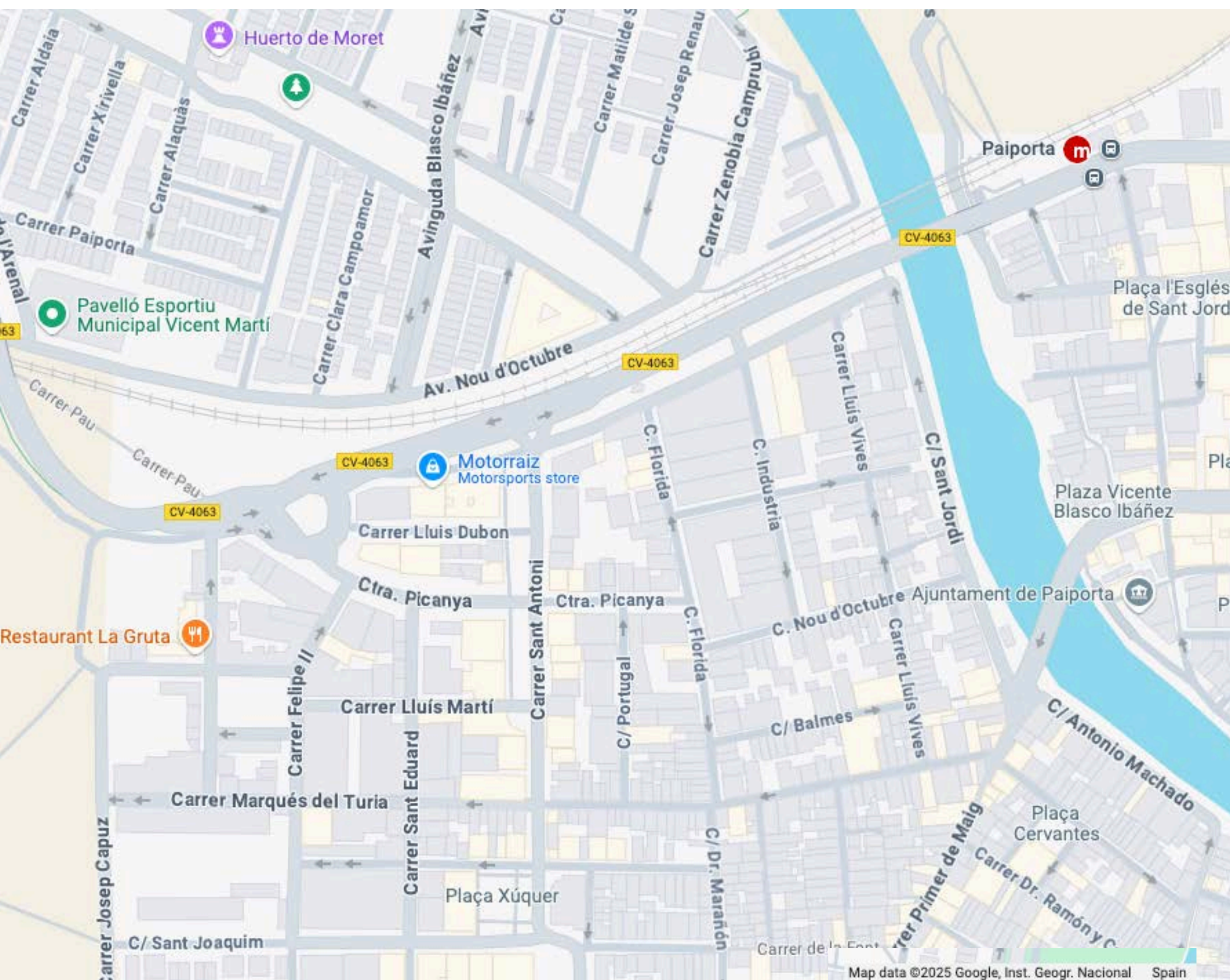
# Reason 1

# More detailed maps in rural areas

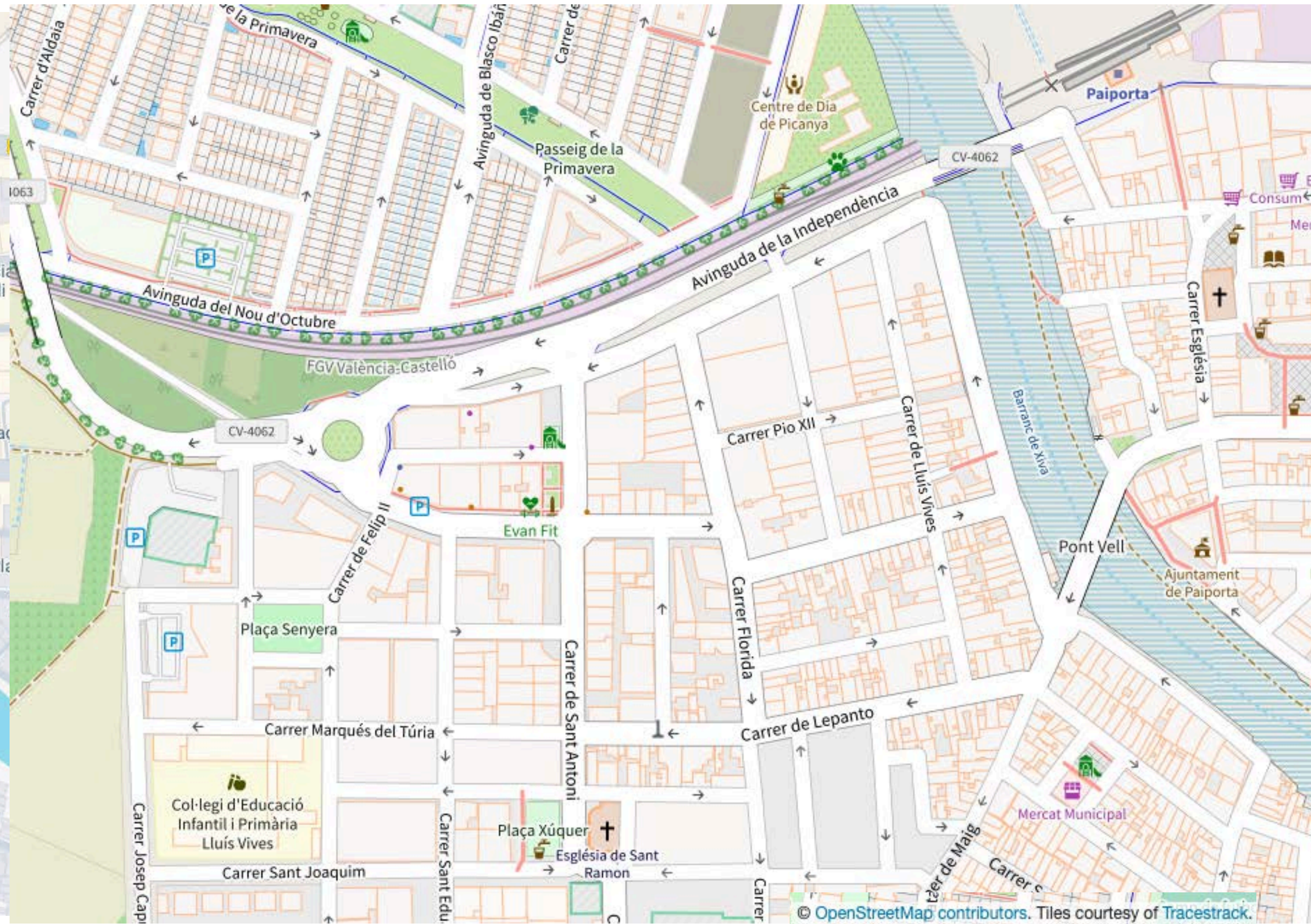


Reason 1

More detailed maps in general



Google Maps

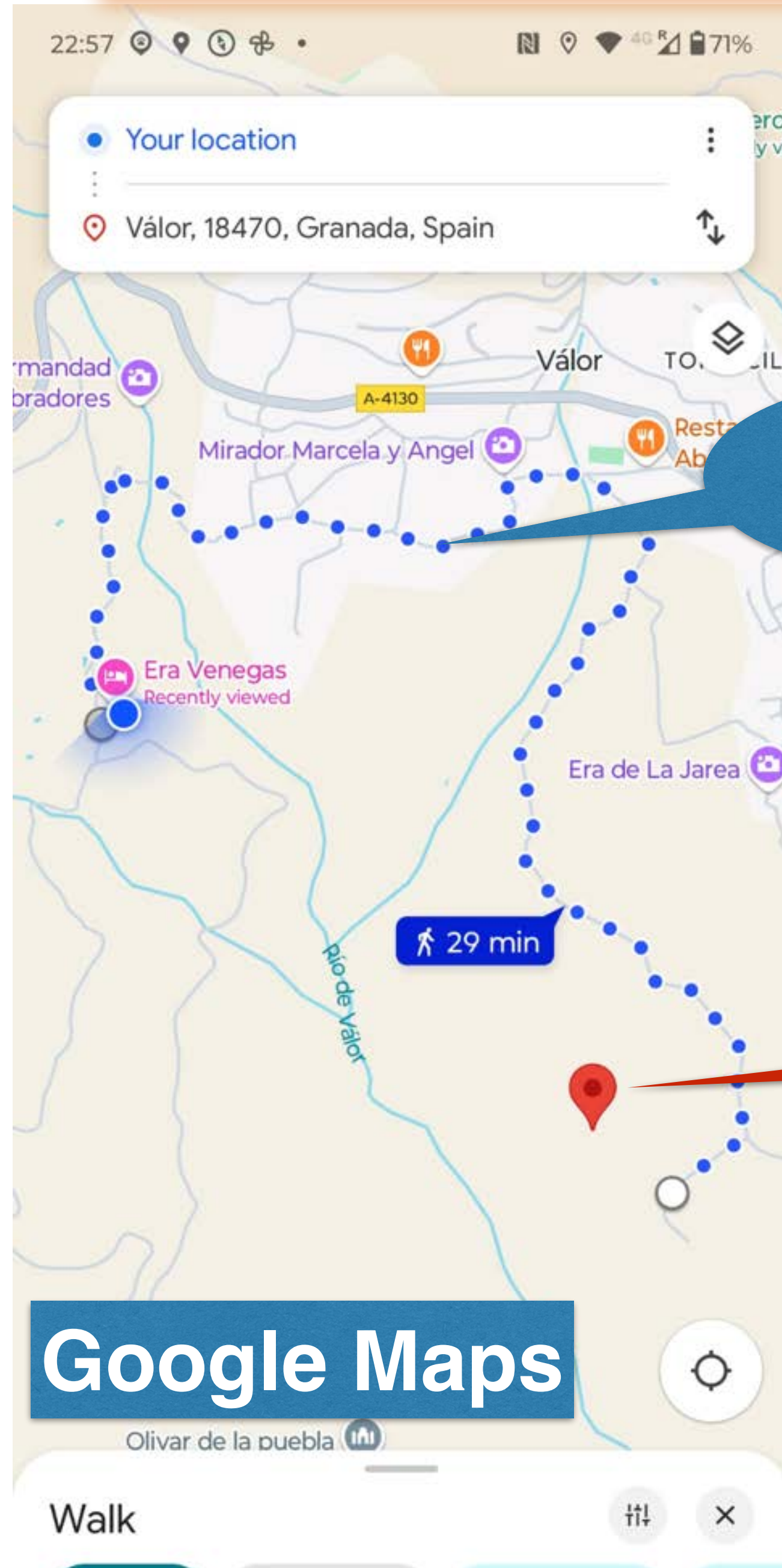


OpenStreetMap



# Reason 1

## Pedestrian Routing - Google Maps vs Organic Maps (OSM)



Routing over "Senderos": 22 min

"Take me to G&T"



## 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

**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>

# 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**



## SPAIN FLOODS 2024 RESPONSE



Photo: ©2024 NASA

We require your **urgent support** mapping.

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

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

https://tasks.hotosm.org/projects/17948

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**

# Reason 2

# Real-Life Examples - DANA Valencia - Oct 29 2024

Telegram

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

(tres toros, que coincidencia:)

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

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://tareass.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, pertenezco a la comunidad de datos abiertos BucleoBits en Valladolid, y nos preguntábamos cómo

