OpenStreetMap

Day 1 – Mapping laboratory

DIGITARCH Summer School

Federica Gaspari
federica.gaspari@live.it – [tars4815](#)

Course page

Course summary

Day 1

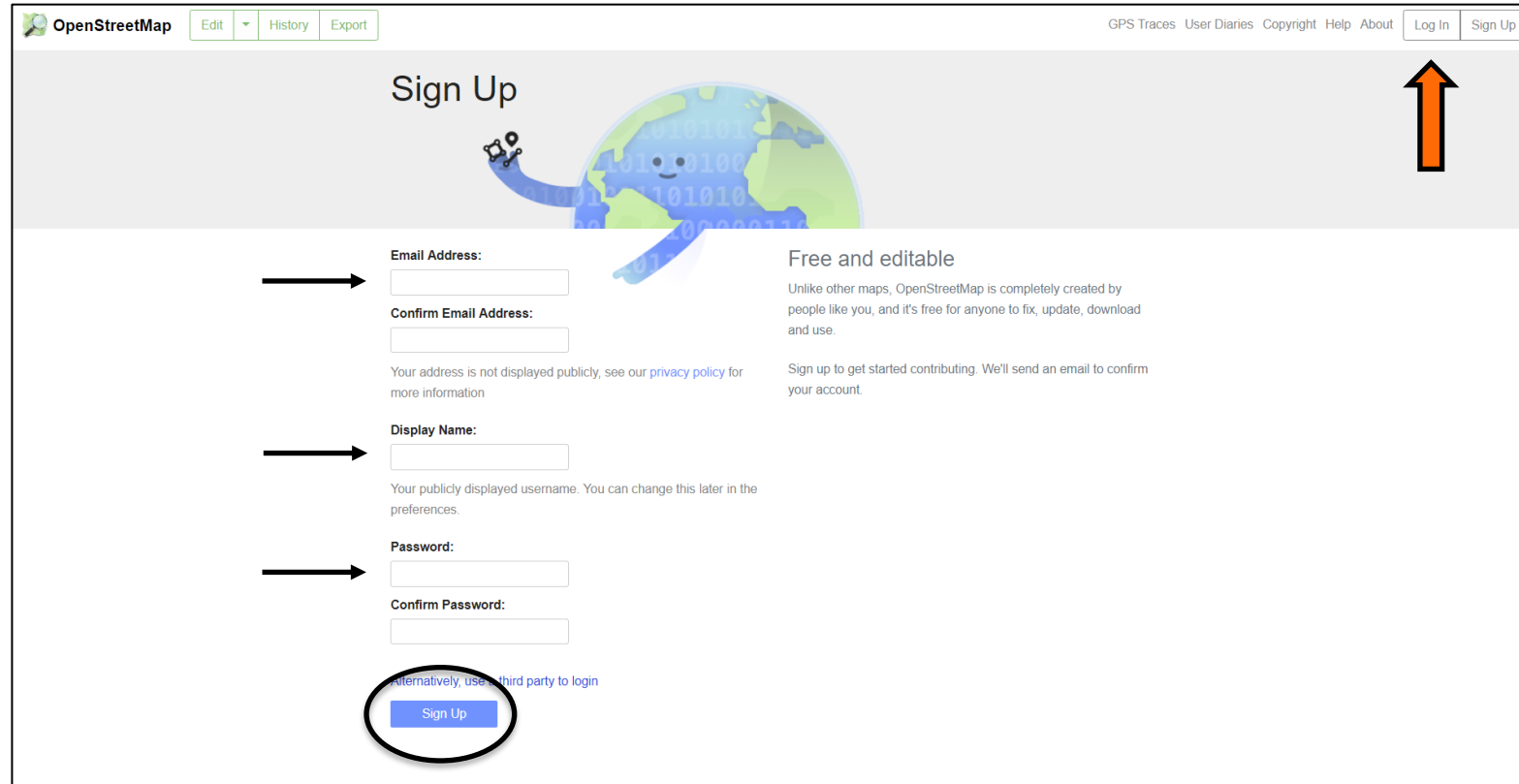Getting started with mapping

WMI Tasking Manager

Mapping buildings

Checking personal contributions

Getting started

Go to the website (https://www.openstreetmap.org) and create a new user profile or log in by using personal credentials.

