



Photogram Manual

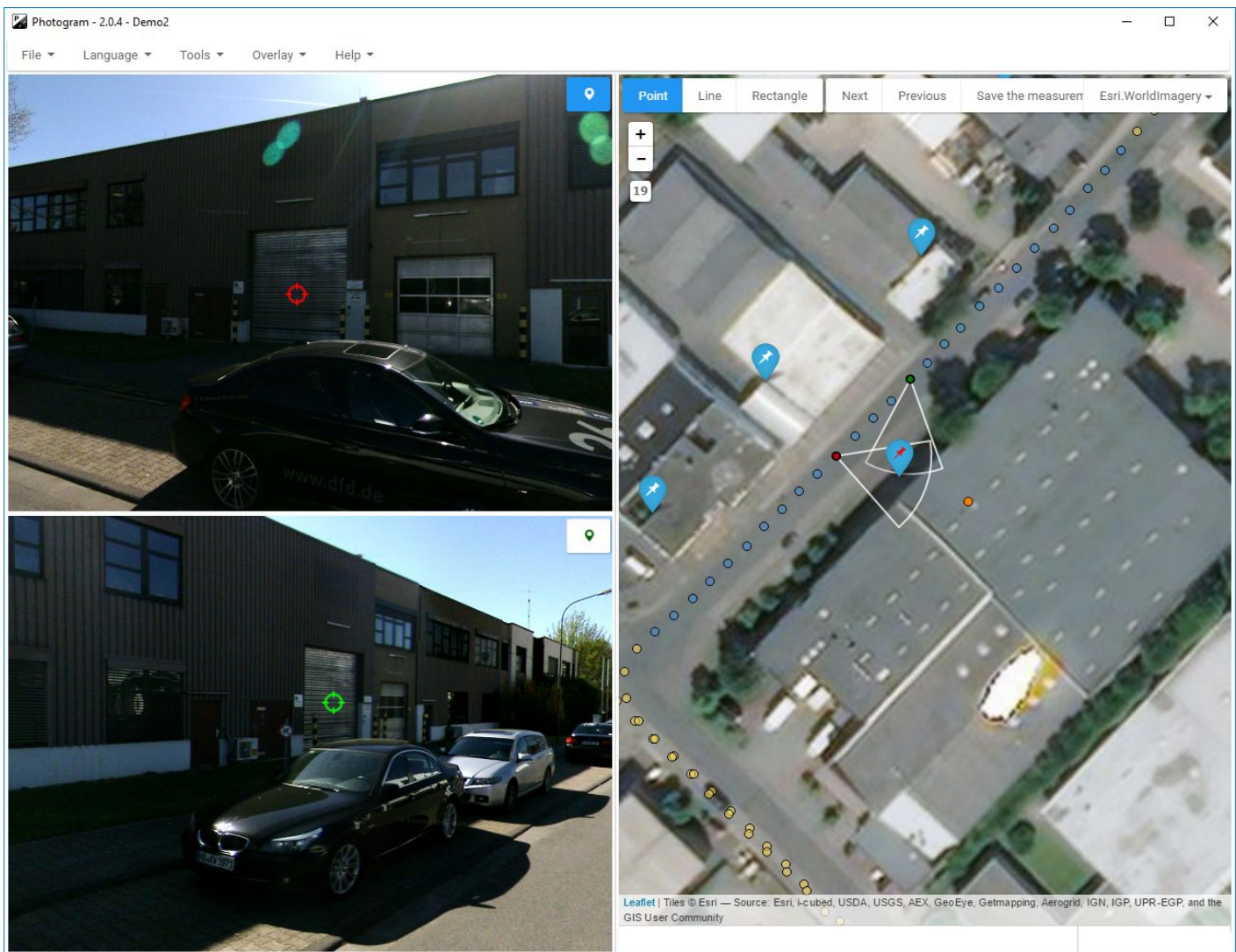


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Quick start

This quick start will cover the basic use of Photogram:

How to get the coordinates of a point using two panoramas.

How to measure the distance between two points.

The end results will be:

- For a point: Label, Custom data fields, Latitude, Longitude Altitude.
- For a distance: Label, Custom data fields, length in meters or feet, WKT (Well Known Text).

Install

Download the latest version of Photogram from [here](#).

Licensing

Register ×

Contact Information	Company Information
Contact person <input type="text"/>	Company <input type="text"/>
Title <input type="text"/>	Address <input type="text"/>
Phone <input type="text"/>	City <input type="text"/>
Fax <input type="text"/>	State <input type="text"/>
E-mail <input type="text"/>	ZIP/Postal code <input type="text"/>
Skype <input type="text"/>	Country <input type="text"/>
<div>Register</div>	

When starting Photogram for the first time the **Register** popup will be displayed.
Fill it in and click **Register**.

Photogram then will work for 21 days for evaluation with all the features available.
There are no limitations at all.

Purchase and Register

Contact Applied Streetview for one or many Photogram licenses.

You will get a key for your PC.

In the menu click **Help -> Add activation key.**

Paste the activation key and click the **Register** button.

Offline registration

In case there is no internet connection at the PC you want to install Photogram, instead of the Register button you will see a Register Offline button.

Click on the Register Offline button and follow the instructions from there on how to get your license.

