

# From PoliMappers to new horizons – with OSM, of course!

Marco Minghini

November 17, 2021



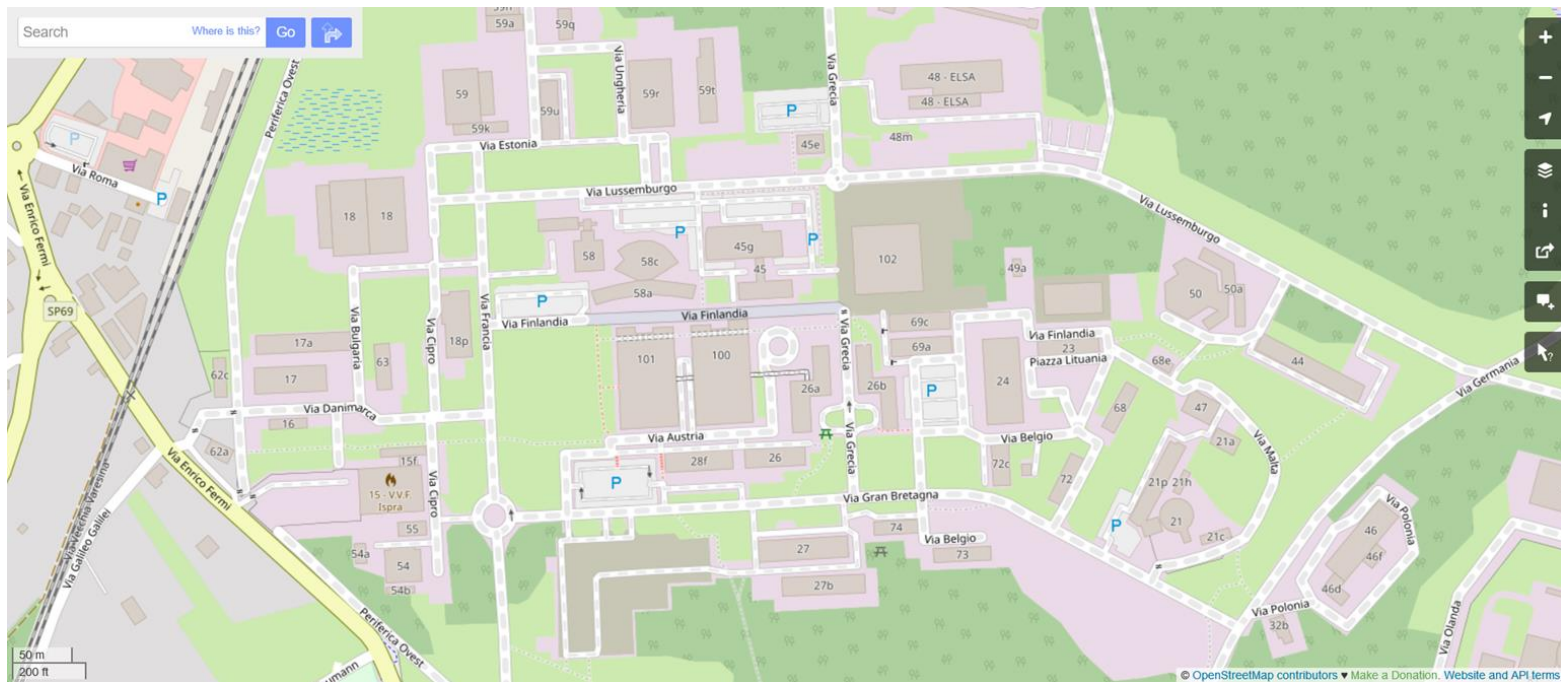
# Back to the past

- BSc (2008), MSc (2010) & PhD (2014) at Politecnico di Milano, **Postdoc Fellow** (2014-2018)
- **Co-founder** & **Faculty advisor** of PoliMappers (2016-2018)



# What I do now

- **Scientific Project Officer** at the European Commission – Joint Research Centre in Ispra, Italy



<https://ec.europa.eu/jrc/en>

# What I do now

- **Scientific Project Officer** at the European Commission – Joint Research Centre in Ispra, Italy
- The **European Commission** is the executive branch of the **European Union**.
- The **Joint Research Centre (JRC)** is the science and knowledge service of the European Commission:
  - **support EU policies** with independent evidence throughout the policy cycle

