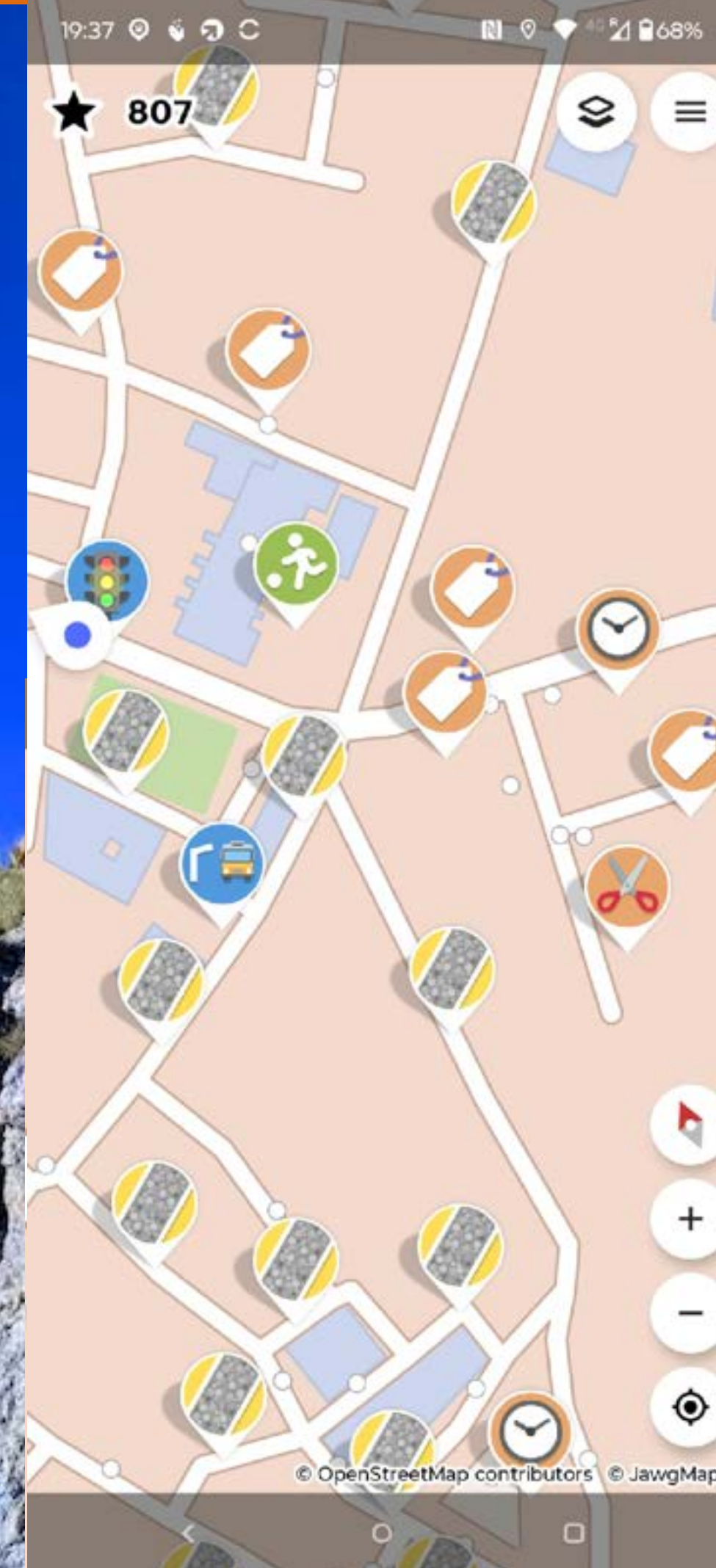


**Vamos a mapear Las Alpujarras!**  
**Let's Map Las Alpujarras!**



## Taller - Workshop - (English)

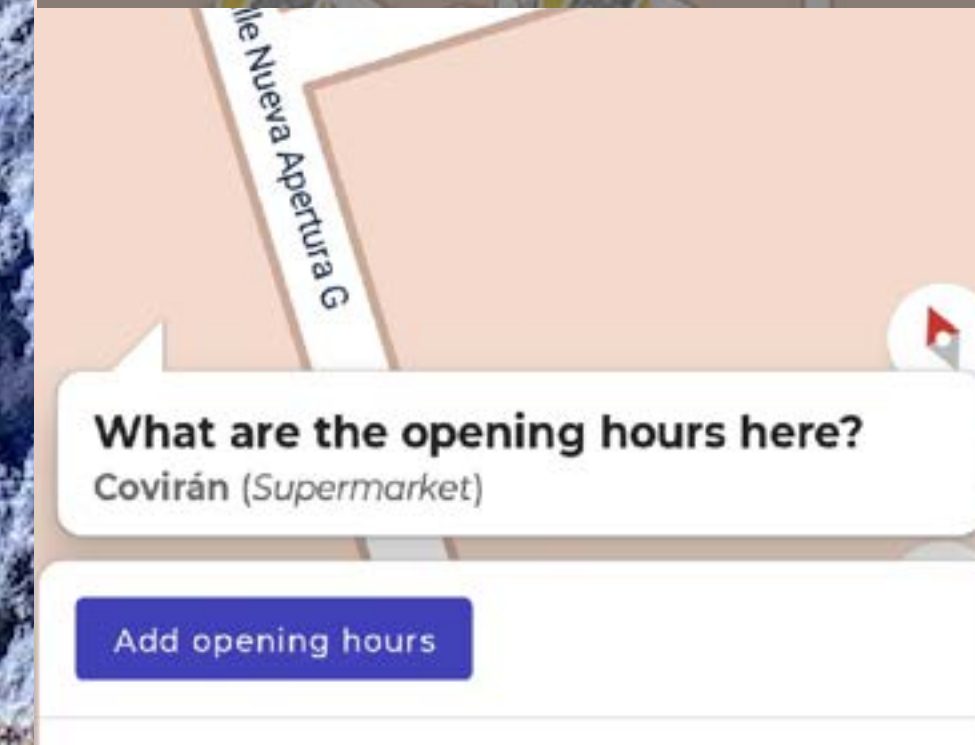
*Learn how to map on OpenStreetMap, the free map of the world, the “Wikipedia of maps”. Roads, paths, bars, shops,...*  
*By: Just van den Broecke (OSM-NL)*



## 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](mailto:justb4@gmail.com)





# Agenda

- Introduction (presentation slides)
- Workshop via [alpumapa.xyz](https://alpumapa.xyz)
  - create account on [openstreetmap.org](https://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](https://openstreetmap.org)



