



cyclomedia

GlobeSpotter for ArcGIS Pro User Manual

Version EN150816

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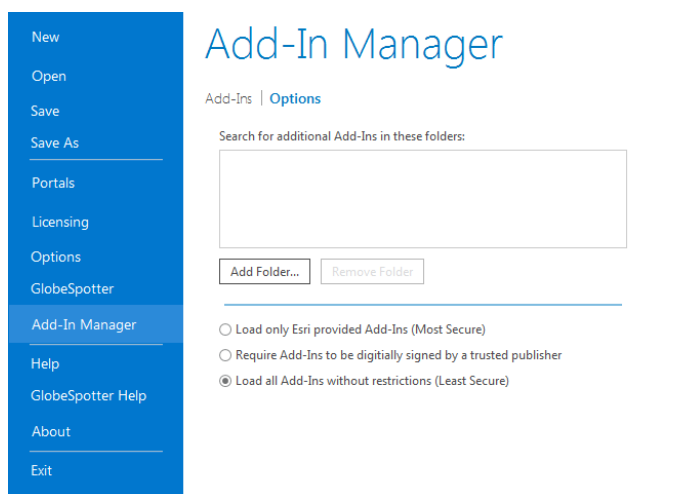
Index

INDEX	2
1. INSTALLATION	3
2. HOW TO USE GLOBESPOTTER FOR ARCGIS PRO	9
2.1 EXPLORING AND VIEWING CYCLORAMAS IN ARCGIS PRO	9
2.1.1 <i>How to show recent recording locations of Cycloramas</i>	9
2.1.2 <i>How to show historical recording locations of Cycloramas</i>	9
2.1.3 <i>How to configure the Cyclorama viewers</i>	10
2.1.4 <i>How to open Cycloramas</i>	11
2.2 HOW TO SHOW VECTOR DATA IN CYCLORAMAS	13
2.3 PERFORMING MEASUREMENTS	14
2.3.1 <i>Standard measurement – point measurement</i>	14
2.3.2 <i>Standard measurement – line / surface measurement</i>	17
2.3.3 <i>Smart Click measurement – point measurement</i>	20
2.3.4 <i>Smart Click measurement – line / surface measurement</i>	22
2.3.5 <i>How to import a measurement in a Cyclorama</i>	23
2.3.6 <i>Undo a measurement</i>	24
2.4 CYCLORAMA SEARCH FUNCTIONALITY	24

1. Installation

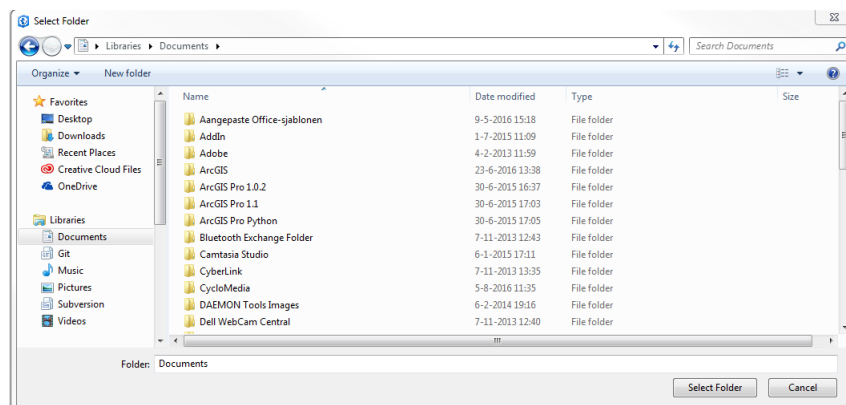
To install GlobeSpotter for ArcGIS Pro, please perform the following steps:

- 1) Check if Adobe Flash Player is installed on your computer. If you do not already have it, please download and install it first via <http://get.adobe.com/flashplayer/>.
- 2) GlobeSpotter for ArcGIS Pro can be installed from a disk or network location:
 - I. Copy the Add-In file to a (local) disk or network location.
 - II. Start ArcGIS Pro.
 - III. Select menu: *Project ► Add-In Manager* and select the *Options* tab.



Add-In Manager, Options tab.

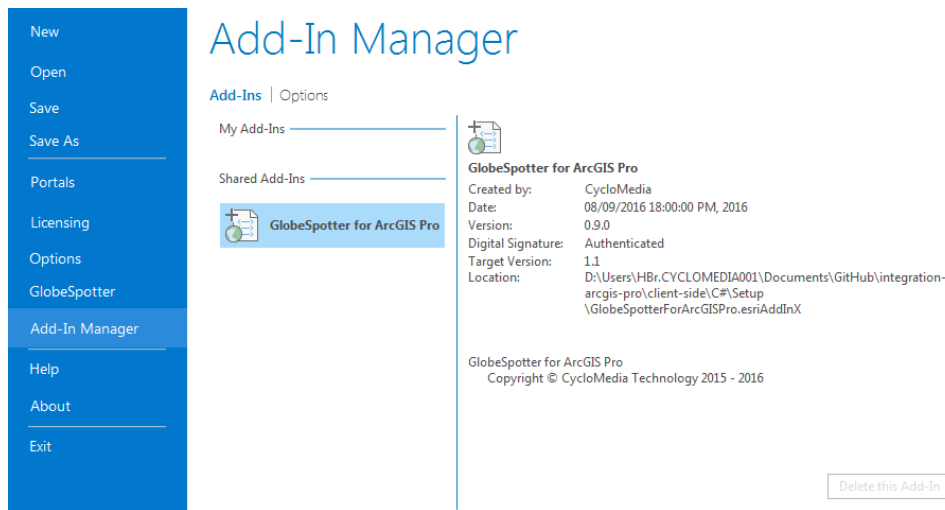
- IV. Click *<Add Folder...>*. Browse to the folder where the Add-In file is located and click *<OK>*.



Browse to the folder where the Add-In file is located.

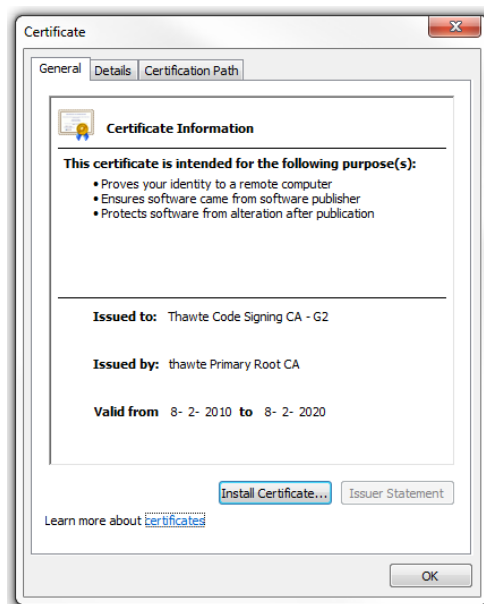
- V. Close the Add-In Manager and restart ArcGIS Pro.
- VI. Select menu: *Project ► Add-In Manager*.

- VII. Check whether GlobeSpotter for ArcGIS Pro is '*Authenticated*'. If the Add-In is '*Untrusted*', close the Add-In Manager, close ArcGIS Pro and install the certificate 'thawte-intermediate-ca.cer' first (which is made available together with this user manual).