<https://ec.europa.eu/jrc/en>





# What I do now

- **Scientific Project Officer** at the European Commission – Joint Research Centre in Ispra, Italy
- Unit B.6 – **Digital Economy**
- (Geospatial) data sharing, interoperability, standardisation
- Technical coordination of the **INSPIRE Directive**



<https://inspire.ec.europa.eu> | <https://publications.jrc.ec.europa.eu/repository/handle/JRC126319>

# OpenStreetMap & me

## ● OpenStreetMap contributor since 2014

Name: [mingo23](#)  
Registered: 2014-01-25  
Active contributor: Yes & Yes  
Mapping days: 1,422  
Map changes: 136,457 (3,326)  
Reverted changes: 11 (0.0%)  
Discussed changesets: 1 (1)



OSM-related accounts:  
1. [OSM Wiki](#): Editcount 155

Type? Heavy Mapper (Highly Active)

Recent changesets (details): Italy (26)

Recent ranks: Italy #581

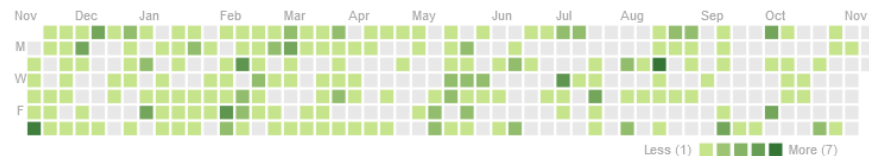
OSM Notes: Closed w/ comment 74 (w/o 8), commented 55 and opened 3  
Changeset discussions: Participated in 7 and created 11 comments

iD editor: Resolved issues=117, Ignored warnings=24

Quality assurance: OSMI issues (details): routing=86, tagging=14

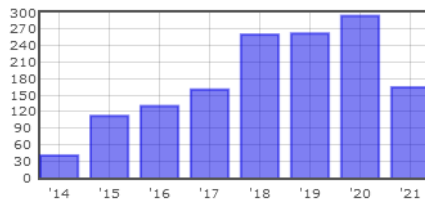
Osmosis issues: [Level 1](#)=20, [Level 2](#)=77, [Level 3](#)=171

194 mapping days with 258 changesets in the last year

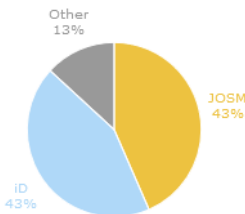


<https://hdyc.neis-one.org/?mingo23>

Mapping days per year

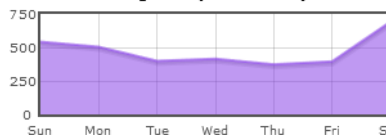


Used editors/programs

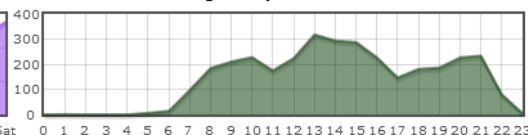


Name	Count
JOSM	1445
iD	1443
maps.me	288
StreetComplete	104
Go Map!!	33
Pic4Review	5
unknown	3
RapiD	2
Deriviste	1
Level0	1
Vespucci	1

Changesets per weekday



Changesets per hour UTC



Changesets per country - Overall 60 countries (Country - Number of changes (changesets))

Italy - 70,538 (2,564)

Swaziland - 9,121 (92) Congo-Kinshasa - 8,157 (73) Nepal - 7,795 (49) Zimbabwe - 5,697 (46)  
 United Republic of Tanzania - 4,353 (44) Malawi - 4,286 (36) Ecuador - 3,478 (33) Malaysia - 2,730 (18)  
 Togo - 2,315 (19) Uganda - 1,696 (17) Japan - 1,436 (16) Mozambique - 1,416 (11)  
 Sri Lanka - 1,040 (18) Mexico - 908 (7) Botswana - 880 (12) Belize - 849 (7)  
 South Sudan - 843 (8) Philippines - 768 (11) Somalia - 673 (9) Nigeria - 638 (5)  
 Kenya - 608 (7) Zambia - 599 (17) South Africa - 549 (4) Puerto Rico - 521 (11)  
 Angola - 461 (10) Bangladesh - 431 (5) Honduras - 414 (3) Chad - 408 (1)  
 Sudan - 318 (1) India - 316 (10) Comoros - 242 (4) Haiti - 235 (5)  
 Guatemala - 197 (1) Switzerland - 185 (10) Montenegro - 183 (3) Cambodia - 176 (3)  
 Benin - 172 (2) Guinea - 159 (2) Argentina - 139 (2) Colombia - 123 (5)  
 Mali - 85 (3) Myanmar (Burma) - 69 (8) Thailand - 65 (1) Indonesia - 35 (1)  
 Canada - 33 (1) Belgium - 29 (13) Rwanda - 29 (2) Cameroon - 15 (2)  
 Spain - 14 (1) South Korea - 6 (1) France - 5 (4) Slovenia - 5 (3)  
 Singapore - 4 (1) Finland - 3 (2) Portugal - 2 (2) Romania - 2 (2)  
 Germany - 2 (2) Czech Republic - 1 (1) ??? unknown - 0 (12)

