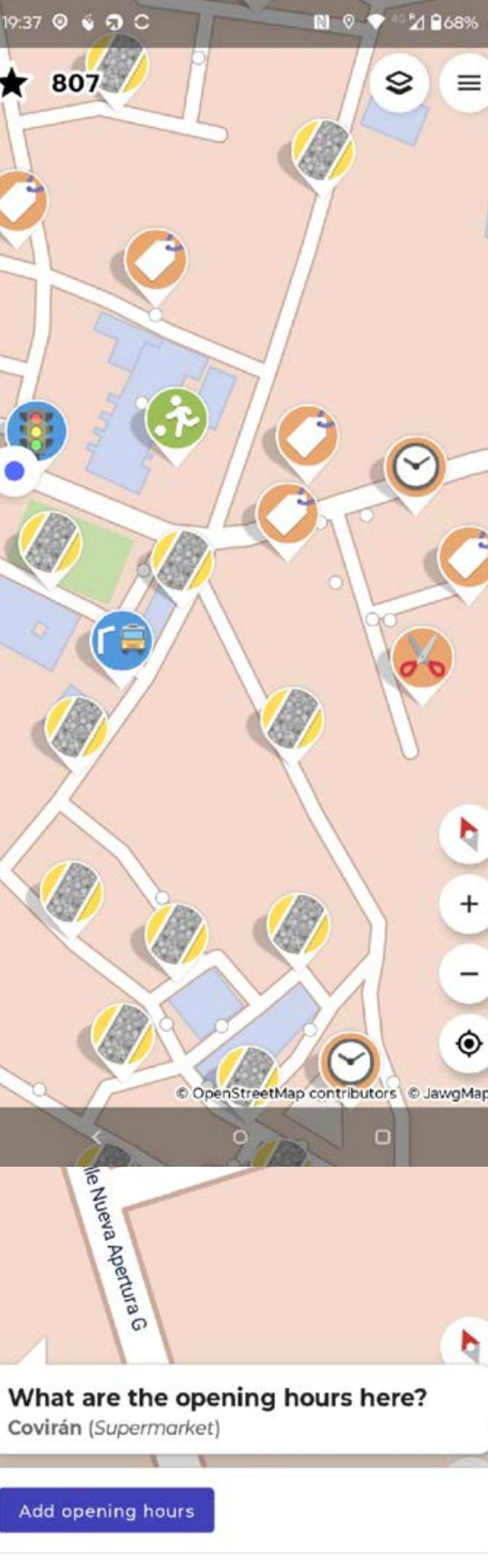
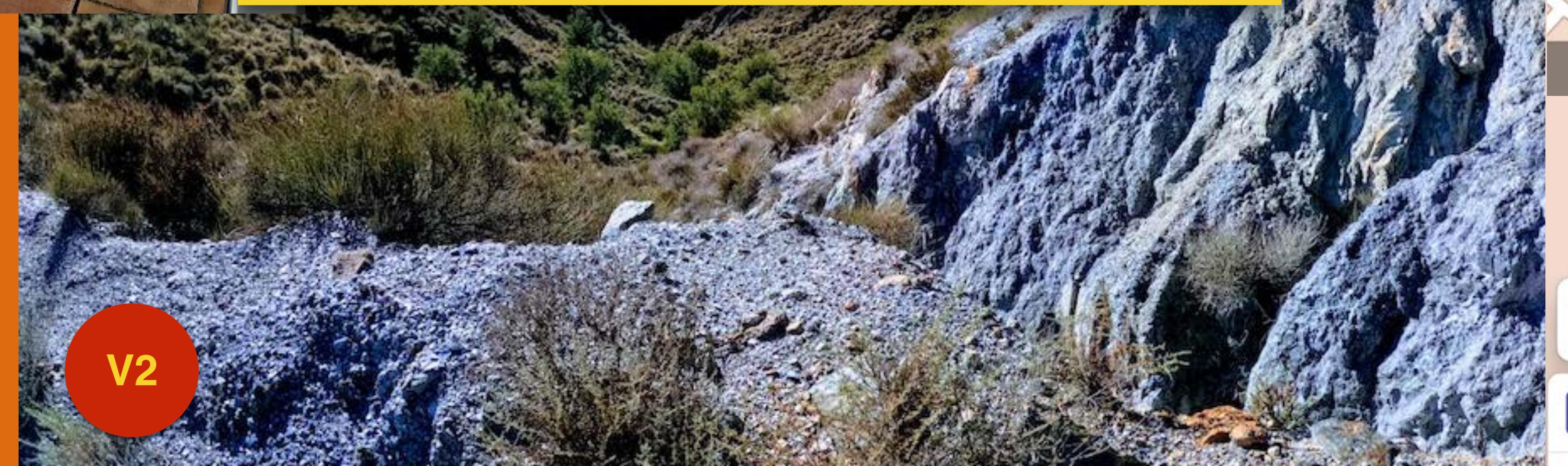


workshop docs
alpumapa.xyz



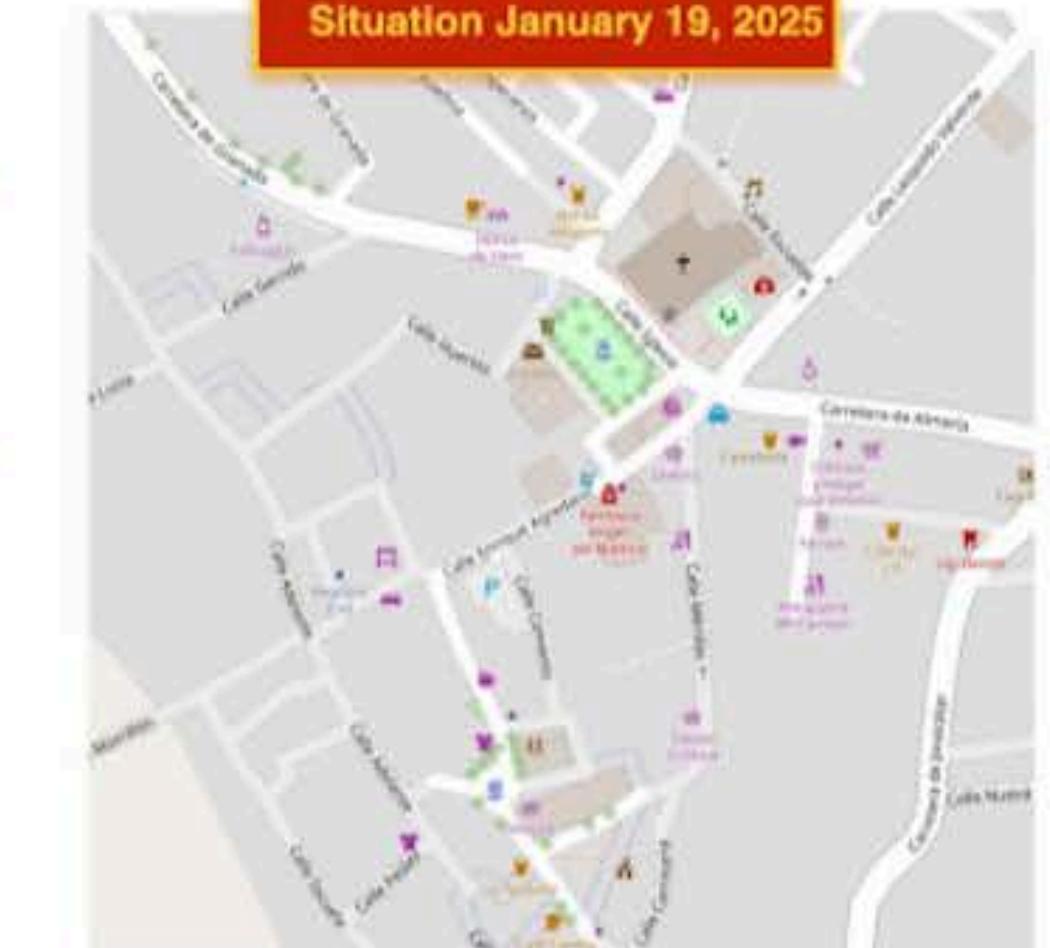
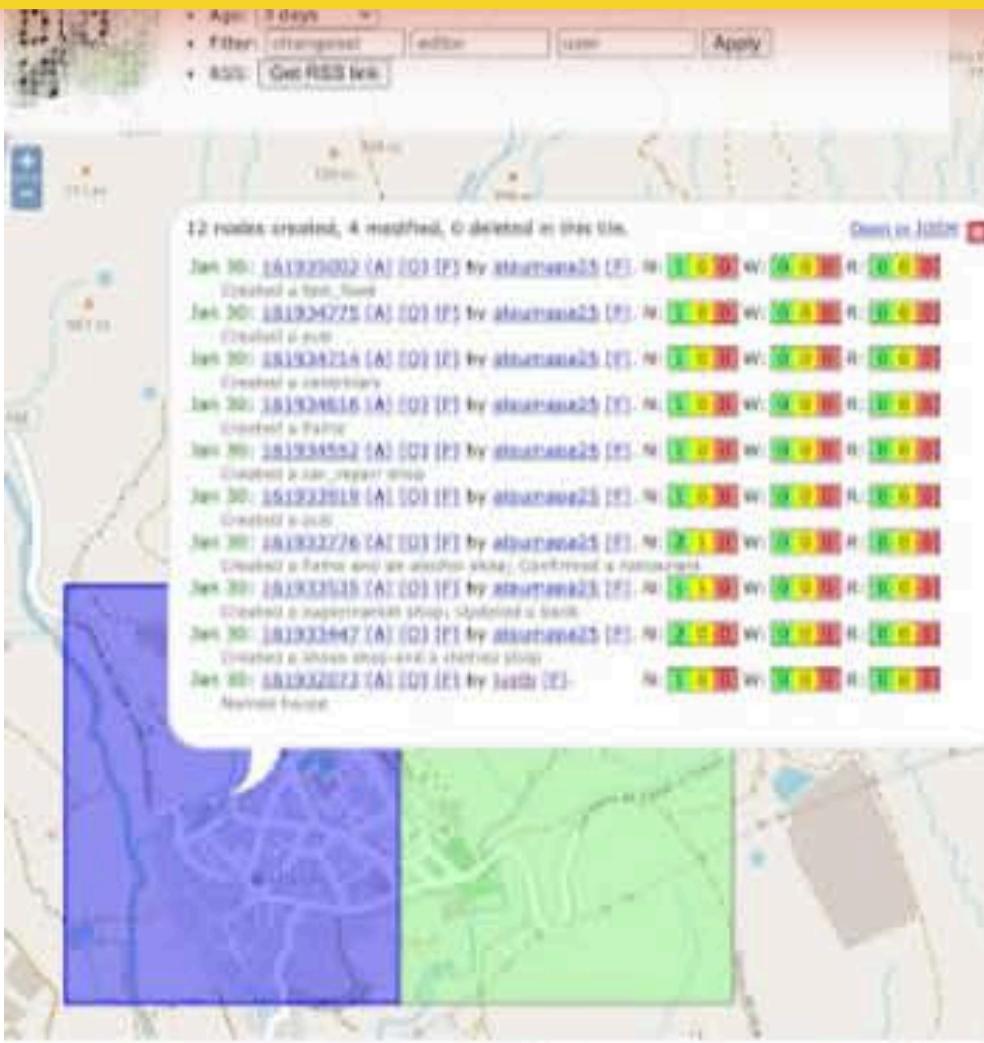
Taller - Workshop - (English)

