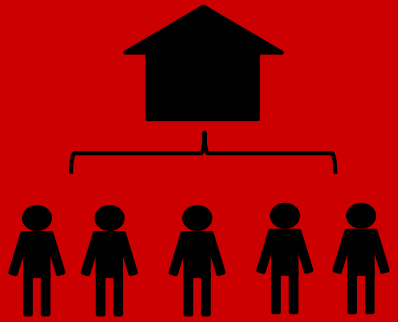
HOT
Humanitarian
OpenStreetMap
Team
ramya.ragupathy@hotosm.org
Stock footage provided by Videvo

What is the Humanitarian OpenStreetMap Team?

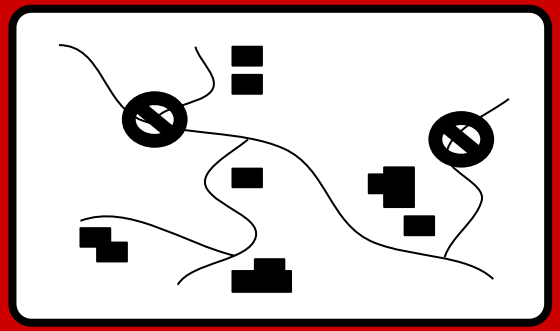
During a crisis, disaster or epidemic, maps are crucial to help responders

Maps Help

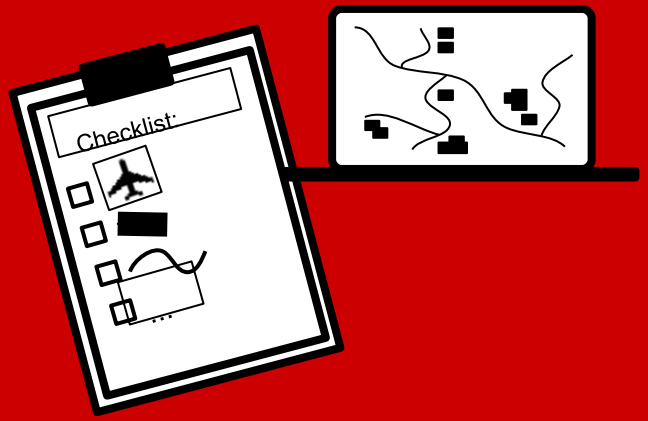


Identify areas of high population

(building density)



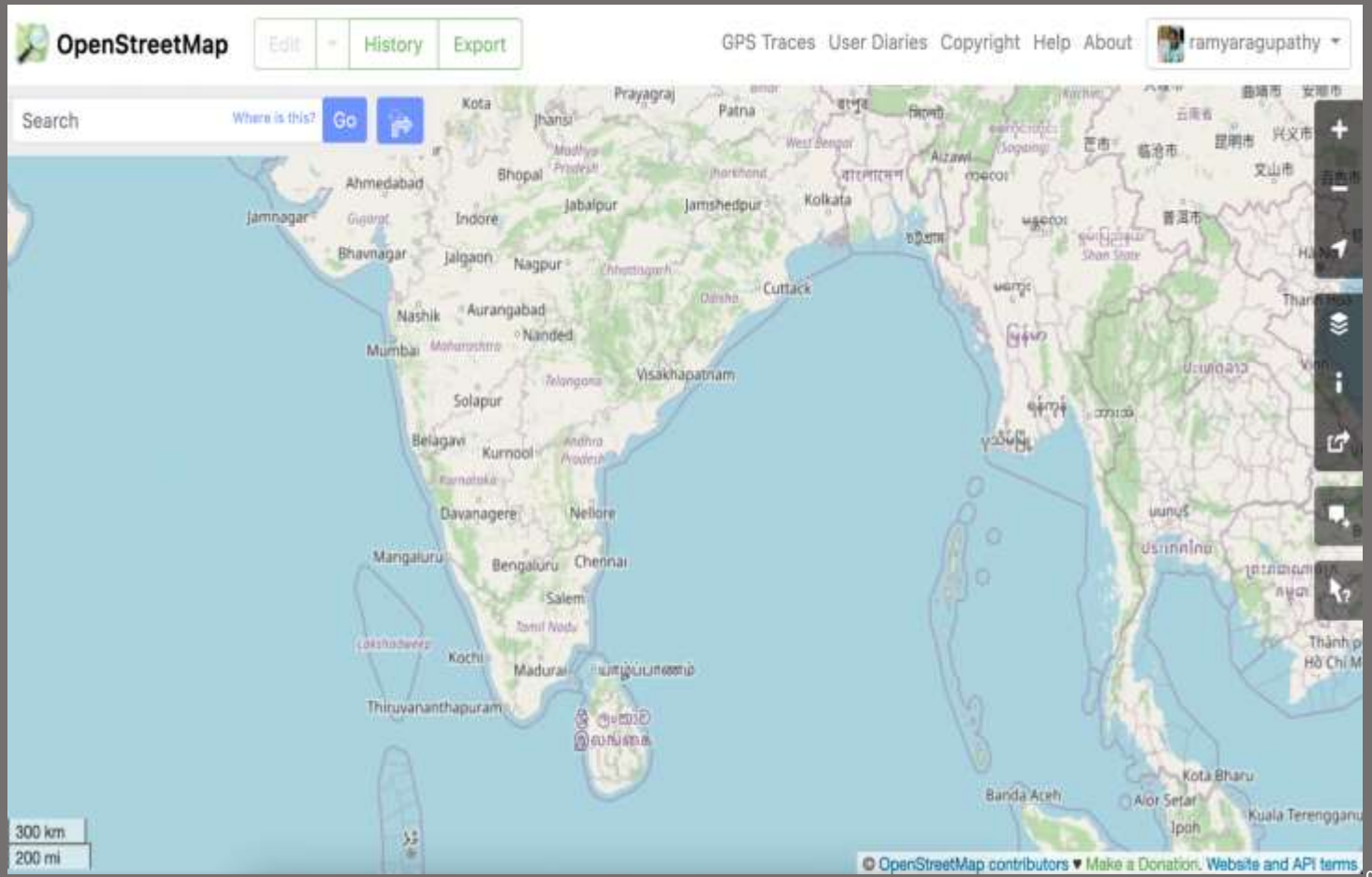
Navigate access routes and safe roads in affected areas



Locate suitable areas for response command posts, shelter and aid provision

Not Everywhere is Mapped
- or has Accessible Maps

The Humanitarian OpenStreetMap Team helps solve this problem by coordinating public efforts
- to map and label areas affected by disasters



OpenStreetMap
is a collaborative project to create a free editable world map

OpenStreetMap

This collective mapping - or the ‘crowdsourcing’ of geographic information began in 2004

Created by people for the people - Wikipedia of Maps!

Open Data Commons Open Database License (ODbL)

Can be used in apps, online maps, and printable maps for free - as long as the contributors are credited