Menu - Help - License Details

Shows the type of the licence, the end of the evaluation period and the end of update period:

Evaluation Licence:

License Details ×

Type: Evaluation Licence
Evaluation ends: 2016.12.20

Payed for licence:

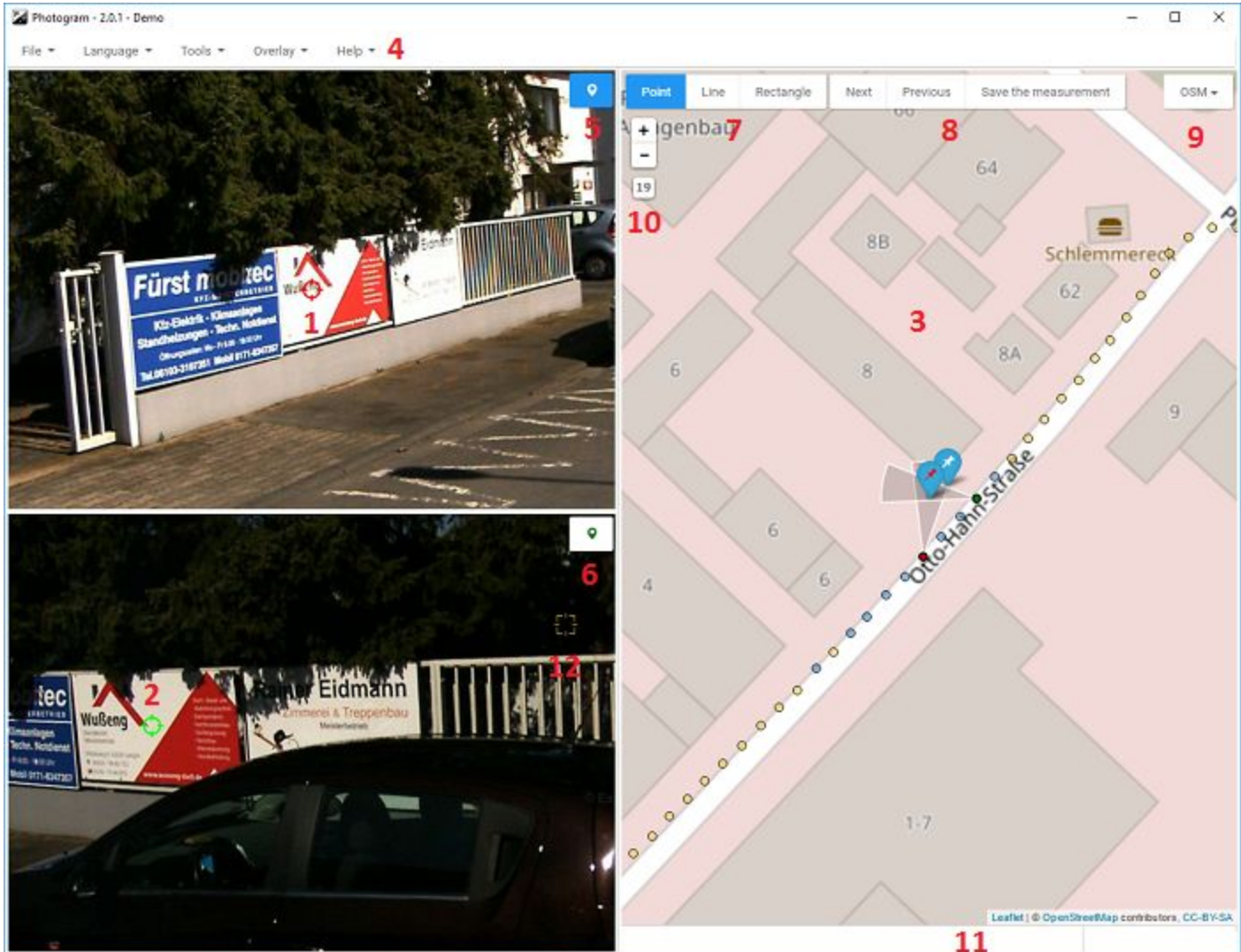
License Details ×

Type: Payed Licence
Usage period ends: Never
Update period ends on: 2017.12.16

Menu - Help - Add activation key

Opens the license Register popup. Use this to update your evaluation license to a purchased license or replace current license with a new one - for example when the Update period ends.

Layout



1. Front panorama (looking backwards)
2. Rear panorama (looking forward)
3. Map
4. Menu
5. Front panorama icon
6. Rear panorama icon

7. Measurement type
8. Tools
9. Change map base layer
10. Map zoom control
11. Bottom status bar
12. Nearby measurement

Projects

New project

To start working with Photogram a new project needs be created.

A project is for storing information like panorama meta-data, measurements taken by the user and project-specific preferences.

Folder with panoramas

This should be used when a folder with panoramas already exists locally. Go to **Menu – File – New project**, a panel will be displayed:

Folder with panoramas x

1 Project name

2 Source folder Choose File No file chosen

3 Add Cancel

Source folder (1):

Select a folder with the panoramas created by Creator. This folder's name is **panoramas**.

Project name (2):

The parent folder of the panorama folder. It's the project name.

Click **Add (3)**, this will create the project and automatically open it, you will see the panoramas as yellow dots on the map.

Open project

File – Open project

A list of all the available projects will be displayed, pick a project to open it.

Close project

File – Close project

Close the current project.

Delete project

File – Delete project.

If a project is deleted all measurement data will be lost as well as all the project settings. Panoramas will not be affected.

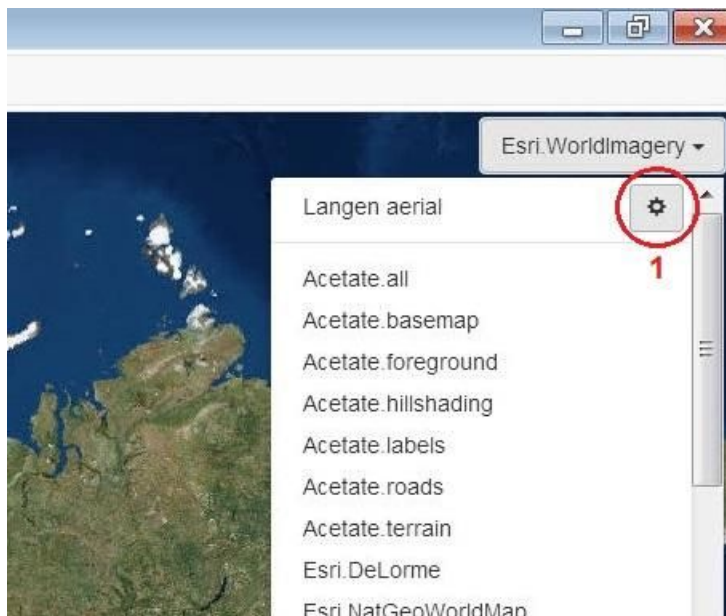
This can not be undone.