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)





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. Rabillias, 2, 18480 Ugijar, Granada
+34 6477887139 (Juan Luis, library)

alpumapa.xyz - workshop
alpujarra.knowmads.com
openstreetmap.org

More

alpumapa.xyz - workshop
alpujarra.knowmads.com
openstreetmap.org

Agenda

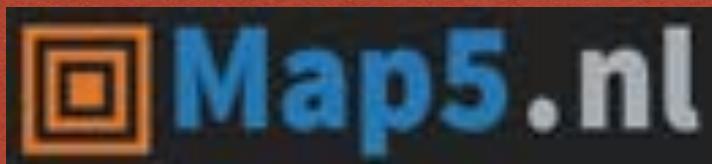
- Introduction (presentation slides)
- Workshop via alpumapa.xyz
 - create account on openstreetmap.org
 - learn, install and configure apps
 - go on the streets to map! OR remain inside (armchair mapping)
BE CAREFUL WHILE LOOKING AT PHONE AND WALKING!
 - return here for looking at results & evaluation

OSM Website: openstreetmap.org

Just van den Broecke
Open Source
Geospatial Professional
www.justobjects.nl

Soy
hollandés

Cloud Services



GeoQoS The GeoQoS logo, which includes the word "GeoQoS" in blue and green, and a small green icon resembling a map or signal.

