# Advertising mapping: using OpenStreepMap for the protection of landscape



Paul Desgranges at SOTM Milano 2018

### **Outline**

- Which advertising devices ?
- Why bother to do this? Is it useful? Is it necessary?
- How to map?
- Tools: preset JOSM, OSM Contributor, MapContrib.
- Status
  - Rendering: icones, openadvertmap, umap
  - Stats per type and per country











27/07/18 Advertising mapping into OSM















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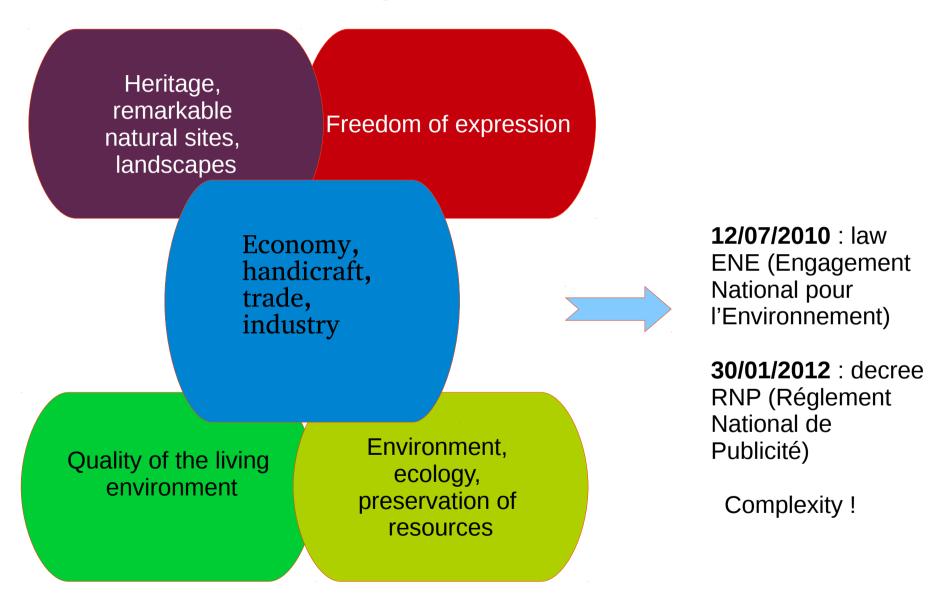






27/07/18 Advertising mapping into OSM

## Legislation on advertising in public space in France is the result of 100 years of discussion on :





#### The Telegraph



#### Grenoble to replace street advertising with trees and 'community spaces'

A plan to curtail outdoor advertising was a campaign promise by Green mayor Eric Piolle in recent municipal elections, as he claims it is "a European first for a large citv"



French city Grenoble bans advertisin trees

NOVEMBER 25, 2014

#advertising #cycle paths #france #green city #grenoble #sustainability

Grenoble is the first European city to renounce the revenue from billboards in public spaces - Grenoble earned some 645,000 euros in 2014 - in favour of making the city a greener space for residents.

"It's time to move forward in making Grenoble a more gentle and creative city," said the city's Green Party Mayor Eric Piolle, who campaigned for office in early 2014 with a promise to remove advertising from Grenoble. "We want a city which is less aggressive and less stressful to live in, that can carve out its own identity. Freeing Grenoble of advertising billboards is a step in this direction."

Mayor Piolle aims for a green and sustainable city without

advertising billboards. At the same time, the city will promote public transportation and will build new cycle paths.

Grenoble didn't renew adv. contract in 2014, 326 adv devices banned from public space

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French city becomes the first in Europe to ban street advertising... and replaces all posters with trees and signs for community groups

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- . Grenoble will plant 50 young trees by spring under the green plan
- · 326 advertising signs will be taken down and contracts will be cancelled
- · Cultural and social groups will be offered free advertising on noticeboards

#### Advertising devices into OSM: what for?

#### Aims 1

- Store into OSM DB what can be seen on landscape
- Perform inventory (how many, density)
- Compare towns with same characteristics
- Follow changes in time

#### Aims 2

 Be able to verify legality of installation, automatic detection of infractions?

#### Aims 3

- Be able to measure advertising pressure
  - On a city, along an itinerary, ...