- **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 Organic Maps, MagicEarth, OSMAnd..

https://organicmaps.app

News • Donate • Contribute • F.A.Q. • GitHub • EN

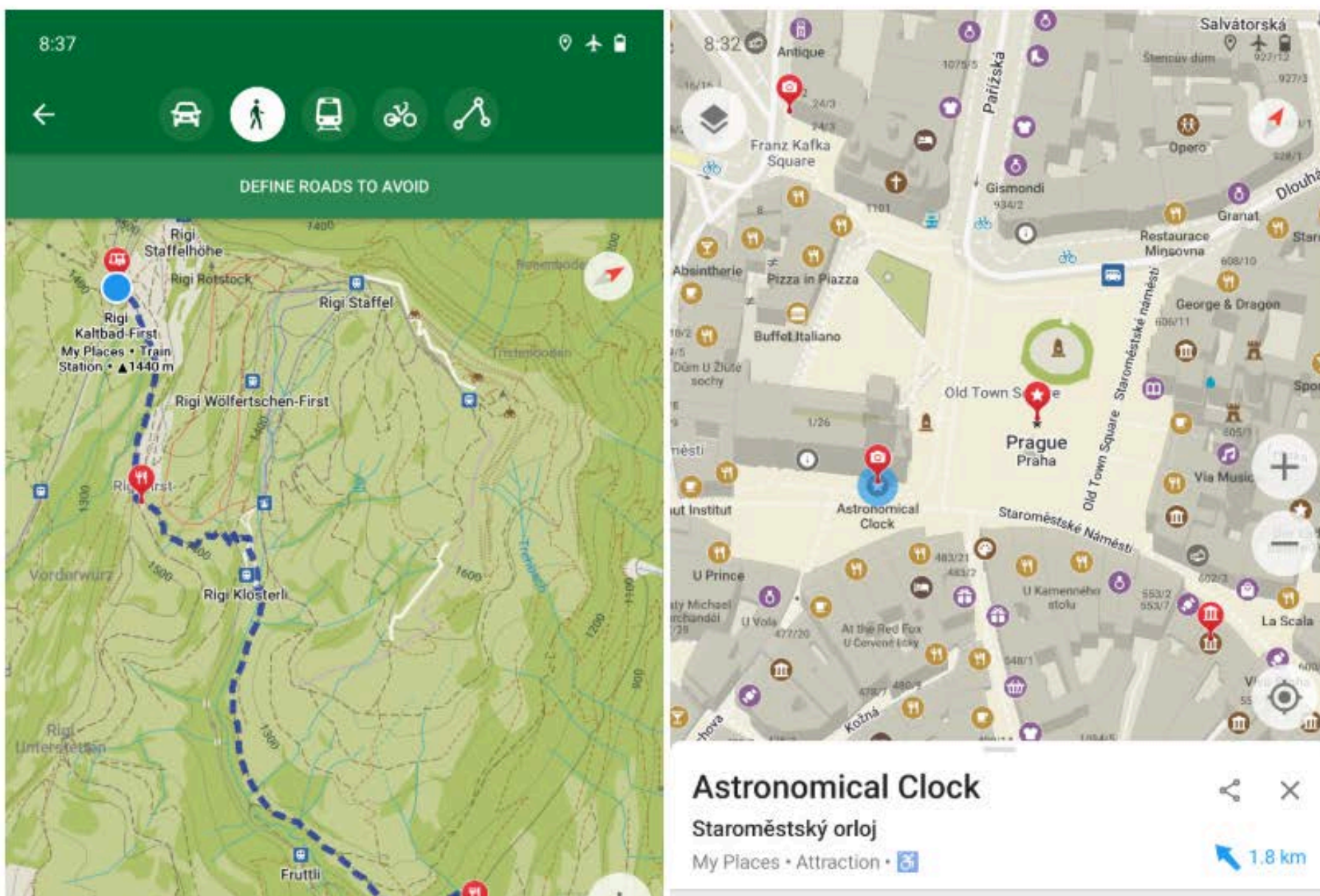
## Organic Maps: Offline Hike, Bike, Trails and Navigation

Organic Maps is a free Android & iOS offline maps app for travelers, tourists, hikers, drivers and cyclists based on [OpenStreetMap](#) data created by the community. It is a privacy-focused, open-source [fork](#) of [Maps.me](#) app (previously known as [MapsWithMe](#)), maintained by the same people who created [MapsWithMe](#) in 2011.

Organic Maps is one of the few applications nowadays that supports 100% of features without an active Internet connection. Install Organic Maps, download maps, throw away your SIM card, and go for a weeklong trip on a single battery charge without any byte sent to the network.

In 2023, Organic Maps [got its first million](#) users. [Help us](#) to scale!

Download and install Organic Maps from [AppStore](#), [Google Play](#), [Huawei AppGallery](#), [Obtainium](#), [FDroid](#)