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

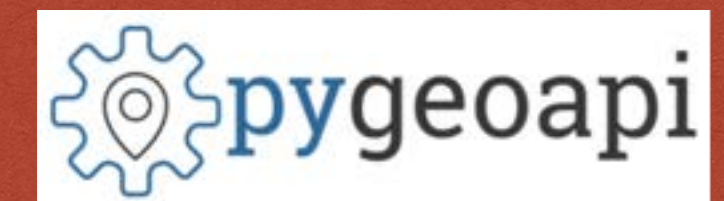
*Soy  
hollandés*

**About  
Me**

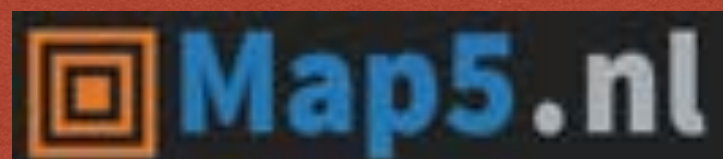
Founder



**FOSS Projects**

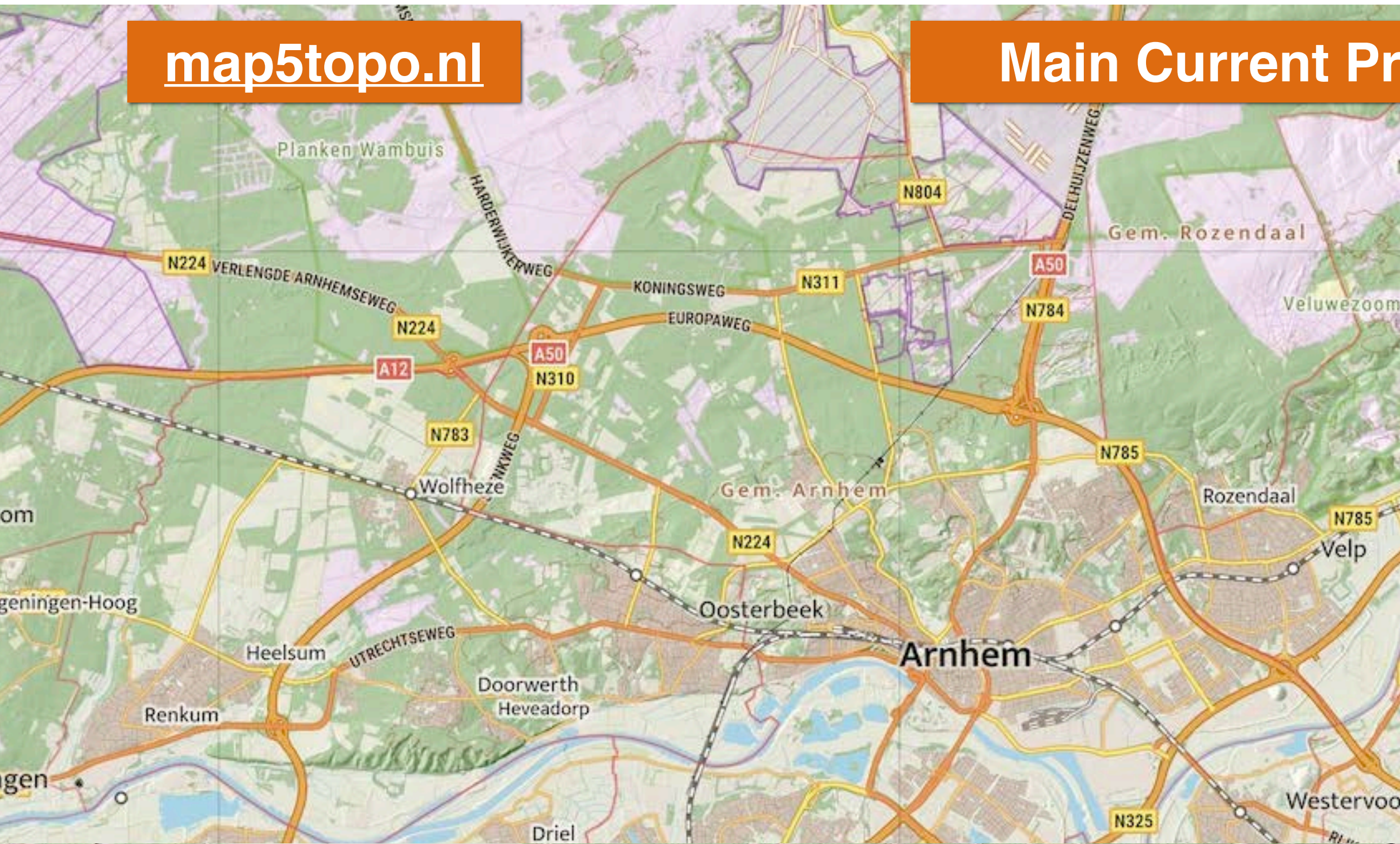


**Cloud Services**



**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)**

ES

OSM España

515 members, 86 online

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...