OSM WORKS THROUGH

Local knowledge
Community organization

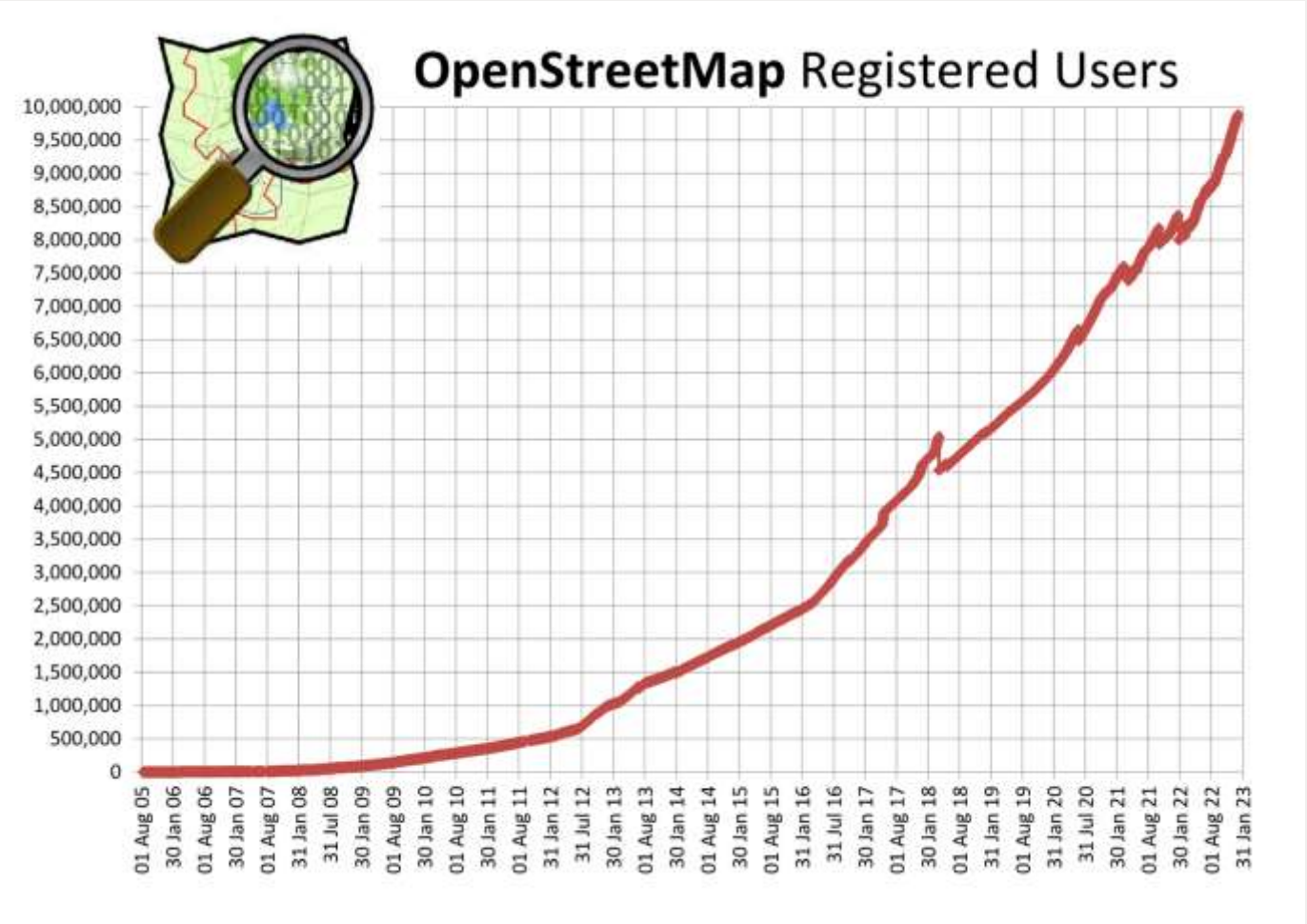
DATA IS

Built by a community of mappers that contribute and maintain data

anyone can add to the map

improve it with local knowledge

and use it for any purpose



OSM now has over **10 million** registered users

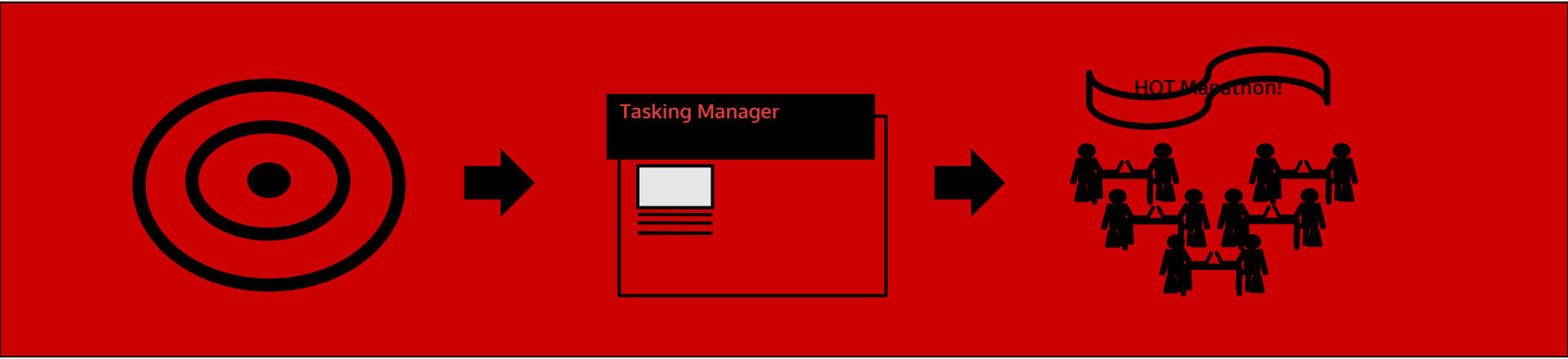
HOT responses predominantly require mappers to digitise satellite imagery

Obtain up-to-date satellite imagery for the area

Digitise roads, tracks, paths, building, open areas, waterways, etc

Upload the data and see the changes

HOT harnesses the OSM volunteer community and coordinates the mapping of affected areas



Disaster occurs!

HOT asks OSM community to help map affected area

Across the globe the HOT-OSM community map

Mapathon

HOT Tech Tools

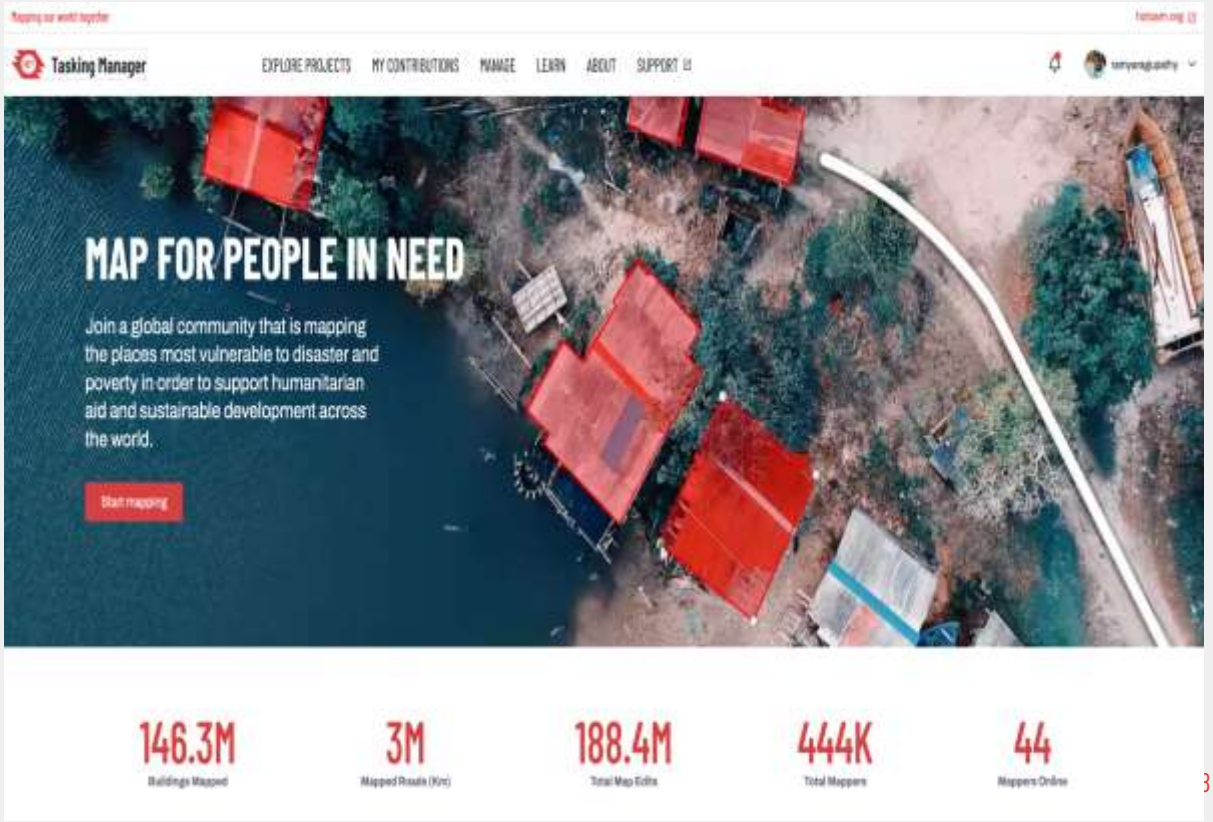
Tasking Manager

Tool for coordination of volunteers and organization of groups to map on OpenStreetMap.

https://tasks.hotosm.org

Widely used within humanitarian organizations, local communities and for mapping teams of large companies.

Free and Open Source Software.