## How to tag into OSM?

- man\_made=advertising (first level tag, not mandatory)
- Tag advertising: external aspect (form factor)
- Then visibility, number of sides, lit, luminous, animated, support, overall size, height.
- Then legal aspect : operator, private/public property, type of message, display size, legal type according to local legislation
- Visibility (nuisance or impact)

## External aspect of device

- advertising=<value> is first level tag (if man\_made=advertising is not). To give the external aspect of the device
  - · advertising=billboard
  - advertising=poster\_box
  - · advertising=totem
  - · advertising=column
  - advertising=board
  - · advertising=tarp
  - · advertising=sign
  - · advertising=flag
  - advertising=sculpture

## Visibility: device visibility

#### visibility

- visibility=house: device for pedestrians, visible up to 10 m
- visibility=street: device for vehicles driving slowly, visible between 10 and 50 m
- visibility=area : device visible from far, or for vehicles driving fast, visible from more than 50 m

### Number of sides

#### sides: the number of sides of the devices

- sides=1 wall devices, tarps, most of the boards in town, default value
- sides=2 totems, most of grounded devices
- · sides=3 rarely
- · sides=4 rarely



## lighting

lit: yes/no





- lit=projection spots or neon ramps
- lit=transmission poster\_box lit from inside
- · lit=neon
- lit=numeric all types of digital display
- lit=screen all types of screen









## Animation type

#### animated:

- · animated=yes/no
- · animated=trivision\_blades : small triangles rotating
- animated=winding\_posters : several posters, often 3, winding one after the other
- animated=rotating : advertising columns rotating on itself
- · animated=screen : a screen is an animation type
- · animated=digital\_prices : for petrol stations for example
- · animated=digital\_messages : for electronic display
- · animated=wind : some easels on ground are rotating with wind

## Support

#### support to qualify what supports the device

- · support=wall
- support=poles/pole/ground devices grounded (either poles, or a large unique pole 'trunk' ["advertising tree"]) or directly put on the ground, in Franc poles for telecom/electricy/light/traffic sign are not allowed to support advertising
- : support=mast device supported by a mast
- \* Support=fence In France blind fence only can support advertising
- \* SUPPORT=POST In France many advertising boards are supported by a post
- support=easel not mandatory if advertising=easel
- support=scaffold mostly for advertising=tarp
- support=ceiling ou roof supported on roof
- support=street\_furniture; street\_furniture:transit\_shelter; street\_furniture:newspaper\_kiosk; street\_furniture:flower\_kiosk; street\_furniture:information; street\_furniture:map; street\_furniture:bench; street\_furniture:trash; street\_furniture:recycling; street\_furniture:clock; street\_furniture:toilets all kinds of urban furnitures being able to support advertising. In France only 5 of them are allowed: transit\_shelter, newspaper\_kiosk, information, ...

Overall size

**size:** external size of the device (without the support), it is not the display size, but the size of display size AND the frame

Difficult to measure precisly, but they are standard formats

#### width x height in meter

- · size=1.5x1
- size=1.3x2.15 (1.2x1.7 => 2m<sup>2</sup>)
- size=3.5x2.7 (3.2x2.5 => 8m<sup>2</sup>)
- size=4.2x3.2 (4x3 => 12 m<sup>2</sup>)

size better than width + height, because there is as well
display\_surface, and height for the overall height of
device









## Height

**height:** the height of the highest point of device from the lowest point, average height has no meaning here, this is not the height of the

display surface

#### In meter:

- height=2.4 often for poster\_box
- height=6 often for grounded billboard (max height in France)
- height=7.5 often for wall billboard (max heigth in France)

## Operator

**operator** to qualify the one performing display, advertising company, or town, or shop, of brand

- · operator=JCDecaux
- · operator=Ville de Grenoble
- operator=SMTC (Syndicat Mixte des Transports en Commun)

### Reference

reference identifier of advertising device, supposed to be unique by an advertising company, supposed to be visible in France on all devices ("buteau")

- ref=

### Land

- land\_property to tell if the advertising device is on private land or public land
  - land\_property=public
  - land\_property=private

## Type of message

**message:** type of advertising message. Only if permament characteristics.

- · message=commercial vast majority, default value
- \* message=opinions/non\_profit In France we have mandatory boards for free speech and non profit organization in all towns in France, reserved space for freedom of expression.
- · message=information municipalities
- message=showbiz In France adv columns in town can only displya advertising for showbiz (theater, music, movie, concerts, ...)
- · message=map for geographic information
- \* message=political for electoral boards, with "permanent=no" as only during election campains in France
- : message=safety for safety warnings, flood,
- · message=legal for legal information
- · Etc. Other values are possible
- When there are two sides it is possible to have message:front=commercial and message:reverse=information for example
   for urban furniture ad hoc