BG

2 09:40

Javier

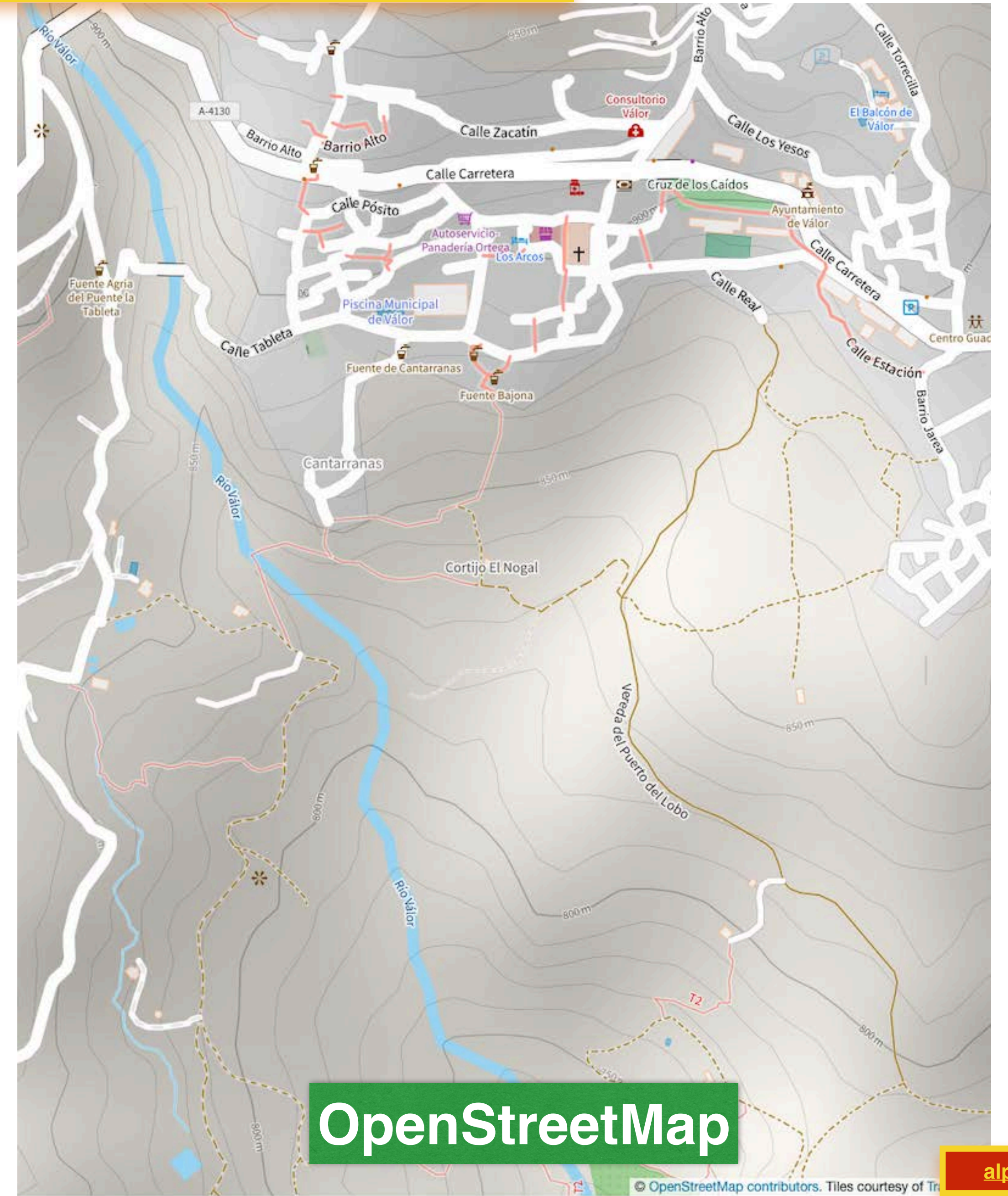
Why? Por que?