Add-In Manager, Add-Ins tab, check if GlobeSpotter for ArcGIS Pro is 'Authenticated' or 'Untrusted'.

- VIII. To install the certificate, please perform the following steps:
- Double-click on 'thawte-intermediate-ca.cer' to install the certificate.



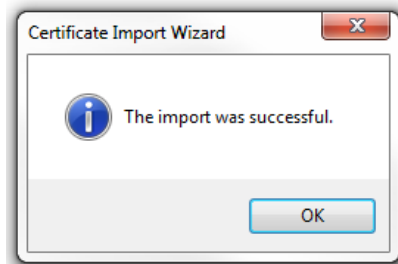
Install the certificate.

- Click on <Install Certificate...> to start the installation wizard for the certificate.



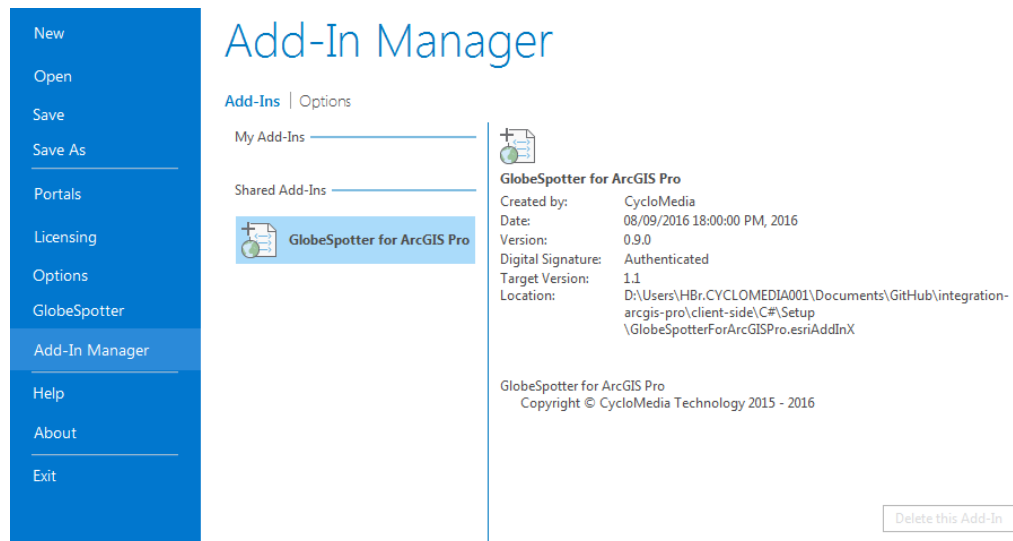
Certificate Import Wizard.

- iii. Click: <Next>, <Next>, <Finished> to complete the installation of the certificate.



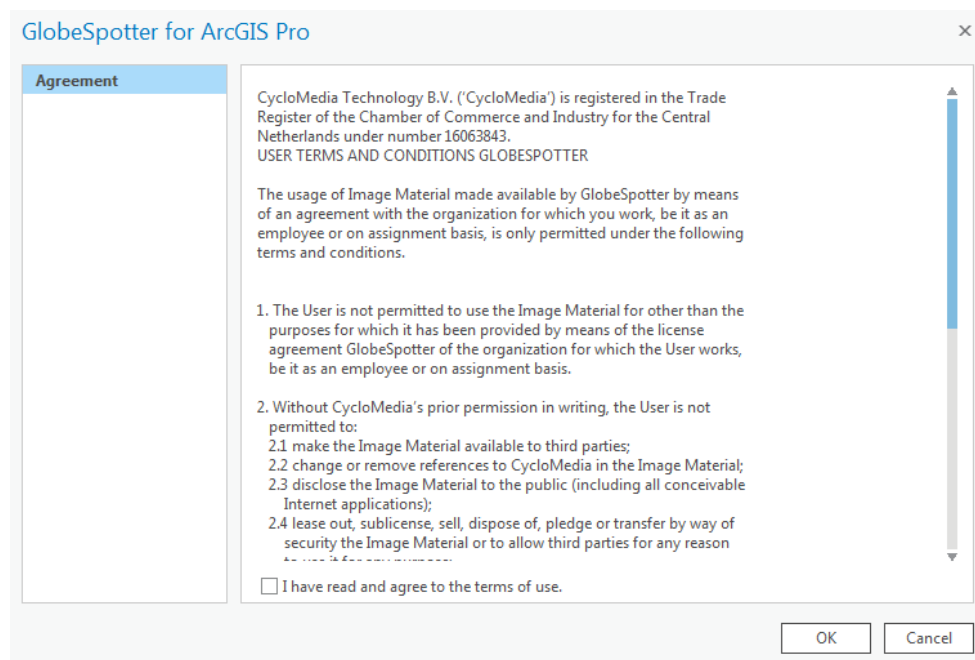
The certificate is successfully imported.

- IX. Start ArcGIS Pro.
- X. Select menu: *Project ► Add-In Manager*.
- XI. Check if GlobeSpotter for ArcGIS Pro is now 'Authenticated'. You can then proceed to paragraph 3).



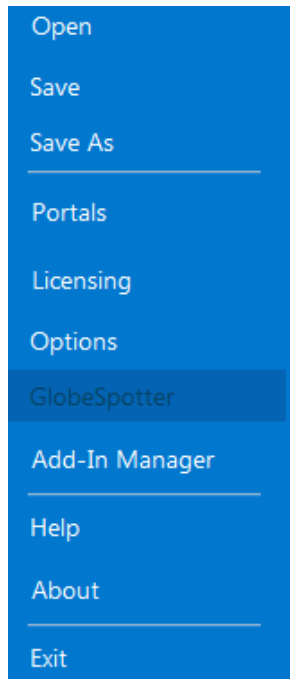
Add-In Manager, Add-Ins tab, check that GlobeSpotter for ArcGIS Pro is now 'Authenticated'.

- 3) If you start ArcGIS Pro for the first time after installing the Add-In, you will be shown the agreement form. Mark '*I have read and agree to the terms of use*' as checked and click <OK>.



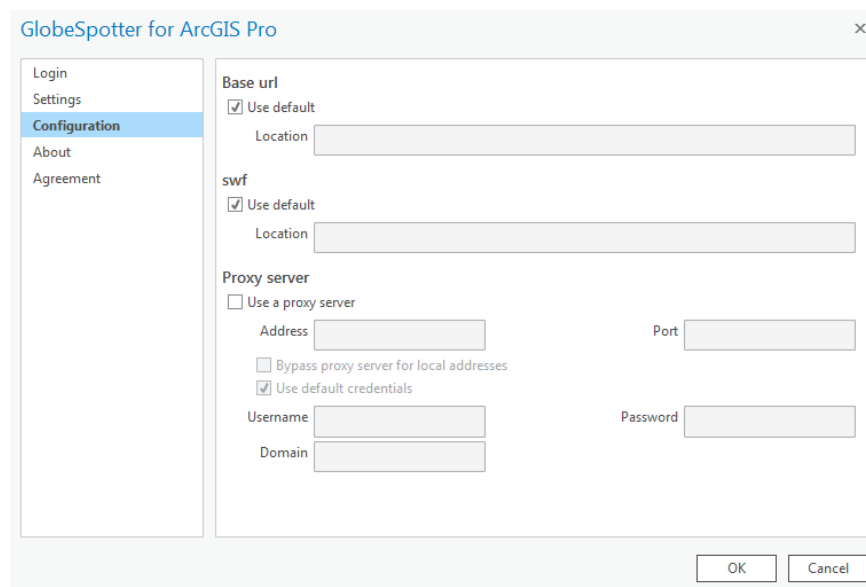
Agreement form.