## Legal device type in France

- legal\_type:FR to qualify the legal type of device in France
  - · legal\_type:FR=publicité
  - · legal\_type:FR=publicité:mobilier urbain:panneau
  - · legal\_type:FR=publicité:mobilier urbain:colonne
  - · legal\_type:FR=publicité:mobilier urbain:mât porte-affiches
  - · legal type:FR=publicité:mobilier urbain:abri transport
  - · legal\_type:FR=publicité:mobilier urbain:kiosque
  - · legal\_type:FR=enseigne
  - · legal\_type:FR=enseigne:temporaire
  - · legal\_type:FR=préenseigne
  - · legal\_type:FR=opinions/associations
  - · legal type:FR=JEI

## Supposed status of device against law in France

- legal\_status:FR to qualify legal status of device, as far as french legislation is concerned.
  - legal\_status:FR=ok : device seems to respect french legislations.
  - legal\_status:FR=to verify:comments : supposition is made that device does not respect legislation, to be verify by an expert, comments.
  - legal\_status:FR=ko:comments : device does not respect legislation, add comments to explain.

## To know if this device is usable by anybody or it is private and reserved

- access to tell if it is possible to stick one's own posters, enable to differentiate commercial boards from boards offered to free opinions and non profit organisations
  - access=open or yes
  - · access=private or no

## Size of display

display\_surface This is the not the overall size of the device, but the size offered to the display.

Difficul to measure precisely

#### surface in meter<sup>2</sup>

- · display surface=1.5: for 1,5 m² => "préenseignes" in France
- display surface=2: for 2 m² => poster\_box
- · display\_surface=8: for 8 m² => a lot of grounded billboards in France
- · display surface=12: for 12 m<sup>2</sup> => a lot of grounded billboards in France

## Visibility: to measure impact of device of advertising pressure of the device

- orientation tells how the device is set as compared with the flow of people or vehicles
  - · orientation=front
  - · orientation=medium
  - · orientation=parallel
  - · orientation=reverse
  - · orientation=multi

## Visibility: to measure impact of device of advertising pressure of the device

#### **Proposal**

 side to tell on which side of the road is located the device as compared of the side when the people or vehicles pass

- · side=same
- · side=opposite
- · side=middle

## Scope "advertising:"

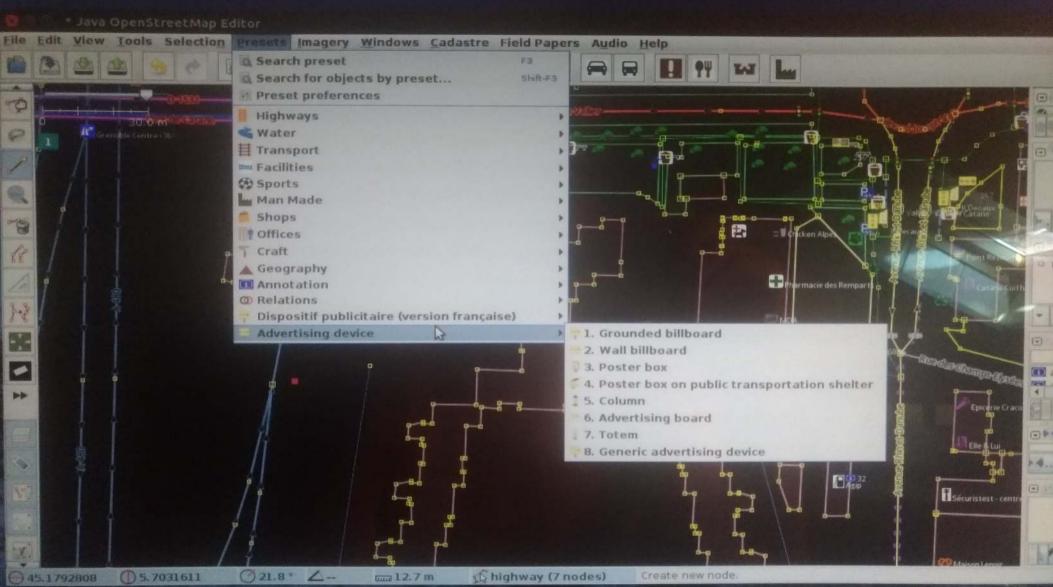
Advertising device can be installed on an existing object and to not mix advertising attributes and object attributes, "advertising:" scope can be added.