Getting familiar
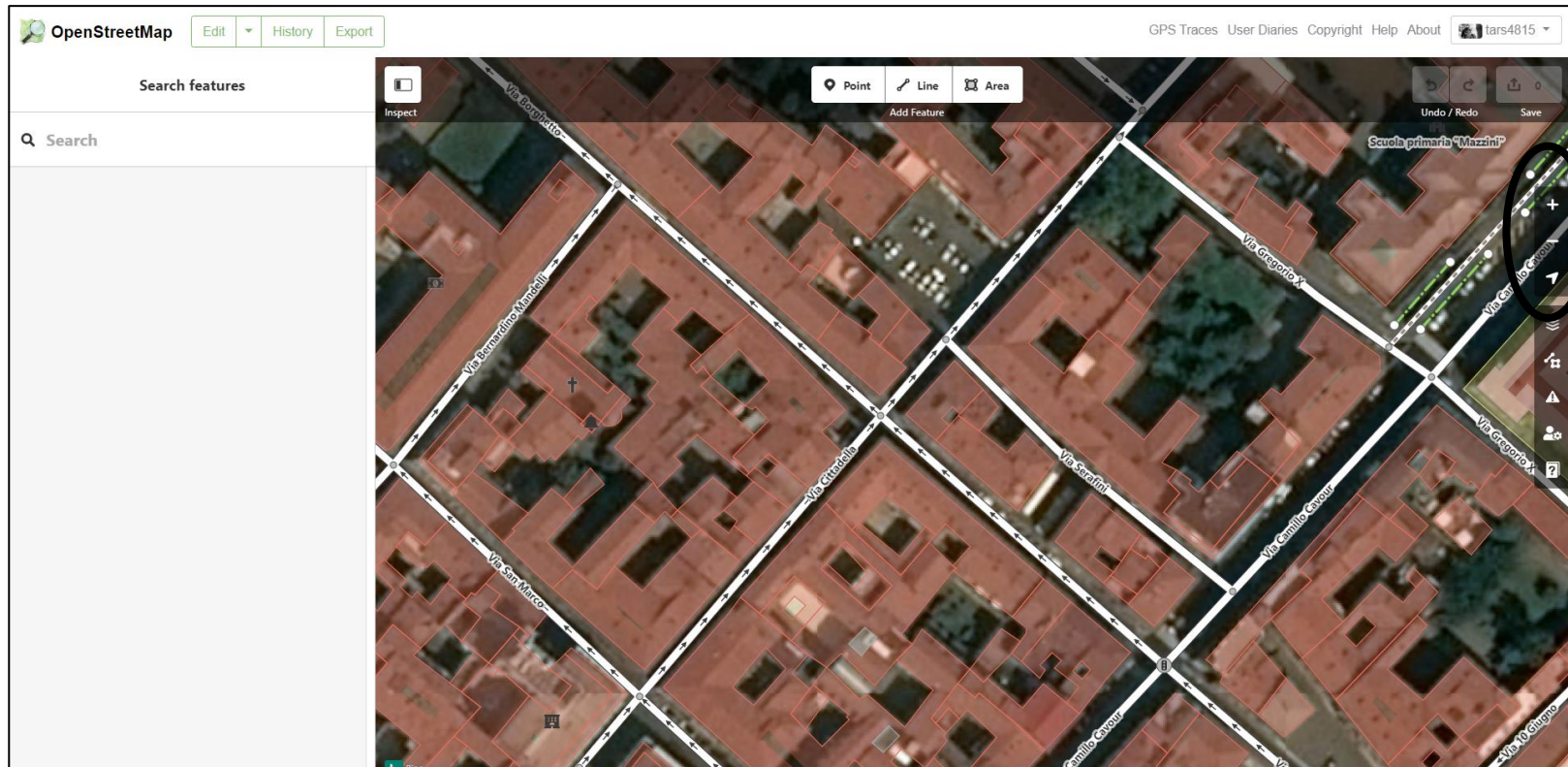
After logging in on OSM website, you can search a specific location and then enter editing mode by clicking on the Edit button.
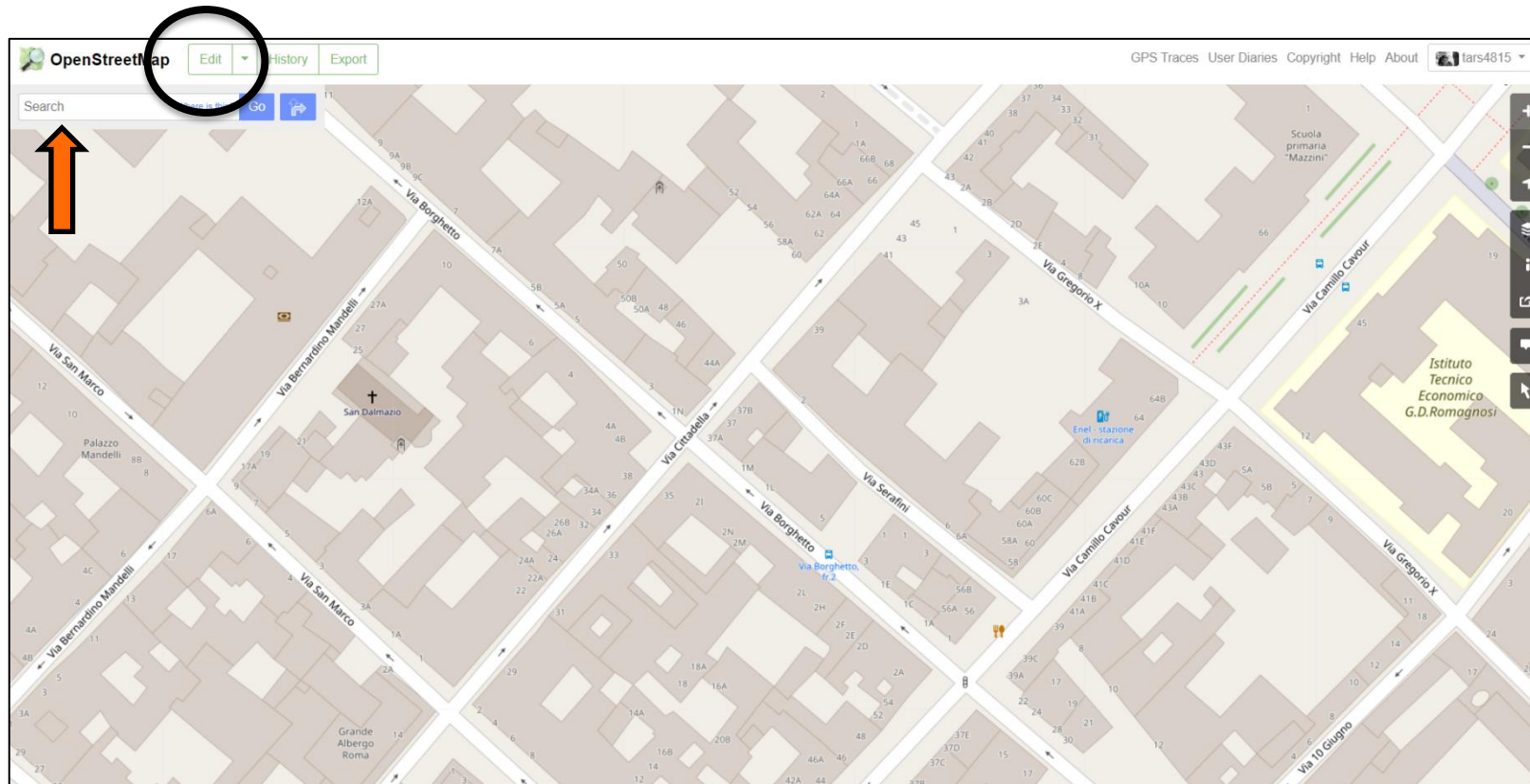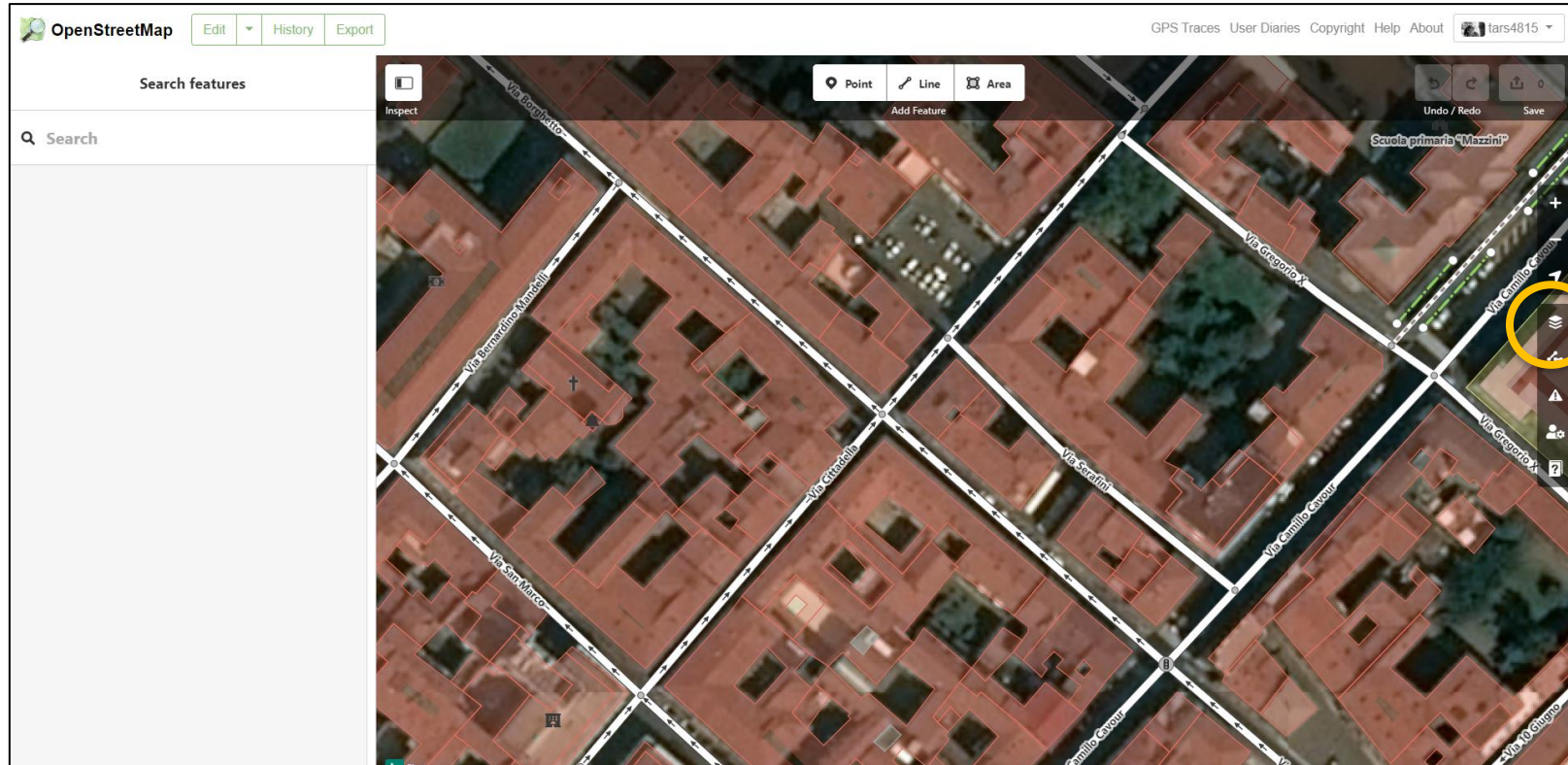
Getting familiar

From the lateral menu, it is possible to zoom in, zoom out and look for the current user position on the map.

Getting familiar

Clicking on the ⬚ icon, you will enter **Background Options** view where it is possible to define specific settings.