- 4) Select the **Project ► GlobeSpotter** menu. You will now open the window *GlobeSpotter for ArcGIS Pro*.



GlobeSpotter menu

- 5) Select the tab *Configuration*.
- 6) If you use a proxy server, you can enable *Use a proxy server* and enter the data about your proxy server.



GlobeSpotter for ArcGIS Pro Add-In window, Configuration tab.

- 7) If you are using a local installation, uncheck the base URL and the swf URL *Use default* option and enter the correct URLs at *Location* instead.
- 8) Select the *Login* tab.
- 9) Enter your username and password and press: *<Apply>*. If you see the message '*Login Successfully*', you are ready to use GlobeSpotter for ArcGIS Pro.

The screenshot shows the 'GlobeSpotter for ArcGIS Pro' application window. On the left is a vertical sidebar with a menu containing 'Login' (highlighted in blue), 'Settings', 'Configuration', 'About', and 'Agreement'. The main area of the window is titled 'Login' and contains two input fields: 'Username' with the text 'HBr' and 'Password' with masked characters '*****'. Below these fields, the text 'Status Login Successfully' is displayed. To the right of this status text is a 'Check' button. At the bottom right of the window are 'OK' and 'Cancel' buttons.

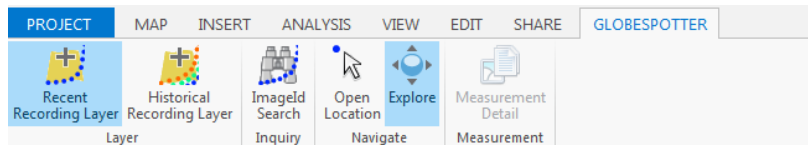
GlobeSpotter for ArcGIS Pro Add-In window, Login tab.

2. How to use GlobeSpotter for ArcGIS Pro

2.1 Exploring and viewing Cycloramas in ArcGIS Pro

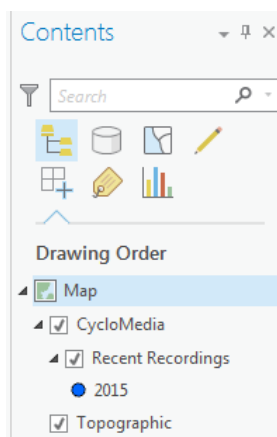
2.1.1 How to show recent recording locations of Cycloramas

- 1) Select *Recent Recording Layer* in the GlobeSpotter tab.



The selected Recent Recording Layer icon.

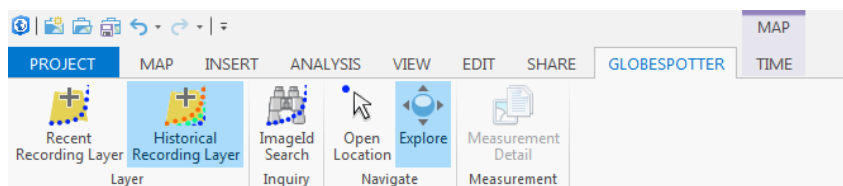
- 2) In the *Table Of Contents* of ArcGIS Pro a new layer will appear as shown in the figure below. Zoom in on the map to a zoom level of at least 1:2000 to see the recording locations on the map (provided there are recordings in the area).



The layer with recent recordings in the Table Of Contents.

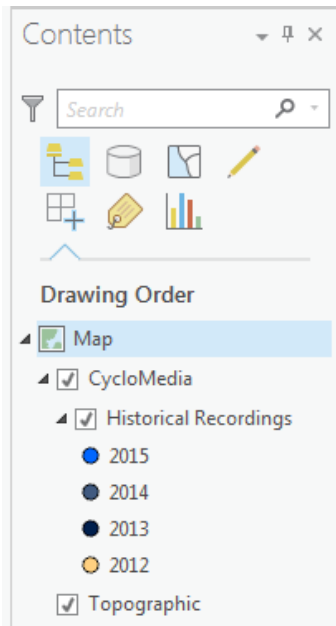
2.1.2 How to show historical recording locations of Cycloramas

- 1) Select *Add Historical Cyclorama Layer* in the GlobeSpotter toolbar.



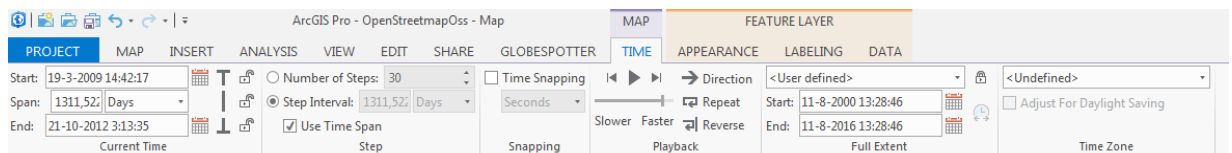
The selected Historical Recording Layer icon.

- 2) In the *Table Of Contents* a layer will appear showing historical recording locations. Zoom in on the map to a zoom level of at least 1:2000 to see these recording locations on the map (provided there are recordings in the area).



The layer with historical recording locations in the Table Of Contents.

- 3) The date range of recordings showed in the map can be modified via the *Historical Slider*, and the *time* tab.



The time tab.

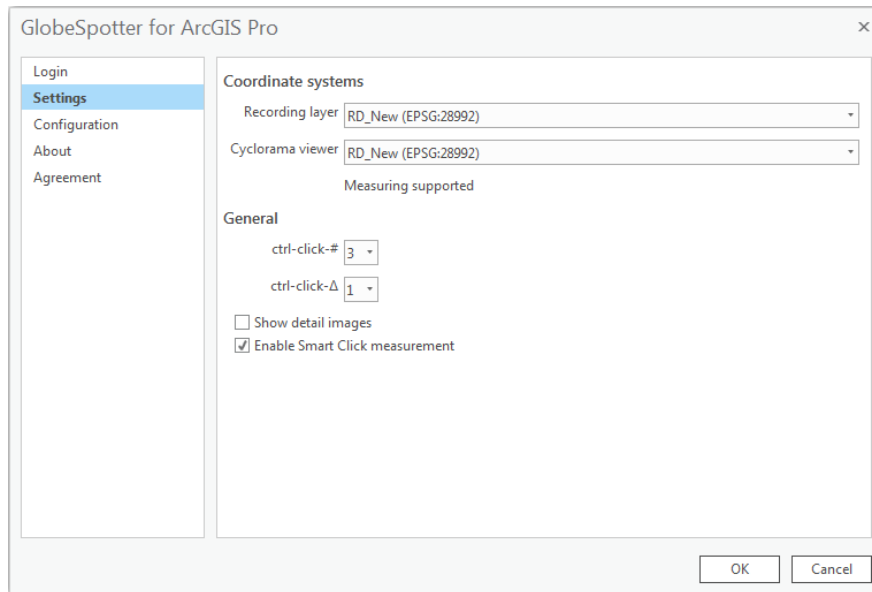
- 4) Move the sliders such that they include the date range of interest.