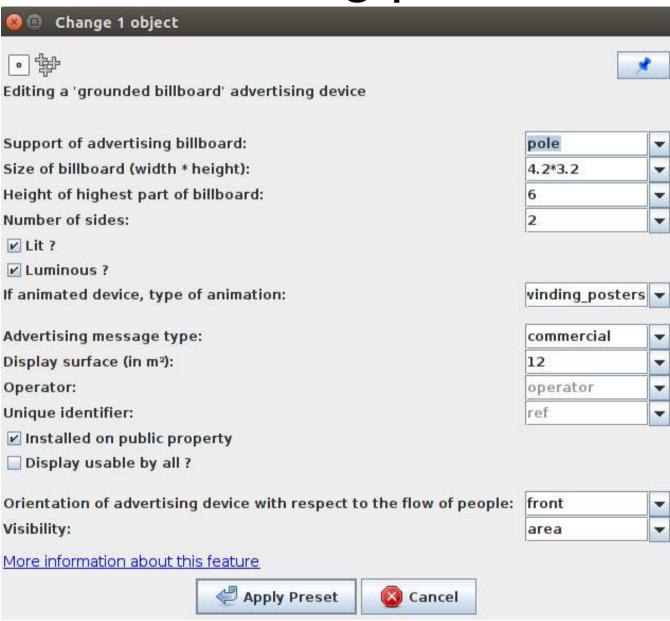
### **Tools**

- JOSM advertising presets: for main cases, to facilitate collection of information into JOSM
- JOSM advertising style: to have a rendering into JOSM while we are editing advertising devices
- OSM contributor: Androïd application with 3 profiles dedicated to 3 types of devices (being built)
- Map Contrib: one theme to help advertising mapping contribution (being built)