geotoko.nl

About
Me

Founder



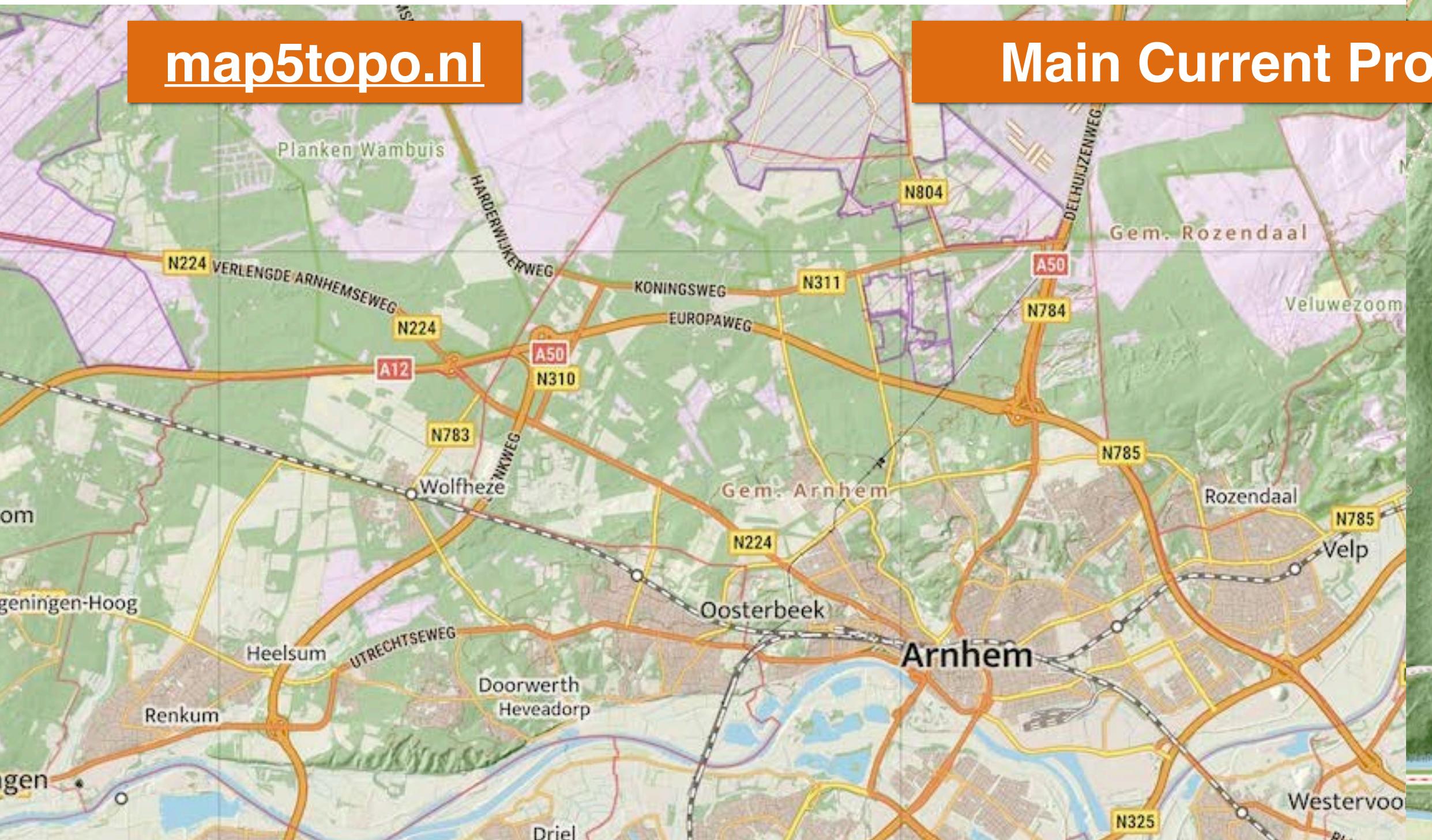
OSGeo·NL

FOSS Projects



OpenStreetMap Mapper
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



.Translate to English X



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

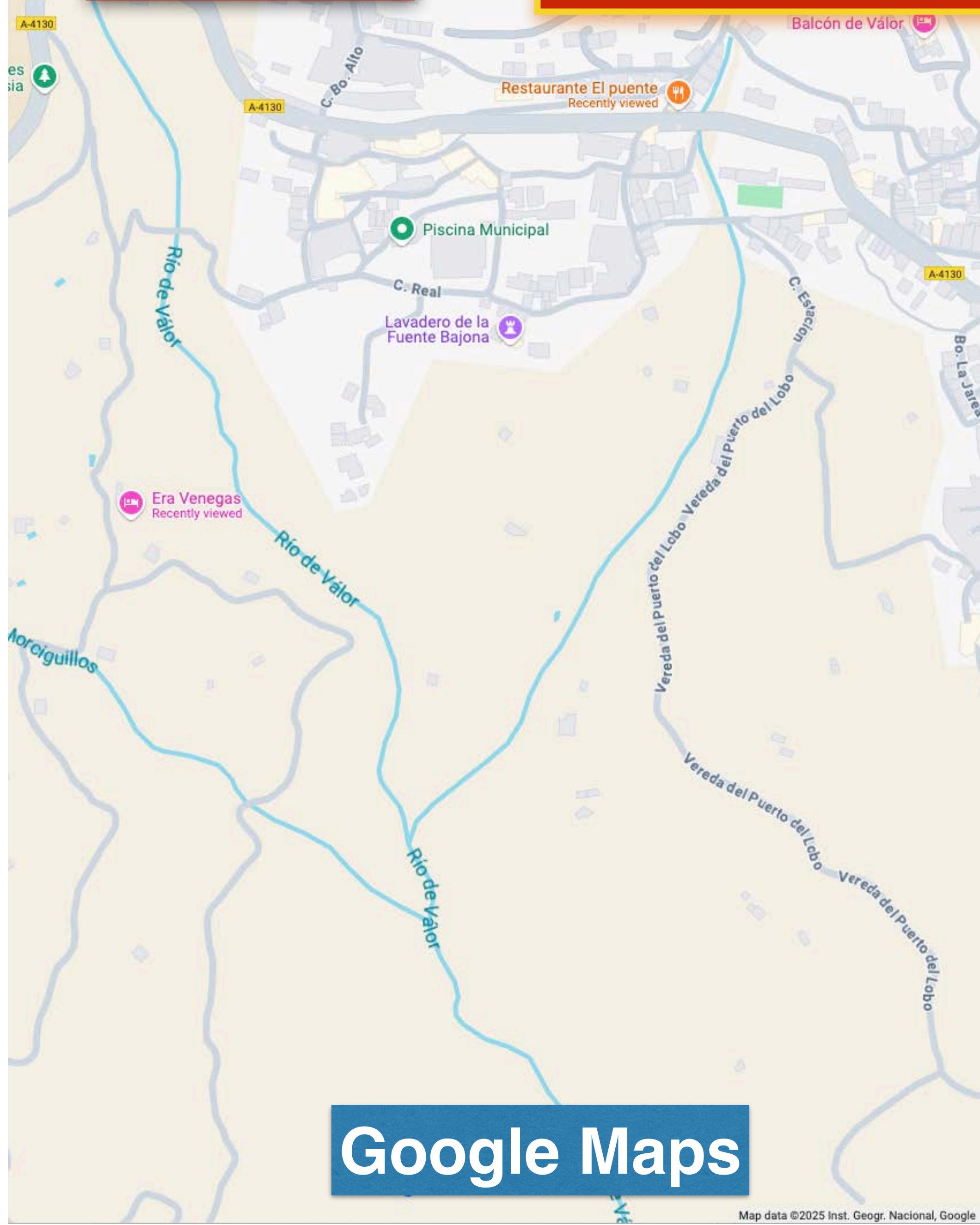
Javier ⭐

Why? Por que?