Getting familiar

Background Options

Background

⌄ Backgrounds

- ⦿ Bing aerial imagery
- ○ Esri World Imagery
- ○ Esri World Imagery (Clarity) Beta
- ○ Mapbox Satellite
- ○ Maxar Premium Imagery (Beta)
- ○ Maxar Standard Imagery (Beta)
- ○ OpenStreetMap (Standard)
- ○ OpenTopoMap
- ○ Stamen Terrain
- ○ Thunderforest Outdoors
- ○ Lombardia - Italy (CTR DBT)
- ○ Lombardia - Italy (CTR)
- ○ PCN 2006 - Italy
- ○ PCN 2012 - Italy
- ○ None
- ○ Custom   ···

☐ Show Minimap
☐ Show Detail Panel

⎗ Report an Imagery Problem

⌄ Overlays

- ☑ Locator Overlay
- ☐ OpenRailwayMap Maxspeeds
- ☐ OpenRailwayMap Signalling
- ☐ OpenStreetMap GPS traces

⌄ Display Options

Brightness **100%**
↺

Contrast **100%**
↺

Saturation **100%**
↺

Sharpness **100%**
↺

Reset All

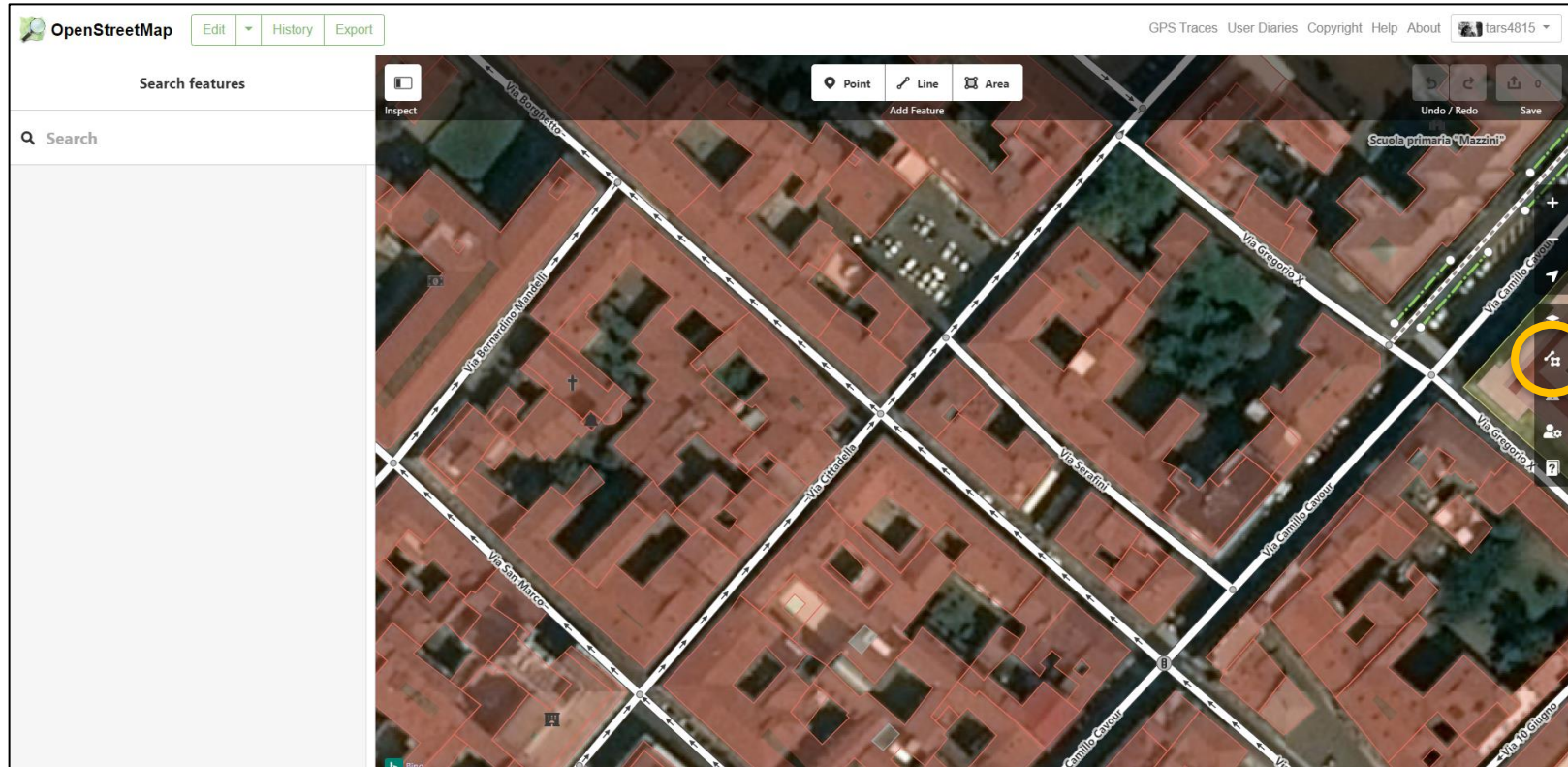**⌄ Adjust imagery offset**

Drag anywhere in the gray area below to adjust the imagery offset, or enter the offset values in meters.

▲

◀   0, 0   ▶

▼   ↺

Getting familiar

Clicking on the ▤ icon, you can decide which map data and layers are visible on the current map view.

Getting started with mapping

Getting familiar

Map data settings

Map Data

∨ Data Layers

- ☑ OpenStreetMap data
- ☐ OpenStreetMap notes

- ☐ KeepRight Issues
- ☐ ImproveOSM Issues

☐ Custom Map Data ··· 🔍

∨ Photo Overlays

- ☐ Bing Streetside
- ☐ Mapillary
  - ☐ Map Features   ⬀ Request Data
  - ☐ Traffic Signs
- ☐ OpenStreetCam

∨ Style Options

- ◯ No Fill (Wireframe)
- ◉ Partial Fill
- ◯ Full Fill

- ☐ Highlight Changes

∨ Map Features

- ⊟ Points
- ☑ Traffic Roads
- ☑ Service Roads
- ☑ Paths
- ☑ Buildings
- ☑ Building Parts
- ☑ Indoor Features
- ☑ Landuse Features
- ☑ Boundaries
- ☑ Water Features
- ☑ Rail Features
- ☑ Pistes
- ☑ Aerial Features
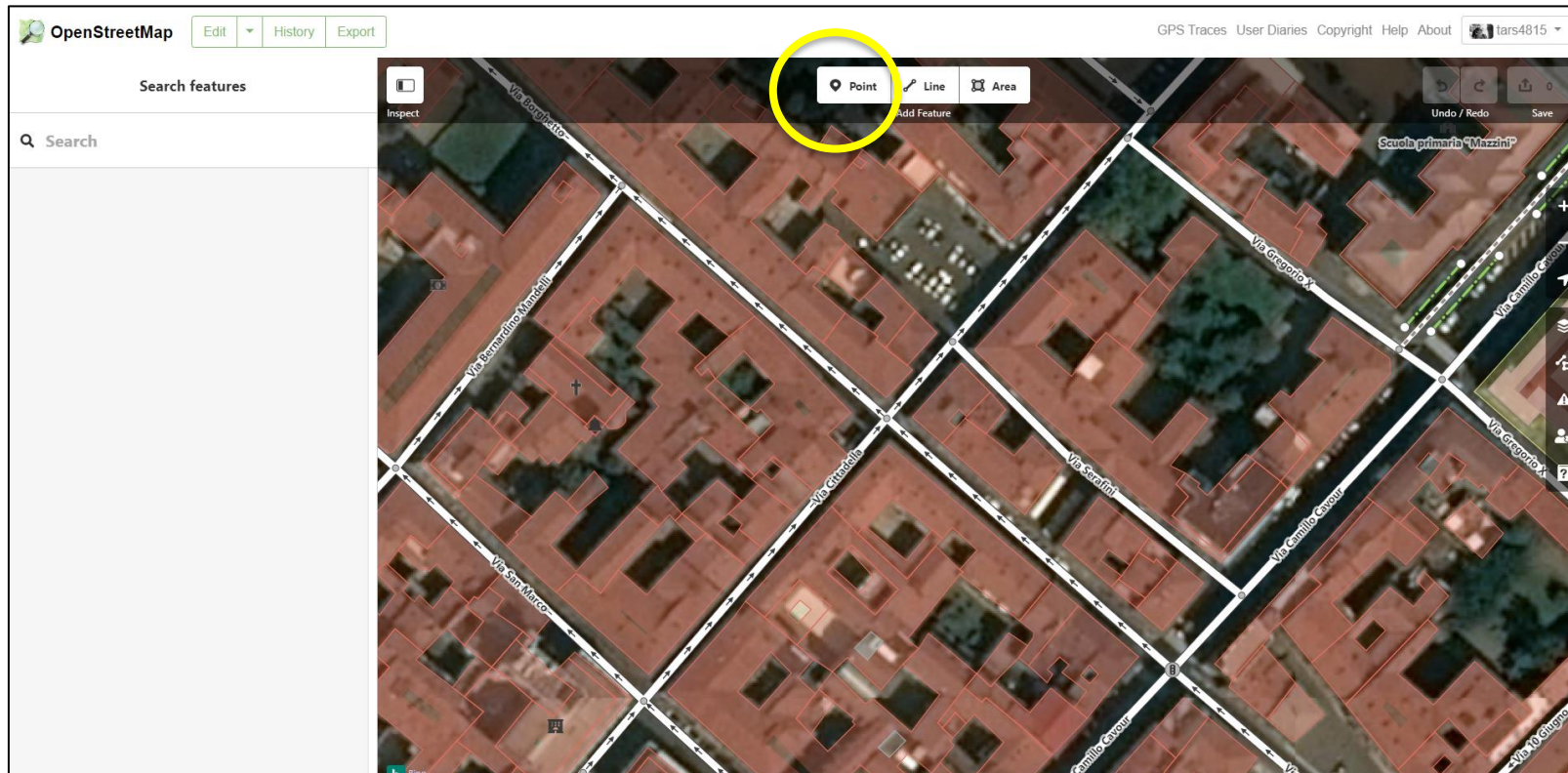- ☑ Power Features
- ☑ Past/Future Features
- ☑ Other Features