Historical Slider.

2.1.3 How to configure the Cyclorama viewers

- 1) Select the *Project* ► *GlobeSpotter* menu. You will now open the window *GlobeSpotter for ArcGIS Pro*.
- 2) Select the *Settings* tab.

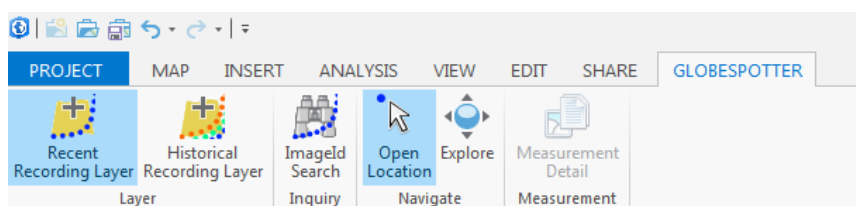


Cyclorama viewing settings in the Settings tab.

- 3) Select the coordinate system which the viewer(s) should use.
- 4) Select the coordinate system which the Recording layer should use.
- 5) Select the number of images that will open with a ctrl-click. (ctrl-click-#)
- 6) Select the number of images between open images with a ctrl-click. (ctrl-click-Δ)
- 7) Press <OK> for the changes to take effect.

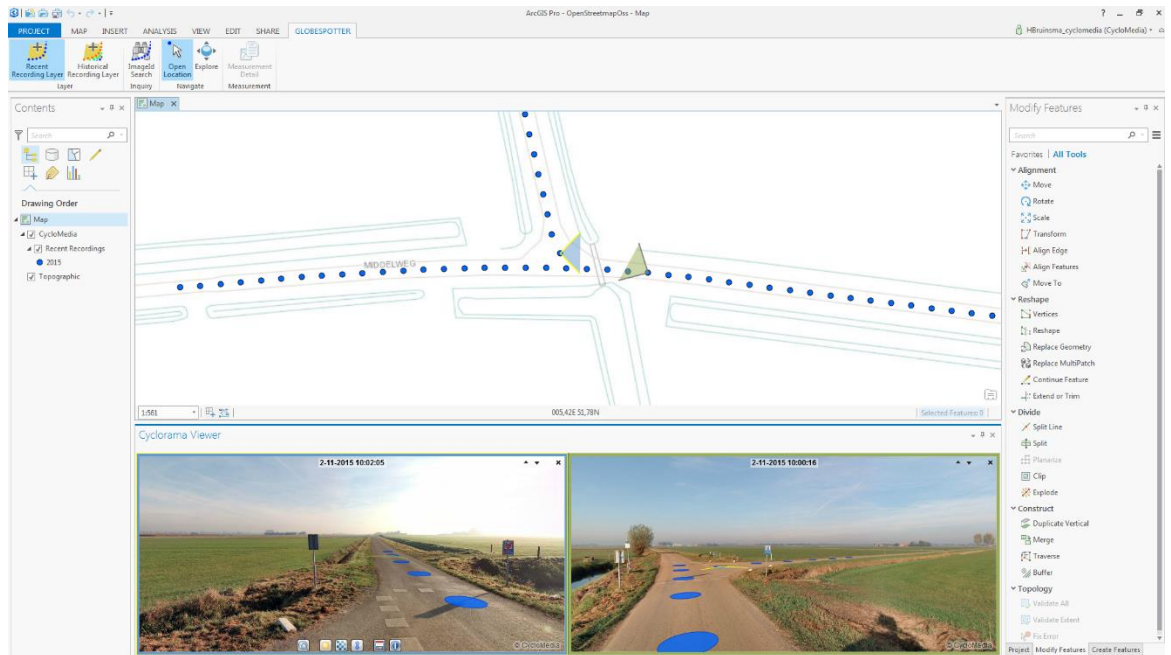
2.1.4 How to open Cycloramas

- 1) Select the *Open Location Tool* in the GlobeSpotter toolbar.



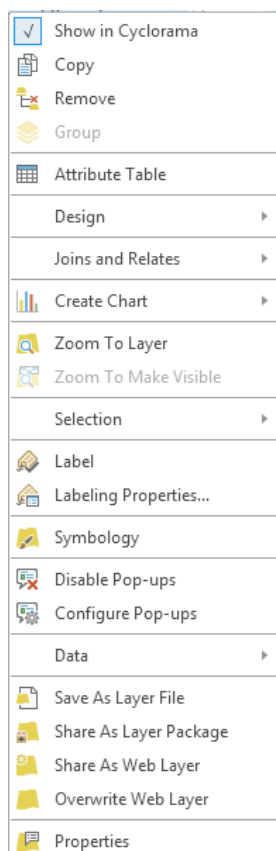
The selected Open Location Tool icon.

- 2) Click on a dot for the corresponding Cyclorama to open in a Cyclorama viewer.
- 3) Click on another dot with shift-pressed and a second Cyclorama will open.
- 4) If the shift key isn't pressed, the first Cyclorama will be replaced by the second Cyclorama.



GlobeSpotter for ArcGIS Pro with two Cyclorama viewers opened.(shift-click)

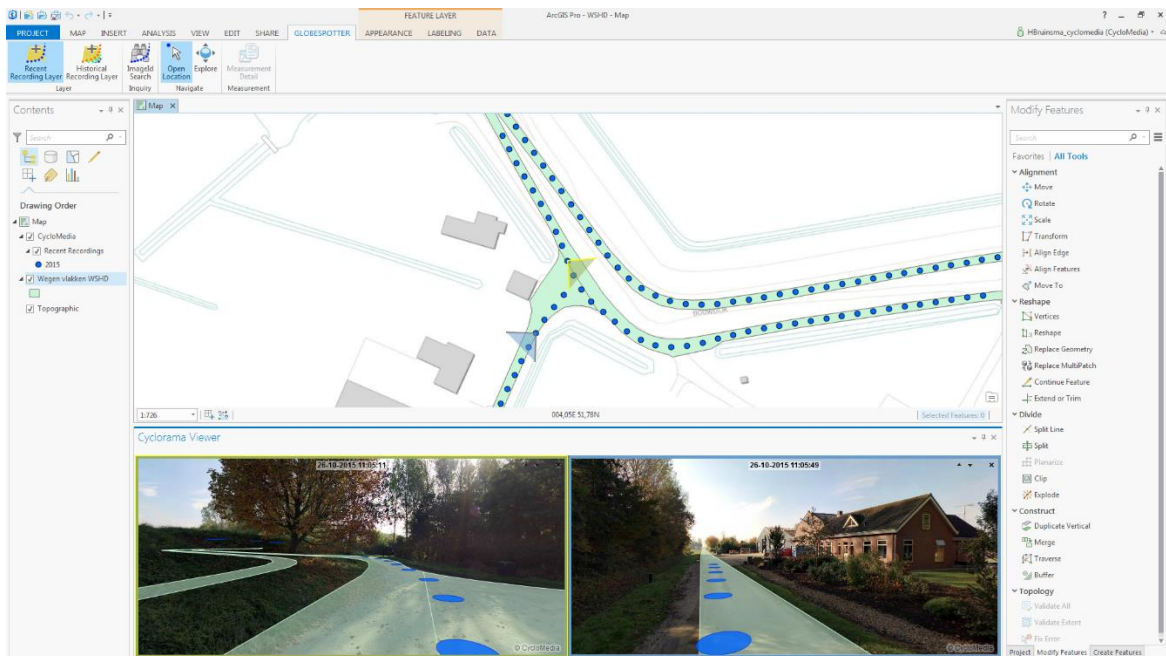
- 5) Optionally, right-click on the layer with recent or historical recording locations to open the feature layer context menu. With the option *Show in Cyclorama*, recording location markers in the Cycloramas can be turned on or off.



