

FOSS4G UK

The collective power: HOT's approach to building open geospatial technology

Speaker: Petya Kangalova, Humanitarian OpenStreetMap Team

Thursday 7 September, 11:15-11:45





Humanitarian
OpenStreetMap
Team



Humanitarian
OpenStreetMap
Team

We are international team dedicated to
humanitarian action and **community**
development through
open mapping.





Humanitarian
OpenStreetMap
Team

Our mission is to ensure that the **local**, community-sourced map data are accessible and **utilised** when decision are made.



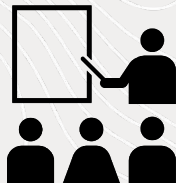
Data quality: Monitor data quality and validate maps



Partnerships: Co-create maps for impact with organizations worldwide.



Capacity development: Provide mentoring, internships, peer-training, skillsharing



Support humanitarian response by creating open source maps and data to respond to disasters and reach target communities



Mobilize contributors to generate map data for development and humanitarian aid

WHAT WE DO



Support OSM communities to prepare for and respond to disasters and local development challenges



Tech: Develop free, user-friendly open source mapping tools



Grantmaking for Open Mapping Organisations and Communities to address local challenges



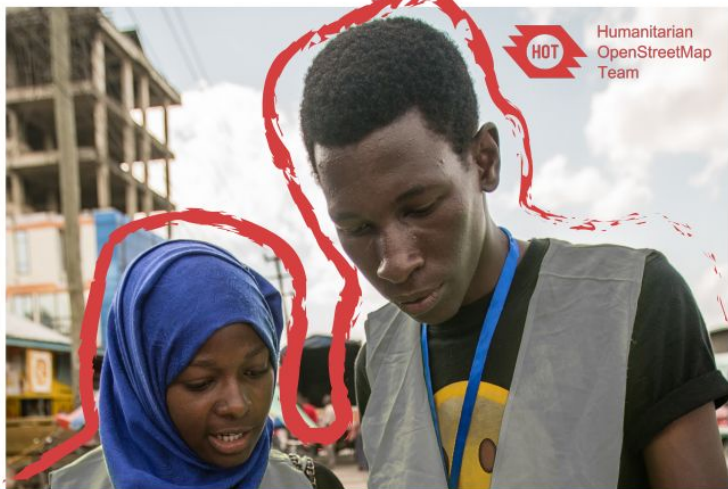
HOT is strengthening OpenStreetMap communities & open data in 4 priority regions



HOT

Humanitarian OpenStreetMap Team - 2023





IMPACT REPORT 2022 - 2023

MAPPING OUR WORLD TOGETHER



Ours is a **Global** Effort

HIGHLIGHTED PROJECTS AROUND THE WORLD



645,000
MAPPERS*

3,000
PROJECTS

148
PARTNERSHIPS

52
COUNTRIES MAPPED

AREA HOME TO



707
MILLION
PEOPLE

HOT

The Power of Collective Intelligence



Humanitarian
OpenStreetMap
Team

People

Ideas

Passions

Knowledge

Experience

Worldviews

Power

Culture

Creativity

Diversity



Tech

Software

Mobile

Drones

Satellites

Sensors

Artificial Intelligence

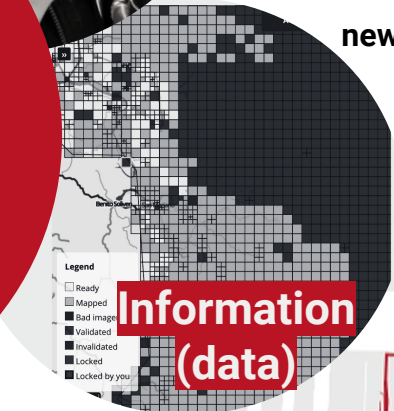


**Humanitarian
OpenStreetMap
Team**

**Collective
Intelligence**
*greater than the sum of
the parts*

new sources of data

community-crowdsourced
local information



- Legend
- Ready
 - Mapped
 - Bad image
 - Validated
 - Invalidated
 - Locked
 - Locked by you

