

OSINT & geolocation

What's OSINT?

- Open Source Intelligence
- Collecting information from openly available sources online

Essential for investigations and for documenting war crimes

bellingcat



The New York Times

OSINT Investigations



- Geolocation to document war crimes
- This BBC investigation contributed to the arrest of those responsible for murder in Cameroon



OSINT Investigations



- Geolocation to document crimes
- This BBC investigation contributed to the arrest of those responsible for murder in Cameroon

Cameroon soldiers jailed for killing women and children

© 21 September 2020





OSINT Investigations

bellingcat

- Geolocation to document crimes
- How Bellingcat geolocated an anti-aircraft vehicle in the exact place and time in which the MH17 plane was shot down



Geolocation

Tools to geolocate images

(Any doubts? feel free to stop me)



About OSINT

- The single most effective tool is observation
- The first step in every verification is to analyze the content that is before us
- Things we can look out for: number plates, vegetation, surroundings, languages, shop signs, clothing, weather... EVERYTHING



Geolocation



DoctorCumFraude @doctor_fraude · 21 nov. 2020

Fijate como tiran la comida los que vienen a Canarias ,es una vergüenza que traigan tanta gente y hay españoles que tienen para comer. Esto lo tenian que ver la gente... 🔞 🔞 😡 😡



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♡ 319

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Geolocation

Any visual clues to know if it's really the Canary Islands (Spain)?











(u)110 >



الرا الزيد











DANKO



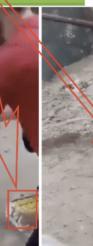


﴿ الراالزيد

﴿ قرا الرَّبِ



WILL D







A boycott of French products?

Creyendo dañar la economía #française, ¡estos imbéciles lanzan productos de marca francesa en lo que parece ser un canal! ¡Así ya contaminando un medio ambiente que no es muy saludable!

**boycott*



Geolocation



A boycott of French products?

- We did a Google search in Arabic and...
- Egyptian outlets describe the event as a boycott

Geolocation

شاهد.. لحظة إلقاء شباب بالفيوم منتجات فرنسية في الترعة رداً على الإساءة للرسول (فيديو)

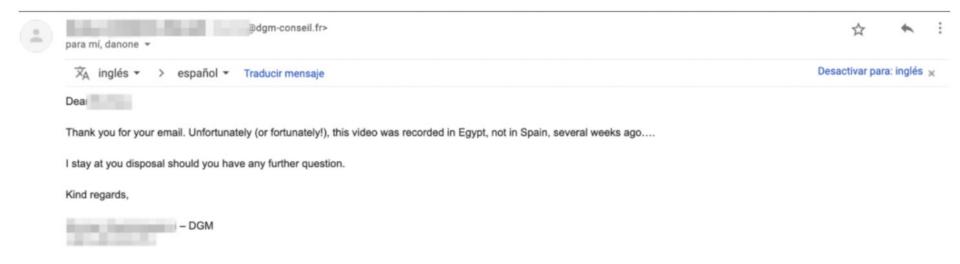


We reach out to Danone

Geolocation

Danone claims it was recorded in Egypt "several weeks ago"*

From Maldita.es we have contacted Danone who states that this video was recorded in Egypt, not in Spain, and they point out that it is from "several weeks ago".



There are no such rivers in the Canary Islands



Geolocation

A water course with such a flow is not usual in the Canary Islands, according to two geography experts to *Maldita.es*

Geolocation

M A L D I T A MIGRACIÓN

Articles

Repor

Why this projec

Newslette

ontact

M Return to Cursed

No, this video is not of immigrants throwing food in the Canary Islands or in Murcia or Valencia or anywhere in Spain