https://www.magicearth.com

Magic Earth Developers Support Contact



## Magic Earth

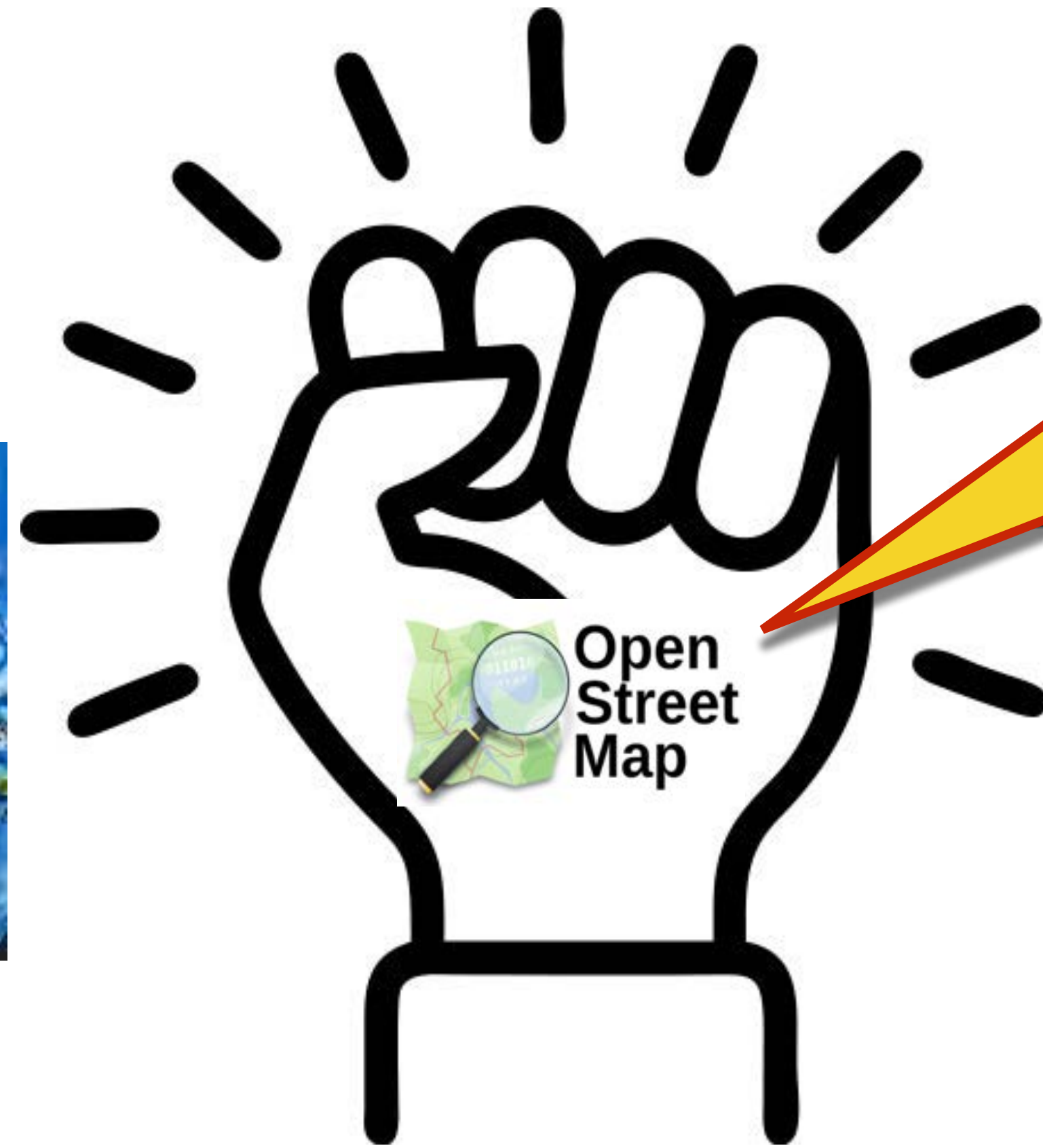
Turn-by-turn navigation, OpenStreetMap, Crowd-Sourced Traffic, 3D maps, Satellite maps, Offline maps and Transit. Entirely free.



So?

Three Reasons - One Word

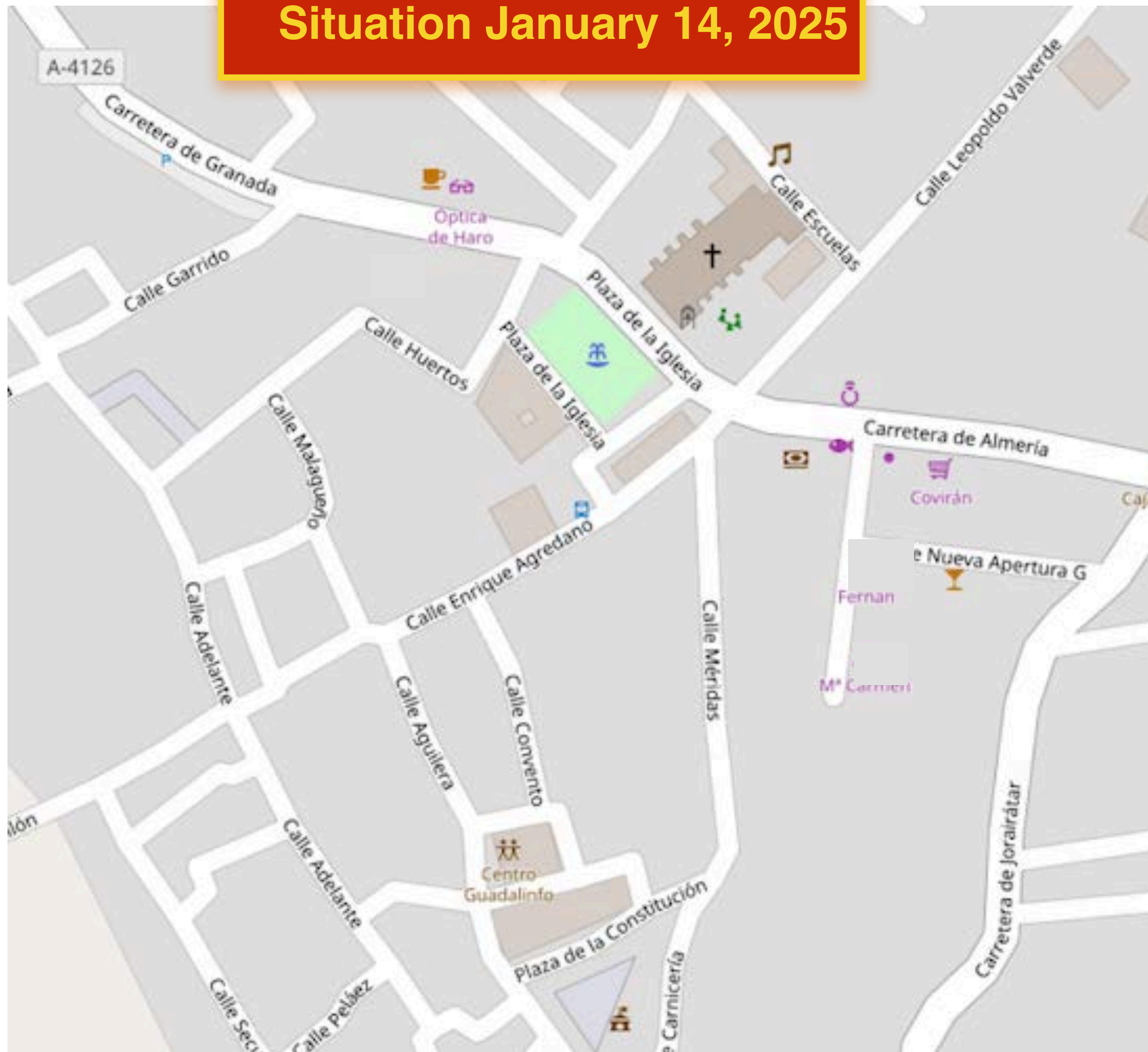
*Never mind  
the \$\*@\*% ,  
Let's take Mapping in  
our own hands*