Three Reasons Tres Razones

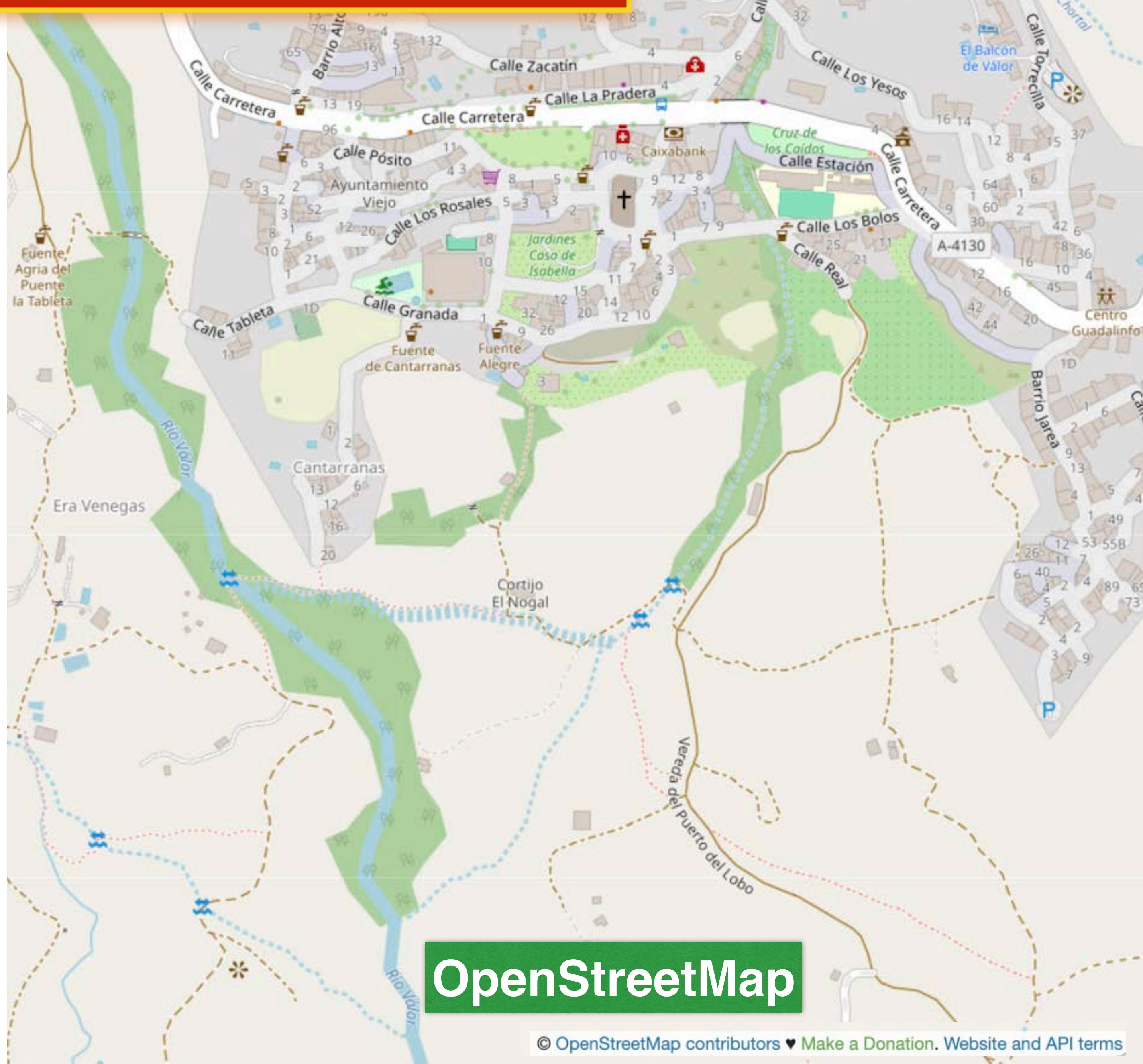
Reason 1

More detailed maps in rural areas



Google Maps

Map data ©2025 Inst. Geogr. Nacional, Google

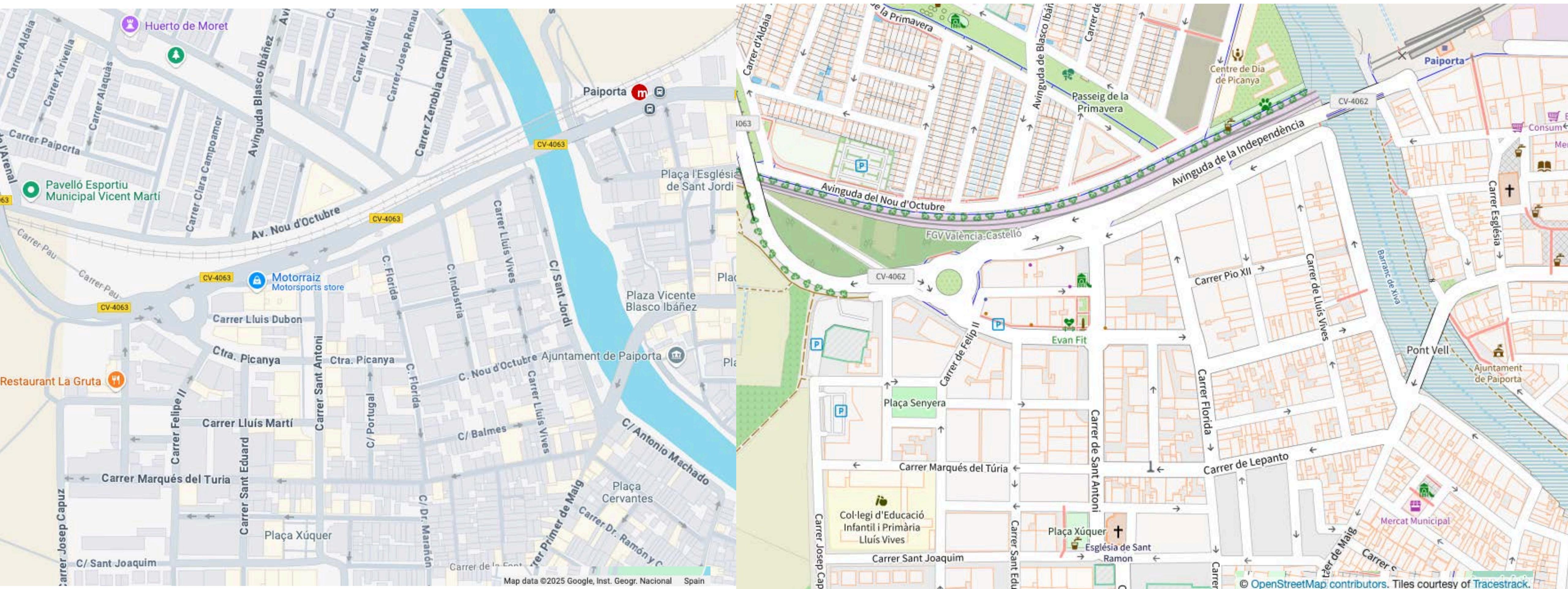


OpenStreetMap

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

Reason 1

More detailed maps in general

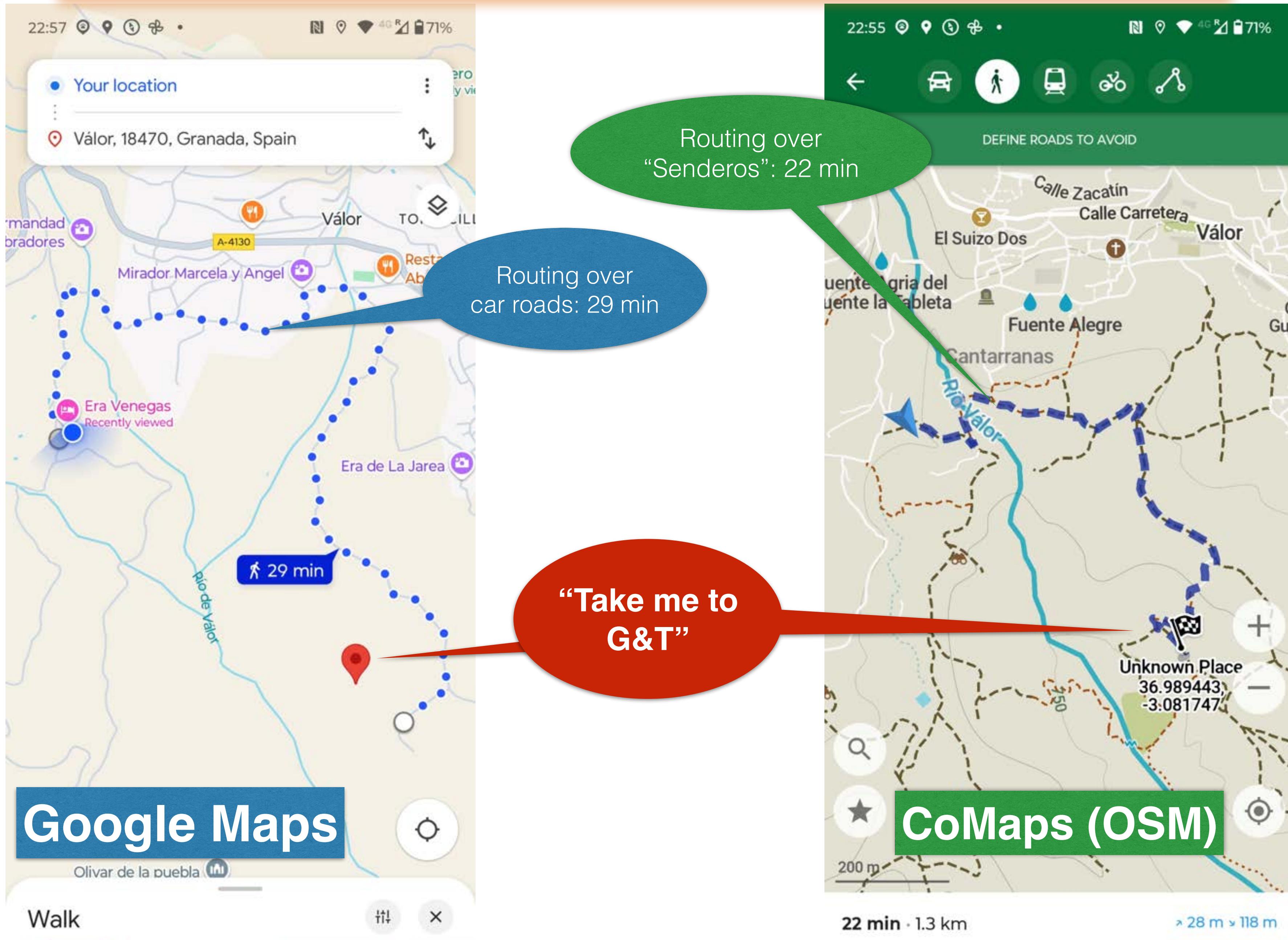


Google Maps

OpenStreetMap

Reason 1

Pedestrian Routing - Google Maps vs CoMaps (OSM)



Reason 2

Disaster Response and Humanitarian Mapping

The screenshot shows the homepage of the Humanitarian OpenStreetMap Team (HOT) website at <https://www.hotosm.org>. The page features a large banner image of two mappers in green vests using a drone in a field. A red overlay on the left side of the banner contains the text: "HOT IS AN INTERNATIONAL TEAM DEDICATED TO HUMANITARIAN ACTION AND COMMUNITY DEVELOPMENT THROUGH OPEN MAPPING." Below the banner are four key statistics: 491K Total Mappers, 260M Total Map Edits, 156.4M Buildings Mapped, and 3.4M Roads Mapped (KM). The website navigation includes links for "WHAT WE DO", "OUR WORK", "TOOLS & DATA", "NEWS", "OPEN MAPPING HUBS", "COMMUNITY & ORGANIZATION", "PARTNER WITH US", "GET INVOLVED", and "DONATE". The footer includes a link to alpumapa.xyz.

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^①

260M Total Map Edits^①

156.4M Buildings Mapped^①

3.4M Roads Mapped (KM)^①

alpumapa.xyz

Reason 2

Disaster Response and Humanitarian Mapping



#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

Spain Floods 2024 | tasks.hotosm.org

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

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>

Mapping our world together

HOT 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

alpumapa.xyz

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



Jordi M

Yo solo he encontrado información útil en la página de 'destroyed' ([https://wiki.openstreetmap.org/wiki/Key: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-límite-110838782.html>

Levante-EMV

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



F

fer

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

21:50

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

NPC

X O @ d apunnoticies | apunmedia.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?

Edited: <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 PucelaBits en Valladolid, y nos preguntábamos cómo

