

CAPACITY BUILDING FOR HIGH-RESOLUTION LAND COVER INTERCOMPARISON AND VALIDATION



Outline

1

Install the application

2

Register

3

Collect data

4

Visualize & query data



Install the Land Cover Collector

Land Cover Collector application is available on various platforms.

- You can access the application on Web at <https://landcover.como.polimi.it/collector/>.
- You can install it on your iOS or Android mobile device, using App Store or Google Play respectively. Search for “Land Cover Collector”.
- You can also download the apk for installing it on Android devices from <https://landcover.como.polimi.it/collector/land-cover-collector.apk>.

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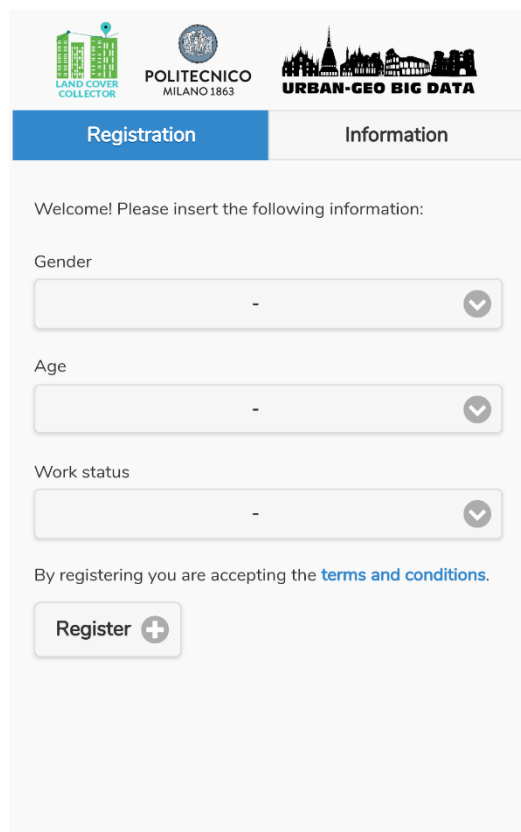
4

Visualize & query data



Register

After reading the terms and conditions, register by filling in the form, entering your gender, age and work status.



Registration Information

Welcome! Please insert the following information:

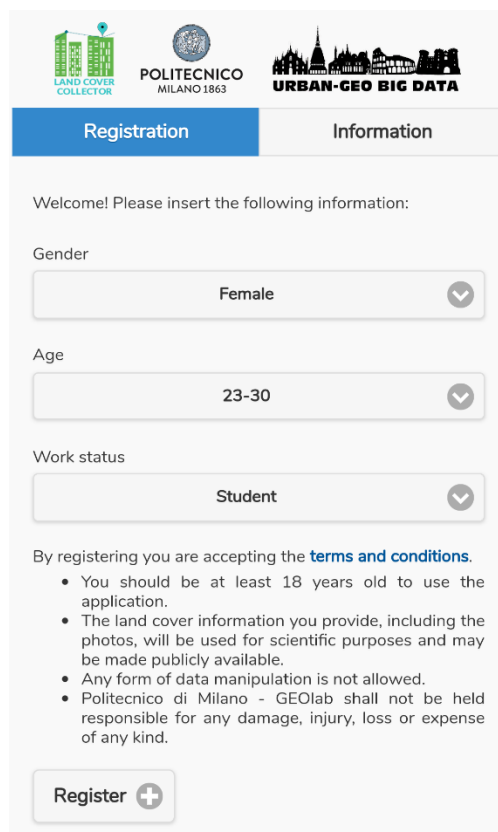
Gender

Age

Work status

By registering you are accepting the [terms and conditions](#).

Register +



Registration Information

Welcome! Please insert the following information:

Gender: Female

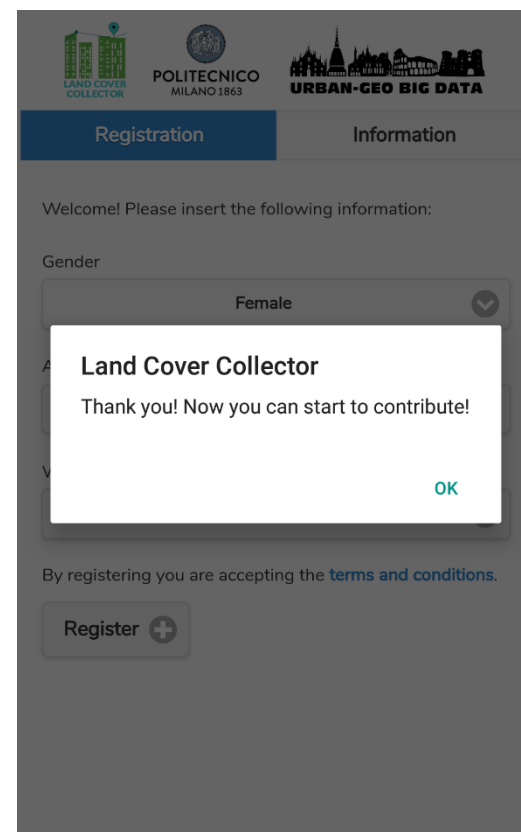
Age: 23-30

Work status: Student

By registering you are accepting the [terms and conditions](#).

- You should be at least 18 years old to use the application.
- The land cover information you provide, including the photos, will be used for scientific purposes and may be made publicly available.
- Any form of data manipulation is not allowed.
- Politecnico di Milano - GEOLab shall not be held responsible for any damage, injury, loss or expense of any kind.

Register +



Registration Information

Welcome! Please insert the following information:

Gender: Female

Land Cover Collector
Thank you! Now you can start to contribute!

OK

By registering you are accepting the [terms and conditions](#).

Register +

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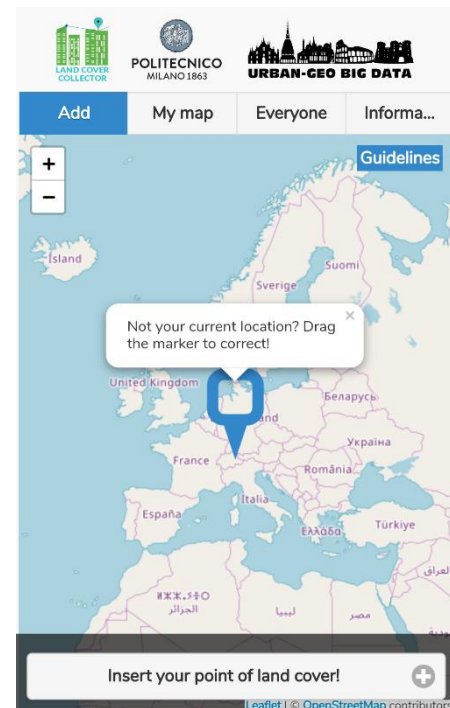
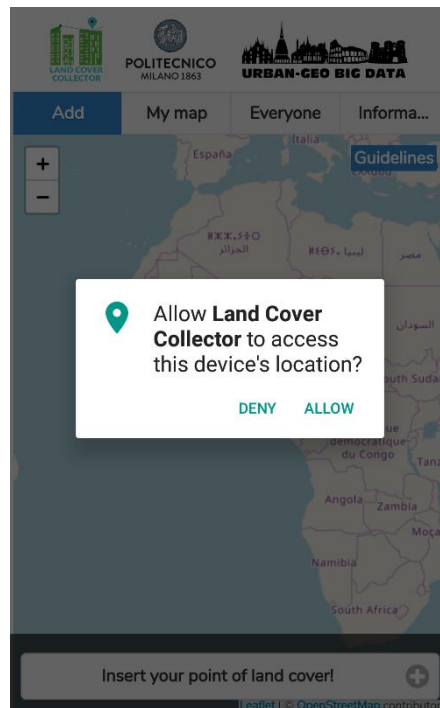
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Visualize & query data