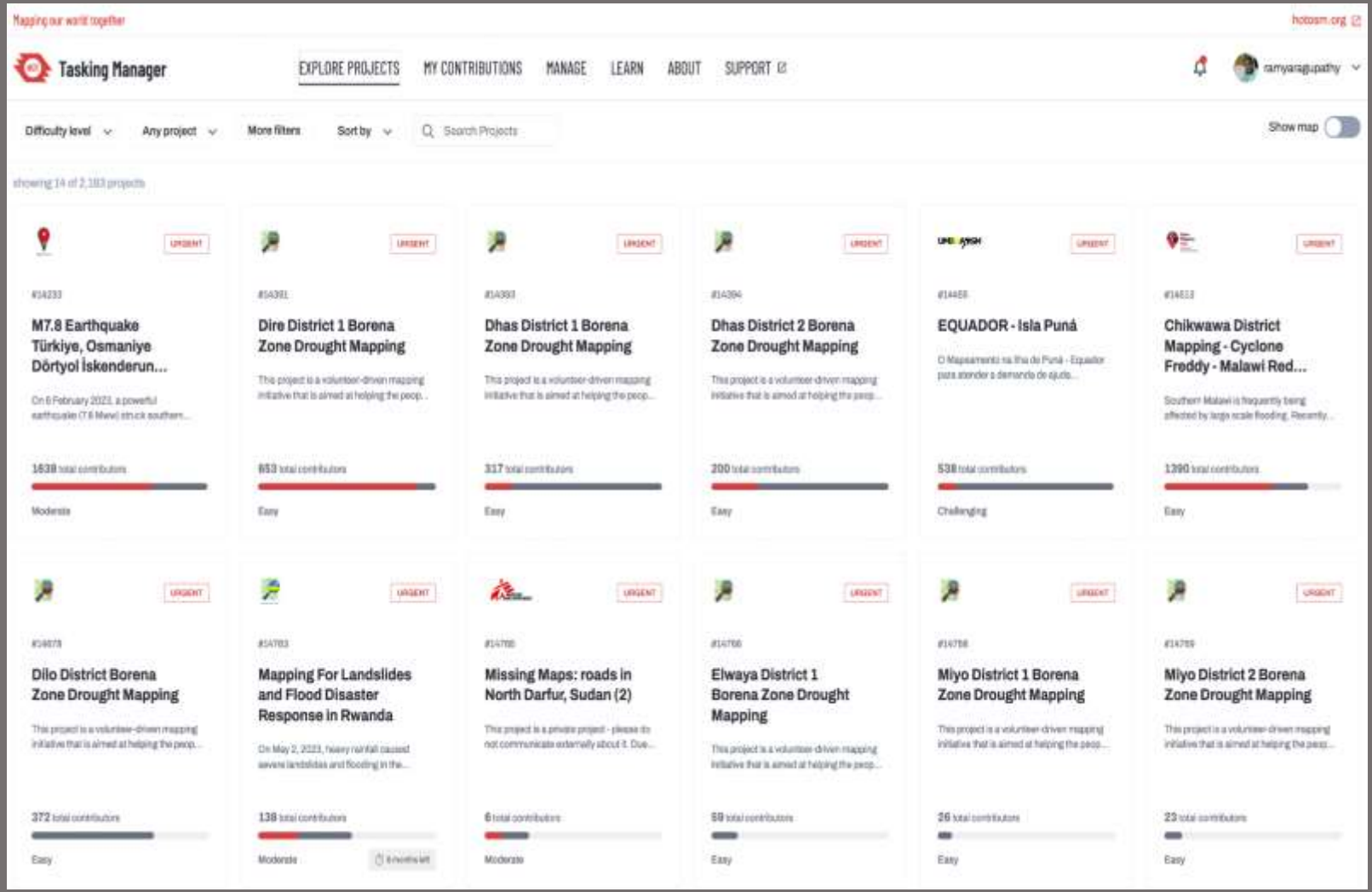


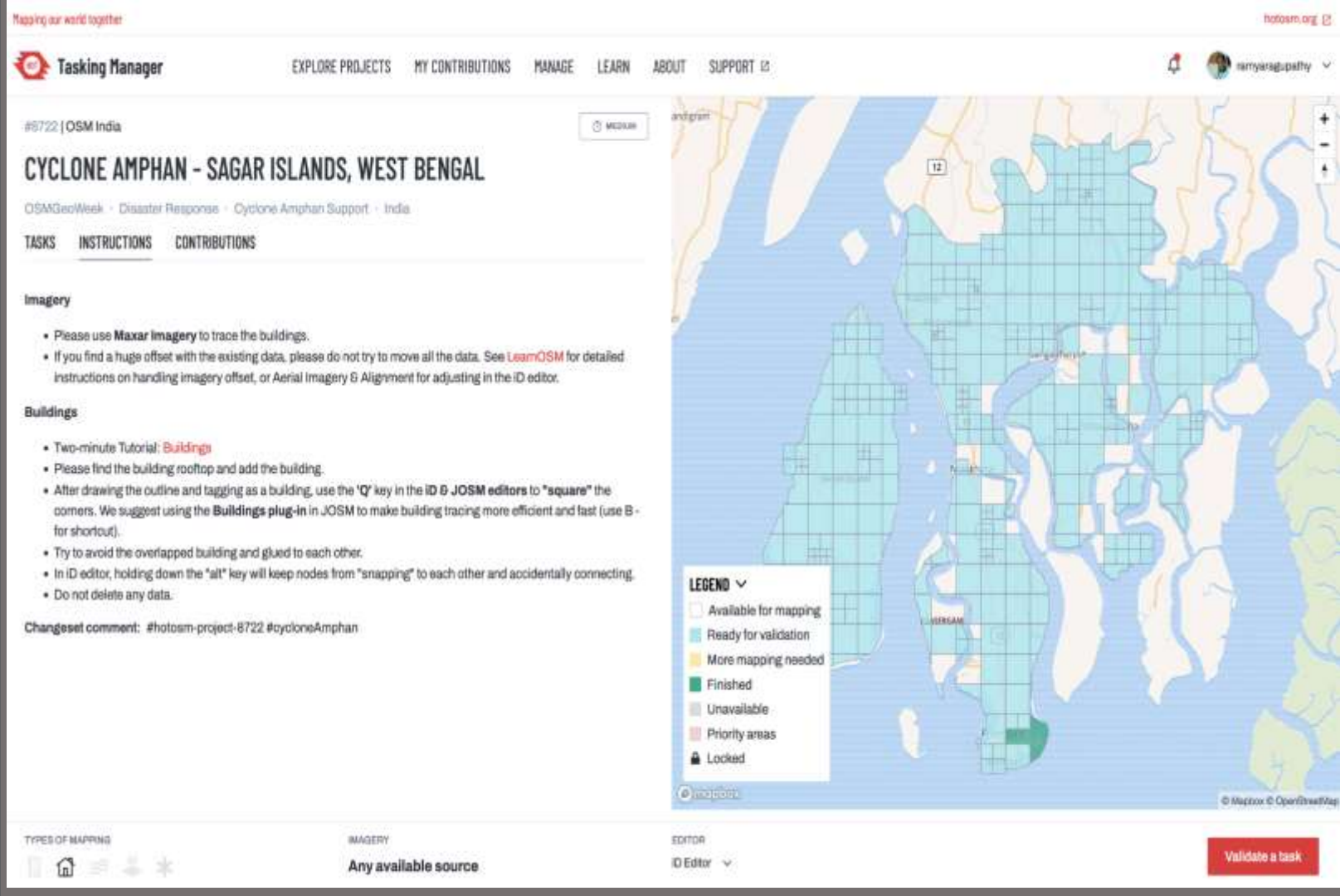
Tasking Manager

15K mapping projects

150+ countries

200+ organisations



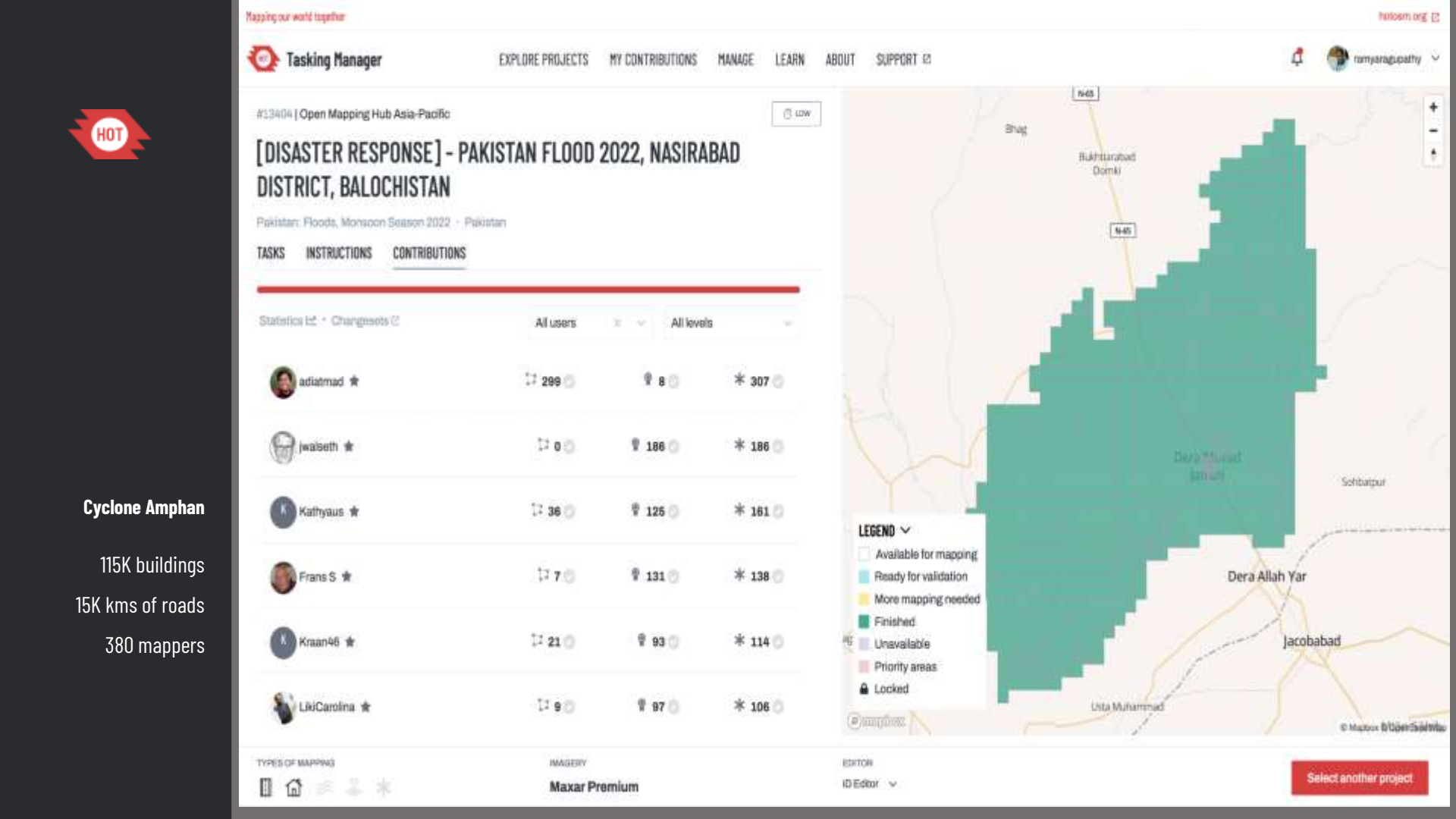


Cyclone Amphan

55K buildings

969 kms of roads

679 mappers



Cyclone Amphan

115K buildings

15K kms of roads

380 mappers

Tasking Manager

EXPLORE PROJECTS MY CONTRIBUTIONS MANAGE LEARN ABOUT SUPPORT

ramyaragupathy

Search features

Search

#13404 | Open Mapping Hub Asia-Pacific

[DISASTER RESPONSE] - PAKISTAN FLOOD 2022, NASIRABAD DISTRICT, BALOCHISTAN · #154

COMPLETION INSTRUCTIONS HISTORY

Please check the history tab for relevant comments.

TASK STATUS

Is this task completely mapped?

- Yes
- No
- The imagery is bad

COMMENT

Submit task

Split task

Select another task

RELOAD EDITOR

iD Editor

Tasks map

Search features

Search

#13404 | Open Mapping Hub Asia-Pacific