PublishedWednesday, April 14, 2021











Maps

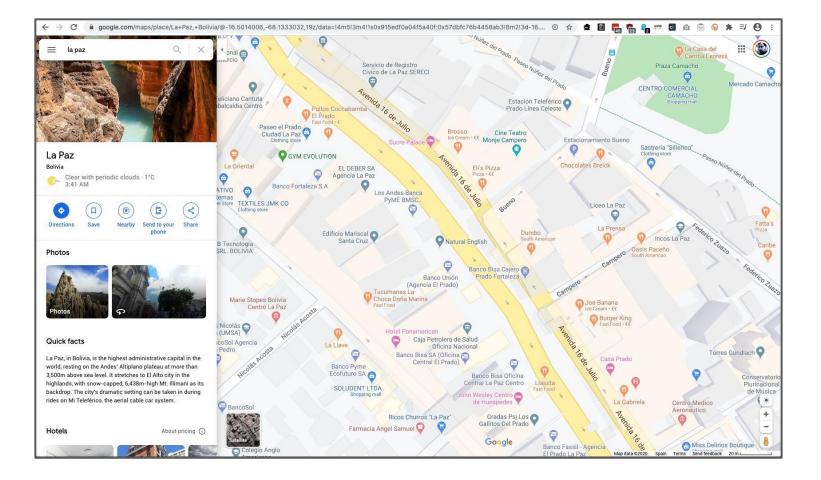
MAPS

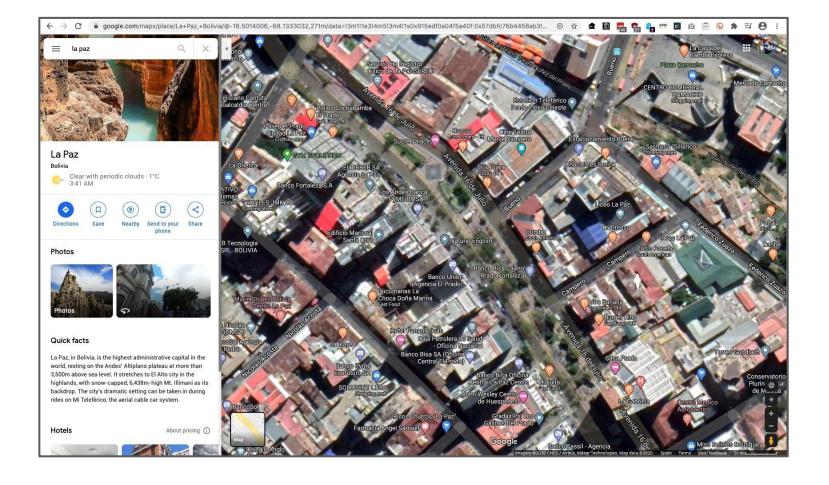
Why maps are your friends and how to use them when fact-checking

MAPS - Google

(other) MAPS

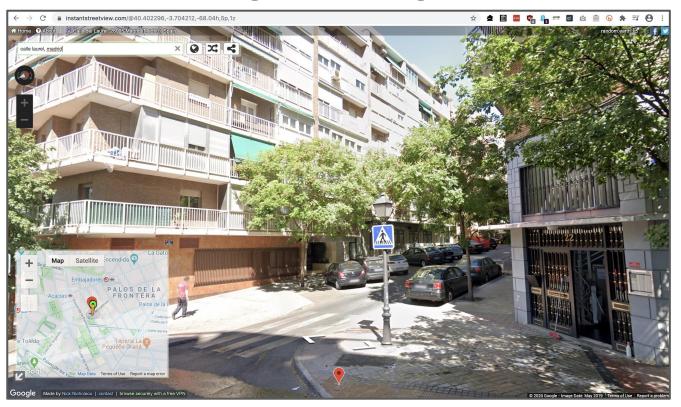
- Google Maps
- Wikimapia
- OpenStreetMaps
- Yandex Maps
- Baidu Maps
- Naver Maps