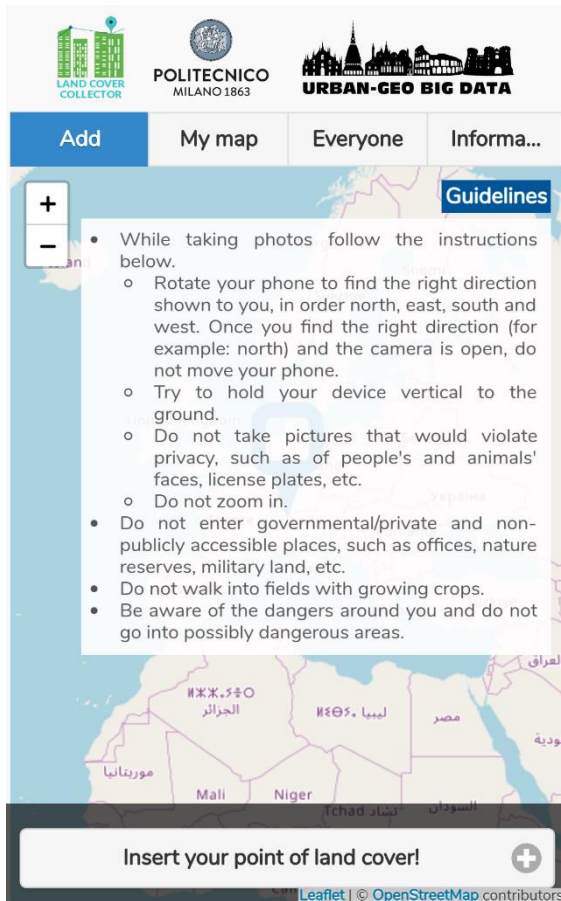
Collect data

On mobile devices turn on your GPS, start the application, and allow it to access the device's location to place the marker in your position. Instead, desktop browsers ask you to access your location. In this case, allow location access. Then move the marker to fine-tune its position.



Collect data

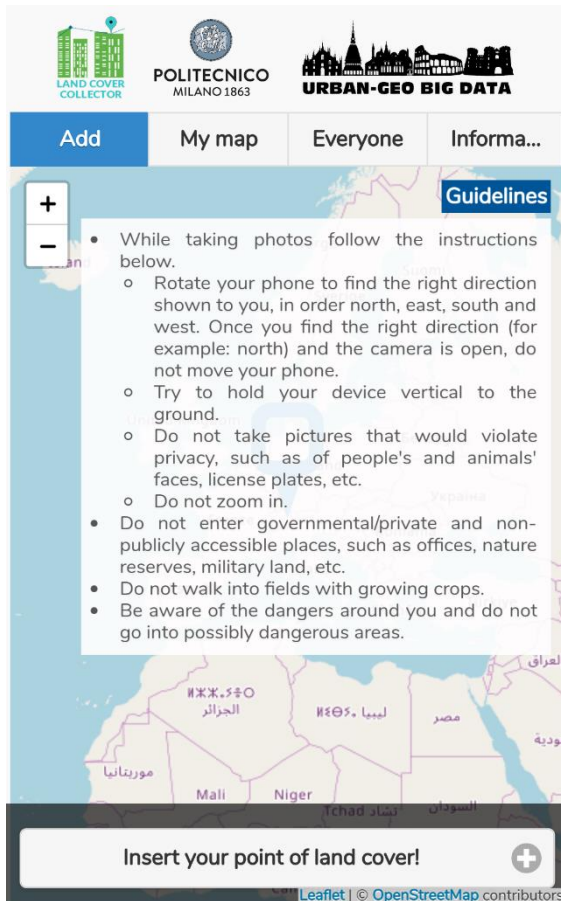
Before adding a point of land cover read the guidelines.



- While taking photos (using Android and iOS applications and optionally on mobile browsers) follow the instructions below.
 - Rotate your phone to find the right direction, in order north, east, south and west. On iOS applications the direction your device is facing will be shown on the map in degrees and the button will be enabled once facing the right direction. On iOS browsers, the direction will be shown, but won't be enforced. On iOS, once the camera is open, do not move your device.
 - Hold your device approximately vertical to the ground.
 - Do not take pictures that would violate privacy, such as of people's and animals' faces, license plates, etc.
 - Do not zoom in.
 - Hold your device in landscape mode.