[DISASTER RESPONSE] - PAKISTAN FLOOD 2022, NASIRABAD DISTRICT, BALOCHISTAN · #62

COMPLETION INSTRUCTIONS HISTORY RESOURCES

TASK STATUS

Is this task well mapped?

#62 Yes No + Comment

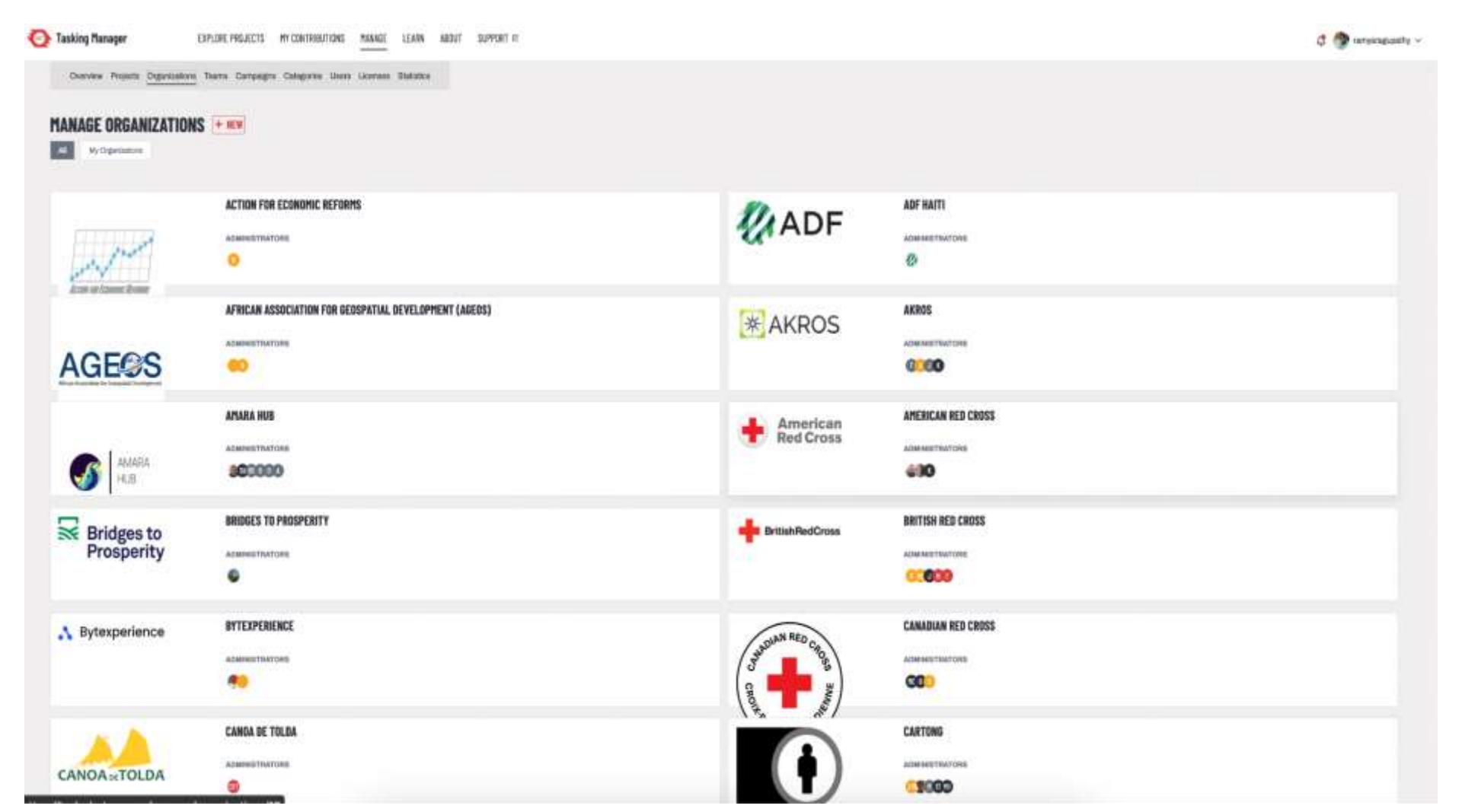
Submit task

Stop validation

RELOAD EDITOR

iD Editor

Tasks map


Tasking Manager
EXPLORE PROJECTS
MY CONTRIBUTIONS
MANAGE
LEARN
ABOUT
SUPPORT IT
Overview
Projects
Organizations
Teams
Campaigns
Categories
Users
Licenses
Statistics
MANAGE ORGANIZATIONS
+ NEW
All
My Organizations
ACTION FOR ECONOMIC REFORMS
ADMINISTRATORS
ADF
ADF HAITI
ADMINISTRATORS
AFRICAN ASSOCIATION FOR GEOSPATIAL DEVELOPMENT (AGEOS)
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Once areas are mapped, data is used by organisations to respond

HOT-OSM community map areas

Map data is held in the OSM database

Organisations use OSM data to plan and coordinate their response efforts

How do we get the data out of OpenStreetMap?