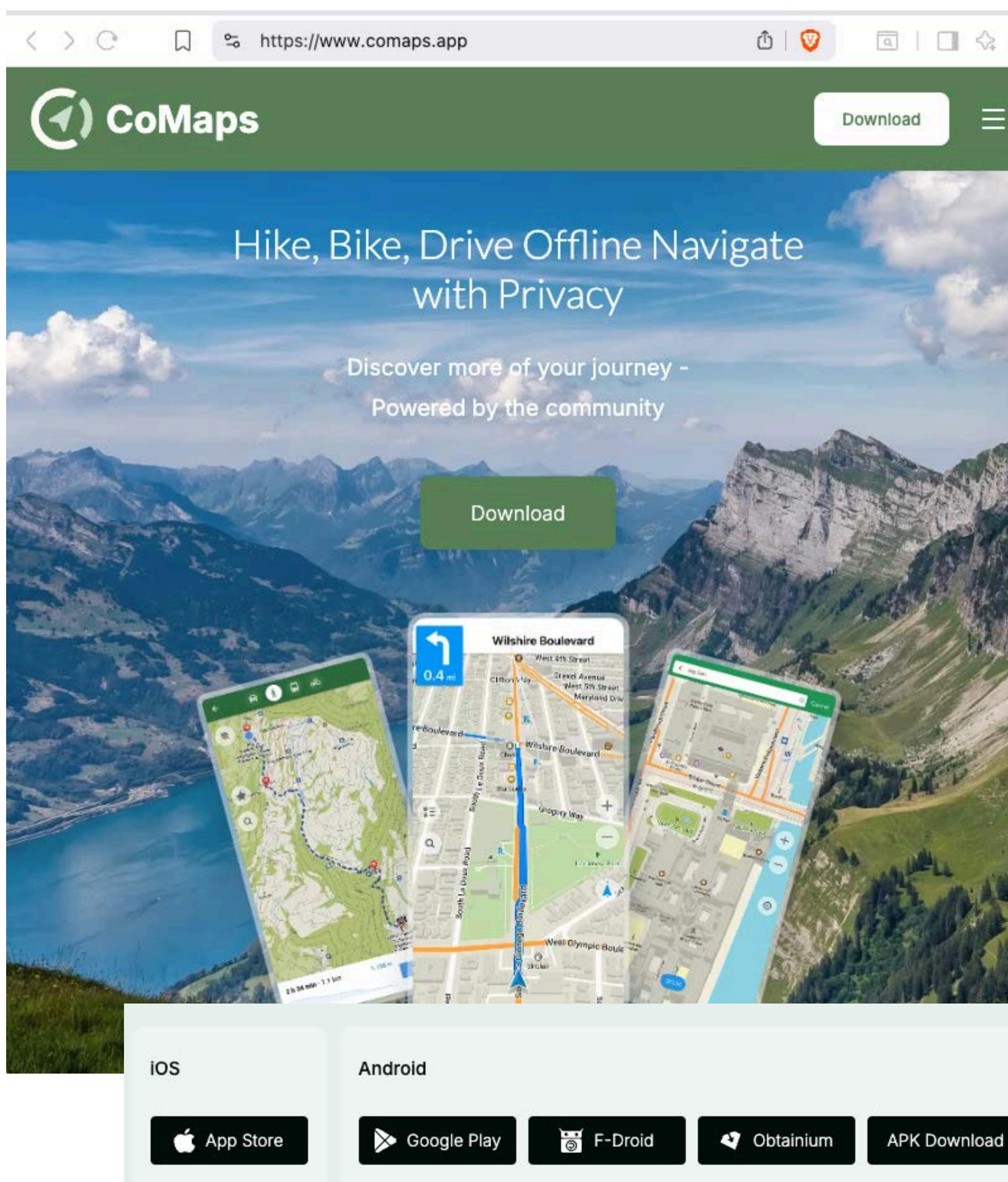
alpumapa.xyz

OpenStreetMap Apps as Big Tech Alternatives

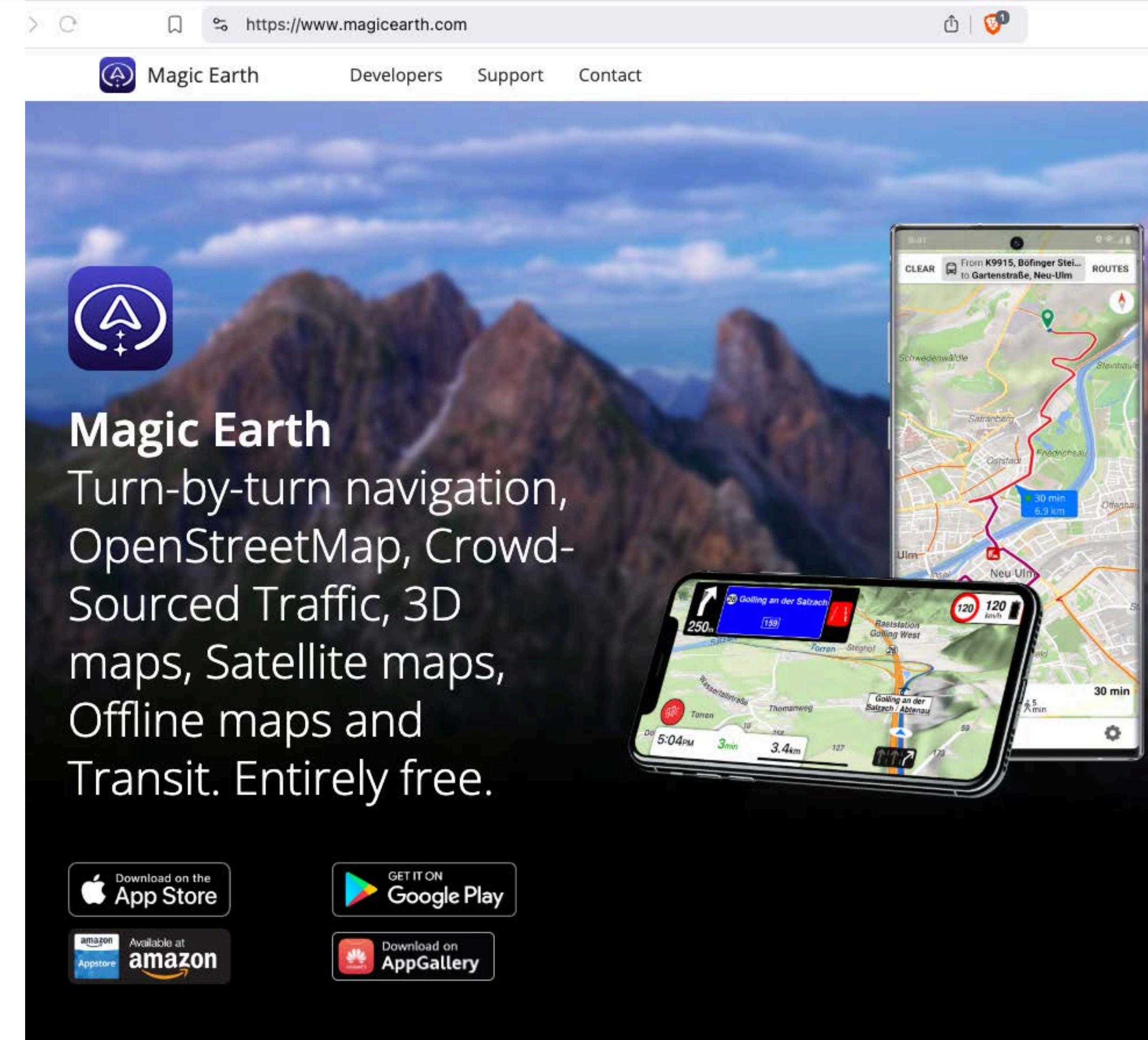
- People moving away from “USA Big Tech Apps”
- Switch to alternatives
 - from Twitter/X/FaceBook to Mastodon
 - from WhatsApp to Signal
 - from Instagram to PixelFed
 - from YouTube to PeerTube
 - etc
- OpenStreetMap fits in this trend
 - from Google Maps to CoMaps, MagicEarth, OSMAnd..

Reason 3

OpenStreetMap Apps as Big Tech Alternatives



The screenshot shows the CoMaps website. At the top, there's a navigation bar with icons for back, forward, search, and refresh, followed by the URL <https://www.comaps.app>. Below the bar is a green header with the CoMaps logo and a "Download" button. The main content features a large image of a mountain range under a blue sky. Overlaid text reads: "Hike, Bike, Drive Offline Navigate with Privacy" and "Discover more of your journey - Powered by the community". There are two "Download" buttons, one in a green box and another in a white box. Below these are three smartphone mockups showing the app interface with maps and navigation details. At the bottom, there are download links for iOS and Android, along with links to the App Store, Google Play, F-Droid, Obtainium, and APK Download.



The screenshot shows the Magic Earth website. At the top, there's a navigation bar with icons for back, forward, search, and refresh, followed by the URL <https://www.magicearth.com>. Below the bar is a header with the Magic Earth logo and links for Developers, Support, and Contact. The main content features a large image of a mountain range. Overlaid text reads: "Magic Earth Turn-by-turn navigation, OpenStreetMap, Crowd-Sourced Traffic, 3D maps, Satellite maps, Offline maps and Transit. Entirely free." There are download links for the App Store, Google Play, Amazon Appstore, and AppGallery. To the right, there's a large image of a smartphone displaying the app's interface with a map and navigation details.

So?

Three Reasons - One Word



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



Empowerment - Empoderamiento

Search

Where is this?  

OSM mapping for Válor - status July 6, 2025

Let's take
Mapping in
our own
hands

Search

Where is this?  

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

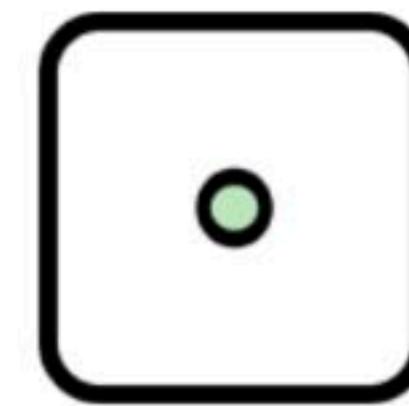
- **EveryDoor - every-door.app**
add or edit businesses, amenities, and more
- **StreetComplete - streetcomplete.app**
improve map by answering map-related questions
- **CoMaps - comaps.app**
also allows direct edits to OSM data
- **Many more like Vespucci, Go Map, MapComplete.. ,,**

OpenStreetMap Inner Workings

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

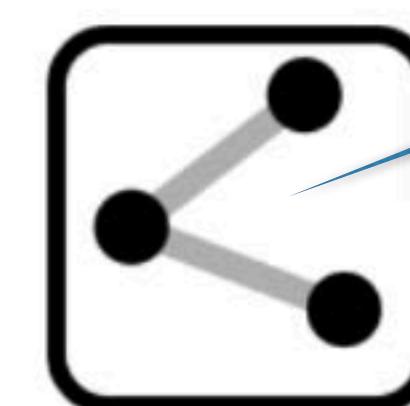
Diving Deeper - How is OSM Data Structured?