Change project input path

Change the current projects input path.

This is helpful when you restore a backed-up project on another PC with different drive names and/or different path to the **panoramas** folder.

Map-tiles



You can pick a map or aerial image provider from the list as the background.

Or click the setup icon (1) to add your own custom tiles source, label and attribution line.

In this case the custom tiles label has been set to “Langen aerial”.

Setup of your own map-tiles or aerial image tiles.

This can be a local or NAS folder or a URL.

Custom map tiles

Label	<input type="text" value="Your Company's map tiles"/>
Url	<input type="text" value="file:///D:/folder/{z}/{x}/{y}.png or http://www.your-company.com/r"/>
Attribution	<input co"="" http:="" type="text" value="Copyright by your=""/>

The URL format supports three variables: z,x,y

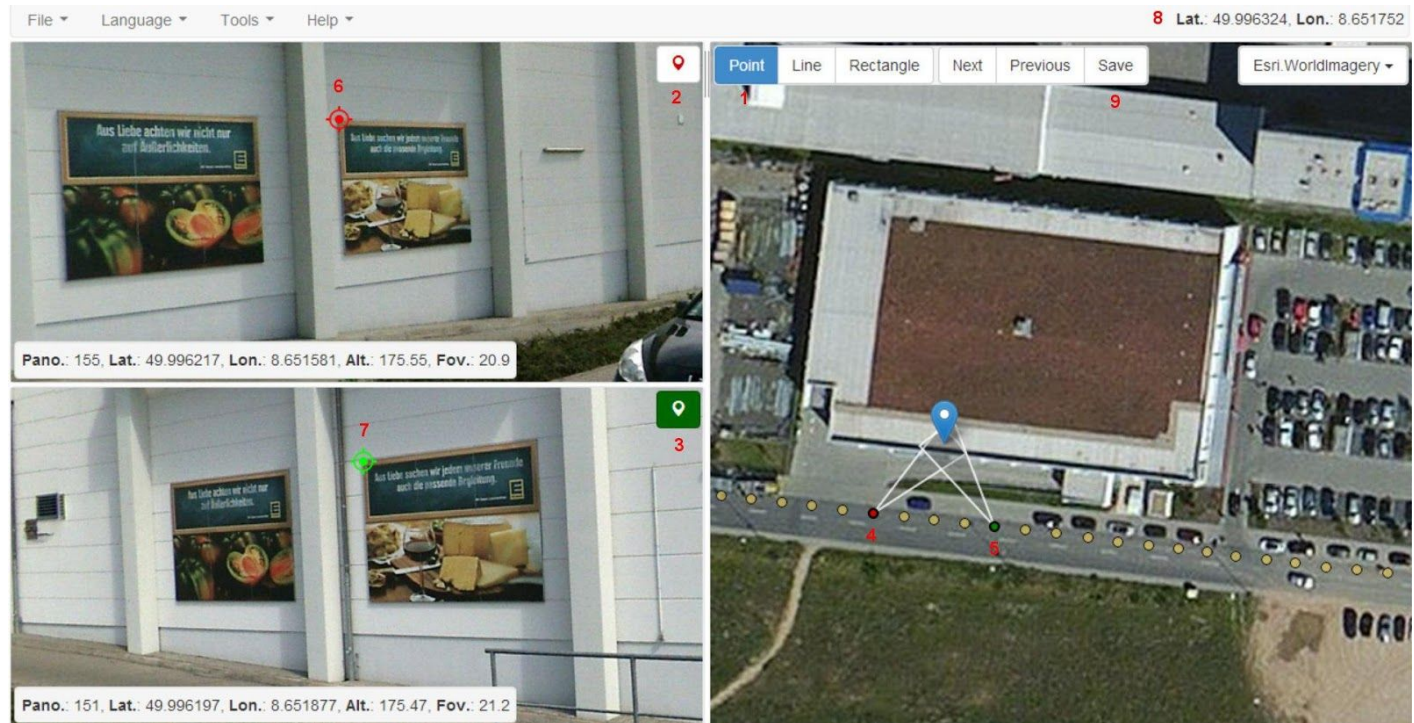
`http://your.source.com/data/tiles/Langen-aerial/{z}/{x}/{y}.png`

x and y can be re-arrange then to meet your needs:

`http://your.source.com/data/tiles/Langen-aerial/{z}/{y}/{x}.png`

Measurements

Collecting data: Point



You can find out the coordinates of any given point on the map as long as it has been captured on at least 2 panoramas of the same tour. Preferably recorded within a few seconds.

Instructions:

Set measurement type to point by clicking the **Point** button (1). To get the coordinates of an object first mark it on 2 panoramas: Front (2) and Rear (3).

To move a panorama click a yellow dot on the map such as (4) and (5). The dot then takes the color of its matching panorama (2) or (3). Try to create an angle close to 90 degrees between the two selected panoramas and the target.

After both panoramas are loaded use the mouse wheel to zoom in and drag to pan to the object to measure. Double-click the first point in the Front panorama (2) – this should add a new target (6). Repeat the same process in the Rear panorama (3) which should produce a new target (7). As soon as the 2nd target (7) is added the result will be displayed in menu bar (8). In our case the length is 3.54 m.

To save the measurement click **Save** (9) this will open the **Save measurement** panel.

Save

Once you click **Save**, the Save Measurement pop-up window will automatically open.