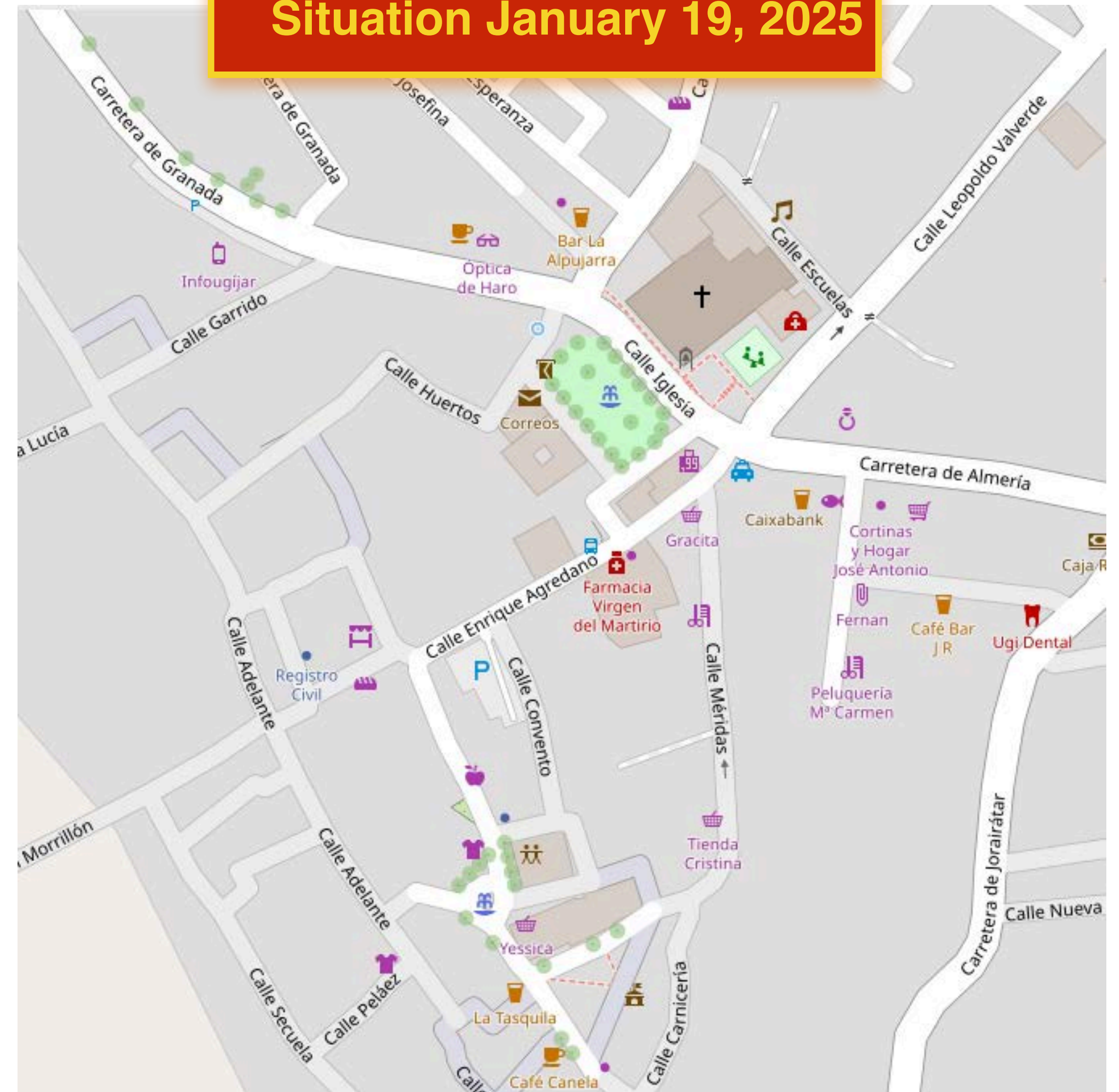
**Empowerment - Empoderamiento**

# So let's Map Ugíjar - Results workshop January 16, 2025 + kapazao edits

## Situation January 14, 2025



## Situation January 19, 2025





# Why OpenStreetMap Matters

- ***Open Data:***  
All map data is freely available for use, modification, and sharing
- ***Community-Driven:***  
Built and maintained by volunteers worldwide
- ***Customizable:***  
Tailored for local needs, from urban planning to disaster management.

# Benefits for Local Communities

## Local Knowledge

- Contributors can map their own neighborhoods, highlighting underrepresented areas.
- Enables local businesses, landmarks, and trails to gain visibility.

## Capacity Building

- Community mapping initiatives improve digital skills and geographic literacy.
- Encourages collaboration among residents.

## Support for Development Projects

- Enhances urban planning, disaster response, and public health initiatives.
- Maps underserved areas for better resource allocation.

# Real-Life Examples

## Disaster Response

- **Haiti Earthquake (2010):** OSM provided critical maps for rescue operations.
- **DANA Valencia (2024):** OSM played a crucial role in mapping flood-affected areas during the Mediterranean "Depresión Aislada en Niveles Altos" (DANA) event. Volunteers quickly updated maps with flooded zones, blocked roads, and safe evacuation routes, aiding emergency services and community recovery efforts.

## Local Advocacy

- **Cycling Networks:** Communities map bike trails to advocate for safer cycling routes.

## Rural Development

- **Tanzania:** Villages mapped for better access to healthcare and education resources.

## Outdoor Apps Using OpenStreetMap

- **Organic Maps:** 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

## Smartphone Apps for Editing and Contributing to OSM

- **EveryDoor: add or edit businesses, amenities, and more**
- **StreetComplete: improve map by answering map-related questions**
- **Organic Maps: also allows direct edits to OSM data**
- **Many more like Vespucci, .. ,,**

# Diving Deeper - How is OSM Data Structured?

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

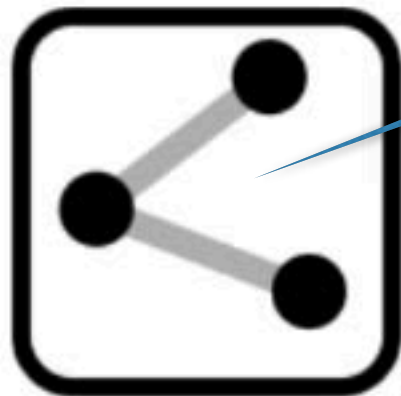
## Two Main Concepts to Grasp

### 1. Core Elements:



Node

“Points”



Way

“Lines”



Relation

“Combinations”

### Examples:

Church, Restaurant, Bench etc

Roads, Paths, Tracks, etc

Busline, Hiking Route

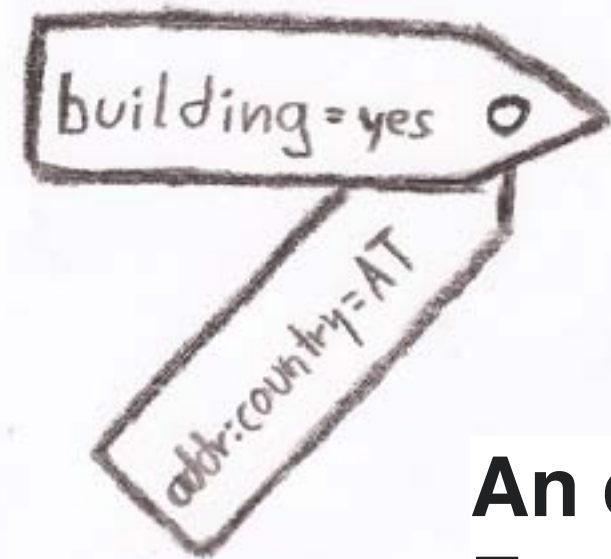
[wiki.openstreetmap.org/wiki/Beginners\\_Guide\\_1.3](http://wiki.openstreetmap.org/wiki/Beginners_Guide_1.3)

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

## 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**.

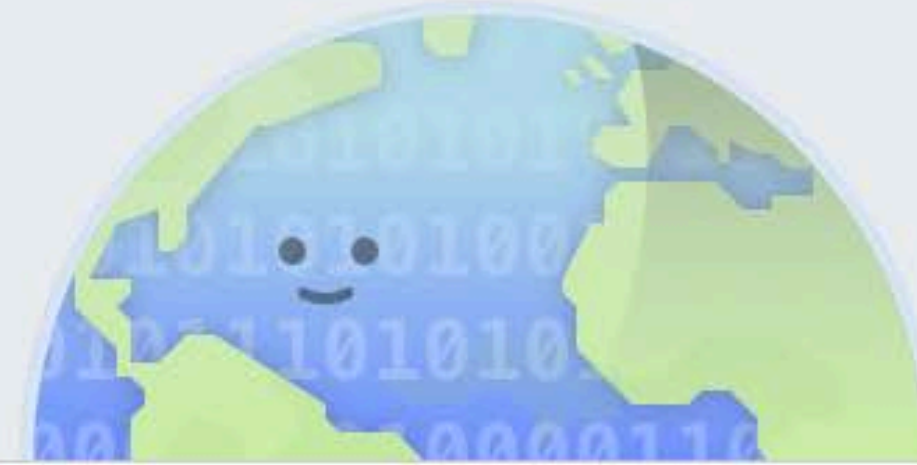
Here are some more examples:

- 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)



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](https://www.openstreetmap.org) website

The image shows a screenshot of the OpenStreetMap website interface. The browser address bar displays the URL: <https://www.openstreetmap.org/#map=17/36.962893/-3.051941>. The page header includes the OpenStreetMap logo, an 'Edit' button, and navigation links for History, Export, GPS Traces, User Diaries, Communities, Copyright, Help, and About. A user profile icon for 'justb' is visible in the top right. The main map area shows a street grid with various buildings and landmarks. Several blue callout bubbles with white text are overlaid on the map, pointing to specific features:

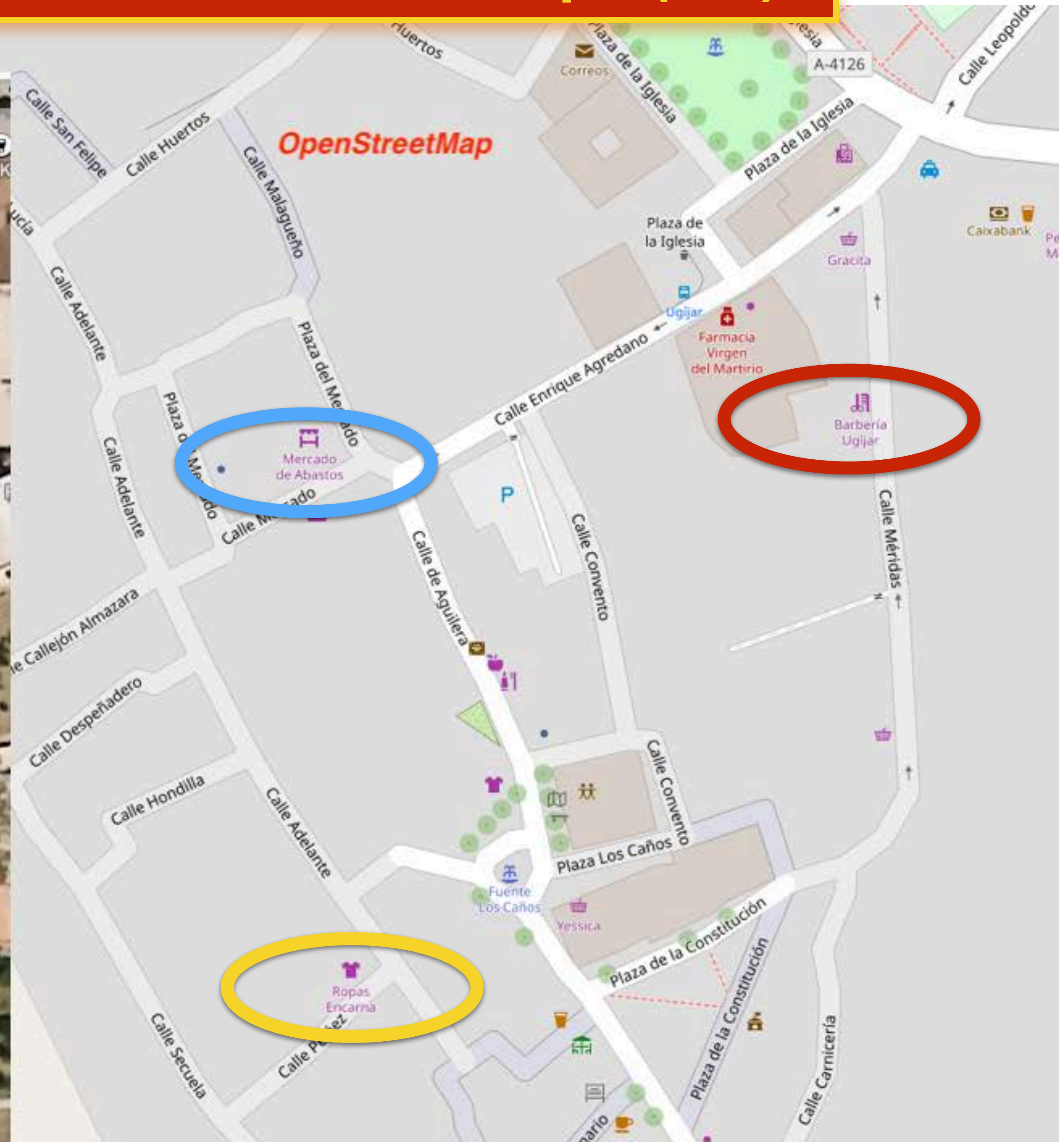
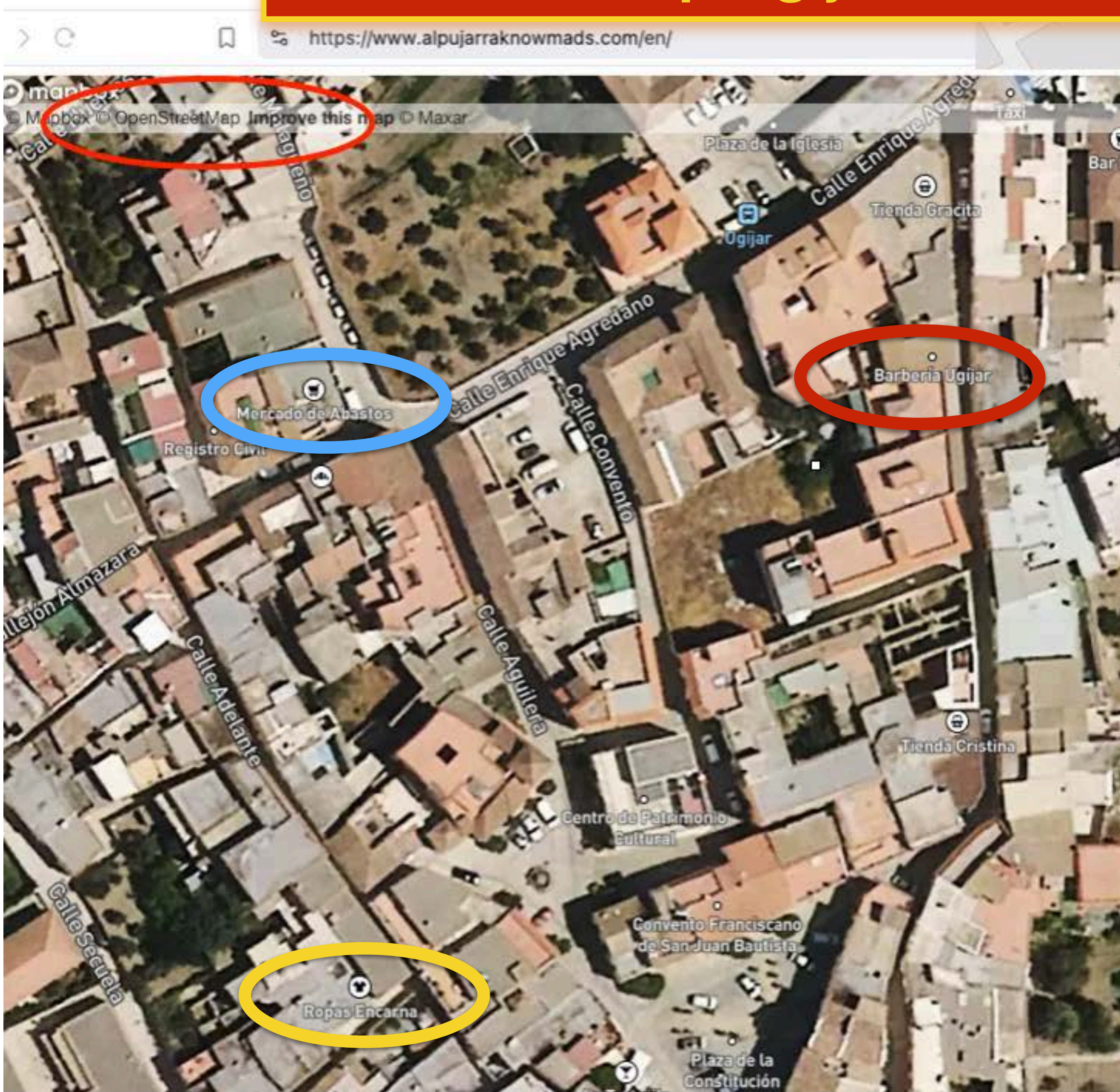
- Edit the Map (OSM Data)**: Points to the 'Edit' button in the top left.
- Your account**: Points to the user profile icon 'justb' in the top right.
- Zoom in/out**: Points to the zoom controls on the right side of the map.
- Change background layer + overlays**: Points to the map style selection icons on the right side.
- Legend**: Points to the legend icon on the right side.
- Add a note to the map**: Points to the note icon on the right side.
- Show OSM data at click location**: Points to the 'Info' icon on the right side.
- Search and jump to place**: Points to the search bar in the top left.
- Create a route**: Points to the 'Where is this?' button in the top left.

At the bottom left, there is a scale bar showing 50 m and 300 ft. At the bottom right, there is a copyright notice: © OpenStreetMap contributors. Make a Donation. Website and API terms.