1. Core Elements:



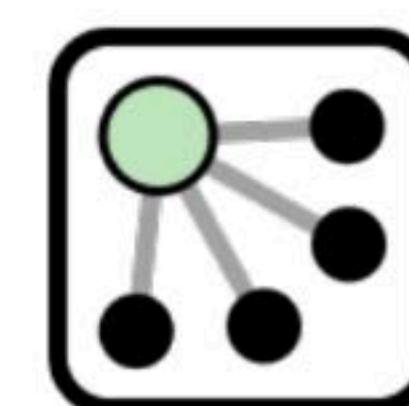
Node

“Points”



Way

“Lines”



Relation

“Combinations”

Examples:

Church,
Restaurant,
Bench etc

Roads, Paths,
Tracks, etc

Busline,
Hiking Route

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

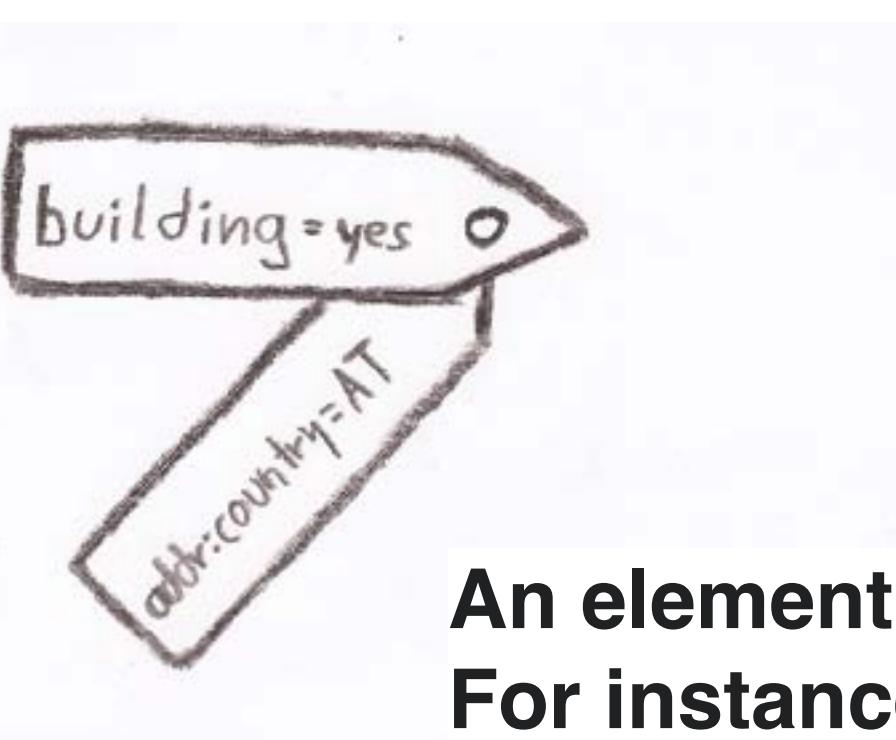
wiki.openstreetmap.org/wiki/Beginners_Guide_1.3

Nice Overview: jakobmiksch.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

Nice Overview: jakobmiksch.eu/post/openstreetmap_overview/

Signup at openstreetmap.org/user/new

 OpenStreetMap 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](#).

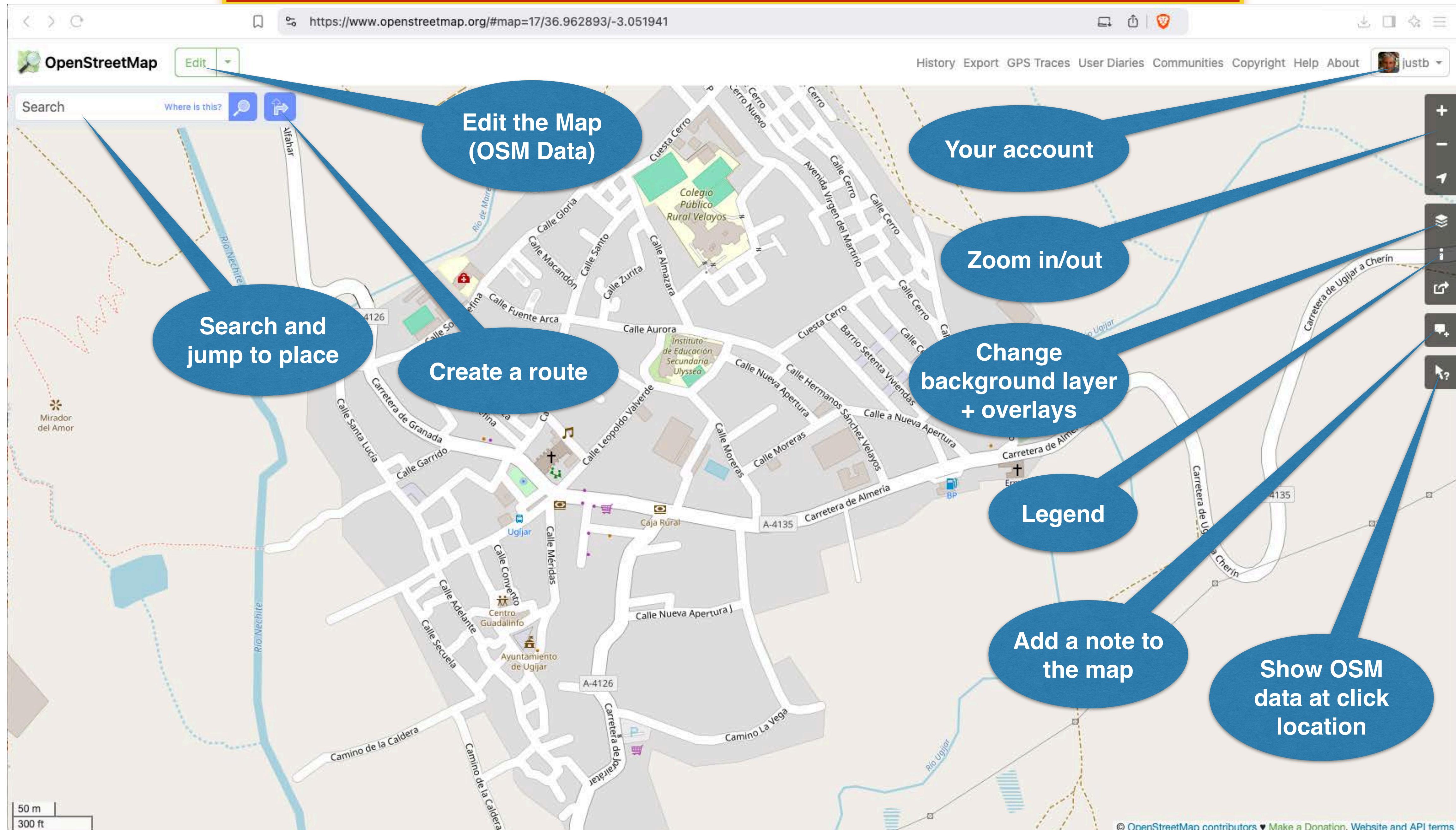
I consider my contributions to be in the public domain.

Sign Up

or sign up with a third party

Navigating the [openstreetmap.org](https://www.openstreetmap.org) website



ON TO THE WORKSHOP

GO TO alpumapa.xyz

Thanks! Questions?

Home: justobjects.nl

Mastodon: mapstodon.space/@justb4

LinkedIn: linkedin.com/in/justb4/

OSM Workshop: alpumapa.xyz

CoMaps Workshop

- Installation
- Download map area
- Explore the map
- Explore settings
- Navigation (foot, car)
- Working with GPS tracks
 - Sharing
 - Recording
 - Creating (gpsvisualizer.com/draw)
- Advanced: Edit OpenStreetMap

CoMaps Workshop - Docs

<https://alpumapa.xyz/apps/comaps/>

<https://alpumapa.xyz/es/apps/comaps/>



CoMaps Workshop - WIFI

WIFI Name: MAPAS_TAPAS

Password:

CoMaps Installation

<https://www.comaps.app/download/>



- Choose Store: App Store (iPhone) - Play Store (Android)
- Install
- On first open will ask to download map around current position

Explore the Map

<https://www.comaps.app/support/>



- Panning and Zooming
- Map Styles and Layers - “Outdoors” and “Contour Lines” BEST!
- Map orientation: Fixed North Up or Floating

Navigation

- Find your favorite place - Tap and Select “Route To”
 - Alternate mode of transport (foot, car, ...)
 - Search place (looking glass), then “Route To:
Hint, enter: “Ginny & Terry”
 - Try “Route From” with “Route To”, and Saving route
 - We will practice outside later



Working With GPS Tracks

- “**GPX File**” universal file format tracks and routes
- Download from any place: Wikiloc, AllTrails etc
- Share via WhatsApp, Signal, or any Cloud storage
- We will practice outside later

Tip: <https://infraestructuras.fadmes.es/senderos>



Senderos Andalucía



FEDERACIÓN ANDALUZA
DE DEPORTES DE MONTAÑA,
ESCALADA Y SENDERISMO

SENDEROS

ESCALADA

VÍAS FERRATAS

BARRANCOS

ROCÓDROMOS

REFUGIOS

PR-A 480 VÁLOR - CUESTA VIÑAS - YEGEN - LA SALUD

Origen: Localidad de Válor

Destino: Localidad de Válor

Provincia: Granada

Municipio: Alpujarra de la Sierra, Válor

[GPX](#) [KML](#) [FOLLETO](#)



Datos del sendero

Estado del sendero: Homologado

Itinerario: Circular

Longitud: 12.84 km

Tiempo de ida: 3 horas y 40 minutos

Altitud máxima: 1370 m

Altitud mínima: 894 m

Desnivel positivo: 870 m

Desnivel negativo: 870 m

Época idónea: Todas excepto verano

Dificultad MIDE:



1 Valor mínimo, 5 valor máximo



Etiquetas experienciales:

Geológico

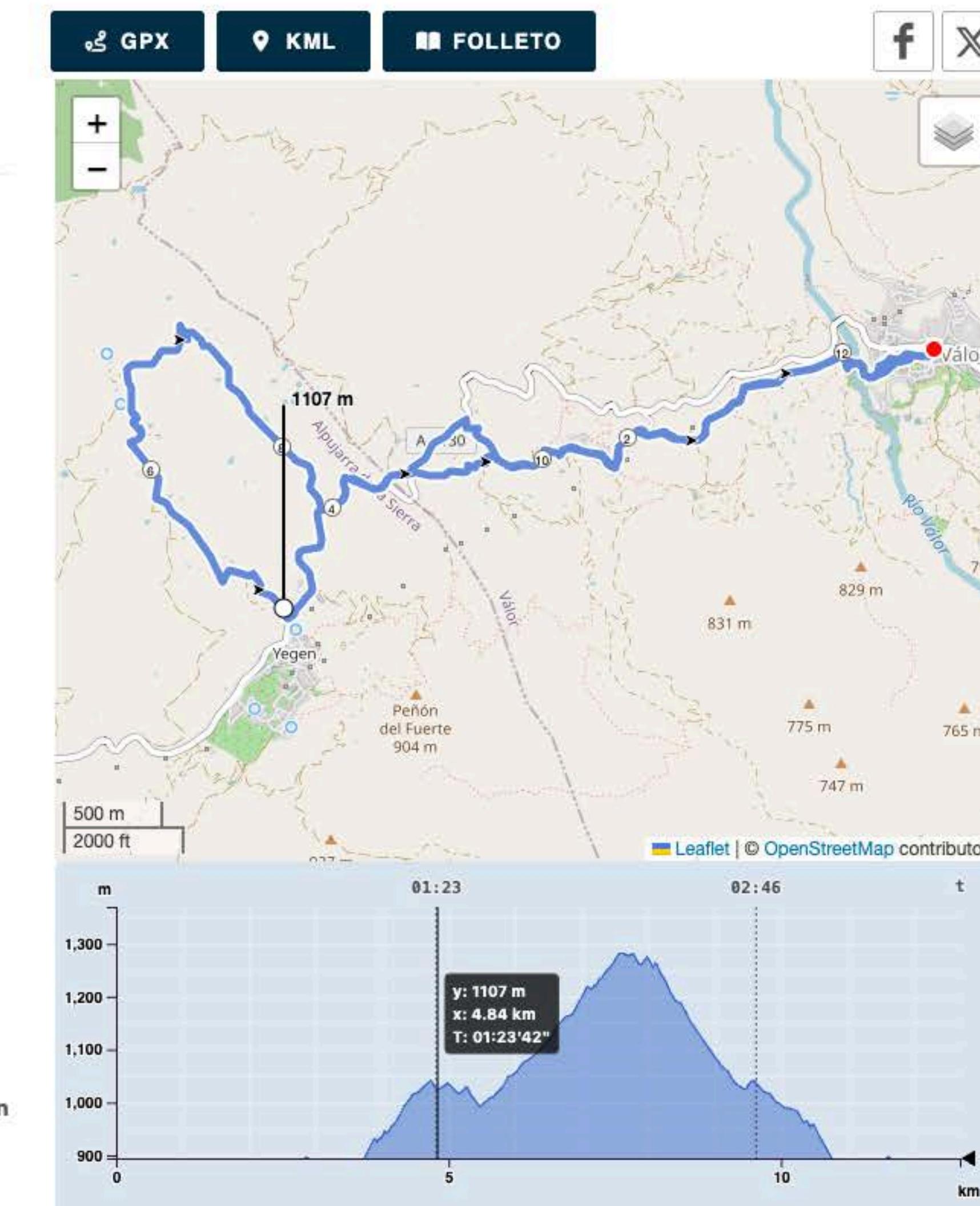
Histórico artístico

Marcha nórdica

Medioambiental

Montaña

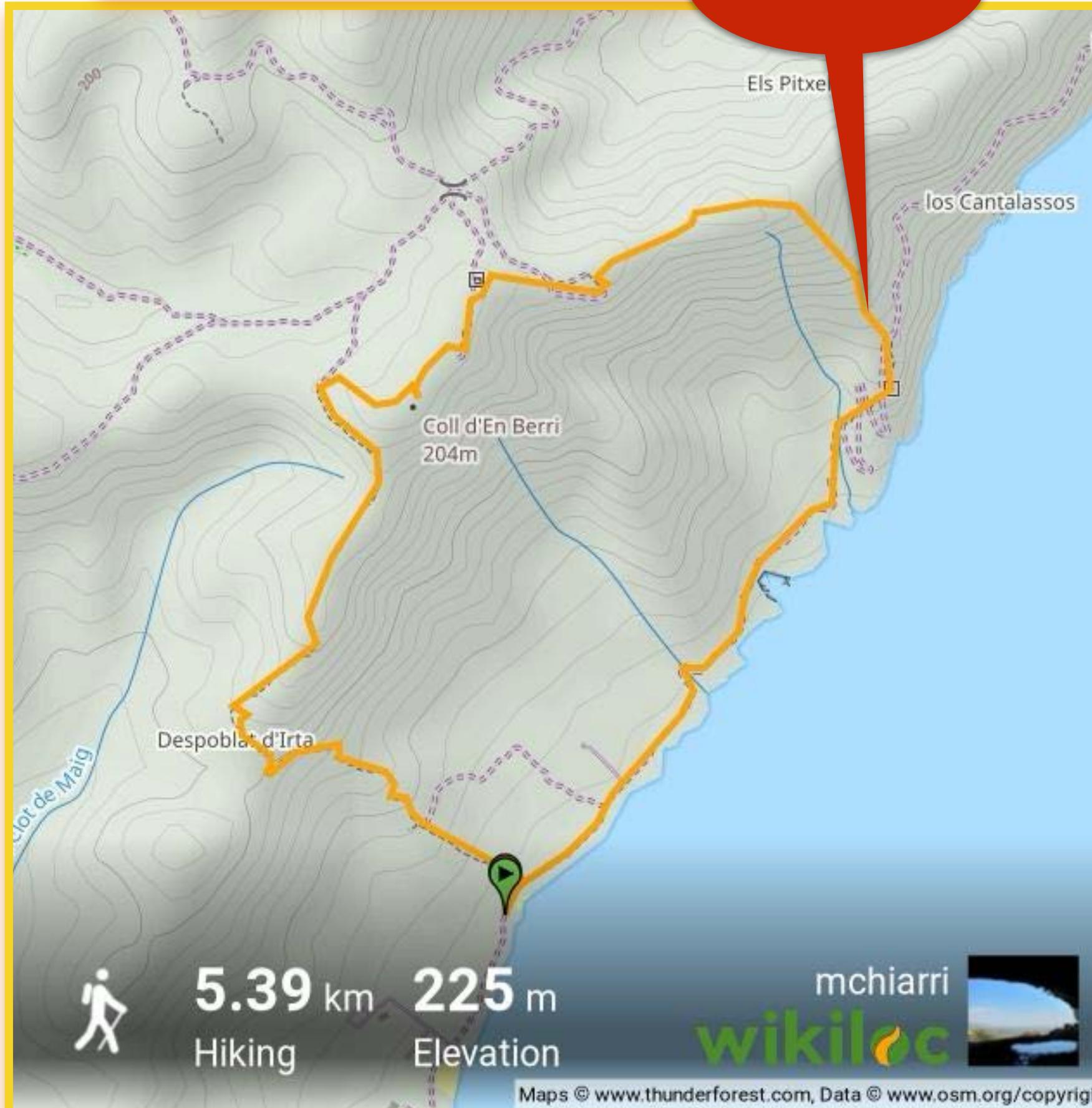
Para hacer con niños +10



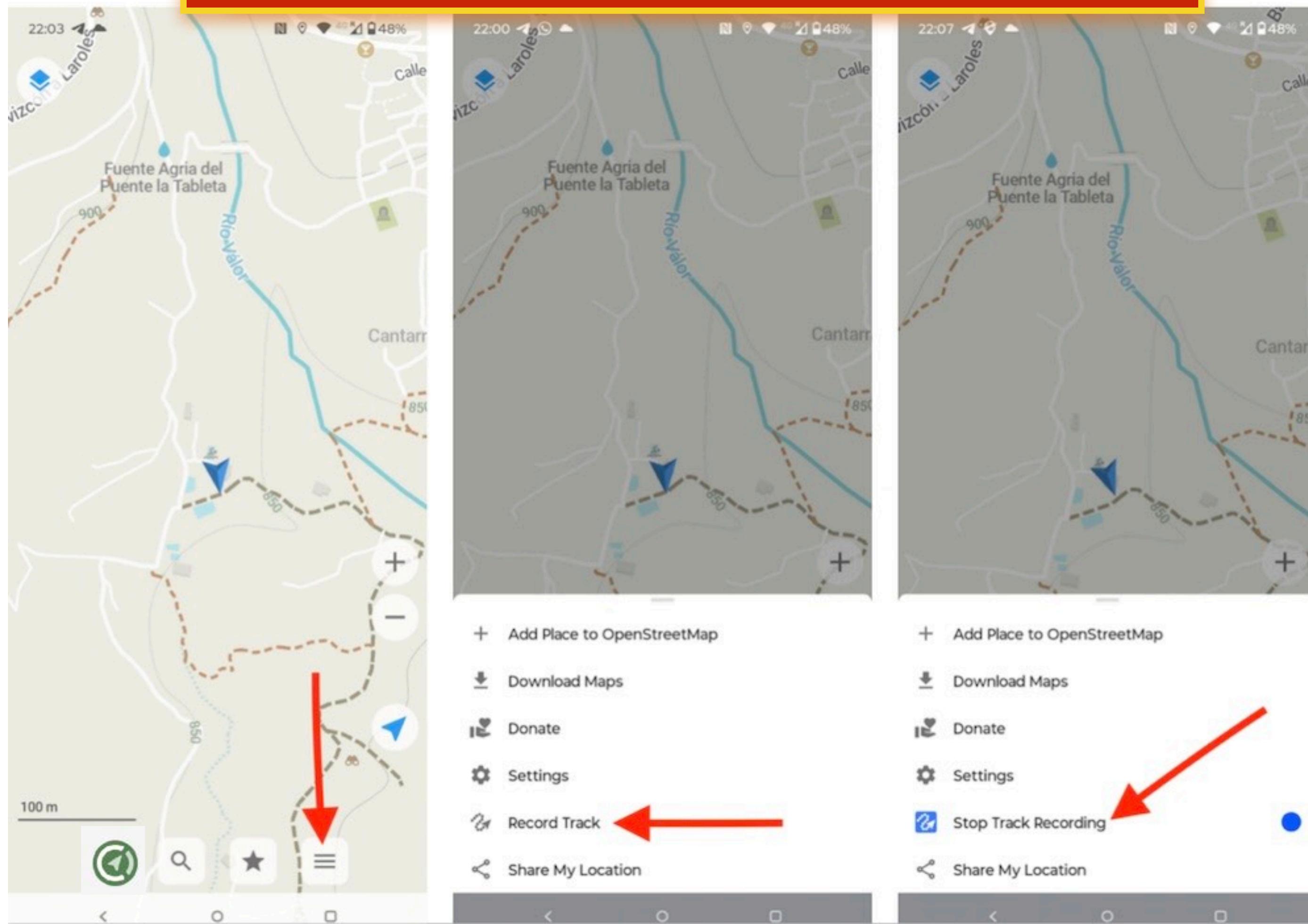
Beware of rutas malas!



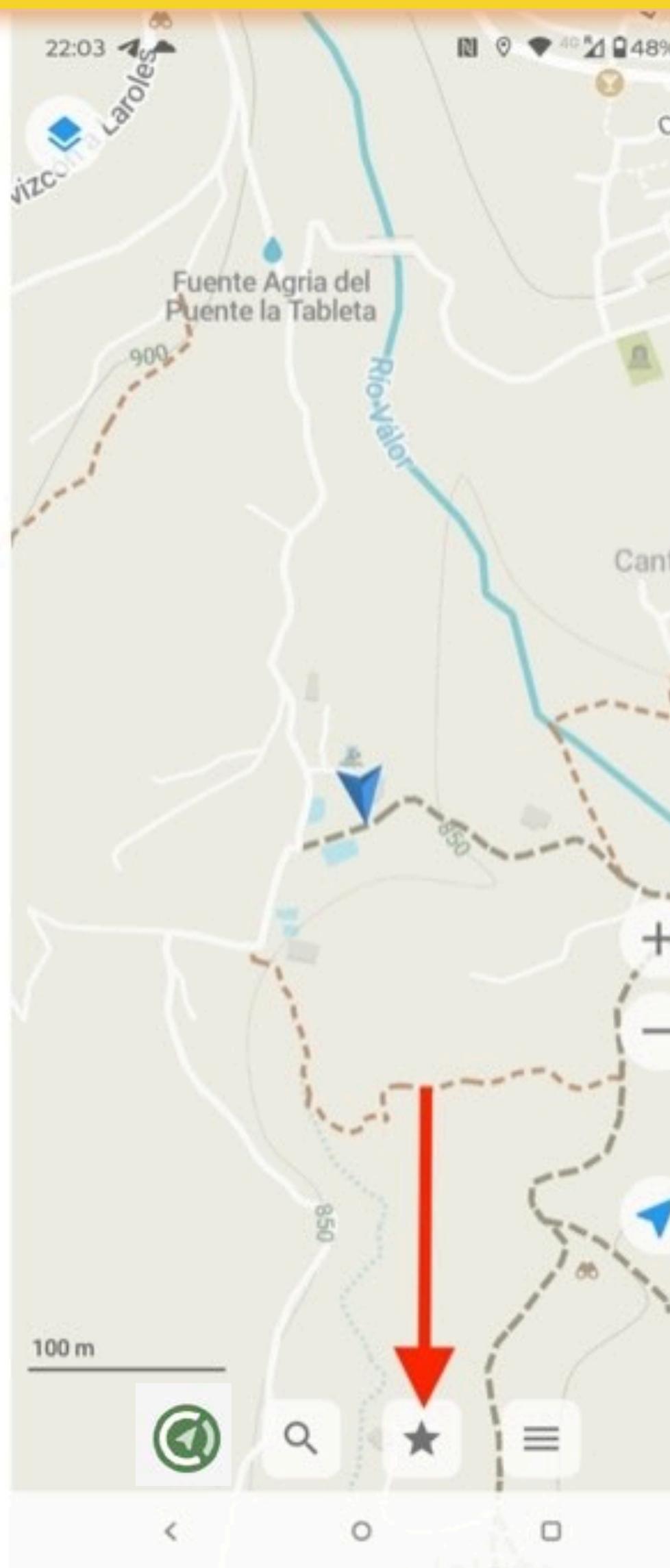
Stuck!!



CoMaps - GPS Track Recording



CoMaps - GPX Track Export



A screenshot of the 'Bookmarks and Tracks' screen from the Wikiloc app. The screen shows a list of items:

- Nechite Valley Paths (1 bookmark, 1 track)
- castanos (2 bookmarks, 4 tracks)
- puerto-ragua-hornillo-4km (1 track)
- Trail Planner Map2 (1 track)
- MolinosRioAguas-6km3 (5 bookmarks, 3 tracks)
- Wikiloc - 2023-10-15 S... Mecina-Alfahar. S (1 track)

Under the 'Nechite Valley Paths' item, there is a context menu with the following options:

- Edit
- Hide
- Export KMZ
- Export GPX (highlighted with a red arrow)
- Delete

Creating your own route - gpsvisualizer.com

GPSVisualizer

Freehand Drawing Utility ("The Sandbox")

[Click here for the Google Maps version]

Use the toolbar on the right to add waypoint markers and tracks, then click one of the "save data" buttons to download as plain text, GPX, or Google Earth KML.

Center the map on a location:

valor granada Go

OSM Nominatim found: Válor, Comarca de la Alpujarra Granadina, Granada, Andalusia, 18470, Spain (36.99617,-3.081) [precision: municipality]

Length: 0.485 km (0.301 mi)

Mouse: 36.99319,-3.08125 Center: 36.99431,-3.08172