Save measurement

Choose label ▾

poster

Save

Cancel

If an overlay is selected it's possible to assign an existing feature to the measurement. Start typing any text which matches one or more attributes of the Overlay to make them appear in the list.

Save measurement

Choose label ▾

Door

Choose feature

Awe

Lot 47; Iroko Awe Road; Eti-Osa; blue

Save

Cancel

If custom fields were added, a list of them will be displayed below Choose label. Populate the fields to save them with the measurement.

Custom fields

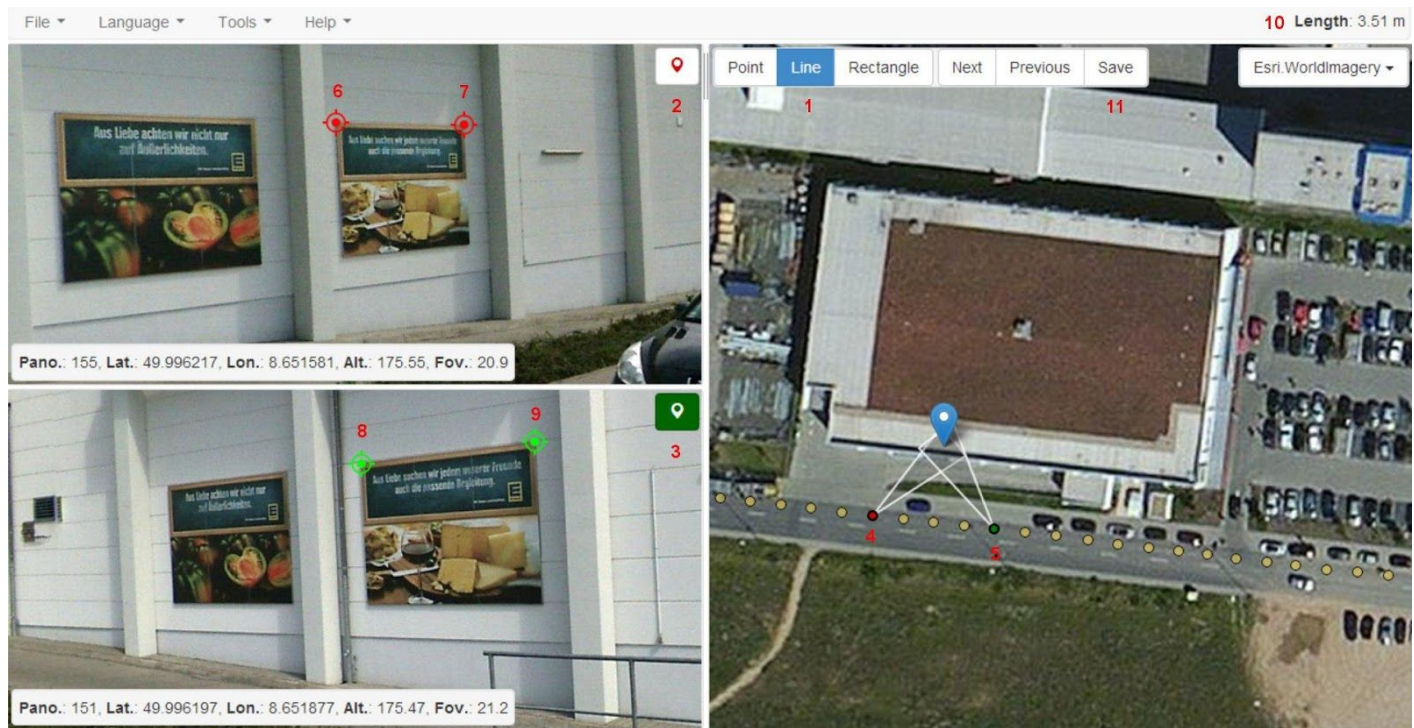
Skype	
Company	Lichtburg Langen
Address	Bahnstraße 73B, 63225 Langen (Hessen), Germany

Enter a label and click the **Save** button.

The process above can be repeated to collect multiple measurements.

To view all the measurements go to **File – View collected data**.

Collecting data: Line



You can calculate the distance between two points on the map as long as they have been captured on at least 2 panoramas of the same tour. Preferably recorded within a few seconds.

Instructions:

Set measurement type to **Line** by clicking the **Line** button (1).

To measure an object first mark it on 2 panoramas: Front (2) and Rear (3).

To open a panorama click a yellow dot on the map such as (4) and (5). The dot then takes the color of its matching panorama (2) or (3). Try to create an angle close to 90 degrees between the two selected panoramas and the target.

After both panoramas are loaded use the mouse wheel to zoom in and drag to pan to the measured object. Double click the first point in the Front panorama (2) – this should add a new target (6) then double click again to end the line (7). Repeat the same process in the Rear panorama (3) which should produce targets (8) and (9). As soon as the 4th target (9) is added the result will be displayed in Menu bar (10). In our case the length is 3.54 m.

To save the measurement click **Save measurement** (11) this will open the **Save measurement** panel.

Save

Once you click **Save**, the Save Measurement pop-up window will automatically open.

Save measurement

Choose label ▾

poster

Save

Cancel

If an overlay is selected it's possible to assign an existing feature to the measurement. Start typing any text which matches one or more attributes of the Overlay to make them appear in the list.

Save measurement

Choose label ▾

Door

Choose feature

Awe

Lot 47; Iroko Awe Road; Eti-Osa; blue

Save

Cancel

If custom fields were added, a list of them will be displayed below Choose label. Populate the fields to save them with the measurement.