# The iD editor on [openstreetmap.org](https://openstreetmap.org) website

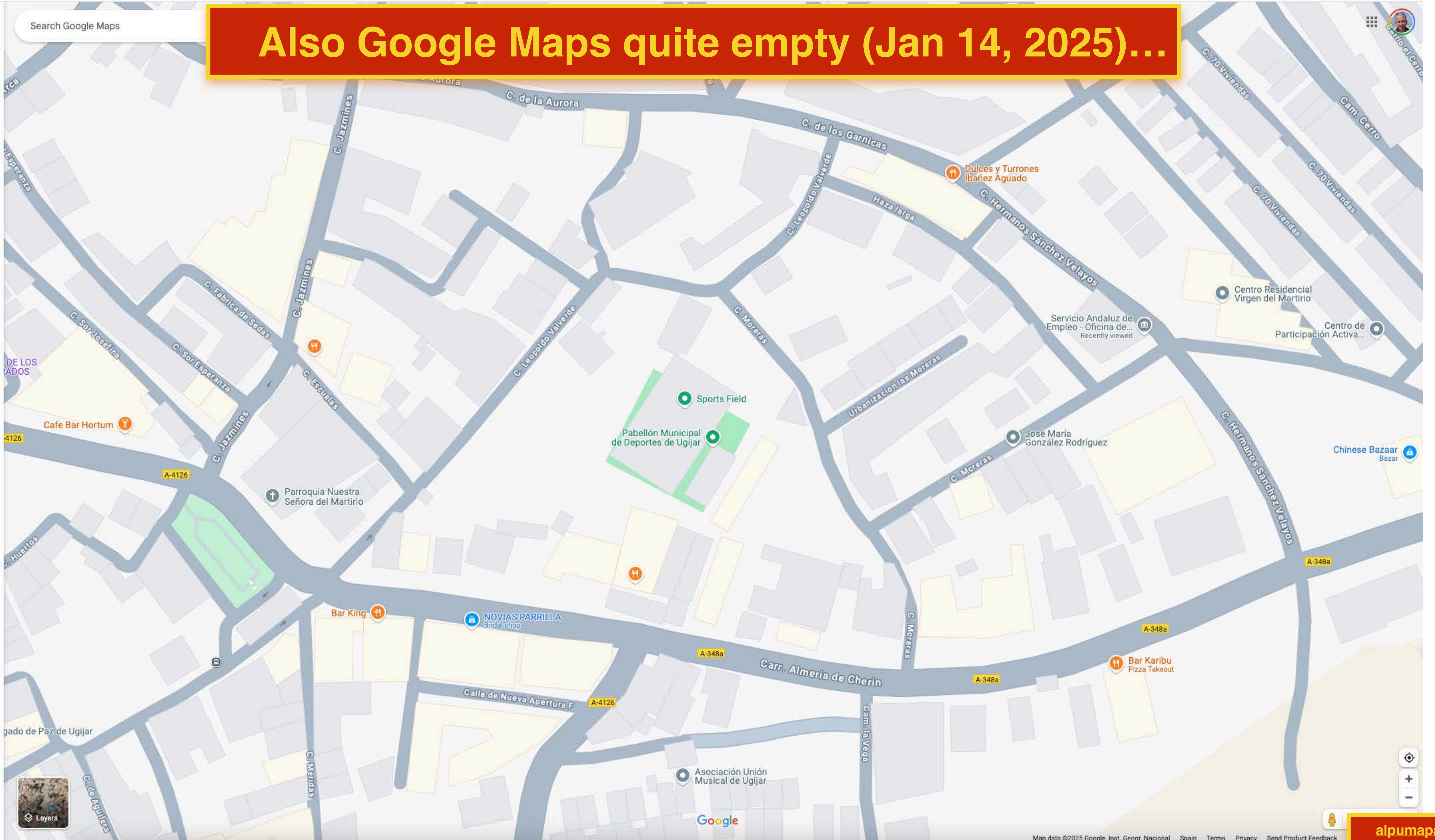


# So let's Map Ugíjar - Results also on other maps (left)

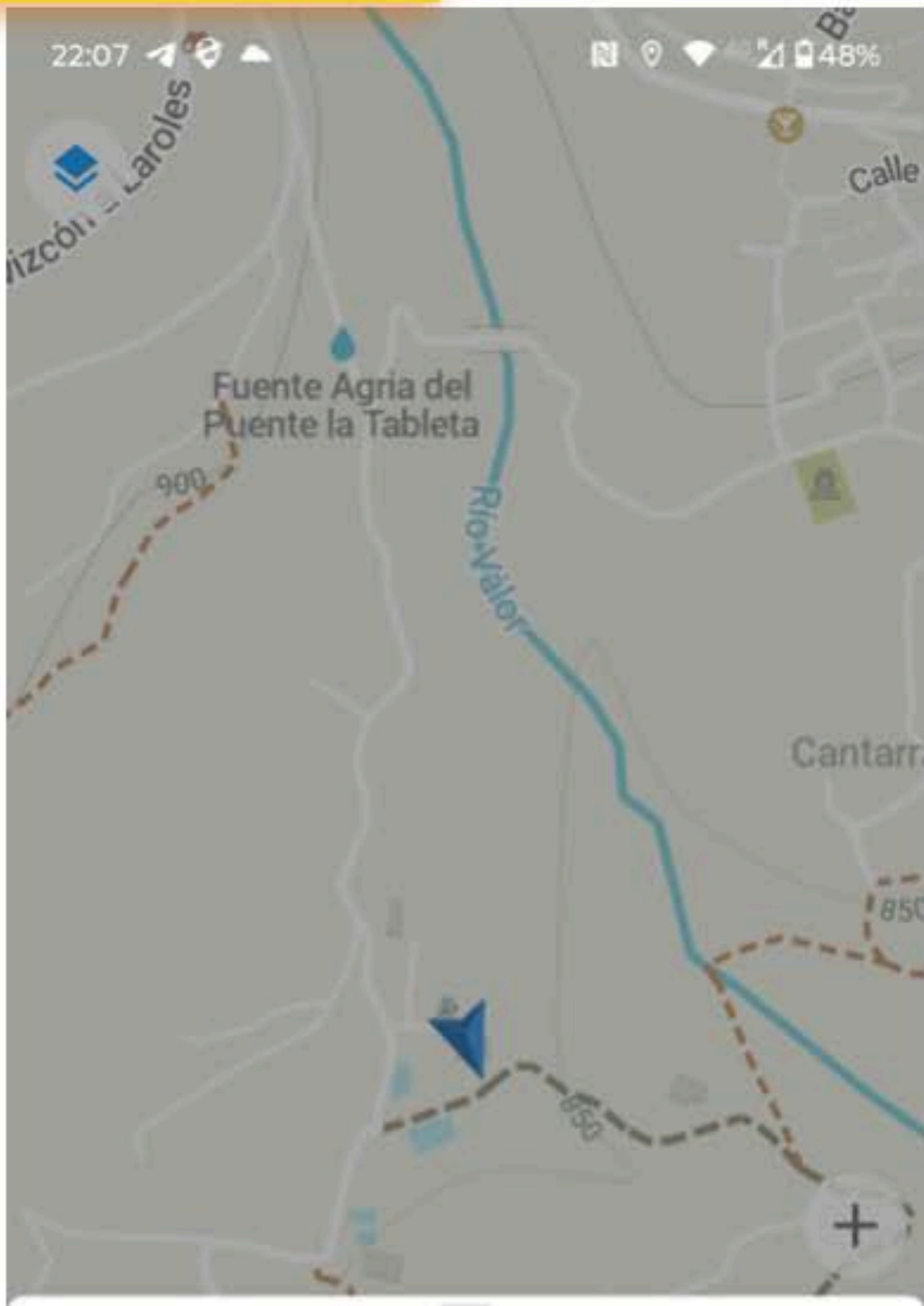
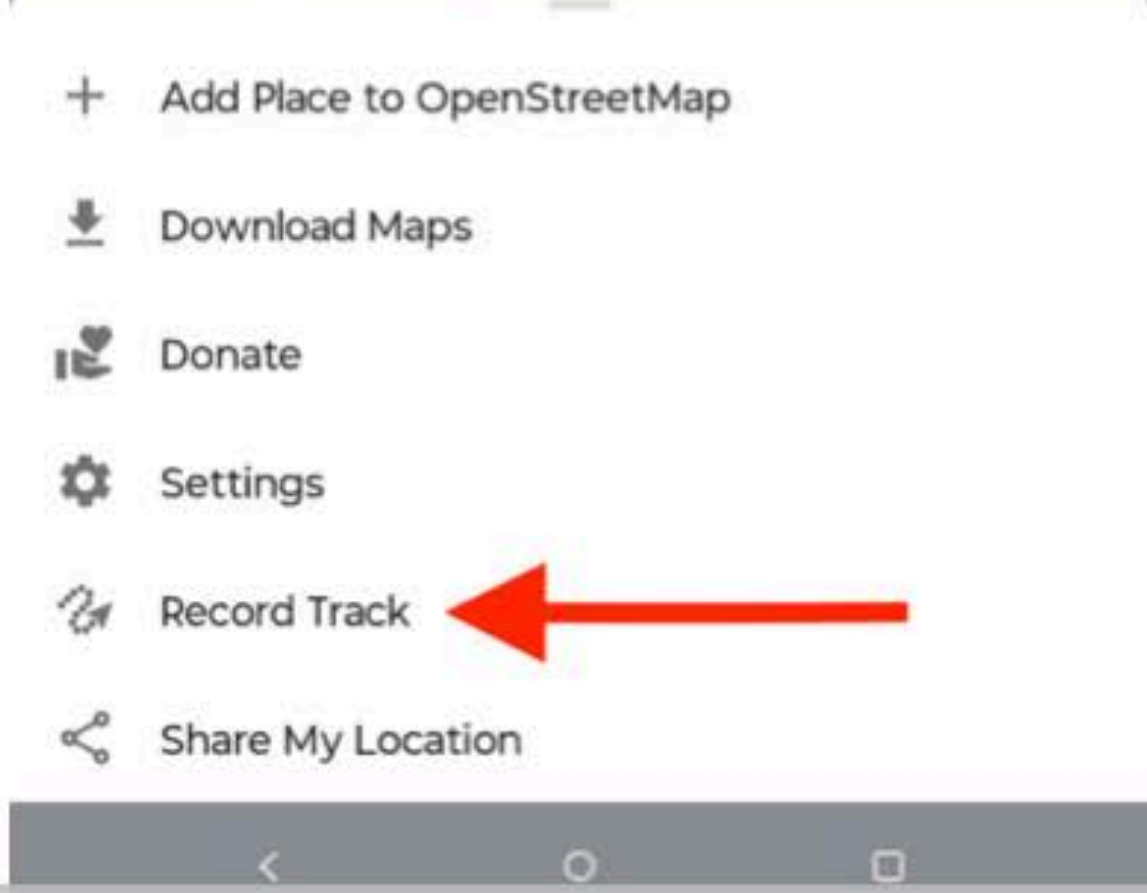
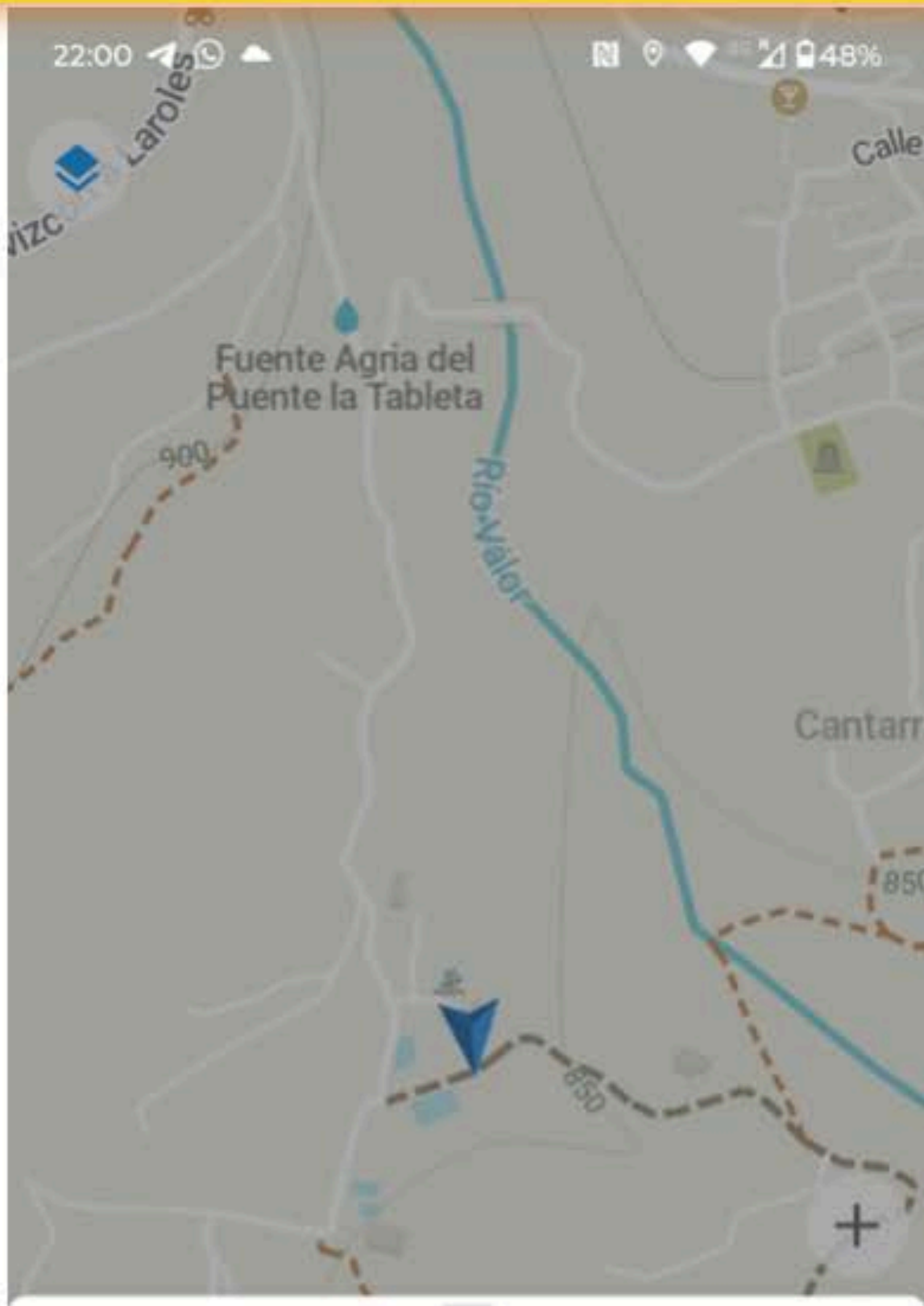
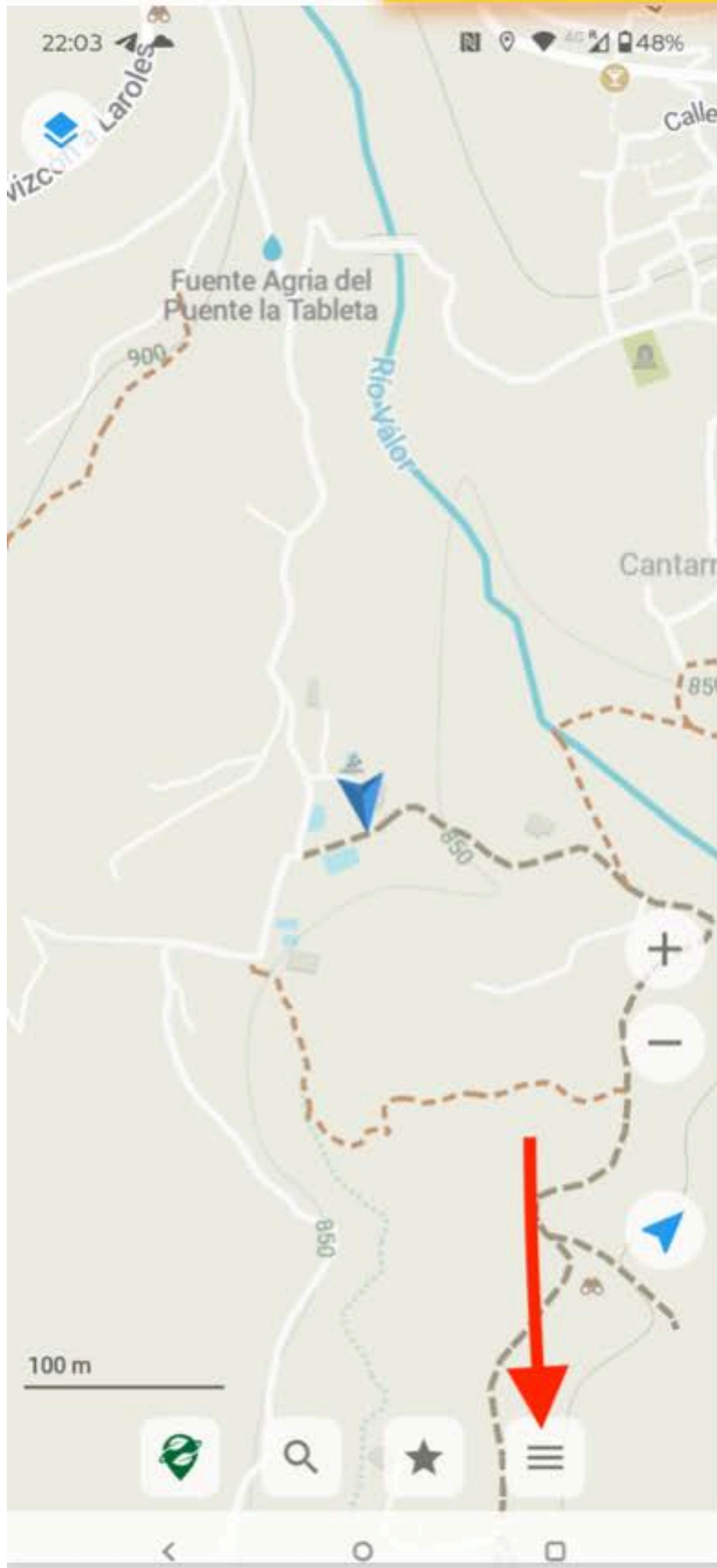