Collect data

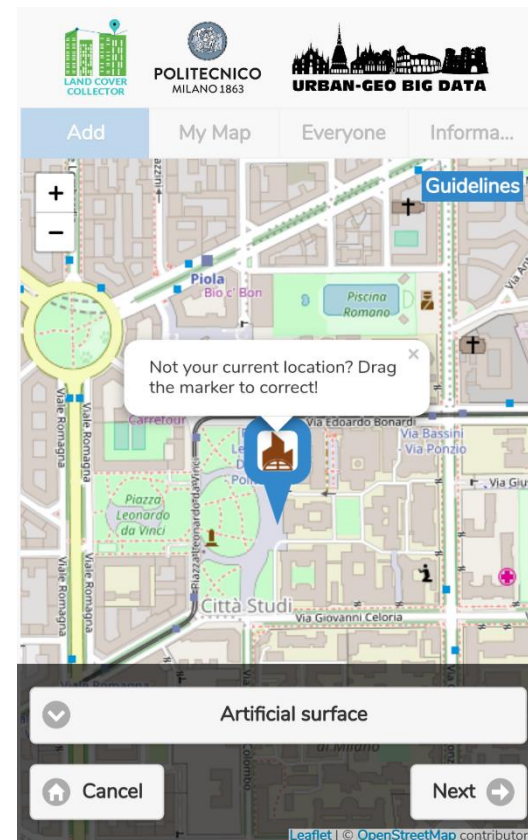
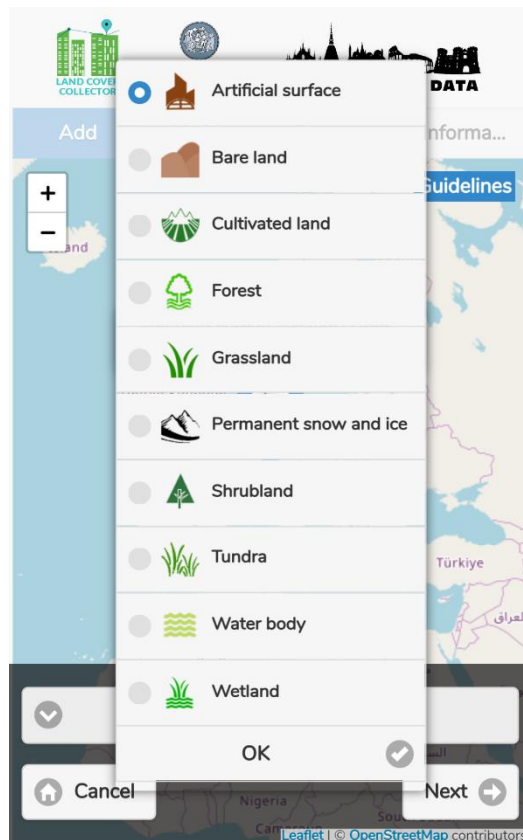
Before adding a point of land cover read the guidelines.



- Instead of taking, if you are using choosing photos (mandatory on desktop browsers, optional on mobile browsers), still try to respect the directions required for the photos.
- Do not enter governmental/private and non-publicly accessible places, such as offices, nature reserves, military land, etc.
- Do not walk into fields with growing crops.
- Be aware of the dangers around you and do not go into possibly dangerous areas.

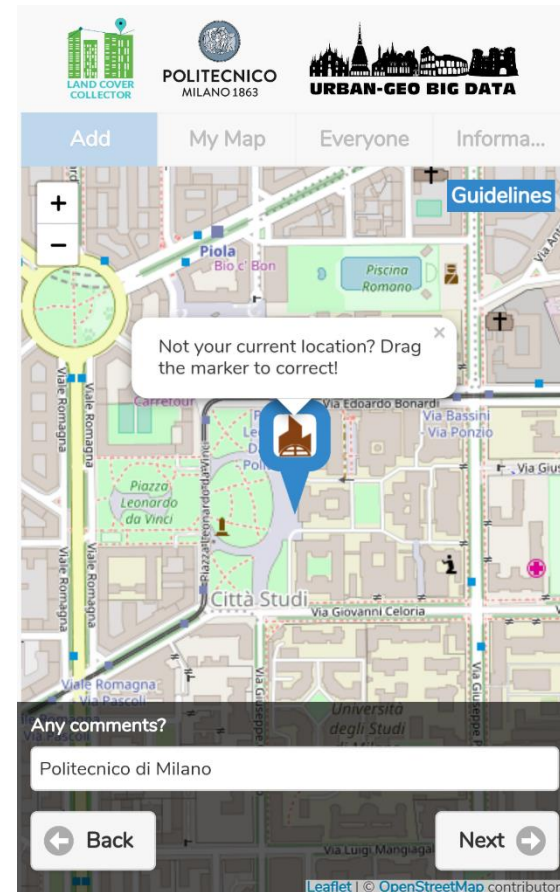
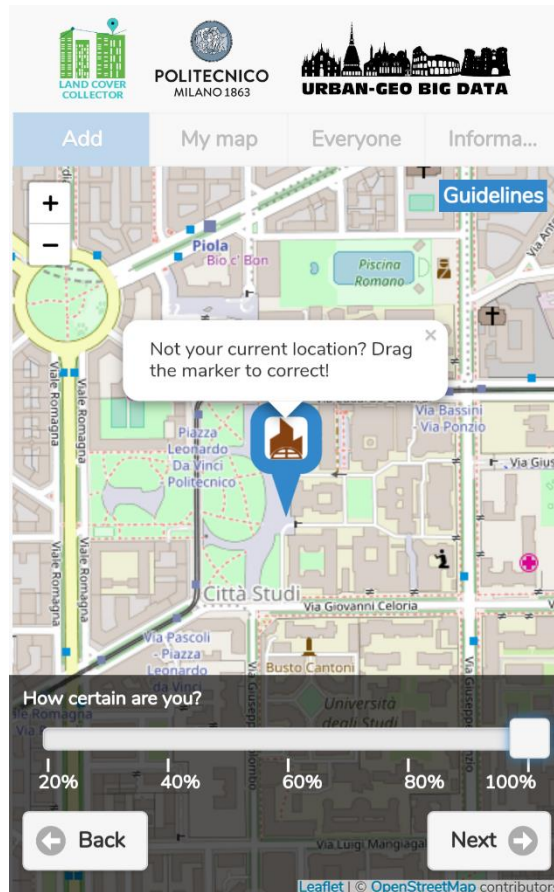
Collect data

Click on “Insert you point of land cover!” button and select the classification of your point.