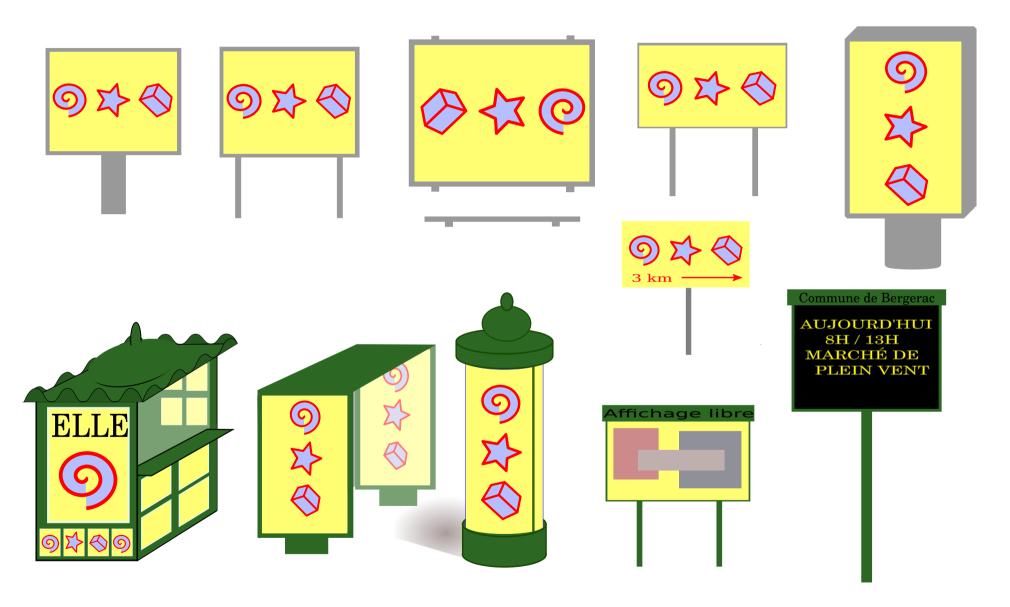
## JOSM advertising presets



## JOSM advertising preset 1 out of 10



## JOSM style

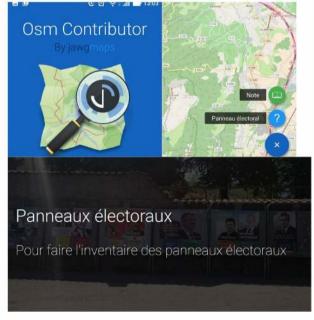


## Androïd App: OSM contributor profiles (being built)

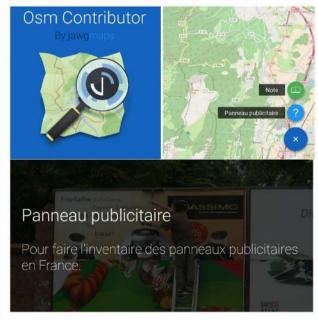
Political boards

**Indication boards** 

Billboards