alpumapa.xyz



# Example 1

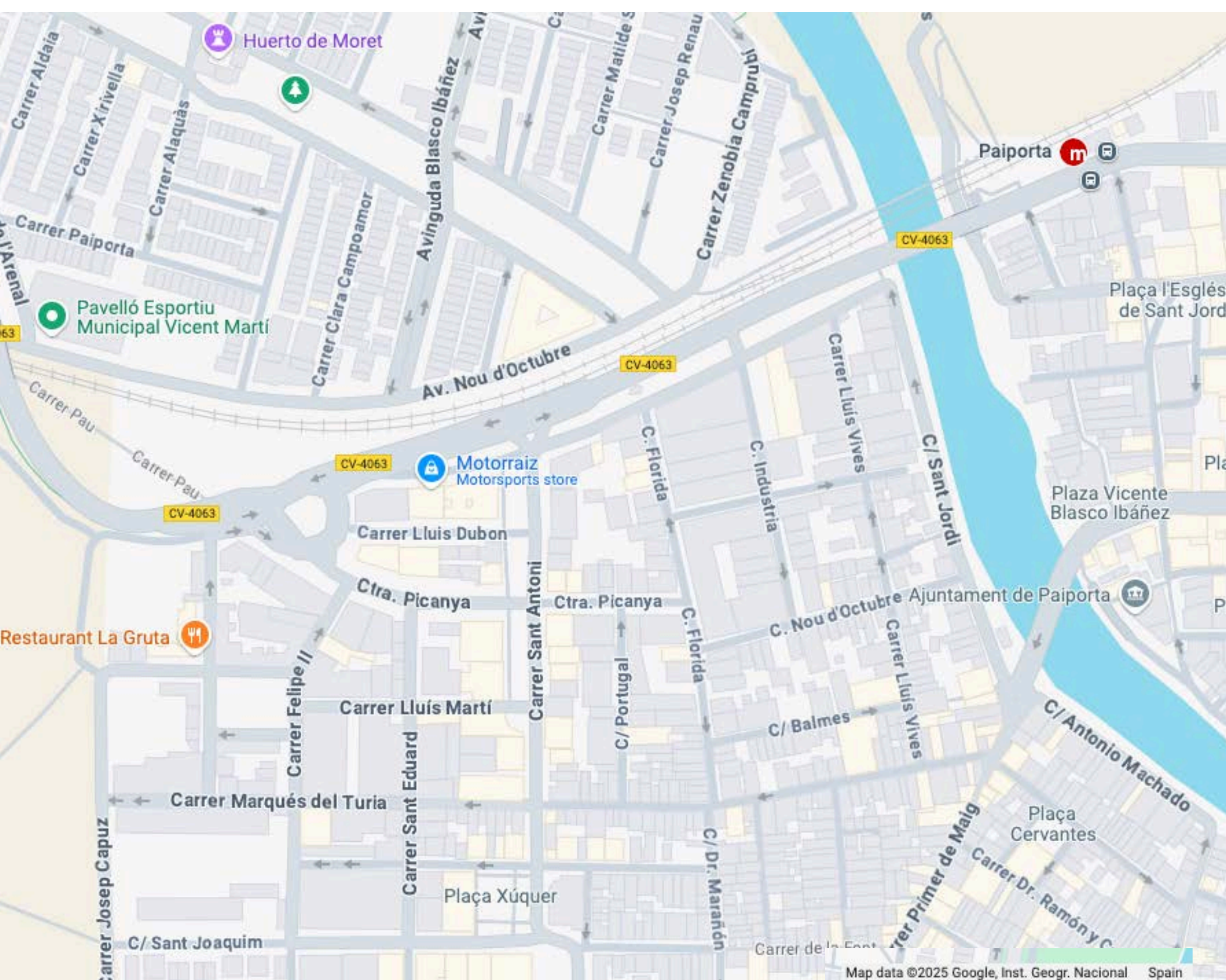
# More detailed maps in rural areas



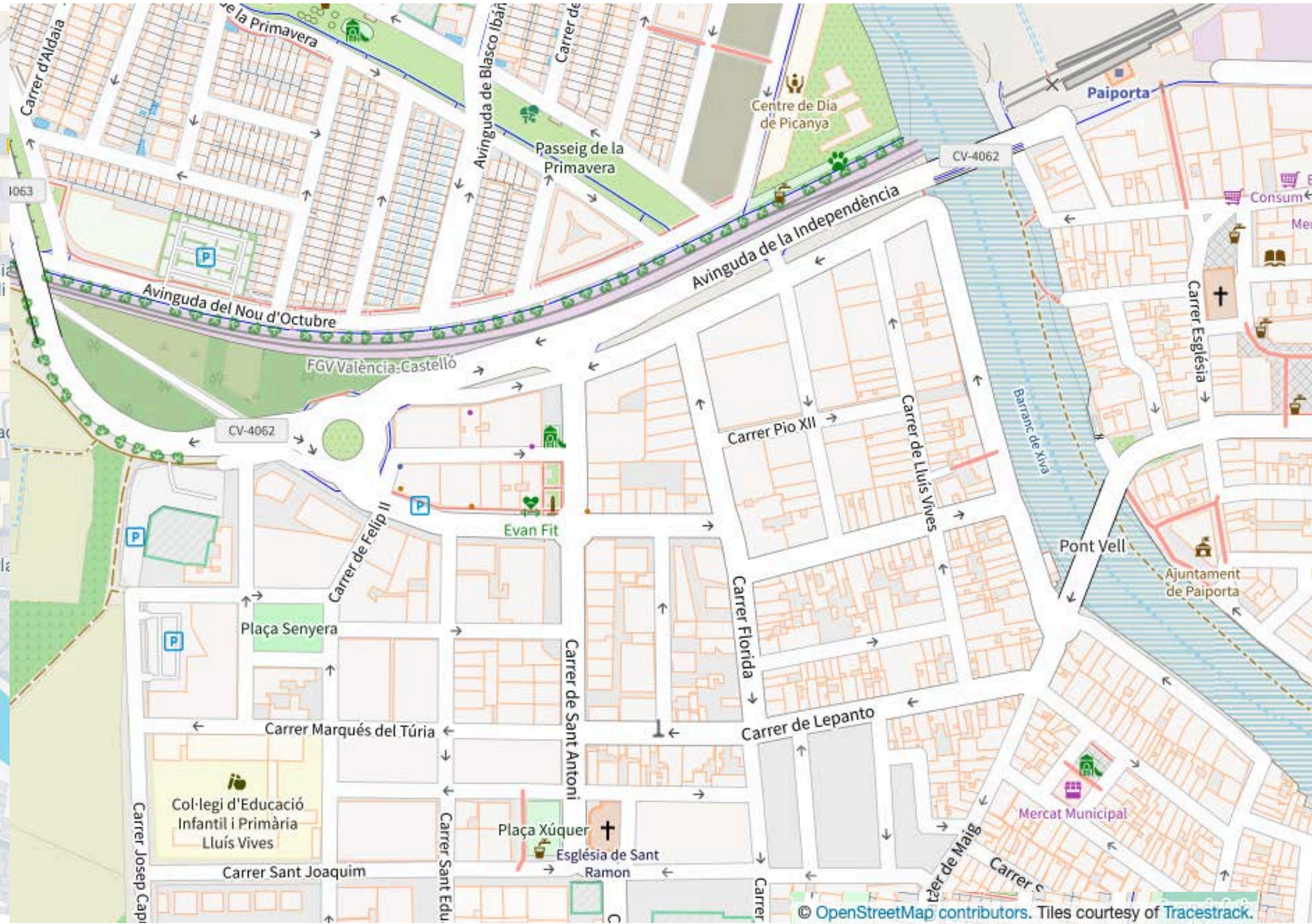