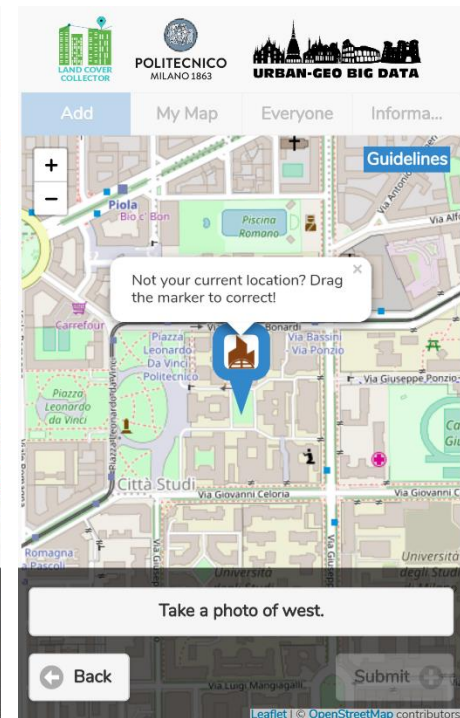
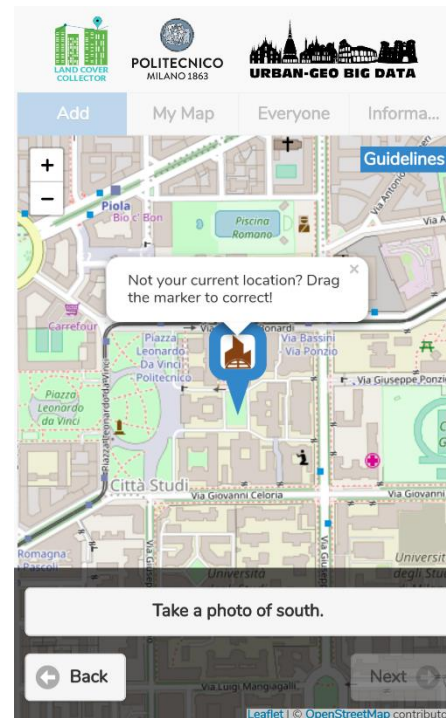
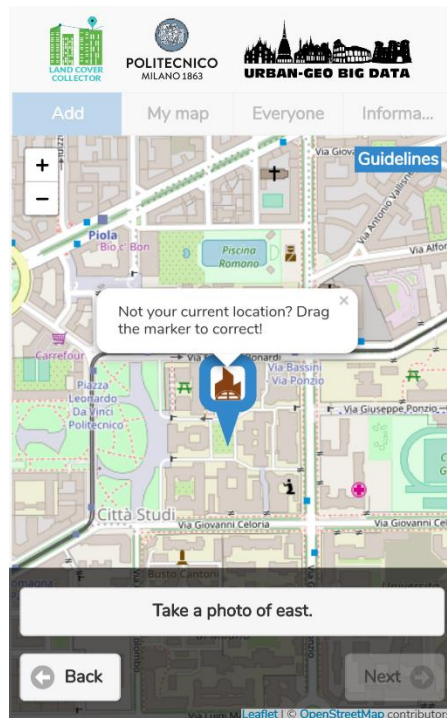
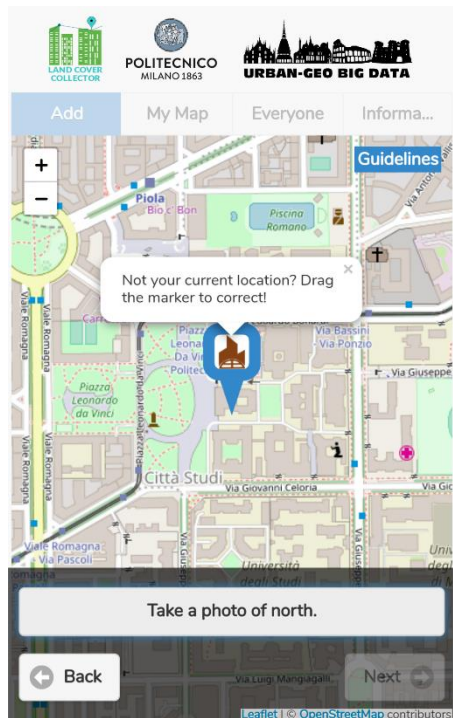
Collect data

State your certainty and then optionally add a comment.