Disable All   Enable All

Create and edit features

Points

To create a new point feature you have to activate the **Point** button and to click on its position on the map. To edit an existing one, you only have to drag it.

Create and edit features

Points

On the right side you can search the **feature type** that corresponds to the point.
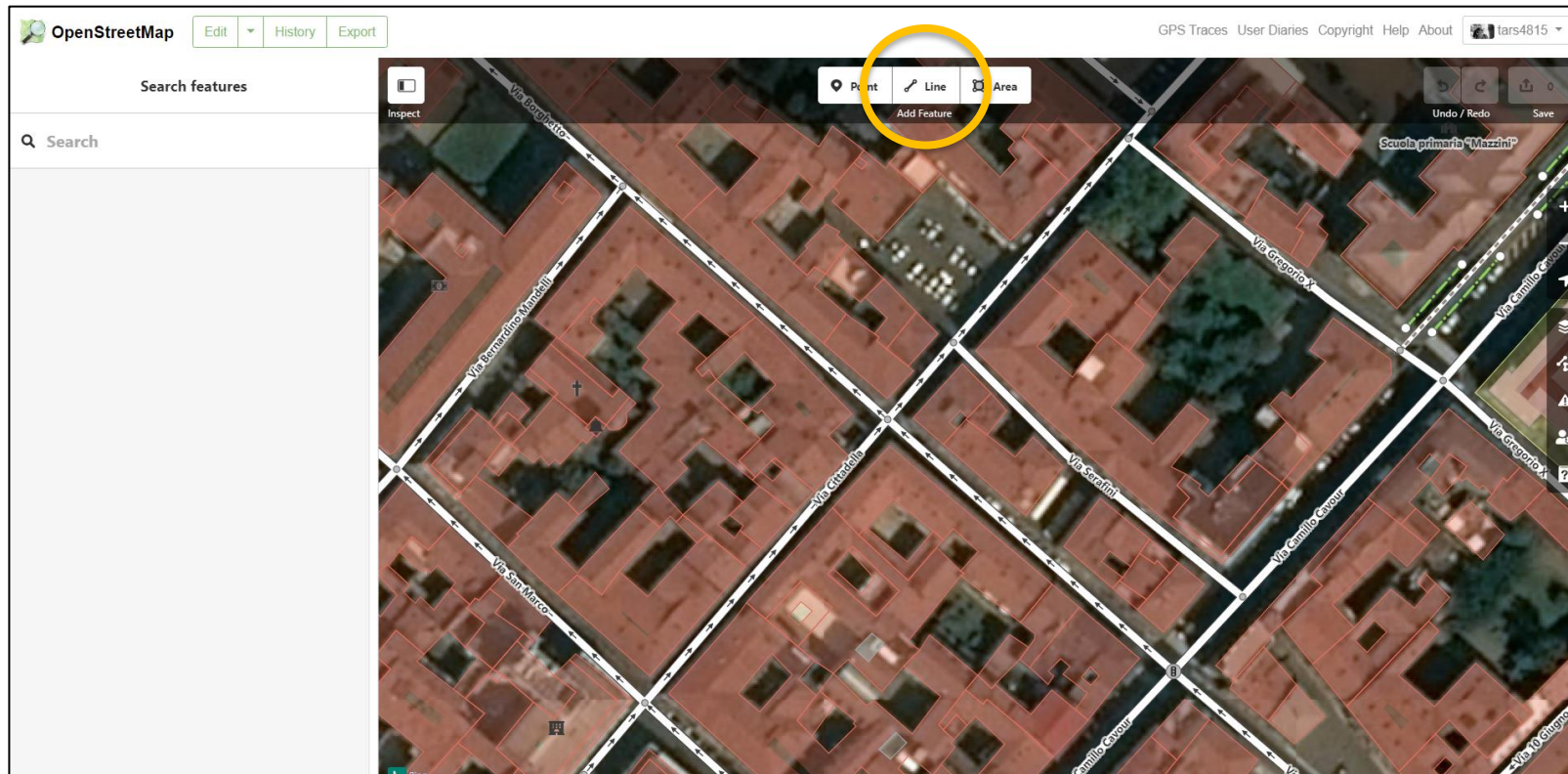
Create and edit features

Points

Then you can define the values of the **tags** requested for the activity. If not all of them are visible you can add them by clicking on **Add Field**.

Create and edit features

Lines (Way)

To create a new line feature you have to active the **Line** button and then to track it on the map by defining its nodes. To edit an existing one, you only have to change the position of nodes or adding new ones to an existing line.

Create and edit features

Lines (Way)