Custom fields

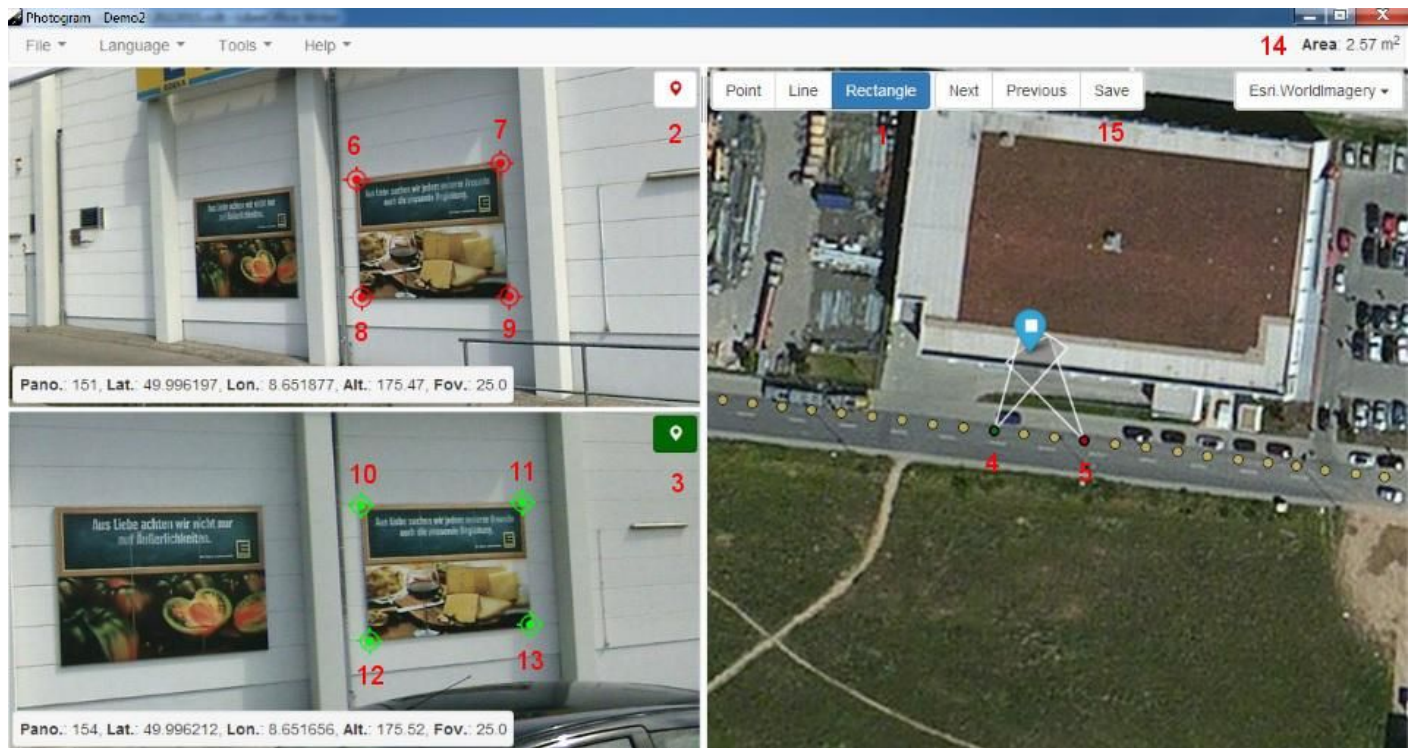
Skype	
Company	Lichtburg Langen
Address	Bahnstraße 73B, 63225 Langen (Hessen), Germany

Enter a label and click the **Save** button.

The process above can be repeated to collect multiple measurements.

To view all the measurements go to **File – View collected data**.

Collecting data: Rectangle



You can calculate the area of a rectangle as long as it has been captured on at least 2 panoramas. Preferably recorded within a few seconds.

Instructions:

Set measurement type to **Rectangle** by clicking the **Rectangle** button (1). To measure an object first find it on 2 panoramas: Front (2) and Rear (3).

To open a panorama click a yellow dot on the map such as (4) and (5). The dot then takes the color of its matching panorama (2) or (3). Try to create an angle close to 90 degrees between the two selected panoramas and the target.

After both panoramas are loaded use the mouse wheel to zoom in and drag to pan to the measured object. Double click the first point in the Front panorama (2) – this should add a new target (6) then double click again on the other corners or the rectangle (7),(8) and (9). Repeat the same process in the Rear panorama (3) which should produce targets (10), (11), (12) and (13). As soon as the 4th target (13) is added the result will be displayed in Menu bar (14). In our case the length is 2.57 m².

To save the measurement click **Save** (15) this will open the **Save measurement** panel.

Save

Once you click **Save**, the Save Measurement pop-up window will automatically open.

Save measurement

Choose label ▾

poster

Save

Cancel

If an overlay is selected it's possible to assign an existing feature to the measurement. Start typing any text which matches one or more attributes of the Overlay to make them appear in the list.

Save measurement

Choose label ▾

Door

Choose feature

Awe

Lot 47; Iroko Awe Road; Eti-Osa; blue

Save

Cancel

If custom fields were added, a list of them will be displayed below Choose label. Populate the fields to save them with the measurement.

Custom fields

Skype	
Company	Lichtburg Langen
Address	Bahnstraße 73B, 63225 Langen (Hessen), Germany

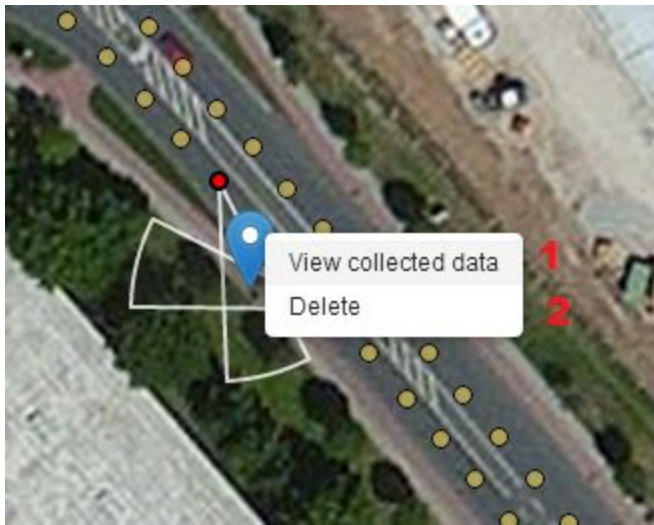
Enter a label and click the **Save** button.