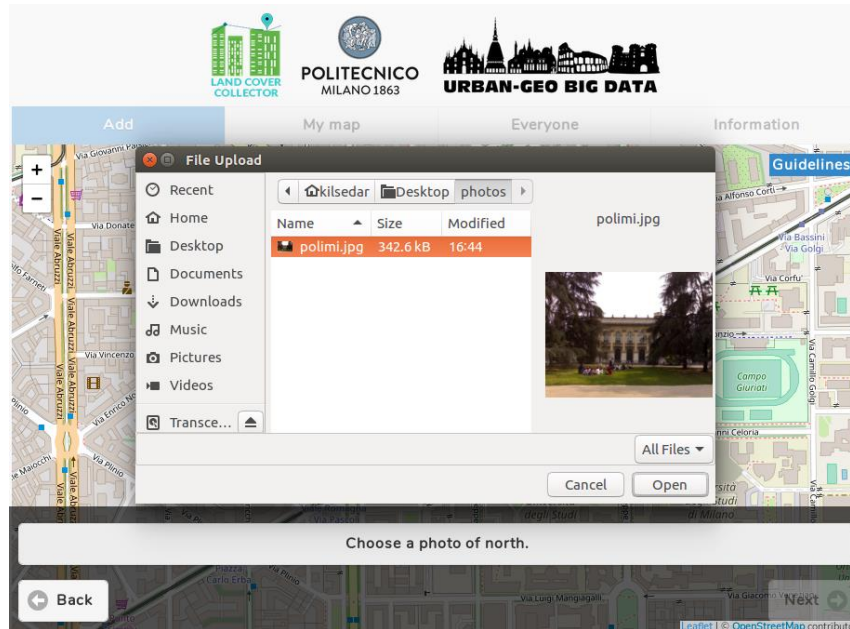
Collect data

Take a photo of north, east, south and west. While taking photo, hold your device vertical to the ground in landscape mode.



Collect data

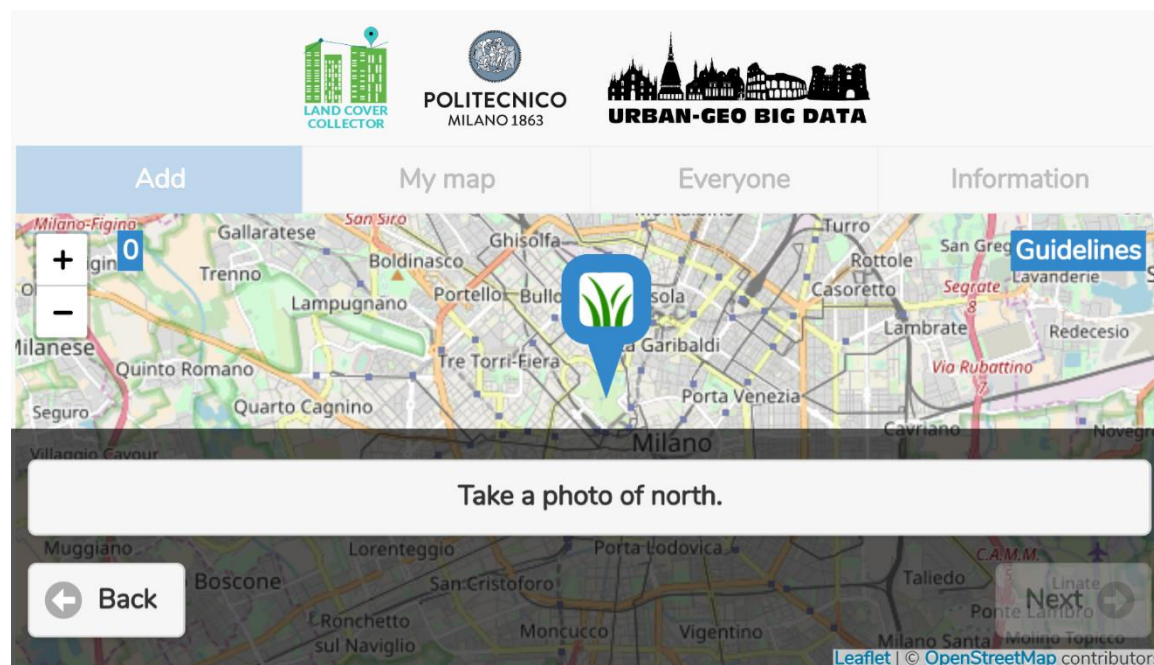
On desktop browsers, you need to choose the photo from your computer.