HOT-OSM community map areas

Map data is held in the OSM database

Organisations use OSM data to plan and coordinate their response efforts

OpenStreetMap Tools

Overpass Turbo

JOSM

QGIS

Export Tool

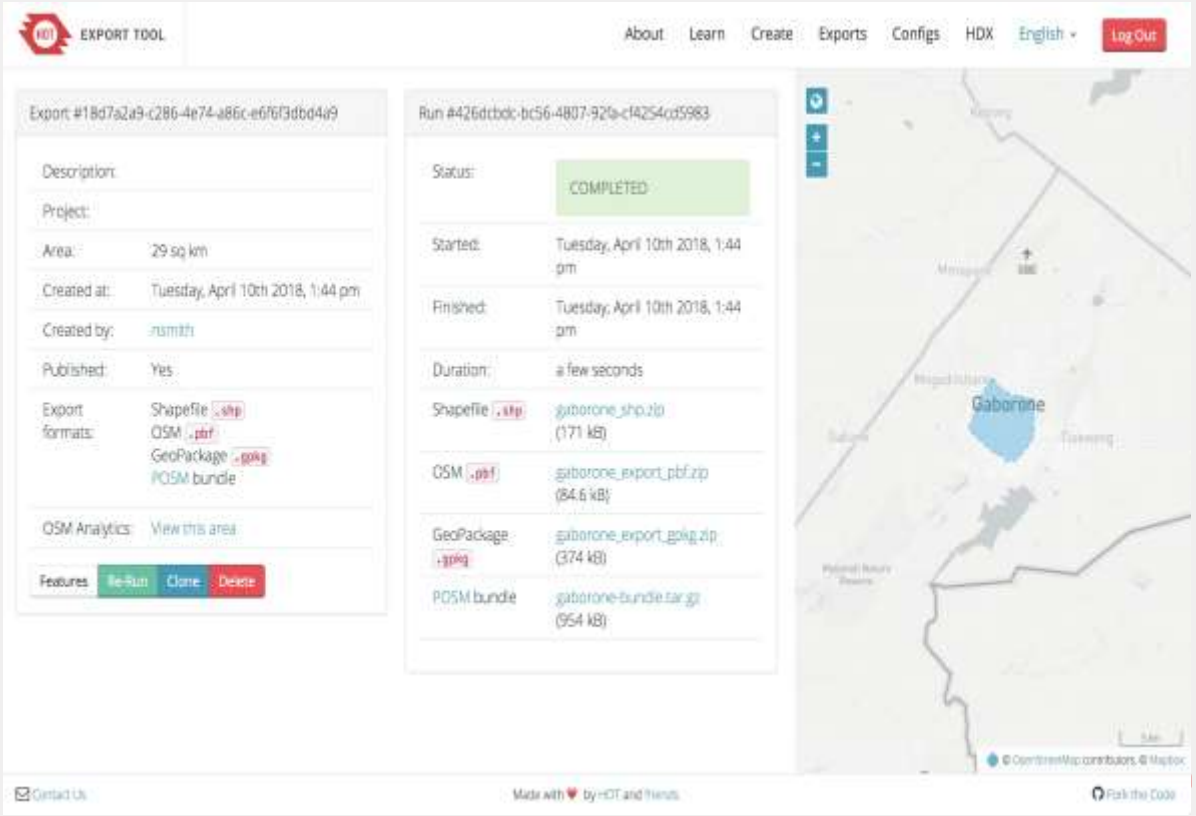
Custom OSM Extracts

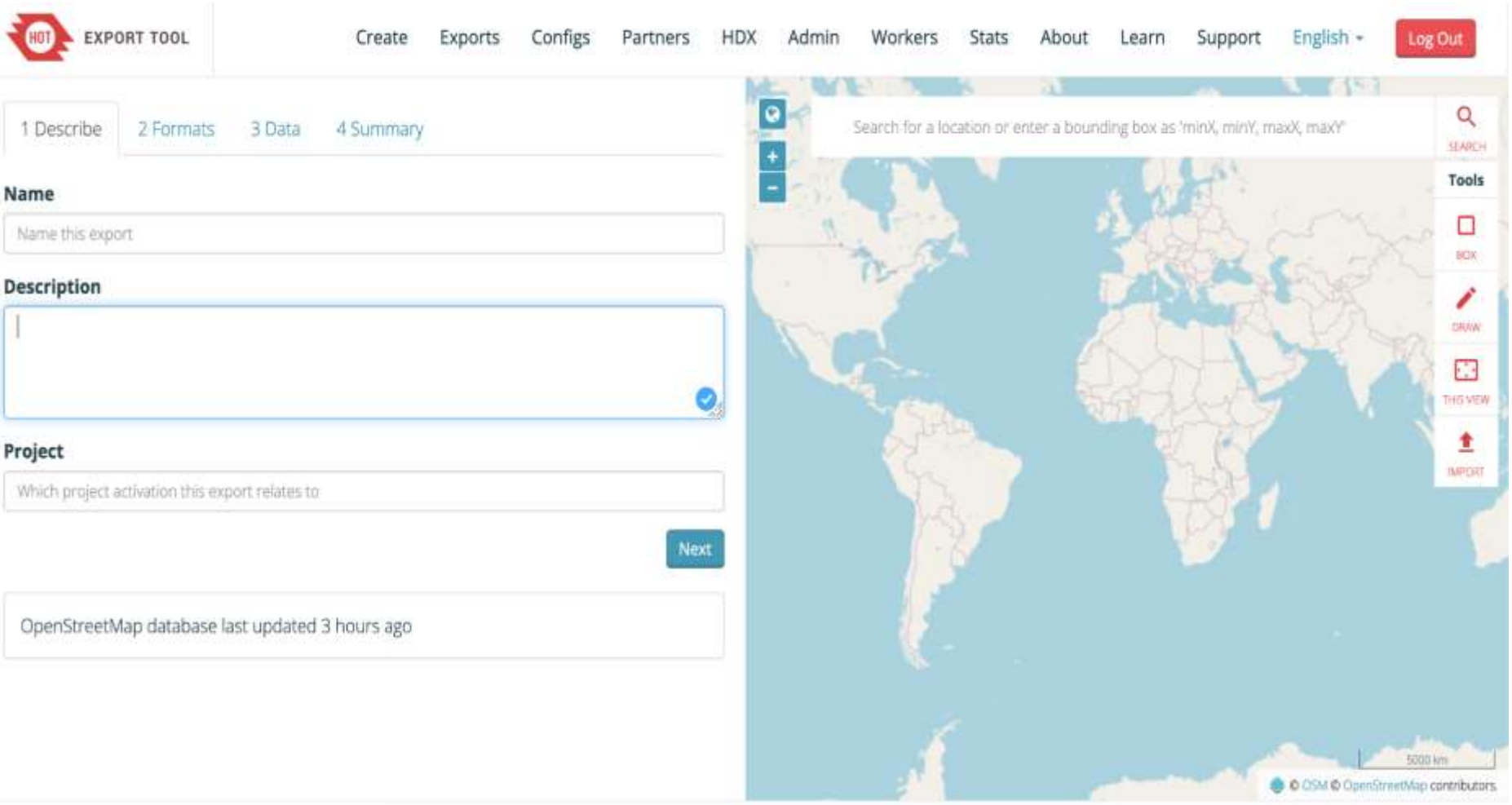
Export Tool

The application allows anyone to create custom extracts of OSM based on the area and the type of data to be accessed.