## Example 1

**More detailed maps in general**



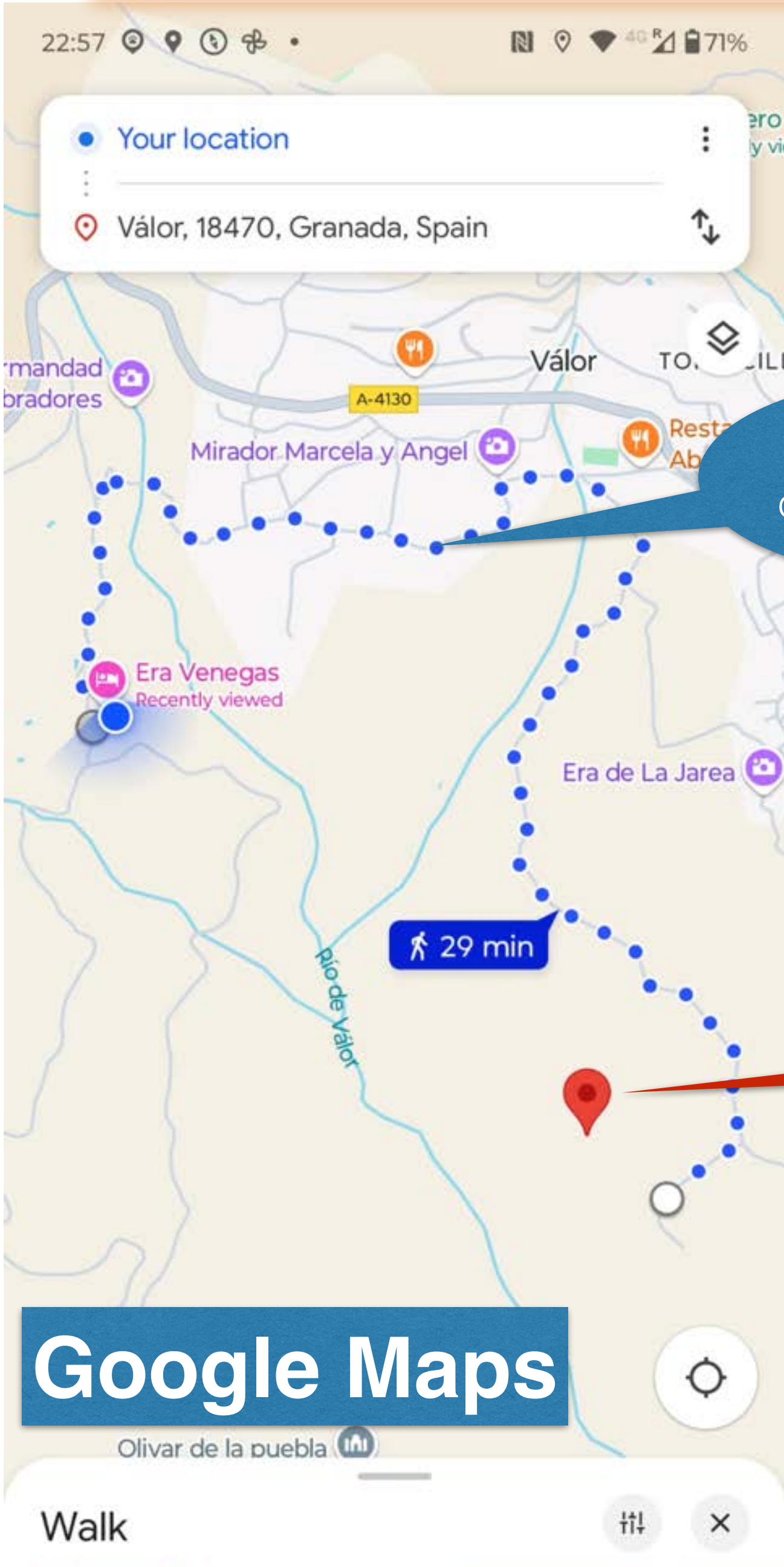
# Google Maps





Example 2

Pedestrian Routing - Google Maps vs Organic Maps (OSM)



Google Maps

Routing over car roads: 29 min

“Take me to G&T”



Organic Maps (OSM)