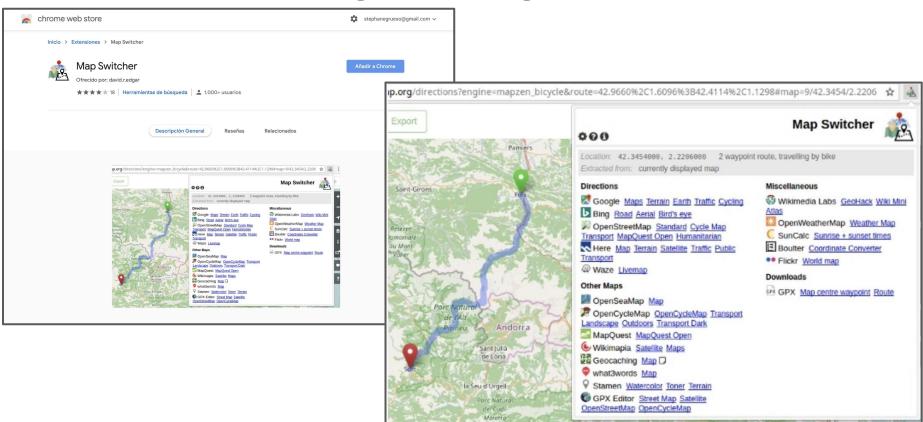


UTILITIES

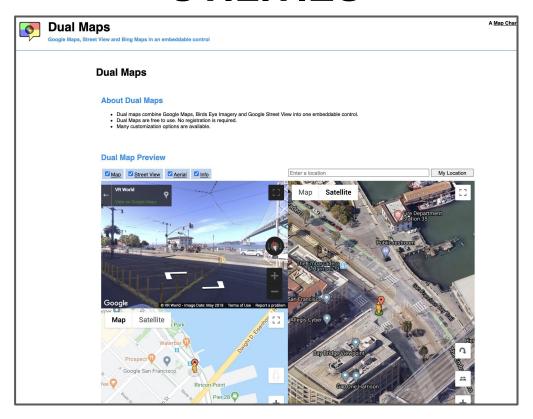


https://www.instantstreetview.com/

UTILITIES



UTILITIES

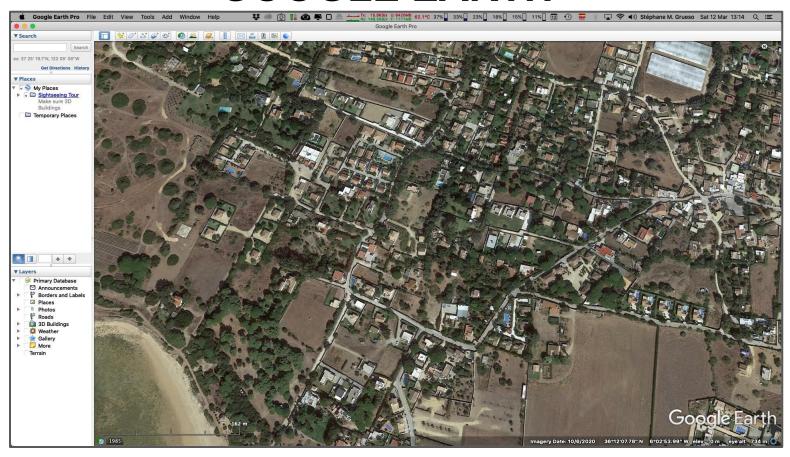


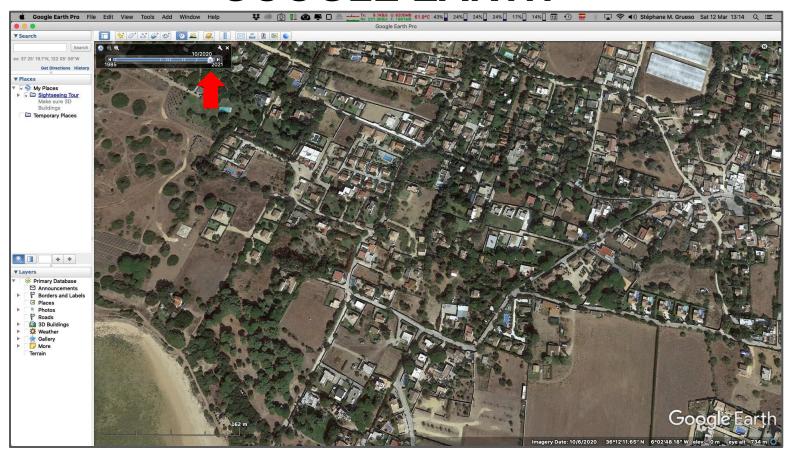
https://bit.ly/2D9Tcx5

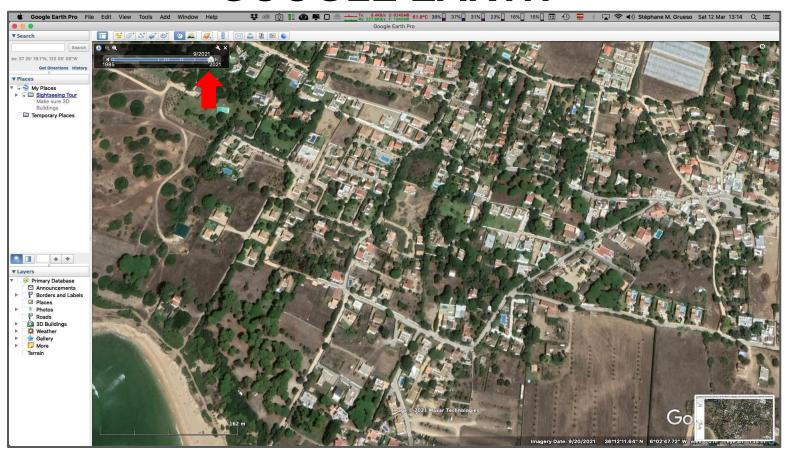
GEOLOCATION

What happens when Google Maps is no use?

Whether it's because the image is from a rural area or from a country in which Google Street View is not available, it's possible that at times we don't obtain the results we were hoping for



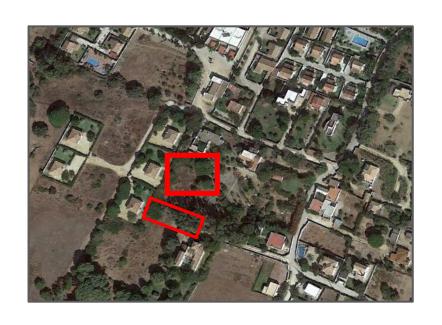








10/2020 9/2021

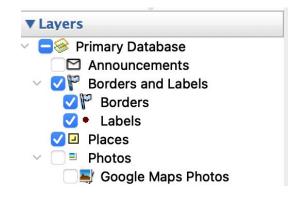




10/2020 9/2021

GEOLOCATION

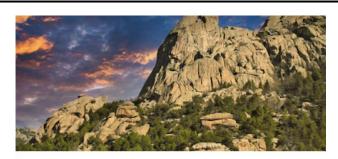
- The most known tool is Google Earth
- You can choose from different perspectives





Terrain

- When there's no Google Street View, we can use Google Earth to check the terrain