Search Google Maps

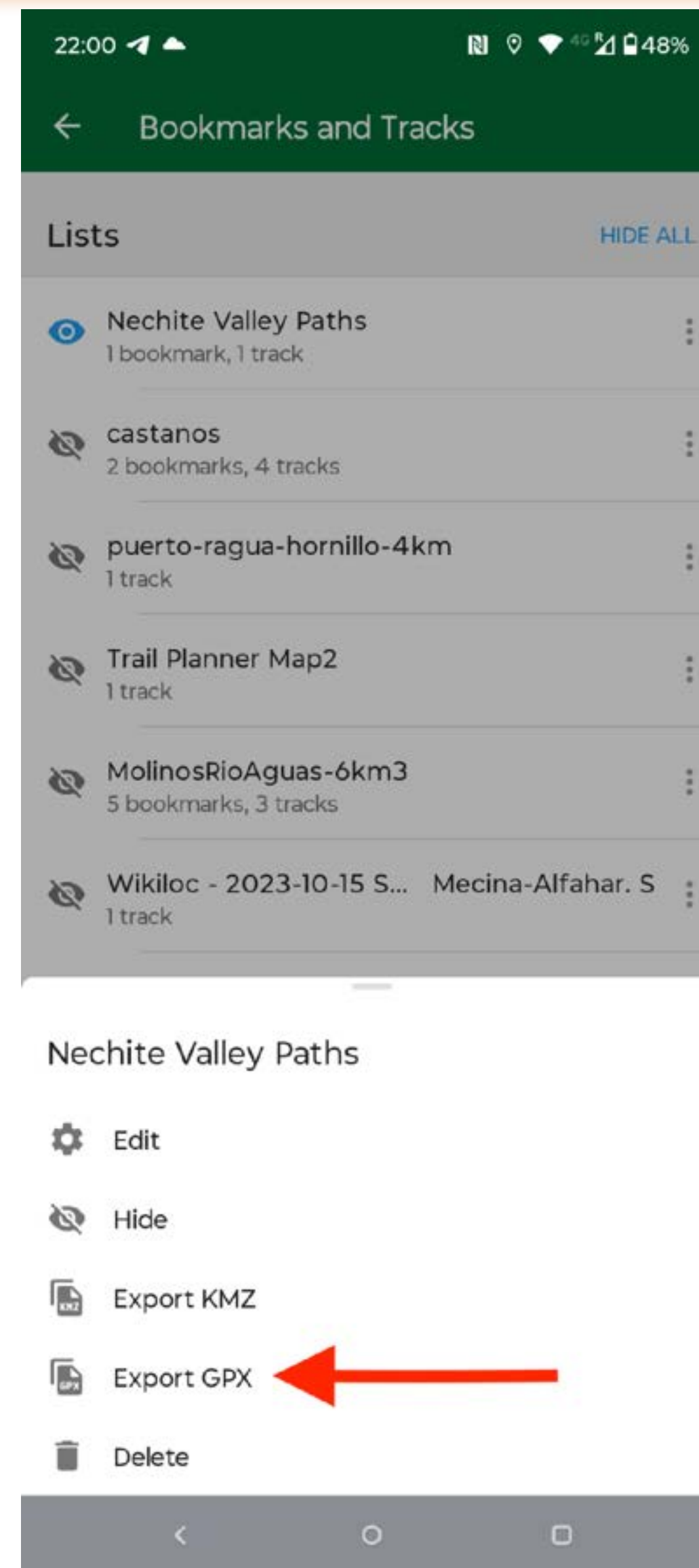
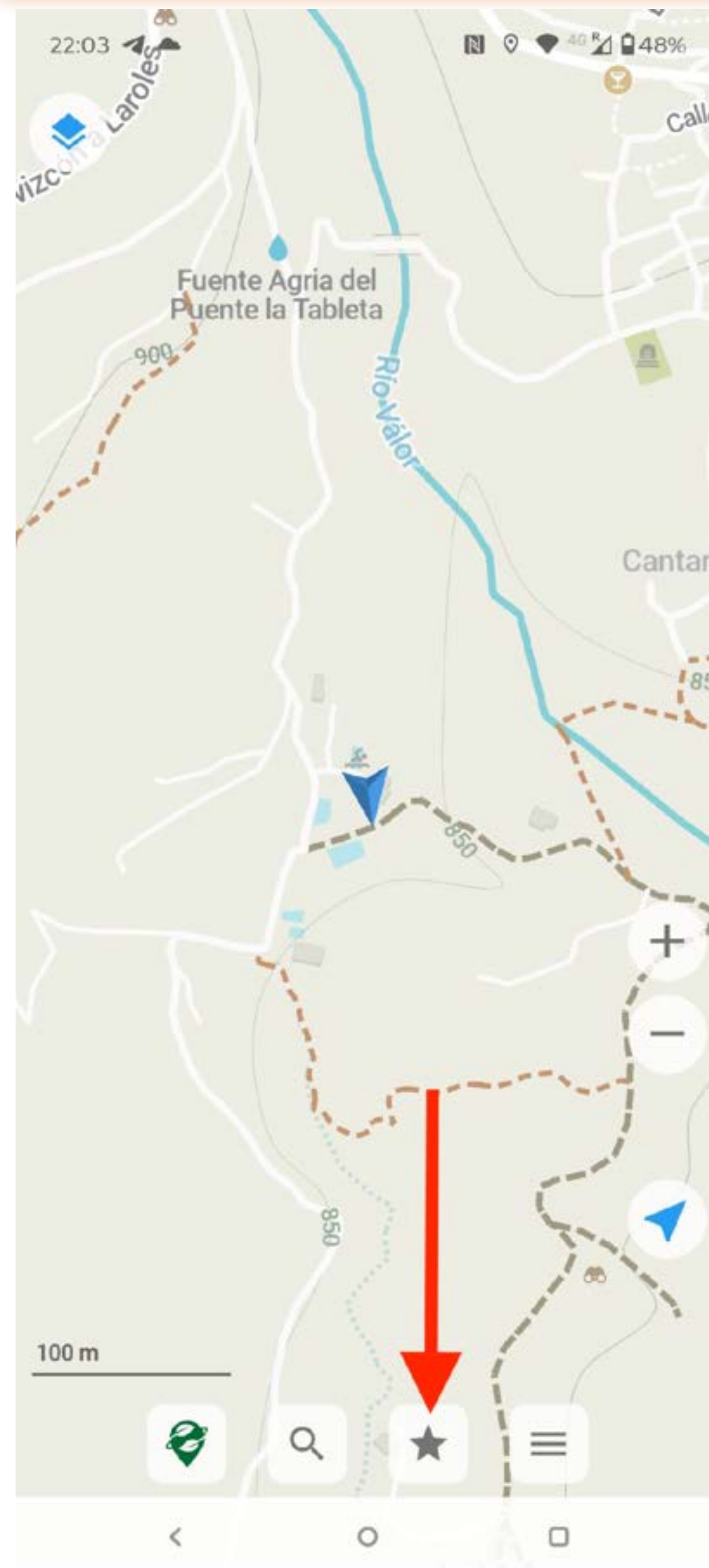
# Also Google Maps quite empty (Jan 14, 2025)...



# Organic Maps - Track Recording



# Organic Maps - GPX Track Export



# TIP: Find unmapped trails with Strava heatmaps

Barberia Ugijar, C. Meridas, 184...

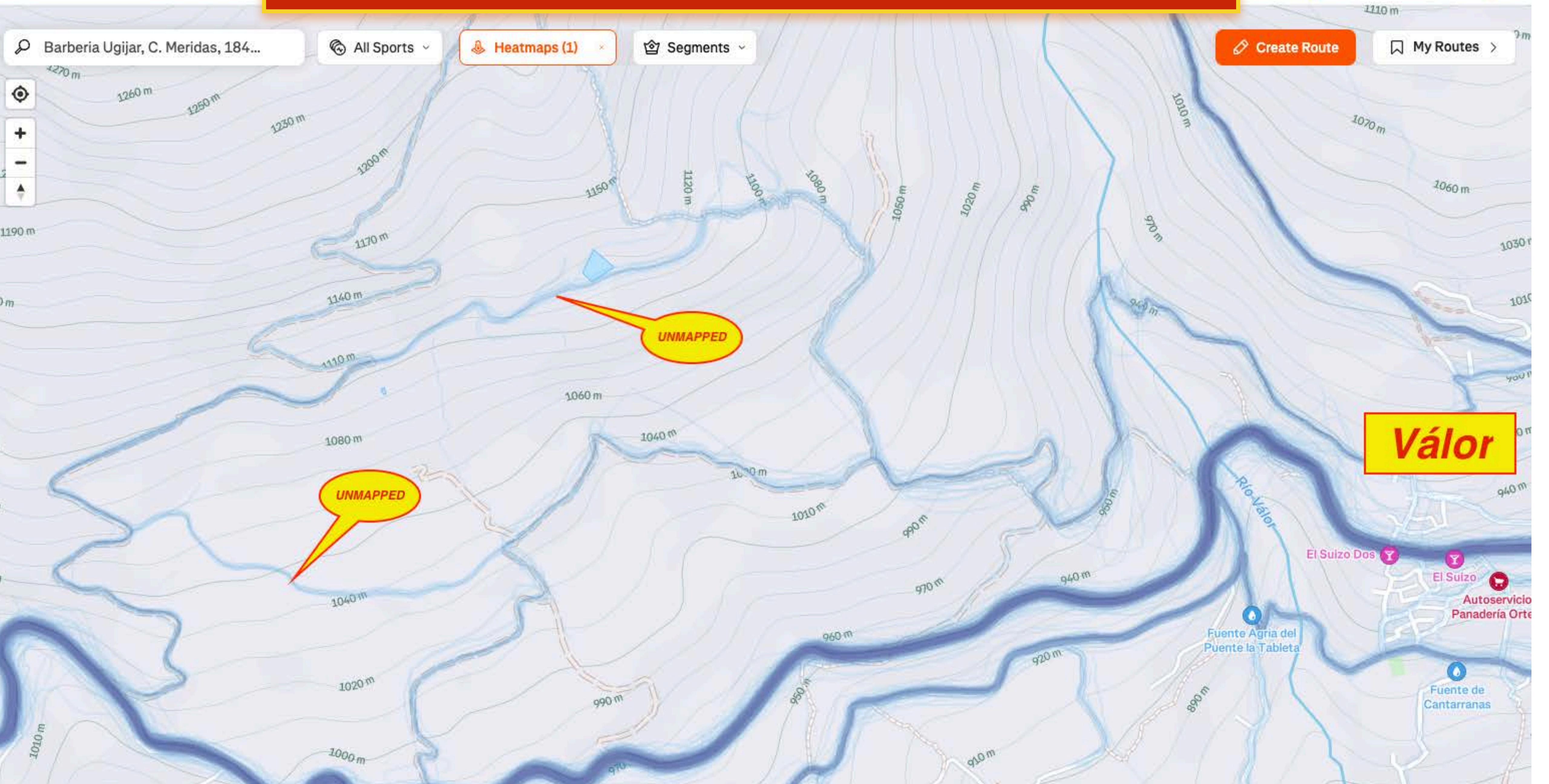
All Sports

Heatmaps (1)

Segments

Create Route

My Routes



**Válor**

UNMAPPED

UNMAPPED

- El Suizo Dos
- El Suizo
- Autoservicio Panadería Orta
- Fuente Agría del Puente la Tableta
- Fuente de Cantarranas

## Tools and Resources

- **OSM Website: [openstreetmap.org](https://openstreetmap.org)**
- **Map Editing Tools: iD Editor, JOSM (Java OpenStreetMap Editor)**
- **Community Support: Local OSM groups and forums**
- **Workshop site: [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)

Apps: [organicmaps.app](https://organicmaps.app)