Link to this view

Map created at [GPSVisualizer.com](https://www.gpsvisualizer.com)

100% OSM + relief shading

Drawing tools: pan wpt trk save data

Your map elements: [track 5]

Import a GPS file Import a URL

Rio Valor

Calle Reina

Calle Los Rosales

Calle Carretera

Calle Estación

Calle Los Yoses

Calle Torrecilla

Calle Los Bolos

Calle Carretera

Calle Alminares

Calle Jareta

Calle La Pradera

Calle Zacatin

Calle Carretera

Calle Los Rosales

Calle Granada

Fuente de Cantarranas

Fuente Alegre

Cantarranas

Cortijo El Nogal

Era Venegas

Balcón de Válor

Barrio La Yeresa

Barrio La Yeresa

GR-130

A-4130

Vereda del Puerto del Lobo

GPSVisualizer Draw

The screenshot shows a map of Válor, Spain, centered on the location 'valor granada'. A red line representing a track has been drawn through the town, starting from the center and extending towards the bottom right. The map features various streets, buildings, and landmarks. On the right side of the map, there is a 'Drawing tools' panel with buttons for 'pan', 'wpt', 'trk' (which is highlighted in green), and 'save data'. Below the map, a QR code is displayed with the text 'GPSVisualizer Draw' underneath it. The bottom right corner of the map area contains the text 'Map created at [GPSVisualizer.com](https://www.gpsvisualizer.com)'. The overall interface is a web-based tool for creating and visualizing GPS tracks.

Thanks! Questions?

Home: justobjects.nl

Mastodon: mapstodon.space/@justb4

LinkedIn: linkedin.com/in/justb4/

OSM Workshop: alpumapa.xyz