**Information
(data)**



HOT's Tech and Innovation Projects

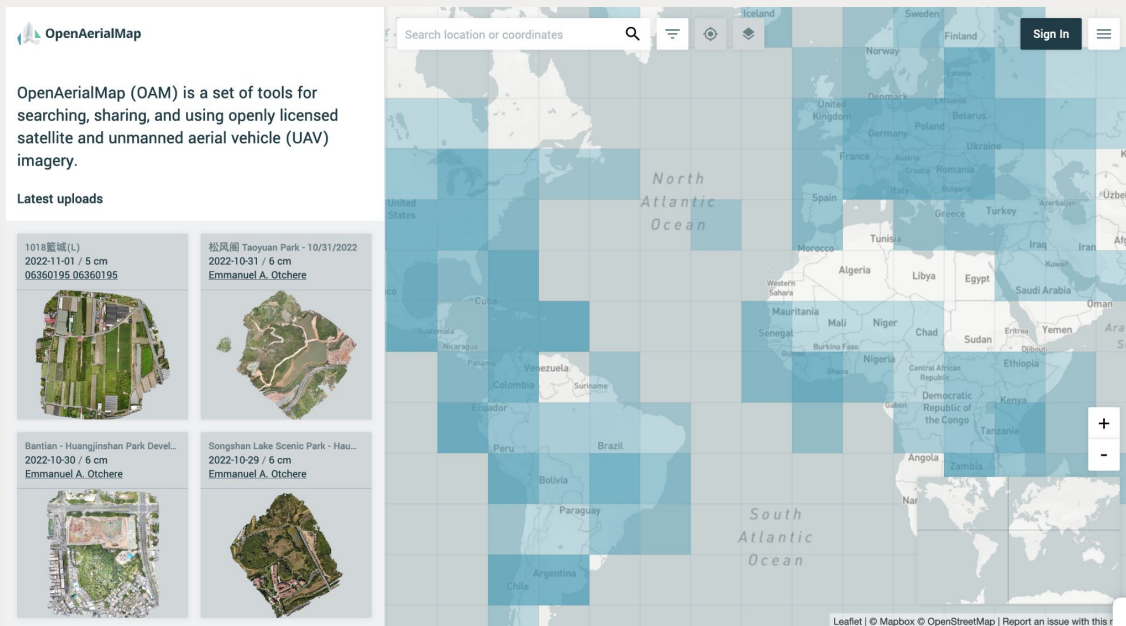


Humanitarian
OpenStreetMap
Team

Key HOT products enabling COLLECTIVE Mapping

OpenAerialMap (OAM)

<https://openaerialmap.org/>



The screenshot displays the OpenAerialMap website interface. On the left, there is a sidebar with the following content:

- OpenAerialMap** logo and name.
- Text: "OpenAerialMap (OAM) is a set of tools for searching, sharing, and using openly licensed satellite and unmanned aerial vehicle (UAV) imagery."
- Latest uploads** section with four items:
 - 1018藍城(L) 2022-11-01 / 5 cm 06360195_06360195
 - 松风閣 Taoyuan Park - 10/31/2022 2022-10-31 / 6 cm Emmanuel A. Otchere
 - Bantian - Huangjishan Park Devel... 2022-10-30 / 6 cm Emmanuel A. Otchere
 - Songshan Lake Scenic Park - Hau... 2022-10-29 / 6 cm Emmanuel A. Otchere

The main map area shows a world map with a grid overlay, focusing on the Atlantic Ocean region. The map includes labels for countries like the United States, Canada, Mexico, and various European and African nations. The text "North Atlantic Ocean" and "South Atlantic Ocean" is visible. The interface includes a search bar at the top, a "Sign In" button, and navigation controls like zoom in (+) and zoom out (-) buttons.

Key HOT products enabling COLLECTIVE Mapping

Tasking Manager

<https://tasks.hotosm.org/>

Mapping our world together hotosm.org

HOT Tasking Manager EXPLORE PROJECTS LEARN ABOUT SUPPORT English Log in Sign up

MAP FOR PEOPLE IN NEED

Join a global community that is mapping the places most vulnerable to disaster and poverty in order to support humanitarian aid and sustainable development across the world.

[Start mapping](#) [Join the community](#)



FMTM

Field Mapping Tasking Manager

- a HOT experiment

Status: deployment



*A coordination tool for
organised field mapping*

- based on all the best free & open field mapping tool



fAir

The local & Open
AI-assisted mapping tool

>> [GitHub](#) <<

[Blog about fAir](#)

hotosm.org/tech-blog/hot-tech-talks-fair/

Key HOT products enabling COLLECTIVE Mapping

Export Tool

<https://export.hotosm.org/en/v3/>

The screenshot displays the HOT Export Tool interface. At the top left is the HOT logo and the text "EXPORT TOOL". A navigation bar includes links for "Create", "Exports", "Configs", "About", "Learn", "Support", "English", and a "Log Out" button. The main interface is divided into two panels. The left panel contains a progress indicator with steps "1 Describe", "2 Formats", "3 Data", and "4 Summary". Below this are form fields for "Name" (with a sub-label "Name this export"), "Description", and "Project" (with a sub-label "Which project activation this export relates to"). A "Next" button is positioned below the Project field. At the bottom of the left panel, a status message reads: "Geojson/shp updated (hr:min:sec) 0:01:23.992120 ago, Rest of other formats updated 2 hours ago". The right panel features a map of the world with a search bar at the top that says "Search for a location or enter a bounding box as 'minX, minY, maxX, maxY'". A vertical toolbar on the right side of the map includes icons for "SEARCH", "TOOLS", "BOX", "DRAW", "THIS VIEW", and "IMPORT". A scale bar at the bottom right of the map indicates "5000 km". The footer contains "Contact Us", "Made with ❤️ by HOT and friends", and "Fork the G".