On mobile browsers, you can choose or take photo. On iOS devices direction will be shown but won't be enforced.

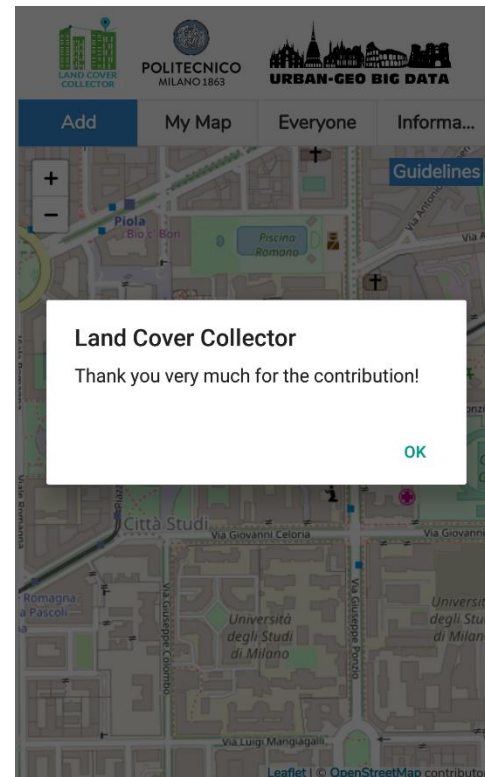
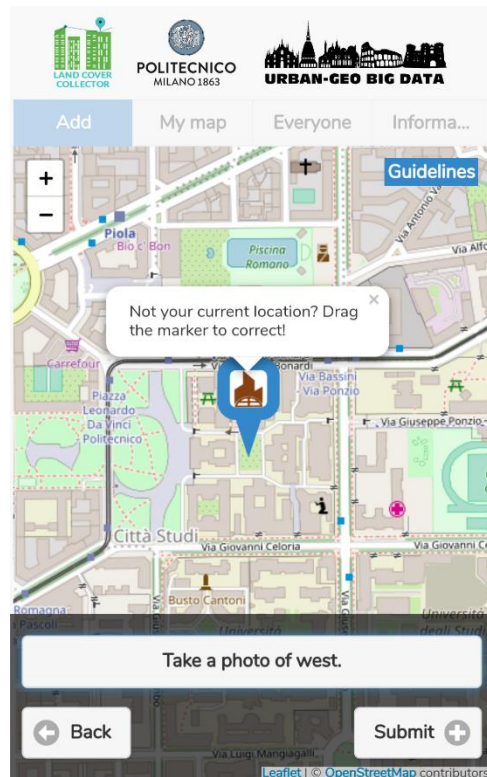
Collect data

On iOS applications, direction will be shown and enforced. Hold your device in landscape mode, once you find the right direction, the button will be enabled and you can take a photo. Once camera is open, do not move your device. Hold your device vertically to the ground.



Collect data

Submit the information you entered. While adding your point, if you want to cancel, you need to click on “Back” until “Cancel” button appears, and then “Cancel”.