Feature layer context menu.

2.2 How to show vector data in Cycloramas

- 1) Add one of the various types of vector data to the Table Of Contents, such as:
 - Shapefiles
 - ArcSDE
 - Personal MDB
 - File GDB
- 2) Open a Cyclorama. Note that the vector data will now be shown in the Cycloramas. With the option *Show in Cyclorama* from the feature layer context menu, the vector layer in the Cycloramas can be turned on and off.



Showing vector data as overlay in the Cyclorama viewers.

- 3) Optionally, set the distance at which vector layer data is displayed in the buttons at the bottom of the cyclorama. The default distance is 30 meters, which means only vector data located within 30 meters of the recording location will be displayed.



Showing and changing the overlay draw distance of the vectdor layer.

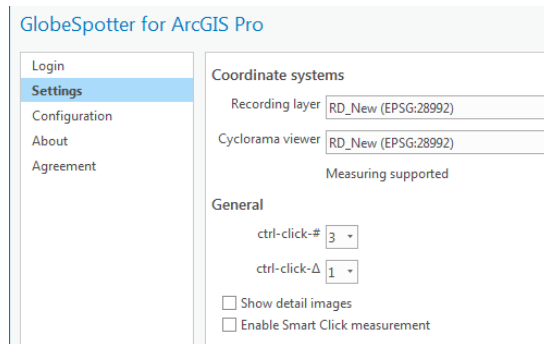
2.3 Performing measurements

Measurements are stored in vector data layers. Point, line or surface measurements each are stored in separate point, line or polygon vector data layers. The following sections explain in detail how to perform the various types of measurements. To illustrate the principle of measuring, this manual will guide you through the process of performing standard measurements first, before explaining measuring with Smart Click (which is turned on by default).

- *Standard measurement – point measurement*
- *Standard measurement – line / surface measurement*
- *Smart Click measurement – point measurement*
- *Smart Click measurement – line / surface measurement*

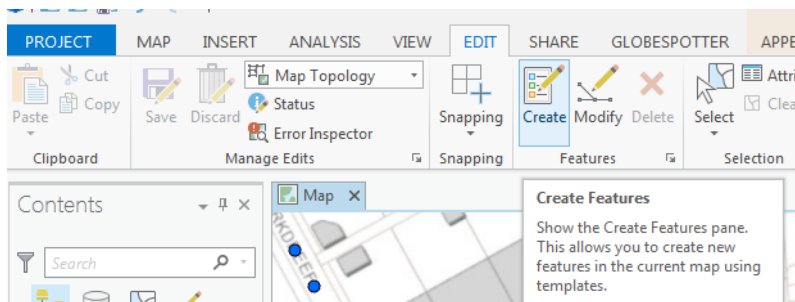
2.3.1 Standard measurement – point measurement

- 1) Add a point vector data layer to the map to store the measurement(s).
- 2) Open two or more Cycloramas in which the object to measure is clearly visible.
- 3) For standard measurements, disable Smart Click measurements in the *Settings* tab of the *Project ► GlobeSpotter* menu.



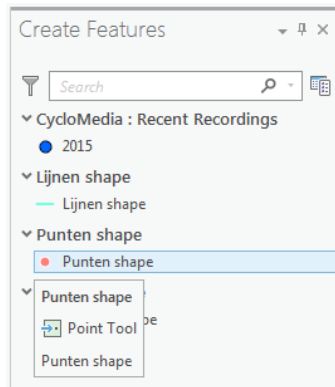
If necessary, disable Smart Click for performing standard measurements.

- 4) Select the tab: **Edit ► Create** to start editing mode in ArcGIS Pro.



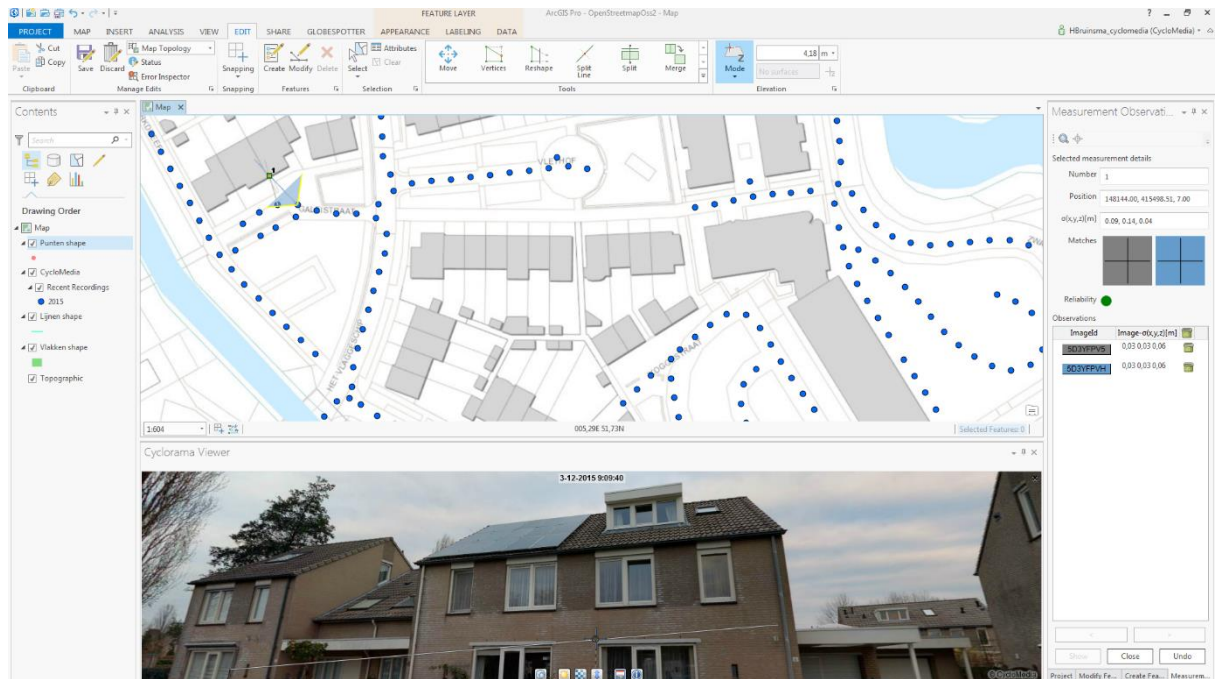
Start editing mode in the newly added vector layer.