Access up-to-date geospatial information from OpenStreetMap's 10 million users

https://export.hotosm.org/




EXPORT TOOL
Create
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Partners
HDX
Admin
Workers
Stats
About
Learn
Support
English
Log Out
1 Describe
2 Formats
3 Data
4 Summary
Name
Name this export
Description
Project
Which project activation this export relates to
Next
OpenStreetMap database last updated 3 hours ago
Search for a location or enter a bounding box as 'minX, minY, maxX, maxY'
SEARCH
Tools
BOX
DRAW
THIS VIEW
IMPORT
5000 km
© OSM © OpenStreetMap contributors
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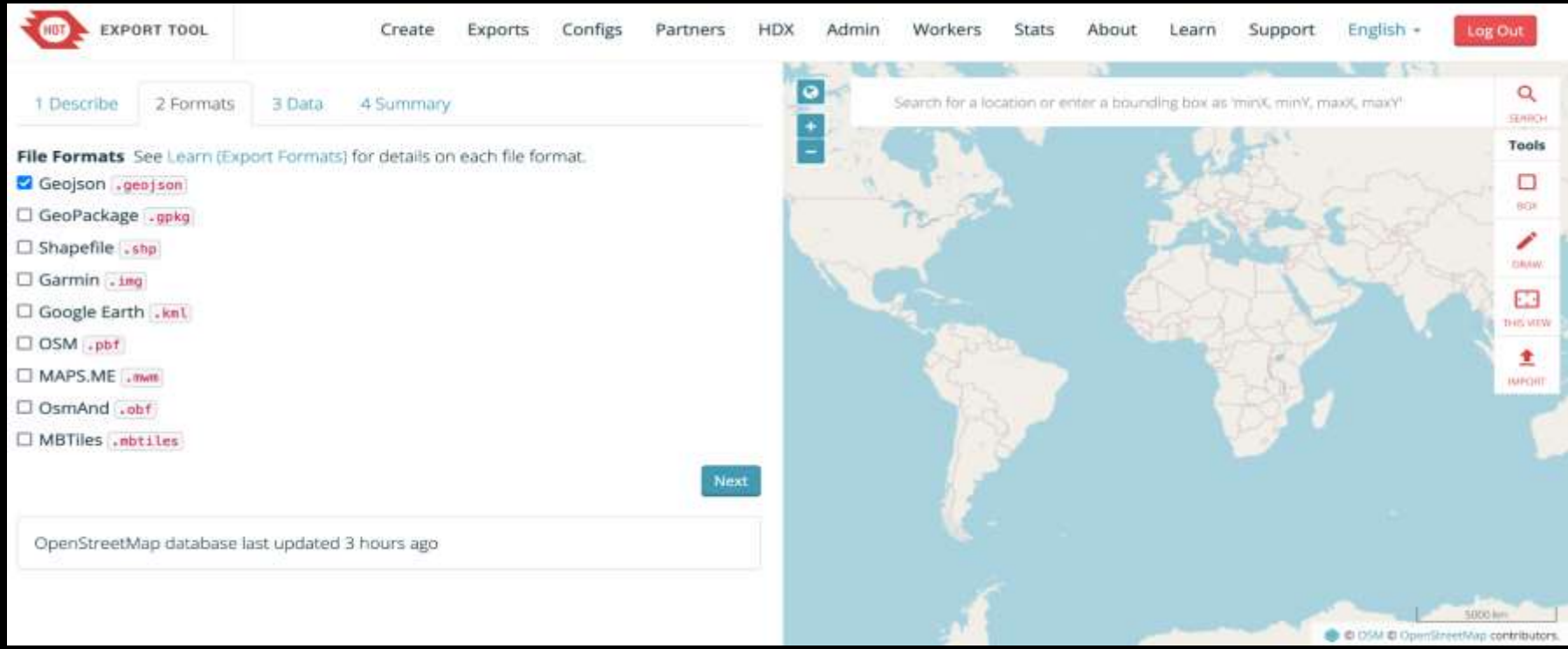
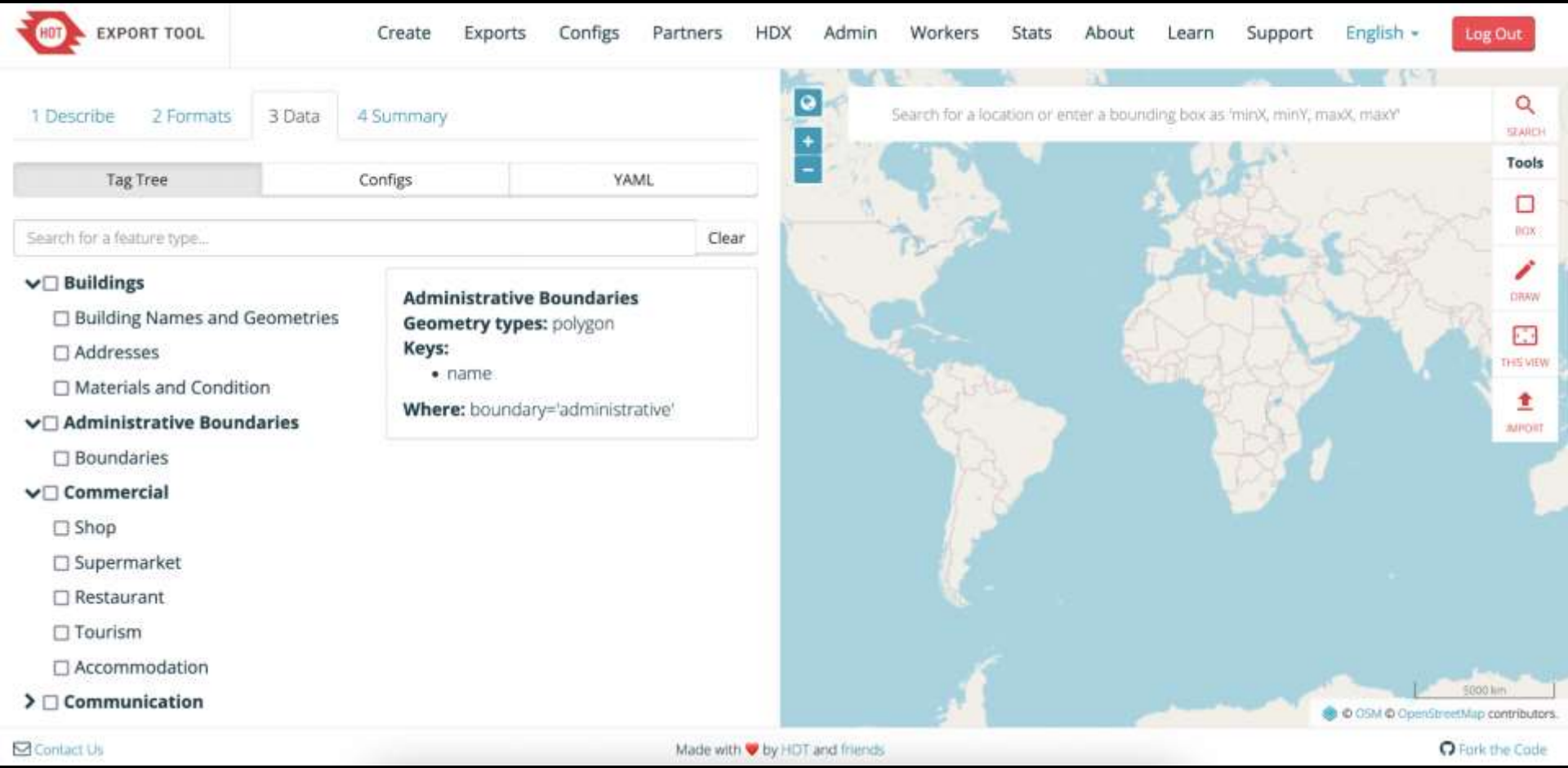
OSM data in different file formats



OSM data in different file formats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Log Out
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2 Formats
3 Data
4 Summary
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Addresses
Materials and Condition
Administrative Boundaries
Boundaries
Commercial
Shop
Supermarket
Restaurant
Tourism
Accommodation
Communication
Administrative Boundaries
Geometry types: polygon
Keys:
name
Where: boundary='administrative'
Search for a location or enter a bounding box as 'minX, minY, maxX, maxY'
SEARCH
Tools
BOX
DRAW
THIS VIEW
IMPORT
5000 km
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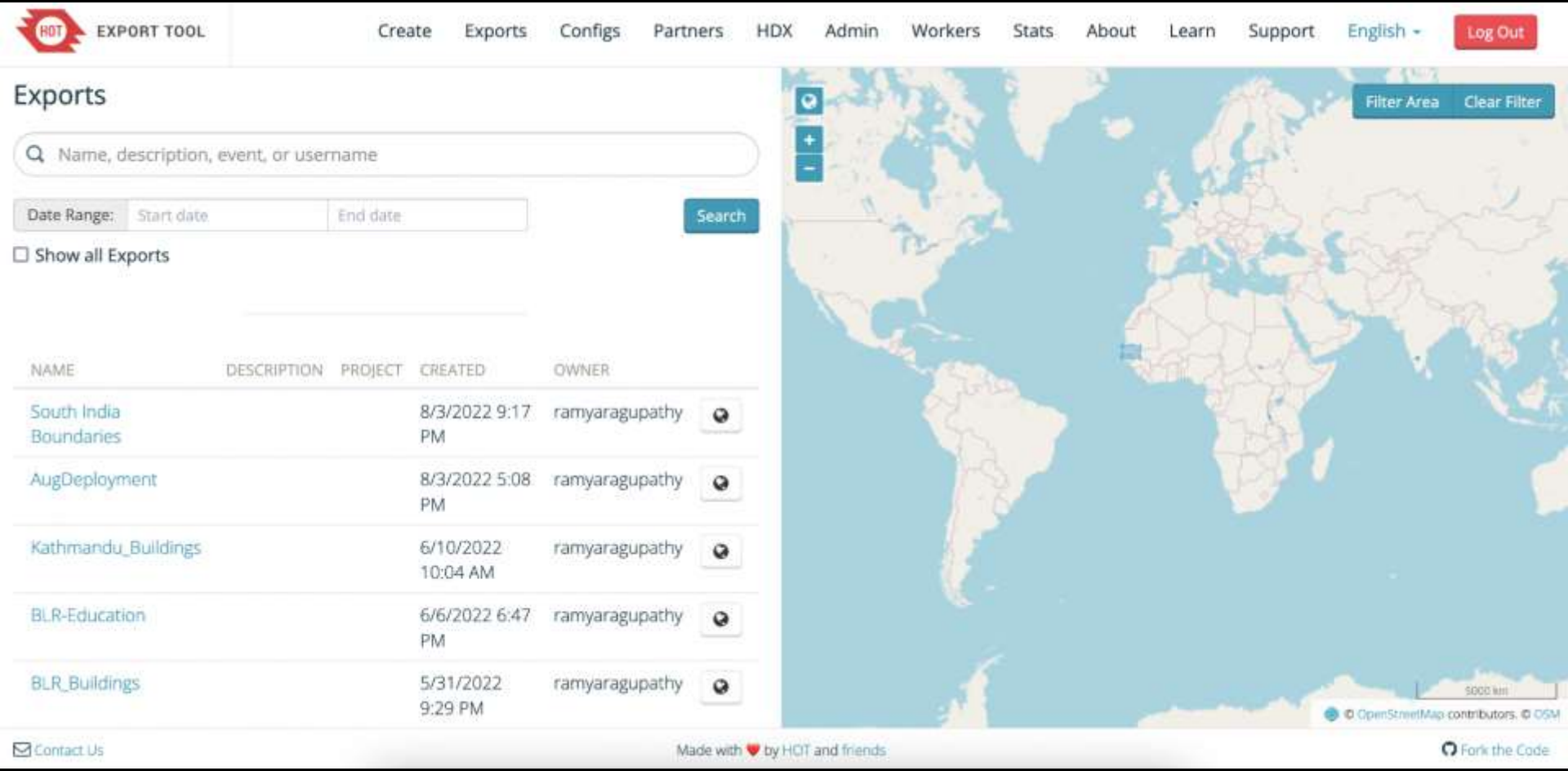
South India Boundaries