The process above can be repeated to collect multiple measurements.

To view all the measurements go to **File – View collected data**.





Working with collected data

After taking a measurement the collected data can be viewed by right clicking the measurement marker (blue) then **View collected data (1)** as shown below or in **File – View collected data**.



To delete a measurement click **Delete (2)**.

The collected data window contains details about the panoramas and their measurements.

Collected data									
 2		3 Search						 4	
<input type="checkbox"/>	Select	Label 6	Type 7	Result 8	Date	Feature	Skype	Company	Address
<input type="checkbox"/>	 1	Building	Point	Lat.: 50.000275, Lon.: 8.648060, Alt.: 132.51	6/16/2017, 3:37:47 PM		Skype A	Company A	Address A
<input checked="" type="checkbox"/> 5		Tree	Point	Lat.: 50.000015, Lon.: 8.648423, Alt.: 127.40	6/16/2017, 2:53:38 PM		Empty text	Empty text	Empty text

To switch between measurements click the eye icon **(1)** in the relevant row. This will automatically load both panoramas used for this measurement directed towards the target object.

To search for a particular measurement type the desired criteria in the search text box **(3)**. This search can be a label name as well as a number. An example would be typing “lamp post” in the search text box **(3)** which will show only collected data which contain “lamp post” in their label **(6)** field. You could also enter “3” to show all the data with a “3” included in either one of the columns. This will show only the labels with at least one column matching the entered criteria.

The Type column **(7)** contains the measurement type while the Result column **(8)** contains the result of that measurement.

The **Feature** column and the **Custom fields** columns (Skype, Company, Address) are shown to the right of the **Date** field.

Fields can be displayed or hidden using the **(4)** drop-down.

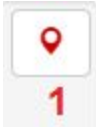
To delete a measurement check the box **(5)** and then click the delete button **(2)**. Multiple check-boxes can be selected.

Nearby measurements will be shown as an **blue icon** on the panorama. Click to display the measurement in Front and Rear panorama views, CTRL + Click to display it in the **View collected data** window.

Tools

Select Front panorama

This sets the Front panorama panel state to active. When a panorama marker is clicked on the map its panorama is loaded into the current panorama panel. This tool can be either accessed by clicking the **(1)** button or via **Tools – Select Front panorama**.



Select Rear panorama

This sets the Rear panorama panel state to active. When a panorama marker is clicked on the map its panorama is loaded into the current panorama panel. This tool can be either accessed by clicking on the **(1)** button or via **Tools – Select Rear panorama**.



Next/Previous panorama

This moves the Front and the Rear panorama to their next panoramas on the map. This tool can be either accessed by clicking on the **(1)** and **(2)** button in the map panel or via **Tools – Next panorama** or by pressing **Page Up** and **Page Down** on the keyboard.



Save the measurement

This makes the current measurement permanent and allows the user to save it under a particular label. This tool can be either accessed by clicking on the **(1)** button in the map panel, via **Tools – Save the measurement** or with the **Ctrl+Shift+S** shortcut.



Reset visited panoramas

Once you have clicked and viewed a panorama, the yellow dot will turn blue, this tells you what panoramas have been visited.

This tool resets all visited panorama markers in blue, back to yellow, in case you want to start all over again. This tool can be accessed via **Tools – Reset visited panoramas** or with the **Ctrl+Shift+R** shortcut.

Custom fields

Custom fields ×

Name	Reuse
<input type="text" value="Address"/>	<input checked="" type="checkbox"/> <input type="text" value="↕"/> <input type="button" value="🗑"/>
<input type="text" value="Company"/>	<input checked="" type="checkbox"/> <input type="text" value="↕"/> <input type="button" value="🗑"/>
<input type="text" value="Skype"/>	<input type="checkbox"/> <input type="text" value="↕"/> <input type="button" value="🗑"/>

Add new field

Add a new field to the bottom of the list.

Name

Click on the text field and change the custom field name. Name can't contain special characters or spaces.

Reuse

Auto-fill the field with the previous datasets value. Saves a lot of typing if Road, Area Code, City, State and Nation is the mostly same. You can enter a different value at any time.



Grab this icon and drag the row to reorder the appearance of the custom fields.

Save

Save changes and close the panel.

Backup

Backup current custom field list to a file.





Restore

Restore a custom field list from a file.

Labels

Labels

×

Name		
Lamppost	⇅	
Tree	⇅	
Manhole	⇅	
Building	⇅	

BackupRestore

Add new fieldSave

Add new field

Populate the **Label** list. Add a new value to the bottom of the list.

Name

Click the label to edit it.



Grab this icon and drag the row to reorder.

Save

Save changes and close the panel.

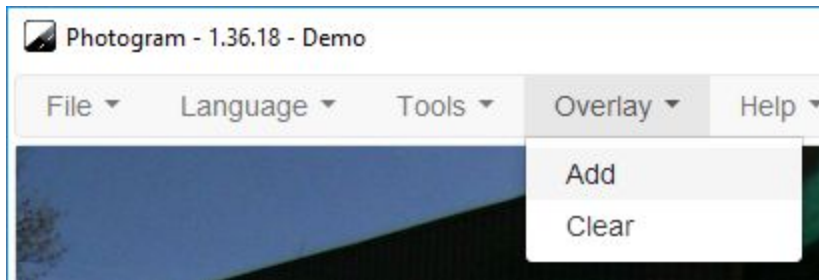
Backup

Backup current list of labels to a file.

Restore

Restore a list of labels from a backup file.