- 5) Select the point layer in the **Create Features** window to start a point measurement.

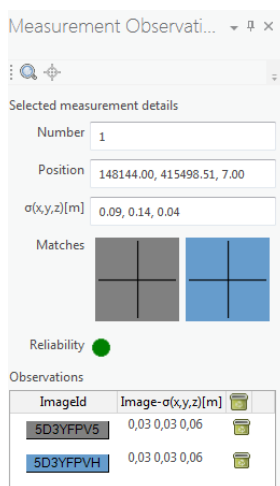


The Create Features window with several vector layers.

- 6) Select the point you want to measure in the first Cyclorama.
- 7) Select the same point in the other Cyclorama(s). The **Selected Measurement Details** window now shows information about the measurement.

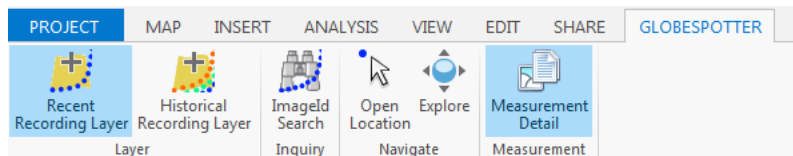


Performing a point measurement (without Smart Click).



The Selected Measurement Details window.

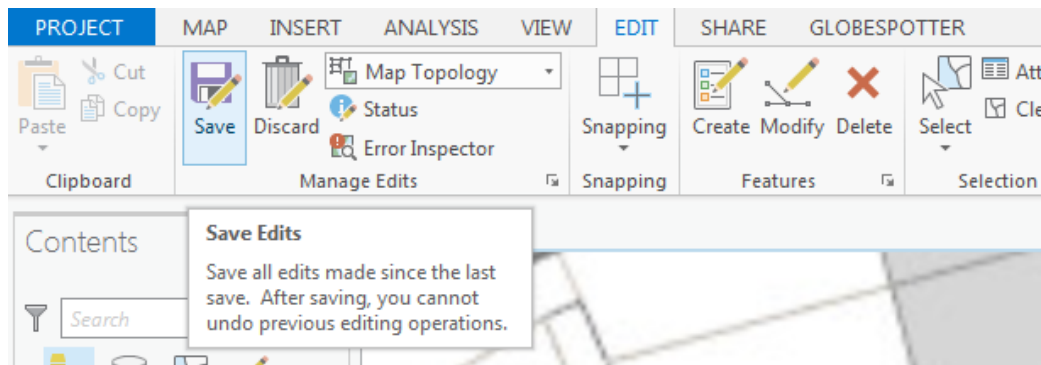
- 8) Optionally, you can make the *Selected Measurement Details* window visible or invisible via the associated button in the GlobeSpotter toolbar.



The Selected Measurement Details icon.

- 9) It is possible to remove observation points or to add more observation points. If you want to add observation points, open a new image and select the point you want to measure.

- 10) If you are finished with the measurement, click the <Close> button in the bottom of the *Selected Measurement Details* window.
- 11) If you are finished with your measurements, save the edits to the vector layer in the *Edit* tab in ArcGIS Pro, as shown in the figure below.



Save edits in ArcGIS Pro.

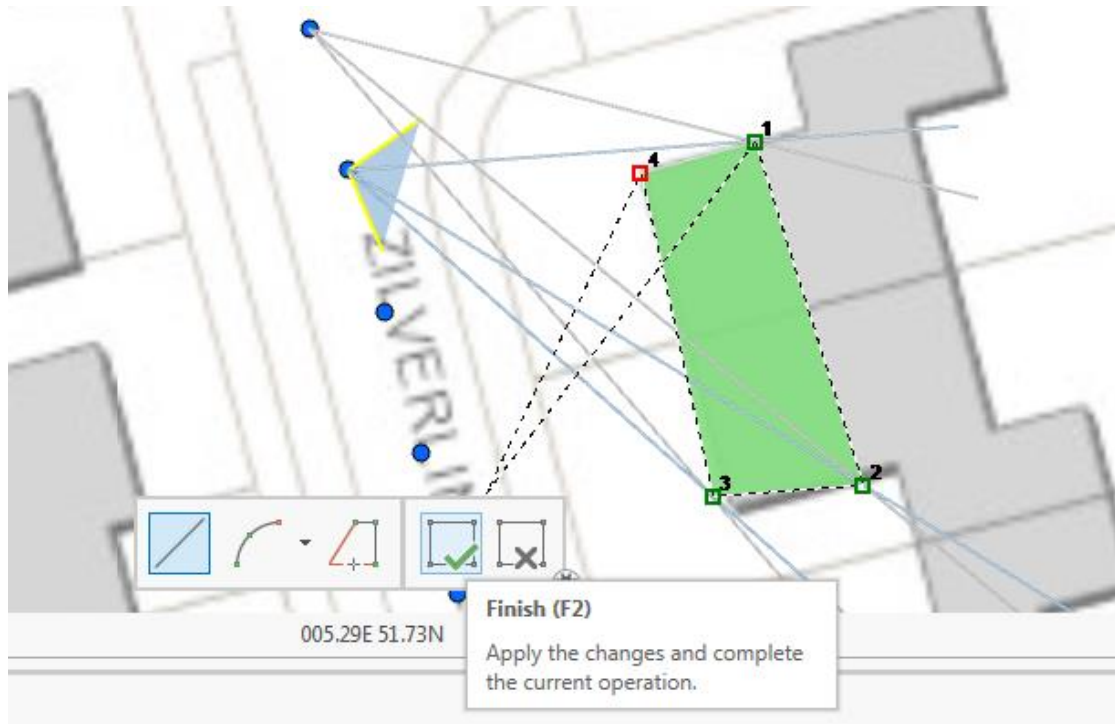
2.3.2 Standard measurement – line / surface measurement

- 1) Add a line or a polygon vector data layer to the map to store the measurement(s).
- 2) Open two or more Cycloramas in which the object to measure is clearly visible.
- 3) For standard measurements, disable Smart Click measurements in the *Settings* tab of the *Project ► GlobeSpotter* menu.
- 4) Select the tab: *Edit ► Create* to start editing mode in ArcGIS Pro.
- 5) Select the line or polygon layer in the *Create Features* window to start a line or a surface measurement.
- 6) Select the first point you want to measure in the first Cyclorama.
- 7) Then select the second and subsequent points you want to measure, until you have selected all the points you want to measure in the first Cyclorama.



Select all the points in the first Cyclorama step by step.

- 8) Repeat the selection of points in the other Cyclorama(s) and make sure you select them in the same order as with the first Cyclorama.
- 9) The measurement is now complete. If you want to edit some measurement points, click the *<Edit>* button in the bottom of the *Selected Measurement Details* window. You can add or remove observation points for a selected measurement. Move through the measurement points with the '*<*' and the '*>*' buttons.
- 10) If you are finished with the measurement, click the *<Close>* button in the bottom of the *Selected Measurement Details* window.
- 11) Click on the *Finish Sketch* button on the toolbar of the bottom of the screen to close the measurement.