After having selected the **line type**, you can define the values of specific tags. If not all of them are visible you can add them by clicking on **Add Field**.
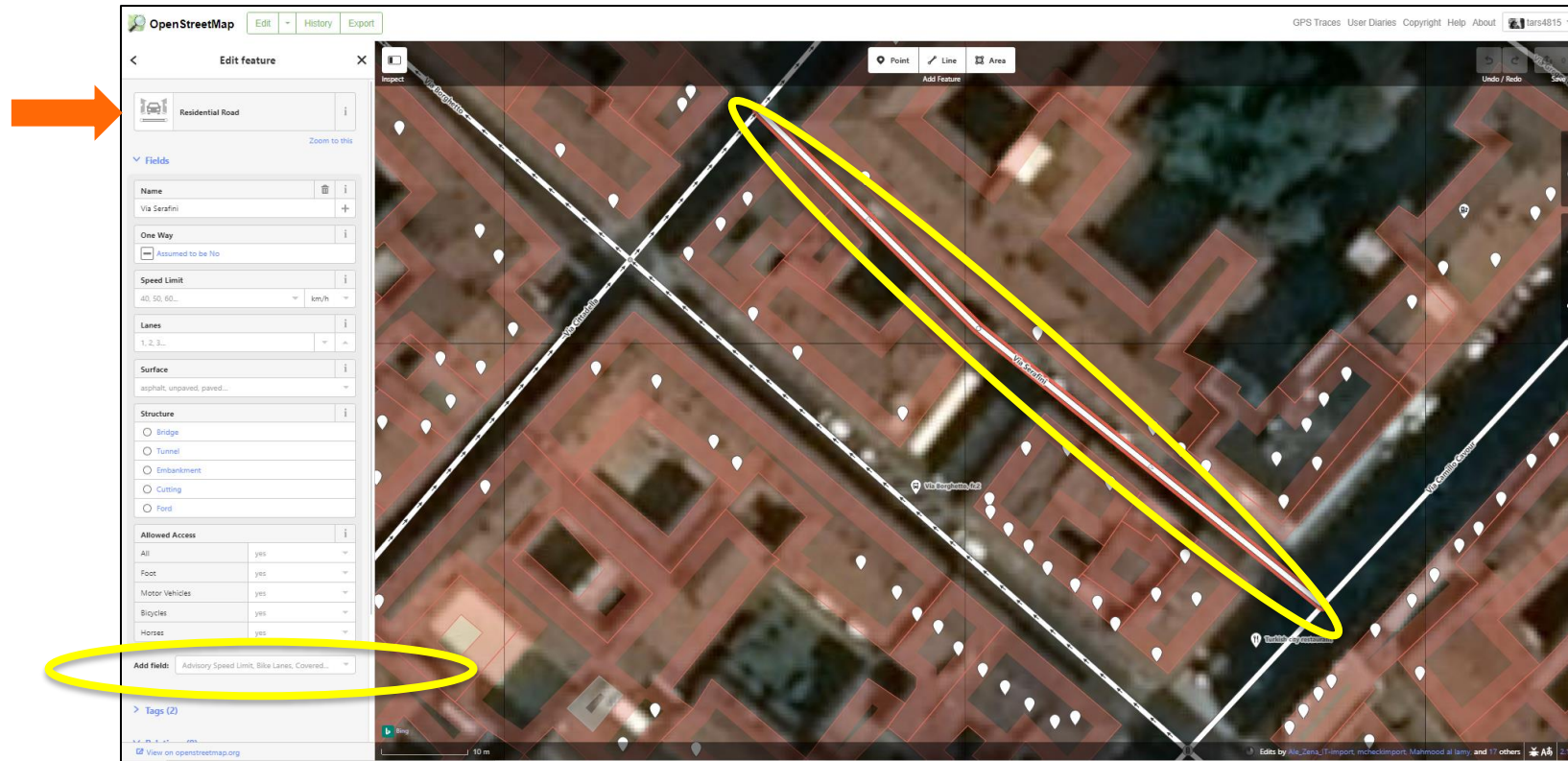
Create and edit features

Areas (Closed way)

For a new area feature you have to active the **Area** button and then to track the boundaries of the polygon shape defined by its nodes placed on the map. To edit an existing area, you only have to change the position of nodes or adding new ones.
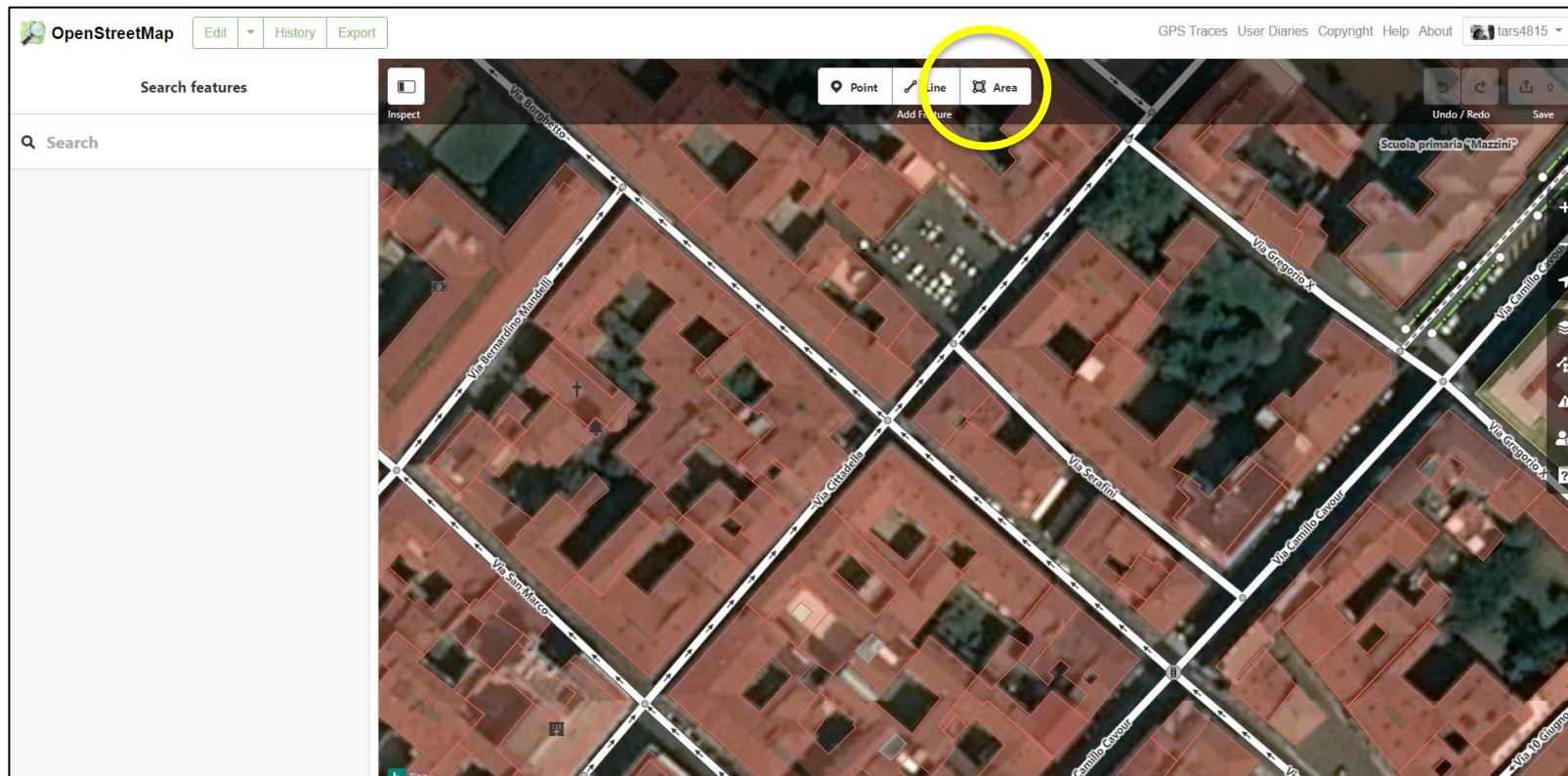
Create and edit features

Areas (Closed way)

After having selected the **line type**, you can define the values of specific tags. If not all of them are visible you can add them by clicking on **Add Field**.

Save changes

You can move between your changes history by clicking on the **undo/redo** buttons. Once you're okay with your edits, you can **save** the changeset by clicking the upload button.

Save changes

Before uploading, write a comment about your edits and include the specific hashtags associated to the activity. Then click on **Upload**.

Wikimedia Italia Tasking Manager

Wikimedia Italia together with the Italian OpenStreetMap community has implemented the so-called **Tasking Manager** that allows the coordination of nationally active OSM projects both for emergencies (earthquakes, etc.) and for the organisation of updating data.