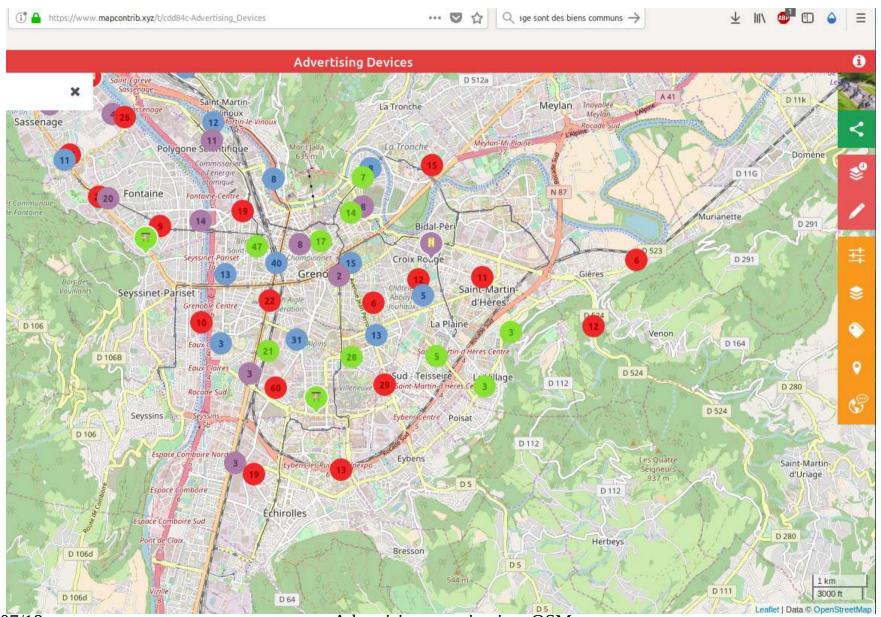




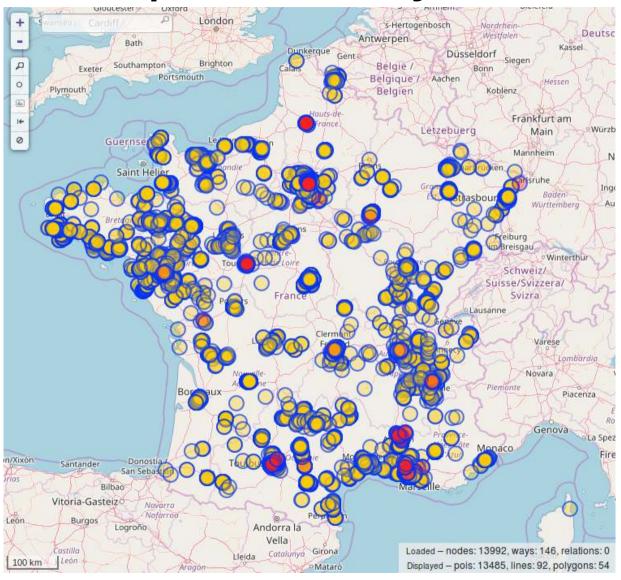


### Map Contrib (being built)

https://www.mapcontrib.xyz/t/cdd84c-Advertising\_Devices



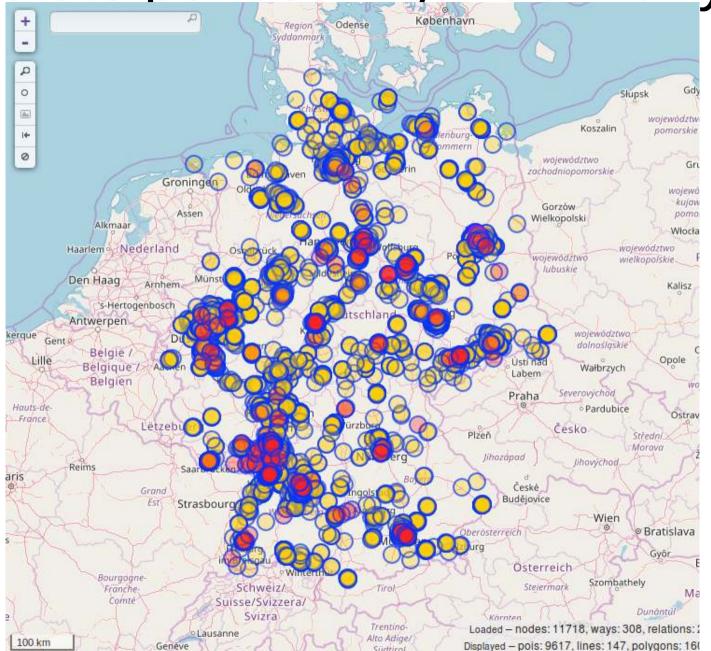
## Stats per country: France



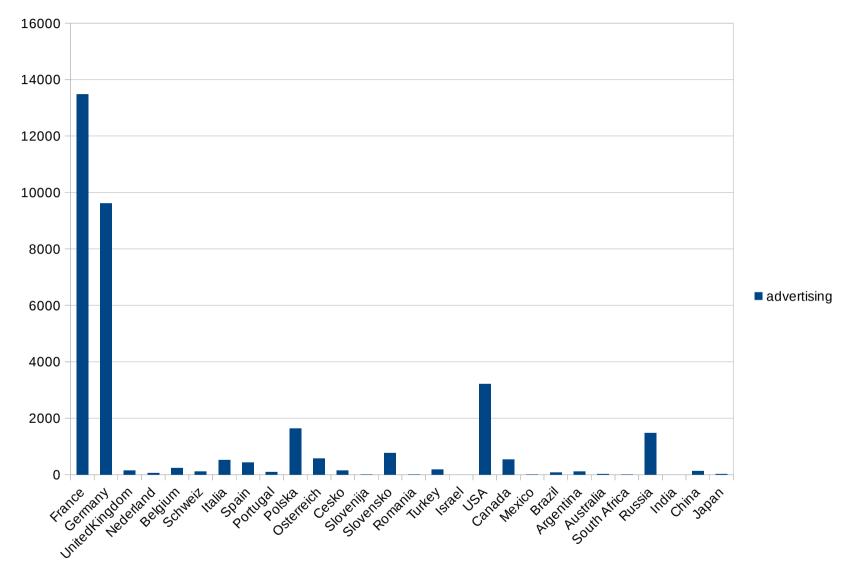
# Stats per country: Italia



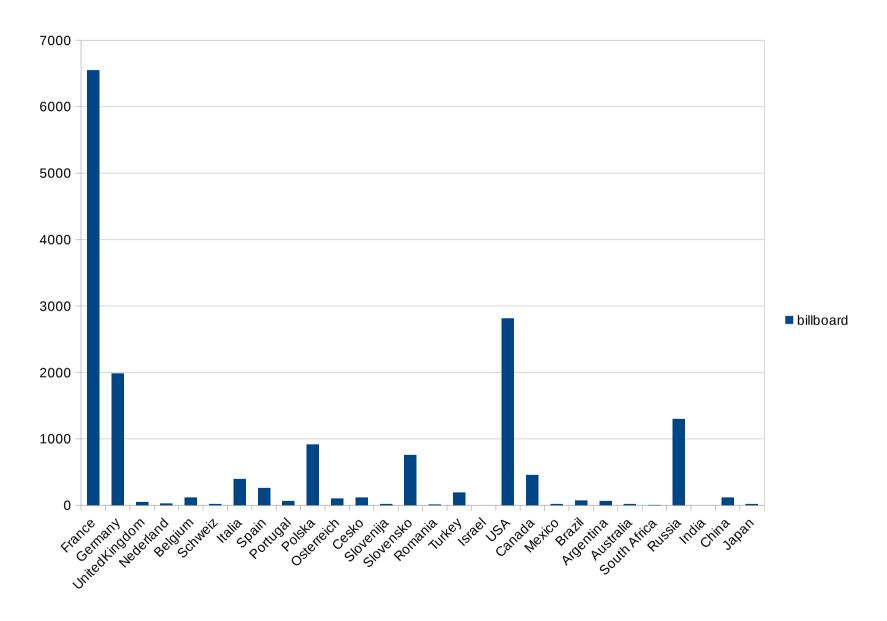