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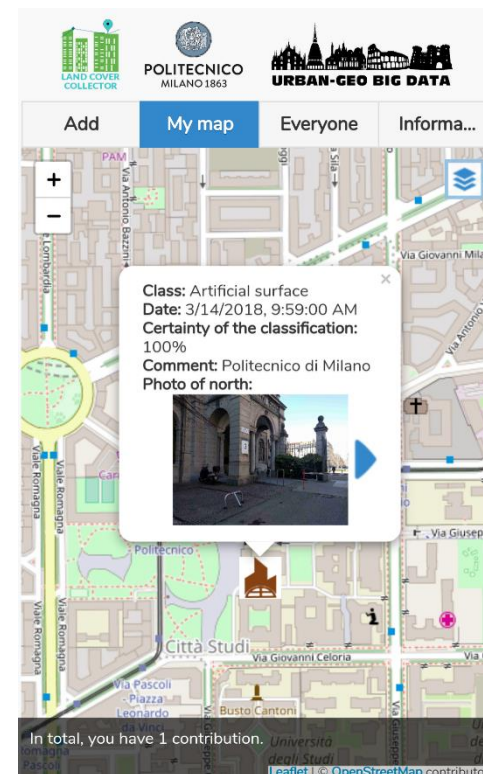
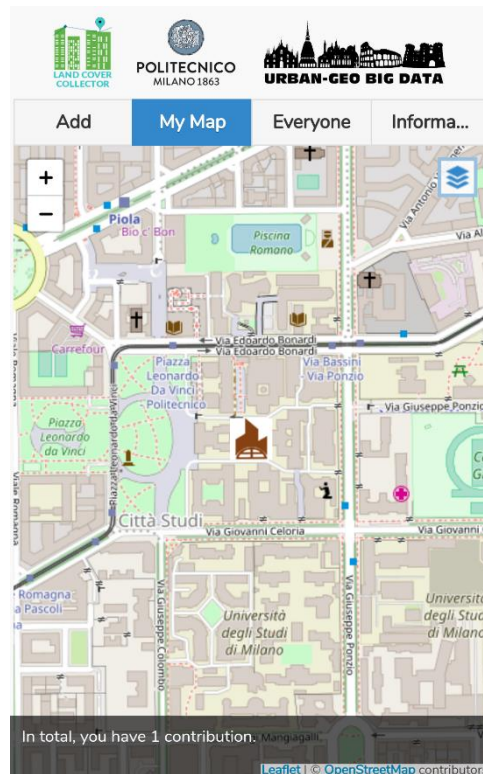
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Visualize & query data



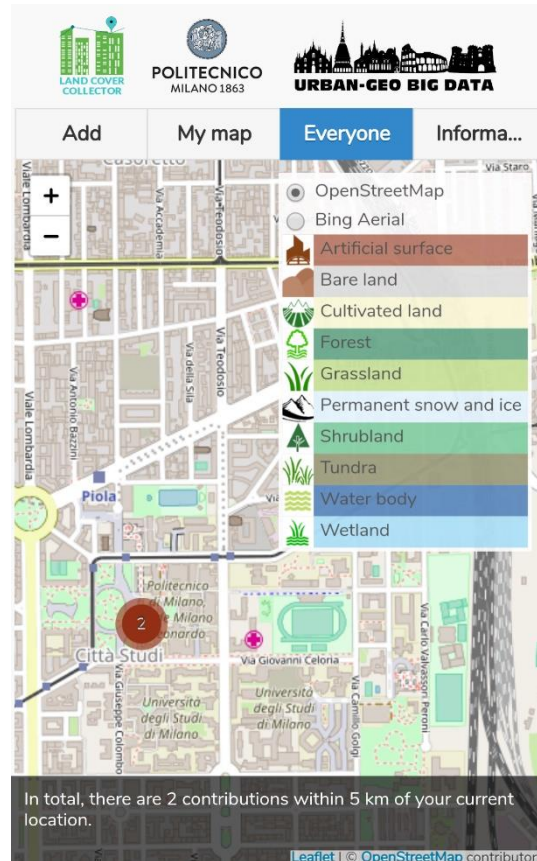
Visualize & query data

The point you added will be visible in the “My map” as a marker, with an icon of its corresponding classification. The point can be queried to see the inserted information.



Visualize & query data

In “Everyone” section points inserted by everyone can be seen. The points belonging to the same classification and close enough to each other will be aggregated and will be given a color of their classification. The basemap can be changed from OpenStreetMap to Bing Aerial, both in “My map” and “Everyone”.



More information

The application is available in English, Italian, Arabic, Chinese, Spanish, Russian, Portuguese and French, thanks to the translations of Prof. Maria Antonia Brovelli, Eng. Mohammed Hammouti, Prof. WU Hao, Dr. Carolina Arias Muñoz, Eng. Matvey Smychkov, Eng. Dalton Borges, Dr. Nicolas Bozon.

It is an open source project available on GitHub at <https://github.com/kilsedar/land-cover-collector>. The application is developed by Candan Eylül Kilsedar. The project is protected with [GLC-3.0 license](#).

The application is partially based on and extends the project [EmoMap](#), developed by the [Research Group Cartography](#) in the [Department of Geodesy and Geoinformation](#) in [TU Wien University](#), and [Via Regina](#) application, developed in [GIS Team](#) of [GEOLab](#), at [Department of Civil and Environmental Engineering](#) at [Politecnico di Milano](#).

You can see the land cover data collected with this application using [this link](#), or download using the URL in the “Download data” section under “Information”. More information on how to download the data can be found in the same section. The data is in JSON format. The license of the data is [Open Database License \(ODbL\) v1.0](#).

Thanks for Your Attention!

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