- This is particularly useful in rural areas such as La Pedriza (Madrid, Spain)





4,8 ★★★★★ 674 reseñas

Reserva natural



escalada.











teléfono

Área natural con riscos y formaciones rocosas, a la que acuden los aficionados al senderismo y la

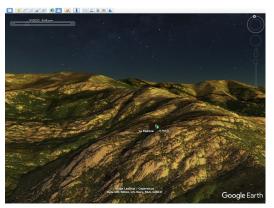
Terrain



Terrain

- We can even see the light and the shades that were present there and then
- We've got to click on the clock that is above



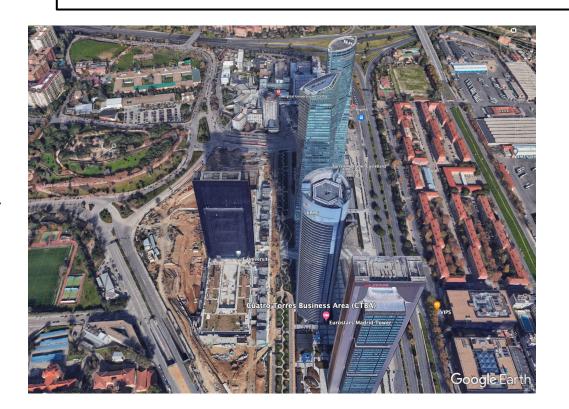






Terrain

- Also very useful to explore a place from the sky in 3D
- Disclaimer: this resource is only available for big cities or monuments



PRACTICAL CASE: GOOGLE EARTH

- A video with hundreds of boats in a port
- They say that it's a port in Morocco and that immigrants are going to cross to Spain in these boats



Canarias 08:10 PM



05:05 PM

Does somebody recognize this port? Any visual clues that can help us?