Description:	
Id:	32a0267c-b224-4607-8310-c2973a47e4ef
Project:	
Area:	6095 sq km
Created at:	Wednesday, August 3rd 2022, 9:17 pm
Created by:	ramyaragupathy
Published:	Yes
Export formats:	Geojson `.geojson`
OSM Analytics:	View this area

Features Re-Run Clone Delete

Wednesday, August 3rd 2022, 9:17 pm

Status:	COMPLETED
ID:	c6477568-0599-42ac-9e1f-bd269562d5bb
Finished:	Wednesday, August 3rd 2022, 9:17 pm
Duration:	a few seconds
Geojson `.geojson`	South-India-Boundaries_GeoJSON.zip (0 B)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Date Range:
Start date
End date
Search
Show all Exports
NAME
DESCRIPTION
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CREATED
OWNER
South India Boundaries
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8/3/2022 5:08 PM
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6/10/2022 10:04 AM
ramyaragupathy
BLR-Education
6/6/2022 6:47 PM
ramyaragupathy
BLR_Buildings
5/31/2022 9:29 PM
ramyaragupathy
Filter Area
Clear Filter
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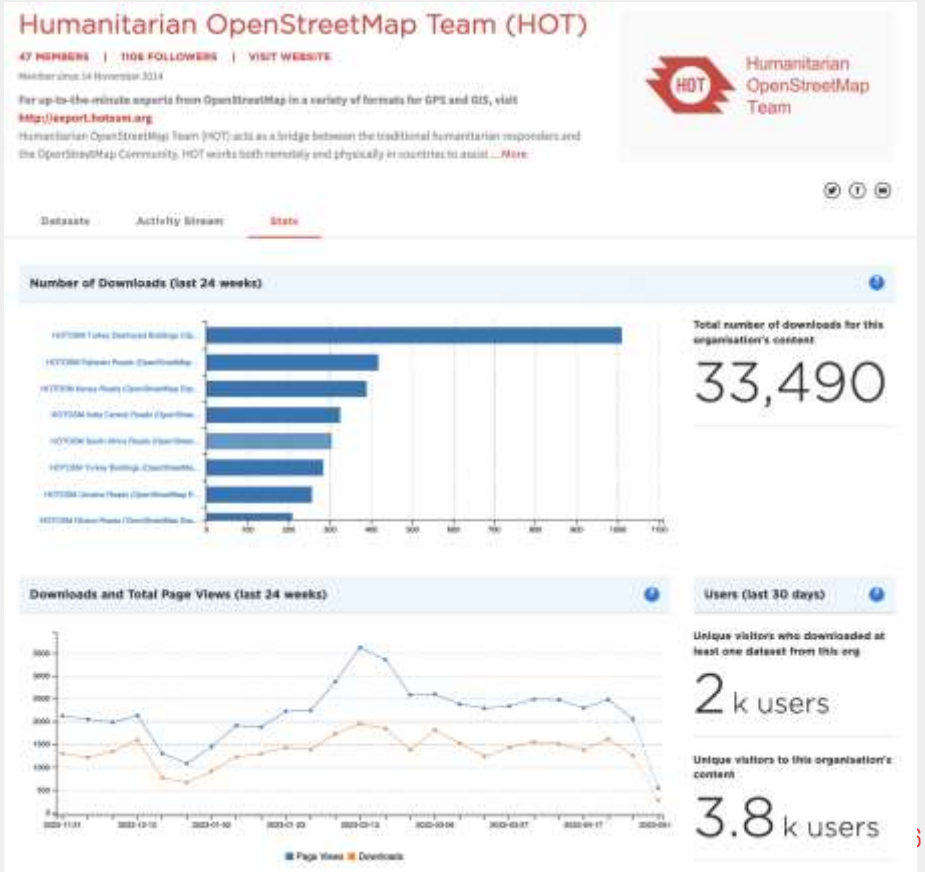
Export Tool

HDX is a product of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

Export Tool updates **500+ data exports** on a weekly basis for the HDX platform



OpenAerialMap

Create capacity for damage assessments and up to date maps

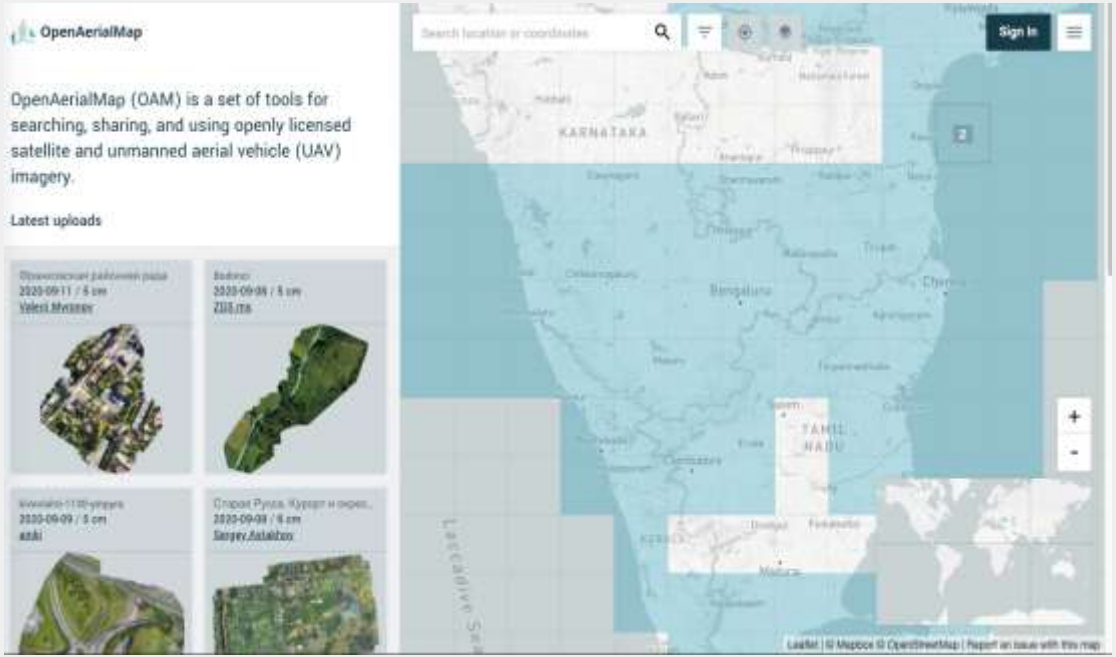
OpenAerialMap (OAM)

OAM is distributed catalogue and hosting service of imagery.

https://openaerialmap.org/

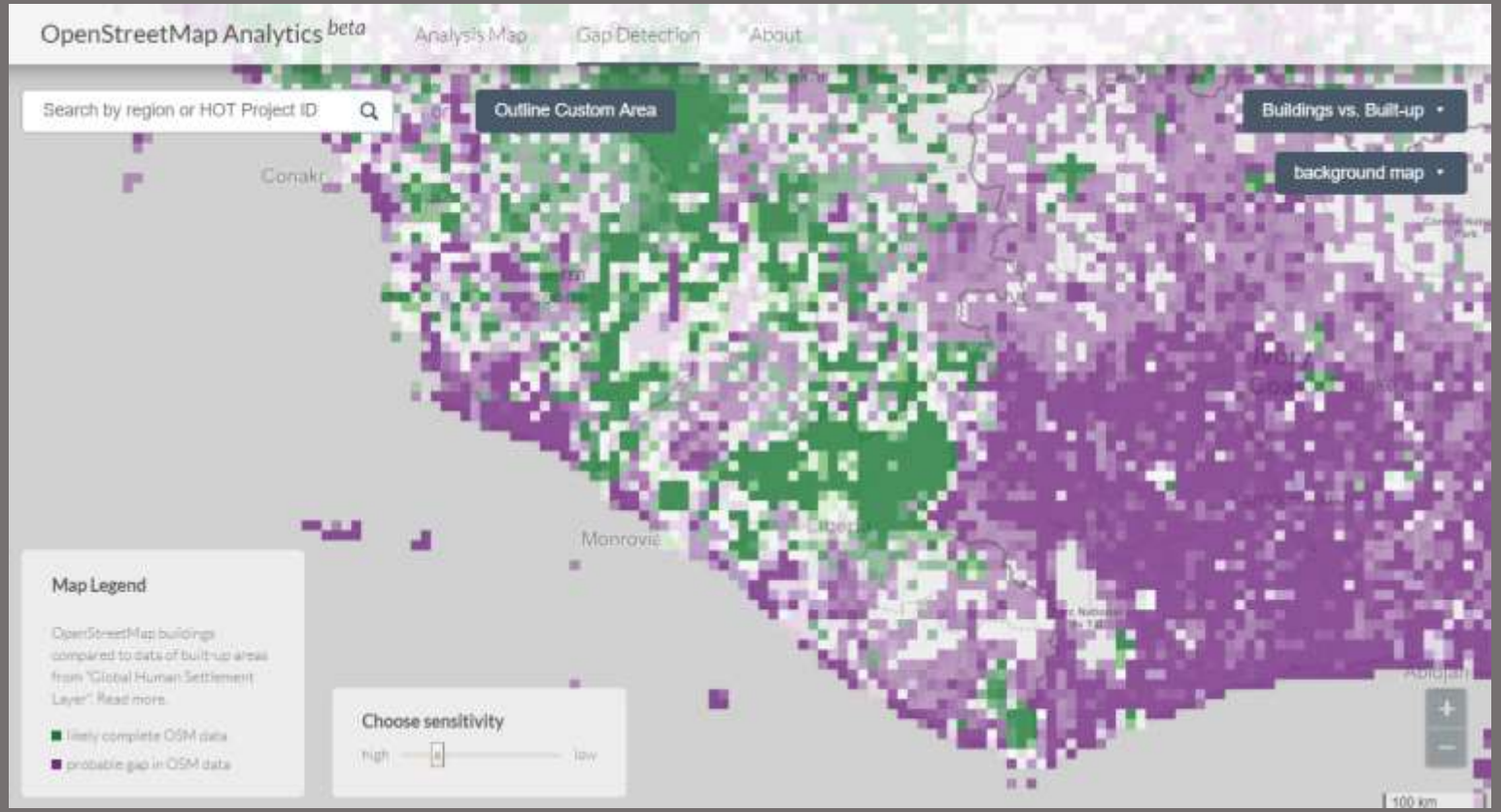
A user will be able to go to OAM and search to see what free imagery is available in the area they are interested in.