Routing over “Senderos”: 22 min



## Example 3

# 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



## Example 3

## 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

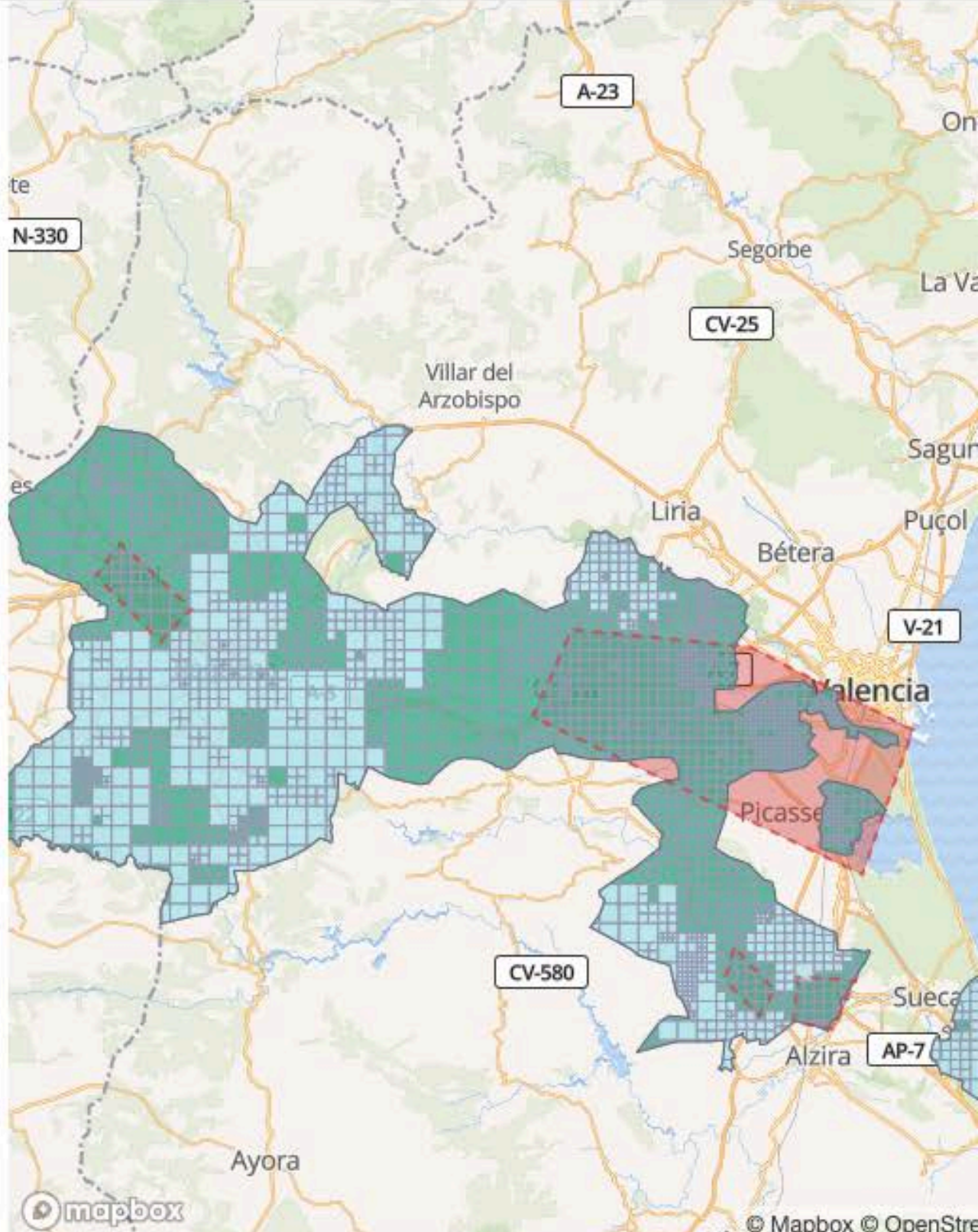
TYPES OF MAPPING     

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**



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

Telegram

ES

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

👍

M

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

👍

F

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)

J

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



F

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

21:33

21:41

21:42

21:47

21:50

21:53

21:54

21:54

21:54

22:02

22:24

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

J

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

J

Jordi M

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

J

Jordi M

Forwarded messages

Nuke 1/11/24

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

21:54

21:54

21:54

