PHOTOGRAMMETRY – AGISOFT METASHAPE

Adding & Editing Photos to a New Project (Professional Edition) (04.06)

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ABOUT AGISOFT METASHAPE

Agisoft Metashape is a stand-alone software product that performs photogrammetric processing of digital images and generates 3D spatial data to be used in GIS applications, cultural heritage documentation, and visual effects production as well as for indirect measurements of objects of various scales. This software provides a platform for cultural heritage specialists to create virtual reality scenes, textured 3D meshes, orthographic projections, geo-referenced maps and much more from images and/or laser scans completely automatically.

This ASOR Tutorial (04.06) will demonstrate how to add and editing photos in Agisoft Metashape Professional on a Windows desktop. ASOR’s tutorials for Metashape are focused on creating 3D surfaces and orthophotos of objects, monuments, and architecture during cultural heritage surveys through the eastern Mediterranean and northern Africa. ASOR plans to expand the scope of its photogrammetry tutorials, however for any questions that aren’t covered in these tutorials, please visit Agisoft’s Community page, which includes video and written tutorials, the software’s manual, and a community forum comprised of Metashape users.

OPENING AGISOFT METASHAPE PROFESSIONAL

1. To open Agisoft Metashape Professional, search for the program by typing in “Metashape” in your computer-wide search function (bottom left corner of your screen). Click on the Metashape application in your programs window to open.
ADD PHOTOS

2. Add photos to a new project by selecting the Workflow Menu > Add Photos. If you have a folder that only contains images you want to add, then you can select Add Folder instead.
3. Once your photos have been added, you will see them appear in the bottom panel.

4. Individual photos can be selected and edited in the bottom panel. The image will appear in the main panel.
PHOTO MASKING

5. Photo masking is a process of identifying regions of each individual photo that Metashape should ignore during the model construction phases. Masking can be done at any point of the model-building process, but is often completed before you begin aligning photos and building the 3D model. It can often save you hours of processing time down the road. However, it can be time-consuming process and is not necessary for every build. Sometimes it is easier to build your dense cloud without masking and then clean up the model by deleting regions of the dense cloud (see ASOR Tutorial 04.08—Building a Dense Cloud).

To mask an image, select that image from the bottom panel. Then choose the Photo menu.
6. You have two options for selecting the area to mask (exclude) from your photos: **Rectangle Selection** & **Intelligent Scissors**. The **Rectangle Selection tool** is good for quick masking of simple areas. In the example below, the user is selecting the area to the left of the doorway. This will hide this information when processing the 3D model and speed up the processing time. The rectangle tool can also be found in the main tool bar.

7. After drawing your masking area, right click on your mouse and choose **Add Selection**.
8. The masked area is now shaded grey/black. You can continue to mask your remaining images by repeating steps 5-7 from this tutorial.

9. For a more accurate masking area, you can select the Intelligent Scissors tool from the Photo Menu.
10. The **Intelligent Scissors tool** allows you to create a masking area through a series of line segments. Once you have created your mask, right click on your mouse and choose **Add Selection**.

11. **Save your project** before moving onto the next step in the Workflow menu.