Overlay



Add

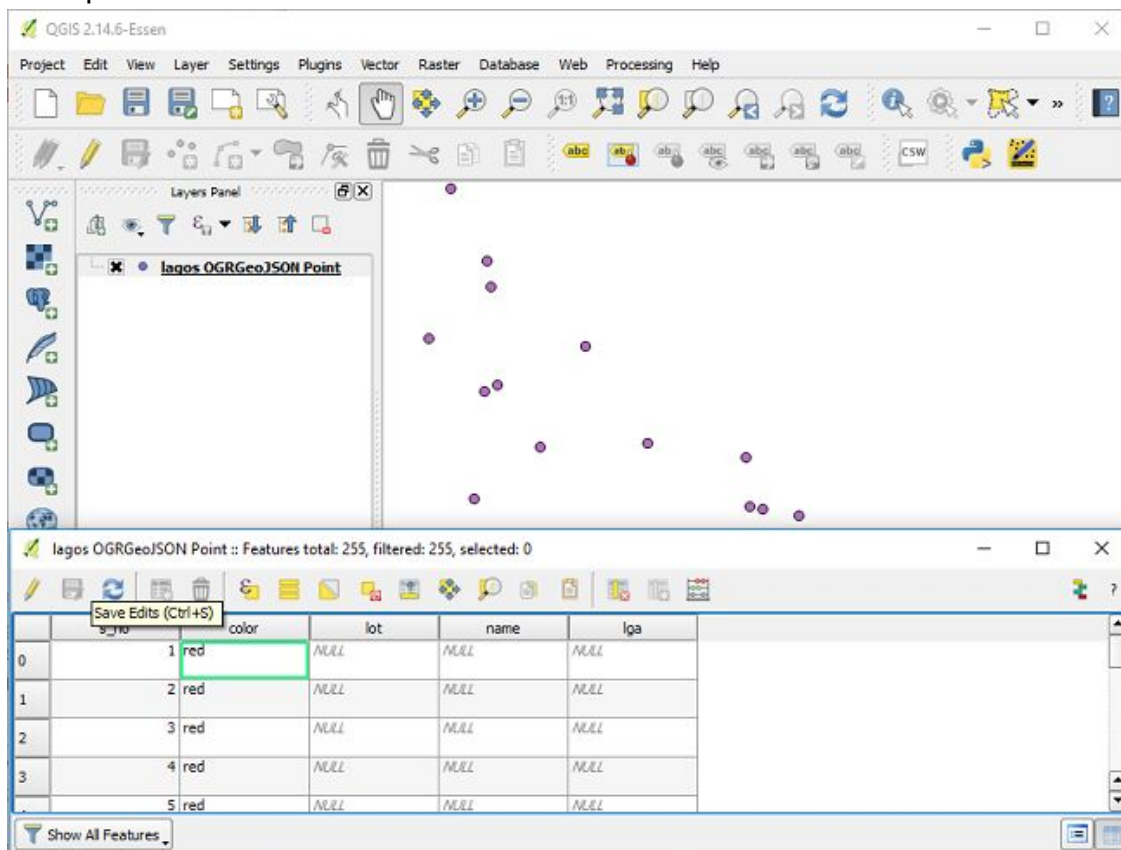
Select a [GeoJSON](#) (.geojson) file to be added to the map.

Once selected:

1. The map will be zoomed to the GeoJSON file extents.
2. A search bar will appear in the top left corner of the map allowing you to search by all the attributes.
3. GeoJSON features will appear on the map as either Point, Lines, Polygons. Click on a feature to view it's attributes in a popup.

By default Photogram will automatically assign a blue color to each feature and a yellow color to a selected feature. To color a feature in a different color add an attribute named **color** with the value in [web color](#) format.

Example in QGIS:



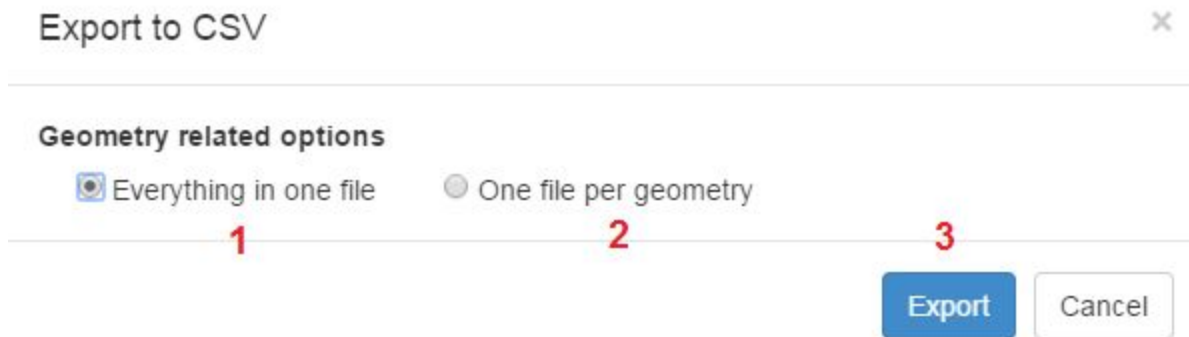
Clear

Remove current Overlay from the map.

Export

Export to CSV

To export the collected data into a CSV format go to **File – Export to CSV** to see this window:



Everything in one file (1) will export all the geometries in the WKT format and will create a single file while **One file per geometry (2)** will create a separate file for each geometry type (Point, line and rectangle). This should allow a more streamlined import into GIS software.

Latitude, Longitude, Altitude and wkt columns are in the WGS84 coordinate System.

Altitude is MSL (Height above **M**ean **S**ea **L**evel). Not HAE (**H**eight **A**bove **E**llipsoid).

All the columns are in UTF-8 encoding.

After clicking **Export (3)** the destination path and the file name can be specified in a pop-up window.

Export to ShapeFile

To export the collected data into a CSV format go to **File – Export to ShapeFile**. Choose the correct path and create a relevant folder then click **Save**. The different files will be exported to the chosen folder.