Stats per country: Germany



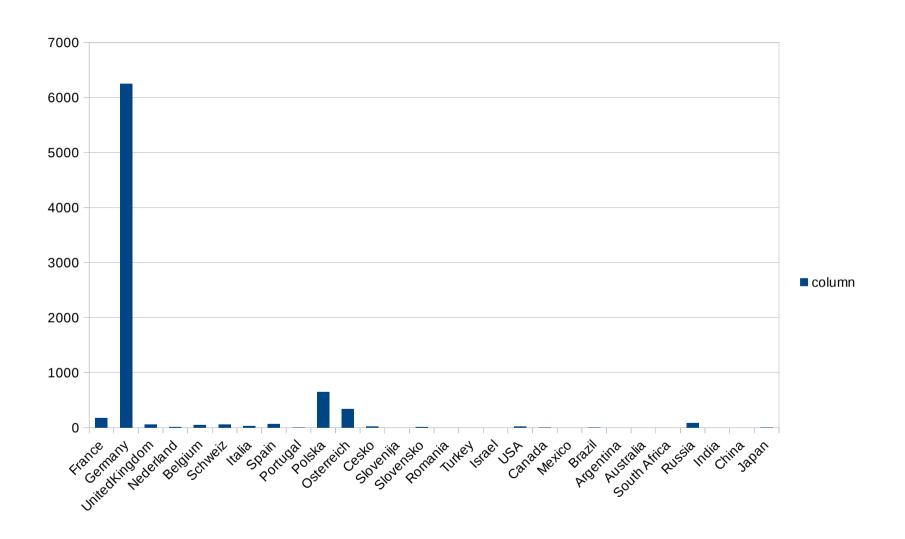
#### Stats on 'advertising=\*' July 24th 2018



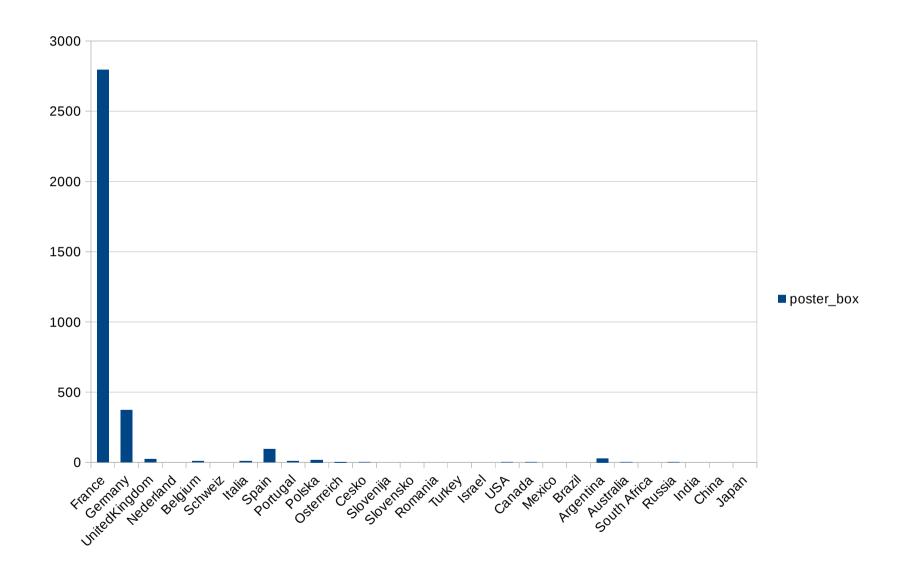
#### Stats on 'advertising=billboard' July 24th 2018



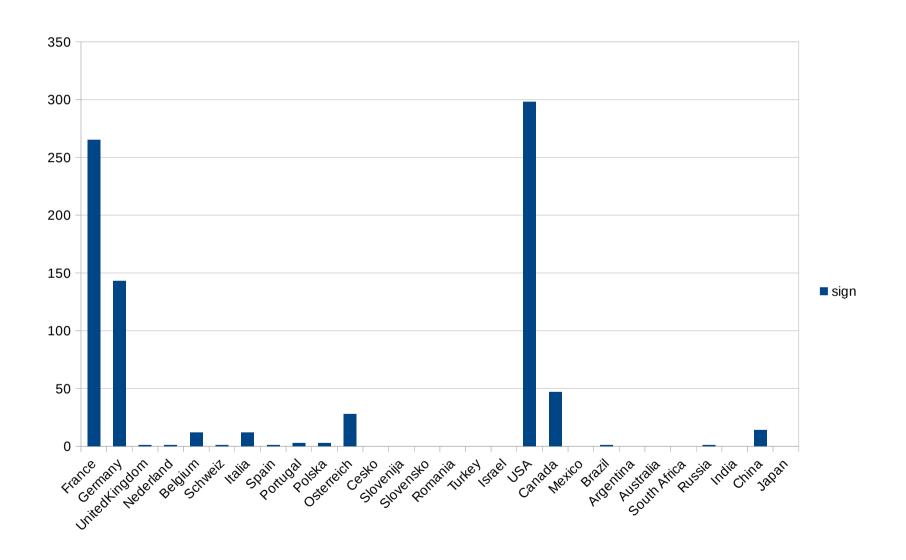
#### Stats on 'advertising=column' July 24th 2018