Imagery in this case means georeferenced photos from satellites, UAVs or other aircraft.



OSM Analytics

Coverage & Gap Detection

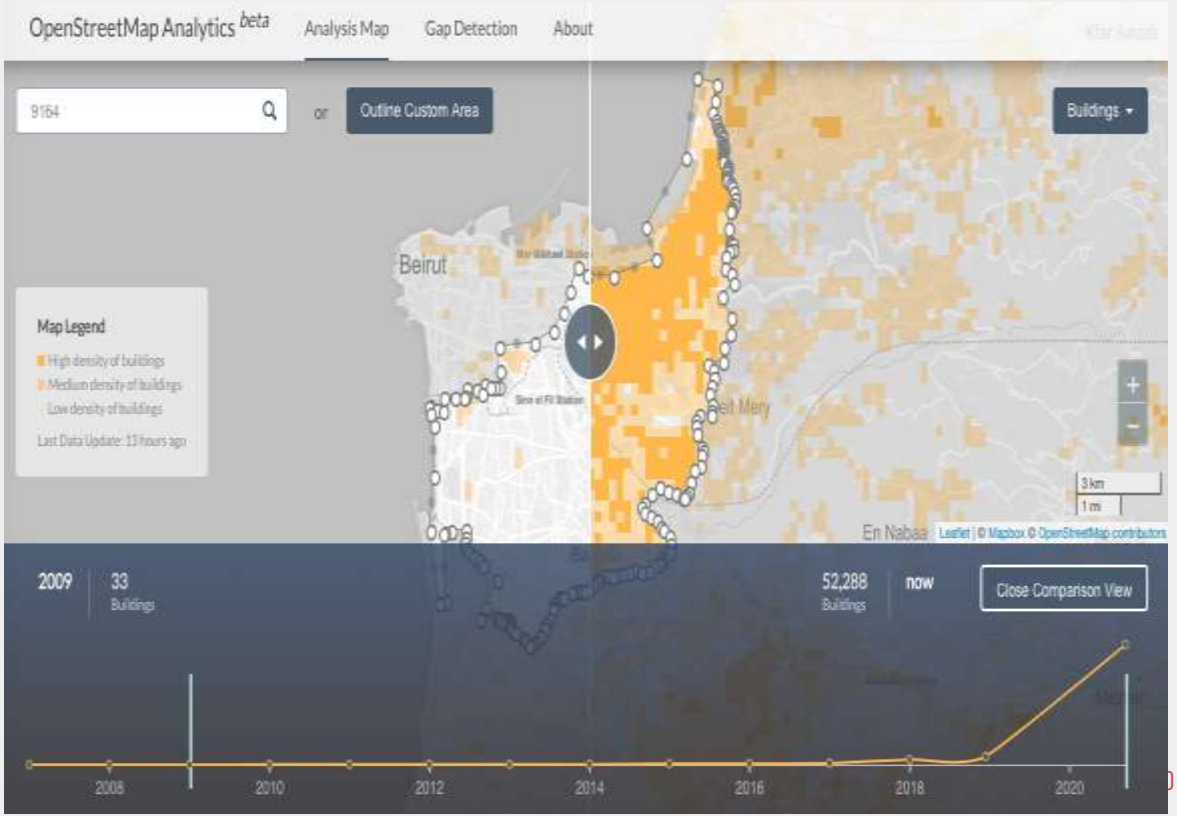


OSM Analytics

An online platform for real time analysis and visualization of the OSM database.

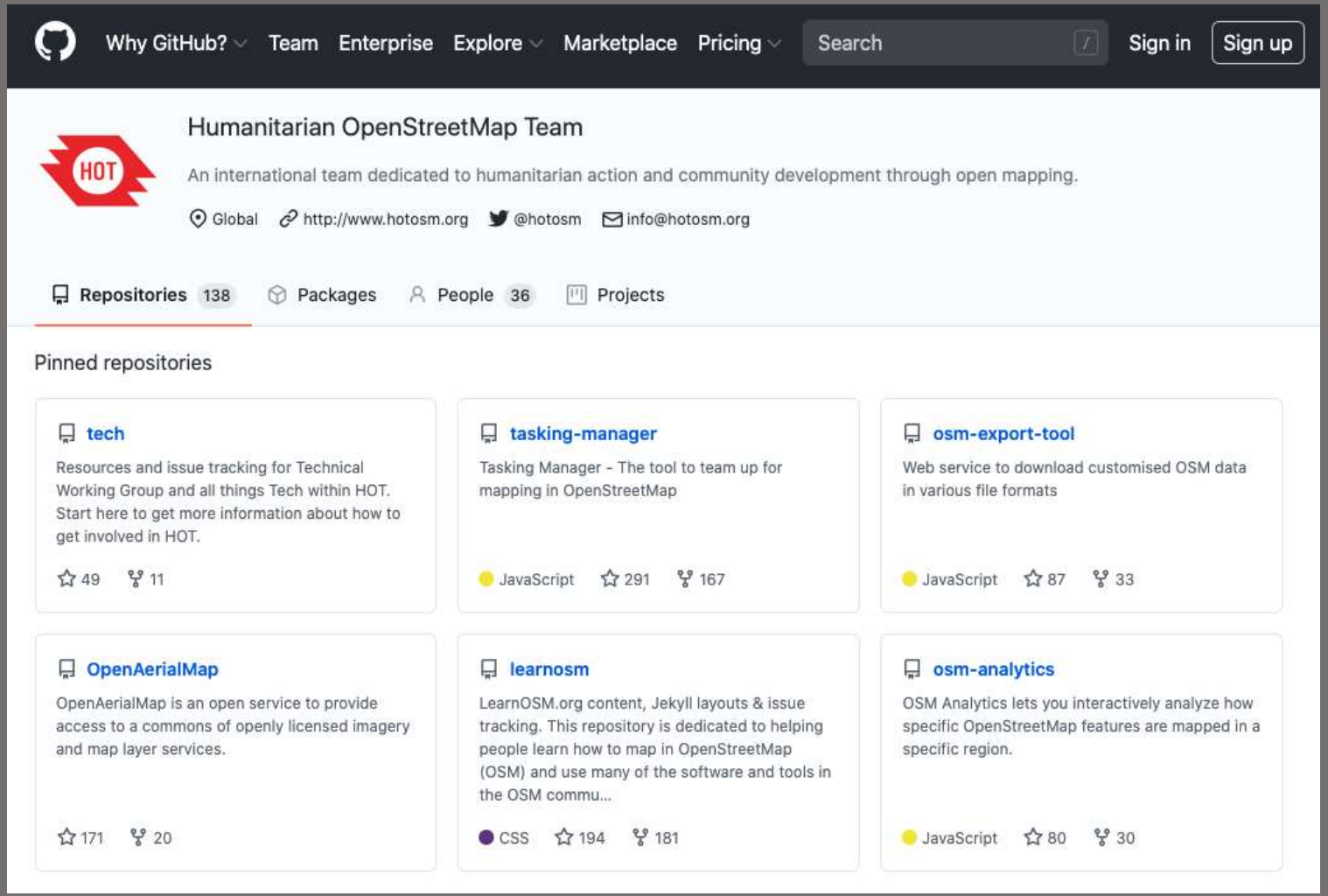
Lets you explore the entire OSM, from global to local scale and understand how the data was created over a time period.

https://osm-analytics.org/



Open Source

All our code is open on GitHub



Diversity

Internship programs

Google Summer of Code

Reach out to us

tech@hotosm.org