# OpenStreetMap & me

- Regular participant in **Italian & global OSM conferences**





# OpenStreetMap & me

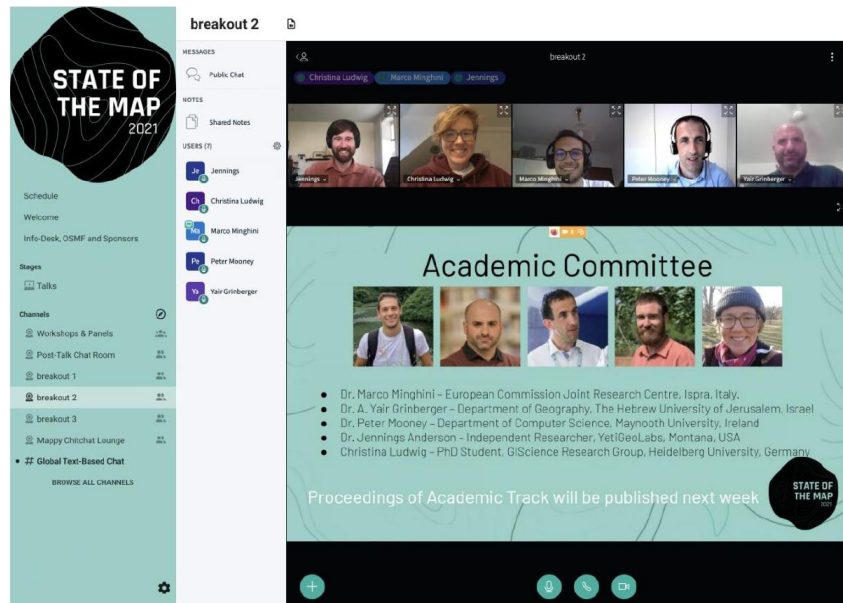
- Regular speaker in Italian & global OSM conferences





# OpenStreetMap & me

- Member of the **OpenStreetMap Foundation (OSMF)**
- Member of the OSMF **State of the Map (SotM) Working Group**
- Co-chair of the **SotM Academic Track** since 2018



# OpenStreetMap & me

- Voting Member of the **Humanitarian OpenStreetMap Team (HOT)**



## Bio

Marco Minghini carried out his studies at [Politecnico di Milano](#) (Italy), where he obtained a BSc in 2008 and a MSc in 2010, both with honors, in Environmental and Land Planning Engineering with a specialization in Geomatics. In 2014 he completed his PhD in Environmental and Infrastructures Engineering with a [thesis](#) on the use of open source software, including mobile data collection and virtual globes for Volunteered Geographic Information (VGI) and Citizen Science applications. From 2014 to 2018 he worked as a Postdoctoral Research Fellow in the [GIS Team of GEOlab](#) at Politecnico di Milano, studying Web geovisualization, Land Cover mapping, VGI (especially OpenStreetMap) and Citizen Science. Since August 2018 he works as Project Officer at the [European Commission - Joint Research Centre \(JRC\)](#) in Ispra, Italy. He is an advocate of open source software, open data and open education. He became an OSM mapper ([mingo23](#)) in 2014 and since 2015 he is a proud volunteer for HOT. He is currently Charter Member of [OSGeo](#), Secretary of [ISPRS WG IV/4](#) "Collaborative Crowdsourced Cloud Mapping (C³M)" and former Mentor of the [PoliMappers](#) chapter of [YouthMappers](#). His [OSM wiki profile](#) lists all its contributions related to OSM.