https://osmit tm4.wmcloud.org/

Tasking Manager

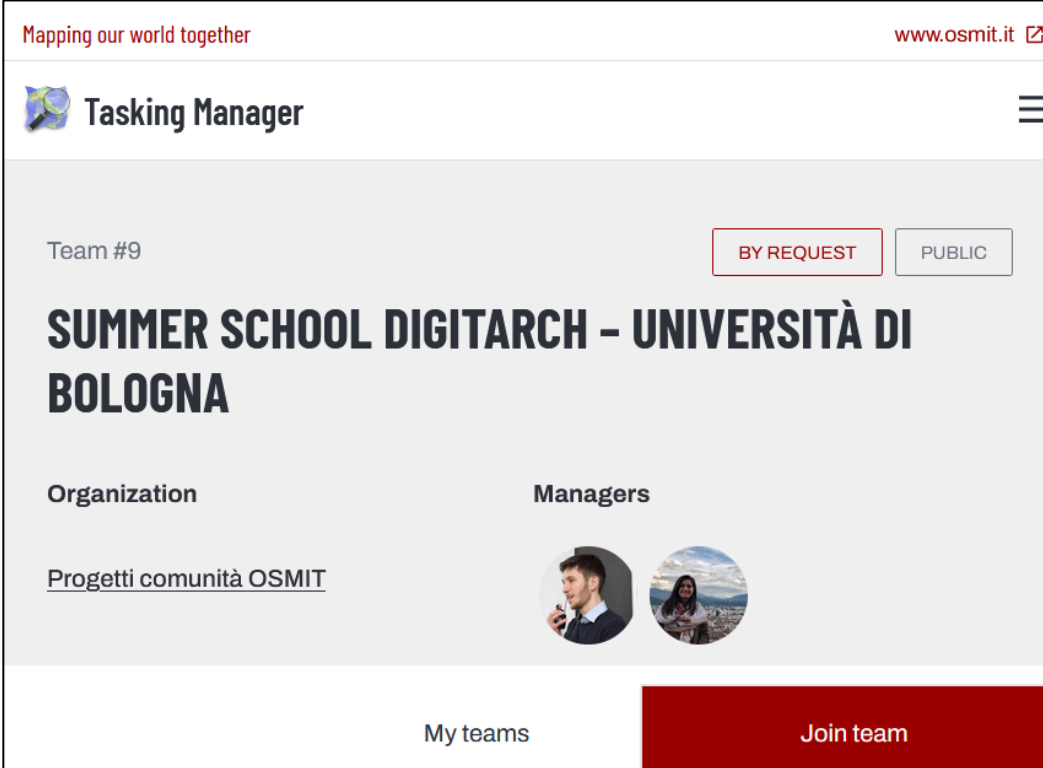**Step 1**: log in to the Tasking Manager with OpenStreetMap credentials.

Wikimedia Italia Tasking Manager

Before starting with the mapping operation, it is necessary to join the mapping team named **Summer School DIGITARCH – Università di Bologna** at the following link, after logging in with your credentials.

https://osmit-tm4.wmcloud.org/teams/9/membership/

Tasking Manager

Step 2: in the "Explore Projects" section, search for project #98 **Mappatura Borghi #MappyBDayOSMIT 2022** (https://osmit tm4.wmcloud.org/projects/98) and make sure you are correctly logged in.
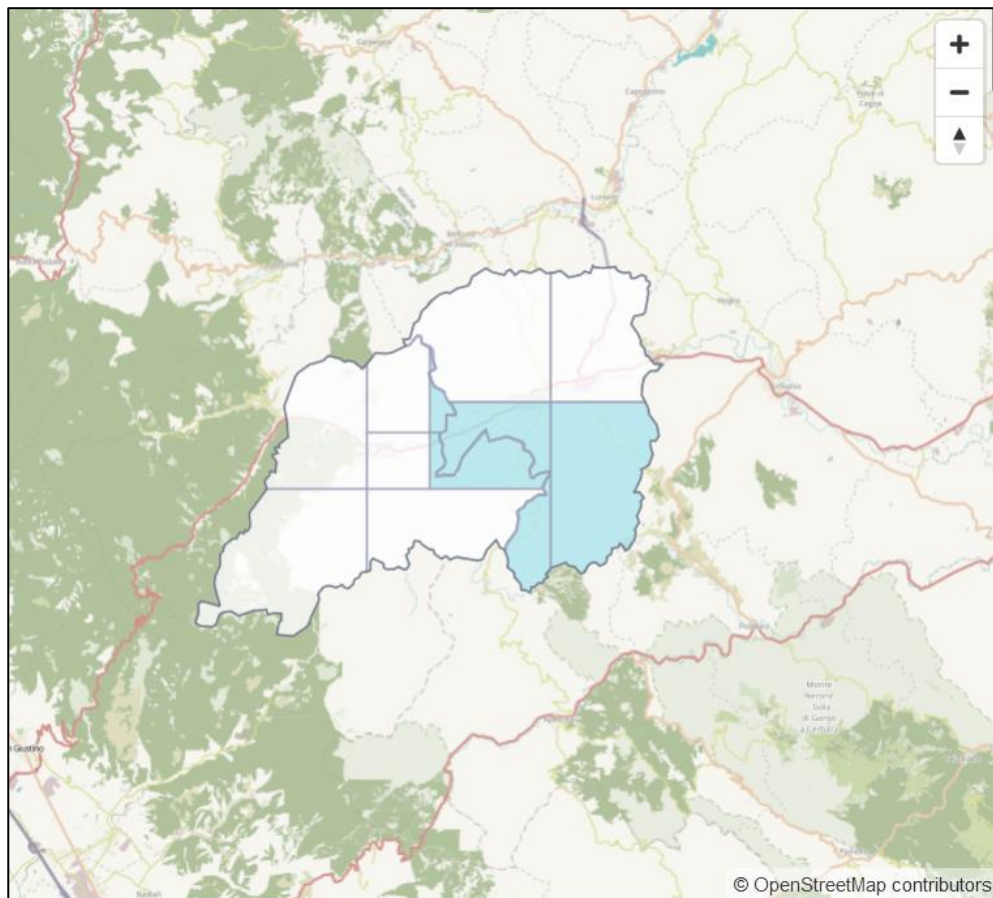
Tasking Manager

Step 3: on the project page, read the description and information carefully. In the Tasking Manager, these sections re po rt the following the characteristics of the project including the type of mapping for which it is indicated, the type of feature and geometry to be mapped and the satellite image to be used.

Tasking Manager

Step 3: By clicking on "Zoom to tasks" in the map pane, you can assess the current progress of the project divided into " tasks," areas of a regular grid that allow the mapping and validation to different users, which, by "blocking" one, avoid conflicts related to multiple mapping activities in the same areas. Areas with a padlock symbol are not selectable because they are already occupied by other users. The white areas are the ones that can be used while the blue ones are waiting for validation and the green ones have been validated. Yellow areas, on the other hand, are areas that during validation were not found to be complete in the mapping and therefore need to be reused to complete the tasks. Gray areas can also be identified in the task area where mapping is not possible because a user previously reported that the satellite image in that area is not of good quality.

Tasking Manager

Step 4: clicking "Contribute" (1) takes you to the task selection screen. Select an unlocked task (2) and begin to mapping by clicking "Map selected task" (3).

iD Editor

Step 5: The iD Editor will appear on the new screen. In the left panel the TM options including the instructions remain visible to be consulted if you have any doubts. The area within which you can map is indicated by a violet perimeter.
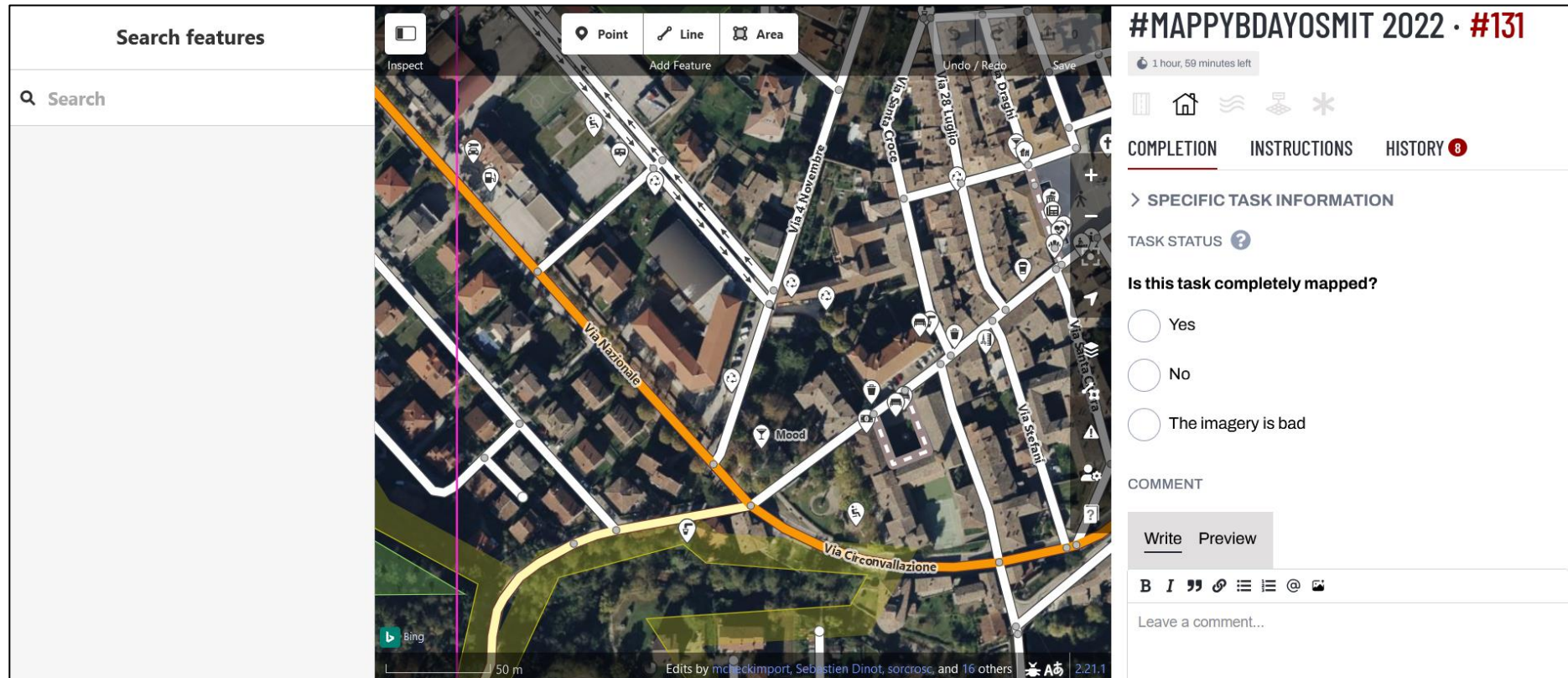
iD Editor