Use Finish Sketch on the toolbar of the bottom of the screen to close the measurement.

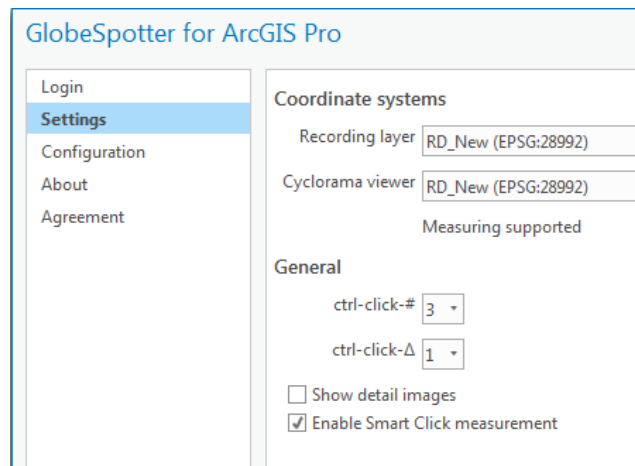
- 12) If you are finished with your measurements, save the edits to the vector layer in the *Edit* tab in ArcGIS Pro



After selecting the points in the second Cyclorama, the measurement is complete.

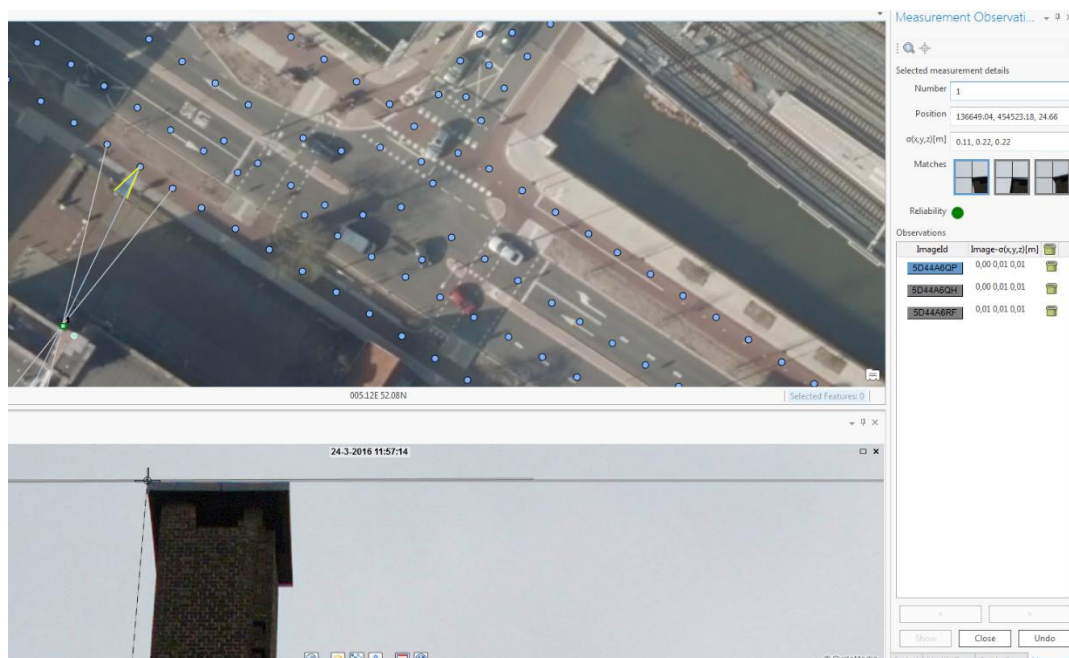
2.3.3 Smart Click measurement – point measurement

- 1) Add a point vector data layer to the map to store the measurement(s).
- 2) Open a Cyclorama in which the object to be measured is clearly visible.
- 3) Enable Smart Click measurements in the *Settings* tab of the *Project ► GlobeSpotter* menu.



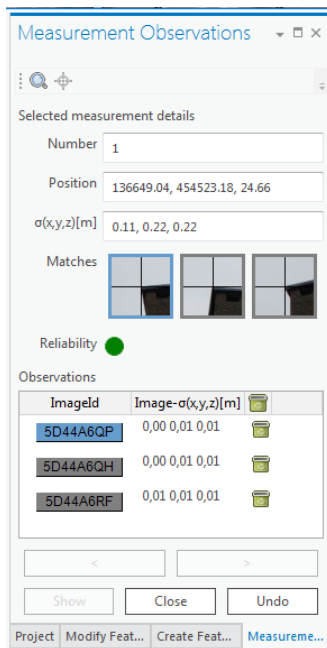
Enable Smart Click measurements.

- 4) Select the tab: *Edit ► Create* to start editing mode in ArcGIS Pro.
- 5) Select the point layer in the *Create Features* window to start a point measurement.
- 6) Select the point you want to measure in the Cyclorama.



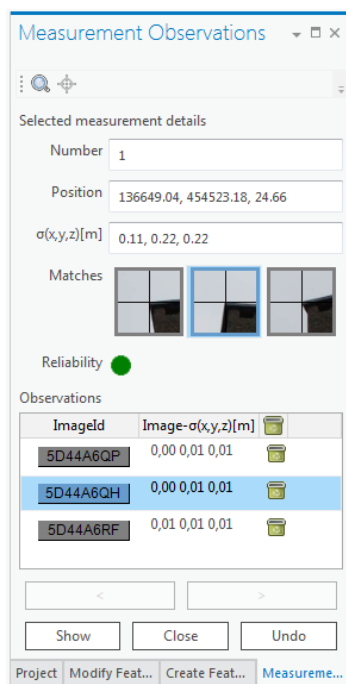
Point measurement (with Smart Click).

- 7) The *Selected Measurement Details* window will now show information about the measurement.



Selected Measurement Details window (with Smart Click).

- 8) You can check the other Cycloramas in which Smart Click found the object by selecting the image and by clicking on <Show>. It is possible to change the matching points found by Smart Click. You can also add or remove observation points. If you want to add more observation points, open a new Cyclorama and select the point you want to measure.