Similar images were published in Spanish outlets

DiariodeAvisos.com

Alerta máxima en Canarias ante una nueva crisis migratoria

DIARIO DE AVISOS 03/01/2020



Espectacular imagen aérea con centenares de cayucos amarrados en el puerto de Nuadibú, en Mauritania. DA

GEOLOCATION

El puerto de Nuadibú, con más de 1.000 embarcaciones en las que los inmigrantes tratan de llegar a Canarias

19 MAR 2006 - 00:00 CET





1/6

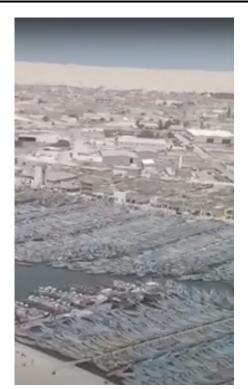
Este número es indic del riesgo del produc 1/6 indicativo de me y 6/6 de mayor riesg

Bankinter S.A se end adherido al Fondo de de Depósitos de Enti Crédito de España. La cantidad máxima actualmente por el n Fondo es de 100.000 por depositante.

Let 's find out...

GEOLOCATION

- Does it seem like the same place?





Let's find out...

- It looks like it, right?
- Google Eart Pro > Google Earth as it offers many more perspectives and tools (such as the clock)
- Downloading is advised





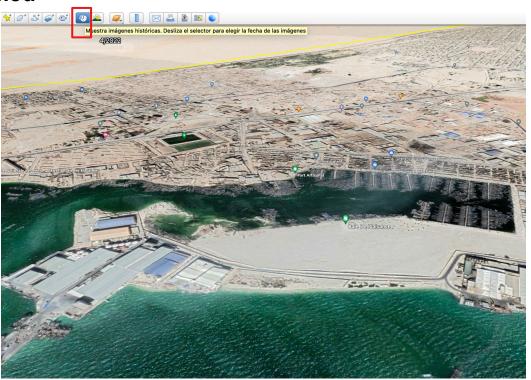
We checked Google Earth Pro and...

- Notice anything different?
- What's going on with the highlighted buildings?
- Why are they like that?



It's time to use the clock to know when the video was filmed





The Google Earth screenshot was taken in October 21, 2020, so the video has to be older than that



If we go to the image that was taken in june 2020, one of the buildings (red) is already there, but not the other one (yellow)

The video has to be prior to june 2020



In april 2020 the only thing that is built is part of the roof of one of the buildings



In the video the partially built roof is also the only thing that we can see

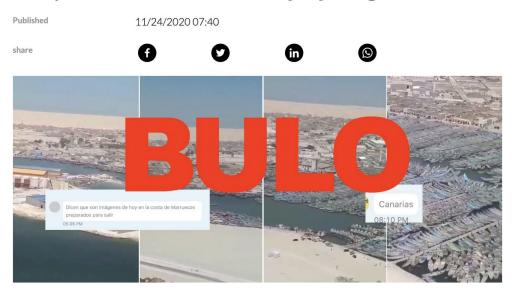
GEOLOCATION





We now know that the images were not taken in november 2020, like the hoax said. It's also not Morocco, but Mauritania.

No, this video in which boats are seen is not recorded in the Canary Islands nor are they "images from today of the coast of Morocco preparing to leave"