ShapeFile geometries are in the WGS84 coordinate System.

Altitude is MSL (Height above **M**ean **S**ea **L**evel). Not HAE (**H**eight **A**bove **E**llipsoid).

ShapeFile attributes have the utf-8 encoding.

Export to SQL

To export the collected data into a SQL format go to **File – Export to SQL**.

SQL format is useful to import data into MySQL and used together with the Players **Asset Viewer** plugin.

Preferences

Auto save mode

- Off
- On last point
- On last point and using the last label

After save options

- Center on measurement
- Move to next panoramas

Show/hide status bars

- Front panorama status bar
- Rear panorama status bar

Show/hide quality metadata

- Quality metadata in "View collected data" window

Display system

- Metric
- Imperial

Select best fitting panoramas on map click

When clicking on the map Photogram will attempt to find a best fitting top and bottom panoramas and orientate the panoramas.

Number of panos between pano closest to click and Front pano

Number of panoramas between panorama closest to click and Front panorama. Default 2.
Example: For the value of 2, the algorithm will pick the closest panorama and then count 2 panoramas towards Front panorama and 2 towards Rear panoramas, this will result in the number of panoramas between Front and Rear to be 5 panoramas.

Maximum angle

Pick Front and Rear panorama in a way that the angle between the radar rays is not larger than the value specified.

Maximum distance

Pick Front and Rear panorama in a way that the distance between the panoramas is not larger

than the value specified.

Default field of view

Keep previous zoom value

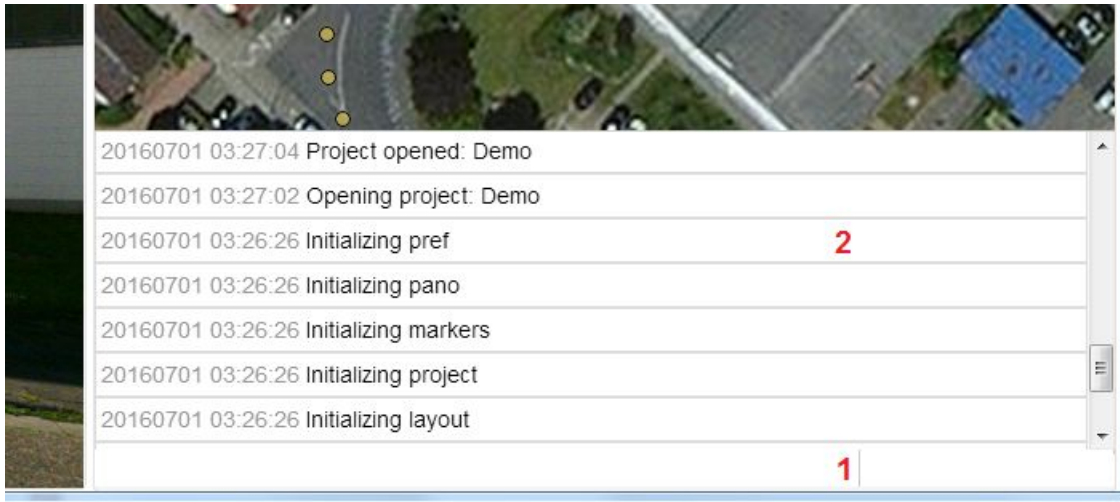
Always use value: Provide an opening angle between 10 and 100 degree for the two panoramas.

Custom map tiles

Pick a map or an aerial image provider from the list as the background, or click the setup icon to add your own tiles source, label and attribution.

Error handling

Bottom status bar



The last information, warning or error message is displayed in the bottom status bar **(1)**, click on it to open the log which contains all the status messages **(2)** and their timestamps. Click again to close it.

Open log folder

Help - Open

Opens the log folder containing the daily log files.

Help - About this PC

About this PC



Windows version: Microsoft Windows 10 Home 64-bit
Computer Name: DESKTOP-68R8V6G
Processor: Intel(R) Core(TM) i5-6300HQ CPU @ 2.30GHz
Memory: Total: 15.88 GB, Available: 10.98 GB
Free disk space: S: 29.48 GB, D: 29.38 GB, C: 40.72 GB
Graphics Card: NVIDIA GeForce GTX 960M, Intel(R) HD Graphics 530
CUDA versions: 8, 7.5

Copy to clipboard











Close

Click on **Menu - Help - About this PC** to display helpful information like Windows version, Computer Name, Processor, Memory, Free disk space, Graphics Card, CUDA versions, etc...

Click on **Copy to clipboard** to copy the information about this PC to the clipboard. Then save it somewhere else.

Reference

Icons

	Select either Front or Rear panorama as the default
	Front panorama is selected
	Rear panorama is selected
	Panorama marker
	Front panorama marker
	Rear panorama marker
	Visited panorama marker
	Saved measurement
	Selected measurement
	Unsaved measurement

Shortcuts

Ctrl+D	View collected data
PageUp	Select Front panorama
PageDown	Select Rear panorama
→	Pans the panoramas and radars to the right
←	Pans the panoramas and radars to the left
↑	Pans the panoramas upwards
↓	Pans the panoramas downwards
Ctrl+Shift+S	Save the measurement
Ctrl+Shift+R	Reset visited panoramas

Support

Hints:

Support is provided for the newest Photogram version only.

Please check and update first:

<http://www.applied-streetview.com/photogram>

Please check for a new Photogram version first:

Menu -> Help -> Check for Upgrade.

Support is available in English language.

To report an error, please use this form:

Menu → Help → Support

You can enter text and attach files.

The log-file is automatically attached.

You can attach extra screenshots.

Contact:

E-Mail: support@applied-streetview.com

Skype ID: applied-streetview

Phone: +49 6103-372 7496

Streetview Technology GmbH

Pittlerstr. 53

63225 Langen

Germany