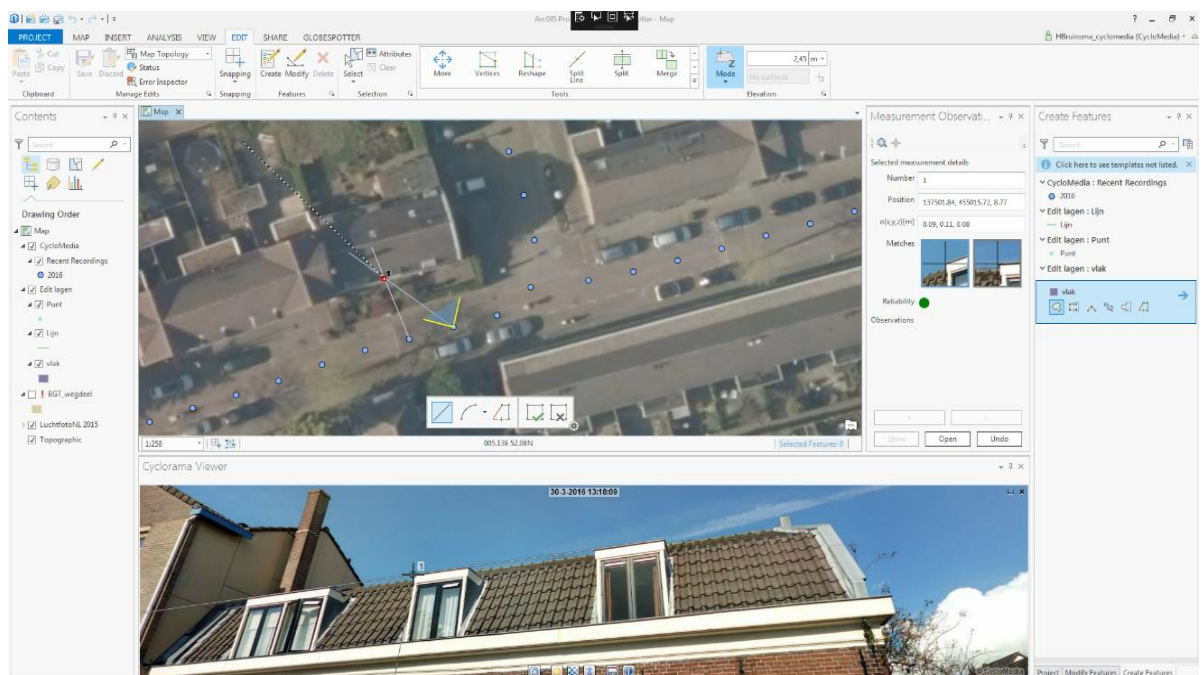


Check the results found by Smart Click.

- 9) If you are finished with the measurement, click the <Close> button in the bottom of the *Selected Measurement Details* window.
- 10) If you are finished with your measurements, save the edits to the vector layer in the *Edit* tab in ArcGIS Pro.

2.3.4 Smart Click measurement – line / surface measurement

- 1) Add a line or a polygon vector data layer to the map to store the measurement(s).
- 2) Open a Cyclorama in which the object to be measured is clearly visible.
- 3) Enable Smart Click measurements in the *Settings* tab of the *Project ► GlobeSpotter* menu.
- 4) Select the tab: *Edit ► Create* to start editing mode in ArcGIS Pro.
- 5) Select the line or polygon layer in the *Create Features* window to start a line or a surface measurement.
- 6) Select the first point you want to measure in the Cyclorama.



Line or polygon measurement after adding the first point.

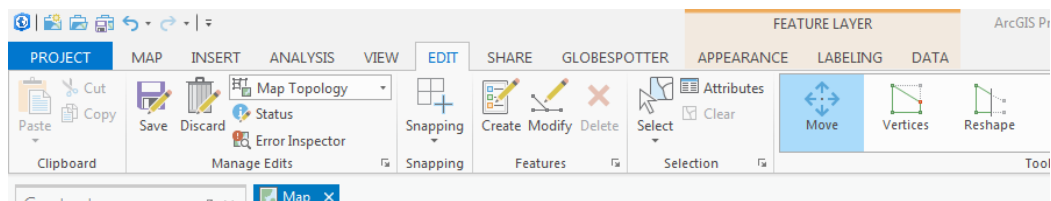
- 7) The *Selected Measurement Details* window will now show information about the measurement.
- 8) If you want to edit or check some observation points, first click the <Edit> button.
- 9) You can check the other Cycloramas in which Smart Click found the object by selecting the image and by clicking on <Show>. It is possible to change the matching points found by Smart Click. You can also add or remove observation points. If you

want to add more observation points, open a new Cyclorama and select the point you want to measure.

- 10) To add more measurement points, close the current point and add subsequent points by repeating steps 6, 7, 8 and 9. It is recommended to check all Smart Click measurement points.
- 11) Click on the *Finish Sketch* button on the toolbar of the bottom of the screen to close the measurement.
- 12) If you are finished with your measurements, save the edits to the vector layer in the *Edit* tab in ArcGIS Pro.

2.3.5 How to import a measurement in a Cyclorama

- 1) Select the *Move* or *Vertices* option in the *Edit* tab.



The *Edit* tab.

- 2) Select a feature on the map to place the measurement back in the Cyclorama.



Measurement shown in Cyclorama (with the move option).

- 3) If you want to edit the (selected) feature, select the *Vertices* option in the *Edit* tab.

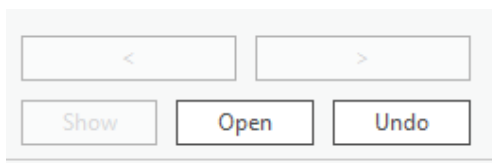


Measurement shown in the Cyclorama (with the Vertices option).

- 4) It is now possible to edit the measurement in the Cyclorama or on the map.
- 5) If you want to edit a measurement point in the Cyclorama, select that point in the map.

2.3.6 Undo a measurement

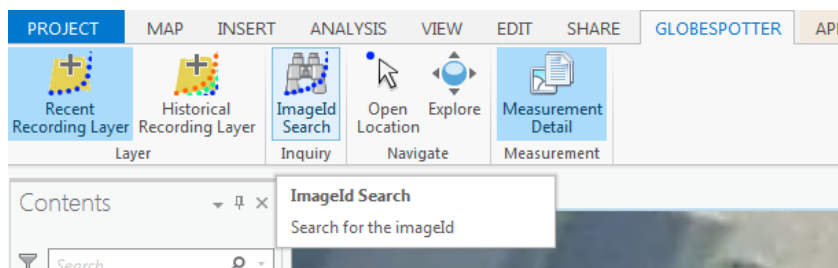
You can undo a measurement by click on the undo button



Undo button measurements

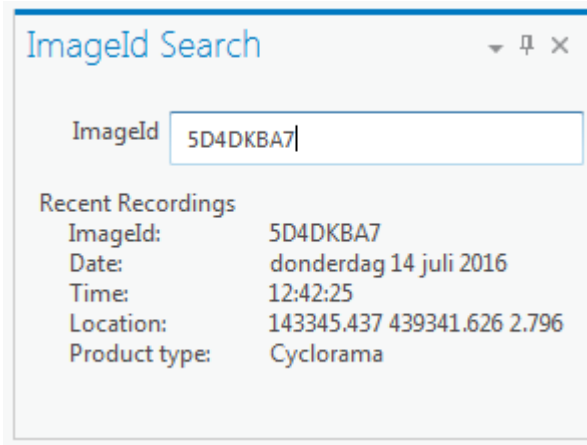
2.4 Cyclorama search functionality

- 1) To start the cyclorama search functionality, click on the *ImageId search* button in the *GlobeSpotter* tab.



ImageId search button

- 2) You will now see the ImageId search window.



Find Cyclorama window

- 3) Enter an imageId and you will get the results
- 4) Double-click a result and you go to the cyclorama.