Step 6: Click on the "Area" icon (key shortcut "1") to activate digitization. After having identified a building, left-click on its vertices. Double-click on the last vertex to finish the insertion.

Mapping buildings
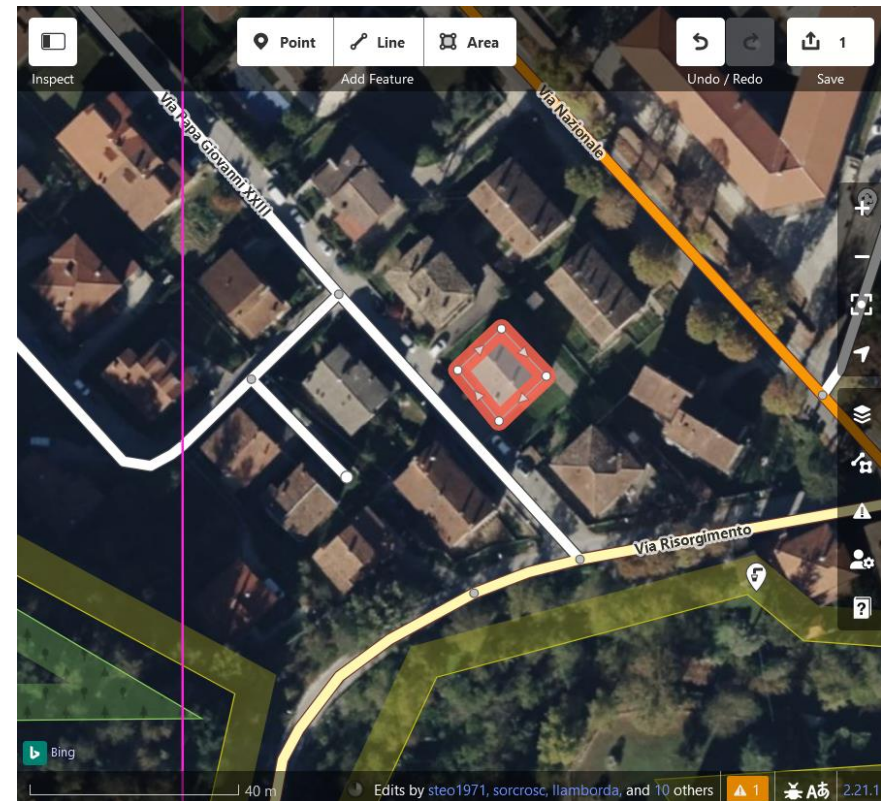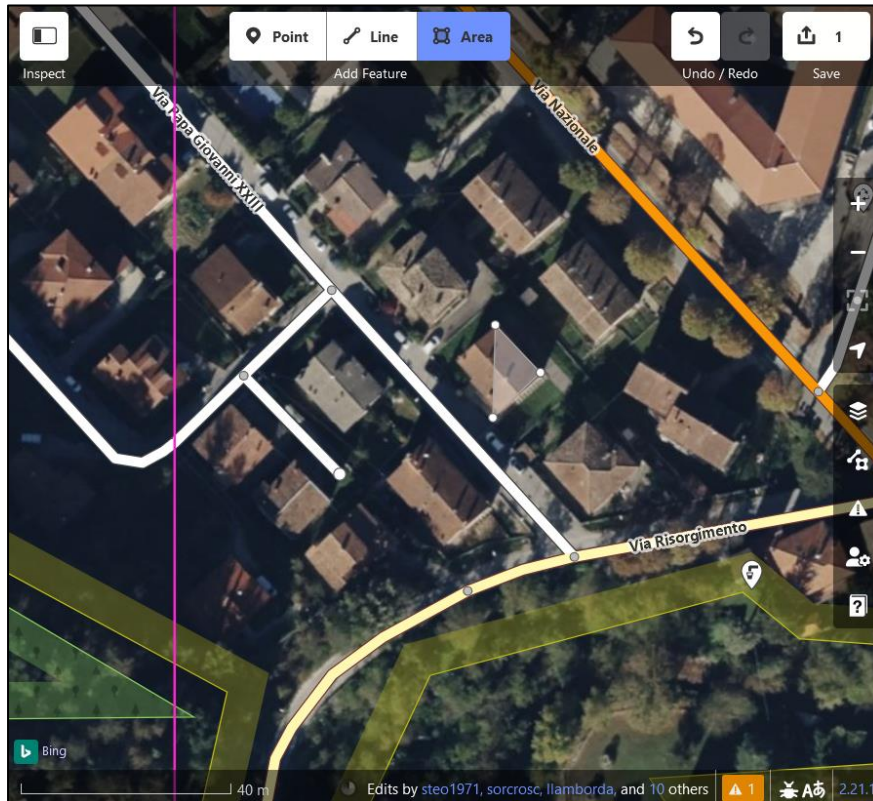
iD Editor

In case the building is a regular shape, make sure that the corners of the shape you have just drawn are correctly orthogonalized. For this operation, you must first select the perimeter of the building and then right-click by selecting the appropriate "Square" command (shortcut from the "Q" key). A similar operation can also be performed for buildings that are circular in shape by clicking the "Circularize" or the "O" key.