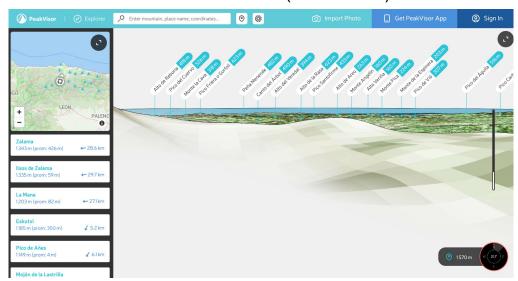


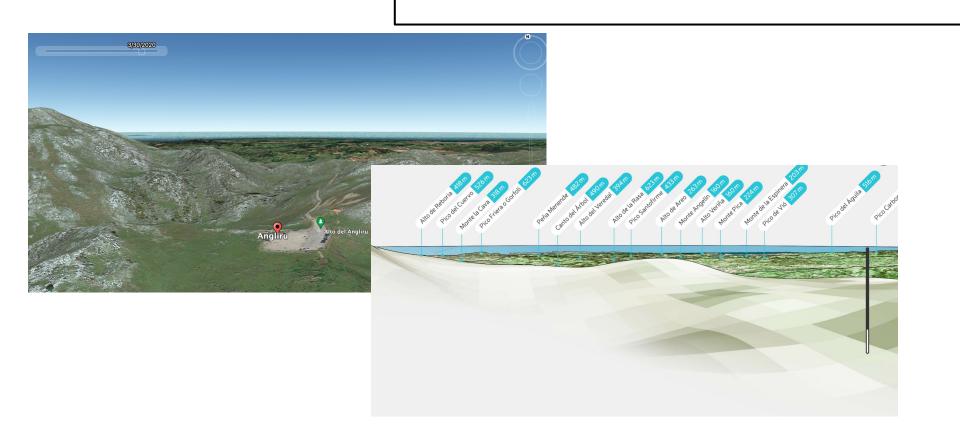
Bonus track: Peakvisor

Tool that lets you see a panoramic view of every mountain

- Useful to verify content in which mountains are present
- It shows other mountains that are nearby
- Distance to other locations of interest
- 360° view from mountaintops

ANGLIRU (ASTURIAS)





- You can upload pictures for the app to geolocate
- The picture has to have metadata
- Once you upload the pic, the app recreates the surroundings and identifies other mountains in the picture
- Free and easy to use app

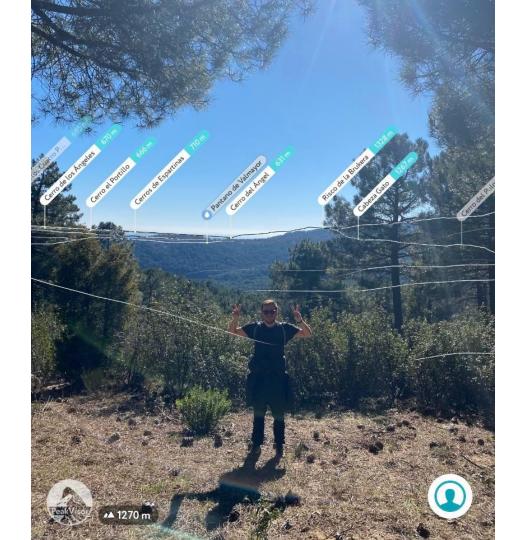


APP

Menú

Senderos

Seguimiento





Flightradar 24

- Best app to monitor air traffic
- It follows flights in real time
- It lets us check the current state of airspace in a particular place
- We can also obtain information about a particular plane (route, company, model...)

GEOLOCATION

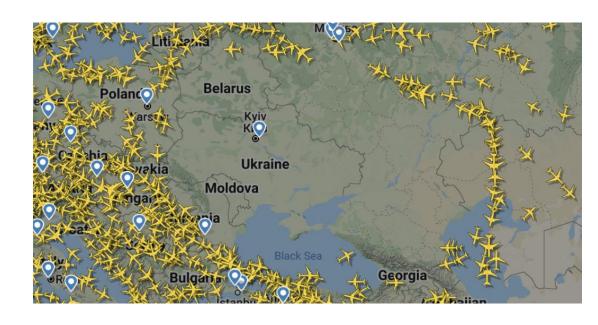




UTILITIES

Geolocation

 We were able to monitor Ukraine's airspace with the tool



UTILITIES

 Thousands of people live-tracked Turkish
 President Erdogan's plane during the alleged coup in 2016

Geolocation



Flight radar of Erdogans flight into Europe from Turkey

NEWS POLITICS FOOTBALL CELEBS TV MONEY TRAVEL

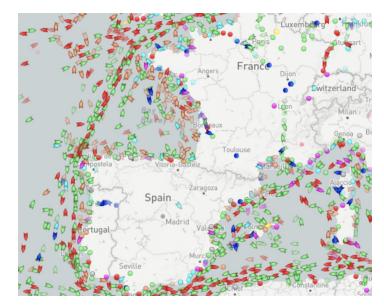
Is this Turkish President Recep Tayyip Erdogan's jet flying over Europe as he pleads for asylum after coup?

MarineTraffic

GEOLOCATION

- Good option for marine traffic
- Not all ships appear in real time (although it's usually quite accurate)
- It lets us know where a ship is from and where it's going





Utilities

GEOLOCATION

 We can check marine traffic in the Black Sea

- There's a Russian cargo ship close to

Mariupol (Ukraine)