On The Web  
[Twitter](#)  
[LinkedIn](#)  
[Facebook](#)

<https://www.hotosm.org/people/marco-minghini>

# OpenStreetMap & me

- **Researcher** on many OSM-related topics:
  - OSM data quality
  - OSM contribution patterns
  - use of OSM data for scientific applications
  - development of OSM applications

## ***Collaborative mapping response to disasters through OpenStreetMap: the case of the 2016 Italian earthquake***

Digital humanitarians represent the current generation of volunteers, providing timely contributions in the form of digital map data in the aftermath of natural disasters. Starting from the tragic 2010 earthquake in Haiti and thanks to the success of the OpenStreetMap (OSM) project, the presence and coordination of these volunteers have grown incredibly over the past years. This work investigates the dynamics of the mapping process and the nature of the OSM volunteers who contributed map data after the 2016 earthquake in Central Italy. The analyses show that existing OSM users were the majority of those contributing to the mapping activity, with less edits performed by new users. The collaborative mapping process was efficiently coordinated through a dedicated platform and the area hit by the earthquake was significantly edited in OSM after the disaster.

**Keywords:** collaborative mapping, disaster management, earthquake, OpenStreetMap

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### Article

## **Generating Up-to-Date and Detailed Land Use and Land Cover Maps Using OpenStreetMap and GlobeLand30**

Cidália Costa Fonte <sup>1,2,\*</sup>, Marco Minghini <sup>3</sup>, Joaquim Patriarca <sup>2</sup>, Vyron Antoniou <sup>4,5</sup>, Linda See <sup>6</sup> and Andriani Skopeliti <sup>7</sup>

### SOFTWARE

### Open Access

## **OpenStreetMap history for intrinsic quality assessment: Is OSM up-to-date?**

Marco Minghini<sup>1,3\*</sup> and Francesco Frassinelli<sup>2,3</sup>



## ***OpenStreetMap Data Use Cases During the Early Months of the COVID-19 Pandemic***

Peter Mooney, A. Yair Grinberger, Marco Minghini, Serena Coetzee, Levente Juhasz and Godwin Yeboah

The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLVI-4/W2-2021 FOSS4G 2021 – Academic Track, 27 September–2 October 2021, Buenos Aires, Argentina

## **TOWARDS THE INTEGRATION OF AUTHORITATIVE AND OPENSTREETMAP GEOSPATIAL DATASETS IN SUPPORT OF THE EUROPEAN STRATEGY FOR DATA**

A. Sarretta<sup>a</sup>, M. Minghini<sup>b</sup>

# A personal, wonderful story about OSM



- March 3, 2016 – a world-record **humanitarian mapathon with children** at PoliMi



[https://www.hotosm.org/updates/2016-03-09\\_200\\_kids\\_map\\_swaziland\\_for\\_malaria\\_elimination](https://www.hotosm.org/updates/2016-03-09_200_kids_map_swaziland_for_malaria_elimination)



# A personal, wonderful story about OSM



- March 3, 2016 – a world-record **humanitarian mapathon with children** at PoliMi



<https://media.ccc.de/v/sotm2019-1364-access-to-prosperity-quantifying-infrastructure-impact-with-osm>

- At SotM 2019 I discovered that the buildings mapped by the children were used in a **real-world planning project** in Swaziland – & I met the person behind it!

News

WHAT WE DO OUR WORK TOOLS & DATA NEWS COMMUNITY & ORGANIZATION PARTNER WITH US GET INVOLVED

## 200 Kids Map Swaziland for Malaria Elimination

Posted by Cristiano Giovando

Working Groups

Associated Projects  
Missing Maps

STATE OF THE MAP

Bridging the Map  
Heidelberg 2019

# Some final thoughts

- OpenStreetMap is not only data... not only software... it is **PEOPLE**. Enjoy every single moment and **take the best from every single person you meet**.
- You are there because other people dedicated their time and effort to OSM. Think to **give something back to OSM** in the future, there are plenty of opportunities – PoliMappers, the OSMF, HOT, etc.
- Whatever your personal and professional path will be, be an ambassador of OpenStreetMap and promote **open values**.

# Thank you!



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<https://wiki.openstreetmap.org/wiki/User:Mingo23>



<https://git.io/J1RcX>