Mapping buildings
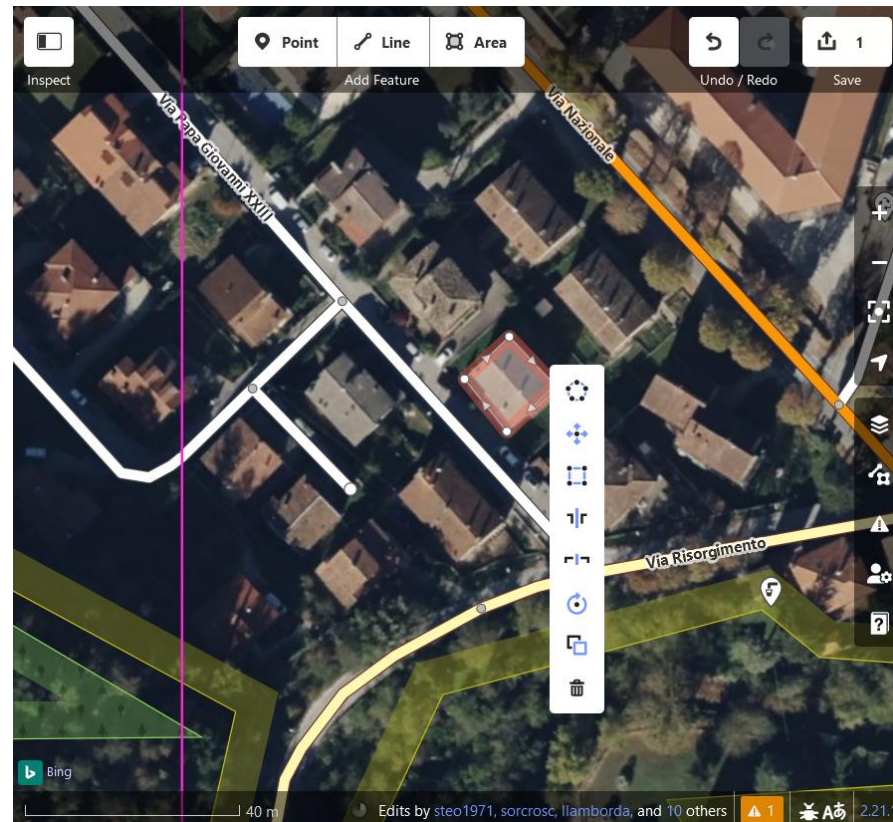
iD Editor

Step 7: After defining the geometry of the element, the correct tag must be entered to associate a meaning. In the search bar on the left, then search for "Building." Click on the corresponding item.
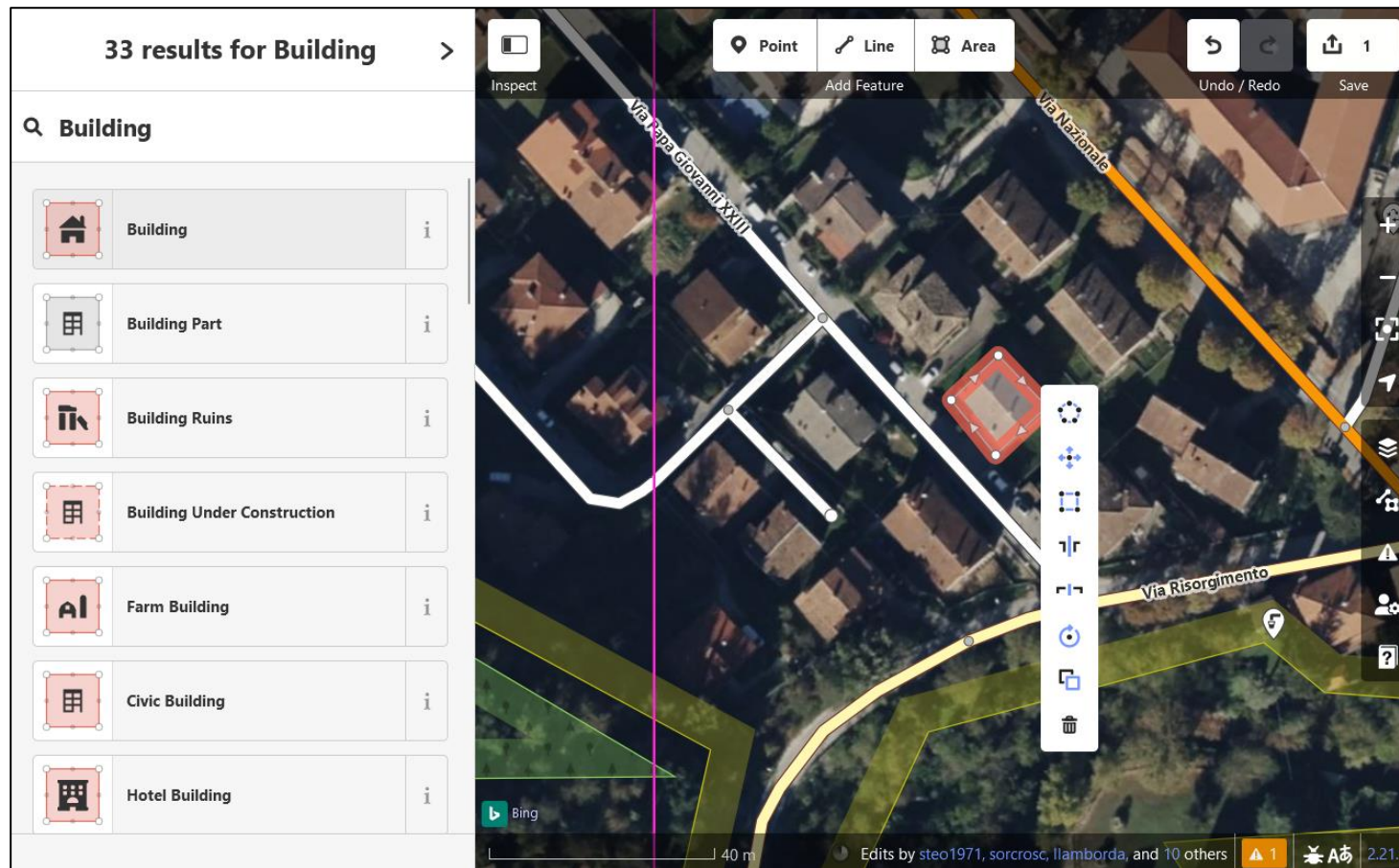
iD Editor

The option just selected will allow the **building = yes** tag to be automatically associated with the element.

Under "Labels," it is additional tags can be added to associate other features with the element just entered on OpenStreetMap.

iD Editor

Step 8: After finishing the task in the iD editor and uploading the changeset, you need to unlock the task in the Tasking Manager, indicating what you have done with your mapping and updating the status of the task. Indicate that the task is complete only when all buildings in the area are mapped. Click "Submit Task" to confirm task completion.

Mapping buildings

Buildings - Common mistakes to avoid

Initial operations on OpenStreetMap and building mappings are generally affected by some common errors related to unfamiliarity with the editor or Tasking Manager interface.

Before saving your changes, always make sure that you have:

- Correctly **orthogonalized buildings with a regular shape** and made circular those that require such an operation
- Mapped the buildings by following their **"footprint on the ground" and avoiding including shadows** or changing the perimeter with hovering vegetation
- Inserted **buildings corresponding to what is visible** in the satellite image
- **Avoided adding duplicates** of buildings already in OSM
- Plotted the perimeters of **buildings without causing overlapping with other elements** (other buildings and/or roads etc.)
- Added the required tag (**building=yes**)

Checking personal contributions

Copyright © Pascal Neis | Map data © OpenStreetMap contributors | More? See ResultMaps-overview | Logout

How did you contribute to OpenStreetMap?

tars4815   Search

Name: tars4815
Registered: 2016-11-18
Active contributor: Yes & Yes
Mapping days: 523 (18%)
Map changes: 507,770 (2,503)
Reverted changes: 24 (0.0%)
Discussed changesets: 3 (1)

OSM-related accounts:
1. OSM Wiki: Editcount 269

Type? Great Mapper (Active)

Recent changesets (details): 🇮🇹 Italy (62) 🇪🇬 Egypt (6) 🇯🇲 Jamaica (2)

Recent ranks: 🇮🇹 Italy #36 🇯🇲 Jamaica #48 🇪🇬 Egypt #200

OSM Notes: Closed w/ comment 0 (w/o 1), commented 1 and opened 2
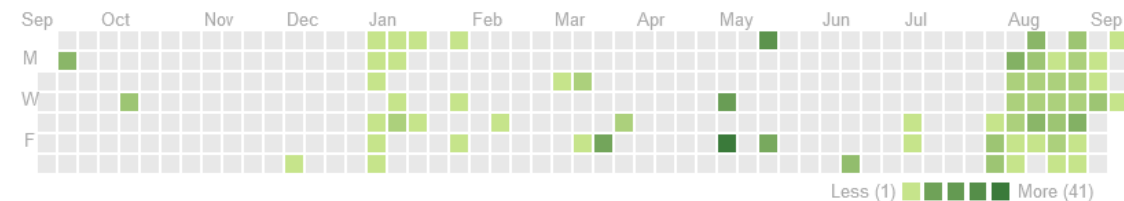**Changeset discussions:** Participated in 87 and created 89 comments
Rollbacks performed: Reverted 15 changesets w/ 27 changes of 13 contributors

iD editor: Resolved issues=9
Quality assurance: OSMI issues (details): routing=40, tagging=11
Osmose issues: Level 1=5, Level 2=68, Level 3=170 🧭

64 mapping days with 199 changesets in the last year

Sep   Oct   Nov   Dec   Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep

M

W

F

Less (1) ▪▪▪▪ More (41)

https://hdyc.neis-one.org/