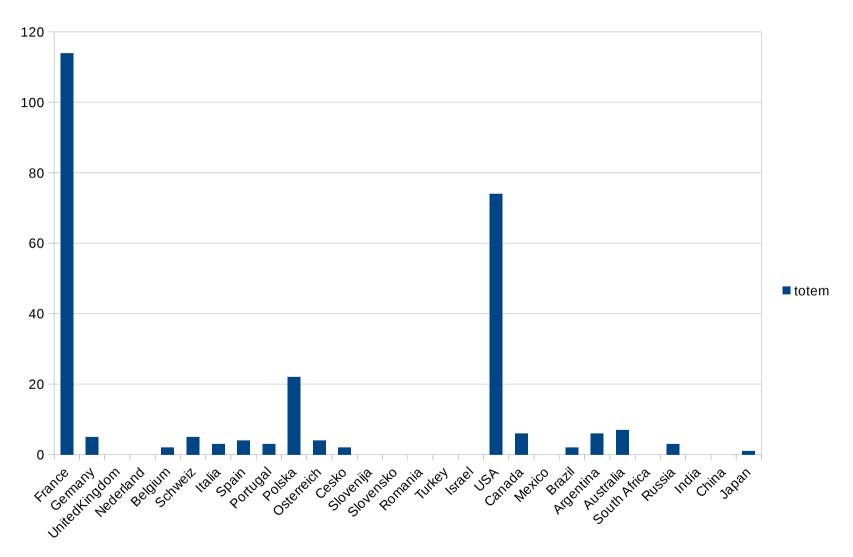
#### Stats on 'advertising=poster\_box' July 24th 2018



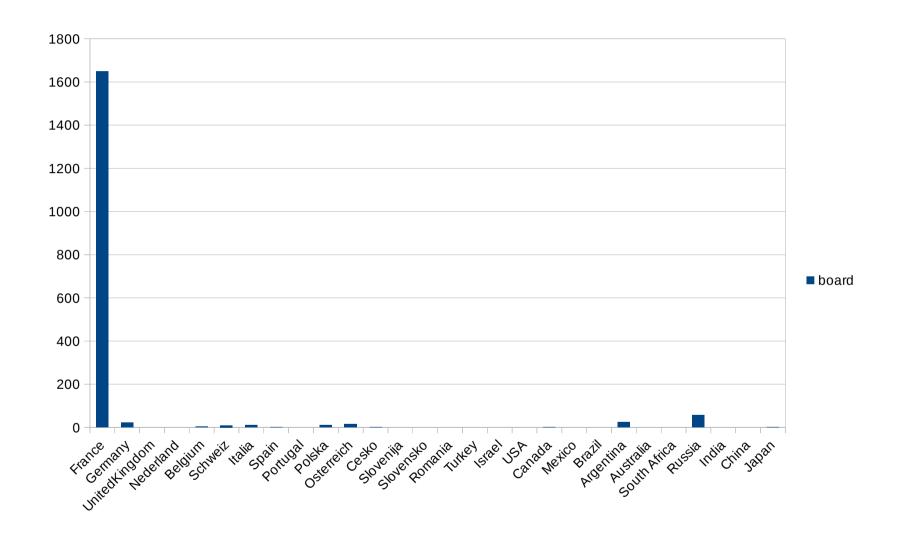
#### Stats on 'advertising=sign' July 24th 2018



#### Stats on 'advertising=totem' July 24th 2018



#### Stats on 'advertising=board' July 24th 2018



### OpenAdvertMap

• http://projets.pavie.info/openadvertmap/#15/45.1803/5.7326

### Some umap

- Inventory of advertising devices in Boulazac http://umap.openstreetmap.fr/en/map/panneaux-scelles-au-sol-boulazac\_147909#15/45.1819/0.7760
- Inventory of advertising devices in Grenoble http://umap.openstreetmap.fr/fr/map/dispositifs-publicitaires-grenoble\_110558#14/45.1778/5.7200
- Inventory of grounded signs of JDLD in France https://umap.openstreetmap.fr/fr/map/inventaire-des-j 194621#6/46.619/6.218

### Merci! Thanks! Grazie!

Presentation © Paul Desgranges 2018

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http://pdfext.github.io/OSM/SOTM\_MILANO/index.html

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