How to Get Involved

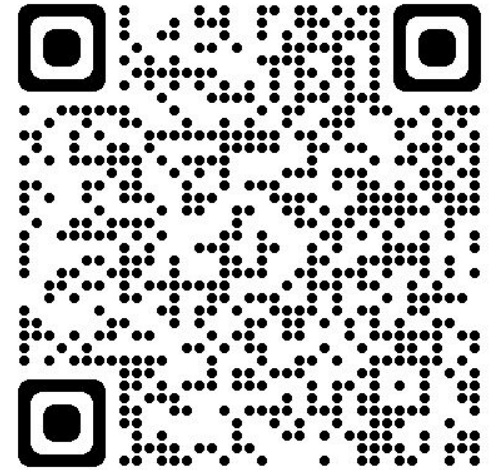


Humanitarian
OpenStreetMap
Team

HOTOSM Open Source Projects

Different ways to get involved:

- **Advocate & Educate:** the power of open source contribution
- **Test & improve user experience:** test our products, share your user feedback, design
- **Improve the knowledge base:** documentation on Github, product tutorials, etc.
- **Translate:** helping an open source project with translation
- **Github & code contributions:** report bugs, raise issues, PRs.



HOTOSM Github Repo



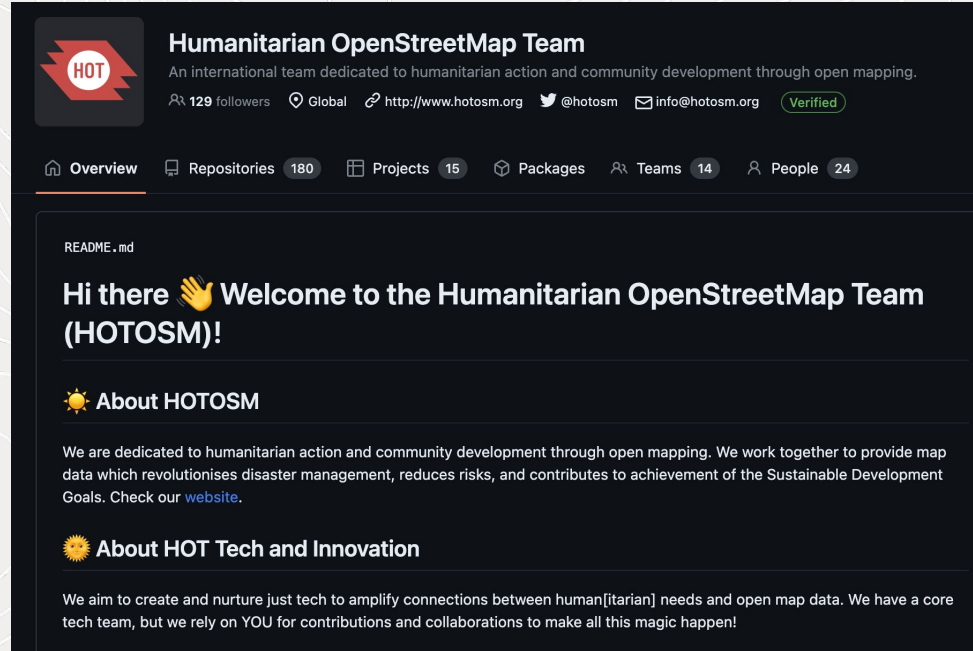
Where to begin on Github?

Step 1: Register on Github

Step 2: Look at the pinned repositories

Step 3: Read contributor guidelines

Step 4: Find "good-first" issues



The screenshot shows the GitHub profile page for the Humanitarian OpenStreetMap Team (HOT). The profile includes a repository count of 180, 15 projects, 14 teams, and 24 people. The main content area displays a README.md file with a welcome message and links to 'About HOTOSM' and 'About HOT Tech and Innovation'.

Humanitarian OpenStreetMap Team
An international team dedicated to humanitarian action and community development through open mapping.

129 followers Global <http://www.hotosm.org> [@hotosm](https://twitter.com/hotosm) info@hotosm.org Verified

Overview Repositories 180 Projects 15 Packages Teams 14 People 24

README.md

Hi there 🙌 Welcome to the Humanitarian OpenStreetMap Team (HOTOSM)!

🌞 About HOTOSM

We are dedicated to humanitarian action and community development through open mapping. We work together to provide map data which revolutionises disaster management, reduces risks, and contributes to achievement of the Sustainable Development Goals. Check our [website](#).

🌞 About HOT Tech and Innovation

We aim to create and nurture just tech to amplify connections between human[itarian] needs and open map data. We have a core tech team, but we rely on YOU for contributions and collaborations to make all this magic happen!



Stay in touch

- **Github:** <https://github.com/hotosm>
- **HOT Tech and Innovation WG:** next one on 12th of September!
- **Slack:** <https://slack.hotosm.org>
- **Blogs:** read our blogs on [OSM Discourse](#) & [hot_tech](#) blogs
- **Twitter:** hotosm
- **Email:** tech@hotosm.org and petya.kangalova@hotosm.org



**HOT Tech & Innovation
WG!**

Join us!



An aerial photograph of a densely packed hillside settlement, likely a slum or informal housing area. The houses are built on a steep slope and feature a variety of roof colors, with a prominent cluster of red-roofed buildings in the foreground. The background shows a hazy, overcast sky and distant hills. A red banner with the text "Questions?" is overlaid on the upper portion of the image.

Questions?

A red arrow icon pointing to the right, containing the word "HOT" in white capital letters.

HOT