22:02

22:24

alpumapa.xyz



# 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, .. ,,**

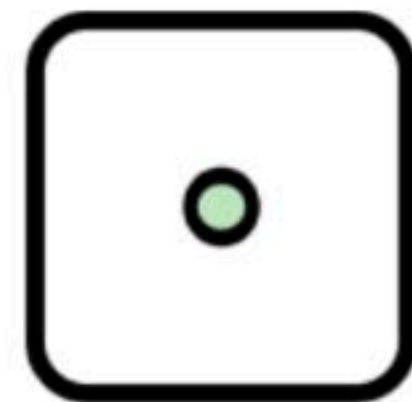


# Diving Deeper - How is OSM Data Structured?

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

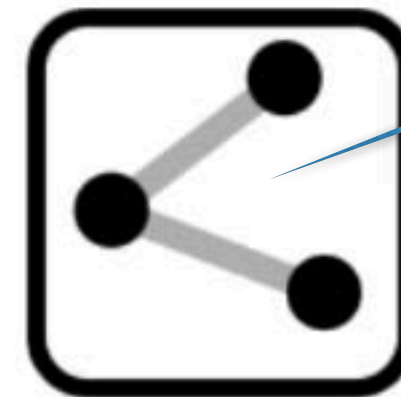
## Two Main Concepts to Grasp

### 1. Core Elements:



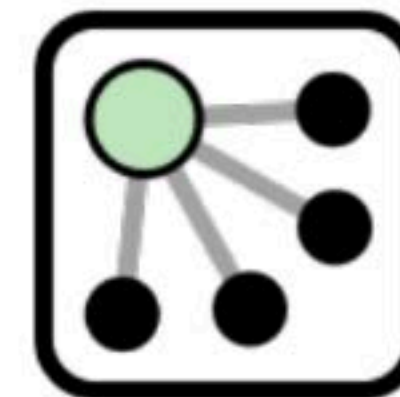
Node

“Points”



Way

“Lines”



Relation

“Combinations”

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/)



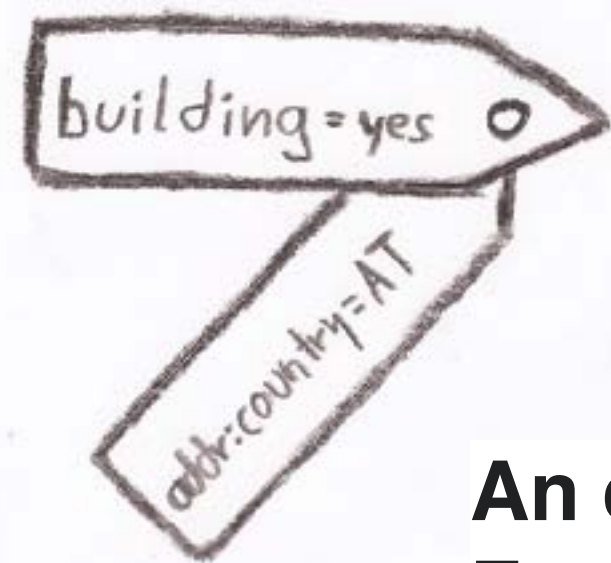
# Diving Deeper - How is OSM Data Structured?

## Two Main Concepts to Grasp

### 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/)**








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





## 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](https://justobjects.nl)

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

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

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

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